



Environmental Impact Report

Land Development
Review Division
(619) 446-5460

LDR No. 99-0618
SCH No. 1984030708

SUBJECT: SeaWorld Master Plan Update. SEAWORLD MASTER PLAN UPDATE, MISSION BAY PARK MASTER PLAN UPDATE/LOCAL COASTAL PROGRAM LAND USE PLAN AMENDMENT, and PROGRESS GUIDE AND GENERAL PLAN AMENDMENT to allow an increase of the height limit on the existing 189.4-acre SeaWorld leasehold from 30 feet to a maximum of 160 feet, in order to implement the approved SeaWorld Initiative, Proposition D. The SeaWorld Master Plan Update proposes locations within the theme park area where taller structures could be developed with exhibits, rides, or shows as well as an extensive renovation of the front gate area. One particular area is designated for development as a "Splash-Down" ride. Other structures within the SeaWorld leasehold but outside the theme park proposed to exceed 30 feet in height would include a hotel, an Educational Facility, the Special Events Center expansion, and a parking structure. The project also proposes expansion of the SeaWorld Marina (formerly "Perez Cove" Marina) and would allow for additional future redevelopment throughout the leasehold. The project site is located on SeaWorld Drive, east of Ingraham Street and West Mission Bay Drive, and on the southern edge of Mission Bay Park. It lies within the Mission Bay Park Master Plan area and the Coastal Zone (a Coastal Development Permit from the Coastal Commission would be required for this project). Applicant: SeaWorld, Inc.

Subsequent to the public review period for this document and prior to its finalization, revisions have been made in the text which are highlighted in a ~~strikeout~~ (to delete) and underline (to add) format.

CONCLUSIONS:

The proposed project would allow an increase in the height limit on the existing 189.4-acre SeaWorld leasehold from 30 feet to a maximum of 160 feet, in order to implement the approved SeaWorld Initiative, Proposition D. Proposition D was approved by the electorate of the City of San Diego in November of 1998. The project would also amend the Mission Bay Park Master Plan Update/and Local Coastal Program Land Use Plan and Progress Guide and General Plan to eliminate inconsistencies regarding implementation of Proposition D. To accomplish this the SeaWorld Master Plan Update would divide proposed development within the leasehold into the five following development areas:

- **Area 1: SeaWorld Theme Park** - Area 1 would consist of 87.7 acres of the 189.4-acre leasehold and would include the Special Events Center and Educational Facility. Approximately 25% of the 87.7 acres would include structures exceeding 30 feet in height: 13.1 acres (15%) between 30 and 60 feet, 6.1 acres (7%) between 60 and 90 feet, 1.8 acres (2%) between 90 and 130 feet, and 0.88 acres (1%) between 130 and 160 feet;

- **Area 2: Guest Parking** - Area 2 would consist of 63.5 acres of land to include the Guest Parking area and the main parking lot. Construction of a parking structure up to 45 feet in height would be proposed for this area;
- **Area 3: Administration and Support** - Area 3 would consist of 8.5 acres of land. No new projects would be proposed for this area;
- **Area 4: SeaWorld Marina** - Area 4 would consist of 1 acre of land and 10 acres of open water area. An expansion of the marina boat slips would be proposed for this area; and
- **Area 5: Perez Cove Shoreline** - Area 5 would consist of 11.4 acres of land and would include the site proposed for a hotel with a maximum height of 90 feet.

In addition, the SeaWorld Master Plan Update proposes a “tiered” development schedule. **Tier 1** projects would be areas of new development or park renovations that would be processed concurrently with the Master Plan Update, or shortly after final approval of the Master Plan Update, such as the “Splash-Down” ride and front gate renovation. **Tier 2** projects would be candidates for redevelopment (renovated or expanded), with site-specific proposals to be made over the life of the Master Plan Update (approximately 20 years out). These projects may include aquariums, special-effects theaters, pelagic fish exhibits, playgrounds and live performance venues. There would also be long-term **Special Projects** which would be conceptual development proposals that have been identified for particular sites within Area 2 (a parking garage), Area 4 (SeaWorld Marina expansion), and Area 5 (hotel expansion). Similar to **Tier 2** projects, special projects would not be constructed for many years.

The proposed SeaWorld Master Plan Update and related actions require a Process 5 approval by the City Council following a recommendation by the City's Planning Commission. Subsequent to City Council approval, the project requires review and approval by the California Coastal Commission. In addition, future proposals for site-specific projects on the SeaWorld leasehold would require varying levels of approval by both the City of San Diego and the California Coastal Commission.

Significant Unmitigated Impacts

Adoption of the proposed project could potentially contribute to direct environmental impacts associated with land use, neighborhood character/aesthetics, light, glare and shading, transportation and circulation, water quality, biological resources, noise, geology/soils, air quality, energy and water conservation. This project could potentially contribute to cumulative impacts associated with land use, neighborhood character/aesthetics (visual quality), and transportation and circulation.

RECOMMENDED MITIGATION OR ALTERNATIVES FOR SIGNIFICANT UNMITIGATED IMPACTS:

The proposed Tier 1 projects, Tier 2 future projects, and the future hotel project would represent an inconsistency with the Mission Bay Park Master Plan Update Design Guidelines for building height and massing in terms of land use. A reduction of land use compatibility and policy impacts would be achieved through implementation of activity-specific mitigation measures associated with transportation/circulation, biological resources, and neighborhood characteristics/aesthetics. Mitigation in the form of approval of the Mission Bay Park Master

ERRATA SEAWORLD MASTER PLAN UPDATE FINAL EIR

The following provide minor revisions to the SeaWorld Master Plan Update Final EIR that correct several minor errors. Each erratum is first identified by its location in the Final EIR, followed by the revision shown in ~~strikeout~~/underline.

Volume I, of the Final EIR, page RTC-82

I-52 Implementation of the SeaWorld Master Plan Update will not result in a significant impact on waste and landfill facilities. Although SeaWorld's waste generation will increase over time, this growth already was contemplated and approved in the 1985 Sea World Master Plan and Environmental Impact Report, RQD No. 84-0160, SCH #84030708, dated February 1985 attached as Appendix C-1A (1985 Master Plan). That 1985 Master Plan projected that SeaWorld ultimately would serve 4 million visitors. Any increased waste generation contemplated by the 1985 Master Plan would not be a significant impact caused by the SeaWorld Master Plan Update. Full build out of the 1985 Master Plan is the baseline for determining whether the SeaWorld Master Plan Update would have significant impacts. *Benton v. Board of Supervisors* (1991) 226 Cal. App. 3d 1467. The Draft EIR projects SeaWorld's attendance would reach 4.4 million. There is no evidence to indicate this difference from the 1985 Master Plan would have a significant impact on waste and landfill facilities than what was contemplated in the 1985 Master Plan.

Furthermore, SeaWorld has an award-winning recycling program that has been recognized by the City of San Diego in seven of the past eight years, as the Recycler of the Year recipient. This award is given to a select few organizations that maintain notable recycling programs that significantly reduce the amount of waste sent to city landfills. Also, SeaWorld has been recognized as the State of California Waste Reduction Awards Programs (WRAP) recipient as one of the top recyclers in the state on six occasions. Since the inception of their current recycling program in 1992, SeaWorld has recycled over 15.25 million pounds of recyclables through the end of 2000. This is equivalent to the preservation of over 25,160 cubic yards of landfill space at our local landfill. See Appendix C-1 of the Final EIR Response to Comments.

Final EIR, page 4.4-44

CMP Freeway Segments

The project would not have a significant impact on the ~~following~~ freeway segments under the near term (2005) condition.:

- ~~1. Northbound I-5, north of Sea World Drive; and~~
- ~~2. Southbound I-5, north of Sea World Drive.~~

Final EIR, page 4.4-49, Significant Unmitigated Impacts

Significant project impacts were calculated ~~at for the~~ northbound and southbound mainline freeway segment of I-5 north ~~and south~~ of Sea World Drive for the Buildout (2020) traffic analysis. These significant impacts are considered unmitigable due the excessive costs to widen I-5.

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Plan Update/Local Coastal Program Land Use Plan Amendment and General Plan Amendment, which are proposed as part of this project, would lessen or avoid the impacts related to inconsistencies with adopted plans and policies, but some significant impacts would remain. Approval of the No Project Alternative or Combination Alternative would, however, reduce these impacts to below a level of significance as discussed below.

The project would result in significant neighborhood character/aesthetics (visual quality) impacts, both direct and cumulative, due to the height and mass of proposed and future projects. The project would allow structure heights of up to 160 feet, where the previous limit was 30 feet (except for the SeaWorld Tower which is 320 feet). Mitigation in the form of complying with the proposed SeaWorld Master Plan Update landscape buffer and bulk plane setbacks, as well as adhering to the SeaWorld Master Plan Update Design Guidelines (regulating landscaping, lighting, signs, and architectural guidelines) would lessen the impact, but not to below a level of significance. Approval of the No Project Alternative and the Combination Alternative would, however, reduce this impact to below a level of significance as discussed below.

The project would result in significant unmitigable transportation and circulation impacts, both direct and cumulative. The proposed project would result in an increase of 15,300 average daily traffic (ADT) by the year 2020 during summer weekdays (summer is the busy season for SeaWorld), including improvements to the theme park and the construction of the hotel. Traffic generated by the project would result in significant unmitigable transportation and circulation impacts to the following freeway segment in the year 2020:

Interstate 5, north and south of SeaWorld Drive (Caltrans jurisdiction) (cumulative)

Traffic generated by the project would result in potentially significant unmitigable transportation and circulation impacts to the following off-site street segments and intersections in the year 2020 should two City Capital Improvement Projects (CIPs) projects not be fully funded (see "Mitigation, Monitoring, and Reporting Program Incorporated into the Project" for more details):

Street Segments

SeaWorld Drive, between SeaWorld Way and Interstate 5 (direct and cumulative)
West Mission Bay Drive, between Interstate 8 and SeaWorld Drive (direct and cumulative)

Intersections

SeaWorld Drive/Interstate 5 interchange (direct and cumulative)
Pacific Highway/SeaWorld Drive intersection (direct and cumulative)
Interstate 8 westbound off-ramp at West Mission Bay Drive (direct and cumulative)

Freeway Segments

Interstate 5, north of SeaWorld Drive (cumulative)
~~Interstate 5 south of SeaWorld Drive (cumulative)~~

Freeway Ramps

Interstate 8 eastbound on-ramp at West Mission Bay Drive (direct and cumulative)
SeaWorld Drive/Interstate 5 northbound on-ramp (cumulative)
SeaWorld Drive/Interstate 5 southbound on-ramp (cumulative)

Approval of the No Project Alternative or the Combination Alternative may, however, lessen these impacts to below a level of significance as discussed below.

Alternatives that would avoid and/or reduce significant direct and cumulative impacts are as follows:

No Project Alternative: The No Project Alternative would result in development on the SeaWorld leasehold that is currently allowed under the existing adopted SeaWorld Master Plan. This includes development of the unbuilt 300-room hotel and 200-slip marina expansion. Furthermore, redevelopment would continue on the leasehold in conformance with the existing 30-foot height limit. The significant impacts that may be avoided with this alternative include land use, transportation and circulation, light, glare and shading, neighborhood character/aesthetics (visual quality), water quality, biology as it pertains to potential raptor perching opportunities, and noise. Other issue impacts are either not significant or could occur under the existing SeaWorld Master Plan.

More Regulated Alternative: This alternative would preclude the rental of Personal Water Craft (PWC) on the leasehold powered by two-cycle engines. Therefore, instead of six PWC's, two boat mooring slips would be provided. This alternative would also limit development of three Tier 2 development areas to 160 feet high and three for shows and two for exhibits. Fireworks would remain the same as existing levels. Significant impacts to water quality and visual quality would be lessened with the More Regulated Alternative, but not to below a level of significance.

Enhanced Public Access Alternative: This alternative would entail a revised site plan that would accommodate pedestrian and/or bicycle traffic along the entire water frontage of the SeaWorld leasehold. The Mission Bay Park Master Plan calls for a 50-foot-wide public access corridor along the waters edge. However, in cases where waterfront access is limited, such as the SeaWorld leasehold, the minimum allowed by the Plan is a 17-foot-wide paved boardwalk that would accommodate both pedestrians and bicycles with a one-foot separation between them. Given the existing SeaWorld facilities located adjacent to the waters edge, this alternative is based on the minimum 17-foot-wide paved boardwalk. Implementation of this alternative would require major alterations and relocations of much of the existing and proposed facilities on the leasehold. Significant impacts would be no different overall than under the proposed project. The extensive cost to implement this alternative, and the compromise it would pose to the success of the SeaWorld operation, would make this project alternative infeasible.

No Hotel and Marina Alternative: This alternative assumes that the proposed 650-room hotel and marina expansion would not occur as part of the proposed project. This alternative would lessen or avoid significant visual impacts associated only with the hotel expansion and biological resources from the marina expansion to eelgrass beds in Perez Cove. Impacts to traffic, both direct and cumulative, may be lessened but not to below a level of significance.

Underground Parking Garage Alternative: This alternative is examined in order to address potential visual impacts associated with the proposed above ground, parking garage structure. However, it was found that there would not be any significant neighborhood character/aesthetics impacts of the project due to its limited visibility from offsite locations. Nonetheless, to underground the parking garage would result in significant design engineering constraints because of high ground water table on the project site. Undergrounding the parking garage would require permanent dewatering and discharge into Mission Bay (which would in turn require a discharge permit from the Regional Water Quality Control Board and treatment of the groundwater effluent). These major engineering and regulatory constraints to undergrounding the garage would either make this facility unbuildable or pose a major cost to the project applicant. This alternative would not lessen any identified significant impacts and would result in significant water quality impacts.

No Parking Structure or Hotel Over 30 Feet High Alternative: This alternative is primarily designed to address potential visual impacts associated with a future hotel, which the proposed Master Plan Update would allow up to 90 feet in height. The future parking structure would also be allowed to reach 45 feet in height in the Update. Since the existing SeaWorld Master Plan allows for a hotel with 300 rooms with a 30-foot-height limit, this alternative assumes a maximum of 300 hotel rooms. This alternative would reduce the height of the parking garage from 45 to 30 feet and assumes that the garage footprint would remain the same, and therefore, the number of parking spaces would be reduced by about one-third.

Reducing the height of the future hotel from up to 90 feet to 30 feet would lessen the visual impacts of the SeaWorld Master Plan Update. However, visual impacts are still considered significant with this alternative because of other components of the Master Plan proposed in Area 1, Theme Park that would result in a significant visual impact. Reducing the parking garage from 45 feet to 30 would lessen visual impacts as well, but not to below a level of significance.

Less Visually Intrusive Alternative: This alternative is designed to lessen significant visual quality impacts associated with the proposed project through more restrictive design guidelines that focus on maximum bulk for various heights of future structures and restrictions on the maximum heights of future structures from visually sensitive areas. The elements of this alternative require future structures to be 75 percent transparent above 60 feet in height. It also limits the height of structures at the eastern end of the theme park to 100 feet since views to this part of the park from the east are openly visible. Overall, this alternative would lessen visual impacts, but not to below a level of significance.

Combination Alternative: This alternative is based on some elements of the foregoing alternatives to address a variety of environmental issues raised by commentators on the Notice of Preparation. The Combination Alternative would limit future structures to no more than 30 feet in height, and no new amusement type rides or hotel would be proposed. It would include enhanced public access along the waterfront and require SeaWorld to focus future attraction development on marine education and conservation.

Elements of this alternative are addressed above in other project alternatives. No future structures that would be higher than 30 feet is addressed in the No Project Alternative and the No Parking Structure or Hotel Over 30 Feet Alternative. No hotel as part of the Master Plan Update is addressed in the No Hotel and Marina Alternative. Enhanced public access along the waterfront is addressed in the Enhanced Public Access Alternative. Finally, the focus of future attraction development on marine education would not address any particular environmental issue. Overall, this alternative may would lessen or avoid significant impacts to transportation/circulation and visual quality, respectively.

Project approval will require the decision-maker to make Findings, substantiated in the record, which state that: a) individual mitigation measures or project alternatives are infeasible, and b) the overall project is acceptable despite significant impacts because of specific overriding considerations.

MITIGATION, MONITORING AND REPORTING PROGRAM INCORPORATED INTO THE PROJECT:

In an effort to reduce or avoid those impacts identified as potentially significant with implementation of the proposed project to below a level of significance, the following mitigation measures have been incorporated into the SeaWorld Master Plan Update. Due to the general nature of the Update, however, additional environmental review may be required as incremental development occurs for site-specific projects over time. Additional mitigation measures with a higher degree of specificity could be required. Moreover, impacts caused by implementation of the Master Plan Update are considered significant and not fully mitigated at this time until these or more specific mitigation measures are developed and carried out.

Land Use: Mitigation in the form of approval of the Mission Bay Park Master Plan Update Amendment and General Plan Amendment, which are proposed as part this project, would partially or fully mitigate the impacts related to inconsistencies with adopted plans and policies. Additional mitigation measures for land use impacts are addressed in the related issues areas (including Biological Resources, Neighborhood Character/Aesthetics, Transportation and Circulation).

Neighborhood Character/Aesthetics: To partially mitigate visual quality impacts related to the construction of structures over 30 feet, the applicant would prepare and implement a site plan for each individual project. These site plans would comply with the SeaWorld Master Plan Update landscape buffer and bulk plan setbacks. They would also adhere to the Master Plan Update Design Guidelines that pertain to landscaping, lighting, signs, and architectural guidelines.

Transportation and Circulation: Significant, but mitigable impacts have been identified in the year 2005, for both roadway segments (unless option 1)b) is selected) and intersections. Traffic mitigation measures would be implemented based on key thresholds, which are to be monitored annually by SeaWorld with the report submitted to the City Environmental Review Manager for review beginning one year after the date of the issuance of the first building permit. When the thresholds are reached, the mitigation measures would be implemented. These measures include:

- 1) one of the following measures:
 - a) SeaWorld would widen SeaWorld Drive to six lanes between Interstate 5 and SeaWorld Way; or
 - b) SeaWorld would contribute fair-share cost to a CIP for widening of SeaWorld Drive if the City of San Diego has formed one for combined improvements to SeaWorld Drive and its interchange with Interstate 5 (SeaWorld's contribution would be 44% of the cost of widening SeaWorld Drive). If this form of mitigation is selected, the short-term impacts of SeaWorld on SeaWorld Drive may not be fully mitigated due to the fact that full funding for the CIP may be delayed or never achieved;
- 2) SeaWorld would coordinate traffic signals on SeaWorld Drive from Friars Road to the Interstate 5 northbound ramp and construct a 400-foot extension of the eastbound right-turn lane on SeaWorld Drive at the southbound Interstate 5 on-ramp (SeaWorld would contribute 100% of the cost);

- 3) SeaWorld would provide San Diego Police Department Special Events Traffic Officers at the Interstate 5/SeaWorld Drive interchange during busy days to override the traffic signals and respond to traffic conditions, if the California Department of Transportation (Caltrans) concurs;
- 4) SeaWorld would provide vehicle lane management during busy times on Perez Cove Way entrance gates to maximize vehicle storage as well as help visitors waiting in line to determine which lanes are open or lines shorter; and
- 5) SeaWorld would distribute promotional/directional material to employees and repeat patrons that would promote Interstate 8 or Ingraham Street as alternate routes to SeaWorld.

Significant, but mitigable impacts have also been identified in the year 2020, for both roadway segments and intersections. Traffic mitigation measures would be implemented based on key thresholds as stated above, and assuming the widening of both SeaWorld Drive (under 2005 mitigation) and West Mission Bay Drive between SeaWorld Drive and Ingraham Street (a Capital Improvement Project, CIP 52-643) to six lanes is complete. The mitigation measures for the year 2020 project impacts would include:

- 1) SeaWorld would reconfigure the Ingraham Street/Perez Cove Way intersection to remove the split east/west signal phasing, by combining the westbound through movement with the right-turn movement to create dual left-turn lanes and a shared through/right-turn lane. The only pedestrian crossing across Ingraham Street should remain on the north side of the intersection (SeaWorld would contribute 100% of the cost);
- 2) SeaWorld would contribute fair-share cost to improve the SeaWorld Drive/Interstate 5 interchange. These improvements would be included in a City-initiated CIP which would cover the widening of SeaWorld Drive between SeaWorld Way and Interstate 5, and improvements to the interchange at Interstate 5. Because the CIP project may not fully funded, the long-term impacts of SeaWorld on the SeaWorld Drive/Interstate 5 interchange are considered unmitigable. SeaWorld's cost participation would be as follows: I-5 northbound on- and off-ramps improvements (29%); I-5 southbound on-ramp storage improvements (27%); and I-5 northbound on-ramp storage improvements (50%);
- 3) SeaWorld would contribute fair-share cost to reconstruct the SeaWorld Drive/Pacific Highway intersection to provide additional lanes of through and right turn traffic on SeaWorld Drive. This would be accomplished through shared lanes and widening of SeaWorld Drive (SeaWorld would contribute 36% of the cost). As SeaWorld is only obligated to pay for a portion of the improvement and no funding source exists for the balance of the cost, the long-term impacts of SeaWorld on the SeaWorld Drive/Pacific Highway intersection are considered unmitigated;
- 4) SeaWorld would reconstruct the SeaWorld Drive/Pacific Highway intersection to provide northbound lane addition which shall be carried through the intersection to the SeaWorld Drive/Interstate 5 southbound on-ramp intersection. The lane addition would start about 300 feet south of Pacific Highway and ends as a right turn lane at the southbound Interstate 5 on-ramp (SeaWorld would contribute 100% of the cost.);

- 5) SeaWorld would contribute fair-share cost to add a third, westbound right-turn lane to the westbound off-ramp of Interstate 8 should West Mission Bay Drive bridge be widened to six lanes (SeaWorld would contribute 28% of the cost). This improvement would only be appropriate should the West Mission Bay Drive bridge be widened to six lanes. As these improvements would only be constructed if CIP 52-643 is funded and implemented, the long-term impacts of SeaWorld on the westbound Interstate 8 off-ramp are considered unmitigated; and
- 6) SeaWorld would contribute fair-share cost to widening the West Mission Bay Drive bridge to six lanes and widen southbound West Mission Bay Drive to three lanes between the bridge and the eastbound Interstate 8 on-ramp (SeaWorld's contribution would be 47%). These improvements would be included in the City's CIP No. 52-643. Should this CIP not be fully funded or implemented, SeaWorld's long-term impact on West Mission Bay Drive between SeaWorld Drive and Interstate 8, as well as the Interstate 8 eastbound on-ramp, would be unmitigated because it is infeasible for SeaWorld to bear the full cost of these improvements.

Significant, mitigable impacts related to parking have been identified. A parking monitoring program would be implemented, and when deemed necessary, one or more of the following improvements would be implemented:

- 1) pave the existing unpaved guest overflow parking area located in the southwest corner of Area 2;
- 2) implement off-site parking or shuttle/MTDB transit options; and/or
- 3) construct the planned parking structure.

Water Quality: Due to SeaWorld's existing surface runoff controls and Best Management Practices (BMPs), no significant impacts were identified as a result of existing operations. In addition, the existing treatment of aquaria water, facility irrigation, wash down, and storm water as provided in SeaWorld's National Pollutant Discharge Elimination System Permit results in no identified significant impacts due to discharge of the treated water into Mission Bay.

Water quality impacts that could result from the operational impacts associated with the expanded marina would be the same types as under the current operation and would include the potential release of pollutants, including fuel, oil, grease, bacteria, heavy metals, and litter. These potential impacts would be mitigated to below a level of significance by installing an automatic shut-off on fuel pumps; regular inspection of the sanitary pump-out; and prohibition of boat hull paint removal and repainting in the marina area.

Water quality impacts that could result from future exhibits would include aquarium water, hose down of animal areas, landscaping, and pedestrian traffic. In order to mitigate potentially significant impacts, within two years of the approval of the Master Plan Update by the California Coastal Commission, SeaWorld would install catch basin inserts or filters to capture oil and grease in runoff at the point where it enters the storm drain system from parking lots and fueling areas.

Water quality impacts related to construction activities would be mitigated through the implementation of a Stormwater Pollution Prevention Plan (SWPPP) that would be approved by the City Engineer and the Regional Water Quality Control Board.

Biological Resources: Significant biological resource impacts could result from shading impacts due to the future, Tier 2 projects. In order to mitigate for any potential impacts, prior to Coastal Development Permit application for the expansion of the marina, a project-specific shadow analysis for Tier 2 projects would be required. This would identify potential impacts from any projects, and would identify any required and appropriate mitigation measures for eelgrass.

A significant impact to least tern nesting activity may occur to the nearby Stony Point Least Tern Preserve should it be recolonized. Prior to construction of a new development project on the SeaWorld leasehold, a determination shall be made as to whether the Stony Point Preserve has been recolonized by the California least tern. Should the preserve be recolonized, a determination shall be made as to whether the new development project would provide a clear line-of-sight from raptor perching opportunities on the proposed structure to the Stony Point Preserve. Should such a line-of-sight exist, the structure would be required to include appropriate design features to eliminate any raptor perching opportunities.

Noise Impacts: Future rides and show may result in significant noise impacts. Prior to issuance of a Coastal Development Permit, a project-specific noise study prepared by a qualified acoustician would be required for any new ride attraction or performance show and must demonstrate that sensitive receptors would not be exposed to noise levels in excess of applicable standards.

The future hotel project would be subject to exterior traffic noise levels that may result in a significant noise impact to hotel patrons, depending on the hotel design. Prior to issuance of building permits for the future hotel, verification that the guest room interiors will meet the 45 dB CNEL interior standard would be required through the preparation of an interior noise study by a qualified acoustician. Any mitigation measures recommended in this study shall be implemented to meet the required 45 dB CNEL interior standard.

The proposed "Splash-Down" ride may periodically increase ambient noise by 3 dB(A) and may be audible out to 7,000 feet from the theme park. However, because ambient noise levels would not substantially increase, the ride would not create a significant noise impact, and therefore no mitigation is required.

Geology/Soils: The proposed project would have potentially significant impacts associated with liquefaction, unstable geologic or soil conditions, soil erosion during construction, and shoreline rip rap slumping. Prior to issuance and/or approval of a grading permit for each portion of redevelopment, a soils investigation, erosion control plan, subsurface geotechnical investigation, and a disposal plan would be approved by the City Engineer. Appropriate mitigation measures (such as soil compaction and runoff control devices) would be incorporated into the project to ensure construction satisfactory to engineering standards. Any effluent discharge to Mission Bay would have to meet the effluent limits specified by RWQCB (Order No. 95-25) and Federal National Pollution Discharge Elimination System (NPDES) requirements. Effluent discharged to the City of San Diego sewer system would be required to meet City standards.

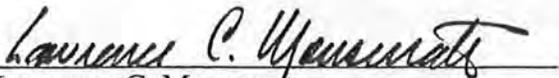
Air Quality: No significant impacts identified. As a condition of any grading or building permit, construction management procedures would be implemented to clean up dirt and debris spillage from public roads, and construction traffic would be routed through the least sensitive areas.

Energy: SeaWorld currently has existing energy conservation programs which would be applied to future development. Implementation of project-specific energy conservation programs to

minimize electrical fuel, and/or natural gas consumption associated with new attraction would be considered.

Water Conservation: In an effort to decrease water consumption, SeaWorld would apply its existing water conservation programs and would consider implementation of project-specific water conservation programs to minimize water consumption associated with new attractions or facilities. Proposed landscaping is required to conform with the SeaWorld Master Plan Update Design Guidelines which would incorporate water conservation measures.

The above Mitigation, Monitoring and Reporting Program will require additional fees and/or deposits to be collected prior to the issuance of building permits, certificates of occupancy and/or final maps to ensure the successful completion of the monitoring program.


Lawrence C. Monserrate,
Environmental Review Manager
Planning and Development Review Department

March 12, 2001
Date of Draft Report

June 5, 2001
Date of Final Report

Analyst: M. Blake

PUBLIC REVIEW:

The following individuals, organizations, and agencies received a copy or notice of the draft EIR and were invited to comment on its accuracy and sufficiency:

Federal Government

National Marine Fisheries Service
U.S. Army Corps of Engineers
U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service

State of California

State Clearinghouse
California Coastal Commission
California Department of Boating and Waterways
California Department of Fish and Game
California Department of Water Resources
California Environmental Protection Agency
California State Coastal Conservancy
CALTRANS, District 11
Regional Water Quality Control Board, Region 9
State Lands Commission
Resources Agency
Park and Recreation Department
State Water Resources Control Board
Air Resources Board

County/City Agencies

County of San Diego

Air Pollution Control Board

City of San Diego

Mayor Murphy

Councilmember Wear, District 2

Councilmembers or Council Offices, Districts 1, 3, 4, 5, 6, 7, and 8

Development Services Department

Planning Department

Engineering and Capital Projects Department

Park and Recreation Department

Real Estate Assets Department

Wetland Advisory Board

Central Library

Clairemont Branch Library

Linda Vista Branch Library

Ocean Beach Branch Library

Pacific Beach Branch Library

Point Loma Branch Library

Clairemont Community Service Center

Peninsula Community Service Center

Park Development

San Diego Association of Governments (SANDAG)

Metropolitan Transit Development Board (MTDB)

Clairemont Mesa Planning Committee

Mission Beach Town Council

Mission Beach Precise Planning Committee

Mission Bay Park Committee

Linda Vista Community Planning Committee

Pacific Beach Community Planning Group

Pacific Beach Town Council

Crown Point Association

Ocean Beach Planning Board

Ocean Beach Town Council

Peninsula Community Planning Board

California Native Plant Society (CNPS)

Endangered Habitats League

San Diego Audubon Society

San Diego Regulatory Alert

San Diego State University, Stuart Hurlbert

Sierra Club

Center for Biodiversity

Citizens' Coordinate for Century III

Environmental Health Coalition

Save Everyone's Access, c/o Scott Andrews

San Diego Convention and Visitors Bureau

Mission Bay Lessees

Jim Peugh

Carolyn Chase, SD Earth Times

San Diego Baykeeper

Surfers Tired of Pollution
League of Conservation Voters
Pat Gallagher
The Surfrider Foundation
League of Women Voters
Carolyn Cook
William T. McBride
Jim Curtis
John Krebs
Jon Myers

Copies of the draft EIR, the Mitigation, Monitoring and Reporting Program and any technical appendices may be reviewed in the office of the Land Development Review Division, or purchased for the cost of reproduction.

RESULTS OF PUBLIC REVIEW:

- () No comments were received during the public input period.
- () Comments were received but the comments do not address the accuracy or completeness of the environmental report. No response is necessary and the letters are attached at the end of the EIR.
- (x) Comments addressing the accuracy or completeness of the EIR were received during the public input period. The letters and responses follow. *

RESPONSES TO COMMENTS

Commentors Index

<u>Letter from</u>	<u>Response Numbers</u>
<u>FEDERAL AGENCIES</u>	
U.S. Fish and Wildlife Service Carlsbad Fish and Wildlife Office 2730 Loker Avenue West Carlsbad, CA 92008	F-1 – F-6
CA. Department of Fish and Game South Coast Regional Office 4949 Viewridge Avenue San Diego, CA 92123 Dated: April 25, 2001	
U.S. Department of Commerce National Oceanic and Atmospheric Administration National Marine Fisheries Service Southwest Region 501 West Ocean Boulevard, Suite 4200 Long Beach, CA 90802-4213 Dated: April 16, 2001	F-7 – F-11
<u>STATE AGENCIES</u>	
Department of Toxic Substances Control 5796 Corporate Avenue Cypress, CA 90630 Dated: April 10, 2001	S-1 – S-19

Letter from	Response Numbers
STATE AGENCIES Continued	
California Regional Water Quality Control Board San Diego Region 9771 Clairemont Mesa Boulevard, Suite A San Diego, CA 92124-1324 Dated April 24, 2001	S-20 – S-27
Department of Transportation District 11 P.O. Box 85406 San Diego, CA 92186-5406 Dated: April 25, 2001	S-28 – S-43
LOCAL AGENCIES	
Metropolitan Transit Development Board 1255 Imperial Avenue, Suite 1000 San Diego, CA 92101-7490 Dated: April 24, 2001	L-1 – L-2
Midway Community Planning Board 3024 Hancock Street San Diego, CA 92110 Dated: April 24, 2001	L-3 – L-15
Pacific Beach Community Planning Committee 2293 Soledad Rancho Road San Diego, CA 92109 Dated: April 25, 2001	L16-L27
Peninsula Community Planning Board 1537 Rosecrans Street, Suite D San Diego, CA 92106 Dated: April 25, 2001	L-27 – L-84
Ocean Beach Planning Board, Inc. P.O. Box 70184 Ocean Beach, CA 92167 Dated: April 18, 2001	L-85 – L-105
Peninsula Community Planning Board, Inc. P.O. Box 60418 San Diego, CA 92166 Dated: April 24, 2001	L-106 – L-137

Letter from	Response Numbers
<u>LOCAL AGENCIES Continued</u>	
Peninsula Community Planning Board, Inc. P.O. Box 60418 San Diego, CA 92166 Dated: April 24, 2001	L-138
<u>INDIVIDUALS AND ORGANIZATIONS</u>	
Mike Meyer 714 Coronado Court San Diego, CA 92109 Dated: April 23, 2001	I-1 – I-24
Carolyn Chase On behalf of San Diego Sierra Club Parks Committee P.O. Box 99179 San Diego, CA 92169 Dated: April 25, 2001	I-25 – I-24
Carolyn A. Cook 4454 Long Branch Avenue San Diego, CA 92107 Dated: April 23, 2001	I-78 – I-117
R. Jarvis Ross 4352 Loma Riviera Court San Diego, CA 92110 Dated: April 24, 2001	I-118 – I-123
William Dempsey Intern writing on behalf of Sierra Club, San Diego Chapter 3820 Ray Street San Diego, CA 92104-3623 Dated: April 25, 2001	I-124 – I-196
San Diego Coalition for Transportation Choices P.O. Box 90220 San Diego, CA 92169 Dated: April 24, 2001	I-197 – I-216

Letter from**Response Numbers****INDIVIDUALS AND ORGANIZATIONS Continued**

Save Everyone's Access
Dated: April 24, 2001

I-217 – I-292

Loma Riviera Community Association, Inc.
3115 Loma Riviera Drive
San Diego, CA 92110
Dated: April 24, 2001

I-293 – I-298

Ocean Beach Grassroots Organization
4423 Brighton Avenue
San Diego, CA 92107
Dated: April 25, 2001

I-299 – I-374

Alfred C. Strohlein
3559 Jewell Street
San Diego, CA 92109-6723
Dated: April 12, 2001

I-375 – I-435

Dr. Edward Gorham
4129 Loma Riviera Lane
San Diego, CA 92110
Dated: April 25, 2001

I-436 – I-461

Edward D. Gorham, Ph.D.
Assistant Professor,
Department of Family and Preventative Medicine
University of California, San Diego
4129 Loma Riviera Lane
San Diego, CA 92110
Dated: April 5, 2001

I-462 – I-466

Katrina A. Kendall
Dated: April 17, 2001

I-467 – I-476

Mission Bay Park Toxic Cleanup
P.O. Box 60026
San Diego, CA 92116
Dated: April 20, 2001

I-477 – I-506

Sierra Club
3820 Ray Street
San Diego, CA 92104-3623
Dated: April 25, 2001

I-507 – I-547

Letter from	Response Numbers
<u>INDIVIDUALS AND ORGANIZATIONS Continued</u>	
Henry D. Romano Dated: May 7, 2001	I-548
San Diego Audubon Society 2321 Morena Boulevard, Suite D San Diego, CA 92110 Dated: May 8, 2001	I-549 – I-585
Sea Paw Save Environmental Areas, Public Access, & Wildlife 3089-C Clairemont Drive, #220 San Diego, CA 92117 Dated: April 25, 2001	I-586 – I-645

Responses to Comments

The following provides the comment letters received on the Draft EIR during the public review period, as well as the response to these comments.

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COMMENTS

RESPONSES



US Fish and Wildlife Service
Carlsbad Fish and Wildlife Office
2730 Loker Avenue West
Carlsbad, CA 92008
(760) 431-9440
FAX (760) 431-9624



CA Dept. of Fish & Game
South Coast Regional Office
4949 Viewridge Avenue
San Diego, CA 92123
(858) 467-4201
FAX (858) 467-4299

In Reply Refer To: FWS-SD-1637.1

APR 2 5 7001

Mr. Lawrence Monserrate
City of San Diego
Planning and Development Review
Land Development Review Division
1222 First Avenue, Mail Station 501
San Diego, California 92101

Attn: Ms. Martha Blake

Re: Draft Environmental Impact Report for the Sea World Master Plan Update (LDR No. 99-0618; SCH 1984030708), City of San Diego, California

Dear Mr. Monserrate:

The U.S. Fish and Wildlife Service (Service) and the California Department of Fish and Game (Department), hereafter referred to as the Wildlife Agencies, have reviewed the draft Environmental Impact Report (DEIR), and the Biological Resources Report (March, 2001) for the Sea World Master Plan Update (SWMPU). Sea World is located on a 189.4-acre leasehold within the City of San Diego's (City) Mission Bay Park (Park). The Park is inside the City's Multiple Species Conservation Program (MSCP), but is outside the Multiple Habitat Planning Area (MHPA).

The Department is a trustee agency under the California Environmental Quality Act (CEQA) and is responsible for ensuring appropriate conservation of fish and wildlife resources including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act (CESA). The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Endangered Species Act of 1973, as amended (Act).

The proposed Park expansion includes a range of potential activities including ongoing maintenance, renovation, replacement and/or expansion of existing facilities within the current 189.4-acre leasehold. In addition, the leasehold's 30-foot structure height maximum would be increased to 160-feet. The expansion is divided into five development areas which are as follows:
1) Sea World Theme Park, 2) Guest Parking, 3) Administration and Support, 4) Sea World Marina,

COMMENTS

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Mr. Monserrate
FWS-SD-1637.1

and 5) Perez Cove Shoreline. Projects within these areas are categorized as either Tier 1 (project to happen while final approval of SWMPU is pending or right after finalization), Tier 2 (candidate projects to happen over the 20 year SWMPU lifetime), or Special Projects which are conceptual development proposals.

The Wildlife Agencies have identified several issues regarding the proposed project and we offer the following comments and recommendations:

- F-1
1. We agree that California least terns (*Sterna antillarum brownii*; tern) have been documented to successfully breed in higher noise areas, for example, near airport runways. However, the more regular and predictable noise is not necessarily equivalent to the unexpected loud explosion, flash of light, and startle effect consistent with fireworks. In addition, literature and studies on possible effects of fireworks or other actions that create a startle effect are no abundant. In 1991, the Service required that the California Department of Transportation stop pile driving operations immediately adjacent to Interstate 5, when a Service biologist observed terns leaving their nest on "D" Street Fill every time the "hammer" was dropped on a pile. The distance between the nesting birds and the pile driving operation was approximately 3,500 feet. The tern nesting site at Mariner's Point, which ranked among the five largest sites in the State in 1998-2000, is about 1 mile from Sea World. The Stony Point site is across the channel. Because of the lack of literature and/or studies, and the experience of this pile driving incident, we are not convinced that an increase in duration or frequency in the fireworks show will not result in an adverse impact to breeding terns.

We recommend that a study be conducted to determine the direct and indirect impacts to nesting terns in the vicinity of the Sea World fireworks prior to any proposed increase in the duration or frequency of the show. Two likely study avenues would be: 1) quantitatively determine behavioral response of incubating terns at Mariner's Point and FAA Island to Sea World fireworks displays, by direct or video recording observations of incubating terns during the fireworks displays; 2) determine if tern egg cracking or failure to hatch may result from adult tern agitation during or after the fireworks displays. We will review and approve the design of the study, the length and duration of the monitoring effort, and the tern biologist chosen for the monitoring effort.

F-2

The current discharge of fireworks may be a contributing factor for Stony Point not being used by terns for nesting. The fireworks are launched from a barge approximately 50-100 feet away from Stony Point, depending on tidal conditions. The explosive charge used to launch the fireworks creates low altitude noise levels that average 147.5 dB and has a maximum noise level of approximately 150.6 dB. Noise levels from the exploding fireworks, at an altitude of 100-300 feet, reach a maximum of 153.7dB. A calculated maximum noise level of 108 dB, accompanied by the sudden flash of light is what would be experienced on the ground directly below the fireworks. As long as Stony Point is a designated tern nesting preserve, the possibility of potential effects due to current or any increase in noise and vibration from fireworks is an issue. We recommend that there be no

F-1

The Draft EIR specifically addresses the issue of fireworks impacts on the productivity of the actively used least tern nesting sites in the Mission Bay area. This information is presented in Section 4.6, Biological Resources of the Draft EIR. This section states that measurements taken from Hubbs-SeaWorld Research Institute were 2,600 feet from the fireworks barge and the focus of such measurements was on "startle response." The supporting studies prepared by experts on least terns, together with an expert third-party review opinion regarding the validity of the results of the two studies, focused on the effect of more frequent fireworks shows during the months of April and May. These two studies and expert third-party opinion are found in Appendix D, Biological Resources Reports, of the Draft EIR. These studies support the conclusion reached in the Draft EIR, that existing and future fireworks displays as proposed by the project applicant, would not result in a significant impact to the nesting success of the endangered least tern at the actively used nesting sites in Mission Bay. The comment provides an opinion that the information presented is insufficient, however the commentor provides no supporting information for that opinion. Without additional supporting information, no further response is necessary.

Least tern egg cracking or failure to hatch tends to indicate declining productivity rates. The Draft EIR studies, however, show little difference in productivity rates at the sites near SeaWorld in comparison to overall San Diego County statistics. This comment does not provide factual information that would contradict the results presented in Section 4.6, Biological Resources of the Draft EIR. Without such information, no further response is necessary.

F-2

See response to comment F-1. It should be noted that Stony Point was abandoned as a nesting colony by terns three years prior to the first fireworks shows. For this reason, it is not reasonable to assume that the terns abandoned this site based on effects associated with fireworks. Further, based on Merkel & Associates knowledge, there have not been any attempts by terns to re-nest in this area in subsequent years, even though terns arrive on the breeding colonies of Mission Bay approximately one month prior to the normal summer fireworks season and begin nest behavior in other colonies in Mission Bay prior to the on-set of fireworks shows.

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Furthermore, the U.S. Fish and Wildlife Service must prove through a preponderance of the evidence that SeaWorld's fireworks would harm or harass the least tern. The federal Endangered Species Act ("ESA") was enacted to protect and preserve endangered and threatened species. (Endangered Species Act of 1973 ("ESA"), 16 U.S.C. § 1531 et seq.) To effectuate that purpose, Section 9 of the ESA prohibits the "taking" of any endangered species of fish or wildlife. (ESA § 9(a)(1)(B)-(C), 16 U.S.C. § 1538(a)(1)(B)-(C); 50 C.F.R. § 17.12.) Under the ESA, "take" means to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." (ESA § 3(19), 16 U.S.C. § 1532(19).) "Harass" means "an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering." (50 C.F.R. § 17.3.)

The government, however, bears the burden of proof. To stop SeaWorld's use of fireworks, the government must prove by a "preponderance of the evidence" that the fireworks would more likely than not harm or harass the least tern. See *Defenders of Wildlife v. Bernal* (9th Cir., Feb. 28, 2000, No. 98-16099) 204 F.3d 920 [2000 WL 220490].) If the government successfully proves that SeaWorld's nightly use of fireworks would more likely than not adversely affect the least tern's nesting behavior, the ESA provides the authority to prohibit such activity. The USFWS has not provided any proof to demonstrate that SeaWorld's existing and proposed fireworks would harm or harass the least tern.

COMMENTS

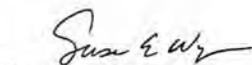
RESPONSES

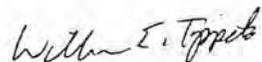
FWS-SD-1637.1

- F-2 Cont. fireworks displays between April 15 and May 15. If the tern nests at Stony Point, no fireworks displays would be conducted while nests or chicks were present there.
- F-3 The Mission Bay Park Master Plan Update (MBPMPU) states that Stony Point should be abandoned and replaced with another location. We strongly disagree with this statement because there has been no discussion or evaluation of a replacement site. We are available to work with the City to explore other potential tern nesting sites within the Park. Since Stony Point is a historical tern nesting area, any replacement site should be utilized by nesting terns prior to removal of Stony Point.
- F-4 2. Page 4.6-20 of the DEIR states that any eelgrass (*Zostera marina*) impacted would require mitigation at 1.2:1, which is consistent with National Marine Fisheries Service guidelines. However, the City's MSCP requires that any eelgrass impacted be mitigated at a 2:1 ratio as stated in Table 2: Wetland Mitigation Ratios of the Land Development Manual-Biological Guidelines, page 13. Therefore, this should be changed to ensure consistency with the City's MSCP.
- F-5 3. The DEIR states that near Perez Cove, great blue herons (*Ardea herodias*) have established rookeries in the past. We recommend any future construction activities taking place in this area avoid the destruction of the rookeries and occur outside of any migratory bird breeding or nesting times.
- F-6 4. The DEIR should clearly define which projects within the five development areas are Tier I, Tier II, or Special Projects.

The Wildlife Agencies appreciate the opportunity to review and comment on the DEIR for the Park. If you have any questions please feel free to contact Mr. Josh Garcia of the Service at (760) 431-9440 or Mr. Brad Henderson of the Department at (858) 467-4201.

Sincerely,


for Nancy Gilbert
Assistant Field Supervisor
U.S. Fish and Wildlife Service


William E. Tippets
Habitat Conservation Supervisor
CA Department of Fish and Game

cc:
NMFS - Long Beach (Robert Hoffman)

- F-3 See response to comment F-2. This comment indicates that the commenting agencies disagree with language presented in the City adopted Mission Bay Park Master Plan Update regarding the recommended abandonment of the Stony Point least tern nesting preserve. This comment does not address the adequacy or accuracy of information presented in the Draft EIR and therefore, no further response is necessary.
- F-4 This conclusion is partially true. A 2:1 ratio is required by the City of San Diego Land Development Guidelines for those projects not subject to federal or state regulatory agency permitting, such as those associated with shading by upland constructed structures. However, the eelgrass mitigation policy ratio of 1.2:1 would apply where U. S. Army Corps permitting is required. This is based on the fact that the City of San Diego Biological Guidelines state that "[W]etland mitigation required as part of any federal (404) or state (1601/1603) wetland permit will supercede and will not be in addition to any mitigation identified in the CEQA document for those wetland areas covered under any federal or state wetland permit. For this reason, wetland impacts addressed in the City's MSCP is in error since the Corps default guideline for eelgrass mitigation, is the Southern California Eelgrass Mitigation Policy which states a 1.2:1 mitigation ratio for eelgrass impacts." Based on the anticipated impact types, it is contemplated that the lower ratios associated with the Southern California Eelgrass Mitigation Policy would apply to most, if not all of the impacts anticipated by the proposed project.
- F-5 Comment noted. In accordance with regulatory requirements, any initial demolition work that has the potential for impacts to rookeries will be confined to the non-breeding season. However, please note that only the hotel project would be near enough to the existing great blue heron rookery to result in a potential impact. The hotel would not be constructed until after 2005.
- F-6 The Draft EIR clearly defines which projects are Tier 1, Tier 2 and Special Projects in Chapter 3.0, Project Description. More specifically, this information is found in Section 3.4.2, Proposed Projects and displayed on Figure 3.4-1 of the Draft EIR.

COMMENTS

RESPONSES



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

F/SWR4:RSH

Land Development Review Division
City of San Diego
1222 First Avenue, Fifth Floor
San Diego, California 92101

Dear Sir or Madam:

The National Marine Fisheries Service (NMFS) has reviewed the Draft Environmental Impact Report (DEIR) for the Sea World Master Plan Update and offers the following comments for your consideration.

The 1996 amendments to the Magnuson-Stevens Fishery Management and Conservation Act set forth a new mandate requiring NMFS, regional fishery management councils, and other Federal agencies to identify and protect important marine and anadromous fish habitat. One aspect of this mandate was the delineation of "essential fish habitat" (EFH) for all managed species. Federal action agencies which fund, permit, or carry out activities that may adversely impact EFH are required to consult with NMFS regarding the potential effects of their actions on EFH, and respond in writing to the recommendations of NMFS. In addition, NMFS is required to comment on any state agency activities which would impact EFH.

The proposed redevelopment activities are located within an area designated as EFH for the Coastal Pelagics and Pacific Groundfish Management Plans. As such, an assessment to determine if the proposed activity may adversely affect EFH is required for any subsequent Federal action. That assessment must contain the following elements:

- 1) A description of the proposed action.
- 2) An analysis of the effects, including cumulative effects, of the proposed action on EFH, the managed species, and associated species, such as major prey species, including affected life history stages.



F-7

This comment provides introductory remarks and information pertaining to the Magnuson-Stevens Fishery Management and Conservation Act and "essential fish habitat" (EFH). This comment also indicates that the commenting agency, National Marine Fisheries Service (NMFS) has commenting responsibilities for any proposed federal permit action that may be associated with the proposed project. Furthermore, this comment describes the information that must be provided for any subsequent federal action. The Draft EIR recognizes that future projects would require a federal permit that would affect EFH, by identifying the Section 404 Permit, and Section 10 of the Rivers and Harbors Act, administered by the Army Corps of Engineers in Section 3.6.2, Project Description, Discretionary Actions of the Draft EIR. The Draft EIR also addresses impacts to eelgrass beds, which are considered EFH, in Section 4.6, Biological Resources of the Draft EIR.

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RESPONSES

- F-7
Cont. 3) The Federal action agency's views regarding the effects of the proposed project on EFH.
- 4) Proposed mitigation, if applicable.
- F-8 If certain elements of this DEIR continue to the permit stage, the U.S. Army Corps of Engineers is likely to be the responsible Federal action agency and they may require you to provide the necessary EFH assessment information.
- F-9 We are particularly concerned over projects described in this DEIR which have the potential to impact existing eelgrass (*Zostera marina*) resources. Eelgrass vegetated areas are extremely productive habitat that serve as important nursery areas for multiple fish species.
- F-10 The proposed 115-slip expansion of the Sea World marina is likely to result in adverse shading impacts to existing eelgrass resources as well as contribute to an incremental water quality degradation associated with anti-fouling boat hull paints, fuel leaks/spills, and engine combustion products. It does not appear that the DEIR provides any justification for this proposed expansion nor does this particular project appear to be consistent with project objectives as described in section 3.2. The DEIR should address these issues.
- F-11 Shading impacts to eelgrass are also expected from the Splashdown Ride as well as other Tier 2 projects. The DEIR states that mitigation for shading would only be required if the shading exceeded a 3-hour impact threshold. We are unaware of any studies which would support this 3-hour threshold. As a consequence, if it could be demonstrated that the proposed projects have been designed in a manner to minimize shading of adjacent water areas to the greatest extent possible, then a comprehensive eelgrass monitoring program to determine level of impacts from shading would be required. The DEIR does address this type of monitoring, but suggests that twice yearly surveys be conducted for a period of three years. We believe this level of monitoring is insufficient and recommend that monitoring occur during fall, spring, and winter for a period of five years.
- Finally, if all of the projects described in the DEIR are constructed as described, it is clear that some level of permanent impact to existing eelgrass resources would occur. A specific plan to mitigate that impact, consistent with the enclosed Southern California Eelgrass Mitigation Policy, should be included in this document.

- F-8 See response to comment F-7.
- F-9 Potential eelgrass impacts are addressed in Section 4.6, Biological Resources of the Draft EIR.
- F-10 As discussed in Section 4.6.3, Biology, Impact, Marine Biological Resources of the Draft EIR, the eelgrass is likely to be affected by marina expansion. This has been addressed as an anticipated significant impact requiring mitigation. As discussed in Section 4.5.3, Water Quality, Impacts, Special Projects of the Draft EIR, incremental water quality impacts are associated with marinas. The water quality impacts associated with the marinas, however, do depend upon the water circulation, site design, and pollutant source control. The area of proposed work is in a moderately well flushed portion of Mission Bay and the contemplated design would not substantially alter the current circulation patterns in and around the existing marina. For this reason, the principal water quality issue to be addressed is how pollutant source control is to be addressed. It is anticipated that any Coastal Permit approval of a marina will require compliance with best management practices (BMPs) developed specifically for the marina. Similar measures have been required within Mission Bay for new marina expansions or reconstruction permits issued since 1997. Finally, Mitigation Measure 4.5-1 addresses potential water quality impacts associated with the proposed marina expansion.

The marina expansion is currently allowed under the existing SeaWorld Master Plan. Furthermore, under the project objectives described in Section 3.3, Project Description, Project Objectives of the Draft EIR, the proposed project seeks to (1) continue to operate an economically-feasible, high quality theme park environment; (2) provide attractions which appeal to a broad range of family members; (3) increase revenues to the City of San Diego; and (4) remain competitive with other theme parks. Therefore the expansion of the marina is a reasonable use, which conforms with the project objectives.

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Section 9.4.3, Alternatives, No Hotel and Marina Alternative of the Draft EIR discusses the project objectives that would be compromised with the implementation of the No Hotel and Marina Alternative, which include, without limitation, the following: (1) implementation of the approval of such expansion under the existing Master Plan; (2) storage of private boats or rental of personal watercrafts (PWC); (3) use of the increased revenue and attendance derived from slip rentals to contribute to the economic vitality of SeaWorld; and (4) compliance with Section 30224 of the California Coastal Act. See response to comments F-11 and I-54.

- F-11 The anticipated eelgrass shading impact concerns are derived from both model predictions on light duration and intensity needs as well as empirical observations and testing associated with construction of other structures in and around Mission Bay and San Diego Bay that would cast shadows and potentially impact eelgrass. Most relevant to the current proposed actions was the modeling and monitoring conducted on the Princess Resort Convention Center expansion on Mission Bay completed in 1992. This facility expansion has an orientation not dissimilar to that proposed for the Tier 2 projects, however the convention center expansion was closer to the eelgrass habitat and thus would be expected to have an even greater effect on diffused light levels. The convention center was sited using comparable design guidelines as have been applied to determine likely impact conditions associated with the Tier 2 projects. At the convention center, the predicted shading impacts were used to set encroachment limits that were proven to be adequate to protect eelgrass resources through monitoring (5-years). The 3-hour threshold for impact was intended to be a criteria to determine when survey efforts to determine if eelgrass had been effected is warranted. Many factors may effect the nature of eelgrass response to shading. For that reason, the 3-hour minimum shading standard may be inappropriate as an *a priori* means of determining when it is appropriate to look for an impact. This adjustment will be made in the Mitigation Measures.

The monitoring recommendations in this comment are not necessary to determine whether an impact from shading exists. First, shading effects will generally be observed in the first year if these are substantial and should emerge within 3 years if they are going to occur at all. Winter will be added to the monitoring intervals based on the fact that eelgrass does not always go dormant during the winter months. However, the recommended 5 years of monitoring is believed to be more than adequate to assess any shadow effects and 3 years would be expected to suffice.

As discussed in Section 4.6-3, Biological Resource, Impact of the Draft EIR, no significant shading impacts are expected to occur from Tier 1 projects. Specifically, the Splashdown is not expected to cast a shadow over the water during the month of December until as late as 4 p.m.

COMMENTS

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While the Draft EIR indicates that future development of the SeaWorld Marina Expansion would have direct significant impacts on eelgrass beds, the project applicant has not determined when this marina expansion would occur. Hence, a specific plan for mitigation of such impacts is not provided in the Draft EIR as it would be premature to identify offsite mitigation sites that may not be available at the time the marina expansion would occur.

The Draft EIR, however, provides the performance standards and identification of the adopted Southern California Eelgrass Mitigation Policy as the mitigation method that would be used when the marina expansion would be sought. For purposes of satisfying the requirements of CEQA, the Draft EIR need not include a specific plan for mitigation but may specify performance standards that will result in mitigation and may be undertaken in more than one specified way. CEQA Guidelines, § 15126.4(a)(1)(B).

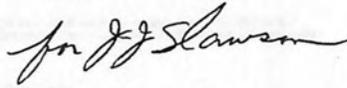
Furthermore, Mitigation Measure 4.6-1 requires the preparation of a project-specific shadow analysis for Tier 2 projects and the Future Hotel Special Project prior to Coastal Permit application, and Mitigation Measure 4.6-2 requires implementation of an eelgrass revegetation program in conformance with the Southern California Eelgrass Mitigation Policy.

COMMENTS

RESPONSES

Should you have any questions regarding these comments, please contact Mr. Robert Hoffman at 562-980-4043 or via email at: bob.hoffman@noaa.gov.

Sincerely,



Rebecca Lent, Ph.D.
Regional Administrator

Enclosure

cc:
USFWS - Carlsbad (Martin Kenney)
CDFG - San Diego (Marilyn Fluharty)

COMMENTS

RESPONSES



Winston H. Hickox
Agency Secretary
California Environmental
Protection Agency

Department of Toxic Substances Control

Edwin F. Lowry, Director
5796 Corporate Avenue
Cypress, California 90630



Gray Davis
Governor

April 10, 2001

Ms. Martha Blake
City of San Diego
1222 First Avenue, MS 501
San Diego, California 92101

NOTICE OF COMPLETION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE SEA WORLD MASTER PLAN - 1984030708

Dear Ms. Blake:

The Department of Toxic Substances Control (DTSC) has received your Notice of Completion (NOC) of a draft Environmental Impact Report (EIR) for the above-mentioned Project.

Based on the review of the document, DTSC's comments are as follows:

- S-1 1) The draft EIR needs to identify and determine whether current or historic uses at the Project site have resulted in any release of hazardous wastes/substances at the Project area.
- S-2 2) The draft EIR needs to identify any known or potentially contaminated sites within the proposed Project area. The NOC indicates the presence of an inactive landfill site near the project site. For all identified sites, the draft EIR needs to evaluate whether conditions at the site pose a threat to human health or the environment.
- S-3 3) The draft EIR should identify the mechanism to initiate any required investigation and/or remediation for any site that may require remediation, and which government agency will provide appropriate regulatory oversight.
- S-4 4) Investigate the presence of lead paints or asbestos containing materials (ACMs) in the currently existing building structures. If the presence of lead and ACMs are suspected, proper precautions should be taken during demolition and renovation activities. Additionally, the contaminants should be remediated in compliance with the California environmental regulations.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at www.dtsc.ca.gov.

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S-1 Section 4.11.1, Human Health/Public Safety, Existing Conditions of the Draft EIR summarizes hazardous materials currently or historically used by SeaWorld or within the SeaWorld leasehold area, including without limitation, the inactive Mission Bay Landfill. The City of San Diego Solid Waste Local Enforcement Agency (LEA) is responsible for inspecting Mission Bay Landfill and monitors for surface gaseous emissions, leachate generation and differential settlement on a quarterly basis. (See p. 4.11-6 of the Draft EIR). Post-closure maintenance of the Mission Bay Landfill is also regulated by the California Regional Water Quality Control Board, San Diego Region ("RWQCB") under Order No. 97-11, pursuant to Title 17, California Code of Regulations (14 C.C.R.), cited on page 4.11-1 of the Draft EIR. Additionally, Table 4.11-1 of the Draft EIR lists hazardous materials used by SeaWorld, their use and the maximum quantity onsite at any single given time as well as the total yearly amount. The EIR has been revised and indicates that future development of the southeast corner of Tier 2 site I-2 may be coincident with the inactive landfill based on a revised approximate landfill boundary map (Figure 4.11-1 in the Draft EIR). According to SeaWorld's lease agreement with the City, SeaWorld may not disturb the existing inactive landfill. Therefore, prior to development of this area, in accordance with state and local regulations, SeaWorld will determine the boundary of the landfill to ensure that development of site I-2 will not involve the landfill. Furthermore, the EIR states that any hazardous materials or wastes encountered during construction activities will be handled and remediated in accordance with all applicable requirements.

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S-2 The Draft EIR indicates that a known potentially contaminated area exists on the southeast part of the project site (pages 4.11-1 through 4.11-6). An analysis in an environmental impact report of the potential impacts of preexisting conditions to human health and the environment is not required under the California Environmental Quality Act ("CEQA"). CEQA requires environmental analysis of a project possibly affected by preexisting environmental conditions only when the project may adversely change those conditions or otherwise have a significant effect on the environment. *Baird v. County of Contra Costa* (1995) 32 Cal. App. 4th 1464, 1466. Otherwise, an analysis of the adverse effects of preexisting physical conditions on a proposed project extends beyond the scope of CEQA and the environmental impact report requirement. *Id.* at 1468. That is, CEQA is not intended to protect a proposed project from the existing environment, but intended to protect the environment from the impacts of a proposed project. *Id.*

Notwithstanding the foregoing, the LEA reports state that waste within the Mission Bay Landfill is adequately covered and the integrity of the final cover has not been compromised. Prior measurements of a variety of toxic constituents also show that such constituents have not exceeded background levels (see page 4.11-6 of the Draft EIR). Furthermore, SeaWorld has conducted a soil and groundwater investigation in the area outside of the approximate landfill boundary (Assessment Report for the SeaWorld Leasehold Expansion, Appendix A-1, Volume II, Appendices to the Final EIR Response to Comments). Results from this Phase I and Phase II site assessment report are included in Section 4.11.1, Existing Conditions of the Draft EIR. The results indicate that low levels of contamination were encountered in several of the soil borings and monitoring wells, and that no landfill debris was encountered. A summary of the study is as follows.

1. In December 1996 and January 1997, wells LE-1 through LE-6 were drilled and installed on the northeast part of the SeaWorld leasehold. Landfill debris was not encountered during drilling.
2. Hydrocarbons such as hydraulic, motor and natural oils were detected in soil from well LE-1 at 10 feet below grade (79 mg/kg). Hydrocarbons such as diesel-weight fuels and solvents were detected in both samples from well LE-4 (200 mg/kg at 10 feet, 380 mg/kg at 15 feet below grade).
3. Acetone in soil was detected 15 feet below grade in wells LE-3, LE-4, LE-5, and LE-6 at 26 µg/kg (ppb), 220 ppb, 21 ppb, and 14 ppb respectively. In well LE-4, 2-butanone (MEK) was detected 15 feet below grade at 36 ppb. Acetone and 2-butanone are solvents typically used in the aerospace industries. Their detection is most likely the result of aerospace manufacturing-waste disposal in the former landfill. Metals analyses generally showed detectable arsenic, barium,

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total chromium, cadmium, cobalt, copper, lead, molybdenum, nickel, vanadium and zinc. Concentrations were below levels discussed in the 1983 Woodward Clyde Consultants Site Assessment Report on the Mission bay Landfill, and below TTLC levels. Some of the metals concentrations likely represent natural background concentrations.

4. 1,1,1-trichloroethane was found in groundwater samples from every well except LE-3 at concentrations from 2.4 ppb in well LE-4 and LE-6 to 7.2 ppb in LE-2. The Basin Plan MCL concentration for 1,1,1-trichloroethane is 200 ppb. Therefore the detected levels were considerably lower than the Basin Plan MCL limits. No other organic compounds listed in the Basin Plan as contaminants of concern were detected in this investigation.
5. Detectable concentrations of barium, silver, selenium and zinc were measured in groundwater samples. Applicable Basin Plan groundwater quality goals are not listed. Chromium, cobalt, copper and other metals detected in the 1983 Woodward Clyde Consultants Sub Assessment Report wells were not detected in the "LE" series wells.

This report indicates that there is no significant contamination of the leasehold near and outside the documented landfill perimeter provided by the City of San Diego. Hence the inactive landfill does not pose a threat to human health or the environment. With regard to other parts of the leasehold, SeaWorld has conducted a variety of construction projects on the leasehold that involved excavation activities. During these construction projects no hazardous materials were discovered on the project site that would pose a risk to human health of the environment.

See also Section 4.11.4, Human Health/Public Safety, Significance of Impact of the Draft EIR which states: "as long as the purchase, use, storage, generation and disposal of hazardous materials/wastes acquire and comply with all the appropriate permits from the San Diego County Department of Environmental Health, the San Diego Air Pollution Control District and the Regional Water Quality Control Board, and/or any other authorities required by law to issue any permits or other approvals required in connection with the removal and/or remedy of soil and/or water and/or building contamination, in connection with the construction and development on the project site, exposure of people to health hazards would be less than significant."

- S-3 The Draft EIR indicates on page 4.11- 9 that implementation of required local, state and federal regulations for the remediation of contaminated soils and groundwater, as well as the regulatory procedures for the storage and use of

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hazardous materials, would result in a less than significant impact with respect to the exposure of people to health hazards. Therefore, the performance standards identified in these regulations provide the mechanism to initiate any required investigation and/or remediation. California courts have held repeatedly that requiring compliance with environmental regulations is an appropriate mitigation measure. "A condition requiring compliance with environmental regulations is a common and reasonable mitigating measure." *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 308; *Perley v. Board of Supervisors* (1982) 137 Cal.App.3d 424,430.

S-4 SeaWorld has policies and procedures in place that require a thorough investigation of any proposed project for the presence of asbestos containing material (ACM) or lead paint. If any of these materials are suspected of being present, Section 4.11.3 of the Draft EIR states that SeaWorld will implement prudent measures before, during, and after demolition or renovation of the site to ensure complete compliance with applicable federal, state and local environmental regulations. See response to comment S3.

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- S-5 5) The NOC shows that although less than significant hazard impact is expected, the potential exists for the inadvertent release of hazardous materials from the future uses and storage of hazardous material. It should be addressed in detail in the final EIR.
- S-6 6) The draft EIR shows that the existing operation of Sea World involves the use and storage of a variety of chemicals. It has not mentioned whether Sea World obtained a hazardous substance storage permit from DTSC to store these chemicals. Otherwise, it is illegal to store hazardous substances without a permit.
- S-7 7) The draft EIR indicates that the proposed project site was a City of San Diego owned and operated Class II and Class III landfill. Additionally, it states that the City also operated part of the site as an unrestricted Class I landfill and received up to 13,400 barrels potentially containing up to 737,000 gallons of industrial waste consisting of waste acids, alkaline solutions, organic solvents, and paint waste. The draft EIR has not mentioned anything on how to remediate these wastes. Instead, the draft EIR shows that trenches approximately 60 feet long and 15 feet deep were excavated and filled with waste with a three to four foot covers. DTSC should be notified of any disturbance of these contaminated soil.
- S-8 8) The draft EIR concludes that although Mission Bay Landfill did receive industrial waste during its operating life, no significant levels of hazardous waste have been historically found. Indicate whether any environmental studies conducted at the site and the regulatory agencies' approvals so far.
- S-9 9) At several instances, the draft EIR indicates that any hazardous wastes/materials encountered during construction would be remediated in accordance with local, state, and federal regulations. Prior to initiating any construction activities, an environmental assessment should be conducted to determine if a release of hazardous wastes/substances exists at the site. If so, further studies should be carried out to delineate the general extent of the contamination. Also, it is necessary to estimate the potential threat to public health and/or the environment posed by the site. It is necessary to determine if an expedited response action is required to reduce existing or potential threats to public health or the environment. If it is not an immediate threat, final remedy should be implemented in compliance with state regulations and policies rather than excavation of soil prior to any assessments. It is not justifiable to inappropriately conduct the excavation of soil for any discoloration or malodorous to determine any contamination.
- S-10 10) Proper environmental investigation and/or remediation are needed with a Workplan which is approved by a regulatory agency who has jurisdiction to

- S-5 The potential release of hazardous materials from existing and future uses on the project site is addressed in the Draft EIR in Sections 4.11.3, Impact and 4.11.4, Significance of Impact. Furthermore, as indicated in Section 4.11.1 of the Draft EIR, SeaWorld follows the procedures described in its Hazardous Materials Business Plan and Emergency Contingency Plan, which establishes the protocol for emergency procedures in the event of hazardous materials spills, fire, or other emergency situation.

CEQA Guideline § 15126.2 requires an EIR to identify and focus on the significant environmental effects of the proposed project. Sections 4.11.3 and 4.11.6 analyze whether the proposed project would result in the exposure of people to potential health hazards or would result in a risk of an explosion or release of hazardous substances. Both sections analyze the potential risks based on whether the proposed project will result in a significant impact to public safety, which is the appropriate standard under CEQA.

- S-6 The hazardous storage permit is listed in Table 3.3-3 in the Draft EIR.
- S-7 The proposed SeaWorld Master Plan Update does not involve any projects that would disturb soils in the area of the closed landfill located in the southeast corner of the project site, with the possible exception of the southeast corner of Tier 2, Site I-2. See response to comment S1. The SeaWorld lease, (Appendix K-1, Volume II, Appendices to the Final EIR Response to Comments) prohibits SeaWorld from disturbing the integrity of the landfill. Nevertheless, Section 4.11.1 states that Article 7.8, Title 14, California Code of Regulations establishes standards and minimal requirements for proper closure, post closure maintenance, and ultimate reuse of solid waste disposal sites to assure that public health and safety and the environment are protected from pollution due to the disposal of solid waste. The closed landfill is regulated pursuant to this authority by the RWQCB under Order No. 97-11. Additionally, the Draft EIR states that the LEA is responsible for inspecting Mission Bay Landfill and monitors for surface gaseous emissions, leachate generation and differential settlement on a quarterly basis. The LEA also monitors surface conditions to determine whether waste is adequately covered to prevent public health and environmental hazards. In addition to the foregoing procedures to address any necessary remediation, any disturbance of contaminated soil resulting from the proposed project would have to comply with the City's post-closure land use plan for South Shores, as well as all local state and federal regulations, as stated in Section 4.11.3. See response to comment S-3.

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- S-8 The information presented regarding no significant levels of hazardous waste was provided by the LEA, which is one of the regulating agencies regarding the Mission Bay Landfill. This statement was provided in the City's Post Closure Land Use Plan for South Shores, which was approved as a modification to Order 85-78 by the Regional Water Quality Control Board. Other studies have been conducted regarding this landfill, which are incorporated by reference into the Post Closure Plan and are described in the revised Section 4.11, Human Health/Public Safety. In addition, see response to comment S-2 regarding the study prepared on the SeaWorld leasehold.
- S-9 As required by federal, state and local regulations, SeaWorld would conduct the appropriate preexcavation studies to determine the potential to encounter hazardous during excavation for development projects. Furthermore, California courts have held repeatedly that requiring compliance with environmental regulations is an appropriate mitigation measure. "A condition requiring compliance with environmental regulations is a common and reasonable mitigating measure." *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 308; *Perley v. Board of Supervisors* (1982) 137 Cal.App.3d 424,430.
- S-10 See response to comment S-9.

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- S-10
Cont. | oversee hazardous waste cleanups. Complete characterization of the soil is needed prior to any excavation or removal action.
- S-11 | 11) The draft EIR shows that the Local Enforcement Agency (LEA) inspection reports indicate that landfill gases have not exceeded background levels and assumed that it is a threat to human health or the environment. The draft EIR should discuss the landfill and a detailed analysis including environmental samples and geotechnical information. In addition to environmental soil matrix sampling, soil gas/vapor sampling will be required to determine if landfill or other gases pose a toxic or explosive risk. Permanent or semi-permanent vapor probes should be installed to monitor for landfill and other gases over time.
- S-12 | 12) The draft EIR indicates that an educational facility will be constructed on the project site. Elaborate whether this facility is a public school. If a school is planning to build in the proposed project area, during the proposed school property acquisition and/or construction utilizing state funding, it should be in compliance with the Assembly Bill 387 (Wildman) and Senate Bill 162 (Escutia) which requires a comprehensive environmental review process and that DTSC's approval is required. DTSC's role in the assessment, investigation, and cleanup of proposed school sites is to ensure that the selected properties are free of contamination, and if the property is contaminated, that it is cleaned up to a level that is protective of the students and faculty who will occupy the new school. A study of the site is to be conducted to provide basic information for determining if there has been a release, or if there is a threatened release of a hazardous material including agricultural chemicals or if there may be a naturally occurring hazardous material present at the site, that may pose a risk to human health or the environment.
- S-13 | 13) The draft EIR shows that man-placed and hydraulically-placed fill materials are present at the project site. Appropriate studies should be conducted to make sure that these fill materials are free of chemical contamination.
- S-14 | 14) The draft EIR indicates that the project construction requires soil excavation and soil filling in certain areas. Appropriate sampling is required prior to disposal of the excavated soil. If the soil is contaminated, properly dispose them rather than placing them in another location. Land Disposal Restrictions (LDR) are applicable to these soils. Also, if the project is planning to import soil to backfill the areas excavated, proper sampling should be conducted to make sure that the imported soil is free of contamination.
- S-15 | 15) The NOC shows that although no significant hazard to the public is expected with future uses of the site, potential uses and storage of hazardous materials at the site will be addressed in the Final EIR. Remember to obtain a hazardous material's storage permit from an appropriate regulatory agency that has
- S-11 | The San Diego County LEA in May, 1995 requested a surface gas monitoring program be instituted and indicated that they did not anticipate the need for installation of gas monitoring probes at this time. See also response to comment S-2.
- S-12 | The proposed educational facility is not a public school and has no connection with the San Diego Unified School District or public school system, and hence would not fall within the jurisdiction of the regulations cited in this comment.
- S-13 | See responses to comments S-2 and S-9.
- S-14 | See response to comment S-9. In addition, as part of compliance with federal, state and local regulations, SeaWorld would conform with regulations ensuring the fill soils provided from offsite locations would be tested to ensure that they are not contaminated. SeaWorld will also comply with regulations governing the disposal of any excavated soils. California courts have held repeatedly that requiring compliance with environmental regulations is an appropriate mitigation measure. "A condition requiring compliance with environmental regulations is a common and reasonable mitigating measure." *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 308; *Perley v. Board of Supervisors* (1982) 137 Cal.App.3d 424,430.
- S-15 | See responses to comments S-6 and S-9.

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- S-15
Cont. [jurisdiction to regulate hazardous substances handling, storage, treatment and/or disposal. Contact the Certified Unified Program Agency (CUPA) to evaluate the permit requirements. Include that information in the Final EIR.
- S-16 [16) As indicated in the draft EIR, potential hazard to the public or the environment though routine transportation, use, disposal or release of hazardous materials is possible. An environmental assessment should be conducted at the site along with an evaluation of the results.
- S-17 [17) The NOC indicates that the project site which is located on a list of hazardous materials sites compiled pursuant to Government code Section 659662.5, and as a result, would create a hazard to the public or the environment. Therefore, the proposed development falls under the "Border Zone of a Contaminated Property". Appropriate precautions should be taken prior to construction since the proposed project is on a "Border Zone Property."
- S-18 [18) A groundwater investigation may also be necessary based on the nature of on-site contaminants and the depth to the groundwater.
- S-19 [19) If during construction of the project, soil contamination is suspected, construction in the area should stop and appropriate Health and Safety procedures should be implemented. If it is determined that contaminated soil exists, the draft EIR should identify how any required investigation and/or remediation will be conducted, and which government agency will provide appropriate regulatory oversight.

DTSC provides guidance for the Preliminary Endangerment Assessment (PEA) preparation and cleanup oversight through the Voluntary Cleanup Program (VCP). For additional information on the VCP or to meet/discuss this matter further, please contact Ms. Rania Zabaneh, Project Manager at (714) 484-5479.

Sincerely,



Haïssam Y. Salloum, P.E.
Unit Chief
Southern California Cleanup Operations Branch
Cypress Office

cc: see next page

S-16 See response to comment S-5.

S-17 The proposed project may include future construction activities immediately adjacent to Mission Bay Landfill. See responses to comments S-1 and S-7. Nevertheless, Section 4.11.6 addresses the possible release of hazardous substances during each of the projects and requires that rules and regulations associated with the appropriate permits be followed to reduce the potential risk of unauthorized releases. See responses to comments S-2 and S-3.

S-18 See response to comment S-2.

S-19 As indicated in the Draft EIR, the applicant would follow federal, state and local regulations with respect to the discovery and remediation of contaminated soils. The procedures for the investigation and identification of regulatory oversight are contained in these regulations that are incorporated by reference into the Draft EIR and therefore constitutes a description of these procedures and identification of agency oversight.

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cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044

Mr. Guenther W. Moskat, Chief
Planning and Environmental Analysis Section
CEQA Tracking Center
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

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California Regional Water Quality Control Board San Diego Region

Wendee H. Flicker
Secretary for
Environmental
Protection

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9771 Chalmers Mesa Boulevard, Suite A, San Diego, California 92124-1324
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Gray Davis
Governor

Start here

April 24th, 2001
City of San Diego
Land Development Review Division
1222 First Ave., Fifth Floor
San Diego, CA. 92101:

SUBJECT: Comments on the Draft Environmental Impact Report for the Proposed Sea World Master Plan Update

Staff of the San Diego Regional Water Quality Control Board has reviewed the Environmental Impact Report for the proposed Sea World Master Plan Update. We have focused our comments on the potential water quality impacts of the proposed future improvements at Sea World. Comments have been placed in three sections: 1) Input on information contained within the Environmental Impact Report (EIR) 2) Current water quality status of Mission Bay and pertinent regulations 3) Suggestions for additional information to support water quality impact assessment.

SECTION 1

- S-20 [A) Page one, paragraph three of the EIR states that there were more than 205 closures and advisories issued for Mission Bay between 1996-1998. The actual number is larger, with approximately 378 postings or closings occurring for Mission Bay within the listed time period. The same paragraph states "Most were the result of sewer spills and overflows". Only 61 days of the 378 reported days of closing and postings were attributed to sewage spills and overflows.
- S-21 [B) The second page, second line states "No sediment quality data was available for review". An extensive sediment study was performed for the San Diego Bay Region in 1995 and includes data for the sediments of Mission Bay. The State Water Resources Control Board, National Oceanic and Atmospheric Administration, California Department of Fish and Game and Moss Landing Marine Laboratories performed this study. The final report is available for review at the SDRWQCB.
- S-22 [C) Page five, paragraph one states "...Sea World routinely samples the receiving water immediately offshore of its water treatment discharge outfalls." The Regional Board is unaware that sampling is being performed in the receiving water and would like clarification of this issue.

California Environmental Protection Agency

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at <http://www.scrch.ca.gov>.

- S-20 The Draft EIR has been corrected on the indicated page (page 4.5-1) to conform with the information provided in this comment. These corrections do not change the impact conclusions present in Section 4.5, Water Quality of the Draft EIR.
- S-21 As indicated in the comment, a study which addressed Mission Bay sediments was conducted in 1996. This report is entitled, "Chemistry, Toxicity and Benthic Community Conditions in Sediments of the San Diego Bay Region". There were two sediment sample locations located near the SeaWorld leasehold. Both are in the Southern Pacific Passage, with one located north of the northeast leasehold corner, and the other located north of the 4D Theater on the SeaWorld leasehold. The results of the sediment analysis have been included in Section 4.11.1, Existing Conditions of the Draft EIR. The results from these two sample locations indicate a nontoxic response for amphipods. The study concluded that neither sampling station near the SeaWorld leasehold was listed as degraded/transitional nor was either sampling station placed on the priority list for future investigation.
- S-22 As required by SeaWorld's NPDES permit, SeaWorld samples the ambient water quality of Mission Bay at the both the eastern and western water intakes. The results of this sampling are reported to the Regional Water Quality Control Board.

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S-23 D) The appendix shows tables listing sampling results from water analysis. Not all water samples showed data for densities of enterococcus. The State Health and Safety Code requires the use of enterococcus as an indicator of the sanitary quality of waters used for recreational activity.

SECTION 2

S-24 Mission Bay has been on the Clean Water Act 303(d) list since 1988, and is listed for bacterial contamination. Mission Bay does not currently attain water quality standards (including designated beneficial uses and numeric criteria as defined at 40 CFR 131) due to chronic exceedences in levels of total/fecal coliform and enterococcus indicator organisms. The SDRWQCB is currently developing a TMDL for Mission Bay due to its status as an impaired waterbody. A TMDL is a written plan and analysis established to ensure that the waterbody will attain and maintain water quality standards including consideration of reasonable foreseeable increases in pollutant loads. The elements for a TMDL can be found at 40 CFR 130.33(b)(1-10). One element of the TMDL is the wasteload allocation to each industrial and municipal point source permitted under the Clean Water Act discharging the pollutant for which the TMDL is being established. The City of San Diego and Sea World are the two permitted dischargers into Mission Bay and would each be assigned a wasteload allocation. The Water Quality Control Plan for Ocean Waters of California establishes the density-based bacterial objectives for Mission Bay. The TMDL for Mission Bay will establish wasteload allocations based on the designated beneficial uses of Mission Bay and the associated water quality standards. Mission Bay has ten existing beneficial uses, including contact water recreation and shellfish harvesting. Thus, the following bacterial objectives must be maintained throughout the water column: the median total coliform density shall not exceed 70 MPN/100 ml and not more than ten percent of the samples shall exceed 230 MPN/100 ml. The 30-day geometric mean for enterococcus shall not exceed 35 MPN/100 ml and no one-day sample shall exceed 104 MPN/100 ml.

S-25 The Sea World EIR lists a number of potential sources of water quality impacts to Mission Bay including amusement park rides, parking structures, parking lots, aquariums and animal shows. The EIR does not adequately address how bacterial contamination from sources such as runoff from impervious surfaces and water-contact amusement rides will be contained. The proposed mitigation measures do not seem sufficient to maintain the water quality standards in the waters of Mission Bay surrounding the proposed additions to Sea World.

SECTION 3

S-26 Section three of the EIR, paragraph two states "Because the two plants have significant excess capacity, runoff from approximately 96 percent of the facility is directed toward to treatment plant. Sea World is committed to directing 100 percent of runoff from newly constructed areas

California Environmental Protection Agency

S-23 As required by SeaWorld's NPDES permit, SeaWorld samples for enterococcus once a week. This information is reported to the RWQCB. Therefore, since more frequent samples are not required they are not provided.

S-24 This comment provides background information regarding a TMDL that is under preparation for Mission Bay and the coliform densities that must be maintained in the Bay. This comment does not address the adequacy or accuracy of information presented in the Draft EIR, and therefore no further response is necessary.

S-25 All runoff and discharge waters that will be introduced into Mission Bay from the new expansion (16.5 acres) will be routed and processed through existing or newly built water treatment systems. The treatment systems will target bacterial contamination and include a process system to adequately reduce bacterial contaminants such as coliform and enterococcus densities. Bacterial contamination from water-contact amusement rides will be addressed through the filter and disinfection features of the water-contact ride pool area. The comment indicates that the proposed water quality mitigation measures do not seem sufficient to maintain water quality standards in the waters of Mission Bay surrounding the proposed additions to SeaWorld. However, this comment does not provide any specificity with regard to the alleged shortcomings of the water quality mitigation measures. The existing SeaWorld BMPs are described under the Existing Urban Runoff Control Program on pages 4.5-8 to 4.5-13 of the Draft EIR. This program addresses the treatment of urban runoff in SeaWorld's aquaria treatment plants;

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surface runoff controls; spill prevention and control; material storage and use controls; vehicle maintenance controls; and waste management and recycling. More detailed information on the extensive SeaWorld BMP program is provided in Appendix C, Water Quality Study, of the Draft EIR. Furthermore, Mitigation Measures 4.5-1, 4.5-2 and 4.5-3 provide additional measures to ensure that surface runoff and other water quality pollutants from the SeaWorld leasehold would be mitigated.

- S-26 All runoff from impervious surfaces from new construction will be captured and routed through one of the two SeaWorld water treatment plants. SeaWorld has conducted engineering studies involving an assessment of surface runoff quantities and future aquaria needs to determine that adequate capacity exists to treat all wet and dry weather flows from runoff generated within the footprint of the existing and expansion to the theme park. As discussion page 3-1 of the Water Quality Analysis for the SeaWorld Master Plan Update prepared by URS, Appendix C to the Draft EIR, SeaWorld will capture, treat, and discharge 100 percent of all runoff created from new construction on the newly acquired 16.5-acre site.

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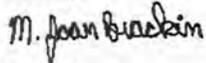
April 24th,

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Cont.

into the treatment system." The proposed additions to Sea World creates impervious surfaces, by such additions as parking structures and parking lots, which will increase hydraulic loading to the storm water conveyance system during wet weather. Has Sea World estimated the increase in hydraulic loading from all new construction and ascertained that their current wastewater treatment system capacity is sufficient to treat all wet and dry weather runoff? Sea World's NPDES permit allows for a discharge of no more than 9.36 MGD of wastewater from the treatment system. If 100 percent of wet/dry runoff from the proposed expanded Sea World is captured for treatment, will Sea World still be in compliance with their permitted discharge of 9.36 MGD? Runoff not treated by Sea World would enter the City of San Diego's stormwater conveyance system and also be subject to the new stormwater NPDES permit. Should Sea World decide to not capture and treat 100 percent of its dry/wet weather runoff, the City of San Diego's Stormwater Pollution Prevention Program office should be notified so that this issue can be addressed during the development of their SUSMP program.

S-27

Sincerely,



M. Joan Brackin
Water Resources Control Engineer
Pollutant Load Reduction Program
San Diego Regional Water Quality Control Board
(858)467-2737
brackj@swrcb.ca.gov

California Environmental Protection Agency

S-27 See response to comment S-26. SeaWorld currently treats 96 percent of the theme park runoff and 25 percent of the parking lot runoff. Future development of projects within the theme park would be treated by the water treatment system. The treatment system capacity would be expanded and permitted if necessary. Mitigation Measure 4.5-2 in Section 4.5, Water Quality of the Draft EIR indicates that parking lot runoff would be treated by catch basin inserts or equivalent within two years of project approval.

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STATE OF CALIFORNIA - BUSINESS, TRANSPORTATION AND HOUSING AGENCY

GRAY DAVIS, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 11, P.O. BOX 85404, MAIL STATION 30, SAN DIEGO, 92186-4404
Telephone: (619) 688-6254
Fax: (619) 688-6299



April 25, 2001

11-SD-008
PM 1.21
(K.P. 1.94)

Mr. Scott Morgan
State Clearinghouse
1400 Tenth Street
Sacramento, CA 95814

Dear Mr. Morgan:

Draft EIR for the Sea World Master Plan Update – SCH 1984030708:

Caltrans District 11 comments are as follows:

- S-28 • Caltrans requires Level of Service (LOS) C or better at State owned facilities, including intersections. If an intersection is currently below LOS C, any increase in delay from project generated traffic must be analyzed and mitigated. Analysis of the intersections shall be done using Intersecting Lane Vehicle (ILV) calculations per the Highway Design Manual (HDM), Section 406, page 400-21.
- S-29 • Appendix B, Traffic Impact Analysis, Figure 7, page 14 – The AM/PM count for the eastbound Interstate 8 (I-8) from Nimitz Boulevard and Sunset Cliffs Boulevard movement is lower compared to the count published in the Caltrans District 11 Traffic Volumes 1988-2000. (See enclosure for the locations of the count.) Please clarify.
- S-30 • Appendix B, Traffic Impact Analysis, Figure 7, page 14 – The AM/PM count for the eastbound I-8 from Sunset Cliffs Boulevard movements is 701/686. It should be 701/686 plus 1289/1763 from South-Left movement.
- S-31 • Appendix B, Traffic Impact Analysis, Figure 7, page 14 – The PM count for Mission Bay Drive at I-8 is 684 for North-Through and 875 for South-Through movements. However, the PM is listed as 684 for South-Through and 875 for North-Through movements in Appendix A, Count Data. Please clarify.
- S-32 • Appendix B, Traffic Impact Analysis, Figure 7, page 14 – The PM count for Nimitz Boulevard at I-8 is 672 for North-Through movement. However, the PM was listed as 669 for North-Through movement in Appendix A, Count Data. Please clarify.
- S-33 • Appendix A, Count Data, Sunset/Nimitz Table – The AM count is 756 for North-Left and 671 for North-Through movements. However, these AM counts are not reflected in Appendix B, Traffic Impact Analysis, Figure 7, page 14. Please clarify.

S-28 This comment references standards found in *Guidelines for the Preparation of Traffic Impact Studies* prepared by Caltrans in January 2001. Because these standards were adopted subsequent to the preparation of the Draft EIR, they need not be addressed in this environmental document. Furthermore, these guidelines are not consistent with regional guidelines (SANTEC/ITE Guidelines for Traffic Impact Studies in the San Diego Region, March 20, 2000) that allow up to 2.0 seconds of additional delay due to a development project, using Highway Capacity Manual (HCM) procedures.

The third sentence states that an ILV procedure of intersection analysis is required. This methodology is not required by City guidelines. It is a planning-type method and does not produce "delay" output, as the HCM method which was used in the Draft EIR. In addition, the ILV method is not nearly as detailed as the HCM method. Since the HCM method was used, an ILV analysis is not needed, because it produces less accurate results. Additionally, use of the HCM method matches the LOS reporting procedure used for all the intersections analyzed in the SeaWorld Traffic Study. It would be inappropriate to use one method of analysis for Caltrans ramp intersections and another method for the remaining part of the traffic study.

S-29 The AM/PM counts taken on June 20, 2000 are lower than the published District 11 volumes for the eastbound I-8 from Nimitz Boulevard and Sunset Cliffs Boulevard. The LOS calculation using the lower June 20, 2000 volumes for this intersection produced LOS F (AM and PM). With the higher District 11 volumes, this intersection would also have been calculated to operate at LOS F

COMMENTS

RESPONSES

(AM and PM). The variation between the June 20, 2000 volumes and the District 11 volumes is unknown but could be due to daily variation (10 to 20 percent), seasonal variation and count duration. Nonetheless, the intersection is operating at unacceptable LOS as shown on page 4.4-10 in Table 4.4-3 of the Draft EIR and on page 26 in Table 3 of the traffic study found in Appendix B of the Draft EIR.

S-30 This posting error has been corrected in the Final EIR. The calculations were done using the correct number and therefore the results presented in the Draft EIR are correct.

S-31 The volumes shown in Appendix A to the traffic study are transposed and have been corrected. The volumes were initially balanced on Figure 7 and then transferred incorrectly to Appendix A of the traffic study. There is no change to the calculations in the Draft EIR.

S-32 The PM count for the northbound volume for Nimitz Boulevard/I-8 in Figure 7 of the traffic study (Appendix B of the Draft EIR) has a minor error on the conservative (overstated) side. The count data shows a PM count of 669 vehicles in Appendix A to the traffic study. Figure 7 shows a PM count of 672 vehicles. This conservative error of three vehicles does not overstate the impact of the LOS for this intersection. This error does not change the results of the analysis.

S-33 The volumes shown in Appendix A to the traffic study (Appendix B of the Draft EIR) are transposed. The volumes are correct on Figure 7; however, they were transferred incorrectly to Appendix A of the traffic study. The calculations were run correctly and the conclusions remain the same.

COMMENTS

RESPONSES

Mr. Scott Morgan
April 25, 2001
Page 2

- S-34 • Please see our enclosed letter regarding the Quivira Basin Redevelopment Project also affecting our facilities in the same vicinity.
- S-35 • Any work performed within Caltrans' right of way (R/W) will require an encroachment permit. For those portions of the project within Caltrans' R/W, the permit application must be stated in both English and Metric units (English first, with Metric in parentheses). Information regarding encroachment permits may be obtained by contacting our Permits Office at (619) 688-6158. Early coordination with our agency is strongly advised for all encroachment permits.
- S-36 • The encroachment permit application should include environmental studies addressing impacts within the Caltrans R/W, if any. It should also include plan information (including notes and specifications) showing what storm water management practices or techniques will be used during the construction to prevent sediment and other pollutants from entering Caltrans storm drain system. Any work activity outside of Caltrans R/W that has the potential for discharging pollutants, overland or through a storm drain system to Caltrans property or to a Caltrans storm drain system, should be addressed in this plan.

Our contact person for I-8 is Erwin Gojuangco, Route Manager, at (619) 668-6610.

Sincerely,

L. Salazar

for BILL FIGGE, Chief
Development Review and Public Transportation Branch

Enclosures

S-34 This comment refers to a letter outlining comments S-37 through S-43.

S-35 Comment noted.

S-36 See response to comment S-35.

COMMENTS

RESPONSES

STATE OF CALIFORNIA - BUSINESS, TRANSPORTATION AND HOUSING AGENCY

GRAY DAVIS, Governor

DEPARTMENT OF TRANSPORTATION

DISTRICT 11

P.O. BOX 86408, M.S. 50
SAN DIEGO, CA 92186-5408
PHONE: (619) 688-6954
FAX: (619) 688-4299



October 16, 2000

11-SD-008
P.M. 0.41
(K.P. 0.66)

Mr. John Kovac
City of San Diego
Land Development Review Division
1222 First Avenue, Suite 501
San Diego, CA 92101

Dear Mr. Kovac:

Draft EIR for the Quijira Basin Redevelopment - LDR No. 98-0767, SCH 1999041004

Caltrans District 11 comments are as follows:

- S-37 • Caltrans requires Level of Service (LOS) C or better at State owned facilities, including intersections. If an intersection is currently below LOS C, any increase in delay from project generated traffic must be analyzed and mitigated.
- S-38 • Intersecting Lane Vehicle (ILV) analysis should be completed for Caltrans ramp termini intersections at the Interstate 5 (I-5)/ Sea World Drive and the Interstate 8 (I-8)/Sunset Cliffs Boulevard interchanges.
- S-39 • The report should include the analysis of the main-lane freeway segments of I-8 and I-5 in the vicinity of the project. If the freeway is negatively impacted by the project, the report should recommend adequate mitigation measures.
- S-40 • Channelizer cones will not be placed along the length of the right turn pocket at the westbound off-ramp to Sunset Cliffs Boulevard. Channelizers, though a good delineation tool, should be avoided in areas where frequent replacement would be necessary.

- S-37 See response to comment S-28.
- S-38 See response to comment S-28.
- S-39 The Draft EIR includes the analysis of the main-line freeway segments of I-8 and I-5, as shown on Tables 9, 18 and 23 in Appendix B. Section 4.4, Transportation and Circulation, identifies mitigation measures for traffic impacts.
- S-40 The placement of channelizers is the responsibility of public agencies and consideration of their installation will occur in the future when traffic volumes warrant. Recommendations on the use of channelizers will consider the replacement frequency to determine whether they should be installed.

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RESPONSES

Mr. John Kovac
October 16, 2000
Page 2

S-41

- The Traffic Circulation section of the EIR indicates ramp termini intersections of the I-8/Sunset Cliffs Boulevard and the I-5/Sea World Drive interchanges will not operate at an acceptable level of service. Improvements should be proposed to increase operations to an acceptable level. The report indicates that full mitigation is beyond the control of this project. If this is correct, then the City should be the lead agency in a project to improve the interchanges and City streets to improve the operations and decrease the delays. Furthermore, "fair share" contributions should be acquired from the developer for those improvements.

S-42

- Any work performed within Caltrans' right of way will require an encroachment permit. For those portions of the project within the Caltrans' right of way, the permit application must be stated in both English and Metric units (English first, with Metric in parentheses). Information regarding encroachment permits may be obtained by contacting our Permits Office at (619) 688-6158. Early coordination with our agency is strongly advised for all encroachment permits.

S-43

- The encroachment permit application should include environmental studies addressing impacts within the Caltrans R/W, if any. It should also include plan information (including notes and specifications) showing what storm water management practices or techniques will be used during the construction to prevent sediment and other pollutants from entering Caltrans storm drain system. Any work activity outside of Caltrans R/W that has the potential for discharging pollutants, overland or through a storm drain system to Caltrans property or to a Caltrans storm drain system, should be addressed in this plan.

Our contact person for I-8 is Erwin Gojuangco, Route Manager, at (619) 688-6610.

Sincerely,



BILL FIGGE, Chief
Development Review and Public Transportation Branch

- S-41 According to City of San Diego guidelines, the SeaWorld project does not significantly impact the intersections of I-8/Sunset Cliffs Boulevard. The SeaWorld project does not increase the intersection delay by more than 2.0 seconds; therefore, no mitigation is required, regardless of the ambient Level of Service.

Section 4.4, Transportation and Circulation in the Draft EIR, has identified significant impacts and mitigation measures for the intersections of I-5/Sea World Drive ramps. The Draft EIR also states that SeaWorld will contribute its fair share contribution due to impacts to Sea World Drive.

- S-42 See response to comment S-35.

- S-43 See response to comment S-35.

COMMENTS

RESPONSES

MTDB

Metropolitan Transit Development Board



1255 Imperial Avenue, Suite 1000
San Diego, CA 92101-7490
(619) 231-1468
FAX (619) 234-3407

April 24, 2001

CIP 476 (PC 20476)

Mr. Lawrence C. Monserrate
Environmental Review Manager
City of San Diego
Land Development Review Division
1222 First Avenue, Fifth Floor
San Diego, CA 92101

Dear Mr. Monserrate:

Subject: MTDB COMMENTS ON THE SEAWORLD MASTER PLAN UPDATE – DRAFT ENVIRONMENTAL IMPACT REPORT (EIR)

Thank you for the opportunity to provide input on the SeaWorld Master Plan Update Draft EIR. We have reviewed the Draft EIR with respect to the MTDB North Bay and Beach Area Guideway Study and have the following comments:

- 1. Please indicate the proposed Automated People Mover (APM) guideway on all graphic depictions of the SeaWorld site. In the Draft EIR it is not clear that the elevated guideway is an integral part of the APM proposal. Section 3.4 of the Project Description does list the Transit Station as a Special Project with a proposed design guideline: "5. Limit the Transit Station and guideway height to 60 feet." However, it should be clear to the reader of the EIR that the APM system has a guideway entering and leaving the SeaWorld site. Graphics such as Figure 3.4.1 - Conceptual Development Plan should indicate the most recent alternative guideway alignments.
- 2. Please specifically list the APM as a potential mitigation measure. The Draft EIR does not adequately describe the positive benefits of an APM system with a stop at SeaWorld in terms of traffic congestion relief and on-site parking reduction. The Transportation and Circulation Section (4.4) of the Draft EIR does mention the North Bay and Beach Area Guideway Study under Transit, but the section seems to be written as if all visitors will be arriving in private automobiles. Section 4.4.8 Mitigation, Monitoring, and Reporting does list the MTDB Transit Options as a mitigation measure (4.4-11): "(2) implement offsite parking or shuttle/MTDB transit options: and/or (3) construct the planned parking structure." However, the APM is not specifically addressed. The proposed mitigation measures could discuss in much more detail the potential to access SeaWorld via transit and/or use off-site parking at sites such as the Old Town Transit Center and shuttle visitors to SeaWorld via the APM.

L-1

L-2

Member Agencies:
City of Chula Vista, City of Coronado, City of El Cajon, City of Imperial Beach, City of La Mesa, City of Lemon Grove, City of National City,
City of Poway, City of San Diego, City of Santee, County of San Diego, State of California

Metropolitan Transit Development Board is Coordinator of the Metropolitan Transit System and the TASC Administration
Subsidiary Corporations: San Diego Transit Corporation, San Diego Trolley, Inc., and San Diego & Arizona Eastern Railway Company
For personal trip planning or route information, call 1-800-COMMUTE or visit our web site at sdcommute.com/



L-1 The proposed Automated People Mover (APM) does not currently have an adopted alignment and therefore was not included on the proposed SeaWorld Master Plan Update illustrative graphics. Because the ultimate guideway location is undecided it is premature to include it on Master Plan graphics.

L-2 The APM project falls within the Mitigation Measure 4.4-11(2) that states, "implement offsite parking or shuttle/MTDB transit options. However, because this transit option is currently not funded it would be inappropriate to assume that it will be implemented and therefore cannot be included as a mitigation measure. *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal. App. 3d 692, 723, 727-28.

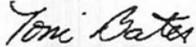
COMMENTS

RESPONSES

Mr. Lawrence C. Monserrate
April 24, 2001
Page 2

Please let us know if you need additional information relating to the North Bay and Beach Area
Guideway Project. Ms. Kathy Donnelly can be reached at (619) 557-4545 if you have any questions
and/or comments regarding our response.

Sincerely:



Toni Bates
Director of Planning

KYamo -L-LCMON.TBATES

Cc: Kathy Donnelly, MTDB

COMMENTS

RESPONSES

MIDWAY COMMUNITY PLANNING BOARD

April 24, 2001

Mr. Chris Zirkle, Senior Planner
City of San Diego
Land Development Review Division
1222 First Avenue, MS 501
San Diego, CA 92101

Re: Draft Environmental Impact Report for SeaWorld Master Plan Update

VIA FACSIMILE: 619/446-5499

Dear Mr. Chris Zirkle:

- L-3 [The Midway Community Planning Advisory Committee received the SeaWorld Draft EIR on March 27, 2001. Unfortunately, after having served on the SeaWorld Community Leaders Forum for the past year and a half, we were not on the list to receive the Notice of Preparation of a Draft EIR or the Draft EIR. After several phone calls we eventually received a copy.
- L-4 [While SeaWorld brings great benefit to the greater San Diego, it cripples the local community traffic in which it resides. The Midway Community Planning Advisory Committee recommends cooperation between SeaWorld, The City of San Diego and the State of California, so that appropriate mitigation be enabled to help make SeaWorld a good neighbor.
- L-5 [This letter addresses areas of concern with the Draft EIR as well as issues not mentioned or omitted. Since the intent of the SeaWorld Master Plan is to increase attendance, which can only increase traffic volume, the Midway Community Advisory Committee has concentrated its primary responses to traffic related issues.
- L-6 [Neighborhood Character/Aesthetics
Splashdown Ride and new entrance does not flow with neighboring community or with the theme of design currently portrayed at SeaWorld.
- L-7 [Light, Glare and Shading
This community is unable to determine the effects of lighting and glare because no sufficient studies have been performed or are identified in the Draft EIR.

3024 Hancock Street, San Diego, California 92110

- L-3 The Draft EIR public review period was extended two weeks based on a request from the Peninsula Community Planning Board.
- L-4 This comment recommends cooperation between SeaWorld, the City of San Diego and the State of California to mitigate traffic impacts. The mitigation measures presented in Section 4.4, Transportation and Circulation of the Draft EIR indicate cooperation between the City and SeaWorld. In addition, the City will work with Caltrans in the implementation of mitigation measures that involve its facilities.
- L-5 This comment introduces traffic as the commentator's primary concern.
- L-6 The Neighborhood Character/Aesthetics issues are addressed in Section 4.2 of the Draft EIR. This section of the Draft EIR focuses on future development in accordance with the proposed SeaWorld Master Plan Update that would impact the surrounding area. A significant unmitigable visual impact was identified for the Splashdown Ride. The Splashdown Ride does include elements that are consistent with SeaWorld's design theme, including large pools of water and a Commerson's dolphin exhibit. Similarly, the new entrance also includes nautical theme elements that are consistent with SeaWorld's design theme, including visual icons to enhance and strengthen SeaWorld's marine park theme and a water body with docked boats, a wharf and a lighthouse. This design approach is consistent with neighboring Mission Bay Park.
- L-7 Section 4.3, Light, Glare and Shading of the Draft EIR addresses the issues raised in this comment. This section concludes that adherence to the City of San Diego Municipal Code, the Mission Bay Park Master Plan Update Design Guidelines,

COMMENTS

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and the SeaWorld Master Plan Update Design Guidelines would ensure that significant light and glare impacts would not occur. This comment does not provide a specific description of the shortcomings of this EIR section and the conclusions presented therein. Therefore, no further response is possible.

COMMENTS

RESPONSES

Mr. Chris Zirkle, City of San Diego
 Land Development Review Division
 April 24, 2001
 Page Two

Transportation and Circulation

Roadway Segments (2005 weekday):

The Draft EIR assumes that there would not be significant immediate impact upon local freeways and surface streets. However, the following affected intersections are currently at LOS E or F based upon the following 1997 study.

L-8

INTERSECTION	LOS
I-5 Northbound Ramps/SeaWorld Drive	E
I-5 Southbound Ramps/SeaWorld Drive	E
Linda Vista Road/Napa Street	E
Midway Drive/Sports Arena/West Point Loma Boulevard*	F
Nimitz Boulevard/West Point Loma Boulevard	F
Carrino del Rio West/Rosecrans Street/Sports Arena Blvd.*	E
* Located in Midway Planning area impacted by SeaWorld traffic.	Not Acceptable

Source: City of San Diego Community and Economic Development Department of Transportation Planning Section Report, November 25, 1997

Freeway Ramps/Arterials/Freeeway Segments (2005 weekday):

The subject summary indicates no near term mitigation (prior to 2005), or significant impacts on weekends - this is not acceptable. Midway Community Planning Advisory Committee recommends the completion of the following freeway interchanges to relieve traffic on SeaWorld Drive as well as the intersections of SeaWorld Drive and I-5:

1. I-5 South to I-8 West (or Beaches).
2. I-8 East to I-5 North

L-9

L-10

In addition, the SeaWorld EIR does not provide for widening the West Mission Bay Drive Bridge until 2020. This is unacceptable since any increase in traffic would render this portion of roadway gridlock.

L-11

Because the CIP is controlled at the City of San Diego level, the Midway Community Planning Advisory Committee recommends that a yearly review be conducted among the adjacent or impacted community planning groups to review traffic impacts.

L-8 A current traffic study, such as the March 5, 2001 SeaWorld Traffic Study, supercedes previous traffic studies for the same study area because the information is more current and therefore considered more accurate.

Section 4.4, Transportation and Circulation of the Draft EIR describes how much traffic a project may add to the existing roadway system before a significant impact is reached. The amount of project traffic that can be added to the existing roadway system depends on the current Level of Service (LOS). If an intersection is operating at an unacceptable LOS (D, E or F), then project traffic can add up to 2.0 seconds of delay (City of San Diego Criteria). If the project is not calculated to cause a significant impact, then no mitigation is required. This aforementioned procedure is the adopted City of San Diego methodology for addressing traffic impacts caused by projects.

Of the intersections listed in the comment, only two were included in the study area for the Draft EIR. The intersections included in the traffic study were determined based on City of San Diego Traffic Study Manual Guidelines. The guidelines require that intersections included in traffic studies must have at least 50 project-generated peak-hour trips through an intersection as determined by a select zone assignment.

Of those two intersections that were common to both studies, the SeaWorld Drive/I-5 northbound ramps was calculated to operate at LOS E, which is identical to the City of San Diego Community and Economic Development Department of Transportation Planning Section Report, November 25, 1997. The other intersection, SeaWorld Drive/I-5 southbound ramps was calculated to operate at LOS C, which is better than the City of San Diego Community and Economic Development Department of Transportation Planning Section Report, November 25, 1997. Because the SeaWorld Master Plan Update traffic study is the most current, it is considered the most accurate.

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- L-9 Completion of the I-5 and I-8 missing ramps (I-5 South to I-8 West and I-8 East to I-5 North) is desirable, and they would relieve traffic on SeaWorld Drive. However, the construction of freeway-to-freeway ramps is well beyond the requirement of a private development. For proper consideration, a mitigation measure must be "roughly proportional" to the impacts of the project. *Dolan v. City of Tigard* (1994) 512 U.S. 374, 391. The proportionality must exist to the extent of the impacts caused by the project and the extent to which the exactions actually mitigate those impacts. *Id.* The relative impact of the project is minimal in comparison to the overly burdensome exaction that would be imposed if the suggested freeway interchanges were to be built at the sole cost and expense of the applicant. No rough proportionality would exist for purposes of satisfying the test set forth in *Dolan*.
- Nonetheless, the missing ramps are being considered in the I-5 Corridor Study being administered by SANDAG. Furthermore, the proposed mitigation measures for traffic impacts at the I-5/SeaWorld Drive interchange would reduce the identified project-related impacts below a level of significance.
- L-10 The Draft EIR cannot control the timing of the widening of the West Mission Bay Drive Bridge. The timing of widening the West Mission Bay Drive Bridge is tied to a City of San Diego Capital Improvement Project (CIP 52-643). Based on adopted City standards, this facility is over capacity with or without the SeaWorld project. SeaWorld is still allowed to add approximately two percent more traffic without resulting in a significant impact. As indicated in Mitigation Measure 4.4-7, SeaWorld will pay a fair share toward future bridge improvements.
- L-11 This comment recommends a yearly review of traffic impacts. A yearly review is provided for in Section 4.4.5. Mitigation, Monitoring, and Reporting, Program of the Draft EIR.

COMMENTS

RESPONSES

Mr. Chris Zride, City of San Diego
 Land Development Review Division
 April 24, 2001
 Page Three

L-12 **Environmental**
 This Draft EIR does not sufficiently address the Dump Site located in close proximity to not only the new parking area, but the Splashdown Ride as well. Due to the high water table and the toxic nature of the dump site, the EIR should address soil testing, removal and remediation in association with the construction of the Splashdown Ride, as well as concerns about paving over the portion of the Dump Site location for the parking lot.

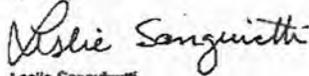
L-13
 In addition, the Midway Community Planning Advisory Committee recommends that large canopy trees be extensively utilized throughout the SeaWorld parking lot area to mitigate the impact of asphalt and metal.

L-14 **Conclusion:**
 Together with the proposed ball park, numerous new hotel sites located on or near Mission Bay and San Diego Bay, the new Embarcadero Plan, together with the SeaWorld Master Plan, North Bay Redevelopment and the Bay-to-Bay Concept, the Midway Community Planning Advisory Committee perceives all these as a recipe for disaster not only for traffic, but for health as safety to the residents of this community.

L-15
"Mission Bay Park should be planned, designed, and managed for long-term environmental health. The highest water quality; sustained biodiversity; ongoing education and research; and the reduction of traffic, noise and air pollution should all be priorities. The park's natural resources should be conserved and enhanced not only to reflect environmental values, but also for aesthetic and recreational benefits".
 Mission Bay Park Masterplan Update

This community, and the greater San Diego community has had a mere 45 (or fewer) days to consider these major environmental impacts that will affect San Diego for 45 years or more. Is this enough time?

Sincerely,



Leslie Sanguinetti
 Chair
 Midway Community Planning Board

L-12 The inactive Mission Bay Landfill is addressed in Section 4.11, Human Health/ Public Safety of the Draft EIR. Soils' testing has been conducted near the boundary of this landfill, which concluded that no contaminated soils exist near the documented boundary of this landfill. Also see response to comment S-2. The proposed Splashdown Ride is approximately 250 feet from the approximate landfill boundary. However, it is unlikely that any landfill gases and/or landfill materials would be encountered during excavations associated with the construction of the Splashdown Ride because it is not directly above the inactive landfill. Further, the Draft EIR also indicates that the area above the inactive landfill would only be used for parking and would be paved with a chip-seal paving surface, which is impervious to water, but allows for gas diffusion and would not involve excavation.

L-13 The SeaWorld Master Plan Update includes Design Guidelines that require trees planted in the parking lots to improve public views towards SeaWorld and provide shade, reduce glare, and soften views of large expanses of pavement.

L-14 The Draft EIR addresses the cumulative traffic effects in the vicinity of the proposed project in Section 4.4, Transportation and Circulation of the Draft EIR and the traffic and health and safety issues in Chapter 5.0, Cumulative Impacts of the Draft EIR.

L-15 The Draft EIR public review period was extended by an additional 14 days, and under Section 15105 of the CEQA Guidelines, a 45-day period for public review is adequate.

COMMENTS

RESPONSES

April 25, 2001

Martha Blake
Mike Westlake c/o
The City of San Diego Development Services
202 C Street
San Diego CA 92101

Dear Mrs. Martha Blake and Mike Westlake,

The Pacific Beach Community Planning Committee's response to Sea World's EIR, Mitigation Measures and Master Plan are as follows and will not be limited to these comments in the future:

Sea World's expansion will definitely contribute to more traffic, more congestion, more density and more noise. There should be a give and take to "mitigation".

- L-16 1 **Access-** (our committee would define as perimeter shoreline walk way and park land access). The Current Sea World master plan conflicts with the Mission Bay Master Plan regarding a shoreline perimeter bike and walk way. This "yet to be identified" pathway should provide access around the bay, a minimum of 25 feet wide with landscaping, a concrete sidewalk and bike path. A Briarfield cove style bridge could accommodate bridging the water areas. (This is our #1 priority).
- L-17 2 **Hotel-** the bulk, scale, amount of units and square footage proposed should be cut in half. 300 rooms, half the height and bulk.
- L-18 3 **Roller coaster or high-rise rides-** these uses are not appropriate in Mission Bay Park. Furthermore during the campaign we were told no such uses were contemplated. Sea World's "platform", the entire reason for the needed lifting of the height restriction was to save the whales, to build a high rise aviary and to build a research facility. While we fully support educational endeavors, we adamantly oppose high rise rides. Several members noted the splash down ride is located on the same 16+acres that was to be used for only surface parking due to structural and soil concerns.
- L-19
- L-20 4 **Parking Garage-** if proper concrete and landscaping designs are employed the structure will blend in. Offered examples of a subdued design is the Catamaran Parking Garage (or, in stark contrast, the Islandia garage). However, any increase in

- L-16 This comment recommends that a shoreline perimeter access be provided on the SeaWorld leasehold. This project alternative is addressed in Section 9.3, Enhanced Public Access Alternative of the Draft EIR.
- L-17 This comment recommends that the hotel part of the proposed project be reduced. This project alternative is addressed in Section 9.6, No Parking Structure or Hotel Over 30 Feet High Alternative of the Draft EIR.
- L-18 This comment expresses an opinion against the inclusion of "high rise rides" in the proposed project. This project concept is addressed in Section 9.8, Combination Alternative of the Draft EIR.
- L-19 This comment indicates that the Splashdown Ride is located in a 16-acre area that was to be used only for surface parking. The Mission Bay Park Master Plan Update states this parcel may be used for expansion of SeaWorld attractions and prohibits use of the entire parcel exclusively for parking. The geological reconnaissance performed by Christian Wheeler Engineering, Appendix F of the Draft EIR, found no geological hazards of significant magnitude to preclude construction at the project site.
- L-20 This comment provides some design suggestions for the future parking garage. The aesthetic issues related to the parking garage are addressed in Section 4.2, Neighborhood Character/Aesthetics of the Draft EIR. This section of the Draft EIR indicates that the future parking garage would be barely visible outside of the SeaWorld leasehold.

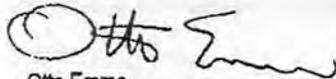
COMMENTS

RESPONSES

- L-21 [] parking should be tied into increasing public park and shoreline access.... that is, the large parking garage will lessen the need for surface parking, thus much of 16.5 acres can be returned to the public.
- L-22 [] 5 **Public Transit-** Sea World's Plan fails to indicate any future proposal to accommodate a rail transit to the park. This accommodation should be at the expense of Sea World, and incorporated into their plan.
- L-23 [] 6 **Minor Projects-** the EIR and Master plan fails to identify the accumulative impact of minor projects over time. No mechanism is in place to monitor or revise the effect of multiple minor projects.
- L-24 [] 7 **Approval Process-** Currently the Real Estate Asset department, Park and Recreation Department, Environmental Review Division are determiners of minor and major projects however a citizen committee such as the Mission Bay Park Committee or Planning Commission should have the ultimate determination whether to change staff recommendations from a minor to a major or even a major into a minor project.
- L-25 [] 8 **Sea World Drive-** Roadway and freeway ingress and egress improvements should be paid for by Sea World and not the taxpayer. Their expansion will increase traffic and congestion, so in return, they pay 100% for road expansion.
- L-26 [] 9 **Electricity -** Because San Diego is experiencing an electrical crisis, we would like to see how this increased usage will affect us. Residents are absolutely unwilling to sacrifice their electrical needs and increased rates for any Sea World expansion.

For further information please contact me.

Sincerely,



Otto Emme
Chairperson PB Planning Committee
2293 Soledad Rancho Road
San Diego, CA 92109
858-483-8992

- L-21 This comment provides an opinion that any increase in parking should result in increasing public parkland and shoreline access. Increasing shoreline access is addressed in Section 9.3, Enhanced Public Access Alternative of the Draft EIR. The increase in public parkland is a recommendation that will be considered by the City when it makes its decision regarding the proposed project. See response to comment L19.
- L-22 The proposed project includes provision of a future transit station location and Automated People Mover guideway on the SeaWorld leasehold, as described in Section 3.4.2, Project Description, Proposed Projects in the Draft EIR and Mitigation Measure 4.4-11. Therefore, the proposed Master Plan Update does accommodate future rail transit. This comment indicates that the cost for these facilities should be at SeaWorld's expense and incorporated into the Plan. The City will consider this recommendation when it makes its decision regarding the proposed project.
- L-23 Chapter 5.0, Cumulative Impacts of the Draft EIR addresses cumulative impacts. Furthermore, other projects included in the analysis of cumulative impacts are the Quivira Basin Redevelopment Project, the Dana Point Inn Land Hotel Expansion and the De Anza Harbor Resort.
- L-24 This comment makes a recommendation that a citizen committee, such as the Mission Bay Park Committee or Planning Commission, should have ultimate determination over minor and major SeaWorld projects. The proposed Master Plan Update includes a review procedure for projects, which is described in Section 3.6, Discretionary Actions of the Draft EIR. This process involves the Mission Bay Park Committee and other City departments. It also requires Coastal Commission approval. The City will consider this recommendation when it makes its decision regarding the proposed project.
- L-25 SeaWorld will contribute funds to mitigate traffic impacts resulting from traffic increases from the SeaWorld operation based on the traffic volumes resulting from SeaWorld patrons and employees. SeaWorld will therefore pay its fair share of mitigation of traffic impacts, with the exception of two mainline segments on Interstate 5. This comment recommends that SeaWorld should be responsible for all costs related to road expansion. The City will consider this recommendation when it makes its decision regarding the proposed project.
- L-26 The recent increase in electrical rates in the San Diego area is unrelated to SeaWorld's electrical usage. The increased electrical demand of future SeaWorld projects is too small a portion of the San Diego region's electrical demand to affect electrical rates.

COMMENTS

RESPONSES

April 25, 2001

VIA FACSIMILE

Ms. Martha Blake/Ms. Ann Lowry
City of San Diego
Land Development Review Division/
Environmental Review Division
1222 First Ave., MS 501
San Diego CA 92101

Dear Ms. Blake/Ms. Lowry,

- L-27 Our Peninsula Community Planning Board had limited time to review the SeaWorld Masterplan Draft Environmental Impact Report. Five of its members were just recently appointed and received notice or documentation to review only Thursday of last week. Some of these comments were included in the Board's Comments, some were not. Some of the information from Mr. Konar were presented only Thursday, so please accept, consider and review our additional concerns and remedies as well.
- Comments to DRAFT EIR SeaWorld Master Plan Update-Date of Notice 3/12/01 Received by new Peninsula Community Planning Board Members, 4/19/01 (along with presentation by Sea World's representative, Greg Konar, at 8:15-9:18 pm).
- L-28 1. (S-21) SeaWorld's Planning Process of "Four Public Forums to Solicit Comment," and "Four presentations made (2 more?)," do not measure up to or meet the requirements as noted by the 10/14/99 Planning Commission Hearing's Identification "for the need to take EXTRAORDINARY efforts to involve the Public in not only the "comments" but in the UPDATE PROCESS," meaning comments are to be responded to, considered, discussed and implemented where possible.
- L-29 2. (S-5) Mitigation Stated is that "Approval of Mission Bay Park Master Plan Update Amendment and SeaWorld Master Plan Update as part of this Project, would Lessen or Avoid the Impacts Related to Inconsistencies with Adopted Plans and Policies." ????? Does this mean, if we 'change the Rules and Policies,' the "Impacts" wouldn't Lessen or be Avoided," just the "Number of Inconsistencies" with the Adopted Plans and Present Policies???? There is inherently in this statement a misuse or avoidance of purpose for this Project that should be clarified NOW. Why is the approved and proposed plan being changed? Disclosure With Mitigation is far more understandable and acceptable to the intelligent populace our city is now inhabited with. To do otherwise is foolish.
- L-30 3. (p4, 1-41) Beyond an irrelevant marketing strategy for promotion of SeaWorld's "Economic Viability" (of which the Public is not to be concerned), the SeaWorld Master Plan Update is NOT RECOMMENDED to be incorporated into the Mission Bay Master Plan Update, as compared to a "Tenant" being involved in or in control of Setting the Policies for the Lease of which he is to sign with the "Landlord" of the property. A "Tenant," especially a For-Profit, Private Enterprise, cannot represent the Best Interests of a "non-profit, public, Landlord," in a competent manner without major Conflict of Interests. In other words, "Public Control" could easily be lost by an organized "Corporation." Already 95% of public input has disclosed direct opposition to the present plan. Advertised, approved and passed in legislature is the desire, need and requirement of Public Review for EACH PROJECT and Amendment to the Mission Bay Park Master Plan and its Leasehold's Improvement!
- L-31
- L-32
- L-33 4. (p4, 1-18) The identified 'Single Guiding Principal,' a Goal and Priority of Organization according to Mission Bay Park's Master Plan states, "Mission Bay park should be planned, designed and managed for long-term environmental health. The highest water quality; sustained biodiversity; ongoing education and research; and the

- L-27 A 14-day extension of the public review was granted by the City at the request of the Peninsula Community Planning Group.
- L-28 SeaWorld conducted an extensive public outreach program as part of developing the SeaWorld Master Plan Update. A description of this program is provided on pages 1-1 and 1-2 in Section 1.1, Background of the Draft EIR. SeaWorld undertook a two-phased public outreach program, with the goal of holding public meetings throughout the City at various times and locations to make them accessible to the largest number of people. The first phase was conducted in January 2000, while the second phase was conducted in June 2000. A total of eight public forums were held, with a total of 225 participants attending and 500 comments generated.
- L-29 The Draft EIR explains that with the approval of Proposition D by the voters, there are inconsistencies between the voter-approved Proposition D and the Mission Bay Park Update Master Plan that would be resolved with the approval of the proposed project.
- L-30 See response to comment L-29.
- L-31 This comment provides a recommendation that the proposed SeaWorld Master Plan Update not be incorporated into the Mission Bay Park Master Plan Update. The City will consider this recommendation when it makes its decision regarding the proposed project.
- L-32 This comment indicates an opinion in opposition to the proposed project. The City will consider this recommendation when it makes its decision regarding the proposed project.
- L-33 This comment restates information presented in the Mission Bay Park Master Plan, however, this comment does not address the adequacy or accuracy of information in the Draft EIR, and therefore no further response is possible.

COMMENTS

RESPONSES

L-34 REDUCTION OF TRAFFIC, NOISE, and AIR POLLUTION should all be PRIORITIES.".....

L-35 Reading carefully all of SeaWorld's summary and much of it's plan, the capitalized areas in the previous paragraph of these "Goals and Missions," in the 'new values' of this update appear to be misplaced or not addressed fully.

A. (p4.1-18) The 'guiding principle' in Access and Circulation is to: "provide safe, efficient and enjoyable access to all of its recreation areas, minimizing circulation and parking impact on adjacent residential areas. Traffic and parking should support, but NOT OVERWHELM, the Park's recreation areas, the regional parkland areas in particular" (and ADJACENT COMMUNITIES!).

As stated in page (3) of the SeaWorld's Master Plan Update Summary, "this project would result in significant UNMITIGABLE transportation and circulation impacts, both DIRECT and CUMULATIVE." This would affect the following street and freeway segments, ramps and intersections that are already at poor service levels of "E or F" now and would immediately become level "F" service levels or worse if approved as presented. Such service levels are totally UNACCEPTABLE and do not meet Goal requirements:

L-36 I-5 Northbound Ramps/SeaWorld Dr.
I-5 Southbound Ramps/SeaWorld Dr.
Linda Vista Rd./Napa St.
Midway Dr./Sports Arena/W.Pl. Loma Blvd.*
Nimitz Blvd./W. Pl. Loma Blvd.*
Camino del Rio W./Rosecrans St./Sports Arena Blvd.*
(*located on Peninsula + already impacted by SeaWorld traffic)

B. Request CEQUA study to determine:

Specific, measurable Changes and Costs in "Environmental Impact" and "Economic Viability or Liability" for the City of San Diego in:

L-37 1. Traffic Congestion and 'needed,' yet unfunded Capital Improvement Projects (CIPs) by the City of San Diego to accommodate SeaWorld's and Quivira Basin's supporting Growth and impacts as proposed in the Project's EIR. (Not to simply 'subsidize' private profits) eg. Visitor, Resident, Loss of Business, Quality of Life, as a result of increased traffic congestion

L-38 2. Cumulative Air and Noise Pollution (SeaWorld has the 2nd Largest Parking lot in San Diego) from Cold Starts in the Mission Bay basin and the Peninsula is already inundated with Airport Impacts...what increases would occur in Air Traffic?

L-39 3. Cumulative Water, and Sewer Processing Costs (with hotels...no conservation can be asked of hotel guests," from a recent UT article quote.)

L-40 4. Cumulative Drain on Energy Consumption and Penalty Costs to Residents and Businesses for the rest of San Diego's Economy.

L-41 5. Tying the Costs of these Infrastructure 'Impacts' and 'Future Impacts' to the Number of Visitors, Autos, or Amount of Profits gained by SeaWorld. (over that of it's present payments for use of Public Land, which if zoned Residential, would bring in annually, far in Excess of SeaWorld's present contributions to the City's expended and expected Costs)

L-42 6. Reducing the Huge Project Expansion would be a reasonable request, as the Project now more than doubles its present capacity, until the following reasonable, regulatable additions are addressed specifically:

L-34 This comment presents an opinion that traffic, noise and air pollution should be priorities. Each of these topics is addressed in the Draft EIR in Sections 4.4, 4.7 and 4.9 respectively.

L-35 This comment provides an opinion that the Mission Bay Park Master Plan Update Goals and Missions appear to be misplaced or not addressed fully in the Draft EIR. Section 4.1, Land Use of the Draft EIR provides a complete addressment of Mission Bay Park Master Plan Update policies and objectives relevant to the proposed project.

L-36 This comment expresses an opinion that the significant transportation and circulation impacts identified in the Draft EIR are unacceptable. Section 4.4.5, Transportation and Circulation, Mitigation, Monitoring and Reporting of the Draft EIR, however, addresses the mitigation of transportation and circulation impacts. Furthermore, evidence of significant impacts cannot be based on opinion. Cal. Pub. Res. Code, § 21082.2.

L-37 An analysis of traffic congestion is provided in Section 4.4, Transportation and Circulation of the Draft EIR.

L-38 The Draft EIR addresses cumulative noise and air quality impacts in Chapter 5.0, Cumulative Impacts. Cold starts associated with vehicles leaving SeaWorld are addressed as part of the URBEMIS7G calculation of vehicular-generated emissions. Cumulative air quality impacts are addressed in Section 5.2.9, Air Quality. Also, see response to comment I-332. The proposed project would not result in a direct increase in aircraft traffic. However, increases in air pollutants from increased aircraft operations at Lindbergh Field have been considered and are incorporated into the Regional Air Quality Strategies, which is the relevant plan for air pollutant reduction in the San Diego Air Basin.

L-39 Implementation of the SeaWorld Master Plan Update will not result in a significant impact on sewer and water facilities. Although SeaWorld's water consumption and sewage generation will increase over time, this growth already was contemplated and approved in the 1985 Sea World Master Plan and Environmental Impact Report. RQD No. 84-0160, SCH #84030708, dated February 1985 which is incorporated by reference. That 1985 Master Plan projected that SeaWorld ultimately would serve 4 million visitors. The 1985 Master Plan also included a 300-room hotel. Any increased water consumption or sewage generation contemplated by the 1985 Master Plan would not be a significant impact caused by the SeaWorld Master Plan Update. Full buildout of the 1985 Master Plan is the baseline for determining whether the SeaWorld Master Plan Update would have significant impacts. *Benton v. Board of Supervisors* (1991) 226 Cal.App.3d 1467.

COMMENTS

RESPONSES

The Draft EIR projects SeaWorld's attendance would reach 4.4 million. There is no evidence to indicate this difference from the 1985 Master Plan would have a significant impact on sewer and water facilities than what was contemplated in the 1985 Master Plan.

In addition, the City of San Diego Water Design Guidelines and City of San Diego Sewer Design Guidelines contain policies for construction of increased water and sewer facilities to accommodate growth. The policies in the water and sewer design guidelines are implemented as part of every development project in the City to insure that no project causes significant water and sewer impacts. Sewer and water fees are structured so that the users pay both the operating expenses and capital improvements necessary to provide the water and sewer services. (See page 28 of the report titled "The Economic and Fiscal Impacts of Tourism on the City of San Diego and The San Diego Regional Economy, dated March 26, 1999, prepared by CIC Research, Inc. for The San Diego County Taxpayers Association found in Appendix B-1, Final EIR Response to Comments).

To insure adequate water facilities, SeaWorld is required to prepare a water study in conformance with the City Water Design Guidelines. This study will evaluate whether the existing city distribution water mains that serve SeaWorld are of sufficient size to provide the volume of water for future development. After this study is approved by the City, SeaWorld would be required to construct any facilities to serve its property in conformance with the Water Study. Subsequent to implementation of any water supply facilities, SeaWorld would pay for and obtain water meters for the new development.

To insure adequate sewer facilities, SeaWorld is required to prepare a Sewer Study in conformance with the City Sewer Design Guidelines. This study will evaluate the existing sewer system from the SeaWorld leasehold to the nearest trunk sewer line (18 inches or larger) to determine whether the existing facilities have sufficient capacity to accommodate new sewage generated by SeaWorld's development. After this study is approved, SeaWorld would be required to construct any facilities to serve its property in conformance with the Sewer Study. Subsequent to implementation of any sewer facilities, SeaWorld would pay for and obtain sewer connections for the new development.

L-40 See response to comment L-26.

L-41 See response to comments L-37 and L-39.

COMMENTS

RESPONSES

L-42 The comment recommends reducing the size of each aspect of the proposed project. A number of project alternatives are presented in Chapter 9.0, Alternatives, which address a variety of project alternatives, some of which are a reduction in the size of the proposed project. Section 9.8, Combination Alternative of the Draft EIR discusses the greatest reduction in the size of the project, while still retaining some of the project elements.

COMMENTS

RESPONSES

L-42
Cont.

- a. Number of Tier 2 Developments
- b. Number of Attraction/Shows
- c. Number of Exhibits/Attractions with Varying heights (Voter's expect Input to each additional Project, according to pre-election information.)
- d. Number of Hotels, not only 'rooms,' but 'suites'

C. Suggestions for mitigation:

L-43

1. The City could support a GP to complete the interchange between I-5 North from the beach areas for commuter access.

L-44

2. As levels of service of "F" are not acceptable to local surrounding communities, "adjacent residential areas," for freeway segments, surface and feeder traffic segments and intersections surrounding and impacted by SeaWorld's Update Plan, SeaWorld Expansion should begin to Fund and Focus on "the provision of CONVENIENT PUBLIC TRANSIT." (4.1-18) Without addressing such needed mitigation, it only postpones addressing present tourist attraction impacts, especially weekend and peak season traffic. It also considerably lowers the public's level of agreeableness and consent with SeaWorld's plans, indefinitely. According to San Diego's Planning Commission, without SeaWorld's lead on this, it will not be a reality for "20 years" as stated by MTDB's Kathy Donnelly, but is as far away as "40 years" according to one shortsighted Commissioner, last month.

L-45

L-46

L-47

a. When Greg Konar stated to PCPB, "80% of SeaWorld clientele are local, within San Diego" (I note that 4.1-41 contradicts his statement and with recent local 'pass offers' may indicate the loss of local support without direct benefit to our communities). As (3-84) states, SeaWorld is one of 10 "key activity centers" that would 'directly benefit' from a "guideway transit link from Inland San Diego (Old Town Station)" and so should contribute financially with a correlating percentage of the construction costs to such a transit link and station. If it is not begun now, it will never exist. Other of the 'activity centers' should also be required to begin funding and planning, with construction on the transit link to be completed in the next 4 years.

L-48

L-49

b. Stated in the Land Use Section (4.1-41), the incorporation of not only the "transit station", but a Monthly Funds Contribution tied to Percentage of Autos or Attendance towards the extension of the trolley 'transit system' (which could be eventually connected to a federally-funded rapid transit system to a new airport, which would bring in endless Public access to SeaWorld's Park), would "improve public access to Mission Bay Park" and SeaWorld, "reducing the number of vehicle trips using local roads to reach SeaWorld theme park" (and Pollution), as proposed, but not allocated for in SeaWorld's Present Master Plan.

L-50

L-51

L-52

c. (4.1-43) "Additional traffic associated with the future hotel(s) would contribute to the overall traffic for the project (SeaWorld Master Plan Update), ...and necessitates the "inclusion of the transit center"...to ameliorate (or make better), the traffic problems facing the park." A Percentage of Profits, Fee per room from Quivers Basin Hotels and future hotels or fee tied to Increases in parking vehicles could also be set aside toward construction of the transit system to meet the Cumulative Traffic Congestion and Circulation Impacts of SeaWorld's "Growth" Projects in the Park and Adjacent Hotel Accommodations for such Growth on the park's and adjacent Residential Areas' for lost of Access and Circulation.

Please call for any questions or comments on any portion of this.

Sincerely,

Cynthia Conger, REALTOR,
Peninsula Community Planning Board Member,
with previous expertise in Business and Personal Development
1537 Rosecrans St., Suite D
San Diego CA 92108

L-43

Presumably this comment is referring to adding the connecting ramp from eastbound Interstate 8 to northbound Interstate 5. This comment appears to recommend the connecting ramp as an improvement for traffic in the project area. The Draft EIR identified a number of traffic mitigation measures that would mitigate the traffic resulting from the proposed SeaWorld Master Plan Update. The commentor's measure was not identified since it was not necessary in order to achieve mitigation of SeaWorld's traffic impacts. For proper consideration of a proposed measure in the Draft EIR, there must exist a nexus between the mitigation measure and the impact. *Nollan v. California Coastal Commission* (1987) 483 U.S. 825, 834-37.

L-44

The Draft EIR identifies traffic mitigation measure 4.4-11 on page 4.4-52 of the Draft EIR that states: At the time the parking monitoring program indicates that it is necessary, complete one or more of the following improvements, as dictated by the monitoring program: (1) pave the existing unpaved guest overflow parking area located in the southeast corner of Area 2; (2) implement offsite parking or shuttle/MTDB transit options; and/or (3) construct the planned parking structure. In addition, the proposed SeaWorld Master Plan Update includes a future Automated People Mover (APM) transit station location and recognizes a future overhead guideway to provide an APM connection to SeaWorld. The APM project is currently being studied.

L-45

See response to comment L-44.

L-46

This comment provides an opinion concerning convenient public transit to SeaWorld. See response to comment L-44.

L-47

The Draft EIR is correct that 60 percent of SeaWorld patrons come from outside the region.

L-48

This comment provides a recommendation that SeaWorld should financially contribute to the construction of the APM that would connect Old Town to Mission Beach. The City will consider this recommendation when it makes its decision regarding the proposed project.

L-49

This comment provides a recommendation that other activity centers that would be connected to the APM should also provide funding for the construction of this transit facility. The City will consider this recommendation when it makes its decision regarding the proposed project.

COMMENTS

RESPONSES

- L-50 This comment provides a recommendation on a method to calculate the funding that SeaWorld could provide towards construction of the APM. The City will consider this recommendation when it makes its decision regarding the proposed project.
- L-51 See response to comments L-44 and L-49.
- L-52 This comment provides a recommendation on how existing and future hotels in the project area could contribute to the APM. The City will consider this recommendation when it makes its decision regarding the proposed project.

COMMENTS

RESPONSES

DRAFT EIR SeaWorld Master Plan Update--- Date of Notice 3/12/01
TABLE S-1 page 1 of 7

Summary of Impacts and Mitigation

The following independent analysis ratings are based upon a review of the findings published in the SeaWorld Master Plan Update Executive Summary dated March 12, 2001.

- (1) Where the results of mitigation *do not* reduce the impact "to below a level of significance," this is equated to a rating of **NOT ACCEPTABLE**.
- (2) Where mitigation is dependent upon funding in part or wholly by the city or state governmental bodies and their legislation such as a city formed CIP, and as "full funding for the CIP may be delayed or never achieved (4.4.2)", these are rated as **NOT ACCEPTABLE**.
- (3) Where certain impacts are not ascertainable or "identified," these have the latent potential for being **NOT ACCEPTABLE** but, are rated **UNDETERMINED**.

Results after suggested
mitigation measures (if any)

L-53

(1) Land Use

- Impacts to transportation/circulation and neighborhood characteristics/aesthetics **NOT ACCEPTABLE**
- Environmental impacts due to proposed marina expansion **NOT ACCEPTABLE**

(2) Neighborhood Character/Aesthetics

- Tier 1 Visual Impacts (The Splashdown ride) **NOT ACCEPTABLE**
- SeaWorld Master Plan Update Visual Impacts **NOT ACCEPTABLE**

(3) Light, Glare and Shading

- Light and Glare *(Note: Unable to identify does not mean that there is no potential cumulative problem.)* **UNDETERMINED**
- Shade *(Note: Effects of shading are dependent upon height and mass. This cannot be determined without finite dimensions and exact location of individual and cumulative projects.)* **UNDETERMINED**

(4) Transportation and Circulation

- Roadway Segments (2005 weekday)
(Note: This analysis is badly flawed. It assumes that there would not be significant immediate impact upon freeway 8. Over 60% of the visitors to SeaWorld come from San Diego and other parts of Southern California. Applying economies of distance of travel, Traffic from I-15 & 163 would use I-8 to the Sports Arena exit to SeaWorld Drive. Northbound traffic upon I-5 would exit East upon I-8 to the Sports Arena Exit also the out of state visitors (35%) to SeaWorld who would reside in hotels primarily in Mission Valley and South of I-8. Old Town and Point Loma hotel/motel guests would impact Sports Arena Blvd, Rosecrans and Midway to access SeaWorld. **NOT ACCEPTABLE**

L-54

L-55

L-56

L-53 This comment provides an introduction to subsequent comments in this letter. It also provides a variety of opinions that impacts associated with land use, transportation/circulation, neighborhood characteristics aesthetics, and light glare and shading are unmitigable and are therefore unacceptable or otherwise undetermined. Cal. Pub. Res. Code, § 21082.2. Because this comment does not otherwise address the adequacy or accuracy of information presented in the Draft EIR, no further response is possible.

L-54 The distribution of traffic on I-8 and I-5 is based on a City of San Diego generated computer traffic model, existing counts in the area and marketing information provided by SeaWorld. These are accepted procedures and are further described under the Trip Distribution section on page 4.4-17 and Appendix B ("Traffic Analysis Methodology") of the Draft EIR. Significant impacts were identified based on adopted criteria as described on page 4.4-13 of the Draft EIR.

L-55 See response to comment L-54.

L-56 See response to comment L-54.

COMMENTS

RESPONSES

TABLE S-1
Summary of Impacts and Mitigation (continued)

(4) Transportation and Circulation (continued) Results after suggested mitigation measures (if any)

Key Intersections (2005 weekday)
 (Note: The report only no significant impacts. The following contradicts the SeaWorld report. These already have failing (congested and undesirable) LOS (level of service) ratings of E & F [see also weekend])

INTERSECTION	LOS
I-5 Northbound Ramps/SeaWorld Dr.	E
I-5 Southbound Ramps/SeaWorld Dr.	E
Linda Vista Rd./Napa St.	E
Midway Dr./Sports Arena/W. Pt. Loma Blvd*	F
Nimitz Bl./W. Point Loma Blvd.*	F
Camino del Rio W/Rosecrans St./Sports Arena Bl*	E
*All three are located in Pt. Loma areas impacted by SeaWorld traffic.	

Source: The above data from The City of San Diego Community and Economic Development Dept Transportation Planning Section Report of 11-25-97

NOT ACCEPTABLE

L-57

L-57 See response to comment L-8.

L-58

Freeway Ramps/Arterials/Freeway Segments (2005 weekday)
 (Note: The subject summary indicates no near term (prior to 2005) or significant impacts nor does it include weekends. This is unsubstantiated, as the whole intent of SeaWorld's redevelopment is to increase attendance which can only result in increased traffic volume. See above chart with regard to existing I-5 ramps)

NOT ACCEPTABLE

L-58 See response to comment L-9.

L-59

Roadway Segments (2005 weekday)
 (Note: The summary indicates significant impacts on SeaWorld Drive and West Mission Bay Drive unless mitigated. It makes no mention of weekends. The mitigations involve unacceptable CIP's.

NOT ACCEPTABLE

L-59 Weekends were counted and analyzed for the existing condition. Future analyses of weekends were not conducted primarily due to the absence of modeling information and because weekdays had poorer operational characteristics, presumably due to the addition of commuter traffic to recreational traffic. Please see the discussion starting on page 28 of Appendix B of the Draft EIR for further information concerning this topic.

COMMENTS

RESPONSES

TABLE S-1

Summary of Impacts and Mitigation. (continued)

page 3 of 7

(4) Transportation and Circulation (continued)

Results after suggested mitigation measures (if any)

L-60	<p>Roadway Segments (2020 weekday) <i>(Note: The summary Mitigation for year 2020 is predicated upon a prior CIP having occurred or upon one taking place in 2020. Both mitigations are specious as funding by the city may not be available during the intervening years or in 2020; however, the traffic impacts would occur.</i></p>	<p>NOT ACCEPTABLE</p>
L-61	<p>Key Intersections (2020 weekday) <i>(Note: The SeaWorld Drive Northbound I-5 onramp, offramp, SeaWorld drive and Pacific highway mitigations are unacceptable as they are considered as "part of a future CIP project which may or may not be created and/or adequately funded (4.4-4 & 4.4-5.)" West Mission Bay Drive and I-8 Westbound offramp mitigation includes creating another right turn lane and widening Mission bay bridge. Major undertakings which would only take place if "CIP 52-643 is implemented and fully funded. (4-4.6)"</i></p>	<p>NOT ACCEPTABLE</p>
L-62		
L-63	<p>Freeway Ramps (2020 weekday) <i>(Note: As indicated in the table on page 2 of this evaluation, the summary ignores the existence of the 1997 City of San Diego's Transportation Planning's LOS "E" (congested and undesirable) rating of the I-5 ramps to SeaWorld Drive. To assume that this would require no interim mitigation until 2020 is fallacious. Even then the mitigation is based upon an unreliable CIP.</i></p>	<p>NOT ACCEPTABLE</p>
L-64	<p>CMP Arterials (2020 weekday) <i>(Note: No impact identified therefore no mitigation proposed. This in spite of the future congested arterials as identified by the city's transportation section.)</i></p>	<p>UNDETERMINED</p>
L-65	<p>Key Intersections (2005 weekend) <i>(Note: The summary indicates significant impacts. Mitigation measure 4.4-10 assumes that I-8 and Ingraham has not been already impacted, thereby negating this as a solution. [See page 1 of this review under Roadway Segments])</i></p>	<p>UNDETERMINED</p>
L-66	<p>CMP Freeway Segments (2020) <i>(Note: The statement "impacts are considered unmitigable," in the summary is alone enough to condemn the entire SeaWorld buildout proposal.</i></p>	<p>NOT ACCEPTABLE</p>

L-60 As indicated on page 4.4-48 of the Draft EIR under Mitigation Measure 4.4-7, if the CIP is not sufficiently funded, then SeaWorld's long-term impact on West Mission Bay Drive between SeaWorld Drive and I-8 would be unmitigated. This is because, according to adopted City standards, the proposed project would only be required to pay its fair share of the mitigation cost resulting from the impact the project would create.

For proper consideration, a mitigation measure must be "roughly proportional" to the impacts of the project. *Dolan v. City of Tigard* (1994) 512 U.S. 374, 391. The proportionality must exist to the extent of the impacts caused by the project and the extent to which the exactions actually mitigate those impacts. *Id.* No rough proportionality would exist if SeaWorld will be required to pay more than its fair share of the mitigation resulting from the impact the project would create.

L-61 As indicated on page 4.4-46 of the Draft EIR under Mitigation Measure 4.4-1 item number 2, if the City has formed a CIP for the combined improvements to SeaWorld Drive and its interchange with I-5, SeaWorld shall contribute to the CIP an amount which is equivalent to 44 percent of the estimated cost of widening SeaWorld Drive to six lanes between I-5 and SeaWorld Way.

L-62 Please see the response to comment L-61.

L-63 As stated in the Draft EIR, the project is only required to mitigate a calculated significant impact based on City of San Diego standards. If new SeaWorld project trips do not materialize, then SeaWorld is not obligated to mitigate an existing deficiency. CEQA is not intended to protect a proposed project from existing deficiencies, but intended to protect the environment from the deficiencies caused by a proposed project. *Baird v. County of Contra Costa* (1995) 32 Cal. App. 4th 1464, 1466.

However, if new SeaWorld traffic materializes, as will be determined by the Mitigation Monitoring Report Program (MMRP), then SeaWorld is obligated to a pay its fair share obligation for improvements to the SeaWorld Drive/I-5 northbound ramps.

COMMENTS

RESPONSES

- L-64 CMP facilities were analyzed as part of the Draft EIR with mitigation measures identified if significant impacts were calculated. The CMP facilities included I-5, I-8 and SeaWorld Drive.
- L-65 There is excess capacity on West Mission Bay Drive at various times of the day and in various directions, as described in the count data set forth in Appendix B of the Draft EIR ("Count Data"). With adequate information, drivers choose the quickest route and avoid congested routes.
- L-66 Comment noted. Evidence of significant impacts, however, cannot be based on opinion. Cal. Pub. Res. Code, § 21082.2. Because this comment does not otherwise address the adequacy or accuracy of information presented in the Draft EIR, no further response is necessary. Moreover, if the specific economic, legal, social, technological, or other benefits of the project outweigh the unmitigable impacts, then such impacts may be considered "acceptable." CEQA Guidelines, § 15093. Accordingly, the potential determination that unmitigated impacts exist will not automatically preclude the approval of the proposed project.

COMMENTS

RESPONSES

TABLE S-1

Summary of Impacts and Mitigation (continued)

page 4 of 7

	(4) Transportation and Circulation (continued)	Results after suggested mitigation measures (if any)
L-67	Parking (2010) <i>(Note: In the summary it is interesting that it is projected that the existing parking at SeaWorld may be exceeded by the year 2010 but, that corresponding concerns for traffic impacts do not occur in this summary until 2020.)</i>	
L-68	Mitigation measures 4.4.11 It is unclear from the summary if one or all three measures would be required under the most adverse conditions.	UNDETERMINED
	(5) Water Quality	
	Existing Operations	
L-69	Aquaria Water Treatment <i>(Note: The summary indicates no significant impact identified because of existing controls. Therefore no mitigation required.) This finding is in spite of the fact that SeaWorld has been found in frequent violation (more than 50 times) of NPDES permits over the past six years. On December 8, 2000 SeaWorld was fined \$12,000 by the Regional Water Quality Control Board for exceeding Enterococcus and total Coliform bacteria limits in discharges into Mission Bay.</i>	EXISTING CONDITIONS UNACCEPTABLE
	Future Expansion	
L-70	Marina Expansion <i>(Note: The potential for SeaWorld to add personal watercraft to a proposed hotel attached marina is not acceptable. PWC's are known for their high volume of pollutant discharge (hydrocarbons.) They have already resulted in death and serious injury in Mission Bay. They are a major nuisance to other boaters particularly sailors. From a public safety standpoint PWC's should be eliminated not encouraged.</i>	CONDITIONAL
L-71	Future Exhibits <i>(Note: The summary merely indicates that additional aquarium water and exhibit hoses/dumps would be incorporated into the existing system. As indicated above this system is already inadequate.)</i>	UNACCEPTABLE
	(6) Biological Resources	
L-72	Shading of Eelgrass Beds <i>(Note: This summary is predicated upon future evaluation)</i>	UNDETERMINED
L-67	The proposed Mitigation Monitoring Report Program (MMRP) will address traffic impacts on an annual basis between 2005 and 2020.	
L-68	The proposed Mitigation, Monitoring and Report Program (MMRP) would dictate the required number of improvements. See Section 4.4.5, Mitigation, Monitoring and Reporting of the Draft EIR for more detailed information on this program	
L-69	There are no significant impacts expected from the existing water treatment process and discharge systems. SeaWorld has received only one fine (in February 2001, not December 2000) for minor excursions of the bacteriological limits of its NPDES permit, each of which is classified non-serious under the Porter Cologne Water Quality Control Act. Moreover, these excursions reflected a sampling artifact stemming from regrowth in the sampling line, rather than showing that the effluent actually returned to Mission Bay exceeded the permit limits. There have been no bacterial exceedances experienced from the SeaWorld treatment systems since the sampling problem was corrected and facility upgrades were completed in August 2000. In fact, bacterial levels in SeaWorld's discharge have been one to two orders of magnitude lower than the limits allowed by SeaWorld's permit, and consistently lower than the levels found in the water SeaWorld takes in from Mission Bay.	
L-70	This comment expresses an opinion that the potential for SeaWorld to add personal watercraft (PWC) as part of the marina expansion component of the project is not acceptable. This comment also indicates that PWCs are known for their high volume of hydrocarbon pollutants. Potential water quality impacts from PWCs are addressed in the Draft EIR in Section 4.5, Water Quality of the Draft EIR. This comment does not address the adequacy or accuracy of information provided in the Draft EIR, therefore, no further response is possible. The City will consider this recommendation when it makes its decision regarding the proposed project.	
L-71	This comment indicates that the existing aquaria water treatment system has resulted in exceedances to the National Pollutant Discharge Elimination System (NPDES) permit that has been granted to SeaWorld. Therefore, the comment expresses an opinion that future use of these facilities is unacceptable. See response	

COMMENTS

RESPONSES

to comment L-69. In addition to aquarium water and exhibit hosedowns, Section 4.5.5, Water Quality, Mitigation, Monitoring and Reporting of the Draft EIR states that SeaWorld will continue its ongoing water quality control program as well as implement the measures set forth in Mitigation Measures 4.5-1, 4.5-2 and 4.5-3 to reduce cumulative operational impacts on water quality.

L-72 This comment indicates that future project impacts to eelgrass beds are undetermined and is consistent with information presented in the Draft EIR regarding eelgrass impacts from Tier 2 projects.

COMMENTS

RESPONSES

TABLE S-1

Summary of Impacts and Mitigation (continued)

page 5 of 7

(6) Biological Resources (continued)

Results after suggested mitigation measures (if any)

L-73 **Least Terns (Foraging) & Least Terns (Fireworks)** (Note: Some environmentalists suggest that SeaWorld has a conscientious program to discourage Least Tern nesting in areas adjoining SeaWorld as they are viewed as a threat to the activities and expansion by SeaWorld. The elevated frequency of fireworks is viewed as a part of that program.) No impacts were identified. **UNDETERMINED**

(7) Noise

L-74 **Future Tier 2 Rides** (Note: The summary indicates that future rides and show may result in significant noise impacts. The Mitigation Measure would only require a Coastal Development Permit. Because public input is limited by the meeting location (frequently out of the county) and the limited manner of public input process with this body, this is not acceptable. Each individual structure must be reviewed by the planning boards in the communities surrounding Mission Bay including Ocean Beach and the Peninsula Planning board. Each structure must then be reviewed by the city planning commission and then by the city council. **UNACCEPTABLE**

L-75 **Traffic Noise** (Note: The summary only deals with traffic noise as it relates to the future hotel and the possible significant noise impacts. It completely neglects to deal with increased traffic noise impacts to the residents of communities adjoining the freeways servicing SeaWorld during interim buildout.) **UNACCEPTABLE**

L-76 **Splashdown Ride Noise** (Note: The splashdown ride noise study uses as a basis the Journey To Atlantis at SeaWorld in Orlando, Florida.) The ride in Orlando was portrayed at the four public forums as being one that was completely enclosed. The splashdown concluded in a domed room replicating an imaginary undersea Atlantis. To the contrary the SeaWorld San Diego version is portrayed as a primarily open air ride with no surrounding acoustical constraints to noise. The sound transmission studies based upon the Orlando splashdown are thereby invalid. **NOT ACCEPTABLE**

(8) Geology/Soils

L-77 **Liquefaction** (Note: SeaWorld is located upon unstable sedimentary soils. As such, any structure upon it poses serious earthquake related hazards.) Any new structures must conform to related current standards. **CONDITIONAL**

L-73 This comment presents an opinion regarding SeaWorld's fireworks program and its impacts on the endangered least tern. This issue is addressed in Appendix D, Biological Resources Reports in Volume III. No fireworks impacts to least terns were identified. See responses to comments F-1 and F-2.

L-74 This comment restates information presented in the Draft EIR that Tier 2 projects may result in a significant noise impacts. This comment also presents an opinion regarding the limited manner of public input in the California Coastal Commission's decision-making process in the issuance of a coastal development permit. Any change or modification to the project review process would require approval from the San Diego City Council. The discretionary actions associated with future Tier 2 projects are described in Section 3.6, Discretionary Actions of the Draft EIR.

L-75 Increases in traffic noise associated with the project and its effects on surrounding communities are evaluated in Section 4.7, Noise of the Draft EIR. This information is presented on pages 4.7-13 and 4.7-14 under the "Traffic Noise Levels" heading in the Draft EIR. Furthermore, the section on page 4.7-21 entitled "Traffic Noise" expressly analyzes potential noise impacts for surrounding roadway segments both with and without the project. The noise levels are summarized in Table 4.7-9. The 65 dBA CNEL contour, depicted in Figure 4.7-4, is located far enough from the roadway that any residential use adjacent to the roadway would not be impacted by traffic noise.

L-76 The 92 dBA at 50 feet from the ride is a reference level used in calculating the noise from the Splashdown Ride. This reference level took into account a number of open air roller coasters that are not enclosed. In Appendix E of the technical appendices, a study by Gordon Bricken & Associates analyzed noise levels from the Splashdown Ride by looking at a study that appeared in the Noise Control Engineering Journal which outlined reference levels for several types of thrill rides, including roller coasters, free-fall rides, water rides and parades. Bricken and Associates also collected data on several roller coaster rides at Six Flags Magic Mountain. The average level Bricken and Associates derived of 92 dBA at fifty feet was not just based on the SeaWorld Orlando ride. Therefore the noise analysis for the Splashdown Ride is reasonable and most likely a worst-case scenario.

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Finally, this comment is partially correct in that the proposed Splashdown Ride would be primarily open where the tracks are located outside of the proposed cylindrical structures. However, the ride would be enclosed for that portion of the ride that is inside the cylindrical structures.

- L-77 This comment is correct in that any new structures must conform to current structural and geotechnical standards. This issue is addressed in Section 4.8, Geology/Soils of the Draft EIR. In particular, the geological reconnaissance performed by Christian Wheeler Engineering (see Appendix F to the Draft EIR) found no geological hazards of significant magnitude to preclude construction at the project site. Nevertheless, to the extent any significant impacts occur, Section 4.8.11, Mitigation, Monitoring and Reporting, of the Draft EIR identifies mitigation measures that would be required to address any unstable soils prior to development of any future projects.

COMMENTS

RESPONSES

TABLE S-1

Summary of Impacts and Mitigation (continued)

page 6 of 7

(9) Air Quality

Results after suggested mitigation measures (if any)

L-78

Ambient Air Quality (Note: The Appendix G Air Quality Impact Analysis is partially accurate and partially flawed.) It is correct in its analysis of Climatic conditions (P.1) in and around Mission Bay and surrounding communities. "The atmospheric conditions combine to limit the ability to disperse air pollution generated by the large population." It is flawed in that predicated its air quality evaluations in the area surrounding SeaWorld upon the Air Pollution Control District's (APCD) "nearest station to Mission Bay...at its downtown air monitoring station at 330 A 12th Street."

L-79

This location is more than 4.5 miles from the intersection of I-5 & I-8, the epicenter of impact of air quality from vehicle traffic (see attached map). The APCD monitor lies West of the I-5. With the prevailing wind from the West this gives no scientific accuracy to the monitor station's data on Air pollution around the San Diego freeways let alone its remote location from the project.

L-80

The proposed downtown ballpark, proposed hotel construction in Quiviera Basin, SeaWorld, DeAnza Cove and the proposed buildout of SeaWorld in part or in combination present a recipe for disaster not only in traffic conditions, but health and safety in terms of air quality from increased traffic vehicular emissions.

L-81

It has been reported nationally and by teachers in the local (Mission Bay area) public school system that there has been a progressive increase in the number of school children with asthmatic conditions. Automotive pollutants are a known direct contributor to this condition.

L-82

Mitigation Measure 4.9-1 only addresses construction activity at SeaWorld it does reflect the increased traffic projections based upon attendance at SeaWorld during the interim buildout and the cumulative traffic effects of other projects in the area.

NOT ACCEPTABLE

(10) Recreational Resources

L-83

Traffic (Note: This only addresses construction traffic it does not address the conflict between the Master Plan Update and the Mission Bay Park of pedestrian/bicycle access along the entire Mission Bay waterfront which also links with the Peninsula Bike Path.) See also Table S-2 Enhanced Public Access Alternative (S-21) **UNDETERMINED**

No discussion

L-78

The San Diego APCD monitors air quality at various locations within the basin where it considers the measurement to best characterize the overall air quality of the general region. The downtown air quality monitor is considered representative of the coastal corridor extending from National City to Mission Beach. While there may be small-scale local air quality differences among various locations, most air quality issues in the basin are regional in nature (ozone and particulate matter). The differences between downtown and Mission Bay are small for regionally significant pollutants.

Furthermore, the air quality impact analysis is not based on the results from the air monitoring station at 330A 12th Avenue. The impact analysis, which is provided in Section 4.9.3, Impact, provides a description of construction impacts, vehicular emission impacts, stationary source impacts and on-water impacts. These impact analyses are conducted independent of the air quality monitoring results from the monitoring station cited.

L-79

See response to comment L-78. The ventilation within the complex building geometry of downtown San Diego at street level is likely not quite as good as the more open Mission Bay environment around SeaWorld. Use of the downtown APCD data to characterize the site air quality baseline may actually slightly overstate background levels to some extent for the project vicinity.

L-80

This comment presents an opinion with respect to cumulative traffic, health and safety, and air quality impacts. See response to comment L-36. Additionally, cumulative impacts are analyzed in Chapter 5.0, Cumulative Impacts in the Draft EIR.

L-81

Rises in asthma rates are not coupled to air quality in San Diego because air quality has improved dramatically while asthma rates have increased in the last 20-30 years (TABLES RTC-1 AND 2. An often cited comprehensive study on children with asthma (McConnel, et al., 1999: *Air Pollution and Bronchitic Symptoms in Southern California in Children with Asthma*; Environmental Health Perspectives, 107, No. 9, pages 757-762) found that air pollution clearly aggravates asthma symptoms, but did not discuss whether air pollution itself causes initial asthma development. However, the study results did evaluate the correlation between bronchitis, phlegm or coughing versus air pollution among asthmatics, which is as follows:

COMMENTS

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TABLE RTC-1
Coefficient of Asthmatic Symptoms to
Air Pollutants in Asthmatic People

<u>Pollutant</u>	<u>Bronchitis</u>	<u>Phlegm</u>	<u>Cough</u>
PM-10	1.4	2.1	1.1
NO2	1.3	2.7	1.6
Smog	1.0	1.2	1.1

Note: Coefficient 1.0 = neutral

The table indicates that particulates (PM-10) and NO2 have a high correlation with asthmatic symptoms, while the relationship to ozone (smog) is almost neutral.

Maximum levels of PM-10 and NO2 in the San Diego Air Basin have been as follows in the last ten years:

TABLE RTC-2
PM-10 and NO2 Trends in the
San Diego Air Basin

	<u>1988</u>	<u>1990</u>	<u>1992</u>	<u>1994</u>	<u>1996</u>	<u>1998</u>
PM-10 ($\mu\text{g}/\text{m}^3$)	37	33	32	45	28	39
NO2	35	29	27	24	22	23

While the PM-10 trend has some variations, it has been relatively unchanged over the 10-year period presented in the above table. The NO2 trend has been downward in the decade shown on the table. Therefore, neither pollutant associated with aggravation of asthma symptoms has shown any correlation to the reported rise in asthma cases.

- L-82 No mitigation measure was identified for an increase in traffic projections because no significant impact was identified for air quality emission future project traffic. This is because the proposed project in 2020 would result in less vehicular emissions than the existing SeaWorld project.
- L-83 The pedestrian/bicycle path conflict between the Mission Bay Park Master Plan Update and the SeaWorld Master Plan Update is addressed in Section 4.1, Land Use and more specifically in Table 4.1-1, under Shoreline Access of the Draft EIR. This issue is also addressed in Section 9.3, Enhanced Public Access Alternative of the Draft EIR.

COMMENTS

RESPONSES

TABLE S-1

Summary of Impacts and Mitigation (continued)

page 7 of 7

(10) Water Conservation

Results after suggested
mitigation measures (if any)

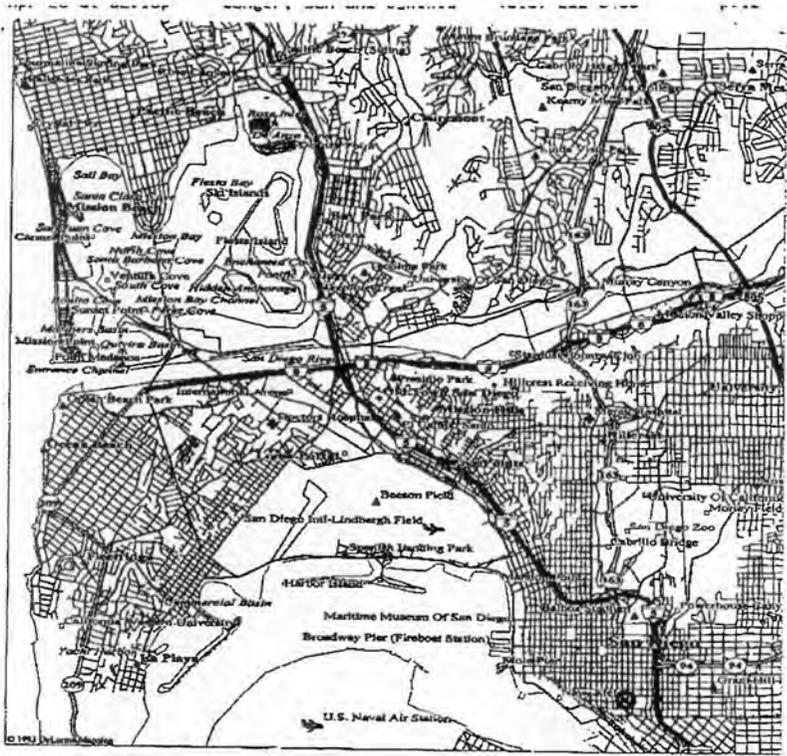
L-84

Water Consumption *(Note: This is difficult to evaluate beforehand, but it may be assumed that fresh water consumption would increase particularly if used in conjunction with the proposed splashdown and similar rides due to evaporation. Marine life exhibits use salt water and would only be a factor in terms of satisfactory filtration and treatment prior to re-cycling into Mission Bay.)*
UNDETERMINED

L-84 An increase in freshwater consumption will be insignificant due to recycling and filtration systems that will be built as part of the expansion to minimize water consumption. Any additional saltwater in the system will be treated in the newly upgraded water treatment systems to effectively reduce bacterial elements such as coliform and enterococcus.

COMMENTS

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LEGEND

○ State Route	✈ Airfield	Scale 1:52,500 (at center)	⊙ 12th Avenue Air Quality Monitoring
◻ Geo Feature	● Population Center	1 Miles	Mag 13.00
○ Major City	— Street, Road	2 KM	Mon Apr 23 11:51:18 2001
+ Town, Small City	— Hwy Ramp		
▲ Hill	— Major Street/Road		
⊕ Hospital	--- Street, Road		
⊙ Park	— Interstate Highway		
⊔ Interstate, Turnpike	— State Route		

COMMENTS

RESPONSES



OCEAN BEACH PLANNING BOARD, INC.

P.O. Box 70184, Ocean Beach CA, 92167

Land Development Review Division
1222 First Avenue, Fifth Floor
San Diego, CA 92101

April 18th, 2001

Ocean Beach Planning Board Response to Sea World Draft Environmental Impact Report

- L-85 On January 17th, 2001 the Ocean Beach Planning Board (OBPB) made a resolution calling for a moratorium on all commercial development in Mission Bay Park until a complete analysis of the cumulative impact of all future development in Mission Bay Park on the bay and it's surrounding communities could be completed. Among the pertinent issues addressed in this resolution are sewage capacity, traffic congestion and associated air pollution as well as affordability of housing, and water pollution. The Sea World Draft EIR fails to adequately address these cumulative impacts.
- L-86 Although the EIR makes mention of the proposed projects at Quivira Basin, Dana Inn, and De Anza Cove, as well as North Bay Redevelopment, the Naval Training Center (NTC) Reuse, Marine Corps Recruit Depot (MCRD) Reuse, and a new airport terminal on the north side of the runway the Draft EIR does not adequately address the cumulative impacts.
- L-87 Sewage capacity: The Draft EIR does not address this issue. What mitigation measures are being taken to address the increased load on our City's failing sewer system that has produced numerous spills and closed the bay and beaches on many occasions? What will Sea World's participation in sewage system upgrade costs be?
- L-88
- L-89 Traffic: The Draft EIR estimates that in the year 2020 the Level of Service (LOS) will be E or F on many local street segments, including Sunset Cliffs Blvd, between Nimitz and I-8, West Mission Bay Drive, between I-8 and Sea World Drive and Sea World Drive between Sea World Way and Friars Road. These estimates are based on widening Sea World Drive to 6 lanes and expanding the West Mission Bay Drive Bridge. Without these expansions the LOS on Sea World Drive will also be E or worse, and West Mission Bay Drive will be an even more congested LOS F. The city standard is LOS D or better. The EIR also identifies significant unmitigatable impacts on I-5 ramps.
- L-90 Traffic is already one of the major threats to the quality of life in our neighborhood. The Quivira Basin Final EIR listed existing LOS on Sunset Cliffs to be C. West Mission Bay Drive to be C between Mission Blvd and Ingraham, and E or F between Ingraham and I-8, Sea World drive is primarily LOS D. The traffic increase forecasted in the Sea World Draft EIR is a serious threat to the quality of life in Ocean Beach and surrounding communities.
- L-91 The Draft EIR does not adequately address a bike path and continuous waterfront access as called for in the Mission Bay Park Master Plan.
- L-92 The EIR does not address added traffic on Midway Drive or Sports Arena Boulevard, Sunset Cliffs Bridge and I-8 exit and access. What cumulative effect will the Sea World Plan, MCRD Reuse, NTC Reuse, North Bay Redevelopment and a new airport terminal have on these segments? Our existing traffic problems need to be addressed before any new traffic is added to our over-burdened roads.
- L-93

- L-85 The Draft EIR includes Chapter 5.0, Cumulative Impacts which addresses cumulative effects associated with SeaWorld along with several other California Environmental Quality Act (CEQA) qualified cumulative projects. Specifically, Section 5.2.4 addresses Transportation/Circulation and restates the traffic analysis for year 2020 since it addresses cumulative traffic impacts from the cumulative projects. Section 5.2.5 addresses water quality, and Section 5.2.9 addresses air quality. Affordability of housing is an economic concern which is not required to consider in an EIR. Cal. Pub. Res. Code, § 21100; CEQA Guidelines, § 15131. An EIR need only evaluate the environmental impacts of a project, and "environment" is defined as the physical conditions within an area affected by a proposed project, including land, air, water, minerals, flora and fauna, noise and objects of historic or aesthetic significance. Cal. Pub. Res. Code, § 21060.5. With respect to sewage capacity issues, see response to comment L-39.
- L-86 See response to comment L-85.
- L-87 See response to comment L-39.
- L-88 See response to comment L-39.
- L-89 The information presented in this comment is consistent with the information presented in the Draft EIR concerning traffic impacts.
- L-90 This comment presents information provided in the Quivira Basin Redevelopment Project EIR and an opinion regarding traffic impacts to the community of Ocean Beach. See response to comment L-36.
- L-91 See response to comment L-83.

COMMENTS

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- L-92 The City of San Diego computer traffic model added SeaWorld traffic to Midway Drive, Sports Arena Boulevard, Sunset Cliffs Bridge and the I-8 ramps. The traffic analysis concluded that the proposed SeaWorld Master Plan Update would not result in significant traffic impacts to Midway Drive, Sports Arena Boulevard, Sunset Cliffs Bridge or the I-8 ramps at Sunset Cliffs Boulevard. Significant and mitigable impacts were identified at the intersection of the I-8 westbound offramp at West Mission Bay Drive and the West Mission Bay Drive eastbound onramp. The mitigation measure for these traffic impacts is provided as Mitigation Measure 4.4-6.
- L-93 Cumulative projects such as the MCRD Reuse, NTC Reuse, North Bay Redevelopment and a new airport terminal are included in the computer traffic model used in this Draft EIR. Because these projects are included in the computer traffic model, their traffic is included in the analysis.

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- L-94 **Air Quality:** The Draft EIR states there will be no significant impacts on air quality despite an estimated increase of over 15,000 average daily trips (ADT) to the basin-wide travel burden. Yet the Quivira Basin Final EIR states that 13,000 ADT from that development will create a "significant cumulative regional impact to the air basin". As a rule of thumb each hotel room adds 10 vehicle trips a day. With 80 rooms being added at Dana Inn, 650 proposed at De Anza, 850 at Quivira Basin (350 of which are 2-room suites), 1000 rooms at NTC, and the 650 Sea World proposes this is an ADT increase of 32,300 simply for hotels. This does not take into account marinas, office space, an airport terminal, and other traffic generation sources.
- L-95
- L-96 **Significance Determination Guidelines** under CEQA (rev. Jan 1994) states "Any multi-family residential, commercial or industrial development resulting in 9,300 ADT will also result in significant cumulative air quality impacts" (p.6). Sea World exceeds this number on it's own despite all the other projects. Why is this listed as an insignificant impact? The San Diego Air Basin is already a serious non-attainment zone for ozone, and also violates PM-10 guidelines. These problems need to be addressed before more pollution is created that threatens the health and quality of life of our communities.
- L-97
- L-98
- L-99 **Water Pollution:** While the Draft EIR addresses the problem of run-off and oil/gas discharges in the area of Sea World, it does not address discharges outside of Sea World. With the 15,000 ADT from the Sea World development and the 32,300 ADT simply from cumulative hotel proposals, run-off increases in areas outside Sea World will be inevitable. Sea World's marina expansion will result in elevated levels of pollution from watercraft as well as increasing the potential for sewage spills, such as the April 2001 spill of 4,000 gallons at Quivira Basin.
- L-100
- L-101 **Mission Bay** is already classified as an impaired waterway for unsafe levels of bacterial pollution. Sea World has been found in violation of their NPDES permits frequently over the last 6 years. On December 8, 2000, Sea World submitted full payment of \$12,000 for Mandatory Minimum Penalty Complaint No. 2000-239, issued by the California Regional Water Quality Control Board, for violating Enterococcus and Total Coliform bacteria effluent limits contained in NPDES Order No. 2000-25. These problems must be addressed before moving forward with any additional expansion.
- L-102 **Housing:** The Draft EIR states the proposed project will not significantly impact housing demands and is not analyzed under cumulative effects. Where are the low-income workers for the 3,230 cumulative hotel rooms going to live? The Draft EIR states "the persons required to fill those new positions would not require special licenses which would bring in a higher level of skilled workers." (p 7-2). What kind of demand will this place on low-cost housing, when this kind of housing is already disappearing from our communities? Has the EIR taken into consideration the miles of travel added due to workers commuting from outlying communities? The issue of housing has not been adequately addressed in the Draft EIR.
- L-103
- L-104
- L-105
- Conclusion:** The only alternative in the draft EIR that adequately addresses these impacts and that can be supported by the OBPB is the No Project Alternative.

- L-94 See response to comment I-304.
- L-95 Section 5.2.9 states, "On a cumulative basis, SeaWorld in combination with the other proposed developments in Mission Bay Park would not result in a change in the air quality within the San Diego Air Basin which would be cumulatively considerable. Air quality within Air Basin would be essentially the same whether or not these projects are implemented." I-407. See response to comment I-332
- L-96 See response to comment I-325.
- L-97 The air quality impact is considered less than significant because the proposed project would result in fewer air emissions than what is currently generated by SeaWorld's operations. See Section 4.9.4, Significant Impact of the Draft EIR.
- L-98 The information presented in this comment relative to the San Diego Air Basin is correct for the state standard. However, based on the impact significance criteria for air quality found in Section 4.9.2, Significance Criteria of the Draft EIR, the proposed project would not result in a significant impact on air quality. Also see response to comment L-97.
- L-99 The Draft EIR addresses discharges from projects outside of SeaWorld in Section 5.2.5, Cumulative Impacts, Water Quality, which states that both Quivira Basin Redevelopment Project and the Dana Inn Expansion project will improve surface water quality runoff by implementing BMPs for their entire site where they do not currently exist. This section also states that De Anza Harbor Resort will comply with the City's Stormwater and Urban Runoff Management Program. All these of these projects will not contribute to a significant cumulative water quality impact. Also, see response to comment I379.
- L-100 Potential impacts to water quality from the proposed marina expansion are addressed in Section 4.5, Water Quality of the Draft EIR. This section also discusses SeaWorld's Spill Prevention Control and Countermeasure Plan which prevent spills and acts as a guide for controlling and cleaning up spills. Additionally, Mitigation Measure 4.5-1 mitigates pollution from watercraft by, among other things, installing an automatic shutoff on the fuel pump; regularly inspecting the sanitary pumpout; prohibiting boat hull paint removal and repainting in the marina area; prohibiting in-water hull scraping to remove marine growth and collecting and properly disposing of any marine material removed from hulls. Mitigation Measure 4.5-2 also installs a Fossil Filter or similar device to capture oil and grease in runoff which mitigates pollution, and Mitigation Measure 4.5-3 requires preparation of a Master Stormwater Pollution Prevention Plan (SWPPP) to control water pollution related to construction. See page 4.5-20 of the Draft EIR for particular provisions of the Master SWPPP.

COMMENTS

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L-101 See response to comment L-69.

L-102 The Draft EIR indicates that future demands for labor resulting from implementation of the SeaWorld Master Plan Update will come from local unemployed or underemployed (Chapter 6.0, Growth Inducement). The unemployed or underemployed part of the labor pool are living in existing homes and therefore, SeaWorld's use of this labor pool would not affect the local housing supply.

L-103 See response to comment L-102.

L-104 The Draft EIR calculated that air quality emission levels are based on an average trip length of 15 miles per visitor trip for the total anticipated additional trip generation determined by the traffic study (page 4.9-11 in the Draft EIR). The average trip length would account for employees traveling from near, or far, from SeaWorld.

L1-05 See responses to comments to L-102 through L-104 above.

COMMENTS

RESPONSES



PENINSULA COMMUNITY PLANNING BOARD, INC.
P.O. BOX 60418
SAN DIEGO, CA 92166

April 24, 2001

VIA FACSIMILE

Ms. Martha Blake
City of San Diego
Land Development Review Division
1222 First Ave., MS 501
San Diego, CA 92101

Dear Ms. Blake,

The Peninsula Community Planning Board has reviewed the SeaWorld Masterplan Draft Environmental Impact Report. This letter identifies the areas of concern with the Draft EIR as well as other issues not mentioned during the presentations by Greg Konar to the PCPB.

- L-106 NEIGHBORHOOD CHARACTER/AESTHETICS
Tier 1 visual impacts (the Splashdown ride) are unacceptable and do not flow with the neighboring communities.
- L-107 LIGHT, GLARE AND SHADING
We are unable to identify the effects of light and glare to the community. This does not mean it's not a problem. It is not addressed in the document. Effects of shading are dependent upon height and mass. Again, cannot be determined without finite dimensions and exact location of individual and cumulative projects.
- L-108 TRANSPORTATION AND CIRCULATION
Analysis in document is flawed. It assumes that there would not be significant *immediate* impacts upon freeways. Over 60% of the visitors to Sea World come from San Diego (Greg Konar, 4/19/01) there for traffic from all directions would attain E to R status immediately at most intersections.
- L-109 Per Draft EIR, page 3. "The project would result in significant unmitigable transportation and circulation impacts, both direct and cumulative. The proposed project would result in an increase of 15,300 average daily traffic (ADT) by the year 2020 during summer weekdays (summer is the busy seasons for Sea World), including improvements to the theme park and the construction of the hotel. Traffic generated by the project would result in significant unmitigable transportation and circulation impacts to the following freeway segment in the year 2020:

INTERSTATE 5 NORTH AND SOUTH OF SEAWORLD DR. (CALTRANS JURISDICTION)
- L-110

L-106 See response to comment L-6.

L-107 See response to comment L-7.

L-108 Section 4.3 analyzes the effects of shading from individual Tier 1 and Tier 2 projects, and Special Projects and specifically references Figures 4.3-1 through 4.3-5 in the Draft EIR which show the effects of shading to the surrounding area. The shading analysis took into consideration the heights and shapes of proposed structures and worse-case maximum development building envelopes for Tier 2 projects and Special Projects.

L-109 See response to comment L-8.

L-110 See response to comment L-8.

COMMENTS

RESPONSES

- L-110
Cont. **CURRENT INTERSECTIONS WITH E-F CONGESTION**
I-5 Northbound Ramps/Sea World Dr.
I-5 Southbound Ramps/Sea World Dr.
Linda Vista Rd/Napa St.
Midway Dr./Sports Arena/W. Pt Loma Blvd.
Nimitz BL/W. Pt. Loma Blvd.
Carmino del Rio w/ Rosecrans St./ Sports Arena Blvd.
- L-111 **FREEWAY RAMPS**
PCPB supports the completion of an interchange between I-5 South and I-8 West. This would require the expansion of sound attenuation walls (Jersey walls) along the south side of I-8 protecting Peninsula/Midway residents.
- L-112 Document does not indicate any near term (prior to 2005) or significant impacts nor does it discuss weekends. This is unsubstantiated, as the whole intent of Sea World's redevelopment is to increase attendance, which can only result in increased traffic volume.
- L-113 **MITIGATION**
40% mitigation for CIP improvements when 100% of traffic increase is caused by Sea World improvements/Hotel Development associated with Sea World Masterplan.
- L-114 Ingraham St/W. Mission Bay Drive Bridge must be widened before 2020. Traffic analysis is flawed suggesting otherwise.
- L-115 **FREEWAY RAMPS**
Summary in document ignores the 1997 City of San Diego's Transportation Planning's LOS "E" (congested and undesirable) rating of the I-5 ramps to Sea World Drive. To assume that this would require no interim mitigation until 2020 is fallacious.
- L-116 *******INTERESTING NOTE**
In the summary it is interesting that it is projected that the existing parking at Sea World may be exceeded by the year 2010 but that corresponding concerns for traffic impacts do not occur in the summary until 2020.
- ENVIRONMENTAL ISSUES**
- L-117 The Mission Bay Park Masterplan Update has a single guiding principle:
Mission Bay Park should be planned, designed, and managed for long-term environmental health. The highest water quality; sustained biodiversity; ongoing education and research; and the reduction of traffic, noise and air pollution should all be priorities. The park's natural resources should be conserved and enhanced not only to reflect environmental values, but also for aesthetic and recreational benefits.

L-111 See response to comment L-9.

L-112 See responses to comments L-57 and L-59.

L-113 This comment is incorrect. SeaWorld's fair share contributions vary by Mitigation Measure. Mitigation Measure 4.4-1 states that SeaWorld's fair share contribution to improvements to widening SeaWorld Drive shall be 44 percent. As to signal coordination on SeaWorld Drive from Friars Road to I-5 NB Ramp and an extension of the eastbound right-turn lane on SeaWorld Drive at the SB I-5 ramp, SeaWorld's share is 100%. Mitigation Measures 4.4-4 through 4.4-7 similarly state varying percentages of cost participation by SeaWorld. Appendix K to the Draft Traffic Impact Analysis – SeaWorld Master Plan Update dated March 5, 2001 prepared by Linscott Law & Greenspan Engineers sets forth the cost participation calculations given for the various Mitigation Measures.

L-114 See response to comment L-10.

L-115 See response to comment L-63.

L-116 See response to comment L-67.

L-117 See response to comment L-15.

COMMENTS

RESPONSES

- L-118 **WATER QUALITY**
Without knowing the planned Tier 2 rides this section is incomplete.
- L-119 We support the Water Quality Boards positions in the Draft EIR.
- L-120 While Sea World has been found to be in frequent violation of NPDES permits over the past six years, we found no significant impact identified because of existing controls.
- L-121 Marina Expansion: Additional number of slips was confusing during presentations. We are unclear as to the number of additional berths. Use of PWCs is questionable, as they are a major source of pollution. How many? Why? Undeterminable effect on the bay and water quality.
- L-122
- L-123
- L-124 **TOXIC DUMP**
There is no discussion about mitigation of the toxic waste dump in the Draft EIR. This is unacceptable from the community standpoint.
- L-125 **NOISE**
Without knowing the planned Tier 2 rides this section is incomplete.
- L-126 There are no plans for noise measurement/management.
- L-127 There is no discussion about noiseless fireworks.
- L-128 There needs to be a real comparison for outdoor noise contours for the Splashdown Ride. The data used in the document is from a ride with an indoor component (Journey to Atlantis/Orlando).
- L-129 Traffic Noise summary only deals with future hotels and not with increased traffic from neighboring communities that must use the roadways to access I-5.
- L-130 **AIR QUALITY**
The document is correct in its analysis of climatic conditions in and around Mission Bay and surrounding communities. But the document is flawed in that "...the nearest station to Mission Bay is it's downtown air monitoring station at 330 A 12th St." This is 4.5 miles from the intersection of I-5 and I-8, the epicenter of impact of air quality from vehicle traffic.
- L-131 The proposed downtown ball park, proposed hotel construction in Quiviera Basin, Sea World, DeAnza Cove and the proposed buildup of Sea World in part or in combination present a recipe for disaster not only in traffic conditions but in health and safety in terms of air quality from increased traffic/vehicular transmissions.
- L-132

- L-118 Water quality impacts from potential future development of Tier 2 rides is addressed in Section 4.5, Water Quality, and more specifically under the Future Ride Attractions heading on page 4.5-16 of the Draft EIR. Page 3-58 of the Draft EIR also provides detail as to the specific attractions, exhibits and rides that Tier 2 projects may include and the types of rides referenced on page 4.5-16 of the Draft EIR.
- L-119 Comment noted.
- L-120 See response to comment L-69.
- L-121 The proposed SeaWorld Marina expansion would include 115 new slips.
- L-122 Section 4.5, Water Quality of the Draft EIR addresses the impact of the marina expansion, including future rental of a small number of jet skis (see page 4.5-17) on water quality. Potential pollutants expected from operation of the marina are listed on page 4.5-18 and Mitigation Measures 4.5-1 through 4.5-3 are set forth to mitigate such pollution. See response to comment L-70.
- L-123 It is currently assumed that future PWC rental operations at SeaWorld would include 6 PWCS which would require two boat slips. (See page 3-65). Section 9.2, Alternatives of the Draft EIR addressing the More Regulated Alternative states what advantages SeaWorld obtains by rental of PWCS, including without limitation, providing attractions which appeal to a broad range of family members, increasing revenues to the City of San Diego and continuing SeaWorld's operation as an economically feasible, high quality theme park. This Section also states that while water quality impacts would be lessened by the elimination of PWC rentals by SeaWorld, other businesses around Mission Bay would still conduct such rentals. Thus, the net effect of SeaWorld's declining to rent PWCs would not improve water quality. See also response to comment L-70.
- L-124 The discussion concerning the closed Mission Bay Landfill is found in Section 4.11, Human Health/Public Safety of the Draft EIR. No significant impacts were identified with respect to impacts associated with this inactive landfill; hence no mitigation measures were specified. See also response to comment S-2.
- L-125 The noise analysis for Tier 2 projects is presented on page 4.7-18 of the Draft EIR, under the Tier 2 Projects heading. The mitigation measure for potential noise impacts from future Tier 2 rides is provided as Mitigation Measure 4.7-1 on page 4.7-24 of the Draft EIR. This measure states that prior to issuance of a Coastal Development Permit, a project-specific noise study prepared by a qualified acoustician shall be required for any new ride attraction or performance show and must demonstrate that sensitive receptors would not be exposed to noise levels in excess of applicable standards.

COMMENTS

RESPONSES

- L-126 This comment makes a statement that is correct in that no identified mitigation measures would require ongoing noise measurements. However, future attractions would be subject to Mitigation Measure 4.7-1 as described in response to comment L-125.
- L-127 Potentially significant noise impacts were addressed with respect to impacts on the endangered least tern. This information is provided in Section 4.6, Biological Resources of the Draft EIR. Because no significant fireworks impact to biological resources were identified, no mitigation measure was specified. See response to comment F-1. In addition, fireworks displays are currently conducted in conformance with City of San Diego and State regulations. For example, SeaWorld's use of fireworks complies with Section 59.5.0501 of the City of San Diego Municipal Code, which prohibits any disturbing, excessive, or offensive noise which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area. Future fireworks shows would also be conducted in conformance with applicable regulations. Consequently, noise effects from fireworks will not violate the City of San Diego fireworks and noise regulations; therefore no significant fireworks noise impact was identified.
- L-128 See response to comment L-76.
- L-129 See response to comment L-75.
- L-130 See response to comment L-78.
- L-131 Section 5.2.4 of the Draft EIR specifically addresses Transportation/Circulation and restates the traffic analysis for year 2020 since it addresses cumulative traffic impacts from the cumulative projects. This section also references Mitigation Measure 4.4-5 to mitigate cumulative traffic impacts. See also response to comment L-82.
- L-132 See response to comment L-82 and L-95.

COMMENTS

RESPONSES

L-133

RECREATIONAL RESOURCES

Traffic plans do not address the conflict between the Master Plan Update and the Mission Bay Park of pedestrian/bicycle access along the entire Mission Bay waterfront which also links with the Peninsula Bike Path. If 60% of users are local why would the park not look to address the Mission Bay Park Masterplans.

L-134

The Mission Bay Park Masterplan states, "Mission Bay Park should provide safe, efficient and enjoyable access to all of its recreation areas, minimizing circulation and parking impacts on adjacent residential areas. Traffic and parking should support, but not overwhelm, the Park's recreation areas, the regional parkland areas in particular. Bicycle and pedestrian paths should reach all areas of the park and extend to adjacent open space corridors in as safe and enjoyable a manner as possible."

L-135

The Draft EIR does not support this goal.

L-136

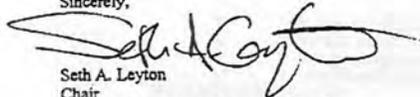
WATER/ENERGY CONSERVATION

Water consumption is difficult to evaluate beforehand, but it may be assumed that fresh water, sewer and energy consumption would increase particularly if used in conjunction with the proposed hotels/splashdown ride/expanded exhibits. *This would occur with minimum to no compensation to neighboring communities who must deal with the smell/pollution/air quality/water quality issues everyday and not just on weekends.*

L-137

Thank you for the opportunity to comment.

Sincerely,



Seth A. Leyton
Chair
Peninsula Community Planning Board

L-133 See response to comment L-83.

L-134 See response to comment L-83.

L-135 See response to comment L-83.

L-136 See response to comment L-84.

L-137 The issues of Air and Water Quality are addressed in the Sections 4.9, Air Quality and 4.5, Water Quality of the Draft EIR. No smell/odor issue was addressed for the proposed project because the project would not result in a potentially significant odor impact to areas outside the SeaWorld leasehold.

COMMENTS

RESPONSES

Facility and Flood Area



PENINSULA COMMUNITY PLANNING BOARD, INC.
P.O. BOX 80418
SAN DIEGO, CA 92166

April 24, 2001

Ms. Martha Blake
City of San Diego
Land Development Review Division
1222 First Ave., MS 301
San Diego, CA 92101

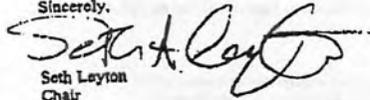
Dear Ms. Blake,

The Peninsula Community Planning Board requests a 30 day extension of the April 25, 2001 deadline for submittal of comments for the Sea World Master Plan Update Draft EIR for the following reasons:

1. Document fails to identify CEQA study if any.
2. Size and Scale of project requires further public input.
3. Other projects in or surrounding community require coordinated transportation evaluation including but not limited to:
 - A. Airport Masterplan/Expansion
 - B. N. Bay Redevelopment
 - C. North Bay Beach Area Guideway study.
 - D. NTC Masterplan/Precise plan .

We honorably submit this request.

Sincerely,


Seth Layton
Chair

L-138

L-138 The City of San Diego granted a 14-day extension of the public review period for the Draft EIR. The public review period termination date was extended to May 9, 2001. See also response to comment L-15.

COMMENTS

RESPONSES

April 23, 2001

Land Development Review Division
1222 First Avenue
MS 501
San Diego, CA 92101

Re: Sea World Master Plan Update draft EIR

Dear Lawrence C. Monserrate,

I will be commenting on attendance projections and traffic. Sorry for the disorganization of the following comments.

- I-1 I feel that the projected attendance increase of 1.3% per year (3.4.4) is totally inadequate. This figure is based on just a current population increase. There is a question that new ride activity would have a greater attendance increase over the existing passive events that currently are presented at Sea World. These attendance figure are a major factor in traffic on the existing roadways. I would like to see the attendance figures at other Sea
- I-2 World parks after they went from passive exhibits to ride exhibits.
- I-3
- I-4 Disneyland has also suffered from flat attendance the past ten years. I would like to see their projection for the next twenty years. Which was probably provided to the state when they expanded I-5 in Anaheim recently.
- I-5 This draft EIR project attendance of 4.4 million in 2020. Would your draft EIR be inadequate if attendance was 5.5 million or higher in 2020.
- I-6 I would first like to comment on the traffic counts at Sea World Drive and I-5. Your current P.M. figures indicted a LOS of E with a traffic count of 37,000. A count of 40,000 would create a LOS F. If you include the Quivera development and traffic growth of 2% this would create a level F at this intersection with the Sea World first expansion.
- I-7 Major mitigation should be completed before phase 1 is completed.
- I-8
- I-9 The Quivera project will spend approximately twelve million dollars in traffic improvements. This includes a third lane southbound onramp from I-5 to Sea World Drive. Sea World should have to create a third lane northbound ramp from I-5 to Sea World Drive. Not the 44% northbound contribution or the 27% southbound contribution of the on ramps. The third lane northbound lane should be built immediately because of the LOS F in the first expansion. Also Quivera is paying 29% of Sea World Drive widening and Sea World is to pay 44%. But Sea World expansion of the park will result in a greater use of Sea World drive between 4:00-6:00P.M. The percentage increase should be 61%. With part of the contribution to help widen Sea World Drive from Friar to I-5 during phase one.
- I-10
- I-11
- I-12
- I-13

- I-1 The projected growth was developed by SeaWorld based on over ten years of historical data regarding attendance at SeaWorld. This information is presented in Section 3.3.2, Project Description, Attendance Characteristics of the Draft EIR. This information includes not only historical attendance information for SeaWorld, but also amusement/theme park attendance history and influences. The SeaWorld historical information indicated a decline in attendance of one percent compounded annually for the previous ten years, even when SeaWorld spent more than \$100,000,000 on improvements to the theme park (See Figure 3.3-3 in the Draft EIR). It also includes attendance data after the introduction of Shipwreck Rapids, which showed a decline in attendance (See Figure 3.3-7 in the Draft EIR). Therefore the attendance projections provided by SeaWorld are not only reasonable, but considered optimistic given the factors presented in the attendance projections and historic attendance trends. This conclusion is supported by the real attendance history of SeaWorld compared to the attendance projections set forth in the 1985 Master Plan and EIR, which is incorporated by reference. That document projected attendance of 4 million visitors at ultimate build out of that plan. SeaWorld's attendance has not reached 4 million, despite the projections. Because the comment presents no evidence identifying any inaccuracy or inadequacy in the foregoing analysis, no further response is possible.
- I-2 This comment is correct in that attendance is a major factor in SeaWorld's projected traffic generation.
- I-3 See response to comment I-1.
- I-4 See response to comment I-1.
- I-5 See response to comment I-1. Given the historic evidence to date and the conservative, optimistic assumptions for attendance projections, there is no evidence to indicate SeaWorld's attendance will exceed 4.4 million visitors.

COMMENTS

RESPONSES

- I-6 Existing traffic volumes presented on Figure 4.4-3 in the Draft EIR indicate a traffic volume on SeaWorld Drive near I-5 of 35,300 ADT, as well as other traffic volumes for road segments in the area of the Sea World Drive/I-5 interchange.
- I-7 The cumulative impacts analysis provided in Chapter 5.0, Section 5.2.4 Transportation and Circulation includes the Quivira Redevelopment Project traffic. Cumulative traffic impacts and mitigation measures are addressed in this section of the Draft EIR.
- I-8 As stated on pages 4.4-15 and 4.4-44 of the Draft EIR, there is no guarantee that the SeaWorld expansion will result in a traffic increase. In addition, SeaWorld would not have a significant impact at SeaWorld Drive intersections with I-5 ramps in the near term (2005). A Mitigation Monitoring Report Program, however, has been established to help ensure timely implementation of mitigation measures when needed. (See Section 4.4.5, Transportation and Circulation, Mitigation, Monitoring and Reporting of the Draft EIR).
- I-9 The portion of this comment regarding the Quivira Redevelopment Project is correct. SeaWorld's traffic mitigation measures are described in Section 4.4.5, Transportation and Circulation, Mitigation Monitoring and Reporting of the Draft EIR.
- I-10 The fair share cost for SeaWorld's mitigation of the traffic impacts to the I-5/SeaWorld Drive is based on City of San Diego adopted procedures. SeaWorld's 44 percent northbound onramp contribution and the 27 percent southbound onramp contribution to mitigate these impacts represent SeaWorld's portion of future traffic, and is consistent with the City's fair share methodology. See Appendix K to Appendix B of the Draft EIR, which is the Draft Traffic Impact Analysis – Sea World Master Plan Update dated May 15, 2001, prepared by Lincoln Law and Greenspan Engineers, which sets forth the cost participation calculations used to determine SeaWorld's fair share.
- I-11 The implementation of this traffic mitigation measure is based on time of expected impact, which will be determined through the traffic mitigation monitoring program described in Section 4.4.5, Transportation and Circulation, Mitigation, Monitoring and Reporting Program of the Draft EIR. If traffic impacts are identified, the appropriate level of mitigation would be implemented.
- I-12 See response to comment L-63. The calculation of SeaWorld's contribution of 44 percent to the widening of Sea World Drive is based on the increase of traffic on Sea World Drive which is due to SeaWorld's proposed project, which is consistent with adopted City of San Diego policies.
- I-13 As described in Mitigation Measure 4.4-1, the widening of SeaWorld Drive is expected to begin at I-5 and proceed westerly to Sea World Way.

COMMENTS

RESPONSES

- I-14 As I stated above in the future attendance figure are realistically low. Sea World is not spending million of dollars to increase their attendance 1.4%. Just like their P.M. figure for the current traffic is wrong. Using their figure (4.4.3) current morning traffic 7-9 are 799. Which I figure are employees and vendors. But their afternoon traffic count at Sea World Drive and I-5 are 1088 between 4-6 P.M. How many of the morning traffic are leaving after their work shift in the P.M. I would figure 700 and that would include part time employees who would work during the busy afternoon hours. So this document is telling me that only 488 cars leave Sea World parking lot on Sea World Drive. I think there was an improper car count. I have a video of cars leaving the Sea World parking lot Thursday July 20,2000 from 4:30-6:00P.M. Of a traffic count of 428. I will estimate a count of 100 between 4:00-4:30 P.M. Which would be a total of 528 plus 700 employees fir a total count of 1228. Which is 15% above your estimates. I wonder how your traffic counts are estimated.
- I-15
- I-16
- I-17
- I-18 Since we are talking about traffic counts. I would like your comments on the traffic gridlock on October weekday in 1998 when there was a sig alert on I-5 and I-8 because of the Padre promotion that Sea World allowed in for \$1. (Side comment. That promotion cost the taxpayers of San Diego over \$500,000. \$21 x per school in attendance. Since there were at least 30,000 kids out of the 45,000 in attendance. Most of the kids did not go to school that day.)Can this area handle crowds of 40,000 to 45,000 attendance in traffic.
- I-19
- I-20 If there are to be future traffic counts submitted to the city, these counts should include Monday thru Friday. Why are Monday and Friday being excluded? The traffic count should be done in the last two week in July. The attendance at the park goes down the last few weeks in August because people are going back to school in some areas.
- I-21
- I-22 Table 4.4-12 indicates that future traffic in 2005 with only increase slightly. I would like to know how these figures were estimated at Sea World Drive and I-5. Since this intersection is close to LOS F right now. With an increase of 150,000?? every three-year it is an important question with more and more hotels being constructed in North County and the access by Sea World Drive for exit and entry.
- I-23
- I-24 Sea World needs to step up to the plate. The original Sea World developers are why we are in this traffic mess on Sea World Drive. According to CALTRANS during the early sixties the city was given two ideas for bridges over I-5. The first choice was ramps from east I-8 to north I-5 and south I-5 to west I-8 OR the second choice was the Sea World Drive/I-5 bridge. The city chose Sea World/I-5 Bridge. Wrong choice but it was a direct route to Sea World. Now its time for you to pay your fair share to fix a prior bad choice.

- I-14 Please see response to comment I-1.
- I-15 Traffic counts used in the Draft EIR traffic analysis are based on actual counts. The count sheets are set forth in Appendix A to the Traffic Impact Analysis prepared by Linscott Law & Greenspan, which is Appendix B to the Draft EIR.
- I-16 A majority, if not all of the SeaWorld employees, leave SeaWorld from the SeaWorld employee parking lot, which is a separate lot located northwest of the main lot. Access to and from this lot is via Perez Cove Way to Ingraham Street. The actual number of vehicles (primarily patron vehicles) that left SeaWorld during a one hour time period is documented in Appendix A to the Traffic Impact Analysis prepared by Linscott Law & Greenspan, which is Appendix B to the Draft EIR.
- I-17 Traffic counts were not estimated. They are actual counts with the count sheets included in Appendix A to the Traffic Impact Analysis prepared by Linscott Law & Greenspan, which is Appendix B to the Draft EIR.
- I-18 The Padre promotion has occurred once in SeaWorld's approximately 35-year history. The response to this promotion was considerably greater than anticipated. SeaWorld has no plans to implement a similar promotion in the future; therefore this potential traffic situation was not analyzed in the Draft EIR and is not necessary because the EIR is only required to analyze impacts resulting from the proposed project.
- I-19 The impacts of large attendance days on traffic counts were analyzed in the Traffic Impact Analysis prepared by Linscott Law & Greenspan, which is Appendix B to the Draft EIR. Nonetheless, traffic associated with special events may not be predictable, and it may require special traffic handling. For example, the roadways around SeaWorld have supported a historical attendance of 38,800 daily visitors on July 4, 1999 with some traffic control officers positioned at various intersections throughout Mission Bay. The traffic control officers were required not only for SeaWorld, but also for the Mission Bay area as the park facilities have significant attendance during summer weekend days. Mitigation Measures 4.4-8 through 4.4-10 are expressly intended to mitigate project impacts during summer weekends, as determined necessary by the monitoring program.
- I-20 Traffic counts are conducted during a mid-week period (Tuesday, Wednesday, and Thursday) to capture the normal operational characteristics of the roadway. Mondays and Fridays are considered atypical. This is the accepted standard for traffic studies conducted in the City of San Diego and conforms with City Traffic Study Guidelines.

COMMENTS

RESPONSES

- I-21 As described in the Annual Monitoring Program set forth in the Traffic Impact Analysis prepared by Linscott Law & Greenspan, which is Appendix B to the Draft EIR, future traffic counts will be conducted during a mid-week period (Tuesday, Wednesday, and Thursday) for two separate non-holiday summer weeks in July or August. Thus, future traffic counts will be conducted at a time that would be representative of typical summer conditions.
- I-22 The year 2005 traffic volumes shown in Table 4.4-12 of the Draft EIR were obtained from the City of San Diego traffic model generated for this project.
- I-23 Please see response to comment L-54.
- I-24 This comment is an opinion concerning previous decisions regarding connections to I-5 and I-8 and the I-5/SeaWorld Drive interchange. SeaWorld's traffic impacts to the I-5/Sea World Drive interchange would be mitigated through measures described in Section 4.4.5, Mitigation, Monitoring, and Reporting of the Draft EIR.

COMMENTS

RESPONSES

Thank you for your time,

Mike Meyer

Mike Meyer
714 Coronado Ct.
San Diego, CA 92109

COMMENTS

RESPONSES

ATTENTION: Martha Blake

Here's the final version, all pages. Thanks for informing about the fax failure.- cdc

City of San Diego
Land Development Review Division
ATTENTION: Martha Blake
1222 First Ave., Fifth Floor
San Diego CA 92101

April 25, 2001
sent via FAX to: 619-446-5499

Sea World Master Plan Update DEIR Comment Letter
LDR No. 99-0618/SCH 1984030708

Thank you for the opportunity to comment.

- I-25 A 1972 city ordinance limits construction along the city's coastline to under 30 feet. This ordinance was originally passed as a result of an initiative petition (creating this "Proposition D") that stated in part that the purpose was to, "keep the beaches usable by all citizens and to provide a small measure of protection against unwanted high population density with its problems of congestion, lack of parking spaces, increased noise, air pollution, inadequate public utilities and increased taxes."
- I-26 In November 1998, voters narrowly approved a new Proposition D, giving Anheuser-Busch/SeaWorld a potential exemption to the height limit on its City leasehold in Mission Bay Park.
- I-27 This Proposition D passed with only 50.7 percent of the vote. This EIR proposes a number of things in this "Update" that go way beyond Prop D – things that, if voter knew about, would have made Prop D passage doubtful.
- I-28 What are they requesting approval for in this Update: an unlimited number of future "track rides" (up to 90 feet WITHOUT ANY GUARANTEED LOCAL PUBLIC HEARING) and a 650-room, 90-ft hotel. Also in the package: a convention center facility to hold 1,000 attendees. They call it a "Special Events"
- I-29 facility. The maximum built-out profile that they are asking to be permitted to put in looks very much akin to plotting the entire Mission Valley Shopping Center

- I-25 Comment noted.
- I-26 Comment noted.
- I-27 The project is consistent with Proposition D.
- I-28 Track Rides between 30 and 90 feet in height would be allowed only in the eight identified Tier 2 sites. This imposes a practical limit of eight track rides. Additionally, because the Tier 2 sites are identified for exhibits, rides, and shows, development of these sites with only one type of attraction is highly unlikely. The review process for projects under 90 feet is described on page 3-74 of the Draft EIR as a Level 1 process. The Level 1 process allows for local review by the Mission Bay Park Committee, Design Review Committee, and a public hearing before the Park and Recreation Board as determined by the Real Estate Assets Department and the Park and Recreation Department. For projects proposed that are greater than 90 feet in height, the Level 2 review process would be required, which requires City Council review. The thresholds for determining public review are maintained by the Real Estate Assets Department and Park and Recreation Departments. The current standards recommend that all projects visible from outside the leasehold be set for public hearing by the Park and Recreation Board.
- I-29 This comment is incorrect in that the Mission Valley Shopping Center is considerably larger than the proposed Special Events Facility. Furthermore, the Master Plan does not propose a convention center. SeaWorld currently includes an 800-person special events facility, known as the Nautilus Pavilion. The proposed Special Events Facility would hold 1,000 people and replace the Nautilus Pavilion.

COMMENTS

RESPONSES

I-30 [] down into Mission Bay Park. Is it likely that's what the voters thought they were voting for? This type of potential configuration is incompatible with a public park.

What about the promises that SeaWorld made in conjunction with Prop D?

The Prop D Summary in the ballot asked voters if Sea World should be allowed to plan and construct:

I-31 "exhibits, attractions and educational facilities only upon land leased from the City, provided:
- The improvements are subject to City and Coastal Commission approval and do not exceed 1/2 the height of the existing SeaWorld Sky Tower; and
- No taxpayer funds are spent for any improvements resulting from this initiative?"

I-32 [] The processes being proposed to approve future projects are designed to allow city *staff* to make all the decisions. This is contrary to the spirit if not the letter of Prop D. SeaWorld represented in public that there would be future public hearings and implied they would be before the City of San Diego public – not just before the Coastal Commission. The voters did not repeal the original Prop D and the City should require a complete public hearing process before the Planning Commission and City Council for anything more than 30 feet.

What about keeping taxpayer's whole?

The fine print in the actual ordinance adopted states:

"No taxpayer funds shall be spent for any improvements in connection with a building or structure or addition to a building or structure."

I-33 [] Not exactly the same thing as was sold in bold in the ballot and PR campaign. What about the impacts of those "improvements." Shouldn't those rightly be paid for by Anheuser-Busch/SeaWorld and not by taxpayers? Isn't that what any voter would believe from reading the ballot summary?

I-30 The compatibility of the Special Events Facility with Mission Bay Park is addressed in Section 4.1, Land Use, and in Section 4.2, Neighborhood Character/Aesthetics of the Draft EIR. These sections address the Special Events Facility land use compatibility and visibility and concluded that this project component would not contribute to a significant impact.

I-31 See responses to comments I-32, I-598 and I-640.

I-32 The discretionary review process for future projects on the SeaWorld leasehold is described on page 3-74 of the Draft EIR. See responses to comments L-24 and I-28.

I-33 SeaWorld will pay its fair-share of the cost for public improvements in accordance with adopted City policies. See responses to comments L-60 and L-113.

COMMENTS

RESPONSES

- I-34 The City must ensure that Anheuser-Busch/SeaWorld keeps it sales and ballot promises so that really "No taxpayer funds are spent for any improvements resulting from this initiative."
- I-35 Projects should not be allowed that have unmitigated impacts. Impacts should be paid for by Anheuser-Busch SeaWorld.
- I-36 Then there are the traffic impacts. In the air quality study it states, "The project study estimates that existing site-related traffic will increase by 12,960 daily vehicle trips. Project-related traffic will generate almost 200,000 additional vehicle miles traveled to the basinwide travel burden." In another location it states, "the future weekday traffic generation (ambient SeaWorld growth, the planned hotel and marina expansion) was calculated to be 15,300 ADT with 496 inbound and 303 outbound AM peak hour trips, and 407 inbound and 681 outbound PM peak hour trips.....(Existing weekday SeaWorld traffic generation is 15,000). The forecast growth for weekend traffic generation is an additional 22,727 ADT over current levels. This is not a small amount of additional traffic to be adding to existing traffic levels and in addition to the 850-room hotel/conference center going in at Quivera Basin directly impacting all of the same streets, intersections, and freeways."
- I-37 The EIR identifies future traffic failures. They calculate the "Sea World" share of growth-related costs to future projects – well mostly. For I-5, where the vast majority of traffic would try to flow at Sea World Drive, the EIR is strangely quiet, stating only, "Unmitigated; Cost prohibitive/Caltrans jurisdiction."
- I-38 Where is the analysis? Why are there no alternatives proposed? Mitigation could be applied to support needed public transit so as to provide alternatives to the significant traffic problems on I-5. At a minimum the EIR should identify possible mitigations for the currently admitted significant unmitigable impacts to I-5 ramps, I-5 and I-8.
- I-40
- I-41 On the other traffic improvements where they at least agree to calculate their "fair share" percentages, they also provide repeated disclaimers in the chart listing "Mitigation and Participation" for significant traffic project impacts, stating

- I-34 See response to comment I-33.
- I-35 Comment noted. SeaWorld will pay its fair-share of the cost for public improvements in accordance with adopted City policies. SeaWorld's unmitigated impacts are neighborhood characteristics/aesthetics, land use and impacts to two mainline segments of I-5. See also response to comment L-66 and I-111.
- I-36 The traffic volumes used in calculating air emissions from future SeaWorld traffic were understated in the Draft EIR. This information, however, has been corrected in both Appendix G, Air Quality Impact Analysis, and in Section 4.9.3, Air Quality, Impact Analysis, Vehicular Emissions Impacts of the Draft EIR. The conclusions regarding air quality impacts from vehicular emissions remain the same as stated in the Draft EIR.
- I-37 As indicated in Section 5.2.4, Cumulative Impacts, Cumulative Impact Analysis, Transportation/ Circulation of the Draft EIR, the cumulative traffic impact analysis took into account the proposed Quivera Basin Redevelopment Project. The Mitigation Measures identified for significant traffic circulation impacts are described in detail in Section 4.4.5, Transportation and Circulation, Mitigation, Monitoring, and Reporting of the Draft EIR.
- I-38 See response to comment I-278.
- I-39 The traffic analysis is provided in Section 4.4, Transportation and Circulation of the Draft EIR. Project alternatives, which would result in less traffic impacts, are discussed in Chapter 9.0, Alternatives of the Draft EIR. With respect to needed public transit, please see response to comment L-2. The Draft EIR has identified possible measures to mitigate SeaWorld-generated traffic impacts to the I-5 ramps at Sea World Drive and the I-8 ramps at West Mission Bay Drive in Section 4.4.5, Traffic and Circulation, Mitigation, Monitoring, and Reporting.
- I-40 The traffic analysis presented in Section 4.4, Transportation and Circulation of the Draft EIR describes both existing I-5 and I-8 ramp operations and operations with SeaWorld's future traffic. Ramp impacts from SeaWorld's future traffic would be mitigated in accordance adopted City of San Diego policies.
- I-41 Impacts to the roadway segments or intersections, which require fair share contributions by SeaWorld, are considered potentially unmitigated because inadequate assurances exist that the necessary Capital Improvement Projects (CIP) would be approved by the City and/or sufficiently funded to complete the needed improvements. Also, see responses to comments L-66, I-27 and I-33.

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I-41
Cont. repeatedly that if any of the City's related CIPs (Capital Improvement Project) are not funded, then "SeaWorld's impact will be significant and unmitigated."

It would seem that if the City (or other projects) don't pony up – for whatever reason, then SeaWorld is "off the hook." So taxpayers are required to put in more dollars for any of this to work out. But SeaWorld's improvements go ahead regardless of whether the projects needed to deal with the impacts happen or not. This is manifestly unfair and a break with the spirit of Prop D, if not the literal, limited language they foisted upon the public.

Any SeaWorld expansion must not be allowed to proceed unless the related CIPs are funded and the impacts fully mitigated.

I-42 There is no discussion of impacts to the City's sewer system, even though Metro Wastewater took the trouble to send a letter in response to the EIR Notice of Preparation stating, "The proposed project will impact the sewer facilities serving the park." The EIR fails to analyze impacts to existing water and sewer movement and treatment systems. What are the impacts and how will they be mitigated? Who will pay? There is no discussion in the EIR about whether SeaWorld's payments will cover the City's cost of providing the infrastructure for water and sewer. What additional water and sewer demand will be generated?

I-43 With respect to beach closures and water quality, the EIR states, "The majority of the closures were the result of sewer spills and overflows." And, "The data indicated widespread presence of bacteria throughout the bay."

I-43 I should think the toilets (even if low-flow) in a 650-room hotel - not to mention increased visitors in general - will impact the sewerage situation. Please provide analysis of this.

I-44 Anheuser-Busch/SeaWorld's proposal is a real problem since Mission Bay is listed as an impaired water body due to bacteria and does not meet the basic fishable/swimmable standards of the Clean Water Act. Adding insult to injury is the fact that SeaWorld does not currently treat all the runoff from its existing parking area. Taxpayers money is or the environment is being used to deal with at least 70 percent of the runoff generated from SeaWorld's parking area.

I-42 See response to comment L-39.

I-43 See response to comment L-39.

I-44 This comment is correct. SeaWorld currently treats 96 percent of the theme park runoff and 25 percent of the parking lot runoff through its water treatment system (page 3-17 in the Draft EIR); however, Mitigation Measure 4.5-2 indicates that within two years of project approval SeaWorld will capture parking lot runoff pollutants through catch basin inserts or similar devices. In addition to the other Mitigation Measures and SeaWorld's current Best Management Practices (BMP), this would reduce water quality impacts resulting from the project to a level below significance. Also, see response to comments L-69 and I-348.

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- I-44
Cont. SeaWorld's position about water quality degradation events is that "None were attributable to SeaWorld operations."
- A more accurate statement would be: none were attributed to Sea World operations. They City and County currently do not perform the tests that would be required to track the pollution to its source. Just because they were not able to attribute events to SeaWorld, it does not follow that they were not potentially "attributable" to them. The EIR should make this clear.
- This needs to be addressed before allowing SeaWorld permission to add more fish tanks or parking lots or do anything that could allow more bacteria into an already impaired water body.
- I-45 In February, 2001 they SeaWorld was fined \$12,000 for their violations to the Clean Water Act. These violations were for bacterial exceedences. It also should be noted that between 1995 and 1999, SeaWorld violated its Regional permit more than 50 times, and most of the violations were bacterial exceedences.
- I-46 What is needed is to do a total health risk assessment on Mission Bay. We have very little understanding of the scientific issues that are before us in dealing with our poor little bay. We have 25 years of monitoring data that tells us little to nothing about the actual risks to human health associated with swimming in potentially contaminated water.
- I-47 The Regional Water Quality Board and City are pursuing grants to do studies to detect human pathogenic viruses at five stations in Mission Bay, to tell us whether the real agents of disease are actually present. They can then look for the source of the viral agents (which are always from sewage, but we need to know where the sewage is coming from), do some RNA testing to determine 'who's doing the doo' (is it people or is it critters?), and perform an epidemiology study to get a factual assessment of the relative risk of having contact with Mission Bay waters. Without this type of sound scientific investigation, there is no way of knowing what the real water quality issues are with Mission Bay.

- I-45 See response to comment L-69.
- I-46 This comment recommends a health risk assessment for Mission Bay. The Water Quality Analysis for the SeaWorld Master Plan Update prepared by URS, included as Appendix C to the Draft EIR, addresses the extensive monitoring of bacterial indicators performed by the City of San Diego Metropolitan Wastewater Department in Mission Bay for the past 15 years. Water samples were collected to assess the quality of water for recreational uses. The data indicated widespread presence of bacteria throughout Mission Bay. Exceedences of standards for water-contact recreation have led to postings of portions of Mission Bay, providing health warnings for people using Mission Bay.
- I-47 Comment noted.

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- I-48 The bottom line is that it makes no sense to allow construction that could add to the current state of consistent water quality impairment. This needs to be addressed since they are asking to be permitted to add more fish tanks and other wildlife exhibits that could add more bacteria into an already impaired water body.
- I-49 They can and should reduce the noise contours of the proposed Splashdown "attraction." There is no excuse for allowing this kind of intrusion in a public park and onto private residences around it in this day and age. The major impetus for all of this is for SeaWorld to remain competitive. Successful theme parks are not required to generate excessive amounts of noise to be competitive. Many new track and water attractions are built completely enclosed to control the noise and the experience. Examples include the new Rock and Roller Coaster at Walt Disney World, and the venerable Space Mountains and Pirates of the Caribbean rides. Most of "Splash Mountain" is also indoors. SeaWorld needs to respect the difference between being able to do what they want on their private land and the needs of being located in a public park and with noise contours that include portions of local residences. The surrounding communities purchased property near to a public park – not to a major competitive entertainment operation.
- I-50 Other issues we would like the City to raise, where the discussion or conclusions of the EIR are insufficient or incomplete and we would ask SeaWorld to improve – and for which we would like to request a Supplemental EIR are:
- I-51 - Commitment to energy independence, energy efficiency, or reduced energy-related pollution
They should commit to their own clean energy systems and not draw power from the public grid. These rides are intensively energy consumptive.
- I-52 - No discussion of waste volumes and regional landfill capacity impacts.
- I-53 - No commitment to purchasing requirements for recycled/recyclable materials in disposable food packaging – major component of their waste stream.
- I-54 - No commitment to limit future jet ski rentals to lesser polluting 4-stroke engines.
- I-55 - No commitment to transit or trip reductions.
- I-56 - insufficient analysis of increases in fireworks discharges into air and water.
Given that the EIR states "Fireworks shows are not considered a visitor draw.

- I-48 Future SeaWorld projects that would require water treatment would conform with applicable water quality permitting requirements. Section 4.5, Water Quality of the Draft EIR addresses the issue of water quality impacts resulting from the project and how such impacts will be mitigated.
- I-49 Section 4.7.3, Noise, Impact of the Draft EIR addresses noise impacts associated with the Splashdown Ride and concludes there is no significant noise impact. Mitigation Measure 4.7-1 requires the preparation of a specific noise study by a qualified acoustician for any new ride attraction and a demonstration that sensitive receptors would not be exposed to noise levels in excess of applicable standards.
- I-50 The CEQA Guidelines provide for subsequent (supplemental) EIR preparation to a certified EIR. The SeaWorld Master Plan Update EIR has not yet been certified, and therefore a supplemental EIR cannot be prepared at this time. Certification will occur at the City Council hearing for the proposed project. Furthermore, the CEQA Guidelines indicate no subsequent (supplemental) EIR shall be prepared unless either (1) substantial changes are proposed in the project which will require major revisions to the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; (2) substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions to the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or (3) new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following: (a) the project will have one or more significant effects not discussed in the previous EIR, (b) significant effects previously examined will be substantially more severe than shown in the previous EIR, (c) mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative, or (d) mitigation measures or alternatives

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which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative. CEQA Guidelines, § 15162 (a). Should these conditions occur after the Final EIR is certified, then a subsequent EIR shall be prepared. A subsequent (supplemental) EIR is subject to the same notice and public review requirements as the original EIR. CEQA Guidelines, § 15162(d).

I-51 Energy consumption and conservation are addressed in Section 4.12, Energy, of the Draft EIR. Energy pollution as it relates to air emissions is addressed in Section 4.9, Air Quality, of the Draft EIR. The remaining part of this comment provides an opinion regarding SeaWorld's use of "clean energy systems." Also, see response to comment L-26.

I-52 Implementation of the SeaWorld Master Plan Update will not result in a significant impact on waste and landfill facilities. Although SeaWorld's waste generation will increase over time, this growth already was contemplated and approved in the 1985 Sea World Master Plan and Environmental Impact Report, RQD No. 84-0160, SCH #84030708, dated February 1985 attached as Appendix C-1 (1985 Master Plan). That 1985 Master Plan projected that SeaWorld ultimately would serve 4 million visitors. Any increased waste generation contemplated by the 1985 Master Plan would not be a significant impact caused by the SeaWorld Master Plan Update. Full build out of the 1985 Master Plan is the baseline for determining whether the SeaWorld Master Plan Update would have significant impacts. *Benton v. Board of Supervisors* (1991) 226 Cal. App. 3d 1467. The Draft EIR projects SeaWorld's attendance would reach 4.4 million. There is no evidence to indicate this difference from the 1985 Master Plan would have a significant impact on waste and landfill facilities than what was contemplated in the 1985 Master Plan.

Furthermore, SeaWorld has an award-winning recycling program that has been recognized by the City of San Diego in seven of the past eight years, as the Recycler of the Year recipient. This award is given to a select few organizations that maintain notable recycling programs that significantly reduce the amount of waste sent to city landfills. Also, SeaWorld has been recognized as the State of California Waste Reduction Awards Programs (WRAP) recipient as one of the top recyclers in the state on six occasions. Since the inception of their current recycling program in 1992, SeaWorld has recycled over 15.25 million pounds of recyclables through the end of 2000. This is equivalent to the preservation of over 25,160 cubic yards of landfill space at our local landfill. See Appendix C-1 of the Final EIR Response to Comments.

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- I-53 See Section 4.5, Water Quality, Existing Conditions, Waste Management and Recycling on page 4.5-13 of the Draft EIR for information concerning recycling of waste products. A major component of SeaWorld's award-winning recycling program is its commitment to purchase products with significant recycled content. SeaWorld has a Recycled Products Procurement policy that encourages and promotes the purchase of recycled materials whenever feasible. The procurement policy allows a five percent price preference for purchase of products with a specified post consumer content. The program is also extended to SeaWorld's contractors and vendors. In 2000 alone, SeaWorld purchased over \$590,000 worth of products manufactured with recycled content materials. In the past seven years, SeaWorld has purchased millions of dollars worth of products manufactured with post consumer and recycled content. Also, see response to comment I-52.
- I-54 See responses to comments L-70 and L-122. Further, see page 23 of the Air Quality Impact Analysis prepared by Giroux & Associates, which analysis is attached as Appendix G to the Draft EIR, which concluded that air quality impacts from personal watercraft would not exceed City of San Diego significance thresholds even assuming no improvements in emissions characteristics for boat engines in the next twenty years. Also, see Section 9.2, More Regulated Alternative of the Draft EIR, which addresses the elimination of potential personal watercraft from the SeaWorld project.
- I-55 Section 4.4, Transportation and Circulation, of the Draft EIR addresses transit. This section indicates that the proposed Automated People Mover could reduce trips to SeaWorld. Further, Mitigation Measure 4.4-11 addresses transit as an option to reduce trips by SeaWorld patrons and employees.
- I-56 See responses to comments I-169 and I-170.

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I-56 Cont.	(page 3-20), the request to increase impacts should be denied. Increasing impacts can only provide greater stresses to endangered least tern nesting sites nearby – which according to the EIR are unnecessary to meet the overall goals of SeaWorld's proposal – to increase attendance.	I-57	Fireworks impacts on least terns are addressed in Section 4.6.3, Biology, Impacts, of the Draft EIR. Also, see responses to comments F-1 and F-2.
I-57		I-58	The biking/walking path is addressed in Section 9.3, Alternatives, Enhanced Public Access Alternative of the Draft EIR.
I-58	Does not complete the vision of biking /walking path around the water of Mission Bay Park. It actually precludes that vision. They should submit a design that includes this important public access component as well as other important access issues pedestrians and bicyclists.	I-59	See response to comment I-58.
I-59	Does not include anything related to walkable/pedestrian community design.	I-60	See response to comment I-55. In addition, the proposed SeaWorld Master Plan Update includes a future Automated People Mover (APM) transit station location and recognizes a future overhead guideway to provide an APM connection to the park. SeaWorld currently provides bike racks for patrons near the front gate and for employees at the employee entrance to the theme park. Also, SeaWorld implemented the existing bikeway along the eastern, southern and western parts of their leasehold as an EIR mitigation measure that was part of the approval of their 1985 Master Plan. Section 4.1 of the Draft EIR, Land Use provides a discussion of the existing bicycle/pedestrian path that is adjacent to SeaWorld on its southerly and westerly boundaries.
I-60	Overall the EIR and proposed designs are extremely weak when it comes to implementation of any "smart growth" principles such as transit, bicycling or pedestrian access or trip reduction methods. Traffic congestion can be mitigated by increasing carpools and support for reliable public transit. Transit investments should be considered as mitigation for currently unmitigable impacts to freeways and local streets, roads and intersections.	I-61	See response to comment I-60.
I-61		I-62	Comment noted.
I-62	They state a commitment to "community education" but this is not quantified or guaranteed in anyway. There must be assurances that commitments to public education in community will indeed be undertaken and not run afoul of other budgetary commitments.	I-63	Comment noted.
I-63	On Page 3-73 they state, "In keeping with the intent of the Mission Bay Park Master Plan Update to preserve existing viewsheds and visual corridors, the additional height available to SeaWorld should be used judiciously." This proposed Update does not provide projects and processes that could be reasonably considered judicious, with minimal public review and unmitigated impacts. Final action should not be ministerial and should absolutely not be made by the Real Estate Assets Department. This is a decision about a public park, not just another "real estate asset."	I-64	Comment noted.
I-64		I-65	Comment noted.
I-65		I-66	The Mission Bay Park Master Plan Update (page 44) discussion on dedicated lease areas states that: "Within the preceding objectives, commercial lease areas should render maximum revenue utility to the City." The basis for concluding that the Tier 1 projects would be consistent with this provision is the fact that these areas are already committed to theme park-commercial recreation use. Because the infrastructure for theme park development is already present, redeveloping the Tier 1 areas within the existing theme park is the most effective and cost efficient method to maximize revenue utility to the City of San Diego. Additionally, no expansion of the commercial lease area is required.
I-66	On Page 4.1-23 what is the basis for the conclusion that the proposed projects would "render maximum revenue to the City"?		
I-67	It is unacceptable to agree to the proposal that would allow for:		

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I-67 Mitigation Measure 4.2-1 is intended to reduce the proposed project's visual impacts by requiring the preparation and implementation of a site plan for the project, which complies with the SeaWorld Master Plan Update landscape buffer and bulk/plane setbacks, and the adherence to the SeaWorld Master Plan Update Design Guidelines. Mitigation Measure 4.2-1, however, would lessen but not fully mitigate the visual impact of the Splashdown Ride. Also, see response to comment L-66.

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- I-67
Cont. "significant visual quality impact because the potential extensive visual mass and visibility of future development above 60-foot in height in Mission Bay Park." (page 4.2-84). What are required mitigations for this?
- I-68 On page 9-8 it states, "Both the hotel and marine are high-priority uses in the California Coastal Act." Where? A quick check of the CCA finds the list of key uses as: recreation, exhibition, educational, research and scientific. Hotels are not really in any of these categories. Even if you claim they are a part of recreation – they are not required for recreation. So exactly where are hotels called out at "high priority uses in the Coastal Act?"
- I-69 On page 4.10-1 it states, under the heading Circulation:
"Inadequate functioning of the circulation system in Mission Bay Park may discourage use of the Park. The proposed project would result in significant impacts to the circulation system in the vicinity of SeaWorld.
This should not be allowed – whether or not in a public park – but especially not in a public park.
- I-70 On page 4.5-18 it states, "due to the current degree of water quality problems in Mission Bay Park, the additional surface water pollutants generated by the redevelopment activities would result in significant cumulative impact on Mission Bay."

This is yet another sign that SeaWorld needs to do more before being allowed to further develop in Mission Bay Park.
- I-71 What started as a modest marine education site in a public park is now justified to become a major resort destination because SeaWorld requires continuous growth to remain competitive. What about our poor, polluted and traffic-
- I-72 decimated public park? If they want what amounts to almost complete control over their operations they should purchase their own site in an appropriate setting as Disney and other competitive theme park owners have had to do.
- I-73 SeaWorld is an important part of the economy here. The City obviously needs help in cleaning up Mission Bay. As one of the major businesses benefiting from Mission Bay, Anheuser-Busch/SeaWorld can and needs to be more a part of

- I-68 The following sections from the California Coastal Act provide the information requested in this comment.

California Coastal Act-

Section 30220

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Section 30222

The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal dependent industry.

Section 30224

Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launch facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.

Section 30255

Coastal-dependent developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal-dependent developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.

See also response to comment I-513.

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- I-69 The proposed project would result in significant traffic impacts on the circulation system in Mission Bay Park. The applicant will pay its fair share to mitigate traffic impacts resulting from traffic generated by SeaWorld. Other traffic would be generated by cumulative projects and background regional growth by 2020. If traffic impacts associated with cumulative projects and background growth are not mitigated, then a significant traffic impact would remain. This is explained in Section 4.4.5, Transportation and Circulation, Mitigation, Monitoring and Reporting of the Draft EIR.
- I-70 As discussed in Section 4.5.5, Water Quality, Mitigation, Monitoring, and Reporting, of the Draft EIR, catch basin inserts and storm drain catchment basins provide appropriate methods to capture and collect target contaminants found in stormwater runoff. Potential impacts to surface water runoff are also addressed by SeaWorld's extensive Best Management Practices (BMP), which are described in Section 4.5.1, Water Quality, Existing Conditions of the Draft EIR. Also, see response to comment I-44.
- I-71 SeaWorld was originally conceived as a marine park that included a variety of uses, including a ride. The City of San Diego issued an Invitation for Lease Proposal Mission Bay Aquatic Park dated November 10, 1960 and two responses to that invitation were analyzed in a memorandum to the City Council dated September 12, 1961, attached as Appendix D-1 to Final EIR Response to Comments. The selected proposal included marine life exhibits, restaurants, a cocktail lounge, gift shop and high-speed hydrofoil rides. Those uses were described in the first lease for SeaWorld, attached as an exhibit to Resolution 172101 adopted by the City Council on August 9, 1962, found in Appendix E-1 to the Final EIR Response to Comments. The lease required the operator to "diligently conduct such business to produce a reasonable and substantial gross income." That lease provision remains in effect at the current time. With City approval, SeaWorld has expanded its size, attractions and rides since that first lease. On May 10, 1968, SeaWorld proposed a substantial development program, including a flume ride, whale stadium, and observation tower. See Letter dated May 10, 1968 and San Diego Union article dated January 8, 1969 included as Appendices F-1 and G-1 to the Final EIR Response to Comments. SeaWorld's uses historically have been approved by the City Attorney. See City Attorney Report to the City Council dated April 25, 1974, attached at Appendix H-1 to the Final EIR Response to Comments. The City consistently planned for and approved SeaWorld's expansion. See Evening Tribune article dated April 8, 1977 and San Diego Union article dated April 8, 1977, attached as Appendices I-1 and J-1 to the Final EIR Response to Comments. The Mission Bay Park Master Plan Update dated August 2, 1994, described the 16.5 acres added to the SeaWorld leasehold in 1998 as possible expansion for SeaWorld attractions. See Lease Amendment dated June 29, 1998, Document No. 00-18538-1, attached at Appendix K-1 to the Final EIR Response to Comments.

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I-72 Section 4.5, Water Quality, Section 4.9, Air Quality, and Section 4.4, Transportation and Circulation, of the Draft EIR address water and air quality and traffic in Mission Bay Park, respectively.

I-73 Comments noted.

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I-73
Cont. solving the problems in and around Mission Bay – as well as keeping their ballot promises to taxpayers.

I-74 This proposal should be sent back for major revisions and commitments to reducing impacts. A Supplement EIR should be required. At a minimum, the City should hold Anheuser-Busch to its campaign promises pertaining to taxpayer burdens related to improvements – "any improvements" required as a result of their projects. We urge the City to undertake a financial analysis of the what the City would have to commit to in order to address the unfunded CIPs and all the other environmental impacts.

I-75

Another minimum: The City should increase the ability of the public to be involved in reviewing plans for all future proposals that exceed the 30-ft height limit of the original Prop D.

I-76 Just because the voters approved that they could plan and construct projects over the height limit, it did not do so without believing future review would be required. The language did not state that the public and City Council would not have review of major projects. They are now proposing that. We should reject that process. We don't do it for project on private land, we should never do it for projects on public park land.

I-77 Call on Anheuser-Busch/SeaWorld to propose how they can help solve the problems in Mission Bay Park – not just plow ahead and ignore them.

Please keep me on the list of interested parties and send any notices of public hearings or other documents to me at the address below.

Sincerely,

Carolyn Chase

Carolyn Chase
On behalf of San Diego Sierra Club
Parks Committee
C/o P.O. Box 99179

I-74 See response to comment I-50.

I-75 With respect to issues regarding SeaWorld's fair share contribution for improvements, see response to comment I-33. With respect to issues regarding sewer and water facilities, please see response to comment L-39.

I-76 Comment noted.

I-77 Comment noted.

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Carolyn A. Cook

4454 Long Branch Avenue San Diego, CA 92107

April 23, 2001

Mr. Lawrence C. Monserrate
Environmental Review Manager
Development Services Department
1222 First Avenue, Fifth Floor
San Diego, CA 92101

Subject: Comments on the Draft EIR for the Sea World Master Plan Update

Dear Mr. Monserrate:

- I-78 [] We are all concerned with environmental issues and quality of life. What would happen to Sea World if their crystal clear pools, ponds, and aquariums were polluted with cloudy, muddy water? Sea World (amusement park) is contributing to the increasing problem of noise pollution to our environment. Does Sea World care about this problem like they do for their beautiful clear pools – seems not! Does Sea World really care so much more about revenue than the environment that they have to offer outside and amplified noise to get people in the gate? Please lets save the live amplified bands and public announcement (PA) systems for an enclosed venue so that our rights to the peaceful enjoyment of our homes in the beach areas are not violated.
- I-79 []
- I-80 []
- I-81 []
- I-82 [] Those of use who live here want the community to remain a place for families to enjoy the natural beauty and peaceful atmosphere of our beach community. If Sea World insists on having a venue for this type of noise polluting entertainment, it should be held inside so only those who choose this type of entertainment are listening and enjoying without disturbing the existing surrounding neighborhoods. Also, I wonder what effect the amplified noise has on sea life and birds nesting in the area. (Has anyone seen a least tern in the last six years nesting in their special site by the amusement park? And by the way, who decided on the guidelines of decibel noise levels? If the noise measures only one (1) decibel, and it disturbs someone, it is quite simply too many decibels! Why all the expensive noise level tests – aren't our complaints enough? Weather and atmospheric conditions have a lot to do with how noise is carried. We cannot control these conditions, but noise and amplification we can control.
- I-83 []
- I-84 []
- I-85 []
- I-86 [] What has happened to the concept of courtesy and respect for one's neighbors? I feel that our neighbor Sea World is showing neither. By allowing the outdoor amplified PA systems and music to continue, Sea World is contributing to noise pollution and degrading our neighborhoods and environment. It is a proven scientific fact that noise aggravates stress. Our homes and neighborhoods should be our haven away from daily stresses.
- I-87 []

In addition to my general comments and frustration noted above, I would also like a response to the following questions:

- I-88 [] 1. Page 2 of the Conclusions, last paragraph: How does a General Plan Amendment and Master Plan/LCP Amendment mitigate a significant land use plan and policy inconsistency? The policies and design guidelines were developed for a reason and the mere fact that the Sea World expansion is inconsistent with those policies and guidelines should not mean that changing those policies and guidelines makes the impact go away. Are you setting a precedence for other development around Mission Bay by saying it's acceptable to amend the plans to suit the individual needs of the development? Please explain this logic to me.
- I-89 []

- I-78 This comment provides a question regarding the water quality of SeaWorld's exhibit pools, which does not address the adequacy or accuracy of information presented in the Draft EIR; therefore, no further response is necessary.
- I-79 The comment makes a statement regarding noise from the existing SeaWorld operation. Noise is addressed in Section 4.7, Noise of the Draft EIR.
- I-80 The comment presents a rhetorical question regarding noise from the existing SeaWorld operation. Noise is addressed in Section 4.7, Noise of the Draft EIR.
- I-81 The comment makes a statement regarding noise from the existing SeaWorld operation. Noise is addressed in Section 4.7, Noise, of the Draft EIR.
- I-82 The comment makes a statement regarding noise from the existing SeaWorld operation. Noise is addressed in Section 4.7, Noise, of the Draft EIR.
- I-83 Noise effects from fireworks are addressed in Section 4.6.3, Biology, Impact, Terrestrial Resources. Responses to comments regarding noise effects on SeaWorld's animals are provided in response to comment I-464. Noise effects on least tern nesting success as it relates to fireworks at the Stony Point Preserve located near SeaWorld are addressed in responses to comments F-1, and F-2.
- I-84 Noise standards are created by the City of San Diego and are provided in the City of San Diego General Plan, City of San Diego Noise Ordinance. This information is provided in Section 4.7, Noise of the Draft EIR.
- I-85 The commentor is correct in that weather conditions can and will affect noise propagation. This phenomenon is addressed in Section 3.2, Propagation Factors in Appendix E, Noise Analysis of the Draft EIR. The most significant of these conditions is wind. Generally, noise increases downwind and decreases upwind of the noise source. The commentors address on Long Branch Avenue would be

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upwind of the noise source 14.2 percent of the time, and downwind 1.2 percent of the time over an average year. Thus, there are not significant periods where wind would alter noise propagation in the direction of that site. The commentor also mentions Crown Point which is north of SeaWorld. This locale experiences wind flow from the south 8.9 percent of the year, which would increase noise levels from SeaWorld during this amount of the year.

- I-86 Comment noted. See Section 4.7, Noise of the Draft EIR for addressment of PA system noise.
- I-87 See response to comment I-86.
- I-88 Approval of the project would resolve the inconsistencies between the voter-approved Proposition D regarding increased development height standards, and the adopted General Plan and Mission Bay Park Master Plan Update/Local Coastal Program. Some land use impacts were identified in Section 4.1, Land Use of the Draft EIR as significant impacts as they relate to traffic and visual quality issues. Section 4.4.5, Transportation and Circulation, Mitigation, Monitoring, and Reporting and Section 4.2.5, Neighborhood Character/Aesthetics, Mitigation, Monitoring, and Reporting set forth Mitigation Measures intended to reduce the proposed project's visual quality and traffic impacts.
- I-89 The proposed SeaWorld Master Plan Update does not necessarily represent a precedent for other developments around Mission Bay. The SeaWorld Master Plan Update was created in response to the voter-approved Proposition D, which allowed an increase in development height on the SeaWorld leasehold up to 160 feet. Two other Mission Bay Park projects: Quivira Basin Redevelopment Project and DeAnza Harbor are proposed consistent with the existing 30-foot development height limit.

COMMENTS

RESPONSES

Carolyn A. Cook
 4454 Long Branch Avenue San Diego, CA 92107
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- I-90 2. Page 4 of the Conclusions, last paragraph: Why is the "Underground Parking Garage Alternative" an alternative at all? Isn't the purpose and intent of the CEQA alternatives to look at alternatives that "avoid or substantially lessen any of the significant effects of the project"? The last line in that paragraph says that this alternative would not lessen any identified significant impacts and would actually result in significant water quality impacts. Is this alternative just a "strawman" or was it added to make it look like a wide variety of alternatives were looked at? This alternative should have been one of the alternatives considered but rejected since it is infeasible to build and doesn't reduce impacts.
- I-91 3. Page 5 of the Conclusions, Combination Alternative: Why was the terminology "...may lessen or avoid significant impacts" used when all of the previous paragraphs on alternatives used the term "would"? Will this alternative reduce impacts or not? The analysis was supposedly done, so an answer is needed.
- I-92 4. Page 6 of the Conclusions, Neighborhood Character/Aesthetics paragraph: The mitigation suggested is meaningless. The significant impact conclusion in the EIR is all about building height. Suggesting compliance with design guidelines for bulk, landscaping and setbacks will not change the fact that the structures proposed are too high. How will this mitigation reduce a height impact? Wouldn't it be more appropriate to recommend a compromise in building height, say reduce the maximum from 90-feet to 60-feet? A reduction in height is the only way this type of impact can really be reduced, although not below a level of significance. Just because Prop D now requires an amendment to the plans does not mean the environmental impact of this should be ignored. The environmental analysis should stand on it's own and be a separate discussion from the plan amendment discretionary action.
- I-93
- I-94
- I-95 5. Page 6 of the Conclusions, Transportation and Circulation: The first line in this section, and the last line of mitigation 1) b), are completely at odds. The first line says "Significant, mitigable impacts have been identified in the year 2005" while the last line says "...the short-term impacts of Sea World on Sea World Drive may not be fully mitigated ..." The first line infers that the impacts can be mitigated. Which is it?
- I-96 6. Pages 6, 7, 8 of the Conclusions: Sea World should have it's own (2-way) auxiliary lane between I-5 and the amusement park for Sea World guests only. The amusement park traffic should NOT mix with day to day traffic of Ocean Beach residents, and others heading southwest. Has an auxiliary lane, or direct I-5 connector road been considered and evaluated? If it hasn't, why not? Sea World generates enough traffic to warrant their own access road. Other amusement parks have either proposed or been required to implement significant road/intersection improvements to reduce impacts. For example, the Disneyland expansion back in the early 1990's to add WESTCOT center (and associated additional parking for 34,300 vehicles) included a number of significant roadway improvements as part of the proposal and as part of required mitigation. These improvements included a direct access from I-5 to the parking structures for visitors. Likewise, the Coors Amphitheatre in nearby Chula Vista (20,000 seat capacity) included a number of stringent mitigation measures due to the significant impact on area roadways. (Pages from these reports are attached.) Why then, if the proposed Sea World expansion assumes an increase in attendance by one million people by 2020 (a significantly greater traffic generation than the examples

- I-90 The Underground Parking Garage Alternative was included in response to requests from members of the public in their response to the Notice of Preparation for this Draft EIR. In addition, this alternative was also raised by members of some nearby community planning boards.
- I-91 Section 9.8, Alternatives, Combination Alternative of the Draft EIR states that "the significant, unmitigable neighborhood character/aesthetics impact would be avoided with this alternative." Additionally, this section states that significant impacts associated with transportation/circulation would be lessened because less traffic would be generated under this alternative. This alternative also would avoid significant, mitigable impacts to land use; traffic circulation; light, glare and shading; water quality; biology, pertaining to perching opportunities; and noise.
- I-92 See response to comment I-67. Chapter 9.0, Alternatives, presents several project alternatives that would reduce the height of future projects and would therefore reduce the visual impact. These are found in Section 9.2, More Regulated Alternative; Section 9.4, No Hotel or Marina Alternative; Section 9.6, No Parking Structure or Hotel Over 30 Feet High Alternative; Section 9.7, Less Visually Intrusive Alternative; and Section 9.8, Combination Alternative of the Draft EIR. See also response to comment I-111.
- I-93 See response to comment I-92.
- I-94 Section 4.2, Neighborhood Character/Aesthetics of the Draft EIR specifically addresses the environmental impacts of the increased height requirement permitted by Proposition D.
- I-95 As indicated Section 4.4.5, Transportation and Circulation, Mitigation, Monitoring and Reporting of the Draft EIR, where mitigation depends upon full funding of CIPs, a factor which is beyond SeaWorld's control, mitigation of certain traffic impacts dependent upon that mitigation measure may not occur. Other traffic impacts, however, will be mitigated to a level below significance. See Section 4.4, Transportation and Circulation of the Draft EIR for more detail as to such mitigable impacts.

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I-96 An EIR need only analyze “feasible” mitigation measures, which are those measures capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. CEQA Guideline § 15126.4(a)(1), 15364. A private two-way auxiliary lane between I-5 and the park would be infeasible because there is insufficient room to build another interchange on I-5 in the vicinity of the park. Interchange spacing is based on Caltrans’ ramp acceleration and merging distance requirements, which preclude a new interchange in this area. This type of improvement is also beyond the mitigation required to provide acceptable Levels of Service for traffic circulation in conformance with adopted City of San Diego standards.

For proper consideration, a mitigation measure must be “roughly proportional” to the impacts of the project. *Dolan v. City of Tigard* (1994) 512 U.S. 374, 391. The proportionality must exist to the extent of the impacts caused by the project and the extent to which the exactions actually mitigate those impacts. *Id.* No rough proportionality would exist if SeaWorld will be required to pay more than its fair share of the mitigation resulting from the impact the project would create.

I-97 See response to comment I-96 and I-201.

I-98 See response to comment I-96 and I-201.

I-99 See response to comment I-96 and I-201.

COMMENTS

RESPONSES

Carlyn A. Cook
 4454 Long Branch Avenue San Diego, CA 92107
 Page 3

- I-99 Cont. _____
 - I-100 _____
 - I-101 _____ 7. _____
 - I-102 _____
 - I-103 _____ 8. _____
 - I-104 _____
 - I-105 _____
 - I-106 _____ 9. _____
 - I-107 _____
 - I-108 _____
 - I-109 _____ 10. _____
- provided) are the traffic mitigation measures proposed so meager and insufficient? Not only will the mitigation measures proposed NOT reduce the impacts to below a level of significance, but the measures proposed are contingent upon City-controlled CIP projects being implemented.
- Page 9 of the Conclusions, Water Quality: Please explain how the project complies with the new Regional Water Quality Control Board Order 2001-01. Specifically, how does the project demonstrate an attempt to generate no net increase in runoff volumes? Also, the City of San Diego has been requiring private developers to install expensive, state-of-the-art filtration devices to capture urban runoff. Is Sea World going to be held to the same standard? Likewise, on Page 9 of the Conclusions, Water Quality, third paragraph: Why does the mitigation measure say "...within two years of the approval of the Master Plan Update by the California Coastal Commission, Sea World Would install catch basin inserts or filters..." Mitigation measures are typically required up front and prior to occupancy, or at least when the construction is complete, correct? Why does Sea World get to wait for two years to implement their mitigation?
- Page 9 of the Conclusions, Noise Impacts: Why does Sea World get to defer a technical study? Aren't all of the analyses required now under CEQA? How can the City Council make a decision on future park facilities when they do not have all of the facts and figures to make that decision? At a minimum, assumptions should be used to do the analysis. If assumptions cannot be made, the future noise-generating facilities should not be included in this project description but rather deferred to a future, specific analysis when they know what they are proposing.
- Page 9 of the Conclusions, Noise Impacts: third paragraph: Ambient noise is NOT the issue. Intermittent peak noise events are what cause all of the noise impacts to nearby residences. It is unfortunate that the current codes and regulations do not have a standard for annoying, intermittent PA system noise. While the noise may not be "painful" or last for 24-hours at a time, the mere fact that residents cannot sit in their backyard on the weekend and enjoy peace and quiet is reason enough to call this an impact. Similar annoyances do have rules and regulations, such as car stereos, "boom boxes" and barking dogs. At a minimum, a measure should be implemented whereby the public has an independent monitoring source to call (i.e., the City of San Diego), whereby if they receive "x" number of complaints on any given day, Sea World must immediately reduce the speaker level. In addition, I have heard, from a Sea World employee in fact, that the newer, outdoor amphitheatres can have much more state-of-the-art sound equipment whereby the speakers are located within the seating area and directed downward. Thus, the announcers can be heard by the visitors but the noise would not reverberate off the premises (over 1/4 mile away as it does now) impacting citizens of San Diego who just want to enjoy their home and peace and quiet. This state-of-the-art equipment should be placed in all outdoor amphitheatres at Sea World (existing and proposed) as a requirement, and at a minimum, as a good will gesture to make peace with the neighborhood in which they operate their business.
- Page S-6, bottom right square, "Mitigated to below a level of significance": Page 6 mitigation next to 1) b), last line says "short-term impacts...may not be fully mitigated". What is the correct conclusion?

- I-100 This comment restates information provided in the Draft EIR. The Mitigation Measures provided in Section 4.4, Transportation and Circulation of the Draft EIR will reduce project-related traffic impacts to below a level of significance in nearly all cases. The exceptions are two mainline freeway segments on I-5.. Certain mitigation measures, however, may not be implemented because such measures are dependent on other funding sources, as explained in response to comment I-95.
- I-101 See response to comment S-25. There will be no net increase of storm water runoff volumes from the expanded property footprint as part of the new development. The proposed timeline of two years for implementation of the catch basins which is specified in Mitigation Measure 4.5-2 factors in development time of the new property. No new runoff will occur for the first two years prior to construction of new exhibits or parking lots or other facilities that may generate additional runoff. In addition, the two-year period for implementing the catch basin inserts was specified because SeaWorld's existing Best Management Practices already intercept most runoff pollutants at the source, before they get to the storm drain inlets. See also Water Quality Analysis for the SeaWorld Master Plan Update prepared by URS, Appendix C to the Draft EIR. RWQCB Order 2001-01 requires municipalities (e.g., City of San Diego) to prepare a Jurisdictional Urban Runoff Management Program (JURMP). Within 365 days of the adoption of this Order, the 20 copermitttees (each municipality identified in the General Order in San Diego County) shall collectively develop a model Standard Urban Storm Water Mitigation Plan (SUSMP). Within 180 days of approval of the Standard SUSMP, each municipality will adopt its own local SUSMP and submit a copy along with amended ordinances consistent with the approved model, to the RWQCB for review and approval." These regulations are required to be implemented since they are an "order to comply." When the City of San Diego adopts its SUSMP, future SeaWorld projects would be required to comply with the SUSMP.
- I-102 See response to comment I-101.
- I-103 For future projects that as of yet are unidentified, Mitigation Measure 4.7-1 requires the preparation of a noise study once the specific development project is identified to determine what noise levels would be associated with the project and how project-related noise impacts would be mitigated. Mitigation Measure 4.7-1 indicates that the study must demonstrate that sensitive receptors would not be exposed to noise levels in excess of applicable standards. This study would occur as part of future environmental review for the proposed project.

COMMENTS

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For purposes of satisfying the requirements of CEQA, the Draft EIR need not include a specific plan for mitigation but may specify performance standards that will result in mitigation and may be undertaken in more than one specified way. CEQA Guidelines, § 15126.4(a)(1)(B).

California courts have held repeatedly that requiring compliance with environmental regulations is an appropriate mitigation measure. "A condition requiring compliance with environmental regulations is a common and reasonable mitigating measure." *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 308; *Perley v. Board of Supervisors* (1982) 137 Cal.App.3d 424,430.

- I-104 The City Council can make a decision on the proposed project because the Draft EIR identifies significant impacts resulting from the proposed project and identifies alternatives and proposed mitigation measures to reduce any significant impacts, which is what is required for adequate CEQA review. The Draft EIR addresses the SeaWorld Master Plan Update, which has at least a 20-year timeframe. See responses to comments I-28, I-103 and I-147.
- I-105 A worst-case noise analysis has been provided for Tier 1 projects, (e.g., Splashdown Ride). See the Environmental Noise Analysis prepared by Gordon Bricken & Associates, Appendix E of the Draft EIR. As to Tier 2 and Special Projects, Mitigation Measure 4.7-1 is an appropriate mitigation measure to address any identified significant impacts. See response to comment I-103.
- I-106 This comment indicates that intermittent peak noise events are an impact to nearby residents. Peak noise events of the existing Shamu show were analyzed as part of the baseline noise impact analysis of current SeaWorld operations. These are presented in Section 4.7, Noise of the Draft EIR. The results of this analysis indicate that such noise levels do not exceed adopted City standards.
- I-107 Comment noted.
- I-108 This comment provides a recommendation regarding a noise complaint method for determining noise impacts. This comment also recommends that SeaWorld use state-of-the-art public address sound equipment to reduce the distance at which project-related noise is heard. The City will consider these recommendations when it makes a determination concerning the proposed project.
- I-109 The statement on page S-6 of the Draft EIR identified in the comment refers to the Issue Area, 2005 Offsite Circulation (Weekday). The impacts identified for this heading pertain to the coordination of signals and non-optimized queue and land utilization. These impacts would be fully mitigated by SeaWorld to below a level of significance. On page 6 in the Conclusions of the Draft EIR, a portion of the discussion refers to the widening of SeaWorld Drive, which if not fully funded, may not fully mitigate project-related traffic impacts.

COMMENTS

RESPONSES

Carolyn A. Cook
4454 Long Branch Avenue San Diego, CA 92107
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- I-110 11. Page S-7, last two rows regarding 2020 roadway segments: The Mitigation Measure column and the last column say an impact is mitigated "if" something else happens that is not in the control of Sea World, i.e., CIP project funding/implementation. The mitigation should be defined and absolute and not dependent upon the "possible" outcome of another action that is the responsibility of others. Please explain how this is deemed acceptable by the City and provide examples of other similar mitigation measures (for other projects) adopted by the City Council as acceptable. At a minimum, there should be a scenario provided in the mitigation columns that assume the "if" does not happen.
- I-111
- I-112
- I-113 12. Table S-2: The alternatives should be compared to the proposed action in terms of environmental impacts. It is evident that the only real comparison is in regard to economics. We of course know the answer to that...Sea World and the City (i.e., TOT) receive the greatest economic gain by building their proposed plan and not the alternatives. The economic viability of an alternative should only be considered when deciding if an alternative is "feasible" in the first place, or when the City Council makes a decision on the project and weighs that information with the environmental effects. What most people want to read/understand in the EIR is the environmental comparison. If a matrix of comparison is to be provided (like Table S-2), it should be used to show the major characteristics of the alternatives and the significant environmental effects of each alternative in comparison to the project (CEQA Guidelines Section 15126.6(d)). I also disagree that under the Combination Alternative that this alternative "would not meet any of the project objectives". Each of the objectives should then be listed and explained why the alternative doesn't meet the objective.
- I-114
- I-115
- I-116
- I-117

I surely hope that the Planning Commission and City Council consider the Sea World proposal very seriously, particularly in light of the precedence this project may set for future development around Mission Bay. I also have to say that I have never seen so many "significant but unmitigated impacts" in one document and think that it would be a disgrace if they are all swept under the carpet with the usual "Statement of Overriding Considerations" which always give more weight to the economic incentives over the environmental impacts.

I look forward to reading the Final EIR and responses to my comments and questions.

Sincerely,

Carolyn A. Cook

- cc: Ocean Beach Town Council
- Ocean Beach Planning Board
- Ocean Beach Grassroots Organization
- Donna Frye, Council Candidate
- City of San Diego Planning Commissioners
- City of San Diego Council Members

- I-110 SeaWorld is required to pay its fair share cost to mitigate its traffic impacts in conformance with City of San Diego policies. See response to comment L-9.
- I-111 The City Council may or may not deem potentially unmitigated impacts acceptable. In order to deem them acceptable, the City Council must make Findings and describe the Overriding Social and Economic Considerations that the City used in accepting the potentially unmitigated significant impacts.
- I-112 Table S-1 in the Executive Summary of the Draft EIR provides a column, Significance of Impact(s) After Mitigation. The information in this column indicates whether or not the mitigation measure may not be fully implemented. See also response to comment I-111.
- I-113 The Advantages column in Table S-2 in the Draft EIR provides comparisons of the environmental advantages of the various project alternatives to the proposed project.
- I-114 Comment noted.
- I-115 Comment noted.
- I-116 Comment noted. Alternatives are discussed in more detail in Chapter 9.0, Alternatives in the Draft EIR.
- I-117 Section 9.8, Combination Alternative of the Draft EIR states that the elements of this alternative are addressed in discussions of the other project alternatives. For example, on page 9-8 of the Draft EIR, the No Hotel and Marina Alternative analyzes why this alternative would not achieve the objective of "increasing revenues to the City of San Diego." This analysis would be equally applicable to why the Combination Alternative would not meet this project objective.

COMMENTS

RESPONSES

R. Jarvis Ross
4352 Loma Riviera Court
San Diego, CA 92110

April 24, 2001
The City of San Diego
Land Development Review Division
1222 First Avenue 5th Floor
San Diego, Ca. 92101

SUBJECT: SeaWorld Master Plan Update Draft EIR dated March 12, 2001

To Whom It May Concern:

As a resident of the Loma Riviera Community Association a complex of 263 townhomes I am responding to the subject draft EIR.

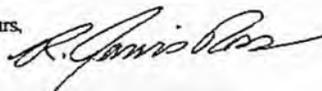
The draft EIR concludes that among other impacts the project would result in significant environmental impacts in the following areas: Land use, Neighborhood Character/Aesthetics, Light, Glare, Transportation and Circulation, Noise, and Air Quality.

After reviewing the EIR, and the proposed mitigation I find the Draft EIR S-1 Section completely unacceptable in part for the follow reasons.

- I-118 1. Inaccurate or conflicting data (see Figure 7 page 11 of the Economic Development planning section report dated 11-25-97 which contradicts statements in Table S-1 page S-7 under Transportation and Circulation.)
- I-119 2. Dependency upon unfunded and unreliable CIP's.
- I-120 3. Dependency upon the City funding for mitigation which was not included in proposition D.
- I-120 4. Interpreting "entertainment" in proposition D as a license to convert SeaWorld to a amusement park with rides that carry the risk of serious injury to visitors and deviate from it's avowed historical purpose as a marine life educational park.
- I-121 5. Serious unmitigated impacts (such as noise and air quality) to we residents living closest to SeaWorld. Loma Riviera is less than one mile from SeaWorld and was not monitored in any data in the EIR.
- I-122 6. The electorate did not approve "tiers" of structures. Each individual structure must go through the effected local (Ocean Beach, Peninsula, Midway, and Mission bay) planning commissions then to the city planning commission, the city council and finally to the coastal commission. Citizen input is imperative on each structure!
- I-123 7. There is no statement in the EIR as to the number of injuries sustained at amusement parks around the country on "amusement" thrill type rides or how SeaWorld would absolve the city of liability by permitting such rides in a city owned park.

Please reject SeaWorlds proposals.

Sincerely yours,



I-118 See responses to comments to L-8 through L-84.

I-119 See response to comment L-60.

I-120 The proportion of SeaWorld's entertainment, education, and other attractions is provided in response to comment I-164.

I-121 The Draft EIR does not identify any significant unmitigable noise or air quality impacts. In addition, noise levels were monitored near Loma Riviera. As indicated on Figure 4.7-1 in Section 4.7, Noise of the Draft EIR noise monitoring location #3 is near Loma Riviera.

I-122 See response to comment L-24.

I-123 Legal liability regarding SeaWorld patrons is addressed in its lease with the City. SeaWorld may be liable for patron injuries depending upon the circumstance. It is not addressed in the Draft EIR, because it is not an environmental issue.

COMMENTS

RESPONSES

City of San Diego
Land Development Review Division
ATTENTION: Martha Blake
1222 First Ave., Fifth Floor
San Diego CA 92101

April 25, 2001
sent via FAX to: 619-446-5499

Sea World Master Plan Update Comment Letter
LDR No. 99-0618/SCH 1984030708

I-124

With the proposed development that Sea World is seeking in regards to the Sea World Master Plan Update, further environmental degradation is inevitable. Solutions need to be thoroughly discussed and many of these issues are not being adequately represented in the Sea World EIR. The citizens and visitors of San Diego have the right to enjoy Mission Bay Park as it was originally intended. The interests of the city at large are not being reflected within the Sea World EIR.

I-125

The issue of aesthetics is of great concern. Prior to this proposal all structures were under the 30-foot height limit within Mission Bay Park. Now Sea World wants to exceed this height with "themed track or water rides" that serve no specific purpose but bringing a

I-126

"Theme Park" feel to the Bay. With the high rise ride 'Splashdown,' Sea World is directly breaking the intention of Mission Bay Park. The current Mission Bay Park Master Plan specifically warns against "extreme or exaggerated thematic designs." And

I-127

against Mission Bay Park becoming the site of a "Disneyland" like attraction. Yet this is exactly what this proposes - except that at least with Disneyland - they own their own land. This is a public park and the level of reduced public review being requested by

I-128

SeaWorld is completely inappropriate and breaks with the spirit if not the letter of Prop D. All projects of more than 30 feet should receive review via the full Planning Commission and City Council process.

I-129

The proposed Splashdown ride is plainly what the authors of the adopted Mission Bay Park Master Plan were trying to avoid on the Cities land. With rides such as the Splashdown ride setting the precedent for further future expansion, it is very likely to see Mission Bay Park turned into nothing more than a "Disneyland" by the bay.

I-130

Within the EIR it mentions that "Proposed buildings and special attractions would be reviewed to determine if they would be visible from public areas outside Sea World and if landscaping is needed to enhance or screen public views." Simply looking at the photo simulations provided within the EIR, it is apparent that Sea World's expansion could be permitted to be very significant without significant public review. The impact of the development could drastically alter the skyline of Mission Bay Park - and again without appropriate local community review. No amount of landscaping could remedy this.

I-131

The traffic issue in San Diego is something that every resident has been affected by in one way or another. Smart ways of dealing with the added traffic problems that will occur if Sea World expands is imperative. The EIR offers some solutions to expanding

I-124 Comment noted. A summary of project impacts and Mitigation Measures is provided in Table S-1 in the Draft EIR.

I-125 The impacts of the increased height of future SeaWorld development are addressed in Section 4.2, Neighborhood Characteristics/Aesthetics of the Draft EIR. Not all the structures over thirty feet would be rides. For example, the educational facility would be about 45 feet in height and the special events center would have a 60-foot high icon structure. See response to comment I-67.

I-126 Comment noted.

I-127 An evaluation of the proposed project in comparison to the Mission Bay Park Master Plan Update is provided in Section 4.1, Land Use of the Draft EIR. In particular, consistency between the Mission Bay Park Master Plan and the Sea World proposed project is analyzed on a categorical basis in Table 4.1-1 in the Draft EIR. Furthermore, Section 3.5, Project Description, Mission Bay Park Master Plan Update Amendment of the Draft EIR sets forth the amendments proposed to the Mission Bay Park Master Plan Update to create consistency with Proposition D passed in 1998.

I-128 This comment makes a recommendation regarding future discretionary review of future SeaWorld projects. The discretionary review process for future projects on the SeaWorld leasehold is described on page 3-74 of the Draft EIR. Also, see response to comment I-28.

I-129 See response to comment I-127.

I-130 The photosimulations presented in Section 4.2, Neighborhood Characteristics/Aesthetics show a worst-case scenario, with actual projects likely to be smaller. The Draft EIR identifies significant and unmitigable visual quality impacts associated with the proposed project in Section 4.2, Neighborhood Characteristics/Aesthetics of the Draft EIR. The Draft EIR recognizes that visual quality mitigation measures, including landscaping for visual quality impacts would not mitigate these impacts to below a level of significance. See responses to comments I-67 and I-111.

COMMENTS

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I-131 The widening of SeaWorld Drive would result in a minor loss of parkland along this roadway. Widening of SeaWorld to six lanes is a part of the adopted Mission Bay Park Master Plan Update and therefore is an anticipated reduction of parkland. Other traffic Mitigation Measures proposed in Section 4.4, Transportation and Circulation of the Draft EIR would not result in the reduction of parkland.

COMMENTS

RESPONSES

I-131 roadways but no guarantees. Those road expansion represent a further loss of open space
Cont. and parkland. What would be the mitigation for those? Why is there no analysis for the
I-132 "significant and unmitigated" impacts to I-5? How could those impacts be mitigated? It
is unacceptable in today's traffic crisis to require significant unmitigated impacts.

I-133 New attractions increase attendance by as much as 100,000 - 150,000 visitors in the first
year of operation but this increase historically has not translated into a net attendance
gain for Sea World on an annual ongoing basis according to the EIR. With this being the
case the number of visitors tremendously increases, creating huge traffic problems
without reciprocating in a lasting profit for Sea World. Since the profit is only
temporary, Sea World must continue to expand in order to increase attendance. This
means that Sea World will always be looking to expand which is problematic in a public
park.

I-134 Sea World has also proposed a hotel expansion. The hotel within Area 5, the existing
300-room hotel "entitlement" provided in the 1985 Master Plan is proposed to be
increased to 650 rooms. Master Plans are not entitlements or rights to build in any
fashion. If the impacts of the proposed development are inappropriate they should be
rebuffed. Hotels were not called out as an explicit use in Prop D and with the passage of
Prop D by a very narrow margin, the City should not now be adding uses that are
questionable.

I-135 Another major negative consequence of Sea World's expansion program is on the
environment. Mission Bay is already heavily polluted from years and years of
environmental abuse. A portion of the Sea World lease is located on its prior landfill site
which received toxic substances while it was open. Is Sea World restricted from plans to
do "excavation of existing soils, and varying site preparation" in those areas? Those areas
need to be further researched before any type of action is taken.

I-136 The important conclusion that needs to be made is that the EIR done by Sea World has
only touched the surface in evaluating the projects environmental impacts. Air Quality,
Water Quality (including sewage flows) and Energy due to the expanded rides and
attractions were not sufficiently analyzed in the EIR - especially sewage system impacts.
I-137 Please provide an analysis of impacts on the City's sewage flow and treatment system.

I-138 The Sea World Master Plan Update EIR mentions 'Significant Unmitigated Impacts'.
These impacts are said to be approved by the Mission Bay Park Master Plan
Update/Local Coastal Program Land Use Plan Amendment and General Plan
Amendment but some significant impacts would remain.

I-139 The No Project Alternative or Combination is supposedly said to reduce the level of
impact below a level of significance but what are the consequences in relation to the new
plan? The result of unmitigable transportation and circulation impacts are of concern
to the city and the Sierra Club. Why is it that the traffic issue must be unmitigable and
cannot be completely dealt with by Sea World since their business is the reason for

I-132 A significant impact has been identified to I-5 in Year 2020 because of the increase
in traffic due to SeaWorld. (See Section 4.4.4, Transportation and Circulation,
Significance of Impact of the Draft EIR). SeaWorld's increase is calculated to range
from 2.0-2.8 percent during the peak hours. This is a relatively small percentage.
To mitigate impacts on I-5, additional main lanes would be needed and Caltrans
would have to implement a CIP. There is no known or anticipated Caltrans
improvement project to which SeaWorld can contribute its fair share. Therefore,
the project impacts remain unmitigated.

I-133 SeaWorld's potential future development is described in its proposed Master Plan
Update and is addressed in the Draft EIR.

I-134 The existing SeaWorld Master Plan does allow for a 300-room hotel, which is
considered an entitlement, however a future hotel under the existing plan would
require approval by the City Council and Coastal Commission. (See Section 3.6,
Discretionary Actions of the Draft EIR).

I-135 See response to comment S-7. As to further research and analysis regarding the
landfill, see response to comment S-2.

I-136 Air quality, water quality and energy are each addressed in the Draft EIR in
Sections 4.9, Air Quality, 4.5, Water Quality and 4.12, Energy, respectively. Sewage
issues are addressed in response to comment L-39.

I-137 See response to comment L-39.

I-138 Comment noted.

I-139 The consequences of the No Project Alternative and the Combination Alternative
are separately addressed in Section 9.1, No Project Alternative, and Section 9.8,
Combination Alternative of the Draft EIR. These discussions address what impacts
would be mitigated and what project objectives would not be met if either of these
project alternatives were selected. Also, see responses to comments L-113 and I-
33.

COMMENTS

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I-139 Cont	the significant increase? The language on the Prop D ballot stated that expanded attractions would require that, "No taxpayer funds are spent for any improvements resulting from this initiative."	I-140	See responses to comments L-60 and L-113.
I-141	Please analyze the consistency with Prop D. Given that the major purpose of this "Update" is to implement Prop D, there needs to be analysis of consistency before moving forward.	I-141	See responses to comment I-598, I-636 and I-640.
I-142	The Sierra Club asserts that this Update is inconsistent with Prop D in several respects. In addition to any unmitigated impacts being inconsistent with the taxpayer protection promises, it is also inconsistent with respect to adding a hotel – which is not an exhibit, an attraction or an educational facility – which are the only uses called out in Prop D. It is also inconsistent in that Sea World promised future review of projects over 30 feet by the City – with the implication to the voters being review with a local public hearing before the City Council. But for most projects, Sea World wants no local public hearing – only a review by Development Services staff. This is unacceptable.	I-142	See responses to comments I-598 and I-636.
I-143		I-143	See responses to comments to I-598, I-636 and I-640.
I-144		I-144	See response to comment I-28.
I-145	With the fair-share cost to a CIP for widening of Sea World Drive, Sea World's contribution is only 44% of the cost. Why and how was this percentage chosen? Why is Sea World paying the lower percentage of the cost and not contributing 100% of the cost like the in the traffic signals on Sea World Drive from Friars Road? The Sea World calculations of fair-cost for reconstruction of the roadways around Sea World are questionable. The traffic models being used for this are not state-of-the-art and do not take into consideration the latest information with respect to generated and induced travel. Please run models that correctly utilize the best modeling available.	I-145	See responses to comments L-60 and L-113.
I-146		I-146	The City of San Diego Series 9 Traffic Model was used, which is the best model available. It is based on the SANDAG regional model. Traffic Analysis Zone updates were also provided for the City's Traffic Model which included the forecasted Sea World growth, the two identified cumulative projects and other significant proposed and approved projects. See page 36 of Traffic Impact Analysis prepared by Linscott Law & Greenspan, Appendix B of the Draft EIR.
I-147	Have the impacts of the distribution of promotional/directional material to employees and repeat patrons been researched? Sea World provides no analysis of the effectiveness or what their public and personnel education. What do the materials cover? What is their financial commitment to real public education?	I-147	Educational materials for employees and members of the public are common mitigation measures. Although they may reduce circulation impacts, the Draft EIR concludes that certain circulation impacts would be significant and unmitigable. An EIR is only required to evaluate the environmental impacts of a project, to identify alternatives to a project and to indicate the manner in which significant effects can be mitigated or avoided. Cal. Pub. Res. Code, §21002.1(a).
I-148		I-148	See response to comment I-147.
I-149		I-149	See response to comment I-147.
I-150	The paving of land leased by Sea World can be of great concern. What effects will the paving of the existing unpaved guest overflow parking area have on the surrounding environment, bay and groundwater? And on the landfill site? Will the existence of more cars on the newly paved road cause increased problems with non-point source pollution in the bay?	I-150	The impact on water quality of future paving activities is addressed in Section 4.5.3, Water Quality, Impacts of the Draft EIR. Surface runoff from future paved and development areas would be monitored and mitigated to below a level of significance as set forth in Section 4.5.5, Water Quality, Mitigation, Monitoring and Reporting of the Draft EIR. In addition, Mitigation Measure 4.5-2 requires the implementation of catch basin inserts or equivalent technology to capture oil and grease in parking lot runoff. Section 4.11, Human Health/Public Safety of the Draft EIR addresses the closed landfill. The parking area located above the closed landfill is paved with a chip-seal surface that is impervious to water but allows for gas diffusion. Also see response to comments S-1 through S-19 and I-44.
I-151			
I-152	According to the EIR "Water quality within Mission Bay is generally lower than that of the coastal ocean water due to the poor flushing characteristics of the bay and the input of nutrient material from urban storm runoff." Has all possible impacts been looked at in regards to the paving of certain areas? How effective would the implementation of 'catch basin inserts' or 'filters' to capture oil and grease runoff be?		
I-153			
I-154	With the significant impact that may occur to the least tern at the Stony Point Least Tern Preserve more alternatives need to be discussed. To		

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- I-151 See response to comment I-150.
- I-152 See response to comment I-150.
- I-153 Section 4.5.5, Water Quality, Mitigation, Monitoring and Reporting of the Draft EIR indicates that Mitigation Measure 4.5-2 (installation of catch basin inserts or equivalent to capture oil and grease in runoff), when combined with SeaWorld's ongoing controls summarized in Section 4.5, Water Quality, and Mitigation Measures 4.5-1 and 4.5-3, would reduce cumulative operational impacts on water quality to a level below significance. See also the Water Quality Analysis for the SeaWorld Master Plan Update prepared by URS, Appendix C to Draft EIR. These measures, as well as SeaWorld's existing Best Management Practices (BM) are considered very effective in minimizing oil and grease in surface runoff and have been used by other jurisdictions, such as the City of Oceanside. See also response to comment I-70.
- I-154 See response to comment F-2.

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- I-155 what degree will Sea World construction have on the least tern? Are there ways to recolonize? If so what needs to be done? What agencies need to be involved in such an issue?
- I-156
- I-157 Geology and Soils need to be looked at in relation to the parks current levels and the soil makeup of the park. It is a concern that the land may not adequately be able to handle the proposed development without disturbing potential toxins.
- I-158 With the proposed new projects, the increase in energy use by Sea World is going to be very significant. California is already facing huge problems with the energy crisis that is currently heavily effecting San Diego. With projects such as Splashdown tremendous increases in energy inevitably will be used. Sea World should be required to have a plan for their own energy independence and not burden the existing troubled public grid with their growth requirements. The time of season that Sea World will be using the most power is during their peak season of summer which also coincides with San Diego's peak power needs.
- I-159 Will this chain of events cause any problems, especially in the future when energy will be of an even greater concern?
- I-160
- I-161 The water conservation program that Sea World already has in effect works to decrease water consumption at the park's existing water levels. When the park is faced with increased water needs due to its' new attraction will the current program for water conservation be effective? If this program is not effective are there other alternatives designed to update water conservation within the park?
- I-162
- I-163 "Without new attractions, Sea World expects that attendance would decline." This is clearly stated within the EIR and poses the question, what is Sea World's primary goal? Is it education, research, conservation or entertainment? According to Table 3.3 -1 'Area 1 Facilities' the answer is clearly entertainment. It is understood that entertainment is a very important factor for Sea World and the company needs to make a profit but to what extent? Hopefully the goals of the Sea World Master Plan Update are congruent with the further progression of important issues to the community and it's visitors to a public park.
- I-164
- I-165 Water treatment for the park is said, "to treat marine animal water as well as a portion of the facilities stormwater." What and why is only a portion of the facilities stormwater being treated? What kind of impact will this have if water use is increased due to the Sea World Master Plan Update?
- I-166 Twenty-Five percent of the parking lot storm runoff is collected and treated. Will this also result in any significant increase and if so what effects and solutions are being done? In respect to the monitoring of air quality, water quality and fireworks has Sea World always been up to code and reliable in controlling their permits? It is important to know of any fines or violations that Sea World has so as to project the consistency of their
- I-167

- I-155 Page 4.6-13 of the Draft EIR states that new construction and operation activities would be at a sufficient distance so as to not affect the least tern.
- I-156 Recolonization of the Stony Point Preserve is not related to impacts associated with the proposed project. Please see Section 4.6, Biology of the Draft EIR and response to comment F-2. Additionally, the Mission Bay Park Master Plan Update calls for this preserve to be abandoned.
- I-157 See responses to comments L-12 and L-77.
- I-158 The project will not have a significant impact on energy consumption, as described in Section 4.12, Energy of the Draft EIR. Also, see response to comment L-26.
- I-159 The City will take the recommendation for SeaWorld's energy independence into consideration when it makes its determination concerning the proposed project.
- I-160 See the Energy Generation and Energy Conservation Programs discussions found in Section 4.12, Energy of the Draft EIR on pages 4.12-2 and 4.12-3. SeaWorld's future energy consumption is addressed in Section 4.12.3, Energy, Impact of the Draft EIR. Mitigation for the reduction of future energy use is provided in Mitigation Measure 4.12-1. Also, see response to comment L-26.
- I-161 Section 4.13.3, Water Conservation, Impact of the Draft EIR analyzes the project's impacts on water consumption and states that the project will not result in usage of excessive amounts of water because SeaWorld will apply its existing water conservation programs as well as the implementation of Mitigation Measure 4.13-1 for any new projects.
- The SeaWorld water conservation program has been in existence since 1990. The program is dynamic and ever changing. Conservation strategies are constantly re-evaluated to determine effectiveness and potential for implementation of new technology and water-saving techniques. The program will continue to utilize the techniques that have been successful for SeaWorld. Future evaluations will be performed as new opportunities arise and present themselves for implementation.
- I-162 See Mitigation Measure 4.13-1 on page 4.13-4 in the Draft EIR. Water conservation is designed into projects through value engineering techniques. The process involves utilization of cost beneficial evaluations to select the most efficient methods and process equipment in the design and building new projects.

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- I-163 SeaWorld's goals are described in their vision statement on page 3-1 of the Draft EIR under Section 3.2, Project Description, Project Objectives of the Draft EIR. See response to comment I-71. One of SeaWorld's goals is to comply with its contractual obligations under its lease, which requires the development of new animal exhibits, interactive experiences and/or theme attractions. See Appendix K-1 in Volume II, Final EIR Response to Comments Appendix to the Draft EIR.
- I-164 SeaWorld attractions consist primarily of exhibits (58%), rides (13%), and shows (16%). The proportion of each attraction devoted to education varies but 70% of SeaWorld attractions contain educational content and 63% percent contain a conservation message. Conservation messages are also displayed throughout the park unassociated with any attraction. As new attractions are added, these proportions are not expected to change dramatically. CEQA Guideline §15131(a). See response to comment I-163.
- I-165 See Section 4.5. Water Quality of the Draft EIR, for a discussion of stormwater treatment provided by SeaWorld's two water treatment facilities; its Best Management Practices; compliance with various permits and governmental regulations; and Mitigation Measure 4.5-2. In particular, this section states that, for most times during the year (except on four to six times per year) the treatment facilities have excess capacity. Furthermore, Section 4.5.5, Water Quality, Mitigation, Monitoring and Reporting of the Draft EIR sets forth Mitigation Measures which, in combination with SeaWorld's ongoing controls, will reduce any significant water quality impacts to below a level of significance.
- I-166 See responses to comments I-44 and I-165.
- I-167 See response to comment L-69. SeaWorld has been in compliance with its other permits.

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- I-167
Cont. environmental record. Please report on SeaWorld's compliance record with all their existing permits and what permits would need to be changed and how.
- I-168 In regards to firework shows one must ask whether the projected increase in attendance due to the Sea World Master Plan Update will increase the amount of shows? If Sea World does in fact increase the number of shows
- I-169 the impacts of this must be projected. With increased fireworks shows, an analysis of the amount of debris or duds entering the bay itself must be done. There was no air quality analysis of increasing fireworks show. Please provide
- I-170 analysis of the air quality impacts.
- I-171 The Landscape in relation to projected expansion is an important significance. Continuing the aesthetic beauty of Sea World regardless of the level of development is important to Mission Bay Park. Included in the EIR are Sea World's general landscape guidelines. It is important to know to what degree each of the guidelines will be carried out. To what extent will Sea World maintain "the wide variety of plant species that enhance Sea World as a botanical garden." Are they really doing this and to what level? By trying to use tall trees to provide partial screening will this realistically be effective or simply be not noticeable? Even though Sea World speaks of planting draught tolerant species, will the increased landscaped land have some effect on water preservation for the Park? As for the regular use of fertilizers on the Sea World lawns, what effect does the fertilizer have? If increased lawn area is developed further for the expansion, will the higher runoff levels of the fertilizer effect aquatic regions, plants, animals or any living organisms? A goal of the City has been to increase the usage of native plants and reduce ornamentals which increase water consumption. Sea World should be required to maintain native landscaping only. This would also be an asset to the public and the community for both educational and environmental purposes.
- I-172 The architectural design of the park according to the Mission Bay Park Master Plan Update has specific goals that are important in keeping Mission Bay Park a water-oriented recreational environment. The Sea World Master Plan Update in its development must make sure to stay within the guidelines outlined.
- I-173
- I-174
- I-175
- I-176 The Splashdown Ride that is breaking the original height restriction is a major addition to the park. Does the suggested Splashdown Ride stay within the Architecture goals and objectives of the Mission Bay Master Plan Update? Does the design of the ride fall under the guidelines involving 'Building Design' and 'Theme Park Attractions'? In regards to the use of energy for the Splashdown Ride what impacts will result. A ride with the size of the Splashdown ride is sure to have significant impacts. The noise contours must be reduced. There is no competitive need for new attractions to have significant noise contours. State-of-the-art roller coasters are often built completely enclosed so as to contain the visitor experience and have complete control. There is no competitive reason to build attractions with large noise contours. At Walt Disney World, their newest "Rock and Roller Coaster" is completely indoors - as is Space Mountain and Pirate of the Caribbean. Most of Splash Mountain is completely inside. Without a commercial rationale - and
- I-177
- I-178
- I-179
- I-180

I-168 The proposed SeaWorld Master Plan Update indicates that SeaWorld may increase its fireworks show up to a maximum outlined on page 3-40 of the Draft EIR. Noise impacts from fireworks shows are discussed on pages 4.7-5 and 4.7-23 of the Draft EIR. The impacts from fireworks shows on least terns are analyzed on page 4.6-13-4.6-15 of the Draft EIR. See also response to comment F-2.

I-169 As indicated in the Draft EIR on page 3-20, subsequent to a fireworks show, SeaWorld performs a water sweep for duds and/or debris. Also, early in the morning following each fireworks display, a beach sweep on Fiesta Island is performed to retrieve any duds and/or debris. This reduces potential fireworks effects on Mission Bay water quality.

A review of a fireworks water quality study provides no evidence to indicate there would be a significant impact from fireworks on Mission Bay water quality. This study, commissioned by Walt Disney World Company in 1992, was conducted to determine the relationship of fireworks on a small water body located at EPCOT Center in Lake Buena Vista, Florida. The report entitled "Environmental Effects of Fireworks on Bodies of Water", and prepared by DeBusk, et al, in 1992, analyzed the effects of 2000 fireworks shows over a ten-year period. The study concluded that the environmental effects of fireworks displays are probably negligible (DeBusk et al, 1992).

Additionally, this study indicated that other factors that affect the accumulation of fireworks constituents in water bodies pertain to the size of the water body, hydraulic residence time and other physio-chemical characteristics. While the small lake, which was evaluated in the study, is a stagnant water body that would tend to accumulate fireworks constituents, Mission Bay is a larger water body that has tidal and hydraulic characteristics that would result in dilution of fireworks constituents as compared to the stagnant water body evaluated in the Disney study. Therefore, fireworks impacts to Mission Bay's water quality are not considered significant.

Finally, a study, *Chemistry, Toxicity and Benthic Community Conditions in Sediments of the San Diego Bay Region*, completed in 1996 addressed toxicity of sediments in San Diego Bay, Mission Bay and the Tijuana Estuary. The report's goal was to characterize the general state of sediments in the areas studied and to locate toxic hotspots where future investigation and remediation would be a priority. There were two sediment-sampling stations located near the Sea World leasehold. Both were in the Southern Pacific Passage, with one located north of the northeast leasehold corner and the other located north of the 4D Theater on the SeaWorld

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leasehold near the fireworks barge. The study indicated that neither sampling station near the SeaWorld leasehold was listed as degraded/transitional, nor was either sampling station placed on the priority list for future investigation. Therefore, if SeaWorld fireworks had resulted in elevated levels of some constituents, then the area where the sampling was done would have been recommended for further study.

- I-170 Fireworks shows have not been identified as a substantial source of air pollution emissions in the air basin. There is no perceptible change in regional air quality after the 4th of July when multiple fireworks shows occur throughout the basin on a single evening. Some increase in particulate matter from smoke likely occurs during fireworks displays, and unburned organic compounds can be released. EPA's position on the quantification of emissions from explosive activity is stated as follows:

"Any estimates of emissions from explosives use must be regarded as approximations that cannot be made more precise because explosives are not used in a precise, reproducible manner."

EPA; AP-42, "Compilation of Air Pollutant Emission Factors" (2000).

Page 11 of the Air Quality Impact Analysis prepared by, Appendix G of the Draft EIR, notes that while the project will impact air quality almost exclusively through vehicular traffic, "secondary, project-related atmospheric impacts derive from a number of other small, growth-connected emissions sources." However, "all these emission points are either temporary, or they are so small in comparison to project-related automotive sources that their impact is negligible." Thus, the Draft EIR focuses on the sources of significant impacts to air quality caused by the project, such as construction impacts and vehicular traffic emissions.

- I-171 SeaWorld would follow the Design Guidelines attached as Appendix G to the Mission Bay Park Master Plan Update, which will be monitored by City staff as part of future project review. Tier 1 projects' consistency with the Design Guidelines are discussed on pages 4.1-32 and 4.1-34 of the Draft EIR. Tier 2 projects' consistency with the Design Guidelines are discussed starting on page 4.1-39 of the Draft EIR. Special projects' consistency with the Design Guidelines are discussed on page 4.1-44 of the Draft EIR.

- I-172 The effectiveness of trees for screening and lessening visual impacts is apparent based on the existing tall (60 to 70 feet-high) trees in the western part of the leasehold. See Figures 4.2-32 and 4.2-38 in the Draft EIR.

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- I-173 As discussed in Section 4.13.6, Water Conservation, Impact in the Draft EIR, with the proposed use of drought-tolerant plants and general compliance with the SeaWorld Master Plan Update Design Guidelines, no significant water conservation impacts will result from the project.
- I-174 The potential effect of fertilizers is addressed in Section 4.5, Water Quality of the Draft EIR. Fertilizers in runoff are controlled through existing Best Management Practices.
- I-175 This comment is a recommendation for SeaWorld to use drought tolerant plants and native landscaping to reduce water consumption. These objectives are already identified in the Mission Bay Park Master Plan Update landscape design guidelines. This recommendation will be considered when the City makes its determination concerning the proposed project.
- I-176 This recommendation will be considered when the City makes its determination concerning the proposed project.
- I-177 The architectural guidelines of the Mission Bay Park Master Plan Update recommend low-scale buildings to reinforce the open quality of the bay while minimally obstructing views to the sky and distant shore. The inconsistency in scale of the Splashdown Ride with the height requirements set forth in the Mission Bay Park Master Plan Update Design Guidelines is mitigated by 1) the amendment to the Mission Bay Park Master Plan, which allows taller development on the SeaWorld leasehold, and 2) the design and architectural guidelines pertaining specifically to the SeaWorld leasehold (as permitted through the passage of Proposition D). In other respects, the Splashdown Ride is generally consistent with the Mission Bay Park Master Plan Update Design Guidelines (as required by Mitigation Measure 4.2-1), although, due to its height, the Splashdown Ride will still result in a significant visual impact, further described on pages 4.1-32 and 4.1-34 of the Draft EIR. The project will not block views of Mission Bay from any identified gateways. The Splashdown Ride structure is water-oriented and complements the aquatic theme of Mission Bay. The building materials would “accommodate the marine environment, both in function and empathy.” The roofs are curved to provide a “graceful transition between the sky and the building massing”. As described in Figure 3.4-6 in the Draft EIR, the painted exterior would be light in hue with varying shades to afford a variety of reflections of atmospheric light. Bright, more playful colors (aquamarine) are used as accent colors in the roofs, flumes, and tracking. (See Figure 3.4-6 in the Draft EIR).
- I-178 The SeaWorld Master Plan Update, which will become part of the Mission Bay Park Master Plan by reference, contains architectural guidelines which clarify that “SeaWorld is a theme park and utilizes authentic architectural styles and images, based on classical design, to enhance the aquatic environment and create a festive

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atmosphere.” In essence, these site-specific standards would grant SeaWorld more flexibility to use thematic styles appropriate to a theme park without changing the general intent of the guidelines for the rest of Mission Bay Park.

- I-179 The Splashdown Ride would result in an increase in energy use. This comment also presents an opinion that this increase in energy use would be significant, yet no further information is provided for this opinion; therefore, no further response is possible. See response to comment L-26. This comment also makes a recommendation that the Splashdown Ride noise contours must be reduced. See response to comment I-49.
- I-180 This comment recommends a completely enclosed ride to reduce significant noise impacts, but Section 4.7, Noise of the Draft EIR did not identify any significant noise impacts associated with the Splashdown Ride. Thus, no alternatives or mitigation measures need to be analyzed.

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I-180
Cont. considering the public park setting in Mission Bay, significant noise contours should not be allowed in this public park setting.

I-181 They state that the noise is less than ambient levels – but at what times? Does this
I-182 measure the noise peaks? Or noise averages? Noise is a peak phenomena. Average ambient noise is not a valid comparative standard. Furthermore, the noise contours are so large, that they are way beyond the noise contours of the existing I-5 noise contours. We

I-183 question that the noise analysis is accurate with respect to declaring that the noise would be less than existing “ambient” noise for all areas inside the proposed new noise contours – especially those covering Ocean Beach and Crown Point communities. Sea World

I-184 seems to have no respect for its position in a public park with surrounding residences – which is a unique situations that merits special treatment. Unfortunately, Sea World is taking the position that they are the ones who merit special treatment – not the residents who have every right to expect that a public park is a place of some quiet and respite from noisy development – as do other visitors and patrons of the other attractions in

I-185 Mission Bay. Please comment on attraction alternatives with noise contours no greater than the existing lease.

I-186 The proposed “Educational Facility” mentions that it will “include space for sleeping.” Isn’t this then really yet another hotel facility – no matter what they call it? Is it indoors? If it’s indoors, they may call it a camp, but it’s a hotel. This is inconsistent with Prop D. All Tier 2 and future projects need to be further detailed. What future

I-187 environmental review will be required for projects? Are they attempting to avoid future detailed environmental review? Are they deferring mitigation? This may not be allowed under CEQA and we object to the use of a “Program EIR” in this setting with large environmental problems right now. How are the Exhibit/Ride/Show projects going to be reviewed more in thoroughly?

I-188 Is the Parking Garage going to be reviewed for aesthetic qualifications as mentioned in the Mission Bay Master Plan? Also, will the impact of the

I-189 construction and possible consequences due to the increased flow of traffic in the region cause any harm to the surrounding area?

I-190 Out of the special projects that are described in the EIR, are adequate environmental regulations going to be followed so as to protect the bay against pollution, especially in regards to Personal Watercraft? NO addition 2-stroke watercraft show be permitted in Mission Bay. With the increase in Hotel rooms-due to

I-191 Hotel Expansion what solutions are given for the additional sewage? Have solutions been made that won't negatively effect the surrounding area? It is unacceptable to add

I-192 water quality impacts to an already impaired water body.

I-193 The Mission Bay Park Master Plan Update Amendment 21. Sea World says “to preserve existing viewsheds and visual corridors, the additional height available to Sea World should be used judiciously.” This does not allow for judicious review. How does this amendment explain the ability to have

I-181 The noise analysis conducted for the proposed project addressed a variety of noise sources, which are found in Appendix E, Noise Analysis and Section 4.7, Noise. These noise sources include vehicular traffic, show public address systems, rides, the parking garage, the marina expansion, and construction activities. This section also addressed noise impacts to future hotel patrons. The noise analysis first described noise analysis methods and applicable standards, followed by a characterization of the existing noise environment to provide a basis for evaluating noise impacts. The existing noise environment in the vicinity of SeaWorld includes Lindbergh Field aircraft; vehicular traffic on SeaWorld Drive, Ingraham Street, I-8 and I-5; recreational boating and personal watercraft on Mission Bay; helicopter overflights; and existing activities at SeaWorld. Because applicable standards (page 4.7-1 of the Draft EIR, Applicable Standards) are based on noise averages, the noise analysis focused on average noise levels. For vehicular traffic the analysis uses a Community Noise Equivalent Level (CNEL), which provides weighting for evening and nighttime periods (page 4.7-1 of the Draft EIR, Noise Setting. For other noise sources such as rides or shows an hourly noise average is used (page 4.7-3 of the Draft EIR, City of San Diego Noise Ordinance). Noise peaks are included in both the characterization of existing noise and the analysis of future noise.

I-182 See response to comment I-181.

I-183 As illustrated in Figure 4.7-4 and Table 4.7-6 of the Draft EIR, the noise contours that go “way beyond Interstate 5” are lower than ambient levels. The noise analysis for the Splashdown Ride assumes a worst-case scenario. The noise analysis for the Splashdown Ride is presented in Section 4.7, Noise of the Draft EIR and the noise technical report upon which this section is based is provided in the Environmental Noise Analysis prepared by Gordon Bricken & Associates, Appendix E of the Draft EIR. The noise analysis was conducted in accordance with City of San Diego requirements with consideration of adopted noise regulatory standards.

I-184 Comment noted. See response to comment L-75.

I-185 Project alternatives that would exclude attractions that do not generate additional noise are presented in Chapter 9.0, Alternatives of the Draft EIR.

I-186 The sleeping area in the educational facility is for students who would spend the week at SeaWorld as part of SeaWorld’s children’s educational program and is not a hotel.

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- I-187 The SeaWorld Master Plan Update provides the guidelines for future development of Tier 2 projects in Chapter 3.0, Project Description of the Draft EIR. However, due to unknown specific needs and placement of future attractions at this time, SeaWorld has adopted a phased development approach. Where appropriate, performance standards are included in Mitigation Measures for future Tier 2 projects, which is appropriate under CEQA. CEQA Guideline § 15126.4(a)(1)(B). Furthermore, subsequent projects would be subject to environmental review in conformance with CEQA.
- I-188 The site plan for the parking garage will adhere to the design guidelines outlined in the Master Plan Update and will be reviewed for compliance with the Master Plan Update Design Guidelines pursuant to Mitigation Measure 4.2-2.
- I-189 Section 4.4, Transportation and Circulation of the Draft EIR addresses traffic impacts resulting from the proposed project. Traffic mitigation measures are described in Section 4.4.5, Mitigation, Monitoring and Reporting.
- I-190 Section 4.5.5, Water Quality, Mitigation, Monitoring and Reporting of the Draft EIR sets forth the Mitigation Measures which will reduce water quality impacts from the proposed project, including Special projects, to a level below significance. Section 4.9.3, Air Quality, Impacts of the Draft EIR analyzes air quality impacts which will result from the project, and in particular, addresses pollution resulting from PWCs. No significant impacts to air quality are expected to result from the project. Nevertheless, Mitigation Measure 4.9.5 is identified as a method of reducing adverse but less than significant air quality impacts. Finally, Section 9.2, More Regulated Alternative of the Draft EIR addresses a project alternative without PWCs.
- I-191 See response to comment L-39.
- I-192 See response to comment I-190.
- I-193 Table 1.1-1 of the Draft EIR shows the percentage of area that is subject to the height increase approved by Proposition D. As shown, 75% of Area 1 will be subject to the previous height requirement of 30 feet. Only 2% of Area 1 will be permitted to reach 130 feet, and only 1% of Area 1 will be permitted to reach 160 feet. SeaWorld derived these figures in response to public forums. Additionally, Section 4.2, Neighborhood Character/Aesthetics of the Draft EIR addresses the visual impacts of the proposed project.

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I-194 judicious review of such an issue? Will there be any guaranteed local public review hearings of the project in the future?

The proposed project described in the Sea World Master Plan Update is an unbalanced proposal to further exploit Mission Bay Park without addressing existing deficits. Those deficits must be addressed before allowing such a large impactful set of projects to be planned, much less permitted.

The 'General Plans' section of the EIR has identified that "Mission Bay Park should be a park in which land uses are located and managed so as to maximize their recreation and environmental functions, minimize adverse impacts on adjacent areas, facilitate public access and circulation, and capture the distinctive aesthetic quality of each area of the Bay." With the proposed project, the needs of Mission Bay Park need to be taken heavily into account. It is necessary that all aspects of the proposed projects are thoroughly researched and all questions that the public has are answered.

I-195 We urge that a supplemental EIR be developed that addresses all the unaddressed impacts and mitigation issues and that it also analyze an alternative of a SeaWorld closure. If Sea World is indeed unable to remain financially viable if they are unable to expand inappropriately in a public park setting, the City should be looking at alternatives to terminate the lease and offer to others or return the parkland to free public use. The surrounding Community Plans show a large deficit of parkland with respect to population and this will only get worse if properties are not identified to increase the balance toward the public.

I-196

Signed,

William Dempsey
Intern writing on behalf of
SIERRA CLUB, San Diego Chapter
3820 Ray St.
San Diego CA 92104-3623

I-194 See response to comment L-24.

I-195 See response to comment I-50.

I-196 Comment noted.

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April 24, 2001

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RE: Draft EIR: Sea World Master Plan Update (LDR No.99-0618/SCH 1984030708)

The San Diego Coalition for Transportation Choices (SDCTC) has reviewed the draft EIR and submits the following comments.

1. Comments will be focused primarily on the Traffic and Circulation section of the document. The comments about this section may have an impact upon the findings made in the other sections of the document and therefore such implications should be considered as part of the development of the Final EIR.
2. The Transportation and Circulation Section poses six (6) issue questions that presumably are based upon the scoping done for this project. Our comments will discuss the adequacy of answering these six (6) questions as well as other issues.
3. Issue 1 question (Section 4.4.3 Impact), "Would the proposal result in an increase in projected traffic, which is substantial in relation to the capacity of the street system?" The response to this question is clearly YES. However, the 8,000 ADT associated with the near term Year 2005 project (Sea World Park improvements only) are not considered to cause a significant impact on most street segments because the Volume to Capacity Ratio (V/C) does not meet the City's set standards except for Sea World Drive between I-5 and Sea World Way. However, as documented on page 4.4-19 a total of 12 segments would operate below LOS D in 2005. Only Sea World Drive is identified in the mitigation measures as requiring improvements since it is the only roadway that met the V/C standard. This seems entirely inappropriate. All roadway functioning below LOS D should be brought up to LOS D not just those that meet the change in the V/C. Intuitively this means that roads not functioning well (at or above LOS D) should be brought up to LOS D regardless of whether the project causes the LOS

I-197 This assessment is correct. The City of San Diego traffic significance criteria only requires a project to mitigate its significant impact, regardless of the pre-project Level of Service. Facilities already operating at LOS E or F are the responsibility of public agencies to improve to LOS D or better. See response to comment S-2 regarding analysis and mitigation of preexisting conditions.

I-197

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I-197 Cont.	to worsen. Otherwise we are simply allowing a project to make an existing bad situations worse. The argument that the further degradation of the roadway is not significant since it is already poorly functioning and that it would be unfair to require the project to mitigate that impact really is saying that an existing bad situation which causes delay and congestion will be perpetuated and likely worsened for the benefit of a new development at the cost of the travelling public.	I-198	See response to comment I-197.
I-198			
I-199	4. The mitigation proposed for the issue identified above Mitigation Measure 4.4-1, has two options. The second option of using the City's CIP project could result in not mitigating the impact and potentially allowing the Sea World development proceed without mitigation period, unless the city completes the CIP project. This is totally unacceptable public policy. The impacts caused should be mitigated prior to any development entitlements. If the City CIP projects is needed to make the project possible, then Sea World needs to wait until the project is done and the mitigation is realized. This is also the case for mitigation measures 4.4-4, 4.4-5, 4.4-6 and 4.4-7. All of these measures require City CIP participation. The original Proposition D passed by the voters stated that any and all cost associated by the improvements needed due to development resulting from the change in the height limit would be born by Sea World and that no public funds would be spent to make the development possible. All these mitigation measures require public participation and therefore violate the spirit of the voter's intent in approving Position D.	I-199	Mitigation Measure 4.4-1 was conceived with two options for the benefit of the public. The first option is for SeaWorld to mitigate only its direct impact. The second option is the establishment of a CIP project that would provide a larger improvement project to mitigate more than SeaWorld's impact, with SeaWorld paying its fair share. The City will consider this recommendation when analyzing the project.
I-200	5. Issue question 2 "Would the proposal result in substantial impacts upon existing or planned transportation systems?". As outline above the answer is Yes and given the mitigation measures proposed the impacts could also go unmitigated or mitigated at public expense. The bottom line is that if the City's CIP projects are not fully funded and built, the impacts would not be mitigated. That would require findings of overriding consideration. Such findings would appear to be hard to make in the case of this project, since the mitigation is feasible if Sea World would pay. The argument that such improvement are beyond the "fair share" that would be required, should not entitle Sea World to proceed without the mitigation. If it is in the public interest to improve the impacted roadways in order to mitigate the impacts caused by the project in 2020, then the City will in essence subsidize this project proposal, while other high need capital improvement project may go unfulfilled. This does not seem to be good public policy given the multi-billion dollar infrastructure deficit faced by the City.	I-200	See response to comment I-33.
I-201			
I-202	6. Issue question 3, "Would the proposal result in an increase demand in offsite parking?". The mitigation measures identified appear to address this issue adequately, however, the additional parking provided at Sea World that would minimize offsite parking demand will have substantial environmental effect. Pollution runoff is a significant issue and given the proximity of Mission Bay, water quality would likely suffer regardless of the mitigation put in place to prevent such pollution. Additionally, more paved parking areas will generate	I-201	Impacts caused by the project under the near term 2005 condition and the buildout term 2020 condition are analyzed in Section 4.4, Transportation and Circulation of the Draft EIR. Traffic Mitigation Measures are presented in Section 4.4.5, Mitigation, Monitoring and Reporting. Also see responses to comments L-60 and L-113 concerning fair share mitigation requirements and response to comment I-111 concerning required Findings and Statement of Overriding Considerations. The City will consider this comment when analyzing the project for approval or disapproval.
		I-202	The Draft EIR states that implementation of Mitigation Measure 4.4-11 will reduce parking impacts to a level below significance. See response to comment S-25.

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I-203 additional localized heating effects. Such effects include an up to 15 degree temperature increase in the immediate area with spill over effects to surrounding areas. A hotter localized climate due to such a heat island effect has negative impacts upon surrounding vegetation and people.

I-204 7. Issue question 4, "Would the proposal result in traffic generation in excess of specific/community plan allocation?". The document states that since no allocation is set in the existing plan no significant impact exists. However, what is missing is a discussion of the trip generation of Sea World relative to the Master Plan Area as a whole. What percentage of the total trip generation of the entire Mission Bay Master Plan is due to Sea World? That information is vital in order to understand the relative impact this facility has on the Mission Bay Park.

I-205 8. Issue question 5, "Would the proposal result in a discouragement to other Mission Bay Park users?". The conclusion made in the document is that with the circulation impacts mitigated below a level of significance, park users would not be discouraged from frequenting the park. That is certainly and interesting if not unsubstantiated conclusion. While the mitigation measures proposed, if implemented, would perhaps reduce the impact to below a level of significance, making the finding that park visitors would not be discouraged from visiting the park is unsubstantiated and mere conjecture. A number of the roadway segments functioning below LOS D that while according the City's V/C standards would not be further degraded, those roadways are already failing. The public's perception that the traffic in the area is terrible may be far worse than the actual situation. But, that perception, that an already bad situation is only going to be made worse by an expanded Sea World facility, will cause people to think twice about visiting the park. Whether the perception of the "bad traffic" is valid or not is irrelevant. The perception that things are only going to get worse will influence people's decision making. The end result would be that Sea World is granted a benefit at the expense of public access and enjoyment of a public resource. Again, that would be poor public policy.

I-206 9. Issue question 6, "Would the proposal result in an increase in hazards to motor vehicles, bicyclists, or pedestrians?". This is an interesting question and unfortunately the only place in this section where pedestrians and bicyclists are mentioned. A finding is made that since the proposed Tier 1, Tier 2 and Special Projects would be designed according to current safety standards, motorists, bicyclists and pedestrians would not be put at risk. First, this is really a poor question to ask in the first place in regards to pedestrians and bicyclist in particular. While we certainly do not wish to increase hazards, the real question is, are people walking and bicycling to and from this facility? If they are not why not? While assuring that projects meet design standards for safety does not mean pedestrians and bicyclists will use the facilities. The City of San Diego should be encouraging more walking and bicycling. That means providing the opportunity. Opportunity is related to hazard free facilities, but it goes far being

I-203 See response to comment I-13.

I-204 As stated in Section 4.4.3, Transportation and Circulation of the Draft EIR, the SeaWorld theme park is estimated to generate about 23,000 ADT by the year 2020. This is 8,000 ADT more than the existing 15,000 ADT currently generated by SeaWorld. The proposed hotel and marina are estimated to generate another 7,300 ADT.

The Mission Bay Park Master Plan Update EIR did not identify an ADT for the park. Mission Bay Park roads serve more than Park users. Recreation, residential, commercial, etc., trips to/from Ocean Beach, Point Loma, Mission Beach, Pacific Beach and La Jolla all traverse the park. Therefore, quantifying park users is difficult. As a result the focus of traffic studies in this area is to provide an adequate circulation system (all modes), regardless of who uses them. Therefore, the Mission Bay Park Master Plan Update and the SeaWorld Master Plan Update focus on roadway impacts and mitigation measures to provide acceptable Levels of Service.

I-205 Comment noted. See response to comment I-204.

I-206 Comment noted. See response to comment I-204.

I-207 Patrons are encouraged to walk or bicycle to SeaWorld. The City has a system of sidewalks and bicycle facilities in the Mission Bay Park area. There is a Class I bike path along most of SeaWorld's frontage, with Class II bike lanes elsewhere. The bike path near SeaWorld is located east of SeaWorld in the South Shore Park and along the southerly and westerly lease boundaries and joining other bike paths at the intersection of Perez Cove Way and Ingraham Street. SeaWorld provides bicycle racks at its main entrance for patrons and at the employee entrance for employees. The signalized intersections provide controlled street crossings. These facilities are designed to standards that promote safety. Also see response to comment I-60.

I-208 See response to comment I-207.

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- I-208
Cont. that. Are there facilities that allow people to walk and bike? Are there connections for bicyclist and pedestrians to reach popular destinations? To the extent we are talking about a public park, non-motorized travel is not only a way to get to the park, but also one of the primary ways to enjoy the park. In-line skating, scooter riding and skateboarding are some other ways to access the park and enjoy its facilities. To the extent that new transportation projects should be planned to encourage pedestrians and bicyclists by providing bike lanes, loop detectors at intersections, pedestrian crossings that favor the pedestrian not the motor vehicle and direct access points to facilities, only then will more people choose not to drive. Rather than focusing on hazards, the focus should be on assessing if everything that can be done is being done to facilitate alternative transportation access to the park and within its boundaries.
- I-209
- I-210 10. Virtually no mention was made of public transit in the transportation and circulation section. The two references to the North Bay and Beach Area Guideway Study and the potential location of a bus stop near the planned parking structure is hardly a full discussion of the issue. The Metropolitan Transit Development Board has adopted a Transit First Strategy which focuses on making transit San Diego's first choice of transportation in the future. The reasons for adopting this strategy are numerous, but in regards to this project, mitigation measures that are being cited to reduce the congestion associated with this project are the construction of more motor vehicle travel lanes. Research has shown that as roadway capacity is increased, that capacity is quickly filled with additional vehicles resulting in continued congestion. Therefore, while the mitigation measures that are suggested to alleviate the decrease in LOS in the surrounding roadways, the reality is likely to be a continued poor LOS on those roadways and local residents and park visitors will continue to experience that congestion. The economic impacts of congestion are significant in terms of lost productivity and loss of personal time spent in commuting. Transit service opportunities for the proposed project abound including shuttle bus service from local hotels and fixed-route bus service for Sea World visitors and employees. A fuller discussion of this issue is warranted given that the size and scale of the existing and proposed Sea World operation is of regional significance.
- I-211
- I-212
- I-213
- I-214 11. Finally, no mention is made at all of other alternative transportation options including van pools and car pools. Given the large number of Sea World employees, one way by which reduce the congestion caused by additional development of Sea World is for Sea World to reduce its own trip generation. This can certainly be done for employees by supporting formation of van and car pools. As a mitigation measure for congestion significant benefits could be realized by these alternative transportation approaches.
- I-215
- I-216 Our organization would like to be kept informed of activities and public hearings regarding this project. Please place us on the mailing list of interested parties.

- I-209 Comment noted.
- I-210 Currently, public transit service to SeaWorld is available through public bus service. In addition, SeaWorld has provided for a future Automated People Mover station and guideway in their SeaWorld Master Plan Update. See also response to comment I-60.
- I-211 Comment noted.
- I-212 The assertion made in this comment is speculative. The Mitigation Measures set forth in Section 4.4, Transportation and Circulation of the Draft EIR will provide a benefit to the public. If traffic uses the additional capacity provided by SeaWorld, then there would be relief on parallel facilities such as I-8 or Pacific Beach Drive.
- I-213 In addition to the Automated People Mover, the Draft EIR identifies Mitigation Measure 4.4-11, which includes implementation of offsite parking or shuttle/MTDB transit options. In addition, the proposed SeaWorld Master Plan hotel would likely provide trip reduction since people staying at this hotel could walk or take a shuttle to SeaWorld. This phenomenon has been documented at other theme parks, such as, most notably, the recently developed California Adventure, developed by Disney. See responses to comments to I-60 and I-263.
- I-214 The traffic analysis in the Draft EIR is a conservative worst-case study. However, the Mitigation Monitoring Report Program requires the applicant to explore and implement alternative satellite parking locations and shuttle/MTDB transit operations as appropriate to meet parking demand. SeaWorld does encourage and support employee carpooling and there is a bus stop adjacent to the employee entrance. Also, see response to comment I-207. Furthermore, the Draft EIR does not take credit for alternate transportation modes as a mitigation measure because the success of the program cannot be guaranteed. An EIR need only analyze

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“feasible” mitigation measures, which are those measures which are capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. CEQA Guideline §§ 15126.4(a)(1), 15364. While SeaWorld can support and encourage its employees to carpool, it cannot require them to do so as a means of mitigating significant traffic impacts resulting from the project.

I-215 See response to comment I-214.

I-216 The commentor will receive a copy of the Final EIR.

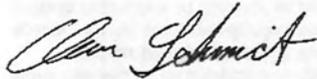
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Thank you for the opportunity to comment.

Sincerely,



Chris Schmidt
Board Chairman



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Martha Blake
City of San Diego
Land Development Review Division
1222 1st Avenue
San Diego, CA 92101

April 24, 2001

SUBJECT: MISSION BAY PARK: DRAFT ENVIRONMENTAL IMPACT REPORT ON ANHEUSER BUSCH CORPORATION SEAWORLD REDEVELOPMENT PROPOSAL

- I-217 [The insatiable cancer of hotels in Mission Bay Park has recurred. Citizens of San Diego face the most serious loss of parkland and public coastal access in our history.
- I-218 [The City recently failed to gut coastal protection under the zoning code update. The City was not deterred. With a huge corporate ally, the City now plans to convert coastal park to an eleven-hotel support facility for a massive amusement park. This targeting of irreplaceable open space represents a threat to the essence of the California Coastal Act.
- I-219 [The Busch Entertainment Corporation division of the Anheuser Busch Corporation of St. Louis wants to use San Diego's most popular park for an unprecedented expansion. If implemented, Busch's SeaWorld will negatively impact the park's access, natural environment, character, views, silence, and wildlife. SeaWorld would dominate the park with up to fourteen 16-story structures, built from one end of its leasehold to the other.
- I-220 [Just as troubling will be the precedent for commercialization of public open space. Parks, taxpayer-funded set asides for outdoor recreation, are now seen by private interests and the City as raw land for development.
- I-221 [Major increases in cumulative traffic from SeaWorld and other proposed support hotels will displace public access to coastal beaches and communities.
- I-222 [Busch proposes a facility marked by noise and screams from thrill rides, nightly rock and roll concerts, and extended months of nightly fireworks. To its 32-story skytower, SeaWorld wants to add night lit signs from six to sixteen stories high.
- I-223 [Expansion plans also call for a 650-room, 9-story hotel, a parking structure, a convention center, and more restaurants and retail inside the park.
- VIOLATION OF MASTER PLAN CALL FOR LEASEHOLD INTENSIFICATION OVER EXPANSION:** Like all other proposed additional commercial
- I-217 Comment noted.
- I-218 Comment noted.
- I-219 Only four of the Tier 2 project areas would allow structures reaching 160 feet in height. See Chapter 3.0, Project Description of the Draft EIR.
- I-220 An analysis of traffic impacts is provided in Section 4.4, Transportation and Circulation of the Draft EIR. Section 5.2.4, Cumulative Impact Analysis, Transportation/Circulation addresses cumulative traffic impacts. SeaWorld's traffic impacts would be mitigated through the Mitigation Measures identified in Section 4.4.5, Mitigation, Monitoring and Reporting of the Draft EIR, with the exception of traffic impacts to portions of the I-5 mainline roadway.

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- I-221 An analysis of noise impacts is provided in Section 4.7, Noise of the Draft EIR. This noise analysis addresses vehicular traffic, rides, fireworks and shows. In most cases no significant impacts were identified. However future Tier 2 projects would require compliance with Mitigation Measure 4.7-1, a specific noise study to address potential noise impacts from these projects.
- I-222 See Chapter 3.0, Project Description of the Draft EIR for a description of sign guidelines included as part of the proposed project. For any proposed signs that would be visible to the public from outside the park, the following Mission Bay Park Master Plan Update commercial sign standards would be applied:
1. As a general rule, freestanding commercial signs shall be low, close to the ground and shall not exceed eight feet in height and shall be placed in a landscaped setting.
 2. Exceptions may be granted to accommodate sign designs or site identification within other architectural features such as entry walls or gatehouses.
 3. Motorist sight-lines should be considered when locating signs near roadways.
 4. Signs attached to buildings should be designed to blend with the architecture rather than appearing as a billboard.
 5. Rooftop signs are prohibited.
- I-223 SeaWorld added approximately 16.5 acres to its leasehold in 1998. The latter part of this comment provides unsubstantiated background information concerning Mission Bay Park that does not address the adequacy or accuracy of information presented in the Draft EIR, therefore, no further response is possible. See response to comment I-66.

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I-223 Cont.	<p>developments in the park, this is a physical expansion of a leasehold that has already intensified its leasehold.</p> <p>REVIOLATION of the PUBLIC/PRIVATE PARTNERSHIP: The draft Environmental Impact Report (EIR) fails to mention the historic public/private partnership of Mission Bay Park. When given the park by the state in trust, San Diegans had a clear vision for its future. Their idea was large youth camps, primitive overnight family camping, hiking trails, trail riding, aquatic recreational facilities, and retention of its natural upland and marsh ecology as a stop on the Pacific Flyway for millions of migrating birds.</p>	
I-224	<p>Six hotel resort owners intervened. They promised resort revenues would fund public recreational facilities. What the park actually got was elimination of virtually all its wetlands, unsafe polluted water, a garbage landfill, a class I toxic industrial waste dump, sewage treatment ponds, habitat destruction, severe wildlife loss, expansion and intensification of commercial leaseholds, and city failure to fund public elements of the Master Plan.</p>	I-224 Comment noted.
I-225	<p>Now, fifty years later, the lie of "let us commercialize or public facilities won't be funded" is being retold by a new set of city officials "partnering" with politically-connected developers.</p>	I-225 Comment noted.
I-226	<p>VIOLATION of the PUBLIC TRUST: The district councilman has admitted the city has failed to follow state law that requires revenues generated by the trust be retained for the purposes of the trust, not disappear into the general fund.</p>	I-226 Comment noted.
I-227	<p>VIOLATION OF ORIGINAL CHARTER: This facility was first allowed into the park as a marine educational facility. Anheuser Busch's redirection, evidenced by its name change to an "Adventure Park", now wants a high-rise hotel, thrill rides, and a convention center. All violate the spirit and intent of the original lease charter. Further, hotels have been allowed in coastal parks as park visitor-serving.</p>	I-227 Comment noted.
I-228	<p>Why is a new convention center appropriate to further congest the park? It would attract non-park visitors. The city has already walled off San Diego Bay for an expanded Convention Center.</p>	I-228 Comment noted. The Master Plan does not propose a convention center. SeaWorld currently includes an 800-person special events facility, the Nautilus Pavilion. The proposed Special Events Facility would hold 1,000 people and replace the Nautilus Pavilion.
I-229	<p>VIOLATION OF MISSION BAY PARK MASTER PLAN AND PUBLIC REVIEW: Anheuser Busch's plans require extensive amendment of the park Master Plan. During public hearings on its initiative to exceed the coastal height limit by over 500%, Busch promised complete public review. They issued a list of 14 possible projects that excluded any roller coasters or hotels. Initiative text also assured public review.</p>	I-229 A description of the future review of SeaWorld projects is provided in Section 3.6, Discretionary Actions of the Draft EIR. See also response to comment L-24.
I-230	<p>Now, the project list has disappeared. Anheuser Busch plans roller coaster-like rides and a hotel over twice the size allowed by the Master Plan. To get them, Busch wants to bypass public review. SeaWorld's attempt to include their whole master plan into the MBPMP should be denied. They also ask for an unprecedented blanket EIR exemption for any project under 90-feet, including the hotel. Any project in a public park over one story and 500 square feet demands full public review.</p>	I-230 Environmental review for any future SeaWorld project would be conducted in conformance with CEQA. The City will consider this recommendation when making its determination concerning the proposed project.

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I-231	<p>CONFLICT OF INTEREST: Within days of City award of a contract to conduct a park land survey, Anheuser Busch's local consultant was allowed to merge with the firm doing the survey. The City used the survey to add unusable land to the park to allow more commercialization. The Community Planning Committee has voted a 19-0 resolution calling for the city to reverse this ploy and reinstate 145 acres of marsh to its separate status in the Master Plan.</p>	I-231 Comment noted. Additionally, the proposed project does not include an increase in the size of the SeaWorld leasehold. Hence, there is no conflict of interest.
I-232	<p>CITY CHARTER SECTION 55.1: Approved by almost 80% of public vote, this section limits all leases to 25% of the park's land area. SeaWorld's 26.5 acre expansion violates the city charter.</p>	I-232 The SeaWorld leasehold is not proposed for expansion as part of this project. An expansion of the leasehold by 16.5 acres occurred in 1998, prior to passage of Proposition D.
I-233	<p>FAILURE OF PUBLIC NOTICE: The City refused to distribute the draft EIR to all of the city's planning boards and town councils. This is not a neighborhood park. It is a regional park, possibly California's most popular. It is used by 15 million tourists and residents from all over the city. Another 15 million who recreate at the city's ocean beaches must use park roads. The planning boards have been denied the draft EIR, seven appendices, and SeaWorld's complete master plan. This is a critical omission as the SeaWorld document is proposed to become part of the Mission Bay Park Master Plan. Just one week before comment was due, SeaWorld was showing new slides of its tier 2 projects to the Peninsula Planning Board, providing no copies to the board or public. SEA requests an extension of the comment period for 30 days so citizens can be furnished this information for review.</p>	I-233 The Draft EIR was distributed to the planning committees/groups; and public library branches at Clairemont Mesa, Mission Beach, Mission Bay Park, Linda Vista, Pacific Beach, Ocean Beach, and Peninsula, and the Crown Point Association. The draft EIR was also distributed to the town councils of Mission Beach, Pacific Beach, and Ocean Beach, as well as the Mission Bay Park Lessees. Public notice of the document was also published in the San Diego Daily Transcript and Public Record Reporter. The document and appendices were also available for review at the City's central library and at the office of the Land Development Review Division. Furthermore, the public distribution and notice of the Draft EIR and appendices complied with all CEQA and City requirements. In addition, at the request of the Peninsula Community Planning Board, the required public review period was extended 14 days.
I-234		
I-235		
I-236	<p>FAILURE TO PROVIDE STORY-POLES OR ADEQUATE PHOTO-SIMULATIONS: The draft EIR should require story-poles to define view impacts of SeaWorld's massive 3- to 16-story structures. This proposed development is of unprecedented scale and scope. Since Anheuser Busch has applied for fourteen sixteen-story permits running the length of its leasehold bay frontage, story-poles are required to describe the potential significant visual obstructions. Story poles should be lit to show night impacts for surrounding neighborhoods and parkgoers.</p>	
I-237	<p>The last two areas designated by the Master Plan for public picnic and children's play areas are South Shores Park and south Fiesta Island. These areas lie adjacent to and across the Pacific Channel from SeaWorld, respectively. Visual aids from these sites are needed to adequately assess view impacts.</p>	I-234 The slides shown by SeaWorld representatives were of Tier 1 projects. SeaWorld did not show slides of its Tier 2 projects to the Peninsula Community Planning Committee at that time, because there are no Tier 2 projects. A copy of the Draft EIR, which included photo simulation of the Tier 2 projects' maximum potential building mass, was mailed to the Peninsula Community Planning Board over one month earlier. The Board requested a 30-day public review period extension and was granted a 14-day extension of the comment review period. At the request of some of the committee members, SeaWorld mailed printed copies of the slide presentation to each planning committee member.
I-238	<p>The overwhelming public response to the SeaWorld expansion plans at its public workshops was negative. Anheuser Busch's corporate response to public concerns about duplicating Disneyland on precious park land is to plan massive "icon" signs higher than their attraction. These signs should be banned under the city sign ordinance.</p>	
I-239	<p>FAILURE TO STUDY SEWER INFRASTRUCTURE: "Because the sampling was conducted during spring and summer 2000, not all of the analytical data are available as of this writing. However, preliminary data (May 2000) indicated</p>	I-235 The Peninsula Community Planning Board requested a 30-day public review period extension and was granted a 14-day extension of the comment review period by the City of San Diego.
I-239		I-236 The photosimulations provided in the Draft EIR on Figures 4.2-26 through 4.2-38 provide a visual tool to understand the significant and unmitigated visual impact identified in the Draft EIR. Furthermore, the photosimulations presented in the Draft EIR illustrate a worst-case scenario.

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- I-237 See response to comment I-236. SeaWorld has not applied for sixteen permits.
- I-238 Photosimulations were provided from six selected locations around SeaWorld. Photosimulations in Figures 4.2-28 and 4.2-34 in the Draft EIR provide a visual understanding of view impacts to South Shore Park. Photosimulations of the proposed project from Fiesta Island were unnecessary to document the identified significant unmitigable visual impact, because other photosimulations provided a reasonable range of representative key vantage points surrounding SeaWorld. See Figure 4.2-2 in the Draft EIR.
- I-239 SeaWorld signage would be regulated by SeaWorld Master Plan Update Design Guidelines. See also response to comment I-222.

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- widespread presence of total and fecal coliform and enterococcus throughout most portions of Mission Bay."
- I-240 Incredibly, the city has failed to require any sewer study. As Mission Bay is an impaired water body, continually plagued by coliform and enterococcus bacteria, sewer study is a critical requirement. Possibly the major source of this bay pollution, a negative influence on public health, access, and the tourism industry, is an antiquated sewage infrastructure installed in dredged fill subject to settling and earthquake liquefaction. What is the repair status of area pipes? What is sewer design capacity in relation to thousands of new customers from general admissions, special events, restaurants, and hotel rooms? The bay is defenseless against bacteria because the city has destroyed 97% of its natural wetlands for passive filtration. What of bay wetland restoration? What is the cost of potential sewer upgrades? Who is responsible to pay for them?
- I-241
- I-242
- I-243 **WATER QUALITY:** The report cites the lack of any baseline data, critical to monitoring of water quality. "There is no existing historical data set for evaluating the background water quality directly offshore from the park." Why doesn't the city demand this data?
- I-244 Under permit, SeaWorld dumps into Mission Bay millions of gallons of industrial discharge from two water treatment facilities every day. SeaWorld has a long history of exceeding discharge limits for chlorine or bacteria, and was recently fined \$12,000 for exceedances. The bay is becoming San Diego's Dead Sea. Dead and deformed fish and birds are being found. Park wildlife populations are in precipitous decline. No expansion decisions should be made until the City is forced to provide its overdue 10-year update of the Master Plan's Natural Resource Management Plan.
- I-245
- I-246
- I-247 Bay waters are unsafe for both human and recreational contact. What are the conditions of the water and bottom directly offshore to SeaWorld, where millions of gallons are discharged? Is it a kill zone?
- I-248 What quantities of chlorine, sodium hypochlorite, sodium bisulfate, and any other treatment chemicals used by SeaWorld? What quantities of what chemicals are discharged to expose children, swimmers, scuba divers, fishermen, and wildlife?
- I-249 With an increase in both its orca population and water-oriented thrill rides, SeaWorld has applied to dump millions more gallons daily into Mission Bay. What are potential or actual impacts of this increase on bay water quality? Where is eutrophication data?
- I-251
- I-252 Sediment and invertebrates in sediment are critical indicators of water quality, particularly for heavy metals. The EIR dismisses the issue: "No sediment quality available for review." Where are these tests?
- I-253 **RUNOFF:** SeaWorld trumpets that it treats over 90% of its runoff, excluding the parking lot. Anheuser Busch wants to attract thousands of additional general admission, special event, and hotel customers to one of the city's largest parking lots and a massive new parking structure. Thousands of new vehicles will mean
- I-240 See response to comment L-39.
- I-241 See response to comment S-25.
- I-242 See response to comment L-39 with regard to sewer impacts. The global restoration of Mission Bay to resolve impacts not caused by the proposed project is not required by CEQA and therefore was not addressed in the Draft EIR. Also, see response to comment S-25.
- I-243 The technical analysis for water quality was prepared by qualified professionals with experience in the preparation of technical studies for evaluating environmental effects. (see the Water Quality Analysis for the SeaWorld Master Plan Update prepared by URS, Appendix C to Draft EIR for resumes of technical professionals). These professionals determined that, although no Mission Bay water quality data was available for water immediately offshore of SeaWorld's leasehold, the data provided was a good representation of water quality for this water body, including the area adjacent to SeaWorld. Furthermore, SeaWorld samples Mission Bay water quality for certain constituents near its two influent pipes as part of conducting its water treatment for its saltwater exhibit pools. These data are provided to the Regional Water Quality Control Board as part of SeaWorld's NPDES permit. Generally, the effluent from SeaWorld's water treatment plants is cleaner than the water that it takes in from Mission Bay. See responses to comments I-244 and I-249.
- I-244 SeaWorld does not release any industrial discharge water into Mission Bay from its two water treatment facilities. SeaWorld returns seawater and non-industrial runoff to Mission Bay after the water is treated through disinfection, dechlorination, and differential settling, in a condition that is much cleaner than the NPDES permit requirement dictate for a variety of constituents. The water quality information reported by SeaWorld to the Regional Water Quality Control Board, as part of their NPDES permit is incorporated by reference. SeaWorld's treated discharge water is much cleaner than what is already present in Mission Bay. See Section 4.5, Water Quality of the Draft EIR for further discussion.
- I-245 The comment that dead and deformed fish and birds are being found in Mission Bay and that the wildlife populations are in precipitous decline is contrary to all data with which Merkel & Associates (expert biologists who performed the biological resources study) is familiar. Fish studies conducted in Mission Bay Park by Hubbs Sea World Research, National Marine Fisheries Service, and private

COMMENTS

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consultants over the past decade and a half have noted no such directional declines, but rather cyclical changes associated with regional environmental fluctuations such as El Nino, which appear to be the norm. Similarly, there are no known studies that indicate a decline in bird populations or their health within Mission Bay Park. Absent having greater clarification as to what supporting data this conclusion relies on, no further response is possible.

I-246 Comment noted.

I-247 See response to comment I-243.

I-248 SeaWorld does not use chlorine or sodium bisulfate in its water treatment process. Therefore there is no recorded use of these chemical products. Sodium hypochlorite chemical usage in the facility is approximately 302,000 gallons per year. Sodium bisulfite treatment chemical use is approximately 60,000 gallons per year. The hazardous materials used by SeaWorld are listed in Table 4.11-1 of the Draft EIR.

I-249 All chemical discharges are regulated by the State of California Regional Water Quality Control Board and require that the SeaWorld effluent returned to Mission Bay meet acute toxicity testing requirements. In addition, all water returned to Mission Bay must meet specific parameter discharge requirements as specified in the California Ocean Plan for the State of California under the Clean Water Act. Section 4.11.3, Human Health/Public Safety, Impact of the Draft EIR analyzes whether the proposed project would expose people to potential health hazards, including dangerous hazardous materials, and Section 4.11.5, Human Health/Public Safety, Mitigation, Monitoring and Reporting of the Draft EIR sets forth Mitigation Measures to reduce any such impact to below a level of significance.

I-250 SeaWorld has made no request for an increase in the permitted discharge volumes of effluent to be returned to Mission Bay. The NPDES Permit authorizes SeaWorld to treat and return up to 9.36 million gallons per day (mgd) of effluent to Mission Bay. SeaWorld currently discharges average daily volumes that are below the permitted limits. Because there is no actual increase in the permitted discharge volume to be returned to Mission Bay there are no negative impacts.

I-251 SeaWorld is required to develop and implement a 12-month study addressing potential impacts of eutrophication from SeaWorld discharge to Mission Bay. SeaWorld must complete the study and submit results to the RWQCB by December 22, 2001.

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- I-252 Sediment and the invertebrates that live in the sediment may provide an indication of water quality. Sediment bioassay tests may be conducted to assess the toxicity of a sediment by typing the organisms that live in the sediment (e.g., amphipods). Such tests are conducted by obtaining samples of the sediment of concern along with a reference sediment that is known to be clean, and exposing test species to both types of sediment for a specified period of time. The animals from the sediment of concern are then tested to measure changes in their weight and reproduction, and compared to the animals from the reference sediment. If significant differences are observed, then additional tests (a Toxicity Identification Evaluation) may be conducted to determine the pollutant responsible for causing the observed toxic effect. Sediment tests were conducted in Mission Bay at two sample locations near the SeaWorld leasehold. The results from these two sample locations indicate a nontoxic response for amphipods. See response to comment S-21.
- I-253 The issue of surface water quality runoff is addressed in Section 4.5, Water Quality of the Draft EIR. In addition, this section includes Mitigation Measure 4.5-1, which requires storm drain inlet filters to further capture any small quantity of pollutants that may enter surface water. Mitigation Measures 4.5-1 through 4.5-3, in connection with SeaWorld's ongoing controls will reduce water quality impacts resulting from the project to a level below significance. Also, see response to comment S-25.

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- I-253 Cont. how much more polluted runoff? Just eighteen percent of this runoff is now treated. What is in it? Where does it go?
- I-254 **TOXIC WASTE DUMP:** Appendix F has less words regarding the park's toxic waste dump than its title of a Class 1 Industrial Toxic Waste Dump: "an old landfill". It is an old garbage landfill. It is also repository for millions of gallons of 68 toxic EPA priority pollutants leaking into the park's water bodies and wildlife preserve. It leaks because the dump was unengineered, unlined, has extensive hydraulic action and has no bedrock. Releases are documented. Dump gases have been fatal. Disappearance of whole wildlife populations such as sand dollars, butter clams, bait fish, bat rays, and razor clams are unexplained. Where is study of potential impacts to the public and wildlife?
- I-256 It is necessary to study this dump because SeaWorld physically overlies it. Its actual boundaries are unknown as it was never fenced and the city threw away records. Core drilling is required to establish type and location of pollutants that are subject to release with the next movement of the Rose Canyon or offshore faults.
- I-258 Further, SeaWorld may well engage in more construction-related dewatering, a process that may move pollutants under SeaWorld. Is Anheuser Busch or the City or San Diego responsible if these disastrous scenarios occur? Does the City have HazMat emergency evacuation plan coordination in place with emergency agencies? The facts about this civic cover-up are becoming known. When cleanup of dump toxins occurs, who will bear the financial responsibility?
- I-259 **PARKING:** The draft EIR fails to note that many park area lots are rated over capacity during peak summer months. They fill up by 10:30 am. The EIR does not count public parking spaces in the park, failing to note that after fifty years, there is more private than public parking in the park. It also fails to note the City has refused to build any parking structures for beachgoers or parkgoers.
- I-260 **TRAFFIC:** The EIR fails to mention SeaWorld lies in a geographically constricted area containing both of the city's two major tourism destinations, namely its ocean beaches and Mission Bay Park. Many beach and park intersections and segments are at UNACCEPTABLE levels of service (LOS) now! It is UNACCEPTABLE to artificially add commercial traffic that displaces the public in the coastal recreational zone. The EIR fails to note the city's worst traffic-- daily summer sigalerts and signs warning visitors to avoid the area because of full parking lots.
- I-264 The EIR has no study of peak period weekend traffic. This omission demands study. It neglects to acknowledge the tens of thousands of residents and vacationers that fill parking lots and gridlock roads to the city's major ocean beaches, coastal residences, restaurants, and parks.
- I-265 The EIR does no accurate cumulative study. It fails to factor in build out of public recreation areas at South Shores and Fiesta Island. It makes no mention or allowance for coastal zone public visitor increases estimated by SANDAG at 41-50

- I-254 Surface water from SeaWorld's theme park area and 25 percent of their parking lot is treated by SeaWorld's water treatment facilities. These treated waters are tested on a regular basis for a variety of constituents, the results of which are provided to the Regional Water Quality Control Board as part of SeaWorld's NPDES permit requirements. Mitigation Measure 4.5-2 provides for additional treatment of SeaWorld's surface runoff beyond what is already addressed through SeaWorld's existing Best Management Practices (BMP) (See Section 4.5.1, Existing Conditions). Surface water runoff either enters the City's storm drain system and then proceeds to San Diego Bay or enters San Diego Bay from the SeaWorld leasehold to from SeaWorld's water treatment plants. Also see response to comment I-305.
- I-255 This comment describes the closed Mission Bay Landfill on the SeaWorld leasehold, which is also discussed in an updated landfill description in Section 4.11.1, Existing Conditions in Section 4.11, Human Health/Public Safety of the Draft EIR. The City of San Diego Local Enforcement Agency (LEA) has indicated that the Mission Bay Landfill is not a Class I landfill and that although hazardous materials were placed in this landfill, monitoring of groundwater and water in the area has not shown that it is leaking. See responses to comments and S-1 through S-19.
- I-256 See responses to comments S-1 through S- 19 and I-255.
- I-257 See responses to comments S-1 through S- 19 and I-255.
- I-258 The boundaries of the landfill on SeaWorld's leasehold are generally known. See responses to comments S-1 through S-19. Furthermore, as discussed in revised Section 4.11.3, Human Health, Public Safety, Impact of the Draft EIR, although future development area I-2 is coincident with a small portion of the landfill based on an approximate boundary map, SeaWorld's lease with the City prohibited SeaWorld from disturbing the landfill. Therefore, prior to future development SeaWorld would conduct the appropriate testing in conformance with federal, state and local regulations to determine the exact boundary of the landfill to ensure that no development would occur in this area.
- I-259 If any hazardous materials in the groundwater are encountered for any proposed project, they will be remediated as described in Section 4.11.3, Human Health/ Public Safety, Impact of the Draft EIR.
- I-260 The City of San Diego is responsible for any issues with the Mission Bay Landfill if they did not occur as a result of SeaWorld's actions. If SeaWorld actions result in a new contamination, then SeaWorld will be responsible. These requirements are detailed in the City of San Diego/SeaWorld lease agreement.

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- I-261 A standard hazardous material emergency response plan is provided for City landfills. Should a hazardous emergency occur, the City of San Diego would respond through their Hazardous Materials Response Unit. This would be followed by response from the San Diego County Hazardous Materials Response Unit. The response will vary with the nature of the emergency.
- I-262 See response to comment I-260.
- I-263 The EIR is only required to analyze environmental effects resulting from the proposed project, not Mission Bay Park as a whole, and to identify measures to mitigate significant impacts resulting from the project. See response to comment I-147.
- I-264 See response to comment I-263.
- I-265 See response to comment I-263.
- I-266 See Section 4.4, Transportation and Circulation of the Draft EIR for a description of existing intersection LOS and an analysis of project-related traffic impacts in the area of the SeaWorld leasehold, including SeaWorld's traffic mitigation measures.
- I-267 See response to comment I-19.
- I-268 See response to comment L-59.
- I-269 See response to comment L-93.
- I-270 See response to comment L-93.

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I-270 Cont.	percent by 2020. It fails to factor in possible hotel expansions at De Anza Point and Bahia Point.	
I-271	The EIR fails to do a required fire and police study. The EIR fails to consider the public health impact of the loss of emergency trauma access for the coastal recreational zone caused by closure of both the areas hospitals.	I-271 The police and fire service are addressed in Section 7.4, Public Services of the Draft EIR.
I-272	In citing a possible Disneyland-like monorail system between resorts, the EIR ignores the Master Plan's call for a park public tram system. This desperately needed element to reduce area traffic pressures has been successfully implemented at the Del Mar Fairgrounds and Balboa Park.	I-272 As noted in the SeaWorld Master Plan Update Draft EIR, page 7-3, the City's standard response time for paramedic ambulances is 8.0 minutes. According to City of San Diego, Fire Communications Information and Dispatch Services, the locations from which the medical emergency teams are dispatched rotate on a daily basis. Primary hospitals utilized for service of the SeaWorld area are Scripps La Jolla and Mercy Hospital. The hospital is chosen based on the severity of the patient's condition and the level of activity at the hospitals. Impacts due to closure of area hospitals are outside the scope of the proposed project and are not required to be analyzed in the EIR.
I-273	The EIR fails to mention a case study that demonstrates the coastal access impacts of the SeaWorld expansion. Gridlock. In 1999, SeaWorld's free admission day attracted a crowd the corporation wants every summer day. Coastal communities, beaches, and the park were brought to a standstill. Interstate 8 was backed up to Interstate 5. This is real, unlike SeaWorld figures that project a customer growth increase of 1.3% per annum. Why is this extremely conservative estimate for a massive thrill ride/hotel/retail/convention center expansion accepted by the consultant as the basis for traffic projections?	
I-274	The EIR offers no mitigation for impacts to Interstate 5. What of inability to pay for mitigation? Re: SeaWorld Drive/Northbound I-5 Offramps: "This long-term impact may not be fully mitigated due to the fact that full funding for the CIP may be delayed or never achieved."	I-273 See response to comment L-2.
I-275	What of the traffic from this project irreversibly worsening coastal traffic levels that block resident and tourist access to and along the coast? These five critical intersections already fail city standards for passage (LOS D being "acceptable"): SeaWorld Drive/I-5 Northbound Offramps LOS E, Ingraham St./Crown Point Dr. LOS E, West Mission Bay Drive/I-8 Westbound Offramp LOS F, Sunset Cliffs Blvd./I-8 Westbound Offramp LOS F and Nimitz Blvd./Sunset Cliffs Blvd. LOS F?	I-274 Section 4.4, Transportation and Circulation, address traffic conditions and thereby coastal access in the project area.
I-276	BIOLOGICAL: Lost in the City's drive for revenue is stewardship of the park's endangered species. Under the Endangered Species Act, the city is responsible to increase and maintain viable habitat for the park's seven endangered life forms.	I-275 See responses to comments I-18 and I-19.
I-277	Productive Least tern nesting areas have been reduced to just three. SeaWorld's hi-rises would apparently preclude one site in a park, already the most commercialized in California: "However, in the event that California Least Terns reestablish a nesting colony at Stony Point, the creation of additional potential predator perch sites could result in a significant adverse impact to Least Tern nesting success and/or site use." The three nesting sites closest to SeaWorld have proven non-productive. The city has destroyed two others. Clearly study of development and noise impacts on bird nest site selection is required.	I-276 The rationale for the 1.3 percent compounded annual growth rate assumptions are provided in Section 3.4.4, Project Description, Attendance Projections of the Draft EIR. See response to comment I-1.
I-278	AIR QUALITY: SeaWorld has cogeneration energy units permitted to run full time, 24/7, in summer. What fuel do these use? What levels of pollution do they produce? What is the record of compliance with air pollution district regulations?	I-277 See response to comment I-276.
I-279		I-278 The EIR states that the project would cause significant and unmitigated impacts to I-5 north of SeaWorld Drive. Mitigation for this impact would require the installation of an additional travel lane for both northbound and southbound traffic on I-5 between Sea World Drive and SR-52.
I-280		I-279 See response to comment I-41.
I-281		I-280 An evaluation of intersections is provided in Section 4.4, Transportation and Circulation of the Draft EIR. Mitigation Measures for impacts resulting from SeaWorld operations are described in Section 4.4.5, Transportation and Circulation, Mitigation, Monitoring and Reporting of the Draft EIR. The Mitigation Measures identified for intersections would mitigate the traffic impacts in accordance with City policies.
I-282		I-281 Comment noted.

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I-282 See responses to comments F-1 through F-2.

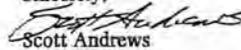
I-283 An explanation of SeaWorld's cogeneration facilities is provided under the "Generation" heading on page 4.12-2 in the Draft EIR. SeaWorld's co-generation engines run on natural gas fuel transmitted by the local utility company. Emission factors and permit limits for these engines are: operating temperature range must be between 103 and 117 F; oxides of nitrogen emissions shall be limited to 275 parts per million by volume (PPMV); carbon monoxide emissions shall be limited to 720 PPMV and calculated at 3 percent oxygen on a dry basis.

I-284 There have been no violations of air pollution district regulations during the recent and current monitoring and testing period.

COMMENTS

- I-285 The study notes SeaWorld and Mission Bay Park are in a potential toxic hot spot for air pollution due to a coastal inversion layer. It notes PM-10 levels will increase. What of critical PM-5 levels? Why is the resultant impact on air pollutants from stop and go traffic and cold starts in the city's second largest parking lot an acceptable impact on public health?
- I-286
- I-287
- I-288 **NOISE ANALYSIS:** The EIR noise analysis is questionable: "The average noise level may exceed the City's Noise Ordinance numbers, but in practical terms, cannot be measured because the levels are below the average ambient levels." The report seems to include airplane overflights into the ambient noise level. The report then goes on to admit SeaWorld noise may be audible out to 7,000 feet from the park.
- I-289 How many city neighborhoods does this effect? Where is a simple radius circle chart for fireworks noise, amplified show announcements, screams from thrill rides, music from Rockin Summer Nights, and noise from ride equipment?
- I-290
- I-291 SeaWorld has proposed its Splashdown Ride in the closest proximity to future public picnic and children's play areas at Fiesta Island and South Shores. It admits Splashdown is designed with two scream drops. The study says Orlando's ride registers equipment noise of 81 dBA and screams of 92 dBA but says San Diego's ride will register but 40 to 54 decibels.
- I-292 At whatever level, this demonstrates more unacceptable impacts to a public park. Parks have human value in their natural solitude for families, seniors, and the sick. Why should parkgoers at Fiesta Island and South Shores be under the literal shadow and noise of a beer company's profit machinery? Roller coaster enthusiasts can use the coaster at Belmont Park, a nearby public park already bulldozed to commercialize it for politically-connected developers.

Sincerely,


Scott Andrews

Save Everyone's Access

RESPONSES

- I-285 A CO "hot spot" analysis was conducted for the proposed project and is presented in under the "Vehicular Emissions Impacts" heading on page 4.9-12 in the Draft EIR.
- I-286 The question/comment about "critical PM-5 levels" presumably was intended to reference "PM-2.5" instead. National standards for PM-2.5 were on hold at the time the Draft EIR was prepared. There are no State standards for PM-2.5. Because State standards for PM-10, which includes PM-2.5 as one component, are more stringent than the federal PM-2.5 standard, any analysis for PM-10 relative to the State standard automatically incorporates any possible PM-2.5 issues.
- I-287 The Draft EIR notes on page 4.9-11 that cars are becoming cleaner faster than any projected rate of growth of Sea World attendance. The resulting emissions, calculated as the product of attendance (vehicles) times their average emission levels, are forecasted to continue to decline. As discussed in Section 4.9.4, Air Quality, Impacts of the Draft EIR, impacts are less than significant because future mobile source emissions from visitor and employee travel will be less than for existing conditions. "Public health" is referenced to off-site sensitive receptors. Their exposure to project-related mobile source emissions will decline. The Draft EIR does not, however, designate emissions as "acceptable" as suggested. Ambient air quality at nearby intersections is acceptable because it meets clean air standards. Emissions are less than significant because they decline with time. All emissions, however, impede attainment of regional air quality standards and should thus be minimized to the extent feasible.
- I-288 The noise analysis presented in Section 4.7, Noise, concludes that there would be no significant unmitigable noise impacts resulting from the proposed project.
- I-289 Section 4.7, Noise of the Draft EIR addresses noise impacts from the proposed projects, including the Splashdown Ride (screams and track noise) and from the Shamu Stadium (amplified sound) and their effect on areas surrounding the project site. See response to comment L-127.
- I-290 See response to comment I-289.
- I-291 The Draft EIR indicates that the Splashdown Ride noise analysis reference level is 92 dBA at 50 feet from the ride. Noise contours with lower noise levels were calculated based on this reference level and are shown on Figure 4.7-4 in the Draft EIR.
- I-292 Comment noted. Section 9.0, Alternatives of the Draft EIR and in particular, Section 9.8, Combination Alternative, address the possibility of the proposed project without the Splashdown Ride. Also, see response to comment I-147.

COMMENTS

RESPONSES

LOMA RIVIERA COMMUNITY ASSOCIATION, INC.
 3715 LOMA RIVIERA DRIVE
 SAN DIEGO, CALIFORNIA 92110

TELEPHONE (619) 224-1313
 April 24, 2001

DELIVERY BY COURIER

FAX (619) 224-4053

The City of San Diego
 Land Development Review Division
 1222 First Avenue 5th Floor
 San Diego, Ca. 92101

SUBJECT: SeaWorld Master Plan Update Draft EIR dated March 12, 2001

To Whom It May Concern:

At the direction of the Loma Riviera Community Association Board of Directors.
 This is in response to the subject Draft EIR.

The draft EIR concludes that among other impacts the project would result in significant environmental impacts in the following areas: Land use, Neighborhood Character/Aesthetics, Light, Glare, Transportation and Circulation, Noise, and Air Quality.

After reviewing the EIR, especially the above impacts and the proposed mitigation, we the duly elected board members as representatives of Loma Riviera Community (Condominium) Association, comprised of some 526 residents, unanimously find the proposed mitigation and interpretation of Prop D unacceptable for the following reasons:

- I-293 1. Inaccurate or conflicting data
- I-294 2. Dependency upon unfunded and unreliable CIP's.
- I-295 3. Dependency upon City funding for mitigation which was not included in proposition D.
- I-295 4. Serious unmitigated impacts (such as noise and air quality) to we residents living closest to SeaWorld. Loma Riviera is less than one mile from SeaWorld and was not monitored in any data. Many of our residents are seniors who have lived here for over 25 years.

I-296 See also the attached review of the Table S-1 Summary of the EIR Impacts and Mitigation.

I-297 We ask you to reject the SeaWorld Master Plan Update based upon the unacceptable impacts.

For the board of Loma Riviera Community Association.

Sincerely yours,


 Deborah Baker
 Chairperson

I-293 Comment noted.

I-294 See responses to comments L-113 and I-95.

I-295 The Draft EIR did not identify unmitigated air quality or noise impacts. See Section 4.9, Air Quality and Section 4.7, Noise, in the Draft EIR. Also, see response to comment I-121.

I-296 See response to comment I-298.

I-297 The City will take this comment into consideration when it makes its determination concerning the proposed project.

DRAFT EIR SeaWorld Master Plan Update— Date of Notice 3/12/01
 TABLE S-1 page 1 of 7

Summary of Impacts and Mitigation

The following analysis ratings are based upon the LRCA board's review of the findings published in the SeaWorld Master Plan Update Executive Summary dated March 12, 2001.

- (1) Where the results of mitigation *do not* reduce the impact "to below a level of significance," this is equated to a rating of *NOT ACCEPTABLE*.
- (2) Where mitigation is dependent upon funding in part or wholly by the city or state governmental bodies and their legislation (such as a city formed CIP), and as "full funding for the CIP may be delayed or never achieved (4.4.2)", these are rated as *NOT ACCEPTABLE*
- (3) Where certain impacts are not ascertainable or "identified," these have the latent potential for being *NOT ACCEPTABLE* but, are rated *UNDETERMINED*

Results after suggested
mitigation measures (if any)

(1) Land Use

- Impacts to transportation/circulation and neighborhood characteristics/aesthetics *NOT ACCEPTABLE*
- Environmental impacts due to proposed marina expansion *NOT ACCEPTABLE*

(2) Neighborhood Character/Aesthetics

- Tier 1 Visual Impacts (The Splashdown ride) *NOT ACCEPTABLE*
- SeaWorld Master Plan Update Visual Impacts *NOT ACCEPTABLE*

(3) Light, Glare and Shading

- Light and Glare *(Note: Unable to identify does not mean that there is no potential cumulative problem.)* *UNDETERMINED*
- Shade *(Note: Effects of shading are dependent upon height and mass. This cannot be determined without finite dimensions and exact location of individual and cumulative projects.)* *UNDETERMINED*

(4) Transportation and Circulation

- Roadway Segments (2005 weekday)
(Note: This analysis is badly flawed. It assumes that there would not be significant immediate impact upon freeway 8. Over 60% of the visitors to SeaWorld come from San Diego and other parts of Southern California. Applying economies of distance of travel. Traffic from I-15 & 163 would use I-8 to the Sports Arena exit to SeaWorld Drive. Northbound traffic upon I-5 would exit East upon I-8 to the Sports Arena Exit also the out of state visitors (35%) to SeaWorld who would reside in hotels primarily in Mission Valley and South of I-8. Old Town and Point Loma hotel/motel guests would impact Sports Arena Blvd, Rosecrans and Midway to access SeaWorld. *NOT ACCEPTABLE*

I-298 See responses to comments L-53 through L-84.

I-298

COMMENTS

RESPONSES

TABLE S-1

Summary of Impacts and Mitigation (continued)

page 2 of 7

(4) Transportation and Circulation (continued) Results after suggested mitigation measures (if any)

Key Intersections (2005 weekday)

(Note: The report only no significant impacts. The following contradicts the SeaWorld report. These already have failing (congested and undesirable) LOS (level of service) ratings of E & F (see also weekend))

INTERSECTION	LOS
I-5 Northbound Ramps/SeaWorld Dr.	E
I-5 Southbound Ramps/SeaWorld Dr.	E
Linda Vista Rd./Napa St.	E
Midway Dr./Sports Arena/W. Pt. Loma Blvd*	F
Nimitz Bl./W. Point Loma Blvd.*	F
Camino del Rio W./Rosecrans St./Sports Arena Bl*	E
*All three are located in Pt. Loma areas impacted by SeaWorld traffic.	

Source: The above data from The City of San Diego Community and Economic Development Dept Transportation Planning Section Report of 11-25-97 .

NOT ACCEPTABLE

Freeway Ramps/Arterials/Freeway Segments (2005 weekday)

(Note: The subject summary indicates no near term (prior to 2005) or significant impacts nor does it include weekends. This is unsubstantiated, as the whole intent of SeaWorld's redevelopment is to increase attendance which can only result in increased traffic volume. See above chart with regard to existing I-5 ramps) **NOT ACCEPTABLE**

Roadway Segments (2005 weekday)

(Note: The summary indicates significant impacts on SeaWorld Drive and West Mission Bay Drive unless mitigated. It makes no mention of weekends. The mitigations involve unacceptable CIP's. **NOT ACCEPTABLE**

I-298
Cont.

COMMENTS

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TABLE S-1

Summary of Impacts and Mitigation (continued)

page 3 of 7

(4) Transportation and Circulation (continued)

Results after suggested
mitigation measures (if any)

Roadway Segments (2020 weekday)

(Note: The summary Mitigation for year 2020 is predicated upon a prior CIP having occurred or upon one taking place in 2020. Both mitigations are specious as funding by the city may not be available during the intervening years or in 2020; however, the traffic impacts would occur.

NOT ACCEPTABLE

Key Intersections (2020 weekday)

(Note: The SeaWorld Drive Northbound I-5 onramp, offramp, SeaWorld drive and Pacific highway mitigations are unacceptable as they are considered as "part of a future CIP project which may or may not be created and/or adequately funded (4.4-4 & 4.4-5.)" West Mission Bay Drive and I-8 Westbound offramp mitigation includes creating another right turn lane and widening Mission bay bridge. Major undertakings which would only take place if "CIP 52-643 is implemented and fully funded. (4-4.6)"

NOT ACCEPTABLE

Freeway Ramps (2020 weekday)

(Note: As indicated in the table on page 2 of this evaluation, the summary ignores the existence of the 1997 City of San Diego's Transportation Planning's LOS "E "(congested and undesirable) rating of the I-5 ramps to SeaWorld Drive. To assume that this would require no interim mitigation until 2020 is fallacious. Even then the mitigation is based upon an unreliable CIP.

NOT ACCEPTABLE

CMP Arterials (2020 weekday)

(Note: No impact identified therefore no mitigation proposed. This in spite of the future congested arterials as identified by the city's transportation section.)

UNDETERMINED

Key Intersections (2005 weekend)

(Note: The summary indicates significant impacts. Mitigation measure 4.4-10 assumes that I-8 and Ingraham has not been already impacted, thereby negating this as a solution. [See page 1 of this review under Roadway Segments])

UNDETERMINED

CMP Freeway Segments (2020)

(Note: The statement "impacts are considered unmitigable," in the summary is alone enough to condemn the entire SeaWorld buildout proposal.

NOT ACCEPTABLE

I-298
Cont.

TABLE S-1

Summary of Impacts and Mitigation (continued)

page 4 of 7

(4) Transportation and Circulation (continued)

Results after suggested mitigation measures (if any)

Parking (2010)

(Note: In the summary it is interesting that it is projected that the existing parking at SeaWorld may be exceeded by the year 2010 but, that corresponding concerns for traffic impacts do not occur in this summary until 2020.)

Mitigation measures 4.4.11 It is unclear from the summary if one or all three measures would be required under the most adverse conditions.

UNDETERMINED

(5) Water Quality

Existing Operations

Aquaria Water Treatment (Note: The summary indicates no significant impact identified because of existing controls. Therefore no mitigation required.) This finding is in spite of the fact that SeaWorld has been found in frequent violation (more than 50 times) of NPDES permits over the past six years. On December 8, 2000 SeaWorld was fined \$12,000 by the Regional Water Quality Control Board for exceeding Enterococcus and total Coliform bacteria limits in discharges into Mission Bay.

EXISTING CONDITIONS UNACCEPTABLE

Future Expansion

Marina Expansion (Note: The potential for SeaWorld to add personal watercraft to a proposed hotel attached marina is not acceptable. PWC's are known for their high volume of pollutant discharge (hydrocarbons.) They are a health and safety hazard have already resulted in death and serious injury in Mission Bay. They are a major nuisance to other boaters particularly sailors. From a public safety standpoint PWC's should be eliminated not encouraged

CONDITIONAL

Future Exhibits (Note: The summary merely indicates that additional aquarium water and exhibit hoses would be incorporated into the existing system. As indicated above this system is already inadequate.)

UNACCEPTABLE

(6) Biological Resources

Shading of Eelgrass Beds (Note: This summary is predicated upon future evaluation)

UNDETERMINED

I-298
Cont.

TABLE S-1

Summary of Impacts and Mitigation (continued)

page 5 of 7

(6) Biological Resources (continued)

Results after suggested -
mitigation measures (if any)

Least Terns (Foraging) & Least Terns (Fireworks) (Note: Some environmentalists suggest that SeaWorld has a conscientious program to discourage Least Tern nesting in areas adjoining SeaWorld as they are viewed as a threat to the activities and expansion by SeaWorld. The elevated frequency of fireworks is viewed as a part of that program.)
No impacts were identified. **UNDETERMINED**

(7) Noise

Future Tier 2 Rides (Note: The summary indicates that future rides and show may result in significant noise impacts. The Mitigation Measure would only require a Coastal Development Permit. Because public input is limited by the meeting location (frequently out of the county) and the limited manner of public input process with this body, this is not acceptable. Each individual structure must be reviewed by the planning boards in the communities surrounding Mission Bay including Ocean Beach and the Peninsula Planning board. Each structure must then be reviewed by the city planning commission and then by the city council. **UNACCEPTABLE**

Traffic Noise (Note: The summary only deals with traffic noise as it relates to the future hotel and the possible significant noise impacts. It completely neglects to deal with increased traffic noise impacts to the residents of communities adjoining the freeways servicing SeaWorld during interim buildout.) **UNACCEPTABLE**

Splashdown Ride Noise (Note: The splashdown ride noise study uses as a basis the Journey To Atlantis at SeaWorld in Orlando, Florida.) The ride in Orlando was portrayed at the four public forums as being one that was completely enclosed. The splashdown concluded in a domed room replicating an imaginary undersea Atlantis. To the contrary the SeaWorld San Diego version is portrayed as a primarily open air ride with no surrounding acoustical constraints to noise. The sound transmission studies based upon the Orlando splashdown are thereby invalid. **NOT ACCEPTABLE**

(8) Geology/Soils

Liquefaction (Note: SeaWorld is located upon unstable sedimentary soils. As such, any structure upon it poses serious earthquake related hazards.) Any new structures must conform to related current standards. **CONDITIONAL**

I-298
Cont.

TABLE S-1

Summary of Impacts and Mitigation (continued)

page 6 of 7

(9) Air Quality

Results after suggested mitigation measures (if any)

Ambient Air Quality (Note: The Appendix G Air Quality Impact Analysis is partially accurate and partially flawed.) It is correct in its analysis of Climatic conditions (P.1) in and around Mission Bay and surrounding communities. "The atmospheric conditions combine to limit the ability to disperse air pollution generated by the large population." It is flawed in that predicated its air quality evaluations in the area surrounding SeaWorld upon the Air Pollution Control District's (APCD) "nearest station to Mission Bay...at its downtown air monitoring station at 330 A 12th Street." This location is more than 4.5 miles from the intersection of I-5 & I-8, the epicenter of impact of air quality from vehicle traffic (see attached map). The APCD monitor lies West of the I-5. With the prevailing wind from the West this gives no scientific accuracy to the monitor station's data on Air pollution around the San Diego freeways let alone its remote location from the project.

The proposed downtown ballpark, proposed hotel construction in Quiviera Basin, SeaWorld, DeAnza Cove and the proposed buildout of SeaWorld in part or in combination present a recipe for disaster not only in traffic conditions, but health and safety in terms of air quality from increased traffic vehicular emissions.

It has been reported nationally and by teachers in the local (Mission Bay area) public school system that there has been a progressive increase in the number of school children with asthmatic conditions. Automotive pollutants are a known direct contributor to this condition.

Mitigation Measure 4.9-1 only addresses construction activity at SeaWorld. It does not reflect the increased traffic projections based upon attendance at SeaWorld during the interim buildout and the cumulative traffic effects of other projects in the area.

NOT ACCEPTABLE

(10) Recreational Resources

Traffic (Note: This only addresses construction traffic it does not address the conflict between the Master Plan Update and the Mission Bay Park of pedestrian/bicycle access along the entire Mission Bay waterfront which also links with the Peninsula Bike Path.) See also Table S-2 Enhanced Public Access Alternative (S-21) **UNDETERMINED**

I-298
Cont.

COMMENTS

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TABLE S-1

Summary of Impacts and Mitigation *(continued)*

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(10) Water Conservation

Results after suggested
mitigation measures (if any)

Water Consumption *(Note: This is difficult to evaluate beforehand, but it may be assumed that fresh water consumption would increase particularly if used in conjunction with the proposed splashdown and similar rides due to evaporation. Marine life exhibits use salt water and would only be a factor in terms of satisfactory filtration and treatment prior to re-cycling into Mission Bay.*

UNDETERMINED

I-298
Cont.

COMMENTS

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I-298
Cont.

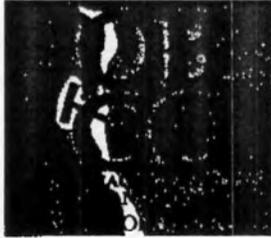


12th Avenue Air Quality Monitoring Station

COMMENTS

RESPONSES

Response to Sea World Draft Environmental Impact Report:



From: Ocean Beach Grassroots Organization

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San Diego, California 92107

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Introduction:

Ocean Beach Grassroots organization is a community organization that began in Ocean Beach less than a year ago. While our primary orientation is toward the environmental, social and economic needs of our community, we are also concerned about wider issues as well. For an organization that has been in existence for such a short time, we have gained a great deal of support in our community. Our membership is over 50 people, and we have the active support of hundreds more (see Appendix E). Our primary goal has been the preservation of the unique quality of life found in Ocean Beach.

I-299

Given these concerns, we have been actively involved in issues affecting Mission Bay. Consequently, we are very disturbed by Sea World's proposals to expand their facilities. The proposals outlined in the environmental impact report violate not only the letter and spirit of the Mission Bay master plan, but Sea World's own referendum (a mid-1990's vote that allows them to exceed the height limit) as well. We believe that these developments will do irreparable harm both to our community, and to Mission Bay.

Our primary concerns fall into four areas. First, the project's impact on traffic and air quality. Second, its impact on water quality and sewer resources. Third, its possible intrusion on the site of an old toxic land fill. Finally, its affect on the physical environment including birds, sea life and the aesthetics of the area.

While we address each of these areas in depth below, we will summarize our major points before proceeding.

Summary

I-300

The EIR indicates that there will be unmitigatable impact on traffic from this development in the areas around Sea World, but even this we believe seriously underestimates this impact. There are factual errors and logical inconsistencies that lead us to believe there will be traffic far in excess of the EIR projections. This will not only make the lives of those of us who must drive these streets on a regular basis much more difficult, but will limit access to Mission Bay for all San Diego residents. We also believe that this congestion could seriously impair fire, police and other safety services to the areas and communities around Sea World.

I-301

I-302

Since the connection between traffic and air pollution is obvious, we find the EIR's projection of no impact on air quality to be highly questionable. The EIR fails to address changing standards in air quality, it leaves out of its

I-299 Comment noted.

I-300 See responses to comments L-59, I-5, I-20 and I-315.

I-301 See responses to comments I-271 and I-272.

I-302 An explanation of the potential air quality impact is provided under the "Vehicular Emissions Impacts" heading on page 4.9-11 of the Draft EIR. Also see response to comment I-287.

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- I-303 report contributions to air pollution of some other proposed developments in the area, and it uses outdated standards in some of its report. There is one point we think worth emphasizing. While the Sea World EIR claims to have taken into account the impact of all proposed developments in the Mission Bay area, there is a glaring contradiction with the final EIR of the Quivira Basin project. This latter EIR states in its conclusions that there will be significant and unmitigatable impacts on air quality from this development alone. How is it then possible for the Sea World EIR, with twice the traffic, to have no impact of air quality if it is taking into account the Quivira project? This and many other inconsistencies need to be addressed.
- I-304
- I-305 In the area of water quality and sewer infra-structure, we find the EIR to have underestimated impacts and ignored important issues. Most importantly, the EIR ignores some important impacts of the increase in traffic and litter on water quality. The EIR does address the issue of run-off from increased traffic at Sea World itself (though we believe even here the EIR minimizes the impact—see below), but it says nothing about problems outside of Sea World. The increase in visitors and traffic to Sea World will also increase the oil, gas, and other pollutants on surrounding roadways as these visitors wait in traffic and visit other areas in and around Mission Bay. The run-off from this increased use has not been addressed by the EIR.
- I-306 In addition, the EIR makes no mention of the impact of the expansion of development on sewer resources. The Sea World development (in the build out phase) in combination with the other developments planned for Mission Bay, will necessitate massive increases in sewer hook-ups. The stress this may cause to an already overburdened system has not been addressed. More important yet, the cost to local tax payers of these additional sewer hook-ups is not even mentioned. This is particularly surprising since the referendum that allowed Sea World to exceed the height limitation states explicitly that there will be no costs to taxpayers from this development.
- I-307 Third, the threat to this development of the old dump site located to the east of Sea World has not been sufficiently explored in the EIR. Much has been written about this site over the years. While there is a lively debate about whether the toxic materials in this dump currently pose a threat to visitors and wildlife, there is no debate about the existence of highly toxic substances in this area. The EIR, however, only makes limited mention of this problem. Since this site could pose both physical as well as economic costs to the

- I-303 See response to comment I-332 regarding cumulative air quality impacts. The only air quality standard that has changed since the Draft EIR was authored pertains to PM-2.5, which is addressed in response to comment I-286.
- I-304 The Quivira Basin Redevelopment Project Draft EIR air quality analysis of vehicular emissions differs from the SeaWorld Draft EIR in two ways. The basis for understanding both reasons pertains to projections by the California Air Resources Board (CARB), that in future years vehicles (known as the vehicle fleet) will generate fewer emissions. This is because older vehicles, which generate more air emissions would be retired, and newer vehicles will generate fewer air pollutants. With this in mind, the first reason pertains to a comparison of existing emissions generated by each project to future emissions from each project. Compared to existing conditions, vehicular emissions from project-related traffic will decline because its rate of traffic generation is slower than the rate of emissions improvements from better automotive emissions controls. The Quivira Basin project, however, proposes a rate of growth that out-paces air emission improvements from less polluting vehicles in the future. Relative to existing conditions, future project-related traffic will therefore have less of an impact than it does today.
- The second reason is that the Draft EIR used a buildout date of 2020, which is consistent with the maximum traffic generation. The Quivira Basin Redevelopment Project Draft EIR uses a buildout date of 2005, because this is the projected date for completion of this project. The 2020 vehicular fleet, (i.e., vehicles on the road), would generate considerably less air pollutants as compared to the vehicular fleet in 2005. The result is that calculated vehicular air emissions for the Quivira Basin project exceed the significance thresholds, while SeaWorld vehicular air emissions will not.
- I-305 In addition to the City's regular street-sweeping, SeaWorld currently implements a sweeping program whereby parking lots, walkways and internal streets are swept daily to remove litter, oils and grease, and particulate matter, as further described on page 4.5-10 of the Draft EIR. Furthermore, while it is understood that vehicles, particularly from brake pad and tire wear, are a source of heavy metals released on streets, the state of the practice has not advanced to the point where quantification of these pollutant impacts is feasible on a per vehicle basis. In accordance with CEQA Section 15145, the EIR process is not required to speculate on impacts that are not quantifiable.

Furthermore, the Regional Water Quality Control Board (RWQCB) adopted Tentative Order 2001-01 on February 21, 2001. Under paragraph F.1.a.(7) each municipality within the County of San Diego is being charged with the responsibility of implementing a Jurisdictional Urban Runoff Management Program (JURMP) that contains, among other measures, a component for reducing pollutants associated with vehicles and increased traffic resulting from development or significant

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redevelopment. Within 365 days of the adoption of this Order the 20 copermittees shall collectively develop a model Standard Urban Storm Water Mitigation Plan (SUSMP) which will include this same component. Within 180 days of approval of the Standard SUSMP, each municipality will adopt its own local SUSMP and submit a copy along with amended ordinances consistent with the approved model, to the RWQCB for review and approval. These regulations are required to be implemented because they are an "order to comply."

I-306 See response to comment L-39.

I-307 See responses to comments S-1 through S-19. Section 4.11, Human Health/Public Safety of the Draft EIR has been revised to include additional data regarding the inactive Mission Bay Landfill.

COMMENTS

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- I-307
Cont. development, we think a more rigorous analysis of the risks involved should be undertaken.
- I-308 Fourth, the EIR makes limited effort to address the problems of impact on endangered and protected species in the area. Our feeling is that CURRENT efforts are minimal. Anyone who has walked the area now set aside for least tern nesting knows how pathetically small and marginal is this area. To further encroach on this limited area for road widening and other projects is unacceptable. There are scores of other bird species that use this area, and the report has little to say about them.
- I-309 In addition, we believe the impact of the Sea World project in combination with other developments in the area will cause major changes in the aesthetics of Mission Bay. The Mission Bay master plan explicitly states that this resource should stay open and uncluttered by commercial development. The Sea World development in combination with Quivira Basin development will create a "wall" of commercial enterprise that will extend from the ocean to nearly two miles in land. Promises to mitigate and compensate for this development are unacceptably small.
- I-310 **Our organization believes that the problems associated with the EIR, both admitted and ignored, mean that the only acceptable response is to stop this development. The EIR lists this response as one of its options, but says that it would violate "project objectives". This, however, is unimportant in comparison to the greater good that stopping development would provide. These "objectives" are based on the needs of Sea World, not on the needs of the San Diego community.**
- I-311 **If the City is unwilling to halt development immediately, then a referendum should be submitted to the citizens of San Diego that allows them to vote on this issue. This referendum should contain a full list of the impacts of this and ALL developments planned for Mission Bay. This should include impacts on traffic, air quality, bio-diversity, accessibility to the bay, and aesthetics. Most importantly, this referendum should clearly state the costs of these projects HIDDEN in the provision of the public infra-structure (sewer, traffic, etc.) that makes them possible.**

- I-308 See response to comment F-1 and F-2. The widening of SeaWorld Drive to six lanes is included in the Mission Bay Park Master Plan Update and therefore was addressed in the Final EIR for that project. Furthermore, as stated on page 4.6-12 of the Draft EIR, "no native vegetation or sensitive animals occur within the area which could be impacted should SeaWorld be required to widen SeaWorld Drive as described in Mitigation Measure 4.4-1 as outlined in Section 4.4. Although the Southern Wildlife Refuge and an unused least tern nesting site lie to the south of SeaWorld Drive, the indirect impacts from any roadway widening would not be significantly greater than those which are associated with the existing roadway."
- I-309 Section 4.2, Neighborhood Characteristics/Aesthetics of the Draft EIR, indicates that the proposed project would result in a significant, unmitigable visual quality impact. See response to comment L-66. Further, the Mission Bay Master Plan Update designates the SeaWorld leasehold for commercial use.
- I-310 This comment is an opinion in support of the No Project Alternative. The City will take this comment into consideration when it makes its determination concerning the proposed project. See also response to comment L-66.
- I-311 Comment noted.

COMMENTS

RESPONSES

I. Traffic and Air Quality:

Introduction:

I-312 In this section we address the issues of traffic and air quality. Each of these will be treated in separate sub-sections below. The issues of traffic and air quality are both the most immediate to our community and those with the most egregious errors and lapses in the EIR. We find the projections in the EIR for traffic increases and the attendant problems for air quality deeply disturbing. This unease, however, turns to horror when we realize that there has been a consistent underestimation of both the amount and impact of traffic increases in the report.

We are the people who will have to live with the consequences of this failed estimation. We drive these roads and breath this air not on a few days during the summer or on Tuesdays, Wednesdays, and Thursdays, but 365 days year. We further believe that these underestimations will result in both a serious decrease in access to Mission Bay for the citizens of this city, and a major decrease in the quality of their experience should they be lucky enough to reach the bay. We therefore request a re-examination of the problems of traffic and air quality taking into account the problems outlined below.

Traffic:

Underestimations

I-313 As we stated in the introduction, there is a consistent pattern of underestimation of the traffic problems discussed in the EIR. One of the most important examples of this is the Draft EIR's focus on weekday traffic levels (Tuesday, Wednesday, Thursday) for determining when mitigation measures are necessary. Summer weekend traffic often leads to more congestion than these days (especially in the afternoon hours), and mitigation monitoring should take this into account.

I-314 Further, the worse days for traffic are often on Mondays and Fridays during the summer as those are days when local commuters who use the roadways around Sea World join visitors to the park who are arriving early for the week-end. If these days are combined with a holiday (Memorial Day, Fourth of July, Labor Day, etc.), then grid lock conditions are common. This tendency will skyrocket as the number of hotels in this area increase. Anyone in the hotel industry can tell you that tourists don't just magically appear at 8 am on Saturday and leave at 5 pm on Sunday.

I-315 Another example of underestimation is the assumption that there will be no increase in visits to Sea World as the result of Tier One developments.

I-312 Comment noted.

I-313 See responses to comments L-59, I-1, I-2, I-20 and I-21.

I-314 See responses to comments I-1, I-2, I-20 and I-21.

I-315 The traffic study trip generation is based on projected increases in attendance, not Tier 1 or 2 development. The SeaWorld theme park is estimated to generate an additional 2,000 ADT by Year 2005 and an additional 8,000 ADT by Year 2020. The hotel and marina expansion would generate an additional 7,300 ADT after 2005. Therefore, the Tier 1 developments would contribute to the theme park ADT increases. See responses to comments I-1 and I-2.

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I-315
Cont.

This estimation, it is argued, is based on past experience. Sea World in the past has added attractions, only to see increases in attendance decline a few months later. We suspect, however, that Anheuser-Busch is not planning on investing millions of dollars on "slash-down rides" and the like only to hold on to current market share. As competent business people, Sea World officials must be trying to appeal to a larger clientele (the adolescent market?).

I-316

A more realistic assessment would look at a range of possibilities, most of which would assume an increase in attendance. Such projections could be based on what has happened to other amusement parks. We would suggest Knott's Berry Farm as a model, as it was also a theme park trapped with a limited clientel due to its theme orientation (Western). Anecdotal evidence suggests that Knott's Berry Farm added significantly to its attendance once it built roller coaster type rides.

I-317

Yet another example of underestimation is in the discussion of the cumulative impact of the developments planned for the areas in and around Mission Bay. Although the EIR makes mention of the proposed projects at Quivira Basin, Dana Inn, De Anza Cove, North Bay Redevelopment, the Naval Training Center (NTC) Reuse, Marine Corps Recruit Depot (MCRD) Reuse, and a new airport terminal on the north side of the runway, the Draft EIR does not adequately address these cumulative impacts.

I-318

More specifically, the traffic study states that "the traffic model was updated to include the North Bay Redevelopment, Marine Corps Recruit Depot Reuse, Naval Training Center Reuse, De Anze Cove, and a new airport." (Traffic Study p.35). We have not, however, been able to find evidence of all of these updates. How many ADTs are estimated for these projects? Do they correspond to Table A-1? If they do not please state the differences.

Table A-1 ADT increase estimates for cumulative projects

Sea World	15,300 weekday 15,592 weekend (Draft EIR pp. 4.4-16, 4.4-17)
Quivira Basin	13,615 (Final EIR p IV E-13)
Dana Inn	800 (using San Diego trip generation rates from 80 room total)
De Anza Cove	6,500 (using San Diego trip generation rates from 650 room total)

I-316 The basis for the attendance projections are provided in Section 3.4.4, Project Description, Attendance Projections of the Draft EIR. In addition, these projections take into account the attendance characteristics after the introduction of new attractions, including a ride known as Shipwreck Rapids (Section 3.3.2, Attendance Characteristics of the Draft EIR). Because SeaWorld has had no growth in its attendance over the past ten years, even with considerable investment in the theme park, the projected growth rate was considered optimistic, i.e., greater than probable. Also, see response to comment I-1.

I-317 Chapter 5.0, Cumulative Impacts of the Draft EIR addresses cumulative impacts. See response to comment L-23.

I-318 The City of San Diego's Series 9 Model was used for forecasting future traffic. Linscott, Law & Greenspan Engineers and City staff verified that the cumulative projects listed in these comments and others were accurately coded in the traffic model.

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I-318
Cont.

NTC Reuse (258 acres)	53,525 (NTC FEIR p 4.9-10)
MCRD Reuse:	157,000 (Airport Master Plan)
Airport North Terminal:	
North Bay Redevelopment (1,360 acres)	If acre/ADT ratio equal to NTC is assumed for NBR ADT, which is of similar land use to the linked NTC project [see 1] than increase will be 282,147

I-319

We also wonder why the Sports Arena and Midway intersection is not analyzed in the Sea World EIR? The Quivira Basin project's EIR addresses these streets despite having a lower projected traffic increase. We fear that this exclusion has resulted in an underestimation of an impact on an already crowded intersection.

I-319 See response to comment L-92.

I-320

In the Traffic & Circulation Study, sections of Ingraham, West Mission Bay Drive, and Sea World Drive (at 6 lanes) show an unacceptable LOS (Level of Service), with Sea World contributing a significant impact to this LOS. However, these impacts are not identified as significant in the DEIR or executive summary. This error again contributes to our sense that this report has consistently erred on the side of underestimating the impact of Sea World developments on traffic congestion.

I-320 See responses to comments S-41 and L-8.

I-321

In a like manner, the "Significance Analysis of 2005 Weekday Street Segment Operations" underestimates significant impacts of Sea World development. This section of the report lists an unacceptable LOS (E or F) on Sea World Dr, West Mission Bay Dr, Ingraham and Sunset Cliffs Blvd, BUT concludes that Sea World only contributes significantly to traffic on Sea World Dr. When Sea World is combined with the pedestrian-bridge connected Quivira Basin project there are significant impacts on ALL of these roadways. This is a major flaw in the draft EIR.

I-321 See responses to comments S-41 and L-8.

I-322

Finally, Sea World claims that various road construction improvements (I-5 interchange improvements, West Mission Bay Drive improvements, I-8 westbound off ramp) are not possible because it is "infeasible" for that

I-322 SeaWorld would pay its fair share of mitigation costs for traffic impacts resulting from SeaWorld's future increases in traffic volumes, with the exception of impacts to two mainline segments of Interstate 5. SeaWorld would not mitigate its traffic impacts to two mainline segments of Interstate 5 because Caltrans does not have an adopted program to improve these segments of Interstate 5 to which SeaWorld could contribute, and the entire cost for this improvement would be infeasible for SeaWorld to fund. See responses to comments L-60, I-10 and I-132.

COMMENTS

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I-322
Cont.

organization to bear the costs. If Sea World cannot afford to properly upgrade the roads surrounding their facility in response to the increased traffic they generate, they should not introduce this traffic in the first place. Proposition D was very clear that "no taxpayer funds are to be spent on any improvements resulting from this initiative". This dictates that Sea World's fair share of improvement cost for effects they create is 100%.

We have had limited time and resources to explore the inadequacies of the Sea World EIR. In spite of this, we believe we have discovered major underestimations of the impact of Sea World's proposals on area traffic. If we had a little more time and a lot more money, we are sure we would be able to discover many more instances of these problems. These problems mean that we are facing an unacknowledged traffic disaster waiting for area residents and those who come to visit Mission Bay if this project is allowed to continue.

Air Quality:

I-323

The connection between traffic and air pollution has long been recognized. Given this fact and our analysis of traffic in the above section, we are concerned about the EIR's estimation of air quality. We believe that its finding of "no significant" impact as the result of this project is not credible. This belief was further reinforced when we compared the Sea World EIR to the final EIR for Quivira Basin. Though the Quivira Basin project is much smaller and will have less impact on traffic than Sea World's project, the former's EIR admits that it will have "significant and unmitigatable" impacts on point air pollution. This inconsistency alone raises grave concerns about not only Sea World EIR's evaluation of air pollution, but of its claim to have taken into account the cumulative impact of all developments proposed for Mission Bay.

I-324

Sea World has San Diego County's second largest parking lot (behind Qualcomm Stadium) and hence is the second largest source of cold-vehicle starts and associated elevated pollution levels. The roads surrounding Sea World are also primarily LOS E and F. This stop and go traffic is another major source of elevated pollution levels. If Sea World's impacts to air quality are not significant than what project in San Diego County is significant? Significance Determination Guidelines under CEQA (rev Jan., 1994) state "Any multi-family residential, commercial or industrial development resulting in 9,200 ADT will also result in significant cumulative

I-325

I-323 See response to comment I-304.

I-324 A microscale air quality analysis was performed at all intersections in the project vicinity, including any effects of stop-and-go traffic and "cold-started" vehicles. Between 2000 and 2010, average vehicular CO emissions for autos are forecast to decrease by another 50 percent, and continue to decrease even further by 2020. One car in 2000 generates as much CO as three cars will in 2020. Unless volume increases or congestion effects dramatically offset this continued improvement, air quality will continue to improve faster than any counterbalancing effects of growth caused by the SeaWorld project.

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- I-325 The commentor is referring to a threshold set forth in the City of San Diego Significance Determination Guidelines Under the California Environmental Quality Act (January 1991, Revised January 1994 and May 1999). The current language of these guidelines, however, states that significant, cumulative air quality impacts would occur if “[m]ulti-family, commercial, industrial, or institutional development resulting in 9,500 ADT or more would also result in the emission of 250 pounds of NO_x, 790 pounds of CO and 100 pounds of RHC.” A significance determination under these guidelines, therefore, is two-fold. There must be a showing that (1) the project produces 9,500 ADT or more and (2) the project results in emissions of 250 pounds of NO_x, 790 pounds of CO and 100 pounds of RHC. While Section 4.4.3, Transportation and Circulation of the Draft EIR estimates that the park will generate about 15,300 new ADT by the year 2020, the project’s cumulative emissions and air quality impacts have been found to be de minimus. See response to comment I-332. Therefore, there is no significant impact.

COMMENTS

RESPONSES

I-325 Cont. air quality impacts” (p.6) This project clearly exceeds this guideline. Why
 I-326 no impact on air quality?

I-327 The Sea World EIR appears not to be aware of current standards on small particle air pollution. The EPA’s National Ambient Air Quality Standards (NAAQS) states “We now understand that even at low concentrations fine particles which are inhaled and become imbedded deeply into the lungs are linked to premature death, chronic bronchitis and aggravated asthma. Children with asthma, the elderly and people with cardiovascular or respiratory disease are especially at risk from fine particle pollution”. Many in Ocean Beach have already observed the impact of this kind of pollution. Increases in the rate of asthma among children in our community have been reported by parents and teachers. This makes any increase in particulate matter an issue of great importance to us.

I-328 This project adversely affects PM-10 (one form of small particulate matter) emissions which are already in non-attainment status for the San Diego Air Basin. Will Sea World alter development plans if PM-10 significance
 I-329 thresholds are determined which put Sea World’s project and/or cumulative impacts over these significance limits?

I-330 Another form of particulate matter, PM-2.5, also seems not to have been addressed The California Air Resources Board stated on February 21, 2001 that “By the middle of the next decade, the Air Resources Board (ARB) and local air districts must develop State Implementation Plans (SIP) to reduce unhealthful levels of PM2.5 in areas violating the new federal standards.”
 I-331 Since 2020 build out conditions in the EIR extend beyond the middle of next decade, what measures will be used to monitor these emissions?

I-332 The Draft EIR states “The air quality analysis in Section 4.9, Air Quality, determined that at build out conditions, which included the three cumulative projects and the Sea World Master Plan update, future vehicle priority emission levels would be less than current levels” (p.5-13). However, there are 8 cumulative projects listed in the EIR for consideration in cumulative impact. Why are these 5 projects not analyzed in the Air Quality Study?

The Air Quality Study assumes “The regional air quality plan has determined that the predicted level of growth can be accommodated while clean air standards are attained and maintained on a prescribed schedule.” and therefore asserts that “air quality impacts are not significant”. Does this

I-326 The 9,200 ADT threshold refers to “new” trips above a zero baseline. SeaWorld has an existing non-zero trip generation baseline. Also, see responses to comments I-302, I-304, I-325 and I-332.

I-327 See response to comment L-81 on the relationship between air quality and asthma. See response to comment I-286 noting that the NAAQS for PM-2.5 was not in effect when the Draft EIR was prepared, but that the stringency of the California PM-10 standard incorporates any PM-2.5 issues.

I-328 Impacts to PM-10 due to project implementation are not considered significant in that the park is not a dust generator. The project does not and will not measurably affect the non-attainment status of the air basin. See page 4.9-11 of the Draft EIR.

I-329 CEQA does not require a project applicant to anticipate potential future regulations.

I-330 Information concerning the PM-2.5 standard is provided on page 4.9-2, under the Relevant Plans and Policies in the Draft EIR.

I-331 The San Diego Air Basin is unclassified for the federal standard for PM-2.5. Data collection to determine attainment or non-attainment status of the basin has only recently begun. It is not known if the Air Pollution Control District (APCD) will be required to develop a State Implementation Plan (SIP) for PM-2.5 until an attainment designation is made by the State.

I-332 As defined in Section 15355 of the CEQA Guidelines, a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. When considering a project’s cumulative impact, a geographic area must be defined which includes other, past, present, and probable future projects, that also have similar impacts. A further explanation of cumulative impacts can be found on page 5-1 of the Draft EIR.

According to the CEQA Guidelines, Section 15130, a lead agency (City of San Diego) should define the geographic scope of the area affected by a cumulative effect. The City of San Diego has determined that the scope of area for air quality should be the San

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Diego Air Basin (SDAB), which is coterminous with the boundaries for San Diego County. Therefore, other projects evaluated as contributing to the cumulative impacts to air quality would include all projects region-wide. The basis for the determination of the region-wide geographic scope is that pollutants are widely dispersed in the air and are, therefore, not confined to the immediate area. As a result, one must consider any pollutants produced by the project as cumulative to the overall air quality for the entire region.

As demonstrated in the Draft EIR, the largest impact to air quality from the project at buildout is from vehicle emissions. As shown on page 4.9-11 of the Draft EIR, utilizing the URBEMIS7G Computer Model, the project's contribution to air pollutants from this source in 2020 would be 325 pounds/day for ROG, 394 pounds/day for NOx, 1819 pounds/day for CO, and 465 pounds/day for PM-10. For purposes of comparison to the SDAB, these figures have been converted to tons/day as follows; 0.163 tons/day of ROG, 0.197 tons/day of NOx, 0.910 tons/day of CO, and 0.233 tons/day of PM-10. The projected figures for the SDAB for year 2020 are 188 tons/day of ROG, 152 tons/day of NOx, 895 tons/day of CO, and 143 tons/day of PM-10. See tables RTC-3 and RTC-4 below for detailed data and sources. These projections take into account future improvements in vehicle emissions efficiency which will generally offset the impacts of the predicted increases in traffic. As a result, these numbers represent an overall decrease in all air pollutant categories, except for a slight increase in PM-10, as compared to current levels.

As calculated as a percentage of the cumulative impacts to the SDAB air quality, these figures show the project's contribution at buildout to be 0.087% for ROG, 0.130% for NOx, 0.102% for CO, and 0.163% for PM-10. As stated in the Draft EIR in Chapter 5, per CEQA Guidelines, an EIR may determine that a project's contribution to a significant cumulative impact is de minimus and thus is not significant. A de minimus contribution means that the environmental conditions would essentially be the same whether or not the proposed project is implemented. Data from 2000 shows the project's percentage contribution to SDAB air pollutants to be 0.149% for ROG, 0.131% for NOx, 0.111% for CO, and 0.149% for PM-10. Based on a comparison of the above figures, the project's impacts have been found to be de minimus. A summary of this data can be found in Table RTC-5 below.

Furthermore, in *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1996) 42 Cal. App. 4th 608, the court held that when a lead agency determines that a project makes only a de minimus contribution to a cumulative effect, no analysis of the cumulative effect is needed under CEQA.

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TABLE RTC-3
SeaWorld Air Quality Impacts

	ROG	NOx	CO	PM-10
2000	0.357	0.306	1.702	0.180
2020	0.163	0.197	0.910	0.223

Source: URBEMIS7G

TABLE RTC-4
San Diego Air Basin Air Quality
for Specified Pollutants

	ROG	NOx	CO	PM-10
1990	340	320	2684	113
1995	291	279	2035	114
2000	239	234	1529	121
2005	201	186	1109	134
2010	188	152	895	143
2020	188	152	895	143

Source: Data for 1990-2010, CARB, 2001
Data for 2020, Girouz and Associates, 2001

TABLE RTC-5
Summary of Air Quality Data Percentage
Contribution to SDAB Air Quality Impacts

	ROG	NOx	CO	PM-10
2000- Actual	0.149%	0.131%	0.111%	0.149%
2020- At Buildout	0.087%	0.130%	0.102%	0.163%
Difference	-0.062%	0.001%	0.009%	0.014%

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I-333 regional air quality plan include MCRD Reuse, NTC Reuse, North Bay Redevelopment, and the Airport expansion? If so what are the ADT increase estimates for these projects? Do they correspond to estimates in Table A-2?

I-334 These projects cumulatively affect the federal and state non-attainment status of the San Diego air basin along with the MBP projects and must be studied according to CEQA guidelines.

I-335 Table 3 in the Air Quality Study lists "Park Buildout" emissions levels. However these levels only concern Sea World's Developments. They do not include Dana Inn, De Anza or Quivira Basin. Why was a cumulative URBEMIS7G modeling not done for the cumulative Mission Bay Park projects when these numbers are all available? (Giroux and Associates prepared both the Quivira Basin Air Quality Report and the SeaWorld Air Quality Report) Why was a cumulative URBEMIS7G model not done that included NTC and the Airport expansion when trip generation rates are established in Final EIRs and Master Plans? Why was an URBEMIS7G model not done for all the cumulative projects that Sea World was directed to address by the city? Please include an URBEMIS7G version 5.1 emissions analysis for these cumulative projects. If city estimates exist that are more detailed than those in Table A-1 please include them in the EIR. If trip generation rates in Table A-1 are disputed than please explain why.

Table A-1 ADT increase estimates for cumulative projects

Sea World	15,300 weekday 15,592 weekend (Draft EIR pp. 4.4-16, 4.4-17)
Quivira Basin	13,615 (Final EIR p IV E-13)
Dana Inn	800 (using San Diego trip generation rates from 80 room total)
De Anza Cove	6,500 (using San Diego trip generation rates from 650 room total)
NTC Reuse (258 acres)	53,525 (NTC FEIR p 4.9-10)
MCRD Reuse:	157,000 (Airport Master Plan)
Airport North Terminal:	
North Bay Redevelopment (1,360 acres)	If acre/ADT ratio equal to NTC is assumed for NBR ADT, which is of similar land use to the linked NTC

I-333 The Regional Air Quality Strategies (RAQS) does take into account future redevelopment and expansion of existing development as well as new development that would occur in undeveloped areas. Generally, the projects identified in this comment involve redevelopment that would replace existing land uses which would result in the generation of vehicular air pollutants that would be similar to the air pollutants that would be generated by the new project. Therefore, the net difference in air pollutants generated would be nearly the same. Also, see response to comment I-332.

I-334 See responses to comments L-93 and I-332.

I-335 See response to comment I-332.

I-336 See responses to comments I-318 and I-332.

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I-336
Cont. [redacted] project [see 1] than increase will be 282,147

I-337 The failure to include this cumulative impact on air quality seems to us to be a major error. Without these estimates in the EIR, we fear that this analysis is incomplete.

I-338 We also suggest that the more detailed issues listed below be addressed before approval of the EIR.

1. What was used to predict Sea World's URBEMIS7G model fleet mix assumptions? Why do they differ from URBEMIS7G defaults for the San Diego Air Basin? See table A-2

Table A-2 URBEMIS7G Fleet Mix Assumptions

I-339

Light Duty Auto	75	80
Light Duty Truck	10	15
Medium Duty Truck	3	2
Light-Heavy Duty Truck	1	0
Medium Heavy Duty	1	0
Heavy-Heavy Duty	5	1
Urban Bus	2	1
Motorcycle	3	1
Total	100	100

I-340 2. Why is an outdated version of URBEMIS7G being used for the calculations in this report? As best we can tell, the version used is 3.2 when 5.1 (a more up to date set of guidelines) is available.

I-341 3. Why is 6.93 used as a trip generation rate for hotel rooms when the recognized San Diego trip generation rate is 10 trips per room? The more

I-337 See response to comment I-332.

I-338 The adjusted vehicle fleet used for the SeaWorld Master Plan Update represents a more realistic fleet as compared to the URBEMIS7G where 95 percent of visitors and employees drive cars or light duty trucks, and 5 percent of vehicles are delivery trucks, buses and motorcycles.

I-339 The default traffic mix for the air basin includes a large percentage of trucks that are inappropriate for the vehicle mix for the SeaWorld Master Plan Update, which includes a very large percentage of visitors using automobiles. As shown in this comment, the default percentage of trucks is 10 percent, including 5 percent "heavy-heavy duty" (18-wheelers). Every tenth vehicle arriving at SeaWorld is not a truck, nor is every 20th vehicle an 18-wheeler. Use of the default assumption clearly would be a completely erroneous representation of site visitor vehicles and would obviously skew the results to yield overstated findings. It should further be noted that the rate of future improvement in vehicular emissions will affect all types of vehicles. The proposed project will generate fewer emissions in 2020 than it does today even if the existing baseline is distorted by an erroneous (URBEMIS7G default) vehicle mix assumption. See response to comment I-304.

I-340 URBEIS7G Version 5.1 only corrects the construction activity module of the model as compared to Version 3.2. The construction activity module in URBEMIS7G was not used for the analysis in the Draft EIR. The emissions calculation algorithms in Versions 3.2 and 5.1 for mobile sources, however, are the same.

I-341 The traffic study used a hotel trip rate of 10 per room in conformance with the City Manual. See page 40 of Appendix B, the Draft Traffic Impact Analysis – Sea World Master Plan Update dated March 5, 2001, prepared by Lincoln Law and Greenspan Engineers of the Draft EIR. The 6.93 trips/hotel room took into account that many hotel trips are also SeaWorld trips, and are therefore "internal" trips. The calculation

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was subsequently modified to utilize 10 trips per room without any "credit" for internal or pass-by trips to insure that the analysis is maximally conservative. The updated URBEMIS7G model run is attached, and the data in Table 4.9-4 of the Draft EIR have been modified.

The decrease in regional emissions continues to be documented with these updated, and more over predictive calculations, although the magnitude of the improvement is now smaller than previously shown. Hotel trip generation rates therefore do not affect the less than significant findings.

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I-342 [] trips, the more air pollution. Is this one reason that the EIR believes there to be no significant impact on air quality?

I-343 [] 4. What is the estimated hourly CO concentration for the West Point Loma and Nimitz Blvd intersection when cumulative impacts are analyzed?

I-344 [] 5. What are the cumulative construction related air quality effects of the pedestrian bridge-linked Quivira Basin and Sea World projects? See Table A-3

Table A-3 Combined construction emissions from Quivira Basin Final EIR and Sea World Draft EIR

Reactive Organic gases	6	3	9	100
Carbon Monoxide	20	10	30	550
Nitrogen Oxide	91	43	134	100
Exhaust Particles	3	2	5	100
Sulfur Dioxide	2.8	3	5.8	100

Bold indicates significant impact

I-345 [] 6. What are the cumulative construction related air quality impacts of the extensive demolition at NTC in combination with Sea World and all other projects?

I-346 [] To be honest, we have not been able to fully explore the implications of the points listed above. We fear that hidden in these seemingly small omissions are larger problems. While we recognize that it is not possible in a project as large as this one to dot every "i" and cross every "t", we believe that the potential for harm is too great for the city to ignore these issues.

Overall, our brief analysis of the EIR's discussion of traffic and air quality leaves us deeply disturbed. There are too many omissions and errors for us to feel comfortable that the EIR is protecting our community. In an area as

I-342 The non-significant air quality impact is based on the calculated vehicular air emissions resulting from project-generated traffic in 2020. See Section 4.9.3, Air Quality, Impact, Vehicular Emissions Impacts of the Draft EIR. Also see response to comment I-332.

I-343 The West Point Loma/Nimitz Boulevard intersection was not analyzed in the traffic study because insufficient project-generated traffic would pass through this intersection based on the City of San Diego Traffic Study Guideline criteria. See response to comment L-8 for traffic study intersection criteria. Therefore, project-generated traffic would not be of sufficient volume to affect the carbon monoxide concentrations at this intersection.

I-344 The worst-case construction activity emissions at SeaWorld and construction of the Quivira Basin Redevelopment Project pedestrian bridge would not occur at the same time. The largest generator of construction emissions for the proposed project would be the proposed hotel, which is analyzed on pages 4.9 through 4.11 of the Draft EIR. The hotel would be developed after 2005. The Quivira Basin Redevelopment Project, which would include construction of the pedestrian bridge, would occur prior to 2005. Therefore, the overlap of these two projects would not occur.

I-345 "Cumulative impacts" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present and reasonably foreseeable probable future projects." CEQA Guidelines § 15355. SeaWorld and NTC reuse are not closely related, nor is there a definite schedule when the two activities would necessarily coincide. Construction activities occur throughout the basin every day. Construction as a generic activity generates significant levels of air emissions. The impacts from all basin-wide growth, however, are not considered "cumulative impacts" from a CEQA standpoint.

I-346 This comment is a conclusive description of comments on air quality and traffic. It also offers an opinion regarding air quality and traffic impacts. Responses to comments I-323 through I-345 address these concerns.

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I-346 important as traffic and air quality, all major issues must be fully discussed.
Cont. We fear that this is not true for this project.

II. Water Quality:

Introduction:

I-347 Our organization is concerned with both the underestimation of problems and failure to address significant issues connected with water quality in the EIR. Each of these two areas will be addressed separately below, but before doing so we wish to make some general points. As we have repeatedly said, the Sea World project must be seen against the back drop of all the developments planned for Mission Bay. In combination with the developments at Quivira Basin, Dana Inn and De Anza cove there will be drastic and negative impacts on the water quality of Mission Bay. This is a body of water already badly polluted, and these developments will only make a bad situation worse.

I-348 While we applaud Sea World's willingness to make some effort to mitigate run-off and developmental impacts to local water quality, we question whether these efforts will be enough. Sea World in the past has not shown itself to live up to its commitments. On more than one occasion Sea World has been fined for discharges into Mission Bay (see Appendix B). If this has been the case under the relatively benign conditions over the last few years, what can we expect with the explosion of development that the EIR projects.

I-349 Past history is often the best predictor of future behavior, and Sea World's record leaves us with great concerns.

Minimized Water Impacts:

I-350 1. The expansion of the Sea World Marina we believe to be more significant in its impact on the quality of Mission Bay water than is recognized by the EIR. The problems of both legal and illegal discharges from marinas have been well documented. While the EIR mentions problems from fuel docks and hull cleaning, it does not address the inevitable problems associated with the discharge of biological wastes into bay waters. While these discharges are illegal, they are inevitable where there are large numbers of boats. Increase the number of boats, and you will increase the problems of waste water discharge. Add to this the increase in trash, oil and chemical compounds that are likely, and we have a major increase in problems not adequately recognized by the EIR. This issue is particularly important for a body of water like Mission Bay which does not have adequate means for flushing itself out.

I-351

I-347 Comment noted.

I-348 SeaWorld has received only one fine for minor exceedances of the bacteriological limits of its NPDES permit. This exceedance was well below ambient bacteria levels in Mission Bay. None of the past violations has been classified as serious as defined under the Porter-Cologne Water Quality Control Act, as amended on January 1, 2000. See response to comment L-69.

I-349 Comment noted.

I-350 Most of the boats to be moored at the marina will be small pleasure crafts that are used for recreation, not as residences. As such, the volume of sanitary wastes collected on these crafts and potentially discharged illegally will be relatively small. Similarly, there will be minimal increase in the potential for fuel and oil discharges, since Sea World does not and will not sell fuel or conduct boat maintenance for the general public. Thus, there will be minimal increase in these discharges as a result of the expansion.

Furthermore as required by federal, state and local regulations, illegal sewage dumping is prohibited. California courts have held repeatedly that requiring compliance with environmental regulations is an appropriate mitigation measure. "A condition requiring compliance with environmental regulations is a common and reasonable mitigating measure." *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 308; *Perley v. Board of Supervisors* (1982) 137 Cal.App.3d 424,430. Therefore, required conformance with applicable regulations would mitigate this potential impact.

I-351 See response to comment I-350.

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I-352 2. As we have noted above, Sea World has been fined for the discharging of biologically active water into Mission Bay (Appendix B). We suspect the rosy projections of the EIR about the lack of impact of aquarium water and irrigation discharges at Sea World will, given past history, be proven wrong.

I-353 3. The EIR rightfully recognizes the potential for water pollution as a result of the construction projects planned. If, however, this construction disturbs the hazardous material in the old dump (see below page 13 and Appendix C), the chances for serious pollution of the Bay skyrockets. We see only limited evidence of preparation to deal with this possibility.

A. Ignored Water Problems

I-354 1. There is no discussion in the EIR of sewer problems associated with this development. Tying into the antiquated system currently in place will increase the number of opportunities for discharges. Why is this not at least mentioned? This is all the more important as this may involve significant costs to the city (therefore violating the terms of Prop D).

I-355 2. While the EIR addresses the problem of run-off and oil/gas discharges in the area of Sea World, it does not address discharges outside of Sea World. With an average increase of over **fifteen thousand daily** car trips involved with Sea World development alone (not to mention the increases from development at Quivira Basin, Dana Inn and De Anza Cove), increases in run-off in areas outside of Sea World will be inevitable. These additional people will be visiting other areas in the Bay, they will be parking on side streets, and most importantly, they will be stuck in grid lock traffic (see above pages 5-7) all of which will discharge oil, lubricants, and gas onto local streets. These discharges will inevitably become part of run-off. The EIR seems to assume that these fifteen thousand additional visitors will arrive at Sea World without traveling local streets, and without visiting local beaches and parks—a highly unlikely assumption.

I-357 3. There is no sustained discussion of the impact of fireworks refuse on sea life in the Bay.

Conclusion:

I-358 We believe the EIR has failed to adequately address the issue of local water pollution. The EIR failure to address this issue leaves us fearful about the health of this body of water. With the number of days that portions of the

I-352 See response to comment I-348.

I-353 See Section 4.11.3, Impact, Section 4.11.4, Significance of Impact, Section 4.11.5, Mitigation, Monitoring and Reporting, and Section 4.11.6, Impacts of the Draft EIR, for a discussion of potential impacts from the inactive landfill. No development project is proposed near the inactive landfill. Also, see responses to comments S-1 through S-19.

I-354 See response to comment L-39.

I-355 See response to comment L-39.

I-356 See response to comment I-305.

I-357 See response to comment I-169.

I-358 This comment is a conclusive description of comments on water quality. It also offers an opinion in opposition to the project. The City will take this comment into consideration when it makes its determination concerning the proposed project.

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I-358
Cont. Bay are closed because of pollution at 290 each year, can we really afford to further foul this vulnerable resource? We are saddened when such casual attention has been paid to an issue of such importance. We believe that a rigorous and realistic assessment of water pollution argues against approval of this project.

III. Landfill and the EIR

I-359 We are fearful that the EIR gravely underestimates the problems this project is likely to encounter in developing the area that was a landfill in the 1950's. We have included as Appendix C a detailed discussion of the problems posed by this landfill and the toxic substances found therein. This discussion is being submitted independently to the city, and we will not repeat material included there. We have chosen to include this statement as an appendix because it documents our concerns about the issue. We will make reference to this document throughout our discussion.

I-360 There is no debate about the existence of highly toxic substances in the southeast corner of the area that Sea World proposes to develop. The old waste dump was used extensively by the local aerospace industry for the dumping of highly toxic heavy metals and other materials (see page 2 of Appendix C). There is an apparent problem, however, within the EIR, in establishing just what is the exact proximity of the landfill to the proposed expansion project (Appendix C page 4). Without exact knowledge of the location of these toxic substances it is not possible to estimate either the risks posed by the Sea World project or its costs. If we assume the worse case scenario that this material will be disturbed by the developments proposed, then there exists the possibility of a major disaster or cost unaccounted for by the EIR.

I-361 If we ignore the possible human and ecological disaster represented in this scenario, is the city ready to assume the cost of this situation if Sea World goes to court and demands that it clean up the mess? San Diego already has enough trouble on its hands from a poorly thought out development with the ballpark. The last time a development was contemplated in this area, the Ramada Inn corporation backed out because of fears about this issue (Appendix C page 1).

I-362 We know that Sea World has committed to paying the price of disposing of this waste material. If, however, Appendix C is correct (page 5), and the boundaries of these problems are unrealistic, can't we assume that Sea World

I-359 This comment is an introductory comment concerning issues related to the inactive landfill on the SeaWorld leasehold. This comment also offers an opinion regarding analysis of impacts associated with the landfill in the Draft EIR. See responses to comments S-1 through S-19.

I-360 See responses to comments S-1 through S-19.

I-361 The potential effects from future SeaWorld development related to the Mission Bay Landfill is addressed in the updated version of Section 4.11, Human Health/Public Safety of the Draft EIR. Also see responses to comments S-1 through S-19.

I-362 See responses to comments S-1 through S-19.

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I-362
Cont. would sue the city for misrepresenting this situation? Again, it is local taxpayers who are potentially at risk. It should be remembered that this is the same Sea World who committed itself in Prop D to pay the full cost of developing this area. As we have seen in our discussion of traffic, Sea World is already trying to back out of its obligation to pay for the remediation of local roadways. Can we expect anything less if contamination becomes a larger problem than projected by the EIR?

I-365 Finally, and most importantly to those of us who live next to Mission Bay, any project that proposes to disturb toxic wastes in such a beautiful and important area should be judged guilty until proven innocent. In the long run, we believe that no development should take place in this area until all toxic materials have been removed. This is not an isolated part of San Diego. These toxics are buried feet below some of the most heavily utilized areas in San Diego County. The threat to tourism, wildlife, water, and human beings makes inaction inexcusable.

IV. Wildlife and Physical Impact of Sea World Development:

I-366 Finally, the Sea World development project threatens to seriously impact the physical environment in ways detrimental to both wildlife and human use of this area. The pictures included in the EIR say more than the "1000 words" of narration. In combination with developments at Quivira Basin and elsewhere, the Sea World project will create a wall of development that stretches for nearly two miles. With "Splash-down rides", hotels, parking structures, roller coasters, and traffic, this area will become a Disneyland with gills. The noise, pollution, and physical expansions proposed will threaten least tern nesting areas as well as public access. Aesthetically and ecologically we believe this project to be a serious mistake.

I-367

I-368 The impact on the Least Tern nesting area is the most obvious of ecological problems associated with this project. The least tern's nesting period is from April through July, a period corresponding to some of Sea World's heaviest attendance. When the increased noise, light, pollution, and garbage is coupled with the encroachment on nesting areas from road expansion, the situation could prove serious for this shy and vulnerable species (please see Material in Appendix D).

I-369 The expansion of the Sea World Marina poses hazards to Marine life unacknowledged by the EIR. While the EIR recognizes the possible impact

I-363 Comment noted.

I-364 See responses to comments L-60, L-113 and I-33.

I-365 See responses to comments S-1 through S-19.

I-366 Section 4.2, Neighborhood Character/Aesthetics of the Draft EIR addresses the visual impact of the proposed projects and the photosimulations included this section illustrate a worst-case analysis of this issue. Section 5.2.2, Neighborhood Character/Aesthetics of the Draft EIR addresses the cumulative visual quality impacts of the proposed project. See response to comment I-71.

I-367 See responses to comments F-1, F-2 and I-308.

I-368 See responses to comments F-1, F-2 and I-308.

I-369 See response to comment F-10.

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I-369
Cont. on eel grass, there are a number of other species of marine life that would be affected. The EIR states that painting of boats would be prohibited. This would, however, only marginally deal with the problems associated with the presence of large numbers of boats. Much of the concern with the toxicity of boats concerns the paint applied to hulls to inhibit the growth of sea life. This is why the EIR proposes the prohibition of painting. The problem, however, does not end with the application of these paints. Many of these paints are designed to sluff off, and those that don't, wear away with the regular cleaning required to keep boats functional. All of this highly toxic material ends up in the surrounding water. This poses a significant threat to most forms of marine sea life.

I-370 This problem is in addition to the illegal (but common) pumping of oily bilge water and waste from holding tanks. There is no way to avoid these problems if the number of boats increase. Monitoring efforts by the harbor police and Coast Guard have proven insufficient to protect against these problems everywhere there are concentrations of large pleasure craft (see above pages 11-12).

I-371 As residents of Ocean Beach we are concerned about the aesthetics and accessibility of Mission Bay. The "visual wall" of development has been described previously, but the problems don't end there. The move to "Disneylandize" Sea World threatens much of what is attractive about this area. This kind of development detracts from the bay's natural beauty. It is one thing to build a "Materhorn" in Santa Ana, and it is another thing to build a 95 foot high "Shamu-Splash-Down" in Mission Bay. Santa Ana remains Santa Ana (unfortunately) with the addition of an artificial mountain, it is doubtful that Mission Bay will remain Mission Bay with the addition of a glow in the dark Shamu ride. In the only objective analysis of Mission Bay, a recent Grand Jury report described the park as "over-commercialized" (Appendix A). Why add to this situation?

I-372 This kind of development also tends to decrease access to what is most important to visitors to Mission Bay—the bay itself. The Mission Bay Master Plan calls for accessibility to the water. Sea World already denies access to a large area, but with its expansion, the amount of area open to the non-paying public for walks, picnics or just dreaming will significantly decrease.

I-373 Finally, we fear what this development will mean for our community. While we recognize that Ocean Beach is a "funky" area, we like it this way. We

I-370 See response to comment I-350.

I-371 The Mission Bay Park Master Plan Update designates the SeaWorld leasehold for commercial use. The SeaWorld Master Plan Update does not expand the SeaWorld leasehold. The photosimulations provided in Section 4.2, Neighborhood Character/Aesthetics of the Draft EIR illustrate worst-case visual impacts of the proposed project. See also response to comment I-71.

I-372 See response to comment L-83.

I-373 Comment noted.

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I-373
Cont.

have no interest in becoming Santa Ana with jet noise. We are not attracted to the idea of filling our streets with fast food restaurants, congestion, and filth. We are struggling to preserve the character of our community. The over one thousand names on the petitions in Appendix E testifies to the depth of these feelings.

Conclusion

I-374

We believe that the conclusion from this discussion is simple: the most acceptable option mentioned by the plan is the one that involves no new development. The risks are too great that this project will destroy more than it creates. While we recognize that this project will increase revenues to the city, we do not believe that these small increases justify risking this fragile recreational area.

If the Land Development Review Division decides to proceed with this development after our objections, we hope it will only be after a more rigorous review of the risks than is presented in this EIR. Too much is at stake to rush to approve so many changes.

I-374 This recommendation will be considered by the City when it makes its determination about the project.

COMMENTS

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Mr. Lawrence C. Monserrate
City of San Diego
Development Services, MS 501
1222 First Avenue
San Diego, CA 92101

Dear Mr. Monserrate:

April 12, 2001

Thank you for the opportunity to respond to the SeaWorld Master Plan Update EIR. The length of this response reflects my interest in the subject. It would have been longer but I ran out of time and my printer ran out of ink!

I have divided my response into two sections:

- I: an EXECUTIVE SUMMARY identifies my concerns about using a public park for commercial gain with suggestions for compensating the public for the loss of access;
- II: SPECIFIC RESPONSES to the EIR

I have used some abbreviations:

- A-B: Anheuser-Busch.
- CEQA: California Environmental Quality Act.
- LCPLUP: Local Coastal Program Land Use Plan
- M.B.: Mission Bay.
- MBMP: Mission Bay Master Plan
- MMRP: Mitigation Monitoring and Reporting Program *attachment* to EIR.
- Prop.D: Voter-approved Proposition D (November, 1998)
- S.W.: SeaWorld (implying its generic title or leasehold and not necessarily its relationship to Harcourt-Brace or Anheuser-Busch).
- Update: SeaWorld Master Plan Update.
- Bold lettering** identifies questions specific to the EIR to which responses would be appreciated.
- All *italics* are mine for emphasis.

* * *

I: EXECUTIVE SUMMARY

- A. For every concession granted to S.W., there should be a *quid pro quo*.
 1. If the high-rise garage is approved (by the City Council and Coastal Commission), the previously acquired 16.5-acre parcel (at the north-east corner of the

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I-375 This comment is an introduction to specific comments in the body of the commenting letter.

I-376 This recommendation will be considered by the City when it makes its determination about the project.

I-375

I-376

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- I-376 leasehold) should be rededicated as a public park. The extra acres were acquired for parking; the garage should preclude that need.
- Cont. 2. The *Atlantis* restaurant was sited outside the S.W. leasehold to permit the public to patronize a family-oriented, economic seafood restaurant without having to enter the park and pay admission. Patrons who paid to enter the park could access the restaurant via the "Sky Tram." Now, with the demise of the restaurant, the Sky Tram serves no purpose and should be removed.
- I-377 3. If the proposed pedestrian bridge to Quivira Basin is approved, access to the two proposed hotels in that area of the park will be facilitated.
- I-378 If those two hotels are approved, the A-B hotel should be moot. There are already a sufficient number of hotels in or near M.B., whose average capacity is less than 100%. **So why build more?**
- I-379 Regarding hotels, the EIR does not address the issue of *vertical density*. Hotels, like every other structure around M.B., are identified and measured by their "footprint" or square footage resting on park ground, not by their vertical displacement. Thus a three-story hotel would create more traffic and density than a one-story structure with the same footprint. (The 25% commercial limit in M.B. is based on footprint only, not on the effects imposed by vertical, high-rise structures.)
- I-380 Proposal: the calculation of commercial acres should include the FAR and not be limited to "footprint" alone. If vertical displacement was considered, the EIR would more accurately address the *potential* effects on the environment it is charged with protecting. (A 10-story building resting on a foundation of 5,000 sq.ft. would produce a 50,000 sq.ft. burden for the site. To carry this argument to its absurd limit: if a restaurant or a condo tower rested on stilts, should we calculate *only* the footprint of the stilts?)
- I-381 Conclusion: A-B should not contemplate any hotels in its leasehold. The environmental effects—all negative—cannot be over-estimated. All hotels are opaque. Their view-blocking, massing effects cannot be mitigated by landscaping, screening or "earth-tone" paint. Besides, *all* the other hotels surrounding M.B. allow bay-side walks through their leaseholds. Only A-B precludes public access to the park except for paying guests. **Consequently, would Adventure Park hotel guests be required to pay to enter the park before accessing the hotel? Would the hotel be accessible to the public outside the park boundaries (as the *Atlantis* restaurant used to be)?**
- I-382
- I-383 4. The original Mission Bay Plan called for a circumferential bay-side pedestrian and bike path. If A-B receives any accommodations from this EIR, it should re-establish that path, if not to its original 50-foot width, then at least to a width consistent with the other bay-side walks.
- I-384 5. My last *quid pro quo* is reserved for the issue of noise. As a long-term resident of Crown Point, the noise generated by the fireworks is chronic and unfriendly. Numerous complaints have fallen on deaf ears which is understandable. The pyro-technicians must have been rendered deaf years ago.

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- I-377 Comment noted.
- I-378 The recommendation in this comment will be considered by the City when it makes its determination about the project. Additionally, Project Objectives are set forth in Section 3.2, Project Objectives of the Draft EIR. Project objectives that would be compromised by the absence of the hotel element from the project are discussed in Section 9.4, No Hotel and Marina Alternative of the Draft EIR.
- I-379 Vertical density of the proposed project is addressed in the Draft EIR through the worst-case photosimulations of Tier 2 projects and Special Projects. These photosimulations show the maximum developable envelopes that would be allowed by the proposed SeaWorld Master Plan Update. The maximum developable envelopes illustrate the maximum vertical density that could occur on the SeaWorld leasehold.
- I-380 See response to comment I-379. This recommendation will be considered by the City when it makes its determination about the project.
- I-381 This recommendation will be considered by the City when it makes its determination about the project. See responses to comments L-39 and I-71.
- I-382 Section 4.1, Land Use, and Section 9.3, Enhanced Public Access Alternative of the Draft EIR, address a bayside walkway on the SeaWorld leasehold. The bayfront walkway in the area of the proposed hotel is currently accessible to the public and would remain open to the public after the hotel is developed.
- I-383 See response to comment I-382.
- I-384 See response to comment L-127.

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I-385

Two contradictory statements demonstrate my lack of confidence in the EIR and any likely response generated by these objections:

On page 9 of the EIR: "Noise Impacts:
Future rides and show may result in significant noise impacts.

And yet, on page 11 of the attached mitigation program (MMRP-11), "5.0 Noise/Impact 5.1 Future Tier 2 Rides and Shows," we read:
Future rides and shows may result in insignificant noise impacts.

I-386

The first statement uses "significant"; the second, "insignificant."
As is clearly called out in the CEQA protocol, if a project would cause an insignificant effect, no mitigation is required. (A Negative Declaration may suffice.)
Hence, by declaring that the "Splash-Down" ride "may periodically increase ambient noise by 3dB(A)...out to 7,000 feet...and the ambient noise levels would not substantially increase,...no mitigation is required."
Why does the EIR (which uses "significant") differ from the MMRP attachment (which uses "insignificant")?
When was the wording changed, by whom, and for what purpose?

II: SPECIFIC RESPONSES to the EIR

I-387

Pg. 1 CONCLUSIONS (paraphrased)
Allegation: "The project would also amend the...Update and [LCPLUP] to eliminate inconsistencies regarding implementation of Prop.D.
Response: Why does A-B feel compelled to create inconsistencies to the MBMP (by spending \$2 million on a proposition to change the voter-mandated height limit) only to spend more money to bring those created inconsistencies into conformity with the MBMP? (Had Prop.D not been contemplated and foisted upon the public through an ingenious but disingenuous signature-gathering campaign, the status quo of M.B. development would have prevailed at no cost to A-B.)

Allegation: "To accomplish this [the elimination of inconsistencies], the [Update] would divide proposed development within the leasehold into five development areas:"
Response: I shall limit my observations to the first of these five: "Area 1: SeaWorld Theme Park," by citing two sections of CEQA:

"15355. Cumulative Impacts refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.
"(a) The individual effects may be changes resulting from a single project or a number of separate projects.

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I-385 The text of the Draft EIR is correct. The Mitigation, Monitoring and Reporting Program shall be corrected. Noise studies will be required for future projects to ensure that potential noise impacts from these future projects would not result in significant noise impacts. See response to comment I-103.

I-386 See response to comment I-385.

I-387 See response to comment I-447.

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"(b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."

Response: the present EIR identifies numerous effects which, if compared with previous proposals by other leaseholders, would clearly trigger a response *cumulative* concerns.

I-388

"15382. Significant Effect on the Environment means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant."

Response: The second of these CEQA considerations has been satisfied by the production of a 3 1/4-pound EIR. Furthermore, many environmentally significant impacts have been identified which the EIR addresses.

I-389

Regarding Cumulative Impacts, the stealth weapon of choice favoring any proposed development, is the slow progression of time. Long-range plans, especially those which exceed the life span of a single City Council or Coastal Commission, enjoy the effects of a failing memory or civic apathy. Any project, e.g., the widening of a road or the gradual erosion of a public park by private interests, is not likely to cause alarm. The effects of a decision made by one City Council may be inherited by another without raising a quizzical eyebrow.

I-390

Furthermore, the present proposal intends to *eliminate the inconsistencies* created by Prop.D *via a vis* the MBMP Update. Of the five development areas identified by A-B, the first—and most significant—concerns height. Area 1 of the Theme Park presents a series of structures that would exceed 30 feet in "fixed" ratios of the entire 189.4-ac. leasehold.

I-391

While it is interesting to note that A-B specifically mentions that only 1% of the entire leasehold (or .88ac) would rise about 130 feet and not exceed the 160-foot limit imposed by Prop.D, absolutely no assurance is provided that these percentages would be maintained over time.

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I-388 See responses to comments L-23 and I-317.

I-389 Comment noted.

I-390 This comment is partially correct. The fixed height ratios referred to in the comment only pertain to the 87.7-acre theme park area.

I-391 This statement is incorrect in that the one percent of development which is permitted to reach heights of between 130 and 160 feet is based on the 87.7-acre theme park area and not the entire 189.4-acre leasehold. Additionally, the SeaWorld Master Plan provides that the height analysis map (SeaWorld Master Plan Update, Figure III-1) will be updated and a copy submitted to the Real Estate Assets Department each time a major project is proposed. This will provide a highly accurate method of verifying the current height allocation percentages. Furthermore, the height percentages described in the SeaWorld Master Plan Update, once approved by the City and Coastal Commission, could not be changed without a revision to the SeaWorld Master Plan Update, which would require a new environmental review and approval by the City Council and California Coastal Commission.

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- I-392 Again, the passage of time, which no newly seated council member would appreciate and certainly no newly arrived resident would perceive, would win the argument for incremental, imperceptible, growth.
- I-393 The 16.5-ac accretion was justified by the apparent lack of parking. And yet, after the extra acreage was acquired, the previously rejected multi-story parking garage resurfaced as viable.
- I-394 Abetting this gradual staging, A-B also proposes a "tiered" development schedule. Any timed series of expansion would not attract as much attention as a fully formed, all-out program designed to maximize the leaseholder's investment by attracting the greatest number of visitors in the shortest amount of time.
- I-395 If the 90-foot "Splash-Down" ride was the only amusement to be proposed or completed in a specific time, the public perception (and any resistance to it) would be diminished.
- I-396 On page 2, "Significant Unmitigated Impacts," I heartily agree that the "Adoption of the proposed project could potentially contribute to direct environmental impacts associated with land use, neighborhood character...light, glare...transportation and circulation, water quality, biological resources, noise, geology...air quality, energy and water conservation."
If that's not enough, "This project could potentially contribute to cumulative impacts associated with land use, neighborhood character...visual quality...and transportation and circulation."
What's left? An assault on our Constitutional freedoms?
With a laundry list of "potential" and "significant unmitigated impacts" like that, we should all be concerned that the designers of such a proposal are, themselves, suffering from unmitigated *chutzpah*.
But I digress.
- I-397 Page 3: (top)
Allegation: "Approval of the No Project Alternative or the Combination Alternative may, however, lessen these impacts to below a level of significance...."
Response: Again, I unreservedly endorse these alternatives as moving in the right direction: i.e., to return some of M.B. Park to its rightful owners, the citizens of San Diego.
- I-398 Page 4:
In addition to the No Project Alternative and the More Regulated Alternative...
Allegation: "that would avoid and/or reduce significant direct and cumulative impacts" on the project site and adjacent community resource...
Response: I must stress the importance of adopting the Enhanced Public Access Alternative.
- I-392 Future development on the SeaWorld leasehold would be limited to what is described in the SeaWorld Master Plan Update, which could not be changed without a revision to the SeaWorld Master Plan Update, which would require a new environmental review and approval by the City Council and California Coastal Commission.
- I-393 The parking garage is included in the Master Plan Update to address any potential shortcomings in parking supply that may occur in the future.
- I-394 The Tiers included in the Master Plan Update include near-term projects, where specific project details are known, and long-term potential new and redevelopment projects where project details are not currently known.
- I-395 Comment noted.
- I-396 Comment noted.
- I-397 Comment noted. This recommendation will be considered by the City when it makes its determination about the project.
- I-398 Comment noted. This recommendation will be considered by the City when it makes its determination about the project.

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I-399 Soon after its creation in mid-1960, the original Sea World restricted public access to its leasehold. The 50-foot-wide public access corridor was reduced in width and eventually eliminated by the ever-increasing needs of Harcourt-Brace and, more recently, A-B.

I-399 See response to comment I-382.

The promised bay-side walk and bike path succumbed to corporate expansion and the thinly veiled excuse of security. (Is security enhanced by keeping the public out of its park?)

I-400 Not surprisingly, the justification for denying this alternative is economic-based: Allegation: "Implementation of the alternative would require major alteration and relocation of much of the existing and proposed facilities on the leasehold. Significant impacts would be no different overall than under the proposed project. The extensive cost to implement this alternative, and the compromise it would pose to the success of the S.W. operation, would make this project alternative infeasible."

I-400 Comment noted.

I-401 Response: And yet, the elimination of public access was accomplished piecemeal over time to remain below the horizon of public scrutiny and the infrequently summoned CEQA provisions regarding cumulative and significant impacts. In short, the loss of public access to a public park is both cumulative and significant.

I-401 Section 4.1, Land Use and Section 9.3, Enhanced Public Access Alternative of the Draft EIR address the issues raised in this comment.

I-402 I wish to raise a similar endorsement of the remaining Alternatives for similar reasons:

I-402 This recommendation will be considered by the City when it makes its determination about the project.

The "No Hotel Alternative" is particularly curious. When representatives of A-B were asked three years ago about constructing a hotel on their leasehold, we were told, and I quote Mr. Pat Owen, "We're not in the hotel business."

I-403 In view of A-B's frequently stated planning cycle of 2½-3 years (to justify their inability to inform the public of its intentions), how can today's EIR refer to a hotel if it wasn't contemplated three years ago?

I-403 The SeaWorld Master Plan Update is intended to address future development on the SeaWorld leasehold to 2020 and beyond. See also responses to comments L-39 and I-134.

I-404 Ditto, the above-ground parking garage. When this structure was suggested to the M.B. Planning Committee, it was rejected by the engineer-member, Mr. Mike Pallamary. His reasons for rejecting any parking structure rested squarely on the soft and yielding nature of the former landfill which now underlies a good portion of the eastern A-B leasehold.

I-404 Section 4.8, Geology/Soils of the Draft EIR addresses foundation issues with respect to a future parking garage. See also responses to comments L-77 regarding geology/soils, S7 regarding construction of projects on the landfill and I-393 regarding the parking garage inclusion in the Master Plan Update.

I-405 However, this rejection became an endorsement after A-B obtained 16.5 acres of additional land (east of the present leasehold and adjacent to the bay). Evidently, the land that was too soft to support a garage before the acquisition of the extra acres suddenly became firm after the acquisition.

I-405 See response to comment I-404.

Why was the above-ground garage rejected until after the 16.5 acres were acquired?

By this time, my objections to almost anything A-B proposes for M.B. is a matter of record, repetition and paranoia.

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I shall summarize my concerns by commenting on the mitigation efforts being proposed.

Again, my overriding concern with *any* mitigation effort depends on its timely application or effectiveness in being administered during or after the project has been approved or constructed.

To exemplify this point, I quote from the EIR:

Page 5: (bottom, last sentence)

Allegation: "Due to the general nature of the Update, however, additional environmental review may be required as *incremental development* occurs for site-specific projects over time."

Response: References to "incremental" and "over time" are precisely why the CEQA provision for cumulative effects was written and, regrettably, most often ignored. Unless someone is accountable for continuously monitoring a protracted project and is cognizant of its long-term effects, the likelihood of "overlooking" or "missing" the impacts approaches certainty.

The mitigation of the negative effects on

Page 6: "Neighborhood Character" are "To partially mitigate visual quality impacts [read "block view"] related to the construction of structures over 30 feet, the applicant would prepare and implement a site plan for each individual project."

Response: Unfortunately, if this project is approved, the proponent need not seek Council or Coastal Commission approval for *any* project not exceeding 90 feet. Consequently, the majority of the projects being contemplated would not require approval, but would be granted as a matter of administrative fiat. A series of 90-foot buildings on Mission Bay would present quite a visual challenge.

Page 6:

Allegation: As for mitigating "Transportation and Circulation" effects, A-B proposes to widen S.W. Drive to *six lanes* between I-5 and S.W. Way and by contributing 44% of the cost of widening same.

Responses: What is not mentioned, is the genesis for widening S.W. Drive in the first place: as the Adventure Park grows, so does the traffic into and out of it. **Why should one cent of city funds be spent to accommodate the growth of a commercial enterprise sited in a public park?** If a commercial enterprise causes traffic to increase, that same enterprise should ameliorate it.

Page 6, para 2):

Allegation: Although A-B proposes to pay 100% of the cost to coordinate the traffic signals on S.W. Drive and construct a 400-foot extension nearby...

Response: ...no explanation of "coordinate" is given, nor of the maintenance cost, if any. **What does "coordinate" mean? Coordinate with whom?**

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I-406 See responses to comments L-23 and I-317.

I-407 This comment is incorrect. See responses to comments L-24 and I-28.

I-408 See response to comment I-322.

I-409 Traffic signal coordination means that the traffic signals that are close to each other would have their timing adjusted such that the green lights would be sequenced to permit groups of traffic to continue through continuous signals without having to stop. Such coordination would improve the traffic flow from Pacific Highway, eastward to the I-5/SeaWorld Drive interchange signals. Once the signals are coordinated, no non-routine maintenance would be required for these signals.

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- I-410 Likewise, paras 3), and 4) and 5) (top of Page 7):
Allegation: *all* of these recommendations suggest *possible* traffic mitigations, while skirting the cause of traffic congestion:
Response: A larger Adventure Park will entice more visitors into an already maximized park and beach area.
- I-411 Equally unstated is the cyclic demand for more parking to accommodate more guests who—if the A-B Adventure Park propaganda is correct—will demand more entertainment and, hence, more parking.
- I-412 In 1987, before and during the planning for Shamu Stadium, S.W. requested a further "and final" addition to the park. In exchange for S.W.'s promise that it would not seek any more park land, the city granted S.W. a "final" 87 acres.
- I-413 Obviously, when the 16.5 acres were "negotiated" behind closed doors about three years ago, this promise was forgotten or ignored by the council. (Only Councilwoman Judy McCarty was on the council that granted the 87 acres and the more recent 16.5 acres. Documentation was presented to the council in a failed attempt to remind them of the previous council's agreement with S.W.)
- I-414 **What assurances does the city have that Anheuser-Busch—or any of its successors—will not seek more park land to accommodate the inevitable expansion of the "Adventure Park"?**
In this oft-repeated scenario (not unique to A-B), amusements expand onto the parking lot which, in turn, expands onto new park land. (The original 20-acre "Sea World" now exceeds 180 acres to become the largest leasehold on M.B.—an inevitable accretion that never attracted the attention of CEQA's cumulative effect watchdogs.
- I-415 **Page 7:**
Similar objections can be raised over the mitigation measures proposed for paras 1) to 6) (page 8), all of which relate to "reconfiguration" of streets or "improvements," "reconstructions," "additions" and "widening" to accommodate *more* traffic and not mitigate or reduce existing loads.
To stress the point, traffic is not mitigated by widening roads. The only way to mitigate traffic (or any other negative entity) is to reduce it. Hence, if drivers would abandon their cars and opt for public transit, traffic would be mitigated; that is, there'd be less of it. Widening roads or building more freeways does not mitigate traffic, it accommodates to it, encouraging more of it. (Did the widening of the I-5/I-805 "Merge" alleviate traffic congestion or merely push it further north?)
- I-416 **Page 8:**
Allegation: Of particular concern is the proposal to "1) pave the existing unpaved guest overflow parking area. When this expansion was acquired, none other than former General Manager Bill Davis told me that runoff from the new lot would "percolate" into the soil because the lot had been treated with gravel and slurry; the lot was not to be paved or even asphalted.
- I-410 The traffic model used in the traffic study takes into account future "background" growth or increases in traffic associated with regional growth. See also responses to comments I-1 and I-5.
- I-411 The impacts of the project on parking are addressed in Section 4.4.6, Impact of the Draft EIR. Project-related parking impacts will be monitored as set forth in Section 4.4.8, Mitigation, Monitoring and Reporting of the Draft EIR, and any significant impacts will be mitigated by Mitigation Measure 4.4-11. .
- I-412 Comment noted.
- I-413 The Mission Bay Park Master Plan Update dated August 2, 1994 designated the 16.5 acres as area for possible SeaWorld expansion. See response to comment I-71.
- I-414 The expansion of the SeaWorld leasehold would require approval of the City Council. In addition, the Mission Bay Park Master Plan Update does include any other land adjacent to the SeaWorld leasehold that is identified for a commercial use.
- I-415 See responses to comments L-22, L-44 and I-212 through I-214.
- I-416 See response to comment L-12. See also Section 4.5, Water Quality of the Draft EIR, and Mitigation Measure 4.5-2 for existing Best Management Practices and storm drain inlet treatment.

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I-417 Response: So what's changed? If the lot is to be paved, what provisions will the city impose to guarantee that no oily runoff will reach the bay or channel?

I hope you're sitting down. I fully endorse proposal #2) implement off-site parking or shuttle/MTDB...."

I-418 This idea was proposed during the year-long M.B. Update process which identified the unused southeast corner of M.B. (near the junction of S.W. Drive and Friars Road). The idea was expanded to include a trolley extension from Old Town, past S.W. and on to Mission Beach. (One proposal suggested an extension of the Mission Beach line across the channel and into Ocean Beach.)

By reintroducing this idea—and having it presented and endorsed by the "economic engine" that is A-B, perhaps the political climate at City Hall and the Coastal Commission will be more favorable to an idea that will truly mitigate some of the traffic now endured by M.B. Park and nearby beaches.

That said, I do not endorse:

Page 8, para 3): "construct the planned parking structure."

I-419 After acquiring an additional 16.5 acres, ostensibly for parking associated with the "Splash-Down" ride, and claiming that the former waste dump would not support a multi-story structure and would cause toxic wastes to seep into the bay, A-B is now proposing the structure they had previously rejected.

Why is a multi-story garage now being proposed when it was previously rejected as infeasible?

Finally, and to encapsulate all of my objections to all of the proposals and mitigations identified in this EIR, I wish to state my vehement objection to:

I-420 Chapter 6.0 GROWTH ENDUCEMENT

My antipathy toward this term and its alarming implications were expressed in August, 2000, when the Quivira Basin Redevelopment Project (LRD No. 98-0767) came forth.

I-421 Nothing has changed since then except my growing alarm that the city continues to view "growth" as a good thing. (The city has indeed induced my alarm to grow along with growth itself!)

Allegation: "...CEQA Guidelines requires that an EIR address the growth-inducing impacts of a proposed project. The discussion should include ways in which the project could foster economic or population growth, the construction of additional housing, or remove obstacles to population growth, either directly or indirectly."

I-422 Response: I must assume that any fostering of population growth will include a discussion of the obvious consequences: traffic, utility consumption, infrastructure

I-417 See responses to comments S-25, S-26 and I-416.

I-418 Comment noted.

I-419 A parking structure is included in the proposed SeaWorld Master Plan Update to address potential parking deficiencies that may occur as attendance increases at SeaWorld. See also responses to comments S-2, I-393 and I-404.

I-420 Comment noted.

I-421 Comment noted.

I-422 The Draft EIR addresses project-related traffic impacts in Section 4.4, Transportation and Circulation of the Draft EIR. See responses to comments L-26, L-39 and I-271 regarding energy and infrastructure issues. Sewer and water utilities are addressed in response to comment L-39. The proposed project would not foster population growth as discussed in Section 7.3, Population/Housing of the Draft EIR.

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I-422 Cont. demands, etc., all of which are presently under duress. **Would an increase in our population improve the demands presently being made on our parks, including Mission Bay Park?**

I-423 Allegation: "Direct growth-inducing impacts are commonly associated with the provision of public services, utilities, and roads to a previously undeveloped area."
Response: Mission Bay Park is already at its capacity of 25% commercial development. No further growth should be contemplated, let alone *induced!*

I-424 Allegation: "The provision of infrastructure and services to a site can foster growth by reducing development constraints for nearby areas, thereby inducing other landowners in the area to convert their property to other uses."
Response: What "development constraints" will be reduced for nearby areas?
Since there are no "landowners" in Mission Bay, **Who will be induced to convert their property to other uses? What uses?**

I-425 Allegation: "Direct impacts can also result from population growth taxing existing public services, or a particular development increasing the pace or density of existing surrounding developments."
Response: Amen to that! The above statement should give anyone pause; a greater population leads directly and unequivocally to an increasing pace and densification of existing development. **Will the residents of Pacific Beach and Mission Beach be adversely affected by the inducement of growth at Sea World?** (Answer: youbetcha!)

I-426 Allegation: "indirect growth-inducing impacts include the additional demand for housing, commodities, and services that new development causes or attracts by increasing population in an area."
Response: This is hardly and *indirect* impact. There is a direct correlation between growth and its effects. **Please identify the positive impacts that flow from growth.** Additional demand for housing, commodities and services can only end with increased competition for a diminishing resource and, hence, higher prices.

I-427 Allegation: "The proposed SeaWorld Master Plan Update is expected to contribute to the economy of the San Diego region in terms of jobs, personal income, and tax revenues. However, it is expected that most of the jobs created by implementation of the proposed Master Plan Update would be filled by locally unemployed and under-employed persons. Therefore, the project is not expected to cause an influx of new permanent residents into San Diego County."
Response: **May we please have this in writing along with the proviso that if the "expected" jobs do not materialize, the project will be removed? What assurances do we have that the jobs to be "created" by the implementation of this proposal will**

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I-423 This comment is an opinion that does not address the adequacy or accuracy of information presented in the Draft EIR. The SeaWorld Master Plan Update does not increase the SeaWorld leasehold and does not increase the amount of land for commercial development already designated for Mission Bay Park.

I-424 In the case of SeaWorld, the provision of infrastructure and services would not foster growth in nearby areas as discussed in Chapter 6.0, Growth Inducement.

I-425 This comment is an opinion that does not address the adequacy or accuracy of information presented in the Draft EIR, therefore, no further response is necessary.

I-426 As stated in Chapter 6.0, Growth Inducement of the Draft EIR, Section 15126.2(d) of the CEQA Guidelines requires that an EIR address the growth-inducing impacts of a proposed project. Accordingly, both Chapter 6.0, Growth Inducement, and Chapter 7.0, Effects Found Not To Be Significant of the Draft EIR analyze such impacts as cultural resources, agriculture, population/housing and public services. In particular, Section 7.3, Population/Housing of the Draft EIR states that the project would not significantly alter the population distribution, location, and densities, nor would it significantly affect population growth rate or housing demands.

I-427 See response to comment L-102.

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I-427
Cont. definitely be filled by the locally unemployed? How will A-B discriminate between those job applicants who are already employed elsewhere and those who are "locally unemployed"?

I-428 Curiously, elements of Chapter 7.0 (page 7-2) seem to contradict this admirable goal:
Para 7.3 Population/Housing
Allegation: "While the proposed project could create new jobs in the area, it is anticipated that the existing labor pool in the County would fill the positions created by attendance growth at SeaWorld."
Response: **How does this statement** (which refers to an "existing labor pool") **comport with the previous statement** (which refers to the "locally unemployed")?

I-429 In summary, if there's anything San Diego *doesn't* need, it's growth inducement. Growth doesn't need any inducement. The premise that growth is good is flawed. Citing new jobs and the influx of more taxpayers or investment dollars into our community gives short shrift to the frequently overlooked consequences. Housing projects loom on our hillsides oblivious to traffic, higher land and living costs, more pollution, more sewage, less water and, *most relevant and timely of all*, higher utility rates. We are running out of resources at an alarming rate. (Last summer, while touring S.W. with Mr. Davis, we were told that the electricity costs to keep the penguin exhibit at polar temperatures had doubled. Measures were planned to *raise* the temperature and identify other cost-saving features.) For those now living at their conservative best, the only recourse seems to be the pain of paying more and more for less and less.

I-430 As with the EIR on the Quivira Basin development, the Sea World EIR sings the same tune: As long as tourists flood in, rent hotel rooms, dine in our restaurants, visit our zoo and pay TOT, the city claims success. And yet, *will these visitors enjoy our polluted oceans and bays? Are they enjoying our congested freeways?*

I-431 To add to my consternation, the 1999-2000 Grand Jury was unequivocal in its recommendation to cease all renegotiation of leases until a survey of Mission Bay Park was completed. Although a survey was completed, many questions remain about its validity and value. A second survey is being discussed to allay the concerns of critics about the definitions of "land" and "water" and "tideland," three crucial elements of any survey. One Orwellian definition identifies "tideland" as "land," thereby raising the inventory of developable, commercial land, even if it's under water twice a day.

I-432 Unfortunately, before the first survey was completed, the city disregarded the Grand Jury recommendations in two ways: 1) City Manager Michael Uberuaga ignored the Grand Jury, observing that Mission Bay was not endangered; 2) the De Anza development moved forward from the Planning Commission to the City Council *without waiting for the survey* (establishing an unhealthy precedent for Quivira and Sea World to emulate).

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I-428 Locally unemployed or underemployed individuals are part of the existing labor pool.

I-429 Chapter 6.0, Growth Inducement addresses the potential influence of the proposed project on regional growth.

I-430 Comment noted.

I-431 Comment noted.

I-432 Comment noted.

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12

I-433

If the SeaWorld EIR were the only document being presented to the city and the public for review, there might be little cause for alarm. That facts, however, are not so placid. Quivira Basin and De Anza Cove are only two of a growing number of proposals being presented or planned for the further development of Mission Bay. Because it is already at or beyond capacity, Mission Bay should be seen as the impaired body of water it is, not as the cash cow it has become.

I-434

This, then, is my absolutely *last* observation on the subject: the concluding remarks on the Quivira Basin EIR are most telling.

Allegation: *"The proposed project provides for redevelopment in a fully-developed area with little to no room for expansion as there is very little vacant, undeveloped land in the project area."*

I-435

Response: If you averred that for Quivira, why doesn't the same concern hold true for Sea World? If there is "no room for expansion" for Quivira—which encompasses less land—how can there be room to expand Sea World?

I appreciate this opportunity to vent.

Alfred C. Strohleim

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I-433 Comment noted. See also response to comment L-23.

I-434 Comment noted.

I-435 The project does not expand the acreage of the SeaWorld leaschold.

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April 25, 2001

City of San Diego
Office of the Land Development Review Division
1222 First Avenue, Fifth Floor
San Diego, California 92101

Subj: Draft Environmental Impact Report (LDR No. 99-0618, SCH No. 1984030708):

Section 1. Errors of Fact and Deficiencies in the Draft EIR

EIR statement-pg 8: Water quality: Due to SeaWorld's existing surface runoff controls and Best Management Practices (BMPs), no significant impacts were identified as a result of existing operations.

I-436

Response: The settling ponds at city-owned Famosa Slough are an example of Best Management Practices (BMPs) for street or parking lot runoff. Anheuser-Busch's leasehold includes the second largest parking lot in the city. An estimated 80 per cent of the runoff from this parking lot is not captured and drains untreated into Mission Bay. This is not consistent with BMP, so the draft EIR is in error. Rain falling onto this lot may become mixed with oil, gasoline, and other organic chemicals. Settling ponds with retention times of four days could significantly reduce particulate and chemical contamination of Mission Bay. The impact of parking lot runoff could be largely mitigated using settling pond technology. This mitigation is not mentioned in the EIR. Anheuser-Busch has missed an opportunity for mitigation and to educate and demonstrate their environmental awareness and concern by not allocating some leasehold land for settling ponds. This mitigation measure should be specified and required in the final EIR.

EIR statement-pg 8: Water quality. In addition, the existing treatment of aquaria water....results in no identified significant impacts due to discharge of treated water into Mission Bay.

I-437

Response: The draft EIR is in error. Anheuser-Busch currently discharges about 3.2 million gallons of water a week from its aquaria into Mission Bay. This water exceeded State Regional Water Quality Board standards for bacterial indicators for five months during 1999 and regularly in 2000. Additionally, water quality impacts from dredging and construction are not adequately addressed in the draft EIR.

EIR statement-pg 9: Noise Impacts: The proposed "splash-down" ride may periodically increase ambient noise to 3 dB(A) and may be audible out to 7,000 feet from the theme park. However, because ambient noise would not substantially increase, the ride would not create a significant noise impact and therefore no mitigation is required.

I-438

Response: Noise is additive. There is no threshold effect. For this reason, sections of the draft EIR referring to the ambient noise environment (pgs 4.7-4 through 4.7-17) and existing noise conditions (pg 4.7-1) are irrelevant and should be deleted. The statement

I-436 SeaWorld has implemented a variety of Best Management Practices that include both structural and non-structural methods to reduce pollutants in surface water runoff. These measures are described in both Section 4.5, Water Quality, and the Water Quality Analysis for the SeaWorld Master Plan Update dated September 26, 2000, prepared by URS, which is attached as Appendix C to the Draft EIR. Furthermore, the Draft EIR provides Mitigation Measure 4.5-2 which includes the installation of stormwater catch basin inserts or equivalent to capture oil and grease where it enters the storm drain system. See responses to comments S-25, S-26, and I-416.

I-437 See response to comment L-69. No dredging would occur as part of the proposed project. See Section 3.4, Proposed Master Plan Update and Operations of the Draft EIR. Potential construction-related water quality impacts are addressed in Mitigation Measure 4.5-3 on page 4.5-19 in the Draft EIR.

I-438 Ambient noise is relevant in assessing noise impacts. CEQA requires the EIR to identify any substantial adverse changes in the environment which result from the project. CEQA Guidelines, § 15382. Ambient noise levels and existing conditions are relevant because they reflect the existing environment without the project and provide a baseline for determining the project's noise impacts. Because the project's noise levels are lower than the ambient noise levels, as set forth in the Environmental Noise Analysis - SeaWorld Master Plan, City of San Diego, dated as of August 18, 2000, prepared by Gordon Bricken & Associates, which is attached as Appendix E to the Draft EIR, there is no substantial adverse change in the environment resulting from the project's noise.

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The comment is correct in that noise is additive, however it is added logarithmically. This means for example, that an average noise level of 45 dBA and 45 dBA would equal 48 dBA or an average noise level of 45 dBA and 55 dBA would equal 55 dBA.

The combination of the average ambient noise and the Splashdown Ride average additive noise levels would not result in a significant noise impact.

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I-438 Cont.	<p>cited above that ambient noise levels are high so no mitigation is required is specious. Noise from the splashdown ride will be substantial and audible for over a mile and a half. Additionally, noise from this thrill-ride may violate Animal Welfare Act (AWA) standards determined by Animal and Plant Health Inspection Service (APHIS) with regard to noise exposure and animal safety. Several sections of the AWA address the issue of minimal risk of harm during public exhibition and the requirement to exhibit animals only under conditions consistent with their good-health and well-being. The AWA also contains sections that clearly prohibit harassment of captive animals. The 90-foot tall "splash-down" thrill ride is to be constructed of steel rails anchored in concrete. This ride will generate continuous vibrations in the substrate that can be effectively transmitted into nearby pools. There would be no recourse for the exposed animals, who could be subjected daily and most of the evening to substantial sound disturbances. Many species of marine mammals held by Anheuser-Busch at SeaWorld, particularly the cetaceans are extremely sensitive to sound and low frequency vibrations. Conditions of chronic noise exposure are unlikely to be consistent with their good-health and well-being. According to the California Environmental Quality Act (CEQA) section 15126: "All phases of a project must be considered when evaluating impact on the environment: planning, acquisition, development, and operation." The noise impact to captive animals is nowhere addressed in the draft EIR. The scope of the EIR also is inadequate since Federal agencies involved in enforcement of the AWA were not notified.</p>	I-439	See responses to comments I-463 through I-466.
I-439			
I-440		I-440	See responses to comments I-463 through I-466.
I-441	<p>EIR statement-pg 8: <u>Geology/Soils</u>: The proposed project would have potentially significant impacts associated with liquefaction, unstable geologic or soil conditions, soil erosion during construction and shoreline rip-rap slumping.</p> <p><u>Response</u>: The location of several of the proposed projects could result in the excavation and exposure of a class 1 hazardous waste disposal site. Specific mitigation measures addressing this potential impact need to be clearly stated in the final EIR.</p> <p>EIR statement pg S-2: <u>Executive Summary</u>: Amendment to the Mission Bay Park Master Plan Update/LCP. The project consists of an amendment to the Mission Bay Park Master Plan Update/LCP to bring the plan into conformity with the 1998 voter approved SeaWorld Initiative, Proposition D.</p>	I-441	This comment is incorrect. See responses to comments S-1 through S-19. See also Section 4.11. Human Health/Public Safety of the Draft EIR.
I-442	<p><u>Response</u>: The draft EIR is in error because there is no conformity between Proposition D and the Mission Bay Park Master Plan Update. In August 1998, Anheuser-Busch prepared a vaguely worded initiative known as Proposition D. The narrowly approved initiative mentions only exhibits, attractions, and educational facilities. It did not specify construction of a hotel, thrill rides, or large signs that could reach heights of 160 feet.</p>	I-442	See responses to comments I-88, I-127, I-598, I-636 and I-640.
I-443	<p>Expansion projects which Anheuser-Busch claims were permitted under Proposition D should be curtailed until voters have an opportunity to consider a properly worded initiative that accurately describes Anheuser-Busch's intentions, namely to build multiple thrill rides and drastically increase the size and lighting of their signs in the Mission Bay Park. Evidence that Proposition D was largely misunderstood by voters stems from a ballot measure passed in 1987 by a margin of almost 80 percent which tightly restricts commercial development of leases in Mission Bay Park. (Source: Amendment to the</p>	I-443	See responses to comments I-598, I-636 and I-640.
I-444		I-444	See responses to comments I-598, I-636 and I-640.

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- I-445 [Charter of The City of San Diego-Section 55.1, Article V). Proposition D passed by a margin of only 50.7 per cent. The draft EIR should include the text of Proposition D, rather than segments of the master plan update (section 3.5, pgs. 3-71, 3-72). Most voters would not have had an opportunity to review the master plan update before voting on Proposition D. The conformity between the wording of Proposition D and the Mission Bay Park Master Plan Update must not be assumed in the draft EIR, and the lack of conformity should be accurately described in the final EIR.
- I-446 [
- I-447 [

EIR statement pg 3-40: Fireworks Noise:

... (fireworks) expansion under the proposed master plan update could result in more frequent shows throughout the year and/or and longer shows.

- I-448 [Response: The noise, air quality, and water quality impacts of the proposed expanded fireworks displays associated with this project are not fully considered in the draft EIR. They cannot be fully considered because the draft EIR does not put a limitation on the length of fireworks displays, the number of nights such displays can occur, or the number of shells that can be detonated per night. Permits that may regulate the size of shells to be detonated are not provided in the draft EIR. Anheuser-Busch states that during a major fireworks display, they may detonate up to 1,750 shells in one evening and that these displays could occur in conjunction with an unspecified number of special events or celebrations (pg 3-40).
- I-449 [
- I-450 [
- I-451 [

- I-452 [Water quality impacts. Discharged fireworks fall into Mission Bay and release metals into the water. Pyrotechnic compositions use barium chloride, strontium chloride, potassium perchlorate, strontium carbonate, copper chloride and powdered magnesium and aluminum. These impacts to water quality are nowhere addressed in the draft EIR.

- I-453 [Air quality impacts. The draft EIR does not specifically address the impacts to air quality of the detonation of up to 1,750 fireworks shells in an evening or the toxicity or volume of oxidized pyrotechnic compounds.

- I-454 [Noise impacts. The draft EIR does not specifically address the impact of the detonation of over 1,750 fireworks shells for up to 20 minutes on captive marine mammals or on captive flamingoes with pinned wings held by Anheuser-Busch on its city-owned leasehold. It also fails to specifically discuss the noise impact to a large variety of birds feeding and nesting in the Southern Wildlife Preserve located in the San Diego Flood Control Channel (a Multiple Species Conservation Program Area) within 1,500 feet of these detonations.
- I-455 [

- I-456 [Air quality impacts: The EIR does not specifically address the impact of the detonation of up to 1,700 fireworks shells nightly on air quality. The toxicity and volume of gases released by burning of pyrotechnic compounds need to be specifically addressed in the final EIR. These impacts are nowhere addressed in the draft EIR.

- I-445 Proposition D is attached as Appendix H to the Draft EIR.

- I-446 See response to comment I-445.

- I-447 The proposed amendments to the Mission Bay Park Master Plan Update describes where there is a non-conformity between Proposition D and the Plan. The proposed SeaWorld Master Plan Update reflects the voter-approved Proposition D. The SeaWorld Master Plan Update in comparison to the Mission Bay Park Master Plan Update is addressed in Section 4.1, Land Use of the Draft EIR.

- I-448 See response to comment I-170 which addresses fireworks air quality impacts, and response to comment I-169 for fireworks water quality impacts. See responses to comments F-1, F-2, I-168 and L-127.

- I-449 The Project Description on page 3-40 of the Draft EIR under the heading "Fireworks Displays" provides a description of the maximum number of fireworks shows that could occur, by duration and average number of shells.

- I-450 Permits that regulate fireworks are provided in Table 3.3-3, SeaWorld Operational Permits. City of San Diego Council Policy 500-06, Regulations of Fireworks Displays, regulates the timing of fireworks displays and limits the size of concussive non-color (reports and salutes) to three inches. Finally, this policy requires that fireworks displays that use salutes or reports be limited to three events per 30-day period in each zip code area. This information is provided on page 3-20 of the Draft EIR.

- I-451 See response to comment I-449.

- I-452 See response to comment I-169.

- I-453 See response to comment I-170.

- I-454 See response to comment I-463.

- I-455 The Southern Wildlife Preserve occupies the San Diego River Flood Control Channel from bank to bank and includes lands that range from coastal brackish and salt marsh to mudflats to open water. In addition the preserve includes the lower portions of the rock riprap slopes that physically delimit the boundary of the preserve. Within the preserve and its represented habitats, avian species are the most visibly dominant element of the wildlife fauna. Shorebirds forage on the mudflats, up into tidal channels, and in more open marsh habitats. Some of the birds that forage in the channel night roost on the mudflats, along the base of the riprap, and on the sands of Dog Beach at the

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San Diego River mouth. Few shorebirds are expected to actually nest in the Southern Wildlife Preserve due to a lack of suitable nesting habitat. Marsh and wading birds such as herons and egrets forage within the open water, on mudflats, and in marsh plains. These birds generally depart from the channel at night to roost and nest in trees elsewhere, including on the SeaWorld grounds. Waterfowl forage within the open waters and rest on the water or adjacent mudflats at night. Nesting by waterfowl is limited in the channel but includes nesting by common species such as mallards and gadwalls within the cattail marsh vegetation located to the southeast of SeaWorld. Cormorants spend relatively limited amounts of time in the channel but night-roost on transmission lines crossing the channel. Sensitive species that are found within and around the Southern Wildlife Preserve include state and/or federally-listed endangered species as well as non-listed species recognized as declining. The channel supports regular daytime summer foraging use by California least terns and intermittent foraging use by California brown pelicans and western snowy plover. None of these species occur in the Southern Wildlife Preserve at night. The channel also supports scattered occurrences of Belding's savannah sparrows, and uncommon occurrences by endangered light-footed clapper rails. When present, both species are considered resident species and likely nest within the marsh vegetation of the channel. Non-listed sensitive species that make regular use of the channel are limited and include western grebe and long-billed curlew. Both species forage and may night roost but do not nest within the channel area.

The proposed SeaWorld Master Plan Update would incorporate two elements that have been identified as a potential concern relative to avian uses within the Southern Wildlife Preserve. The first is an expansion of the current fireworks shows to include earlier season shows as well as more frequent showings. The second element is traffic mitigation in the form of roadway widening of SeaWorld Drive and potential encroachment and vehicular noise impacts.

With respect to the proposed expansion of the fireworks display program, there would not be a substantive change in use patterns by avifauna. Because the existing fireworks shows are an element of the baseline environment, the existing avian use of the flood control channel including the Southern Wildlife Preserve exists under conditions that include summer season fireworks displays. Nesting within the channel is relatively limited and commences prior to the beginning of any proposed expansion of fireworks displays with the breeding season for Belding's savannah, light-footed clapper rail, and mallard beginning in March and gadwall beginning in April. These breeding seasons also extend into the current fireworks season with nesting for all species lasting into late June or mid-July. Foraging uses within the channel would not be affected by fireworks shows because foraging is a daytime activity and would not overlap with the fireworks displays. Night roosting uses continue to occur within the channel under the present fireworks baseline conditions and as such, an extension of the fireworks show would not be expected to alter this activity.

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Widening of SeaWorld Drive would impact adjacent roadway landscaping but no foraging, roosting, or nesting habitat used by species associated with the Southern Wildlife Preserve would be effected. This widening and increased traffic volumes would be expected to increase the traffic noise levels by 0.5 dB(A) at 50 feet from the centerline of the nearest lane by the year 2020. This noise increase would not result in a substantive change in the overall ambient noise levels within the flood control channel and would not be expected to have any significant adverse impacts on avian distribution or use patterns. The widening, consisting of an approximately 12 feet of travel lane on the south side of the existing road, would also reduce the separation between the roadway surface and the channel uses areas. However, automobile traffic, especially traffic that is relatively consistent, is a disturbance that birds acclimate to over time. Because the current alignment, width, and traffic use patterns of SeaWorld Drive would not be substantively changed, relative to the channel, these changes would not be expected to be significant. This is especially true given that the pedestrian and bicycle trail that parallels the channel would still form the most proximate disturbance source and one that hosts uses that are generally more threatening to wildlife than automobile traffic. Also see response to comment I-308.

I-456 See response to comment I-170.

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Section 2. Mitigation Measures not addressed in the Draft EIR

- I-457 Mitigation of Visual Impacts
CEQA requires that, "Each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect... (should be included in the EIR). The
- I-458 draft EIR correctly identifies many significant visual impacts associated with this project, but fails to include a specific mitigation of visual impacts. Structures over 30 feet high are prohibited in the Coastal Zone, yet Anheuser-Busch maintains a 320-foot lighted tower for advertising purposes. A mitigation measure for visual impacts that should be
- I-459 addressed in the draft EIR and required in the final EIR is the removal of this tower that is two- times higher than any structure permitted under Proposition D.
- I-460 Mitigation of all Environmental Impacts
CEQA states that the discussion (in EIRs) shall focus on alternatives to the project or its location which can avoid or substantially lessen any of the significant impacts of the project and shall evaluate their comparative merits. An alternative that should be explicitly stated in the final EIR is to take no action on this proposal until the expiration of Anheuser-Busch's leasehold with the City of San Diego. Alternatively, the leasehold might also be cancelled on the grounds that Anheuser-Busch's expansion program for SeaWorld violates the spirit and intent of the original lease agreement with the City for a "Marine Educational Park". A new request for proposals could then be prepared and a more environmentally and zoologically sound leaseholder could be found. An alternative leaseholder might be the San Diego Zoo that operates on leased land and attracts over 3 million visitors a year without resorting to thrill rides and large signs and without exposing their animals to loud noise. The final EIR should explicitly address this alternative.
- I-461

Sincerely,



Dr. Edward Gorham
4129 Loma Riviera Lane
San Diego, CA 92110
Phone: (619) 222-3544

- I-457 This comment provides information from the CEQA Guidelines with regard to mitigation measures and alternatives.
- I-458 Comment noted.
- I-459 This comment makes a recommendation to mitigate a visual quality impact from an existing tower which is not part of the project. The existing SeaWorld tower was approved prior to passage of Proposition D, which regulates the height of structures to 30 feet in the Coastal Zone. The SeaWorld Master Plan Update includes Design Guidelines which address signage for future development on the SeaWorld leasehold. These are described in Section 3.4, Proposed Master Plan Update and Operations of the Draft EIR.
- I-460 Comment noted. The No Project Alternative addressed in Section 9.1, Alternatives, No Project Alternative of the Draft EIR is similar to the no action alternative suggested in this comment.
- I-461 This comment describes a project alternative that is very similar to the alternative described in Section 9.8, Combination Alternative of the Draft EIR. See also response to comment I-71.

COMMENTS

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April 5, 2001

H. Ron DeHaven
Deputy Administrator, Animal Care
Marketing and Regulatory Programs
Animal and Plant Health Inspection Service
United States Department of Agriculture
4700 River Road
Riverdale, MD 20737-1234

Re: Anheuser-Busch proposals for SeaWorld and the Animal Welfare Act

Dear Mr. DeHaven:

I-462

Thank you for your letter (January 4, 2001) describing the Animal Welfare Act (AWA) and how standards are determined at APHIS with regard to noise exposure and animal safety. As you point out, several sections of the AWA address the issue of minimal risk of harm during public exhibition and the requirement to exhibit animals only under conditions consistent with their good-health and well-being. The AWA also contains sections that clearly prohibit harassment of captive animals.

I-463

You stated that many of the captive marine mammals held by Anheuser-Busch at SeaWorld under APHIS permits have recourse to the use of their pools to avoid exposure to the loud noise from fireworks detonations. It is true that the air-water interface is an effective barrier against most sound energy transmission. It is also true that most of the marine mammals kept by Anheuser-Busch at SeaWorld should have no trouble remaining underwater for the 20 to 30 minute duration of the nightly fireworks displays that occur above their enclosures every summer. The fact remains that these fireworks may represent a form of nightly harassment to these animals. As I pointed out in my previous letter, the AWA that your agency has the responsibility to enforce states that marine mammals in captivity must be: "protected from abuse and harassment ... by physical barriers, such as fences, walls, glass partitions, or distance, or both" (1).

I-464

Now there is a new potential source of chronic noise exposure that needs to be considered and investigated by your office. This noise comes from thrill rides that Anheuser-Busch proposes to construct on their 189-acre leasehold from the City of San Diego. These include a 90-foot tall "splash-down" thrill ride constructed of steel rails anchored in concrete. This ride will generate continuous vibrations in the substrate that can be effectively transmitted into nearby pools. There would be no recourse for the exposed animals who could be subjected all day and most of the evening to substantial sound disturbances. Many species of marine mammals held by Anheuser-Busch at SeaWorld, particularly the cetaceans are extremely sensitive to sound and low frequency vibrations. Conditions of chronic noise exposure are unlikely to be consistent with their good-health and well being.

I-462 Comment noted.

I-463 SeaWorld and Hubbs Research Institute will continue to fully comply with all requirements of the Animal Welfare Act (AWA) and the Animal and Plant Health Inspection Service to ensure minimal risk of harm during public exhibition and to exhibit animals under conditions consistent with their good health and well-being. AWA requirements include a monitoring program to be used to detect and identify changes in the behavior and health of the animals subject to the AWA. The attending veterinarian shall conduct onsite evaluations of each cetacean at least once a month and a complete physical examination at least once every 6 months.

While fireworks displays have occurred nightly from mid-June through Labor Day since 1985 at SeaWorld, the anticipated schedule for fireworks displays could approximately double from current levels. However, the increase in the frequency of firework displays is not expected to impact animals due to the distance of the site of the displays from the animal enclosures. In addition, the landscaping, fences, walls and buildings will attenuate noise in the animal enclosures from the increased fireworks displays. The animals can also stay underwater for the length of the longest firework displays, which is estimated to be 20 minutes, further reducing the possibility of impacts.

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I-464 SeaWorld took acoustical measurements of rides at SeaWorld Orlando and Busch-Gardens Tampa. The study is attached as Appendix N-1 in Volume II, Appendices to the Final EIR Response to Comments. Recordings made at the Journey to Atlantis (JTA) water flume ride at SeaWorld Orlando indicated that the noisiest areas are those in the immediate vicinity of the splashdown areas and ride loudspeakers. Animal housing enclosures built in association with rides will be subject to a variety of constant and transient noise, which would primarily consist of noises associated with the roller coaster track, splashdown area and human voices. Additionally, other airborne sounds such as projected music could penetrate the surface of water in nearby tanks, thus potentially creating impacts to animals.

However, the noise levels drop rapidly as distance between the source of the noise and the animal enclosures increase. In the proposed site development of SeaWorld, the Commerson's dolphin pools and the OSPER facility are the closest to the proposed Splashdown Ride and receive the highest noise levels from the Splashdown Ride. Other animal enclosures and pools would be protected from noise impacts by the distance from the noise source and intervening buildings, landscaping, walls and fences.

In addition, the underwater ambient noise in the existing Commerson's dolphin pools at SeaWorld is currently higher than the noise levels projected from the Splashdown Ride as measured by the JTA ride in Orlando.

However, the new site plan for SeaWorld has physically isolated the Commerson's dolphin exhibit from the complex consisting of the ride and the Splashdown Ride area. Additionally, a sound attenuation wall will be placed between the new pool and the Splashdown Ride area to further reduce noise and all loudspeakers will be oriented away from the Commerson's dolphin pools. The pools will be designed in such a manner that the surface of the pools will be protected with a wall from direct line-of-sight to the noisiest parts of the ride. With construction of these improvements, the ambient noise and vibration environment in the Commerson's dolphin pools will be improved over exiting conditions.

Noise impacts to the OSPER facility are also possible. This facility is intended to be a rescue facility for wildlife contaminated with oil or needing rescue and rehabilitation before being released back into their natural environment. Due to the wild nature of the animals in the Oiled Wildlife Care Center, noise and disturbance generated by the ride and by increased human traffic is of concern. Therefore, the noise study suggested placing a sound attenuation wall around the facility to reduce noise from visitors and the Splashdown Ride.

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I-465 Because this noise exposure will be new, the standard of "performance-based" health and well being that you refer to in your letter will not be available to determine Anheuser-Busch's compliance with AWA. Scientific studies are the only recourse in this situation and peer-reviewed scientific studies show that chronic exposure to noise does induce hearing loss in animals and humans and may raise blood pressure in humans (2-5).

I-466 AWA clearly requires that animals must be exhibited only under conditions consistent with their good-health and well being and that they be protected from harassment. The chronic noise and vibration from the roller coaster rides that Anheuser-Busch proposes for SeaWorld may pose a health threat to their captive marine mammals and also might be considered a form of harassment.

Thank you again for your previous letter and for your consideration and investigation of this new matter.

Sincerely yours,



Edward D. Gorham, Ph.D.
Assistant Professor, Department of Family and Preventive Medicine
University of California, San Diego
4219 Loma Riviera Lane (residence)
San Diego, CA 92110
Phone: (619) 222-6653

Copies to:
United States Senator Barbara Boxer
United States Senator Dianne Feinstein
United States Congresswoman Susan Davis
U.S. Department of Agriculture Secretary Ann M. Veneman,
Mayor and San Diego City Council (for distribution)
San Diego City Planning Commission (for distribution)
California Coastal Commission, Atten: Elizabeth A. Fuchs, (for distribution)

1. The Animal Welfare Act (Code of Federal Regulations, Title 9, Volume 1, Parts 1 to 199 January 1, 2000, U.S. Government Printing Office, and Subpart E--Specifications for the Humane Handling, Care, Treatment, and Transportation of Marine Mammals. Source: Federal Register 44 R 36874, June 22, 1979.
2. Sokas RK, Moussa MA, Gomes J, Anderson JA, Achuthan KK, Thain AB, Abu Rishah Z. Noise-induced hearing loss, nationality, and blood pressure. Am J Ind Med 1995 Aug;28(2):281-8.
3. Prasad NH, Brown LH, Ausband SC, Cooper-Spruill O, Carroll RG, Whitley TW. Prehospital blood pressures: inaccuracies caused by ambulance noise? Am J Emerg Med. 1994 Nov;12(6):617-20.
4. Tomei F, Tomao E, Papaleo B, Baccolo TP, Alfi P. Study of some cardiovascular parameters after chronic exposure to noise. Int J Cardiol 1991 Dec;33(3):393-9.
5. Ising H, Rebentisch E, Poustka F, Curio I. Annoyance and health risk caused by military low-altitude flight noise. Int Arch Occup Environ Health 1990;62(5):357-63.

Blind Copy: Anne Lowery

I-465 The marine mammals are and will continue to be monitored under the requirements of the AWA. See response to comment I-463. If the health and well-being of the monitored animals are shown to be at risk, additional scientific studies will be conducted to determine the cause and source of the problem. The identified problem will be resolved.

I-466 As stated previously, the majority of animals at SeaWorld will not be significantly affected by increased noise levels over existing conditions due to the distance between the source of the noise and the animal enclosures. The Commerson's dolphin pools and the OSPER facility are the closest animal enclosures to the proposed Splashdown Ride and as such would potentially receive the highest noise levels. However, with the recommended sound attenuation barriers and measures proposed, noise and vibration impacts are not expected to be significant and, in the case of the Commerson's dolphin pools, are expected to be improved over existing conditions. However, SeaWorld will continue its monitoring program to ensure that the health and well-being of the animals are maintained.

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City of San Diego
Land Development Review Div.
1222 First Avenue, Fifth Floor
San Diego, CA 92101
Ref: LDR No. 99-0618/
SCH 1984030708

17 April, 2001

To whom it may concern:

I-467 I am writing to discuss with you the recently released SeaWorld Mission Bay Park Master Plan Update Environmental Impact Report (EIR). In regards to new development, the summary for Proposition D stated that no taxpayer funds would be used for improvements resulting from the initiative. However, the fine print in the ordinance stated otherwise and I believe many voters would not approve of the plans set forth by the EIR. I am concerned about several aspects of the EIR.

I-468 The EIR does not discuss whether or not SeaWorld's water and sewer payments will cover the City's cost of providing the infrastructure for these resources. I understand that if they do not, the capacity fees will partially be the responsibility of the taxpayers and other businesses, i.e. those who use the existing system.

I-469 I am also concerned about the generation of increased traffic around Sea World Drive and I-5. The projected increases include adding 22,727 average daily trips over the weekend. The roadways around SeaWorld could not handle such an increase as is. The nearby San Diego River estuary should not be endangered by a desire to add road space to account for such increases in traffic.

I-470 Additionally, San Diego's bays are among the worst polluted in the nation. Beach closures are a common threat and I am concerned about the impacts that a proposed 650-room hotel will make on Mission Bay. SeaWorld does not currently treat all its runoff and they have not been very careful about clean water in the past. In February of 2001
I-471 the park was fined for violations of the Clean Water Act. They also violated limits of bacterial levels over 50 times between 1995 and 1999. SeaWorld should also have a hand in the scientific monitoring of the bay's water.

I-472 I would like to ask that the EIR be revised to properly address these concerns. I
I-473 hope that SeaWorld will also commit to using their own clean energy systems rather than drawing energy from the public grid. The EIR should also include a discussion of
I-474 increased waste, landfill impacts, and a commitment to recycling and the purchase of
I-475 recycled/recyclable materials in disposable food packaging.

I-476 I urge you to consider these concerns and request that SeaWorld also allow the public and the City Council to participate in reviewing any proposals set forth in the future. Thank you very much for your time.

Sincerely,


Katrina A. Kendall

I-467 Comment noted. See response to comment I-598.

I-468 See response to comment L-39.

I-469 This comment is incorrect. SeaWorld would add up 15,300 new trips to roadways near SeaWorld. See Project Trip Generation and Distribution on page 4.4-16 in the Draft EIR. The 22,727 ADT figure identified in this comment is the existing 1999 SeaWorld generation on summer holidays plus the future hotel and marina trips. The ability of roadways to accommodate SeaWorld's traffic is addressed in Section 4.4, Transportation and Circulation of the Draft EIR. Also, see responses to comments L-8 and I-315.

I-470 See response to comment I-455.

I-471 The proposed hotel would not affect the water quality of Mission Bay because the area where it is planned is a paved parking lot where surface runoff drains into Mission Bay. The proposed hotel would replace the hardscape of the paved parking lot, with hardscape associated with the hotel. Therefore the surface water quality runoff characteristics would not change. In addition, Mitigation Measure 4.5-2 would treat surface water runoff from SeaWorld's parking lots. See response to comment L-39.

I-472 See response to comment L-69. In addition, Mitigation Measure 4.5-2 would treat surface water runoff from SeaWorld's parking lots.

I-473 See response to comment I-472.

COMMENTS

RESPONSES

- I-474 Responses to the comments raised in this letter are set forth above in I-467 through I-473. See Section 4.12, Energy of the Draft EIR for a discussion of SeaWorld's energy conservation measures. Furthermore, use of SeaWorld's energy-generating systems to generate energy for in-park use may not be the most efficient means of generating electricity at certain times of the year. The lack of efficiency may in fact create excess air emissions relative to generating capacity created at more efficient facilities elsewhere.
- I-475 See the Waste Management and Recycling discussion on page 4.5-13 of the Draft EIR. See responses to comments I-52 and I-53.
- I-476 Comment noted.

COMMENTS

RESPONSES

Mission Bay Park Toxic Cleanup
P.O. Box 60026
San Diego, CA 92116

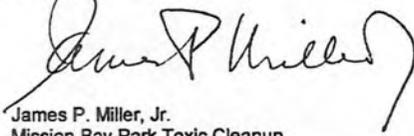
April 20, 2001

City of San Diego
Land Development Review Division
1222 First Ave.
San Diego, CA 92101

Dear Sir or Madame:

Attached is a response to the Draft Environmental Impact Report for the Proposed Sea World Master Plan Update of March 12, 2001. This response is specifically intended for reprint in its entirety in the final Environmental Impact Report.

Sincerely,



James P. Miller, Jr.
Mission Bay Park Toxic Cleanup

COMMENTS

RESPONSES

Mission Bay Park Toxic Cleanup

P.O. Box 60026
San Diego, CA 92116

April 20, 2001

City of San Diego
Land Development Review Division
1222 First Ave.
San Diego, CA 92101

General Subject: Draft Environmental Impact Report for the Proposed Sea World Master Plan Update 3/12/01

Focus Subject: **MISSION BAY LANDFILL TOXIC WASTE DUMP**

I-477

The Draft Environmental Impact Report for the Proposed Sea World Master Plan Update of 3/12/01 (DEIR) makes occasional mention of Mission Bay Landfill, as well it should, since part of Sea World's existing parking lot, as well as all of its proposed parking lot expansion, and part of its Tier 2 expansion site I-2 **overlie the old waste disposal facility.**

I-478

The report addresses, though briefly, a very important environmental aspect of that dumping ground operated between the years 1952 and 1959—the fact that **millions of gallons of hazardous and toxic industrial wastes**, largely from San Diego's aerospace industry, were buried at the facility throughout those years, much of it in large metal drums, beneath the ordinary garbage, below groundwater level, in unlined pits.

I-479

Sea World is well aware, of course, that the massive and toxic nature of such industrial dumping was confirmed in the early 1980's by City, State and Federal agencies—after an anonymous tip to a San Diego television station exposed the "toxic truth" about the City-operated facility, which had been held in check for over two decades. It is ironic, in light of Sea World's current expansion plans, that the discovery of the toxic nature of Mission Bay Landfill back then coincided with another large development scheme that had been planned for Mission Bay Park—a 35 acre Ramada Hotel complex—that one located at the end of the landfill opposite Sea World. To this day, the proposed Ramada site sits barren and unused.

The purpose of this letter is three-fold. First, it is intended to supplement the background information about Mission Bay Landfill that is presented in the DEIR,

I-477

This comment is correct in that the southeast corner of the SeaWorld leasehold includes the inactive Mission Bay Landfill and that a small portion of the revised approximate landfill boundary map (See revised Figure 4.11-1 in the Draft EIR) does overlay the southeast corner of Site I-2 of the Tier 2 projects. See responses to comments S-1, S-2 and S-7.

I-478

For the most part, this comment concurs with information presented in the Draft EIR. Section 4.11, Human Health/Public Safety of the Draft EIR analyzes potential impacts which could result from hazardous materials in the landfill and identifies Mitigation Measures to address such impacts.

I-479

Comment noted.

COMMENTS

RESPONSES

with additional information of environmental significance. Secondly, it will offer corrections to some of the related water quality information presented in Appendix C of the DEIR. Thirdly, it will comment on some of the impacts that the proposed Sea World expansion activities may have on the containment of the industrial wastes and waste by-products of Mission Bay Landfill.

Background Information

I-480 The bulk of the background information about Mission Bay Landfill that is presented in the DEIR appears in Section 4.11—Human Health/Public Safety. As well as pointing out that the landfill was used to dispose of "domestic and public refuse," the report offers the statement, "The City also operated part of the site as an unrestricted class I landfill and received up to 13,400 barrels potentially containing up to 737,000 gallons of industrial waste consisting of waste acids, alkaline solutions, organic solvents and paint waste."¹ Unfortunately, this severely limited description of the facility, whether intended or not, **serves as much to deceive as it does to inform.**

With records from the operational years of the landfill allegedly having been disposed of, just what "part" or parts of the site were used for industrial waste dumping cannot be established directly. However, a City consultant investigating the landfill in 1983 used a magnetic survey to detect potential concentrations of metallic objects such as the 55 gallon "barrels" commonly used to dispose of liquid industrial wastes. That survey revealed areas of magnetic anomaly, consistent with concentrations of buried barrels, quite evenly distributed all the way from one end of the 115-acre site to the other. Furthermore, chemical analysis provided by the consultant, of soil, waste and groundwater samples taken from widely dispersed locations at the site, showed **no areas of the landfill unaffected by industrial pollutants.**

I-481 It was that same consultant which provided the estimate that the landfill may have received the "up to 13,400 barrels" of industrial wastes noted, a figure which, at 55 gallons per barrel, accounts for the corresponding volume of "up to 737,000 gallons." Importantly however, the DEIR avoids pointing out that the consultant determined that wastes buried in barrels represented likely only a third of the **2.2 million gallons of total industrial liquid wastes** that it had estimated were dumped at the landfill during its operation.

I-482 Yet, even this larger total volume is a **deceptive underestimate**, for it was based on waste amounts generated by just three aerospace companies alone. At least two additional aerospace companies, and the U.S. Navy as well, disposed of wastes at Mission Bay Landfill, according to public documents. Furthermore, a 1958 City document with estimates on the volumes of just eight specific waste chemicals generated by only four of the area's aerospace

¹ DEIR, page 4.11-1

I-480 This comment is an opinion that the description of the waste placed in the Mission Bay Landfill is limited, yet the description in the Draft EIR provides an overview of various kinds of wastes placed in the landfill, including industrial wastes. The revised Section 4.11, Human Health/Public Safety in the Draft EIR provides an adequate description of the wastes in the landfill, including the toxic nature of these wastes. This comment indicates that industrial wastes described in the Draft EIR extend throughout the landfill and that no areas of landfill are unaffected by industrial pollutants. See responses to comments S-1, S-2 and S-7.

I-481 The Draft EIR indicates that hazardous industrial waste is contained in the Mission Bay Landfill. Revised Section 4.11, Human Health/Public Safety of the Draft EIR analyzes potential impacts which could result from hazardous materials in the landfill and identifies mitigation measures to address such impacts. The foregoing analysis is not affected by the commentor's information. See responses to comments S-1, S-2 and S-7.

I-482 See responses to comments S-1, S-2, S-7 and I-481.

COMMENTS

RESPONSES

I-482 Cont. [companies reveals a combined waste volume nearly two times the figure that the City consultant used as the starting point for its own estimate.

I-483 [A San Diego Union-Tribune news article of 1983 reported the County Director of Environmental Health as stating, "Most of the hazardous waste generated (by San Diego industries) in the 1950's went into that site."

I-484 [The DEIR statement lists general types of industrial wastes disposed of at Mission Bay Landfill and is likely quite correct, but an expanded description of the industrial chemicals found to be present at the site by the 1983 investigation may serve to better characterize the contaminated nature of the site.

I-485 [The City's consultant, having bored into the depths of the landfill at 25 locations scattered throughout the site, discovered the presence of **at least 86 industrial chemical pollutants among the wastes, sub-surface soil, groundwater, and soil-cover of the landfill.** Of these detected volatile and semi-volatile organic compounds, heavy metals, and pesticides, 68 were listed at the time by the U.S. Environmental Protection Agency (EPA) as "Priority Pollutants"—substances known or suspected of being cancer-causing, or known to be seriously toxic even at low levels. Over half of the entire EPA list was represented.

I-486 [In addition, a State laboratory detected **cyanide** in the landfill wastes and soils, a toxin that was reported as not detected by the City consultant.

I-487 [Two separate assessments of Mission Bay Landfill by the EPA Superfund program, using its numerical Hazard Ranking System, assigned the maximum possible score for both the quantity and the toxicity of the landfill's industrial wastes.

I-488 [With the total of this additional background information in mind, it would seem rather naïve at least, and downright careless at worst, for Sea World planners to assign much importance to the City claim, noted in the DEIR, that "no significant levels of hazardous waste have been historically found."

Corrections

With Mission Bay Landfill situated so closely to the waters of both Mission Bay and the San Diego River channel, the extent to which the toxic industrial wastes may be affecting the quality those waters is a concern of the California Regional Water Quality Control Board, which requires the City of San Diego to conduct regular water quality monitoring near the landfill. The DEIR makes mention of such monitoring, as does the accompanying Appendix C—Water Quality

I-483 See responses to comments S-1, S-2, S-7 and I-481.

I-484 See response to comment I-480.

I-485 See responses to comments S-1, S-2, S-7, I-480 and I-481.

I-486 See responses to comments S-1, S-2, S-7, I-480 and I-481.

I-487 This comment indicates that the Mission Bay Landfill has the highest EPA Superfund program score for the quantity and toxicity of the landfill's industrial waste. See response to comment S-1, S-2, S-7, I-480 and I-481.

I-488 Based on comments I-480 through I-487, this comment questions the Draft EIR's conclusion that no significant levels of hazardous waste have historically been found. No projects would be constructed on the landfill apart from expansion of the existing parking lot. See Section 4.11, Human Health/Public Safety of the Draft EIR and responses to comments S-1, S-2 and S-7. Additionally, this section provides mitigation measures to address any hazardous materials encountered during construction and excavation activities. See responses to comments S-1 through S-19.

COMMENTS

RESPONSES

Analysis.² However, some corrections to the information provided perhaps deserve mentioning.

I-489 The City of San Diego Environmental Services Department does, as indicated in the DEIR, conduct ongoing surface water sampling in the Southern Passage area of Mission Bay and in the San Diego River near the landfill—but not at four locations in each water body as stated, rather at only two locations in each. Moreover, though it is also true as stated that samples from those surface waters have been analyzed for contaminants once or twice a year since 1993, **testing is no longer conducted for many of the chemical parameters** listed in Appendix C.

I-490 Since 1997, the City monitoring program has seen fit to eliminate testing for the full "suite" of twenty metals listed (many of which had been measured in concentrations of particular concern prior to that date), and currently tests only for arsenic and chromium. Although Appendix C does supply a chart of concentrations for 18 different metals in surface water, no time frame for the data is indicated.³

I-491 In addition, Appendix C indicates that surface waters are tested for semi-volatile organic compounds; when in reality, such testing in Mission Bay was also eliminated in 1997. (Thirty-six semi-volatile organic compounds were detected in the 1983 landfill investigation, many at high levels.) By the way, monitoring for all 16 pesticides found in 1983 was also canceled by 1997.

I-492 Appendix C states "No sediment quality data was available for review." While it is unclear whether this statement is meant to refer to aquatic sediments just off-shore from Sea World or elsewhere in Mission Bay, it perhaps should be pointed out that a City consultant, in 1983, did conduct sediment testing both next to Mission Bay Landfill and at other locations in Mission Bay, including one location not far from Sea World. (That study found bay sediments to be highly contaminated by many heavy metals, including **mercury, thallium, cadmium, chromium, arsenic, beryllium, and lead**. Trends among such findings led the resulting report to declare Mission Bay Landfill "suspect as a probable source of metals.") Sediment samples have also been tested, on a regular basis, by the City's water quality monitoring program for the landfill, but only up until 1997.

Impacts

I-493 The Sea World DEIR apparently acknowledges that Mission Bay Landfill is a significant source of contamination of Mission Bay waters. Of the metals concentrations in bay water displayed in the above-mentioned chart, the DEIR states, "It should be noted...that the levels identified in these measurements tend

² DEIR, page 4.5-3; Appendix C, page 1-2

³ Appendix C, page 1-4

I-489 This comment makes general observations about testing conducted in connection with the inactive Mission Bay Landfill; it does not indicate that the proposed project will have any impact on preexisting conditions. See responses to comments S-1, through S-19.

I-490 See responses to comments I-489, and S-1, through S-19.

I-491 See response to comment I-489, and S-1 through S-21.

I-492 See response to comment I-489, and S-1 through S-21.

I-493 Comment noted.

COMMENTS

RESPONSES

I-493
Cont. to be higher than other areas of the Bay due to the influence of...Mission Bay Landfill."⁴

I-494 Beyond concerns about surface waters however, the DEIR admits that the landfill "adds certain constraints to development" and recognizes several possible environmental impacts stemming from the proximity of the proposed Sea World expansion to Mission Bay Landfill. Such impacts relate to the **possibility of encountering hazardous landfill materials in soils, groundwater, or gaseous emissions as a result of construction activities.**

I-495 There is an apparent problem however, within the DEIR, in establishing just what is the exact proximity of the landfill to the proposed expansion project. One would think that is a very important matter, considering the unique nature of this particular landfill. Of three different forms of map provided in the DEIR, each with landfill boundaries drawn superimposed over the Sea World project area, curiously, no two maps seem to be in even close agreement as to that relationship. A comparison of DEIR figures 3.4-1, 4.1-2, and 4.11-1 readily shows such confusion, or deception, whatever is the case.

I-496 The physical reality is that the City of San Diego currently monitors landfill groundwater quality from a well located at the northwestern-most point of the landfill boundaries (as estimated by the 1983 City investigation), and that said well is approximately 200 feet inside of the eastern boundary of Sea World's currently paved parking lot. Furthermore, that well is approximately 200 feet north of Sea World's current center-line road separating the north and south sections of that parking lot, which puts the well rather squarely in the midst of the Tier 2 Sea World expansion area designated I-2, slated for some form of "Exhibit/Ride/Show." From that well, the estimated western boundary of the landfill runs almost directly south, through the existing paved parking lot, all the way to the bank of the San Diego River channel.

I-497 **The DEIR maps showing the relationship between Landfill boundaries and the Sea World proposed project area should not be trusted as currently presented.**

I-498 The DEIR identifies two construction activities, likely to be associated with Sea World's expansion plans, which may result in encounters with hazardous materials originating from Mission Bay Landfill—construction dewatering of the groundwater table, and soil excavation. The report deals with the subject of such potentially impacting activities with the repeated use of the following supposedly comforting statement—"Any hazardous wastes/materials encountered would be remediated during construction in conformance with local, state and federal regulations."⁵

⁴ DEIR, page 4.5-3

⁵ DEIR, pages 4.11-7, 8

I-494 Comment noted.

I-495 The landfill boundary has been removed from Figures 3.4-1 and 3.4-2, and Figure 4.11-1 in the Draft EIR has been revised to include the most current approximate landfill boundary on the SeaWorld leasehold prepared by the City of San Diego, Department of Environmental Services. See responses to comments S-1, S-2, S-7 and S-17.

I-496 See responses to comments S-1, I-477 and I-495.

I-497 See responses to comments S-17 and I-495.

I-498 As to dewatering, see response to comment I-259.

COMMENTS

RESPONSES

- I-499 Of course, one would hope that encounters with hazardous landfill materials could, in every case, be dealt with in a controlled and regulated manner. However, for the sake of the welfare of construction personnel, it would perhaps behoove Sea World planners to review some of the lessons that Mission Bay Landfill has imparted in the past.
- I-500 1. While the so-called boundaries of Mission Bay Landfill have been demarcated boldly on maps since the City's 1983 investigation, subsequent construction related events served to demonstrate that neither the landfill operation itself, nor its industrial wastes had confined themselves to this perimeter.
- I-501 2. With any migration of industrial wastes from Mission Bay Landfill to the surrounding environment obviously a serious matter, Sea World has in the past considered the potential for construction dewatering at a project on their leasehold to **draw in contaminated groundwater from the adjacent landfill site**. Sea World's consultant company considered the matter but indicated that it was very unlikely that such dewatering activities would have any significant impact on the existing groundwater flow. To the contrary however, after such dewatering had proceeded, results from City groundwater monitoring at the landfill indicated that the groundwater flow direction had in fact changed toward the west due those Sea World activities.
- I-502 3. Historically, there has been much concern about hazardous gases at Mission Bay Landfill—gases originating both from the industrial wastes and from decomposition of typical landfill materials. Although a sizable number of industrial volatile organic compounds have been identified at the landfill site (some even in the soil cap itself) the Sea World DEIR has chosen to address just two gases associated with typical landfills—the **potentially explosive methane and the highly toxic hydrogen sulfide**. The DEIR apparently is depending on reports that such gases have not been found above background levels at the surface of the landfill, or in shallow test pits dug on one occasion for construction purposes.⁶
- I-503 Perhaps the author of the DEIR is unaware of past measurements of underground methane concentrations at the landfill, or perhaps it was decided not to include such information in the report for some reason. In any case, construction personnel at least, working in the area of Mission Bay Landfill, should be aware that no fewer than four studies of methane at the site have measured underground concentrations of the gas at 40% by volume or greater, in deed, by two of the studies as high as 72%.
- I-504 Ignoring the possible harmful effects of trapped underground gases in the area of Mission Bay Landfill was shown during the construction of the South Shores boat-launching facility in 1988 to have **grave consequences**. (The year before,
- I-499 Comment noted.
- I-500 See responses to comments S-1, S-2, S-7, S-17 and I-495.
- I-501 As to dewatering, see response to comment I-259. See also responses to comments S-1, S-2, S-7, S-17 and I-495.
- I-502 See response to comment S-2. This comment restates information presented in the Draft EIR. It is unlikely that the project's excavations will be deep enough to encounter landfill gases.
- I-503 See responses to comments S-2, S-7 and S-17. Section 4.11, Human Health/Public Safety of the Draft EIR acknowledges the potential to encounter hazardous materials on or near Mission Bay Landfill and provides Mitigation Measures to address any such encounters. The foregoing analysis and measures remain unchanged by the information provided in this comment. See responses to comments S-3, S-17 and I-502.
- I-504 This comment provides additional information indicating the potential to encounter toxic gases if the Mission Bay Landfill or nearby areas are excavated. See responses to comments S-2, S-3, S-7, S-17, I-502 and I-503.

⁶ DEIR, page 4.11-6

COMMENTS

RESPONSES

I-504
Cont.

San Diego County officials, responsible for regulating such activities at landfill areas, granted a City request to forgo the usual California Safety Code test requirements for gases, in the case of Mission Bay Landfill.) According to news reports from the time, it was merely surface grading operations that exposed an underground pocket of trapped hydrogen sulfide gas, which acutely affected eight nearby workers with symptoms ranging from headache to vomiting and diarrhea. Several of the workers were sent to the hospital, and a **wrongful-death lawsuit was later brought against the City of San Diego** as a result of the incident.

I-505

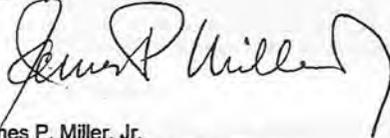
For the sake of the health and welfare of construction workers employed at any Sea World projects near Mission Bay Landfill, as well as for that of nearby City residents and future visitors to Sea World attractions, the potential hazards presented by **the toxic industrial wastes and gases of Mission Bay Landfill should not be underestimated.**

I-506

Information presented in this letter was derived from public records currently available for review at the following government agencies:

- City of San Diego Environmental Services Department
- County of San Diego Department of Environmental Health
- County of San Diego Air Pollution Control District
- California Regional Water Quality Control Board, San Diego Region
- California Integrated Waste Management Board
- California Department of Toxic Substances Control Region 4
- U.S. Environmental Protection Agency Region IX, Superfund division

Sincerely,



James P. Miller, Jr.
Mission Bay Park Toxic Cleanup

Cc: Mayor Dick Murphy, City of San Diego
Richard Gilb, San Diego County Department of Environmental Health
John H. Robertus, California Regional Water Quality Control Board
Edwin F. Lowry, California Department of Toxic Substances Control
Gino Yekta, California Integrated Waste Management Board
Keith Takata, Superfund Division, U.S. Environmental Protection Agency
James Mathis, The Stolar Partnership

- I-505 This comment makes a recommendation regarding the safety of construction workers excavating in the vicinity of the Mission Bay Landfill. Furthermore, in the Phase II evaluation of the Mission Bay Landfill, drill rig operators and geologists took the appropriate precautions to protect themselves against the possibility of encountering toxic gases during the boring operation. See responses to comments S-2, S-3, S-7, S-17, I-502 and I-503.
- I-506 Comment noted.

COMMENTS

RESPONSES



San Diego Chapter
Serving the Environment in San Diego and Imperial Counties

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Voice Info. (619) 299-1744
Email san-diego.chapter@sierraclub.org

City of San Diego
Land Development Review Division
1222 First Avenue, MS 501
San Diego, CA 92101
ATTN: Martha Blake
April 25, 2001
RE: DEIR, Sea World Master Plan Update, IDR 99-0618

Dear Ms. Blake:

I-507 [The San Diego Sierra Club appreciates the opportunity to offer comments and questions on the Sea World Draft EIR. At the direction of the San Diego Planning Commission, the Sierra Club and other community groups and individuals spent much time working with Sea World in an effort to reconcile the project with the Mission Bay Master Plan, the Coastal Act, and with public comments received at the various Sea World "forums." Disappointingly, public input has been broadly ignored in the DEIR proposal. Specific comments detailing the Club's concerns are listed below.

I-508 [**1.3.3 CEQA REQUIREMENTS: PURPOSE AND USES OF THIS EIR:** To clarify precisely what the City must analyze both now and in the future, please explain whether the current project proposal is being reviewed under a Program EIR or a Master EIR. Please specify what "...varying levels of approval by both the City of San Diego and the California Coastal Commission" would be required for "future proposals for site-specific projects on the Sea World leasehold." And under what Standards of Review? (EIR,p.2).
I-509 [If, in accordance with CEQA, the goal of a Master EIR, in contrast to a tiered Program EIR, is to eliminate the 2nd Tier and Special Projects EIR review entirely, what subsequent environmental review would be required for future projects? If, as stated in Design Guidelines, p. S-2, the very general Guidelines themselves become the standards of project evaluation, what would ensure adequate specificity, consistency, and mitigation monitoring responsibilities under Section 1.3? Please explain in detail.

I-511 [**Section 3.6, Project Description, Discretionary Actions:** If Design Guidelines are the standard of review, how would Proposed Level 1 and 2 Thresholds for determining project review levels, based solely on height and major use changes, adequately analyze future site developments? Without regard to other policies and goals of the MBPMP, without regard to such issues as intensification of use, potential visual impacts, and conformance with Chapter 3 Public Access and Recreation policies of the Coastal Act, would the MBPMP Update Amendment, Section 3.5, operate to exempt Sea World from such public review?
I-512 [
I-513 [

3820 Ray Street, San Diego, CA 92104-3623
www.sierraclub.org



- I-507 Comment noted.
- I-508 As stated on page 1-4 in Section 1.3.3, Purpose and Uses of This EIR the SeaWorld Master Plan Update EIR is a program EIR.
- I-509 See Section 3.6, Discretionary Actions of the Draft EIR for a description of the approval process required for future development projects proposed on the SeaWorld leasehold. See also responses to comments L-24 and I-28.
- I-510 Future projects will be subject to environmental review in accordance with CEQA. See also response to comment I-509.
- I-511 See response to comment I-509. Also, the Mitigation, Monitoring and Reporting Program adopted as part of the project would provide the mechanism to ensure that the mitigation measures, including conformance with the SeaWorld Master Plan Update Design Guidelines, are followed.
- I-512 See response to comment I-511.
- I-513 The Mission Bay Park Master Plan Update Amendment would not exempt SeaWorld from compliance with the policies and goals of the Mission Bay Park Master Plan or the Coastal Act. However, the proposed amendments would allow greater height on the SeaWorld leasehold, and the SeaWorld Master Plan Update, which will become part of the Mission Bay Park Master Plan, would provide specific development criteria and design guidelines for future development within the SeaWorld leasehold. The City of San Diego Real Estate Assets, Park and Recreation, and Development Services Department, park advisory committees and the City Council will all utilize the development criteria and design guidelines as a standard for evaluation of proposed new projects.

COMMENTS

RESPONSES



San Diego Chapter
Serving the Environment in San Diego and Imperial Counties

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April 25, 2001
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2.0, ENVIRONMENTAL SETTING: Where is the required discussion of the environment in the vicinity of the project? The DEIR offers simply a litany of regional plans that apply to the site. Without a complete description of the *environmental setting*, the DEIR appears inadequate to investigate and discuss the true environmental consequences of the project. For example, why is there no discussion of the visual quality of the setting; the height, intensity, bulk and scale of other development in the vicinity; the existing marine resources; and public access to and along the shoreline? A summary excerpted here from later Environmental Analysis sections would give the reader a comprehensive understanding of existing baseline conditions for determining significant effects. Because a consistency finding with the existing certified MBPMP and the Coastal Act is ultimately required, a listing and discussion of additional MBPMP "Land Use" and "Aesthetics and Design" Goals and Objectives, as well as Coastal Act Public Access and recreation policies, should be added under 2.2.5 "General Plans" to flesh out the environmental setting.

3.2, PROJECT OBJECTIVES: We note for the record that Sea World's project objectives detail no public or Park benefits. Compliance with the Master Plan and the Coastal Act are statutory requirements, and should not be listed as Project Objectives.

4.0 ENVIRONMENTAL ANALYSIS: In general, the scope of "conceptual" projects being proposed by the DEIR is so extensive that it is impossible to address, or even to know, the impacts from all of them. In an area already suffering from congestion, the Sea World project alone would create significant, unmitigable traffic impacts, without any consideration of Cumulative Impacts from other area projects or the projected growth demands on area roads and recreational facilities. Please identify specific parties or agencies responsible for mitigation monitoring.

- **LAND USE:** Mitigation measures identified in Table S-1 improperly cite approval of the project requests themselves as mitigation for impacts related to inconsistencies with adopted plans and policies. That is, if the MBPMP and the Sea World Master Plan are amended, as requested, current impacts and inconsistencies would henceforth be defined quite differently for Sea World. How would such approvals serve to enhance public access to and along the shoreline? How would the Marina expansion address prior loss of dry boat storage? Please identify where any replanting of eel grass would occur, should it become necessary. If it is not already found in the area, except in the Sea World leasehold, identify why alternative sites would be viable.

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- I-514 Chapter 2.0, Environmental Setting of the Draft EIR provides an overview of the environmental setting. A detailed description of the environmental setting is provided in the "Existing Conditions" sections for Sections 4.1 through 4.13 in the Draft EIR. Without further detail as to why the foregoing sections are inadequate, no further response is possible.
- I-515 See response to comment I-514.
- I-516 See response to comment I-514. Also, see response to comment L-39 for a discussion of the baseline.
- I-517 The information requested in this comment is found in Section 4.1, Land Use of the Draft EIR.
- I-518 This comment presents an opinion regarding the project benefits to the Mission Bay Park and two of the project objectives.
- I-519 This comment restates information in the Draft EIR that certain significant, unmitigable traffic impacts will result from the project. See Section 4.4, Transportation and Circulation and Chapter 5.0, Cumulative Impacts of the Draft EIR for a more detailed discussion of the project-related traffic impacts.
- I-520 As the lead agency, the City of San Diego is responsible for implementing the Mitigation, Monitoring and Reporting Program.
- I-521 The proposed project entails implementing a voter-approved change with respect to land use development on the SeaWorld leasehold. Therefore, the inconsistencies between the voter-approved Proposition D and existing land use policies were identified as significant impacts that could be mitigated through adoption of the Mission Bay Park Master Plan Update Amendment and the SeaWorld Master Plan Update.

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- I-522 Such approvals are not proposed as a measure to enhance public access. Section 9.3, Enhanced Public Access Alternative of the Draft EIR addresses issues associated with enhanced SeaWorld leasehold shoreline access. If this alternative were implemented, the SeaWorld Master Plan Update and the Mission Bay Park Master Plan Update Amendment would not be necessary, as building height along the coastline would be limited to a maximum of 30 feet.
- I-523 The SeaWorld Marina expansion would not affect prior loss of dry boat storage through the provision of 115 new boat slips.
- I-524 See response to comment F-11.
- I-525 See response to comment F-11.

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- I-526 - **NEIGHBORHOOD CHARACTER/AESTHETICS:** Photosimulations included in the DEIR offer incontrovertible evidence of the unmitigable visual quality impacts the projects would create. The DEIR contains no night time photosimulations, as directed by the City's NOP letter. Please provide them prior to issuance of the FEIR.
- I-527
- I-528 Project architecture, particularly the Splashdown Ride, the Front Gate Lighthouse, and the bulk and mass visible in the photosimulations, are "extreme, exaggerated designs" which cannot be "identified as appropriate to the southwestern United States marine environment and which is supportive of the context of Mission Bay Park's landscape." (Aesthetics and Design Goals 1.4 and 1.5, page 10 MBPMP).
- I-529 - **LIGHT, GLARE, AND SHADING:** Although the DEIR identifies no significant impact, there is no analysis of nighttime lighting of the Splashdown Ride, the Special Events Center and other icons, or other conceptual developments. The analysis, therefore, is deficient to identify impacts or possible mitigating alternatives.
- I-530 - **TRANSPORTATION AND CIRCULATION:** Time delays in providing mitigations, as well as apparent cost attributions to the public must be addressed. Mitigations, such as the widening of Sea World Drive, create new, significant adverse impacts to public park land, which have not been discussed as required by CEQA (15126.4).
- I-531 - **WATER QUALITY:** Notices of Violation under existing conditions raise questions as to "No significant impact." What rationale exists for a 2 year delay in installing catch basin inserts to capture runoff pollutants at the point where it enters the storm drain system from parking lots and fueling areas? The DEIR fails to quantify sewage flows into the Metro Wastewater sewer lines, or to state if the plan will require additional flow capacity in the Metro trunklines, and what impacts would result if this is required. What toxic or hazardous materials are present in the site's wastewater? What pretreatment is required?
- I-532
- I-533

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- I-526 This comment concurs with the Draft EIR conclusion regarding significant, unmitigable, visual quality impacts.
- I-527 No night photosimulations were included in the Draft EIR because the daylight photosimulations were sufficient to determine that there would be a significant unmitigable visual quality impact associated with the project. Potential nighttime lighting impacts are addressed in Section 4.3, Light, Glare and Shading of the Draft EIR. See response to comment L-7.
- I-528 In Section 4.2, Neighborhood Character/Aesthetics of the Draft EIR, visual quality impacts from the Splashdown Ride were identified as significant and unmitigable, while the Front Gate Renovation lighthouse would be a small part of the visual landscape that it would be largely unnoticeable outside the SeaWorld leasehold, and hence would not result in a significant, unmitigated, visual quality impact. See response to comment L-6.
- I-529 The nighttime lighting is addressed in an evaluation of the proposed SeaWorld Master Plan Update Design Guidelines. The measures included in the Master Plan Update Guidelines, which are described in Chapter 3.0, Project Description of the Draft EIR, provide Mitigation Measures that would avoid potentially significant impacts.
- I-530 The Draft EIR indicates that SeaWorld's traffic impacts would be mitigated, with the exception of two freeway segments on Interstate 5. See responses to comments L-60, I-10, I-132 and I-322. Furthermore, as to the impacts of widening SeaWorld Drive, see response to comment I-455.
- I-531 See responses to comments L-69 and I-101.
- I-532 See response to comment L-39.

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I-533 Outside of the use of regular water treatment chemicals found in water treatment facilities, there are no other hazardous materials discharged into the water treatment stream that is discharged to Mission Bay. No pretreatment is required of the aquaria water that is discharged into Mission Bay.

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I-534

- **SOLID WASTE MANAGEMENT:** Please quantify the amount of solid waste generated, current and projected, that will be sent to landfills. Quantify the amounts of recycled materials being used and the amounts being collected to be recycled.

I-535

- **NOISE:** Project analysis should include night time analysis. Lack of ambient noise levels from watercraft, traffic, etc., during evening hours would exacerbate noise from Splashdown Ride, public address systems, music, and other Tier 2 and Special Events projects.

I-536

5.0 CUMULATIVE IMPACTS: Chapter 8.0 identifies *significant, unmitigable traffic and visual impacts as well as impacts pertaining to the use of nonrenewable energy and water resources*, from the current Sea World project alone. As directed by the City's July 12, 2000 letter, page 11, cumulative impacts analysis within Mission Bay Park "should include *all existing and pending leases in the park, including those undergoing preliminary review by Real Estates Assets Department.*" (Emphasis added). Why has the analysis been restricted to Dana Harbor and Quivira projects? Photosimulations, for example, clearly indicate cumulative visual impacts include the Hyatt Islandia. We believe an inclusive cumulative analysis, as suggested by the City, would highlight the unmitigable visual impacts being requested by Sea World, and demonstrate the degradation of the Park's visual quality that would result from project approval.

I-537

I-538

I-539

I-540

9.0 ALTERNATIVES: The broad range of alternatives addressed in the DEIR fails to include off-site alternatives, which would include similar uses at different locations, which we believe would fall within the range of "reasonable alternatives." Why is there no alternative discussion regarding project architecture and design? Either the No Project or the environmentally superior Combination Alternative would "...offer substantial environmental advantages over the project proposal." (Goleta II).

I-541

As noted in the City's July 12, 2000 letter to Greg Konar, page 2, "Project objectives will be critical in determining appropriate alternatives for the project, which would reduce significant impacts. The objectives should reflect Sea World's goals in terms of the City's goals for the site." Because the applicant, as previously noted, has included no project objectives reflecting the City's goals, other than mere compliance with statutory requirements and added tax revenue, the alternatives discussion is deficient.

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I-534 See responses to comments I-52 and I-53.

I-535 Nighttime noise levels are accounted for in the calculated Community Noise Equivalent Levels (CNEL) which provides noise level penalty weighting for the evening (7:00 PM to 10:00 PM) and nighttime (10:00 PM to 7:00 AM) periods. Also, SeaWorld typically closes at 11:00 PM in the summer and 5:00 PM in the winter, which is discussed in Chapter 3.0, Project Description and under the "Hours of Operation" heading in the Draft EIR. Therefore, in the wintertime there would be no evening noise generated from SeaWorld operations.

Section 4.7, Noise of the Draft EIR, provides an extensive series of noise measurements in the Mission Bay area to describe the ambient noise condition. The noise meter locations are shown on Figure 4.7-1 and the measured noise levels are provided on Table 4.7-4. Noise levels from the existing evening (5:30 PM and 8:45 PM) Shamu Show were measured and are provided under the "SeaWorld Show Levels" heading on page 4.7-4 of the Draft EIR. This discussion concluded that the Shamu show was not audible at the two field locations where the show was measured (Locations 1 and 10) while the ambient levels were no less than 48 dBA. Consequently, show levels could not have exceeded 30 to 35 dBA at the measured locations. Noise from the Splashdown Ride and Tier 2 projects is addressed in Section 4.7.3, Noise, Impact of the Draft EIR.

I-536 Chapter 8.0, Unavoidable and Irreversible Significant Environmental Effects of the Draft EIR indicates that some traffic impacts would remain unmitigated and visual impacts would remain unmitigated. This chapter also states that future projects' uses of energy and water would be irreversible effects. The basis for selecting cumulative projects addressed in Chapter 5.0, Cumulative Impacts, is set forth on page 5-1 of the Draft EIR. See response to comment L-23.

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- I-537 See responses to comments L-23 and I-536. Existing high-rise hotels in the Mission Bay area were included as part of the visual analysis in Section 4.2, Neighborhood Character/Aesthetics of the Draft EIR. The significant, unmitigable, visual quality impacts are identified in the Draft EIR for the proposed project, primarily due to the height of future structures. As discussed on pages 5-8 and 5-9 of the Draft EIR, since the other cumulative projects in SeaWorld's viewshed would be no higher than 30 feet, no significant cumulative visual quality impacts were identified.
- I-538 Section 15126.6 of the CEQA Guidelines states that an EIR need only describe a range of reasonable, potentially feasible alternatives which would feasibly attain most of the basic objectives of the project. An EIR need not consider every conceivable alternative nor infeasible alternatives to a project. Additionally, alternative locations need not be considered. The key question is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR. CEQA Guidelines, § 15126.6(f)(2). In this case, SeaWorld already exists, so no alternative location is feasible.
- I-539 Alternatives identified in the EIR should avoid or substantially lessen significant effects of the project. CEQA Guidelines, § 15126.6(a).
- I-540 Comment noted.
- I-541 Section 15126.6(d) of the CEQA Guidelines only requires that the Draft EIR include sufficient information about each alternative to allow meaningful evaluation, analysis and comparison with the proposed project. Alternatives chosen should include those that could feasibly accomplish most of the basic objectives of the project. Chapter 9.0, Alternatives of the Draft EIR discusses how each of the different alternatives accomplishes various project objectives and what impacts would be avoided by such alternative. In addition, the City's goals for SeaWorld are reflected in the City-adopted Mission Bay Park Master Plan Update, which is included as one of the project objectives in Section 3.2, Project Objectives of the Draft EIR and the City's Lease with SeaWorld. See response to comment I-71.

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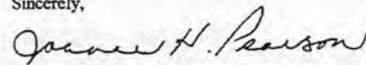
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I-542 [] The City's goals for the site, as we understand them, are reflected in the Mission Bay Park Master Plan and the City's certified Local Coastal Program. In its July 12 letter, the City requests the applicant to "Systematically identify all the relevant goals, objectives, and recommendations in these plans, and analyze whether reasonably foreseeable implementation of the project would be consistent with the plans....Specifically note the consistency of the project with the shoreline access requirements of the Mission Bay Park Master Plan and the California Coastal Act." Where can the reader find this comprehensive analysis? Without it, we believe the DEIR is deficient.

I-543 []
I-544 []
I-545 [] In light of project alternatives considered, we request clear explanation of what site plans, elevations, and square footages were available to the City prior to the release of the DEIR, and what basis was used for analyzing the improvements. If, without project specific details, the City has assumed a "worst case scenario," please state what specifications the City used in its analysis. We would be gravely concerned if the project proposal is requesting blanket approval for such a "worst case" Tier 1, Tier 2, and Special Projects scenario. Please clarify in detail.

In summary, the San Diego Sierra Club thanks you for the opportunity to comment on this important DEIR.

Sincerely,

Joanne H. Pearson, Chair
San Diego Sierra Club Coastal Committee

Cc: Ellen Lirley, Coastal Program Analyst, California Coastal Commission

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- I-542 See response to comment I-I-27.
- I-543 The project's consistency with the shoreline access feature of the Mission Bay Park Master Plan Update is provided in Table 4.1-1 of Section 4.1, Land Use of the Draft EIR. Also see Section 9.3, Enhanced Public Access Alternative of the Draft EIR for information regarding the issues with providing shoreline access on the existing leasehold.
- I-544 See response to comment I-543.
- I-545 Chapter 3.0, Project Description of the Draft EIR provides detailed project information for Tier 1 projects. Tier 2 projects and Special Projects information is also provided in this chapter based on the information available in the SeaWorld Master Plan Update. Tier 2 projects and Special Projects were analyzed on a worst-case basis.
- I-546 The worst- case specifications used were developed from the information presented in the SeaWorld Master Plan Update and the particular topic addressed. For example, the visual quality analysis used "maximum development envelopes" determined from criteria in the Master Plan Update as the criteria for preparing the photosimulations provided in Section 4.2, Neighborhood Characteristics/Aesthetics of the Draft EIR.
- I-547 See also response to comment I-546.

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City Planning Department

I am just an ordinary citizen who has a yearly Sea World, Zoo, and wild animal park pass. These two events are year around, and they both are the biggest attractions in the entertainment world that San Diego has and we surly don't want them to go dormant. Unless the city stands behind them in their expansion plans now and in the future we could lose out to the city's to the north, and in time, again have to travel up the coast to see these kind of attractions. The Zoo and Sea World need to constantly improve to draw people from around the world in order to maintain their credibility, because there is new competition constanly popping up to the north of us.

I-548

Sea world pays its fair share of taxes in all departments of the city's tax structure and they will not be able to do so if they don't stay competitive, and keep up with other attractions and satisfying their patrons.

We do not want a reoccurrence of what happenend thirty-five years ago when the city's from the north kept us from building a convention center. Everytime the convention center came to a vote it was defeated. Then when finally it did pass we built a convention center an eight of the size we should have, and now are completing an expansion that will make us competitive.

What I am trying to say is don't let us stand still and slowly succumb because of wording like roller coaster witch is a splash ride, and etc., but keep an open mind. The people have approved the height so let Sea World grow with the city as it has all the years it has been a part of us.

Thanking you and hope you listen to these words of wisdom.

Henry D. Romano

Page 1

I-548 This comment letter is in support of the project and does not address the adequacy or accuracy of the information presented in the Draft EIR, therefore, no further response is necessary.

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SAN DIEGO AUDUBON SOCIETY

2321 Morena Boulevard, Suite D • San Diego, CA 92110 • 619/275-0557

May 9, 2001

VIA FACSIMILE: 619-446-5499

Ms. Martha Blake
City of San Diego
Land Development Review Division
1222 First Avenue
San Diego, California 92101

Dear Ms. Blake:

SUBJECT: Comments on EIR for SeaWorld Master Plan Update, LRD No. 99-0618

The San Diego Audubon Society is concerned with the potential environmental impacts of the projects that it will facilitated by the proposed update. We feel that the projected expansions will degrade Mission Bay Park in many ways. The scale of the expansions proposed are incompatible with the needs of the citizens of San Diego and the protection of the Park's natural resources. Also, there are a few issues that need to be included in the Update for the benefit of the users of Mission Bay Park. We are also concerned with the clear bias of the document which is not consistent with the requirements of CEQA.

BIRD OVERFLIGHT

I-549 [SeaWorld is located between Mission Bay's Northern Wildlife Preserve and the rest of Mission Bay. Large numbers of bay related birds move from the Northern Wildlife Preserve and other parts of the bay to find optimum conditions for foraging as the tides change. This immediate area contains one of the highest concentrations of bird life in our region. The proposed projects will have several high structures that will obstruct bird flights. Many birds that fly through this site, such as egrets, herons, cormorants, and grebes cannot easily maneuver around obstacles or readily gain altitude. Their mobility and their safety may be threatened by these high structures.

I-550 [Throughout the country there are reports of cases in which birds fly into tall towers and guy wires. These collisions, called bird strikes, result in millions of bird deaths each year, including many endangered or threatened birds. The high towers proposed by SeaWorld could cause similar problems.

I-551 [The EIR failed to address the impacts on bird movement and bird mortality due to these two impacts. The EIR must identify what species fly over the site, the impacts that would result from the proposed phase one and phase two expansions, ways that the designs could be modified to reduce these impacts, how lighting could manage impacts, or whether specific project alternatives could reduce the problem. The "Less Visually Intrusive Alternative" could help reduce this impact. We urge that this issue be researched, observations be made, and a supplement to the EIR be published before any future actions are taken on this project.

I-552 [The flight corridor obstruction of the large and high structures could be somewhat mitigated by lowering buildings and trees to form several relatively clear corridors through SeaWorld.

I-549 The current structures and buildings at SeaWorld have been in place for some time. Most of the Tier 2 structures, while taller than the currently surrounding buildings, would not be extensively larger area-wise (25 percent of the theme park) above the current height limit. In addition, only 25 percent of the entire 187-acre SeaWorld leasehold is allowed to have structures above 30 feet in height. Many bird species, such as the heron, do have the ability to gain altitude in ample time to fly over SeaWorld. Avian collisions with existing structures have not been a noted problem, even though several species, including herons and egrets, some of the least maneuverable fliers, commonly occur well within the core of the SeaWorld facilities. In fact, herons currently nest in the approximately 60 foot tall pine trees near Hubbs SeaWorld Research Institute which would seem to indicate they do have the ability to gain altitude if needed. There is no indication that the relatively limited additional footprint exceeding the current height limitation would affect avian fly-overs at SeaWorld and therefore it would not change with the introduction of Tier 2 projects.

I-550 Tall towers and guy wires are sometimes very inconspicuous and hard to see. Tall buildings with considerable reflective glass and window surfaces that reflect a mirror image of what's behind a bird may also be sources of collision. To address this no elevated guy wires, above the current height limitation (30 feet) are proposed in future construction. Building reflectivity can be addressed by ensuring that non-reflective glass and high visibility design measures are taken so there would not be a significant bird collision issue. This issue is addressed in the SeaWorld Master Plan Update Design Guidelines and more specifically under the Building Design heading on page 3-39 of the Draft EIR. Similar concerns have been contemplated at other sites with

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substantially greater avian activities and risks for collisions such as the Chula Vista Midbayfront, an area surrounded by the Sweetwater Marsh National Wildlife Refuge Building design standards calling for such measures have been considered to be appropriate means of avoiding any potential for significant effects.

I-551 A directed survey of bird flights over SeaWorld was not conducted. However, incidental observations conducted by Merkel & Associates indicate that gulls, waterfowl, herons and egrets, terns, and shorebirds all cross from Mission Bay to the flood control channel over the existing SeaWorld facilities. Some of these birds also stop within the park at various water features. However, the flight patterns are not expected to change based on the fact that the density of development would still provide broad, low elevation flight corridors. SeaWorld Master Plan Update Design Guidelines would address building visibility would address concerns over collisions. Also, see response to comment I-541.

I-552 Comment noted. It is believed that the corridors necessary to provide permeability through the facilities would exist under the proposed project. Further height reduction and increasing corridor widths would not be expected to substantively change either the numbers or patterns of avian flights across the SeaWorld site.

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I-553	<p>IMPACTS OF FIREWORKS ON LEAST TERNS</p> <p>The EIR discusses whether the breeding of the endangered California least terns that nest in Mission Bay would be affected by providing fireworks displays earlier in the spring. We are concerned about the Biological Resources Report's conclusion that expanding the fireworks earlier in the season would not reduce least tern productivity. These conclusions are not scientifically based. No relevant studies on comparable situations are presented. The conclusions are based on conjecture with very little information of only marginal relevance. The least terns are a very precious wildlife resource of the Park. The fireworks events should start in June, after least tern nesting is largely established and the potential for site abandonment is significantly reduced. The conjecture presented in this document does not provide any clear evidence to justify the abandonment of established Mission Bay policy.</p>	I-553 See response to comment F-1 and F-2.
I-554	<p>STONY POINT</p> <p>The EIR noise level analysis seemed to be focused on the least terns that use Mariners Point and FAA Island. However the noise levels at Stony Point are much higher. Stony Point is still designated as a tern nesting area. Noise and startle levels due to SeaWorld should be reduced to allow terns to nest at Stony Point until some better area is established and managed for terns. This EIR should have included the analysis and list of measures that would reduce the impacts of SeaWorld operation to below a level of significance on potential nesting there. If Stony Point is to be written off due to SeaWorld impacts, the EIR should offer mitigation measures to totally offset its loss, such as establishing and preparing another suitable nesting area within the park. This information should be provided in a supplemental EIR and commitments should be made to establish a viable alternative nesting area for California least terns before any decisions are made.</p>	I-554 See response to comment F-2.
I-555	<p>IMPACTS OF FIREWORKS ON WATER QUALITY</p> <p>The fireworks, and expansion thereof, are obviously a part of SeaWorld's Master Plan. A broad range of chemicals are used to provide for the propulsion, explosions, and variety of colors of fireworks. However the EIR did not appear to include a discussion of the water quality and wildlife impacts of the chemicals that fall into the water of Mission Bay from these fireworks. We urge that a supplement to the EIR be circulated to describe SeaWorld's fireworks plan, its impacts on water quality and on the wildlife that use the water, and measures to minimize or avoid the water quality impacts. The Update should then include these measures.</p>	I-555 See response to comment I-169.
I-556	<p>REVIEW OF FUTURE PROJECTS</p> <p>It is proposed that this Master Plan would eliminate the need for thorough public review of many specific projects. During the public outreach process, the vast majority of public comment was opposed to the SeaWorld expansion in general and the specific attractions presented. The public outreach process suggested that the public was uncomfortable with the level of detail of the presentation, the nature of the modifications being considered, and the compatibility of SeaWorld's agenda with the needs of the citizens of San Diego. There was no give-and-take exchange, such as drove the Mission Bay Master Plan Update, that allowed the public to meaningfully influence the future plans for SeaWorld. All future major SeaWorld projects should receive full public review and debate, full project-by-project environmental review, and should proceed through the Mission Bay Park Committee, the Planning Commission, and the City Council, not just those exceeding an arbitrary height threshold.</p>	I-556 This comment provides a recommendation with respect to public involvement in future project review. See also response to comment L-24.
I-557	<p>RECREATIONAL RESOURCES</p> <p>The Mission Bay Master Plan Update, as well as the California Coastal Act, emphasizes the importance of access for the public to the water's edge. The EIR wrongly states that the projects will not result in adverse conditions that would impede pedestrian/bicycle usage of Mission Bay Park. The SeaWorld existing facilities exclude the public from birding, walking and bicycling for a significant portion of the south edge of the Bay. The expansion of SeaWorld, with the increased activity between the gate and the parking lot and the increased bulk of the leasehold area, will</p>	I-557 See response to comment L-83.

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I-557
Cont. additionally degrade the recreational value of this portion of the bay for people birding, bicycling, or walking around the shoreline of Pacific Passage. Measures to offset this loss of recreational value and coastal access is not adequately addressed in the EIR since it fails to acknowledge this impact. With the increase in customer activity between the parking lot and the park entrance, non-park visitors walking or cycling along the south shoreline of ski-bay will have even more difficulty getting through the SeaWorld leasehold.

I-558 We urge that alternatives be defined in the EIR that will either eliminate or offset this loss of recreational value in Mission Bay Park. One very straightforward measure would be for SeaWorld to construct a public walkway along the shoreline between the Bay and SeaWorld facilities that would connect to the shoreline pathways to the east and to the west of SeaWorld's facilities. Such a trail would have very little impact on SeaWorld's land use or facilities. The EIR addresses this possibility under the title of "Enhanced Public Access Alternative" but grossly exaggerates its impact on SeaWorld and it grossly understates the value of this access to the public. However this bayshore access would significantly reduce one of the most negative impacts of SeaWorld on Mission Bay Park users.

I-559 **TREES AS VISUAL BUFFERS, WATER CONSERVATION**
The EIR suggests that a wall of tall trees (80 feet at maturity, as I remember) should be used to surround SeaWorld so tall buildings would be less obvious. This will have a number of inappropriate impacts that are not addressed in the EIR.

- I-560 • Increase water consumption: The additional water consumption of these trees was not computed, but such additional water consumption should be considered a significant impact due to our region's lack of water.
- I-561 • Predator perches: The wall of trees is likely to provide perches to give predators an unnatural advantage over the bay-dependent birds that have used the Bay over history.
- View blockage: The wall of trees will exacerbate, not reduce, the blockage of public views of the bay from many directions. The views of Mission Bay from surrounding hills are very shallow. For some public viewpoints from the hills of Loma Portal and Ocean Beach the proposed buildings and wall of trees will eliminate existing views of Ski Bay.

I-562 **NOISE IMPACTS ON PARK USERS AND NEIGHBORS**
The EIR acknowledges that the expansion projects will radiate noise at a high level and attempts to downplay the impacts of those increases on park users and surrounding communities. The Splash Down Ride may increase ambient noise levels by 3 dB and be audible to 7,000 feet according to the EIR. Contrary to the conclusion of the EIR, this is a significant impact to park users, particularly those seeking passive recreation, relaxation, and wildlife observation. This excessive noise level should be engineered out of the ride, or the ride should not be permitted.

I-563 The SeaWorld public address systems already radiate excessive noise levels. The noise seriously degrades many Mission Bay uses such as passive recreation and relaxation in much of the park, and especially birding along the Northern Wildlife Preserve. The PA noise also degrades the quality of life of surrounding communities. The increased noise of the new attractions will tend to require the PA systems for existing attractions to run even louder so they will be heard in the louder SeaWorld ambient noise level. The EIR does not adequately address these PA impacts.

I-564 These ongoing impacts and the projected increased noise levels can be significantly reduced by lowering the amplification, and by the use of acoustic absorbers, baffles, and reflectors. The noise of the Splashdown ride and other machinery can be reduced by choices of materials, tightening mechanical tolerances, the use of acoustic absorbers, baffles, and reflectors, and lower speeds. We urge the Master Plan and the EIR to identify a suite of measures that will aggressively lower the noise impact of current and future SeaWorld activities. The EIR should

I-558 As noted, this proposal is addressed in Section 9.3, Enhanced Public Access of the Draft EIR. The City will take this comment into consideration when it makes its determination concerning the proposed project.

I-559 Water use for future landscaping that would lessen visual impacts would follow SeaWorld's water conservation measures as described in Section 4.13, Water Conservation of the Draft EIR. This additional water use is not considered significant because it would not be a large quantity of water and because of the water conservation methods employed by SeaWorld to minimize water use. Also, see response to comment I-161.

I-560 Currently, there are abundant trees, buildings, and other perch sites available around the SeaWorld facilities. Not all of these areas are used by predators all of the time. As a result, new construction would not be expected to add a noticeable number of potential predatory perches. In addition, the Draft EIR addresses potential predatory perch sites that could affect the Stony Point Preserve least tern nesting site, which is currently unused, in Mitigation Measure 4.6-3.

I-561 Landscaping, in particular taller trees similar to the trees located on and near the western part of the leasehold, would provide a more natural vegetative screen of future structures. On other land development projects, the City typically will identify landscaping as a means to reduce visual impacts. Generally, the result is a more visually appealing view.

I-562 The ambient noise environment in the vicinity of SeaWorld includes a variety of noise sources, from vehicular traffic on SeaWorld Drive, Ingraham Street, and I-5 to the personal watercraft usage in South Pacific Passage, I-5 and aircraft. The comparison of ambient noise levels with the noise levels resulting from the Splashdown Ride indicates that the Splashdown Ride would generate noise levels that are lower than ambient conditions in nearly all areas, with the exception of Fiesta Island and South Shores Boat Launch. In addition, a 3 dBA increase in noise levels is not detectable to the human ear as explained in Section 4.7, Noise of the Draft EIR. Thus, no significant noise impact will occur from the Splashdown Ride. See response to comment I-438.

I-563 See response to comment I-87.

COMMENTS

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I-564 Because no significant impact was identified as a result of the Splashdown Ride, no mitigation measure was required. CEQA Guidelines, § 15126.4(a)(3). As to significant noise impacts resulting from the project, Mitigation Measures 4.7-1 and 4.7-2 are set forth in Section 4.7.5, Mitigation, Monitoring and Reporting of the Draft EIR to address potential noise impacts from future Tier 2 projects and noise impacts to future hotel patrons. See response to comment I-49.

COMMENTS

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- I-565 [define measures so that new planned SeaWorld projects will radiate much lower sound levels than the current projects. The Master Plan should also incorporate an aggressive radiated noise reduction plan that will substantially reduce radiated noise for existing attractions to help offset the cumulative impacts of the expansion on the park and the surrounding communities.
- I-566 [The target of the radiated noise reduction program should be consistent with the goals of the City's Noise Abatement ordinances. They require that amplified noise in the City not be audible beyond 50 feet. For situations in parks the ordinance requires that amplified noise be low enough that it not be audible beyond 10 feet. We urge that the SeaWorld Master Plan Update and EIR identify ways so the radiated noise of each project is not audible more than 50 feet from that project, so they would not project beyond the parking lots. The City Ordinance should provide the "applicable standard" for deciding what is acceptable.
- I-567 [**LOSS OF PARKLAND**
The EIR states that the expansion of SeaWorld will result in additional traffic and that two additional lanes will be required along Sea World Drive. This road expansion will displace several acres of park land. The EIR does not address this loss. The use of Mission Bay is projected to steadily increase into the future. The Mission Bay Master Plan Update has delineated several areas of the park for native vegetation and habitat oriented recreation. Some of this area is along Sea World Drive. On the south side of Sea World Drive is a buffer area between the Road and the frontage road that is heavily used for birding and relaxing. It is also a buffer between intense activity and the Northern Wildlife Refuge. The expansion of Sea World Drive will degrade park value and park area to both of these public resources. This is a very high environmental and recreational cost that will result from the elements of the SeaWorld Master Plan Update. These impacts must be addressed in the EIR, and alternatives that will reduce these impacts and measures to offset the losses must be identified. We urge that a supplemental EIR be developed that will address this issue.
- I-568 [**IMPACTS ON OTHER NEARBY PARK AREAS**
South Shores Park is immediately east of the SeaWorld leasehold. This area has been extensively developed recently. Its expansion is intended to accommodate our increasing population. The EIR does not address the impacts of the SeaWorld Expansion plans on the viability of this park. These impacts will include noise, traffic, access along the shoreline for walking and bicycling, views, etc. It appears that SeaWorld will loom over this area and its noise will dominate any activity there.
- I-569 [**IMPACTS ON OTHER NEARBY PARK AREAS**
Fiesta Island, across the channel from SeaWorld, is also expected to provide parkland for our expanding population. This area will also be degraded by the view obstruction and noise of Sea World.
- I-571 [The road along Mission Bay's Southern Wildlife Refuge, south of Sea World Drive, is one of the best birding areas in the San Diego region. It is featured in birding guides for California, Southern California, and the San Diego Region. It is visited by birding tours from all over the US and from Europe. Hearing the sounds of the birds is a major part of birding. Many similar species are differentiated by differences in their calls. These calls are especially significant for birders from outside our region who may be seeing and hearing these species for the first time. The value of this portion of Mission Bay will be significantly degraded for these visitors by the SeaWorld Expansion. The degradation will come from the increased traffic noise along Sea World Drive, the increased PA and ride noise from SeaWorld features, and the obstruction of the views to the north.
- I-572 [In a few years these areas of the park should be developed and heavily used by the public. We will need these additional high-value park resources to accommodate future population
- I-565 Section 4.7, Noise addresses noise effects from the proposed project. Noise impacts were determined to either be non-significant or significant and mitigable.
- I-566 The noise analysis conducted in Section 4.7, Noise took into account the adopted City Noise Ordinance and found that noise impacts were either non-significant or significant and mitigable. Additionally, this comment is a recommendation that the City will consider when it makes its determination concerning the proposed project.
- I-567 See response to comment I-131.
- I-568 See response to comment I-131.
- I-569 As indicated in the Draft EIR, noise effects from the proposed Splashdown Ride would primarily affect the boat launch ramp area parking lot. See page 4.7-24 of the Draft EIR. This is an active recreation area with existing noise from vehicles and boats. The SeaWorld Master Plan Update will not affect the existing shoreline access in the South Shores area, since the proposed project only covers the SeaWorld leasehold. Traffic volumes on SeaWorld Drive would increase over time; however SeaWorld's contribution to these impacts would be mitigated. Therefore, these SeaWorld-related impacts would not significantly affect South Shores Park. However, from a visual quality standpoint, future development on the SeaWorld leasehold, including the proposed Splashdown Ride would result in significant visual quality impacts which would affect the South Shore Park.
- I-570 Section 4.2.4, Neighborhood Character/Aesthetics, Significance of Impact of the Draft EIR states that significant, unmitigable visual quality impacts will result from the project. As to noise, one of the ambient noise measurement locations was Fiesta Island (Location #7). No significant noise impacts were identified at Fiesta Island from the proposed project. Noise Mitigation Measure 4.7-1 addresses potential future noise impacts from Tier 2 projects.

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I-571 An increase in SeaWorld traffic on SeaWorld Drive would result in a 0.5 dBA noise increase in 2020 at 50 feet from the centerline of the nearest lane (Table 4.7-9 in the Draft EIR). Human perception in changes to noise levels range between 2 and 3 dBA, therefore this noise increase would be imperceptible to the human ear. Noise from the Splashdown Ride and future Tier 2 rides, as well as PA systems associated with future shows are addressed in Section 4.7, Noise of the Draft EIR. See also response to comment I-87. The Splashdown Ride would result in noise levels lower than ambient levels in the vicinity of Mission Bay's Southern Wildlife Refuge, south of SeaWorld Drive. In addition, noise in this area is dominated by vehicular traffic noise from Interstate 8, Interstate 5 and SeaWorld Drive, which surround the Refuge on three sides. As to views, future development on the SeaWorld leasehold would result in the obstruction of some views which were identified as a significant unmitigable impact in the Draft EIR.

I-572 See response to comment I-127.

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I-572 Cont.	increases. Inappropriate development by SeaWorld will reduce their value and their use. The EIR failed to identify these impacts to nearby parkland within Mission Bay Park, to evaluate the significance of these impacts, and to define ways to eliminate, or at least reduce these impacts as required by CEQA. The EIR also failed to assess the cumulative impact of the SeaWorld Expansion on nearby park areas. The EIR must be augmented to fully address these impacts on these nearby park elements and alternatives to reduce or mitigate them.	I-573	The cumulative land use impact is addressed in Section 5.2.1, Cumulative Impact Analysis, Land Use of the Draft EIR. Since all of the cumulative projects involve redevelopment of existing development, a significant land use impact was not identified. However, significant cumulative traffic impacts were identified in Section 5.2.4, Cumulative Impact Analysis, Transportation/ Circulation of the Draft EIR.
I-574	WATER QUALITY, STREET RUNOFF The EIR estimates the increased traffic that will result on various streets within Mission Bay Park due to the expansion of SeaWorld. The Best Management Practices (BMPs) offered in the EIR only deal with water from the SeaWorld leasehold. This EIR should also identify the increase in pollutant load within Mission Bay Park that will result from the SeaWorld expansion. Water quality BMPs should be identified that would mitigate the full pollutant load in Mission Bay due to the expansion. Where possible the BMPs should be located in the SeaWorld leasehold to minimize loss of parkland.	I-574	See response to comment I-305.
I-575	MASS TRANSIT, TRAFFIC, WATER QUALITY, AIR QUALITY, ENERGY CONSERVATION This Master Plan Update should incorporate measures to bring visitors to SeaWorld by mass transit instead of private automobiles. It should include extremely convenient and attractive loading and unloading facilities for buses to transit centers, trolley stops, Coaster station, park-and-ride lots, and other public and tourist oriented transportation modes. The effort should be directed at incrementally making mass transit the dominant means of access to SeaWorld. This alternative should be identified and its implications thoroughly evaluated in the EIR.	I-575	See response to comment L-22.
I-576	WATER QUALITY, SEAWORLD MARINA EXPANSION We urge that two-stroke personal watercraft not be rented at the Marina. If any personal watercraft are to be stored or rented at the Marina we strongly urge that they be of clean four-stroke technology. This will benefit both water and air quality.	I-576	See response to comment I-54.
I-577	The EIR proposes that no bottom paint be removed in the SeaWorld Marina to prevent contamination. But, bottom paint is designed to continuously shed so fresh toxins are always at the surface. Thus the paint is constantly being removed. No additional toxins should be introduced due to this Marina expansion. We urge that no additional toxic bottom paint be placed in Mission Bay as a result of the SeaWorld Marina expansion. So, if additional docks are permitted we urge that any additional boats using them be required to use non-toxic bottom paint or other non-toxic anti-fouling measures. Until practical non-toxic antifouling measures are commercially available, the docks should not be permitted.	I-577	Mitigation Measure 4.5-1 prohibits "boat hull paint removal and repainting in the marina area." Boat hulls are coated with EPA approved materials which are deemed safe by the federal government as part of their regulations protecting water quality.
I-578	The Marina expansion should only be permitted if prime eelgrass mitigation opportunities can be identified within Mission Bay to fully offset the resulting loss of eelgrass community habitat.	I-578	This comment provides a recommendation regarding marina eelgrass mitigation sites. The eelgrass mitigation program identified in the Draft EIR would follow the adopted Southern California Eelgrass Mitigation Policy. A separate biology report covering eelgrass mitigation would be required at the time the Marina is proposed. See response to comment F-11.
I-579	PROBITY OF THIS DOCUMENT AS AN EIR The EIR is required to provide a neutral and totally unbiased analysis of the advantages and disadvantages of various alternatives. Table S-2 is the heart of the Alternatives Analysis portion of the document. In many cases the language describing the advantages and disadvantages is highly biased. The alternatives favored by SeaWorld are supported by many specific points, and the disadvantages are trivialized. For alternatives not favored by SeaWorld, the advantages are vaguely stated and the disadvantages are exaggerated. Such biased analysis is contrary to the requirements of CEQA. A typical example is the discussion of the "Less Visually Intrusive Alternative" on page S-23. We strongly appreciate the many alternatives that are addressed in this table. However we urge that it be rewritten to present a fair and unbiased analysis of the alternatives.	I-579	Section 15126.6(d) of the CEQA Guidelines only requires that the Draft EIR include sufficient information about each alternative to allow meaningful evaluation, analysis and comparison with the proposed project. Chapter 9.0, Project Alternatives provides an analysis of eight project alternatives.

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OBSTRUCTION OF VIEWS AND SCALE OF PROJECT

Mission Bay was originally a very flat area with water, mud flats, low marshes, and a few low islands that would probably be submerged at the highest tides. The flatness of this area is still evident even with the alterations that have been made. The proposed expansion of SeaWorld would obscure that planar estuarine landscape. A person driving or walking along SeaWorld Drive adjacent to SeaWorld would be almost as isolated to the geography of Mission Bay as he would be on Garnet Street in Pacific Beach. This isolation from Mission Bay is shown well in the EIR's simulations such as Figure 4.2-32.

I-580

We are often told by planners that high-rise development can improve viewsheds - that when structures are higher, they use the land more efficiently, building footprints can be substantially reduced, and better views are available between buildings. Ironically with the SeaWorld proposal we get high structures, but the lower structures are also higher and have larger footprints, and there are more buildings. This plan demonstrates no respect for the park, the Bay, the communities, or the region outside of their leasehold and the EIR does not adequately acknowledge, nor identify better alternatives.

I-580 See responses to comments I-379 regarding maximum developable envelopes and I-538 regarding reasonable alternatives required.

I-581

The SeaWorld Expansion plans are not an appropriate scale for Mission Bay. If SeaWorld cannot be economically viable without taking over a major portion of Mission Bay, then it is more important for us to preserve Mission Bay. I strongly suspect that SeaWorld can develop an economic and strategic model that would allow it to prosper and to coexist benignly with the rest of Mission Bay. However their current aggressive growth oriented strategy, as depicted in this document, is not compatible with the needs of the citizens of San Diego and must be totally revised.

I-581 Comment noted.

I-582

A LONG TERM PERSPECTIVE

We are told that the population of our region will increase by 40% over the next 20 years. Thus we can assume that a lot more citizens of San Diego will use Mission Bay for recreation. This will not be possible if the commercial uses of Mission Bay make major portions of the park less usable by the public.

I-582 Comment noted.

I-583

The oceanarium use on which SeaWorld was originally focused were very suitable as a park use and was very bay dependent. The emphasis of the SeaWorld Expansion is very much away from bay dependence and from being a public benefit. SeaWorld says that it must continue to grow to compete in the tourism business. The proposed expansion will obviously not be the last. Thus SeaWorld appears to be diverging with the needs of Mission Bay Park in terms of both size and direction.

I-583 See response to comment I-71.

I-584

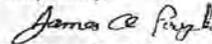
We strongly urge that this EIR be expanded to fully and adequately consider the long term and cumulative impacts of SeaWorld Expansion on Mission Bay in terms of all of the dimensions mentioned above. It should include alternatives that will fully offset these potential impacts. The San Diego Zoo expanded beyond Balboa Park into the Wild Animal Park to satisfy its growth needs decades ago. This EIR should identify an alternative that would leave the Bay dependent, educational, and public serving elements of SeaWorld at the current location. Such an alternative would relocate the thrill ride, amusement park, excessively loud, and pure entertainment elements of SeaWorld to a non-park location. Such an alternative may be the only way to avoid the excessive unmitigatable impacts on the Park of the SeaWorld Master Plan Update. We urge that such an off-site alternative be fully explored in the EIR.

I-584 See responses I-549 to I-583 for responses to comments in this letter, including responses that address a project alternative outside of Mission Bay Park.

I-585

I-585 See response to comment I-538.

Respectfully,



James A. Peugh
Coastal and Wetlands Conservation Chair

Sea Paw

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25 April 2001

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SUBJECT: SEA WORLD MASTER PLAN UPDATE, DRAFT ENVIRONMENTAL
 IMPACT REPORT

DISCUSSION:

The Sea World Master Plan Update (SWMPU) as proposed will have massive undesirable environmental impacts that cannot be mitigated in the proposed project plan. These undesirable impacts include:

1. Change in emphasis away from Sea World's historic marine animal and educational themes.
2. Serious impacts to views and viewsheds due to increased height and density of buildings and attractions, and lack of view corridors thru the project.
3. Serious impacts from noise from attractions and special events, and the extreme environmental damage caused by fireworks to wildlife and the quality of life for residents in noise impacted communities.
4. Dramatic impacts from park expansion and intensification upon traffic congestion and circulation.
5. Negative impacts to water quality and habitat in Mission Bay.
6. Illegal proposal to build a new hotel or parking garage over the 30 foot height limit without voter approval of this type of project.
7. Proposition D is vague and ambiguous, discriminates against visually impaired, and does not use a legal measurement for height limit determination.

I-586

In order to alleviate some of the potential above impacts, there needs to be significant restrictions placed on Sea World's redevelopment plan in the new Master Plan Update that would help reduce the significance of these impacts.

Of significance is the fact that Sea World is located in Mission Bay Park on public land and not on

I-586 The proposed project includes extensive height restrictions as described in Section 3.4, Proposed Master Plan Update and Operations and more specifically in Table 3.4-1 of the Draft EIR. Furthermore, a reasonable range of eight project alternatives are presented in Chapter 9.0, Alternatives of the Draft EIR.

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I-587 private land. First and foremost, any development must respond to the public good and not just private corporate interests. If Sea World can not or will not respond to the Public needs of the surrounding communities, than the proposed redevelopment plan should be denied.

I-588 In this redevelopment proposal, Sea World has had a history of lying and misleading the public on the proposed redevelopment plan. For example, prior to gaining the 16.5 acres at South Shores, Sea World representatives told the public at a meeting with the Clairemont Town Council that they had no plans for building a parking structure and needed the 16.5 acres for parking. After Sea World received the 16.5 acres from the City of San Diego, the representatives for Sea World said that a parking structure was, in fact, a good idea, and that it now is a part of the new Sea World Master Plan Update, as I am sure it was all along. A parking structure is a good idea and should have been admitted to from the beginning, at least to maintain some sense of creditability. It is also important to note that it was my public comments that proposed it be reduced form 50 feet to 45 feet, with the bottom level being semi-subterranean to reduce the height.

Prior to the vote on Proposition D on 3 November 1998, the General Manager of Sea World San Diego, Mr. Bill Davis, said that Sea World had no plans for a roller coaster type ride. Now that Proposition D has passed (by a small majority), Sea World is pushing for a roller coaster type ride with the proposed "Splashdown Ride" for immediate construction in the Tier 1 redevelopment proposal. While I am personally in favor of this type of ride, the lack of honesty on the part of Sea World is troublesome.

I-589 Even in the historic saving of the life of the baby gray whale, J.J., Sea World inappropriately attached a radio transmitter on the back of the whale. When released to freedom, the first thing J.J. wanted to do was remove the radio transmitter from its back. After scraping the radio transmitter off its back, J.J. headed north on its migration route. Just like J.J., we need to scrape down some of the over-height and over-building of the redevelopment plans Sea World has proposed in its Master Plan Update, for the public good and the environmental health of the surrounding habitat areas.

1. Potential change in Sea World's marine animal and educational themes.

I-590 In order to control the change in the Sea World marine animal and educational theme, there needs to be a limitation placed on thrill rides allowed, and, in particular, on rail thrill rides. There should be a limitation of (6) thrill rides total, with a limitation of only (3) of these allowed to be rail thrill rides in the Master Plan Update. These numbers could be less, but this appears to be a reasonable starting point for a discussion on limitations of thrill rides in this redevelopment plan. At least we might get an idea of what Sea World intends to propose with these limitations as part of the Master Plan.

I-591 Currently, there is one thrill ride in operation, with Ship Wreck Rapids, and one rail thrill ride proposed in Tier 1 with the Splashdown Ride. This will leave a maximum of (4) possible thrill rides allowed for Tier 2, and only (2) of these could be rail thrill rides. The Sea World Tower Ride and the Sea World Sky ride would not be classified as "thrill rides" in this context.

I-587 Comment noted. See response to comment I-71.

I-716 Comment noted.

I-589 See response to comment I-586.

I-590 See response to comment I-586.

I-591 See response to comment I-586.

COMMENTS

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2. Serious impacts to views and viewsheds.

- I-592 [A) It is important to note that early in public comment, I suggested that Sea World have a "Bulk Plane Setback" in the SWMPU, but the proposed shoreline setback and shoreline bulk plane setback are not acceptable as proposed, and are inconsistent with the Mission Bay Master Plan which requires a 50 foot wide public access corridor along the water's edge. Due to negative visual impacts and impacts to eelgrass resources due to sunlight shading (see Appendix D, Biological Resources Reports to the SWMPU, Draft EIR, pages 8 to 13), Sea World should be required to implement a 50 foot set back from the existing riprap along its northern border (see Exhibit 1, in this report), as required in the Mission Bay Master Plan (page 16). This area could have, at least, 25 feet (of the 50 feet) available for public use and access to this area could be closed off at night, but it would be made available for public use during daylight hours.
- I-593 [
- I-594 [In order to allow Sea World a reasonable redevelopment plan and a connection to Mission Bay, the Exhibit/Ride Show Area (Area F-2), and the Administrative and Support location (Area-3) could be exempt from this requirement, but would have a 30 foot (or less) height limit within 50 feet of the shoreline along with other restrictions, so that the concepts presented in the Mission Bay Master Plan (page 16) would be preserved.
- I-595 [The 50 foot setback is an important part of the Mission bay Master Plan (page 16) and is supposed to be required by all new developments along the water's edge. This 50 foot setback should be required along the water's edge from the area on the north shore from the east by South Shores (Area A-1), to the area where Perez Cove starts (Area E-2). The Marina (Area 4) and the proposed hotel site (Area 5) should also be required to comply with the 50 foot shoreline setback as required in the Mission Bay Park Master Plan.
- I-596 [B) The proposed perimeter bulk plane setback is incomplete as presented in the SWMPU, and needs to be modified. As mentioned above, it needs to start 50 feet back from the top of the riprap along the northern edge shoreline. While much of it can be as proposed (in Figure 3.4-2 of the SWMPU, Draft EIR), it needs to be set back 50 feet from the north shoreline, and the areas around Perez Cove need to be included in the bulk plane set back requirement as well. (See Exhibit 2.)
- I-597 [To help reduce the visual impacts from any structures in the parking lot area, the entire parking lot should have a height limit of 45 feet with the bulk plane setback around the perimeter starting at 30 feet with an incline of 45° until 45 feet is reached. (See Exhibit 2.) The proposed parking structure must be limited to 30 feet in height, as Proposition D specifically limits Sea World to go over height with only certain types of structures when it states, "amend the 30-foot height limit in the Coastal Zone to allow Sea World to plan and construct exhibits, attractions and educational facilities only...". (See Exhibit 11.) This legal issue of what can be permitted over the 30-foot height limit is discussed further in Section 6 and Section 7.
- I-598 [
- I-599 [C) Since this project is located in Mission Bay Park, views and open space are an important part of the Park's atmosphere, there needs to be a way to allow views thru the project.

- I-592 Section 9.3, Enhanced Public Access of the Draft EIR provides a discussion of a public access along the water's edge.
- I-593 See response to comment I-592.
- I-594 See response to comment I-592.
- I-595 See response to comment I-592.
- I-596 See responses to comments I-586 and I-592.
- I-597 Section 4.2, Neighborhood Characteristics of the Draft EIR indicates that the parking structure would not result in a significant visual impact because only the very upper portions of this proposed 45-foot high structure would be visible outside the SeaWorld leasehold. See response to comment I-598 regarding comments on Proposition D.
- I-598 The legally governing and authoritative language of an ordinance is found solely in the text of the ordinance itself and not in the supplemental city attorney's impartial analysis. The City Attorney's Impartial Analysis, which was included with the text of Proposition D, is merely intended for informational purposes only. See e.g., *Carter v. Seaboard Finance Co.* (1949) 33 Cal.2d 564, 580-81. Thus, the provisions of Proposition D, not the statements set forth in the City Attorney's Impartial Analysis, provide the authority on what types of development are permitted with heights exceeding the 30-foot height limit.

COMMENTS

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Further, Section 2.B of Proposition D expressly permits structures over the 30-foot height limit which are "used for recreational, exhibition, educational, research and scientific purposes." California courts have held that parking automobiles is a beneficial, incidental use to the enjoyment of park property. In *Abbot Kinney Co. v. City of Los Angeles* (1963) 233 Cal. App. 2d 668, 673, the court stated that the development of a parking area was a reasonable and beneficial use incidental to the public's enjoyment of the park property. Likewise, the construction of the proposed parking structure would not be inconsistent with, but beneficial and incidental to, the public's use and enjoyment of the theme park.

I-599 See response to comment I-586. Section 9.7, Less Visually Intrusive Alternative and Section 9.8, Combination Alternative of the Draft EIR address project alternatives that lessen significant visual quality impacts identified for the proposed project.

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I-600	There are two significant views that would be blocked the most. One is the view from the West Mission Bay Drive Bridge (SWMPU, Draft EIR, KVP-3, Figure 4.2-5). This view is a significant view of Mount Soledad and there is a whole mountain view that would be blocked by the proposed development. (See Exhibit 4, Picture A.) The other is a unique from Clairemont that allows a view of the ocean surf at Dog Beach and Ocean Beach, and a view of the Ocean Beach Pier. (See Exhibit 7 & 8.)	I-600	Visual impacts were addressed in Section 4.2, Neighborhood Characteristics/Aesthetics of the Draft EIR which found significant unmitigable project impacts.
I-601		I-601	See response to comment I-600.
I-602	To reduce view impacts and increase the view thru the project, there are two areas where view corridors with a height limit of 60 feet (or 45 feet) would enhance the public views. (See Exhibit 3.) The concept of view corridors was not considered in the Draft EIR for the Sea World Master Plan Update. While a 60 foot height limit is being proposed here, a 45 foot height limit might be more appropriate for the view corridors to function effectively.	I-602	See response to comment I-599.
I-603		I-603	See response to comment I-599.
I-604	When looking at the views from West Mission Bay Drive Bridge (KVP-3), there is a significant view that would be blocked (see Exhibit 4, Picture A). When looking at all the view points, there are really only two significant views beyond Sea World that would be blocked substantially by the redevelopment proposal. As was mentioned earlier, the other is from Clairemont. (See Exhibit 5 & 6.)	I-604	See response to comment I-600.
I-605	Even the Less Visually Intrusive Alternative does not provide an ability to improve the view from the West Mission Bay Drive Bridge. Not only would the view still be blocked, but the view that would be available, would have the "picket-fence effect." That is, you could see that something was on the other side of Sea World, but you couldn't see enough of it to tell what it is you were looking at. The solution to this would be a requirement for a view corridor thru the development (see Exhibit 3, Area 2 View Corridor) with a height limit of 60 feet (or 45 feet). (See Exhibit 4, Picture B.)	I-605	See responses to comments I-379, I-538 and I-599.
I-606	As one can see from the Photosimulation of Maximum Potential Buildout Mass from West Mission Bay Bridge, KVP-3 (SWMPU, Draft EIR, Figure 4.2-32), the potential buildout would totally destroy this view of Mount Soledad from this Bridge. With the proposed Area 2 View Corridor (see Exhibit 3), with a height limit of 60 feet (or 45 feet), a portion of this view would be realized. (See Exhibit 4, Picture B.)	I-606	See response to comment I-600.
I-607		I-607	See response to comment I-599.
I-608	This proposed View Corridor Area 2, would allow a significant portion of the view to be seen from KVP-3 while having minimal impact on the overall project. Only Exhibit Areas J-2, L-2, and C-1 would entirely be affected, and Areas E-2, G-2, and H-2 would be slightly be affected on their perimeters.	I-608	See response to comment I-599.
I-609	Of these, L-2 is a proposed children's area with less need for height than other areas, so the limitation of 60 feet would have little consequences on the development of this area.	I-609	See response to comment I-599.
I-610	The other redevelopment that would be impacted by this restriction would be Area C-1, which is the Front Gate Renovation. When the Front Gate Renovation was originally proposed, the lighthouse presented in Tier 1 was only 60 feet high at the time. With a limitation of 60 feet for the lighthouse, it will go back to its original configuration and still have the grandeur and entrance	I-610	See response to comment I-599.

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I-610 Cont. impact desired in the redevelopment plan. With the lighthouse at 60 feet, the light in the lighthouse will no longer be problematic to the surrounding communities and their residents. Even if the Area 2 View Corridor needed to be 45 feet, the lighthouse could be allowed to go to 60 feet without seriously impacting the view corridor.

I-611 The only development proposal that would be seriously affected would be the development planned for Area J-2, but Sea World has not presented plans for this area, so the 60 foot height limit for this area should be easy to work out in its redevelopment plan.

I-612 For as many times as Sea World says they want to be a good neighbor, it is about time they say, "Yes" to this view corridor proposal, so we can have a "public view" thru their project which is located in a "public park" on "public land."

I-613 The other significant view that the proposed redevelopment would seriously affect is a unique view of the ocean surf at Dog Beach and Ocean Beach from the community of Clairemont. (See Exhibit 5 & 6.) There is no other area or community that has a public view of the ocean surf and beach (at a distance from the Ocean), like the view that can be seen from this particular area in Clairemont. (See Exhibit 7 & 8.)

I-614 This view occurs in the area in Clairemont known as Western Hills and many of the private residents see and enjoy this same view. This view can be seen in the public ROW along Clairemont Drive between Iroquois St. (see Exhibit 7, Picture A), and Hartford Ct (see Exhibit 8, Picture B); along Huxley St. between Tokalon St. and Deerpark Dr.; along Jellett St. between Burgner Blvd. and Deerpark Dr.; along Lister St. between Burgner Blvd. and Deerpark Dr.; along Field St. between Fairfield St. and Grandview St. (see Exhibit 8, Picture A); and at the end of Fairfield St. where the public ROW goes to Western Hills Park (see Exhibit 7, Picture B).

I-615 The view corridor for this unique view travels over the Sea World redevelopment area (see Exhibit 6). Any development over 60 feet in height in the Perez Cove area would seriously block this precious public view.

I-616 The proposed potential hotel site (Area 5), is planned to be built above 60 feet, and this would destroy this public view. The legality of a hotel built over 30 feet will be discussed in Section 6 and Section 7 of this report. The view corridor that I have proposed with a height limit of 60 feet (see Exhibit 3, Area 1 View Corridor) would be required in the Sea World Master Plan Update in order to protect this unique California coastal surf view. It is important to note that public views of the coastal zone are protected by the laws of the State of California, CEQUA, and the Coastal Protection Acts.

I-617

3. Serious impacts from attractions, special events, and especially fireworks.

I-618 When Proposition D was presented to the voters, the GM for Sea World at San Diego, Mr. Bill Davis, went before the news media and stated that all projects over 30 feet would get full public review. It is important that the Sea World Master Plan Update stipulate that all projects proposed to go over 30 feet, will go through the full public review process as promised by Sea World prior

I-611 See response to comment I-599.

I-612 See response to comment I-599.

I-613 See response to comment I-600.

I-614 A view from Clairemont Drive was addressed in Section 4.2, Neighborhood Characteristics/Aesthetics of the Draft EIR. This section of the Draft EIR found visual quality impacts to be significant and unmitigable.

I-615 See response to comment I-614.

I-616 See response to comment I-614 regarding visual quality impacts and response to comment I-636 regarding the hotel height.

I-617 See response to comment I-614.

I-618 See responses to comments L-24 and I-598.

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I-618 Cont.	to the passage of Proposition D. Sea World must live up to its promise on this issue as we have had enough half-truths and misleading statements from Sea World representatives.	I-619 See response to comment L-127.
I-619	The noise from fireworks has been particularly problematic and has caused a disruption in the surrounding communities. Every night when the fireworks go off, dogs bark, birds take to flight, and my dog becomes terrified. The noise from the fireworks has had a serious affect on my community, and the noise level from the fireworks in Clairemont where I live is much greater than the noise from fireworks that affects Mission Beach. There needs to be a noise study done on the fireworks, and something needs to be done to ban the loud "boomers" that are so disruptive. "Sizzler" type fireworks are less noisy than the big "boomer" type.	I-620 Comment noted.
I-620	Also, since 1997 the fireworks have gotten a lot louder and have continued to be louder and longer in duration than those prior to 1997.	I-621 See responses to comments F-1 and F-2.
I-621	There needs to also be a ban on fireworks when the least terns are nesting and when they are seeking nesting sites. I would propose a ban on all fireworks from April 1 through July 1, so that the affect upon least terns could be properly studied.	I-622 Comment noted.
I-622	Also, the least tern nesting site at Stony Point has been unproductive (probably due to the fireworks), so I am recommending that an Alternative Least Tern Nesting Site be proposed for the South Shores area, bordered by 50 feet in from the Pacific Passage on the west, East Mission Bay Drive on the north, Sea World Drive on the east, and a boundary line from Friars Road and Sea World Drive intersection to Pacific Passage on the south. (See Exhibit 10.) This is important to have this new location for an alternative least tern nesting site because the old alternative least tern nesting site is to be removed for construction of a new access road into Quivira Basin.	I-623 This comment is an opinion that a blue heron nesting site within the project should be protected. See also response to comment F-5.
I-623	Also, there is a blue heron nesting site at Sea World in Area 5 where the new hotel is proposed. We need to protect this nesting site at Sea World, as it is the only place in Mission Bay where blue herons nest. Part of this nesting site expands across the street to Dana Landing where there is one tree used by the blue herons for nesting (the Sea World site has about 13 trees used for nesting).	I-624 See response to comment I-623.
I-624	The Sea Worlds Master Plan Update must be required to acknowledge the blue heron nesting site as a valuable natural resource. This site must be designated in the plan as a protected area, and that the trees at this nesting site and the blue herons will not be disturbed. The SWMPU proposed plan has a parking lot and parking structure located in a manner that part of the blue heron nesting site would be destroyed (SWMPU, Draft EIR , Figure 3.4-19).	I-625 Section 4.4, Transportation and Circulation of the Draft EIR analyzes traffic impacts resulting from the project for both the near term (2005) and the buildout term (2020).
I-625	4. The dramatic impacts upon traffic congestion and circulation.	I-626 Comment noted.
I-626	To begin, there needs to have a comprehensive traffic study be done to include all traffic that currently used the roads around Sea World now and in the future 20 years.	
I-626	The traffic on Sea World Drive is already problematic and there has already been traffic backed up from Sea World to Friars Road almost every weekend for the past several months (in February, March, and April). An immediate solution to the problem of having traffic being backed up all the	

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I-627 way to Friar's Road or the I-5 freeway, would be to have a longer 4-lane queuing area within the Sea World leasehold. This can be done by moving the exit to the east and making a longer queuing entrance (see exhibit 9). This needs to be done immediately, before any work on Tier 1 is allowed.

I-628 Some of the traffic solutions need to be implemented prior to the development planned in Tier 1, and all the proposed traffic solutions must be implemented prior to proceeding with any Tier 2 developments.

I-629 If the Sea World redevelopment and traffic to Sea World requires building two extra lanes on Sea World Drive, shouldn't this be considered as commercial use of our public parkland?

5. Negative impacts to water quality

I-630 The negative impacts to water quality are problematic and need to be addressed. I am particularly concerned about the effects upon least tern habitat and their feeding areas. As noted in the Appendix D, Biological Resources Reports to the Draft EIR, eelgrass is important habitat for the feeding behavior of the least tern. Sea Worlds redevelopment proposal will have significant impacts on the eelgrass habitat, due to the shading effect of structures over 30 feet in height. To reduce this impact, the 50 foot setback must be required as specified in the Mission Bay Master Plan (page 16) and discussed earlier in this report. (See Exhibit 1.)

I-632 The expansion of the marina boat docks in Perez Cove (Area 4) cannot be allowed due to the severe negative damage that would occur to the eelgrass beds in the cove. This eelgrass is important habitat for the least tern and this habitat must be protected. The zig-zag boat dock cannot be allowed. Secondly the boat or water craft traffic created by the proposed use would have severe consequences on the other areas of eelgrass that the least terns currently use for foraging in close proximity of Perez Cove.

I-634 The expansion of the 3 other docks cannot be allowed either as this proposed extension could cause a problem with the Sky Ride over the docks. If someone fell out of the Sky Ride, they might survive if they hit the water, but would surely be killed if they hit the boat dock. Secondly, if there was a problem where the Sky Ride got stuck in mid ride, the extended boat docks would be in the way of the rescue operations.

I-635 Watercraft with 2-stroke motors should not be allowed by Sea World (or others) for commercial use in Mission Bay, and there should be a plan to ban all 2-stroke motors in Mission Bay, in the near future.

6. Illegal proposal to build a new hotel or parking structure over the 30 foot height limit without voter approval

I-636 Upon detailed analysis of the ballot proposal for Proposition D, when Proposition D was passed by the voters, there was no mention of there being a hotel or parking structure in the language of Proposition D, nor was there a mention of a possible hotel or parking structure in the discussion

I-627 Mitigation measures to address traffic impacts caused by the project are set forth in Section 4.4.5, Mitigation, Monitoring and Reporting of the Draft EIR. Such mitigation measures would be implemented as determined necessary by the monitoring program to address project-related traffic impacts.

I-628 An EIR need only identify significant, environmental impacts resulting from the proposed project, identify alternatives and propose mitigation measures to reduce significant impacts to below a level of significance. See response to comment I-147. SeaWorld is not obligated to reduce traffic impacts not caused by its project. See response to comment L-43. The monitoring program, set forth in Section 4.4.5, Mitigation, Monitoring and Reporting of the Draft EIR, identifies when project-related traffic impacts would require implementation of the mitigation measures based on traffic analyses discussed in Section 4.4, Transportation and Circulation of the Draft EIR.

I-629 See response to comment I-308.

I-630 Water quality impacts from the project are discussed in Section 4.5, Water Quality. Impacts on the least tern habitat resulting from the project are discussed in Section 4.6, Biological Resources of the Draft EIR.

I-631 See responses to comments F-11 and I-599.

I-632 Prior to expansion of the SeaWorld Marina, an eelgrass mitigation plan must be prepared and approved by the City. See responses to comments F-9 and F-10.

I-633 See response to comment I-632.

I-634 Comment noted.

I-635 Water quality issues associated with 2-stroke PWCs are addressed in Section 4.5, Water Quality of the Draft EIR. See response to comment I-54.

I-636 Similar to a parking structure, a hotel has been found to be ancillary to the complete enjoyment of park property. See *Harter v. City of San Jose* (1904) 141 Cal. 659, 666-67; *Spires v. City of Los Angeles* (1906) 150 Cal. 64, 66. See response to comment I-598.

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I-636
Cont.

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of the City Attorney's Analysis.

I-637

Actually, the measure in the voting pamphlet and the wording used on the ballot specifically limits what kind of development that would be allowed and specifically excludes a hotel or parking structure as one of the uses by stating, "...amending the 30-foot height limit in the Coastal Zone to allow Sea World to plan and construct exhibits, attractions and educational facilities only..." (see Exhibit 11).

I-638

In the City Attorney's Analysis, there is no mention of a hotel or parking structure being proposed or allowed to be built. (See Exhibit 12.) It also specifically excludes a hotel or parking structure from being built over 30 feet when it states, "The 160-foot height limit would remain in effect only for so long as the land at Sea World is used for recreational, exhibition, educational, research or scientific purposes." Guest housing or a parking structure is never mentioned, and by the the above language is specifically excluded.

I-639

While exhibits, attractions, and educational facilities are recreational facilities, the public did not vote on all recreational facilities, but only these specific types. While these specific uses are recreational facilities, not all recreational facilities can be allowed, as you can describe a specific term by the general term, in using the general term, does not mean all items of the general term are now allowed. Proposition D specifically stated, "...to plan and construct exhibits, attractions and educational facilities only...".

In conclusion, the proposal to build a hotel or parking structure over 30 feet is illegal and cannot be allowed in the Sea World Master Plan Update.

I-640

7. Proposition D is vague and ambiguous, discriminates against visually impaired, and does not use a legal measurement for height limit determination.

The Ordinance, as written, is vague and ambiguous, as it never refers to a height in feet, but only refers to the height of the current Sea World Tower. Therefore, Proposition D discriminates against the visually impaired, and, as written, violates the California State Law on People With Disabilities Act, is vague and misleading, and cannot be legally implemented as proposed.

I-641

Without a height in feet description, a person with limited vision has no way of knowing how tall the Sea World Tower actually is, or the impact that a structure of this height would have on the overall sense of ambiance in Mission Bay Park, the effect of this structure on its ability to block sunlight or create shading within the leasehold or upon the public areas surrounding the leasehold. Without a numerical description, they would also not be able to understand the impacts to views to those who are not visually impaired because it does not give a measurement in feet which would allow them a perceptual understanding of the actual height that is being voted upon.

I-642

Even a person with good vision does not get a defining description of what they are voting upon, as there is no descriptive number that would define the height of the tower or the height that they are actually voting upon. While the original height limit is given as "30 feet" and is definitive and quantitatively in this description, the proposed height limit (in the Ordinance) is left to

I-643

I-637 See response to comment I-598.

I-638 See responses to comments I-598 and I-636.

I-639 See responses to comments I-598 and I-636.

I-640 The language of Proposition D explicitly provides the standard to be utilized in calculating the height of buildings and structures proposed to be constructed within the land described in exception Section 1(ii) of Proposition D. Based on the SeaWorld Sky Tower's height of 320 feet, Section 3 of Proposition D states that the base of measurement in accordance with the Uniform Building Code of 1970 is used in calculating the height of the proposed buildings and structures. Thus, the measurement standard set forth in the Uniform Building Code of 1970 provides a quantitative method for measurement of building and structure height.

I-641 See response to comment I-640.

I-642 See response to comment I-640.

I-643 See response to comment I-640.

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I-643

Cont.

interpretation, ambiguity, and vagueness as it states, "...shall exceed one-half the height of the existing Sea World Tower...". There is no quantitatively measurement given.

I-644

It is possible for people to think that the Sea World Tower is only 100 feet tall and that one-half of this height is 50 feet, therefore, Sea World would only be allowed to build 20 over the 30 foot height limit. While inch, foot, yard, or mile is given as a standard of measure in the book of United States Standards of Weights and Measures, there is no reference given as to the Sea World Tower, as it is not a listed measurement. Therefore, this is not a standard upon which height can be measured or determined.

I-645

The Ordinance and Proposition D, as prepared, is illegal, misleading, vague, ambiguous, and cannot be implemented under the laws of the State of California. Staff must find that the Ordinance must be thrown out for the Public Good, and that this issue must be taken up by the City Attorney or State Attorney to protect the public, and have a ruling by an appropriate Court to determine whether it violates the laws of the State of California before any construction can begin. *APPROPRIATE*

I-644 See response to comment I-640.

I-645 See response to comment I-640.

Respectfully Submitted,



Billy Paul, President
SEA PAW
Save Environmental Areas,
Public Access, & Wildlife

EXECUTIVE SUMMARY

This summary provides a brief synopsis of the project description, and the results of the environmental analysis contained within the Environmental Impact Report (EIR). By necessity, this summary does not contain the extensive background and analysis found in the document. Therefore, the reader should review the entire document to fully understand the project and its environmental consequences.

Project Location and Description

The SeaWorld Master Plan Update consists of approximately 17 acres of water and 172.4 acres of land located on the southern perimeter of Mission Bay Park approximately halfway between I-5 and the Pacific Ocean. More specifically, the SeaWorld site is located north of SeaWorld Drive, east of Ingraham Street, and West Mission Bay Drive, south of Pacific Passage in the Bay and west of the South Shores area of Mission Bay Park in the City of San Diego.

The project consists of the following:

1. Update to the existing SeaWorld Master Plan;
2. Amendment to the Mission Bay Park Master Plan Update; and
3. Project approvals for the Tier 1 projects (see below);

The SeaWorld Master Plan Update consists of the following:

Conceptual Development Program

The conceptual development program sets forth the anticipated development and redevelopment needs for the entire SeaWorld leasehold and is divided into three categories:

1. **Tier 1** identifies sites and projects where new development or park renovations will be processed concurrently with the SeaWorld Master Plan Update or are likely to be initiated shortly after its adoption. The Tier 1 projects consist of a Splashdown Ride (95 feet high),

Educational Facility (45 feet high), Front Gate Renovation (up to 90-foot high lighthouse), and Special Events Center Expansion (30 feet high with 60-foot high icon structure).

2. **Tier 2** identifies eight conceptual development sites that are candidates for future redevelopment, renovation or park expansion. Each site retains the potential to have structures exceeding 30 feet in height up to a maximum height of 160 feet. Although this report analyzes the potential visual impact of Tier 2 development, no specific project is proposed for the immediate future.
3. **Special Projects** are long-term conceptual development proposals that have been specifically identified. The Special Projects include a 90-foot tall, 650 room hotel, a 115 slip expansion of the existing SeaWorld Marina, and a 4-level, 45-foot high parking garage.

Development Criteria

The Development Criteria set forth the development parameters applicable to the entire leasehold or specific leasehold areas identified in the plan. Among other controls, the development criteria establish the height limits within the SeaWorld Master Plan Update area. The height limits also help define the maximum building envelopes for the Tier 2 conceptual development sites.

Design Guidelines

The Design Guidelines would be used as standards for evaluation of proposed new projects or for modifications to existing development. The primary focus of the design guidelines is to assure aesthetically pleasing public views of SeaWorld from outside its leasehold. The guidelines therefore address landscaping, lighting, signs, and architecture.

Amendment to the Mission Bay Park Master Plan Update/LCP

In addition to the SeaWorld Master Plan, the project consists of an amendment to the Mission Bay Park Master Plan Update/LCP to bring the plan into conformity with the 1998 voter approved SeaWorld Initiative, Proposition D, which amended the City of San Diego Municipal Code to allow development up to a maximum height of 160 feet on the SeaWorld leasehold. To simplify the amendment process, the SeaWorld Master Plan Update will become a part of the Mission Bay Park Master Plan Update by reference.

Project Approvals

Projects within Mission Bay Park are reviewed and approved by the Real Estate Assets Department in consultation with the Park and Recreation Department and Development Services Department. The SeaWorld Master Plan Update provides for a new level of project review for the SeaWorld leasehold that would require City Council approval for projects exceeding certain

height thresholds set forth in the plan. The Splashdown Ride is the first structure to exceed the 90-foot height threshold established for the Theme Park area. Therefore, the Splashdown Ride is being processed as a separate project concurrently with the SeaWorld Master Plan Update and Mission Bay Park Master Plan Update amendment.

Environmental Setting

The SeaWorld Master Plan site occupies a commercial leasehold within Mission Bay Park. The project site is relatively flat varying from 10 to 20 feet Above Mean Sea Level (AMSL). The existing SeaWorld leasehold contains a variety of uses, most of which either relate to or support the SeaWorld theme park. These uses include: attractions that are an exhibit, show or ride; restaurants; stores; parking lots; special events buildings; and supporting mechanical facilities. Other associated uses in the leasehold area include the SeaWorld Marina and the Hubbs-SeaWorld Research Institute.

South of SeaWorld, beyond Sea World Drive, is the West Mission Bay Drive/Sunset Boulevard/Sea World Drive interchange system and the San Diego River. The interchange area and both sides of Ingraham Street are densely landscaped with various species of pines and eucalyptus trees, with the exception of an interchange loop and adjacent area south of Sea World Drive, which has been designated as a least tern nesting site.

To the west of West Mission Bay Drive is the Quivira Basin commercial recreation area, which is occupied by a fish processing facility and restaurant, marinas and conference center, and the Hyatt Islandia Hotel. Hospitality Point, the primary landform within Quivira Basin, is the location of the City's Park and Recreation Department, Mission Bay Park headquarters. It also houses the Lifeguard Services Division and San Diego Police Department's Harbor Unit.

The eastern boundary of the SeaWorld site extends to South Shores Road, a sparsely traveled road leading to the boat ramp. The eastern boundary lies adjacent to the parklands of the South Shores area.

The northern boundary of the SeaWorld leasehold generally conforms to the shoreline except on the west side of the park where 17 acres of open water area for the Sea World Marina, Waterfront Stadium and Sky Ride are included in the leasehold. To the north lies Fiesta Island, which forms the northern boundary of the Pacific Passage channel, and the open waters of Mission Bay Park.

Public Planning Process

At its October 14, 1999 hearing to initiate the amendment to the Mission Bay Park Master Plan Update, the San Diego Planning Commission identified the need to take extraordinary efforts to involve the public in the SeaWorld Master Plan Update process.

The initial phase consisted of four public forums held at different locations in the City between January 8 and January 13, 2000. Advertisements were placed in eleven San Diego newspapers with a combined circulation of 330,000 and readership of 1.5 million. SeaWorld also established a hotline telephone number, web page, and fax on demand service to provide instant receipt of SeaWorld Master Plan Update fact sheets. Over 500 comments covering a wide range of concerns were received. Between June 17 and June 28, 2000 a second round of four public forums was held to present the draft SeaWorld Master Plan Update and receive comments. The public forums were also used to supplement the EIR scoping process. Display and comment boards were set-up to explain the EIR process and solicit comments. Based on the forums and subsequent Planning Commission workshops, six major land use issues emerged.

These issues are summarized below along with a reference to where the topic is addressed in the EIR:

1. Potential change in emphasis away from SeaWorld's marine animal and educational themes. (See Section 4.1, Land Use)
2. Potential impacts to views and viewshed due to increased height of buildings and attractions. (See Section 4.2, Neighborhood Character/Aesthetics)
3. Noise impacts from attractions and special events (including fireworks). (See Section 3.0, Project Description for a discussion of noise from existing operations [fireworks] and Section 4.7, Noise for a discussion of noise impacts from attractions).
4. Effects of park expansion/intensification on traffic congestion. (See Section 4.4, Transportation and Circulation)
5. Potential impacts to water quality in Mission Bay. (See Section 4.5, Water Quality)
6. The appropriateness of a new hotel in Mission Bay Park (also relates to views, viewshed, and traffic issues). (See Section 4.1, Land Use, Section 4.2, Neighborhood Character/Aesthetics, and Section 4.4, Transportation and Circulation)

Impact and Alternatives Summary

Table S-1 summarizes the impacts associated with the proposed project and the mitigation measures required to reduce the impacts to below significant levels. Table S-2 provides a summary of the project alternatives analysis.

TABLE S-1
Summary of Impacts and Mitigation Measures

ISSUE AREA	SIGNIFICANT IMPACT(S)	MITIGATION MEASURE(S)	SIGNIFICANCE OF IMPACT(S) AFTER MITIGATION
Land Use			
Land Use Policy Compatibility	The proposed Tier 1 projects, Tier 2 future projects, and the future hotel project would have a significant visual impact on Mission Bay Park and would represent an inconsistency with the Mission Bay Park Master Plan Update Design Guidelines for building height and massing. The future marina expansion would significantly impact eelgrass beds in Perez Cove creating a conflict with the environmental goals of the Mission Bay Park Master Plan Update and the Mission Bay Park Natural Resource Management Plan.	Reduction of land use compatibility and policy impacts would be achieved through implementation of activity-specific mitigation measures associated with transportation/circulation, biological resources, and neighborhood characteristics/aesthetics. Approval of the Mission Bay Park Master Plan Update Amendment and Sea World Master Plan Update which are proposed as part of this project would lessen or avoid the impacts related to inconsistencies with adopted plans and policies.	Significant impacts to biological resources would be mitigated while significant impacts to transportation/circulation and neighborhood characteristics/aesthetics would be lessened but not to a below a level of significance.
Neighborhood Character/Aesthetics			
Tier 1 Visual Impacts	The Splashdown Ride, a Tier 1 Project, would result in a significant visual impact due to the height and combined visual mass of the three towers.	<i>Mitigation Measure 4.2-1:</i> Prior to development the applicant will prepare and implement a site plan for the project, which complies with the Master Plan Update landscape buffer and bulk/plane setbacks. The site plan will also adhere to the Master Plan Update Design Guidelines that pertain to landscaping, lighting, signs and architectural guidelines.	Significant impact lessened but not to a below a level of significance.
SeaWorld Master Plan Update Visual Impacts	The proposed Master Plan Update, Tier 1, Tier 2 and Special projects would result in a significant visual quality impact because of the potential for extensive visibility of maximum potential building mass above 60 feet in height in Mission Bay Park.	<i>Mitigation Measure 4.2-2:</i> Prior to each future development the applicant will prepare and implement a site plan for the project, which complies with the Master Plan Update landscape buffer and bulk/plane setbacks. The site plan will also adhere to the Master Plan Update Design Guidelines that pertain to landscaping, lighting, signs, and architectural guidelines.	Significant impact lessened but not to a below a level of significance.
Light, Glare and Shading			
Light and Glare	No significant impact was identified.	No significant impact was identified. Therefore no mitigation would be necessary.	No significant impact.
Shading	No significant impact was identified. See Biological Resources for discussion of shading to sensitive eelgrass beds.	No significant impacts were identified. Therefore no mitigation would be necessary.	No significant impact.

TABLE S-1
Summary of Impacts and Mitigation Measures

ISSUE AREA	SIGNIFICANT IMPACT(S)	MITIGATION MEASURE(S)	SIGNIFICANCE OF IMPACT(S) AFTER MITIGATION
Transportation and Circulation			
2005 Roadway Segments (Weekday)	<p>The proposed project would have a significant impact on the following roadway segments:</p> <ol style="list-style-type: none"> 1. Sea World Drive (4 lanes), between Pacific Highway and I-5; 2. Sea World Drive (4 lanes), between Friars Road and Pacific Highway; and 3. Sea World Drive (4 lanes), between Sea World Way and West Mission Bay Drive Friars Road. 	<p><i>Mitigation Measure 4.4-1:</i> At the time the monitoring program indicates that it is necessary, one of the following measures shall be undertaken by SeaWorld.</p> <ol style="list-style-type: none"> 1. SeaWorld shall widen Sea World Drive to six lanes between SeaWorld Way and I-5, or 2. If the City has formed a CIP for the combined improvements to Sea World Drive and its interchange with I-5, SeaWorld shall contribute to the CIP an amount which is equivalent to 44 % of the estimated cost of widening Sea World Drive to six lanes between Sea World Way and I-5. In the event this alternative form of mitigation is selected, the short-term impacts of SeaWorld on Sea World Drive may not be fully mitigated due to the fact that full funding for the CIP may be delayed or never achieved. 	Mitigated to below a level of significance unless option 2 is implemented.
2005 Key Intersections (Weekday)	No significant 2005 key intersection impacts were identified.	No significant impact was identified. Therefore, no mitigation would be necessary.	No significant impact.
2005 Offsite Circulation (Weekday)	<p>Lack of signal coordination between signals on Sea World Dr. between Friars Rd. and I-5 northbound ramps.</p> <p>Non-optimized queue and lane utilization at Sea World Drive/I-5 southbound ramps.</p>	<p><i>Mitigation Measure 4.4-2:</i> Install signal coordination on Sea World Drive from Friars Road to I-5 Northbound Ramp and construct a 400-foot extension of the eastbound right-turn lane on Sea World Drive at the SB I-5 Southbound onramp. SeaWorld's cost participation shall be 100%.</p>	Mitigated to below a level of significance.

TABLE S-1
Summary of Impacts and Mitigation Measures

ISSUE AREA	SIGNIFICANT IMPACT(S)	MITIGATION MEASURE(S)	SIGNIFICANCE OF IMPACT(S) AFTER MITIGATION
Transportation and Circulation (Continued)			
2005 Freeway Ramps (Weekday)	The project would not generate a direct impact on freeway ramps under the near term (2005) condition.	No significant impact was identified. Therefore, no mitigation would be necessary.	No significant impact.
2005 CMP Arterials (Weekday)	The project would not result in a significant impact on CMP arterials.	No significant impact was identified. Therefore, no mitigation would be necessary.	No significant impact.
2005 CMP Freeway Segments (Weekday)	The project would not result in a significant impact on CMP freeway segments.	No significant impact was identified. Therefore, no mitigation would be necessary.	No significant impact.
2020 Roadway Segments (Weekday)	<p>The proposed project would have a significant impact on the following roadway segments:</p> <ol style="list-style-type: none"> 1. Sea World Drive (6 lanes), between Sea World Way and Friars Road; 	No mitigation required for Sea World Drive, if option 1 of Mitigation Measure 4.4-1 described above is implemented, or CIP improvements are made pursuant to option 2.	Mitigated to below a level of significance provided Sea World Drive widened to six lanes.
	<ol style="list-style-type: none"> 2. West Mission Bay Drive, between Sea World Drive and Ingraham Street; 3. West Mission Bay Drive, between Sea World Drive and I-8; and 	Mitigation Measure 4.4-7: At the time the monitoring program indicates that it is necessary, widen the West Mission Bay Drive bridge to six lanes and widen southbound West Mission Bay Drive to three lanes between the bridge and the eastbound I-8 onramp. These improvements would be included in the City's CIP No. 52-643. SeaWorld's fair share contribution to the cost of widening the bridge and creating three southbound lanes between the bridge and the eastbound onramp to I-8 shall be 47 percent of the City's cost of these improvements. <u>The City's cost is 20 percent of the total cost.</u> In light of the fact that this CIP may not be sufficiently funded or implemented coincident with SeaWorld's needs, SeaWorld's long-term impact on West Mission Bay Drive between Sea World Drive and I-8 as well as the I-8/West Mission Bay Drive eastbound onramp would be unmitigated because it is infeasible for SeaWorld to bear the full cost of these improvements.	Mitigated to below a level of significance if CIP No. 52-643 includes necessary improvements and is implemented concurrent with need.

Note: Transportation and Circulation mitigation measure numbers are the same as those used in Section 4.4, Transportation and Circulation. They are non-sequential because they are correlated to the list of impacts in this table.

TABLE S-1
Summary of Impacts and Mitigation Measures

ISSUE AREA	SIGNIFICANT IMPACT(S)	MITIGATION MEASURE(S)	SIGNIFICANCE OF IMPACT(S) AFTER MITIGATION
Transportation and Circulation (Continued)			
2020 Key Intersections (Weekday)	<p>The project would have a significant impact on the following intersections under the buildout (2020) condition:</p> <ol style="list-style-type: none"> Ingraham Street and Perez Cove Way (PM peak hour); 	<p>Mitigation Measure 4.4-3: At the time the monitoring program indicates that it is necessary, SeaWorld will reconfigure the Ingraham Street/Perez Cove Way intersection to remove the split east/west signal phasing, by combining the westbound thru movement with the right-turn movement to create dual left-turn lanes and a shared thru/right-turn lane. The only pedestrian crossing across Ingraham Street should remain on the north leg (north side of the intersection). SeaWorld's fair share for this improvement is 100 percent.</p>	Mitigated to below a level of significance.
	<ol style="list-style-type: none"> SeaWorld Drive northbound I-5 onramp and offramp (AM and PM peak hours); 	<p>Mitigation Measure 4.4-4: At the time the monitoring program indicates that it is necessary, SeaWorld shall make fair share contributions for the following interchange improvements at the specified percentages.</p> <p><u>Intersection</u></p> <ol style="list-style-type: none"> Dual northbound to westbound left-turn lanes on the northbound I-5 offramp and widen the westbound approach to the northbound onramp to provide a separate right-turn lane (29 percent). <p>As these improvements are expected to be a part of a CIP project which may or may not be adequately funded, the long-term impacts of SeaWorld on the Sea World Drive/I-5 interchange are considered unmitigated.</p>	Mitigated to below a level of significance if a CIP is formed and/or sufficient funds are available to complete improvements to which SeaWorld would make a fair share contribution.
	<ol style="list-style-type: none"> Sea World Drive and Pacific Highway (PM peak hour); 	<p>Mitigation Measure 4.4-5: At the time the monitoring program indicates that it is necessary, reconstruct the Sea World Drive/Pacific Highway intersection to provide six lanes of thru traffic on Sea World Drive. The southbound right-turn movement from Sea World Drive to East Mission Bay Drive (Pacific Highway) would be shared with the thru lane by converting the existing southbound right-turn lane on Sea World Drive to provide three southbound thru lanes and one southbound right turn lane. Sea World Drive south of Pacific Highway shall be widened for about 300 feet plus a 600-foot taper. SeaWorld's fair share of the cost of these improvements shall be 36 percent. As these improvements are expected to be a part of a future CIP project which may or may not be created and/or adequately funded, the long-term impacts of SeaWorld on the Sea World Drive/Pacific Highway intersection are considered unmitigated.</p>	Mitigated to below a level of significance if a CIP is formed and/or sufficient funds are available to complete improvements to which SeaWorld would make a fair share contribution.

Note: Transportation and Circulation mitigation measure numbers are the same as those used in Section 4.4, Transportation and Circulation. They are non-sequential because they are correlated to the list of impacts in this table.

TABLE S-1
Summary of Impacts and Mitigation Measures

ISSUE AREA	SIGNIFICANT IMPACT(S)	MITIGATION MEASURE(S)	SIGNIFICANCE OF IMPACT(S) AFTER MITIGATION
Transportation and Circulation (Continued)			
		<p>The northbound lane addition shall be carried through the intersection to the Sea World Drive/I-5 SB onramp intersection by widening Sea World Drive to provide a third northbound (eastbound) lane that starts about 300 foot south of (west of) Pacific Highway and traps (ends) as a right-turn lane at the southbound I-5 onramps. Both curb lanes on Sea World Drive at Pacific Highway shall be 20 feet wide to accommodate right-turn sneakers. This measure is 100 percent SeaWorld's responsibility.</p>	
	<p>4. West Mission Bay Drive and I-8 westbound offramp (PM peak hour).</p>	<p><i>Mitigation Measure 4.4-6:</i> At the time the monitoring program indicates that it is necessary, a third, westbound right-turn lane shall be added to the westbound I-8 offramp to West Mission Bay Drive intersection to create a configuration which will consist of dual, westbound left-turn and triple, westbound right-turn lanes. SeaWorld's fair share estimate shall be 28 percent. This improvement will only be required in the event the West Mission Bay Drive bridge is widened to six lanes. As these improvements would only be constructed if CIP 52-643 is implemented and fully funded, the long-term impacts of SeaWorld on the westbound I-8 offramp to West Mission Bay Drive are considered unmitigated.</p>	<p>Mitigated to below a level of significance if CIP No. 52-643 includes necessary improvements and is implemented concurrent with need.</p>
<p>2020 Freeway Ramps (Weekday)</p>	<p>Under the buildout 2020 condition, project traffic would result in a significant cumulative impact at three freeway ramps already expected to experience delays in excess of 15 minutes:</p> <ol style="list-style-type: none"> 1. Sea World Drive northbound I-5 onramp (AM and PM peak hours); 2. Sea World Drive I-5 southbound onramp (AM and PM peak hours); 	<p><i>Mitigation Measure 4.4-4:</i> At the time the monitoring program indicates that it is necessary, SeaWorld shall make fair share contributions for the following interchange improvements at the specified percentages.</p> <p><u>Ramps</u></p> <ol style="list-style-type: none"> 2. Additional storage lane, or equivalent, on the northbound I-5 onramp (50 percent), 3. Additional storage lane, or equivalent, on southbound I-5 onramp (27 percent). <p>As these improvements are expected to be a part of a CIP project which may or may not be fully funded, the long-term impacts of SeaWorld on the Sea World Drive/I-5 interchange are considered unmitigated.</p>	<p>Mitigated to below a level of significance if a CIP is formed and/or sufficient funds are available to complete improvements to which SeaWorld would make a fair share contribution.</p>

Note: Transportation and Circulation mitigation measure numbers are the same as those used in Section 4.4, Transportation and Circulation. They are non-sequential because they are correlated to the list of impacts in this table.

TABLE S-1
Summary of Impacts and Mitigation Measures

ISSUE AREA	SIGNIFICANT IMPACT(S)	MITIGATION MEASURE(S)	SIGNIFICANCE OF IMPACT(S) AFTER MITIGATION
Transportation and Circulation (Continued)			
	3. West Mission Bay Drive eastbound I-8 onramp (AM and PM peak hours).	Ramp improvements included in Mitigation Measure 4.4-7 described above would relieve impacts to the West Mission Bay Drive eastbound I-8 onramp.	Mitigated to below a level of significance if CIP No. 52-643 is implemented and sufficient funding is available to construct improvements to which SeaWorld makes a fair share contribution.
2020 CMP Arterials (Weekday)	The contribution of traffic from the proposed project would not exceed the significance thresholds on CMP arterials. Thus, no significant project impacts would occur.	No significant impact was identified. Therefore, no mitigation would be necessary.	No significant impact.
2005 Key Intersections (Weekend)	Significant busy weekend day intersection calculated impacts occur at the Sea World Drive/I-5 Northbound ramp. In addition, busy weekend day significant impacts occur at the SeaWorld entrance.	<p><i>Mitigation Measure 4.4-8:</i> Provide event traffic officers from the San Diego Police Department at the I-5/Sea World Drive interchange during busy days to override the traffic signals and respond to traffic conditions, if Caltrans concurs.</p> <p><i>Mitigation Measure 4.4-9:</i> Improve lane management at the entrance gates to maximize vehicle storage as well as help visitors waiting in line to determine which lanes are open or shorter.</p> <p><i>Mitigation Measure 4.4-10:</i> Distribute promotional material to employees and repeat patrons that would promote I-8 or Ingraham Street as alternative routes to SeaWorld.</p>	Mitigated to below a level of significance.
2020 CMP Freeway Segments	Under the buildout (2020) condition, project traffic would result in a significant impact on I-5 north and south of Sea World Drive northbound and southbound segments of I-5, north of Sea World Drive.	The calculated impacts are considered unmitigable due to the excessive <u>cost</u> to widen I-5.	Significant, unmitigable.

TABLE S-1
Summary of Impacts and Mitigation Measures

ISSUE AREA	SIGNIFICANT IMPACT(S)	MITIGATION MEASURE(S)	SIGNIFICANCE OF IMPACT(S) AFTER MITIGATION
Transportation and Circulation (Continued)			
Parking	The supply of existing parking may be exceeded by the year 2010 depending on the attendance patterns.	<i>Mitigation Measure 4.4-11:</i> At the time the parking monitoring program indicates that it is necessary, complete one or more of the following improvements, as dictated by the monitoring program: (1) pave the existing unpaved guest overflow parking area located in the southwest corner of Area 2; (2) implement offsite parking or shuttle/MTDB transit options; and/or (3) construct the planned parking structure.	Mitigated to below a level of significance.
Water Quality			
Existing Operations	Surface Runoff: Due to SeaWorld's existing surface runoff controls and BMP's no significant impact was identified as a result of existing operations.	No significant impact was identified. Therefore no mitigation would be necessary.	No significant impact.
	Aquaria Water Treatment: Existing treatment of aquaria water, facility irrigation, wash down, and storm water as provided in SeaWorld's National Pollutant Discharge Elimination System Permit results in no identified significant impact due to the discharge of the treated water into Mission Bay.	No significant impact was identified. Therefore no mitigation would be necessary.	No significant impact.
Future Expansion	SeaWorld Marina Expansion: Operational impacts associated with the expanded marina would be the same types as under the current operation and would include the potential release of the following pollutants: fuel, oil, and grease (from boats and fueling); bacteria (from sanitary waste discharges/spills); heavy metals, particularly copper (from boat antifouling paints); and litter.	<i>Mitigation Measure 4.5-1:</i> Future expansion activities at SeaWorld Marina shall include the following: <ol style="list-style-type: none"> 1. Install an automatic shutoff on the fuel pump; 2. Regular inspection of the sanitary pumpout on a routine basis; and 3. Prohibit boat hull paint removal and repainting in the marina area. 	Mitigated to below a level of significance.

TABLE S-1
Summary of Impacts and Mitigation Measures

ISSUE AREA	SIGNIFICANT IMPACT(S)	MITIGATION MEASURE(S)	SIGNIFICANCE OF IMPACT(S) AFTER MITIGATION
Water Quality (Continued)			
	<p>Future Exhibits:</p> <p>The main sources of water quality impacts from future exhibits would include aquarium water, hose down of animal areas, landscaping, and pedestrian traffic. The incorporation of future exhibits into the existing aquaria water treatment program and the existing ongoing water quality control BMP program would result in a less than significant impact.</p>	<p><i>Mitigation Measure 4.5-2:</i> Within two years of the approval of the Master Plan Update by the Coastal Commission, install catch basin inserts such as a Fossil Filter, or equivalent, to capture oil and grease in runoff at the point where it enters the storm drain system from parking lots and fueling areas.</p>	<p>Mitigated to below a level of significance</p>
	<p>Short Term Construction:</p> <p>High periods of rainfall during grading operations could result in the transport of sediment into Mission Bay. Rainfall coming into contact with construction materials could also adversely impact the Bay</p>	<p><i>Mitigation Measure 4.5-3:</i> A Master Stormwater Pollution Prevention Plan (SWPPP) shall be prepared and approved by the City Engineer and Regional Water Quality Control Board. This Master SWPPP shall include general as well as specific measures which will be implemented to control water pollution related to construction. At a minimum, the Master SWPPP shall include the following provisions or their equivalent.</p>	<p>Mitigated to below a level of significance.</p>
Biological Resources			
<p>Shading of eelgrass beds</p>	<p>While a significant negative impact on eelgrass beds is not anticipated from future development in Area 1 and the future hotel, the potential for an adverse impact cannot be eliminated. It is possible that the projected shading effects in conjunction with the dormant period would have a negative impact on eelgrass growth and productivity resulting in a significant impact. A significant eelgrass impact has been identified for expansion of the SeaWorld Marina. No significant shadow impacts would occur from Tier 1 projects.</p>	<p><i>Mitigation Measure 4.6-1:</i> Prior to Coastal Permit application the project proponent shall prepare a project-specific shadow analysis for Tier 2 projects located in future development areas F-2, E-2, G-2 and K-2; and the Future Hotel Special Project to determine the extent of shadow impacts on eelgrass in Pacific Passage, Perez Cove and the Waterfront Stadium lagoon. The shadow analysis shall be performed for the time periods described in Section 4.3, Light, Glare and Shading, in this EIR. Furthermore, the shadow impact shall exceed a three-hour period between the hours of 10:00 AM to 4:00 PM in order to require mitigation. If no shadow impact would occur in these areas as a result of the project specific analysis, no further mitigation would be required. If no shadow impact would occur as defined above in these areas as a result of the project specific analysis,</p>	<p>Mitigated to below a level of significance.</p>

TABLE S-1
Summary of Impacts and Mitigation Measures

ISSUE AREA	SIGNIFICANT IMPACT(S)	MITIGATION MEASURE(S)	SIGNIFICANCE OF IMPACT(S) AFTER MITIGATION
Biological Resources (Continued)			
		<p>no further mitigation would be required. If a shadow impact would occur during this timeframe it would only occur during the eelgrass dormant period as described in the impact analysis above. For shadow impacts that would occur during the eelgrass dormant period, a project specific monitoring program shall be undertaken that includes the provisions described below under eelgrass monitoring program.</p> <p>Eelgrass Monitoring Program</p> <p>Once construction is completed at one of the potentially shade impacted sites, three years of eelgrass monitoring shall be conducted, specifically in the early spring (April) and early fall (October) of the three years. These two times of the year would best track the initial growing phase of the eelgrass, in the spring and the post summer peak, and in the early fall, before the dormant period begins. The area to be monitored would be along the shore and out far enough into the water to cover the area where a shadow would be cast during the majority of the daylight hours in December. The monitoring program would be initiated once development is completed at each of the sites, and the monitoring schedule at each site would be independent of the other. If the monitoring indicates a reduction in the eelgrass bed coverage, then an eelgrass revegetation program shall be implemented in conformance with the Southern California Eelgrass Mitigation Policy as described below in Mitigation Measure 4.6-2.</p> <p>Mitigation Measure 4.6-2: Prior to application for development of the Future Hotel project landing dock and the Marina Expansion project, a project-specific shadow analysis shall be conducted as described above in Mitigation Measure 4.6-1 to determine the exact area of impact resulting from docks and boats. For these impacts eelgrass shall be replaced at a 1.2:1 ratio, which is in conformance with the eelgrass replacement ratios outlined in the Southern California Eelgrass Mitigation Policy. Furthermore, a pre- and post-construction eelgrass survey shall be undertaken to determine the area of eelgrass habitat that would be impacted by the shadows. The proposed projects could require the creation of approximately 1.12 to 1.20 acres of eelgrass. This scenario assumes that all of the shading impacts would occur under the pier, dock, and permanent boat placement.</p>	

TABLE S-1
Summary of Impacts and Mitigation Measures

ISSUE AREA	SIGNIFICANT IMPACT(S)	MITIGATION MEASURE(S)	SIGNIFICANCE OF IMPACT(S) AFTER MITIGATION
Biological Resources (Continued)			
		Eelgrass mitigation sites do not appear to be readily available within the water area of the SeaWorld leasehold. Further exploration of options and alternatives for eelgrass transplant in the amount needed to offset the impacts would have to be conducted under an eelgrass mitigation plan study, which would be determined when the marina expansion or landing dock would be developed. The eelgrass mitigation plan study and implementation would be conducted in conformance with the Southern California Eelgrass Mitigation Policy.	
Least Terns (foraging)	No significant impact to least tern foraging behavior within or near the SeaWorld leasehold would occur from the proposed SeaWorld Master Plan Update. However a significant impact to least tern nesting activity may occur to the nearby currently uncolonized Stony Point Least Tern Preserve should it be recolonized.	<i>Mitigation Measure 4.6-3:</i> Prior to construction of a new development project on the SeaWorld leasehold a determination shall be made as to whether the Stony Point Preserve has been recolonized by the California least tern. If it is has not been recolonized then implementation of the following mitigation measure would not be required. Should the Preserve be recolonized, a determination shall be made as to whether the new development project would provide a clear line-of-sight from perching opportunities on the proposed structure to the Stony Point Preserve. If it would not provide a clear line-of-sight then no mitigation would be necessary. Should a clear line-of-sight be available from perching locations on the new structure, then the structure would be required to include appropriate design features to eliminate the perching opportunity.	Mitigated to below a level of significance.
Least Terns (Fireworks)	No significant impacts were identified for the existing or potential increase in SeaWorld fireworks displays to the nesting success of least terns.	No significant impact was identified. Therefore no mitigation would be necessary.	No significant impact

TABLE S-1
Summary of Impacts and Mitigation Measures

ISSUE AREA	SIGNIFICANT IMPACT(S)	MITIGATION MEASURE(S)	SIGNIFICANCE OF IMPACT(S) AFTER MITIGATION
Noise			
Future Tier 2 Rides and Shows	Future rides and shows may result in significant noise impacts.	<i>Mitigation Measure 4.7-1:</i> Prior to issuance of a Coastal Development Permit, a project-specific noise study prepared by a qualified acoustician shall be required for any new ride attraction or performance show and must demonstrate that sensitive receptors would not be exposed to noise levels in excess of applicable standards.	Mitigated to below a level of significance.
Traffic Noise	The future hotel project would be subject to exterior traffic noise levels that may result in a significant noise impact to hotel patrons, depending on the design of the hotel.	<i>Mitigation Measure 4.7-2:</i> Prior to issuance of building permits for the future hotel, verification that guest room interiors will meet the 45 dB CNEL interior standard shall be required through the preparation of an interior noise study by a qualified acoustician. The measures recommended in this study shall be implemented to meet the required 45 dB CNEL interior standard.	Mitigated to below a level of significance.
Splashdown Ride Noise	The proposed Splashdown ride may periodically increase ambient noise by 3 dBA and may be audible out to 7,000 feet from the Theme Park. However because ambient noise levels would not substantially increase, the Splashdown ride would not create a significant noise impact.	No significant impact was identified. Therefore no mitigation would be necessary.	No significant impact.
Geology/Soils			
Liquefaction	The subject site is located in specific Geologic Hazard category Zone 31 and the site is underlain by fill soils and bay deposits that are characterized as relatively loose and cohesionless. Therefore, the impacts associated with liquefaction are considered significant.	<i>Mitigation Measure 4.8-1:</i> Prior to issuance of a Grading Permit for each portion of the redevelopment, a soils investigation shall be approved by the City Engineer. Appropriate remedial measures shall be incorporated into the grading plans. These measures shall include, but not be limited to the following: 1) monitoring of differential settlement during construction; 2) proper compaction of surficial soils; and 3) installation of a well-compacted structural fill mat (with possible inclusion of geotextile reinforcing fabrics) above the water table in building areas, and/or continuous foundation systems for the buildings.	Mitigated to below a level of significance.

TABLE S-1
Summary of Impacts and Mitigation Measures

ISSUE AREA	SIGNIFICANT IMPACT(S)	MITIGATION MEASURE(S)	SIGNIFICANCE OF IMPACT(S) AFTER MITIGATION
Geology/Soils (Continued)			
Erosion/Slumping	The proposed project would have potentially significant impact associated with soil erosion during construction and shoreline rip rap slumping.	<p><i>Mitigation Measure 4.8-2:</i> Prior to issuance of the grading permits, the applicant shall prepare site-specific erosion control plans for the project in conformance with the City's Grading Ordinance to the satisfaction of the City Engineer. The erosion control plans should be in substantial conformance with the Conceptual Landscape Plan and the Design Guidelines for the Mission Bay Park Master Plan Update and should include temporary and permanent erosion/siltation control measures and/or devices that would be installed both during and after site grading and construction, including, but not limited to, interim and post-development landscaping/hydro-seeding; jute netting (or other approved geotextile material) on manufactured slopes; sandbags, brow ditches, energy dissipaters and desilting detention basins; and any other methods to control short-term and long-term surficial runoff and erosion.</p> <p>Prior to approval of grading permits, the applicant shall retain a soils engineer to monitor the grading, construction, and installation of runoff control devices and revegetation of the project site. The soils engineer shall submit in writing to the City Engineer and the Environmental Review Manager of the Planning and Development Review Department certification that the project has complied with the required notes on the grading plan addressing erosion controls.</p>	Mitigated to below a level of significance.
Unstable geologic or soil conditions	Constraints on development of the site are potentially significant due to potentially poor soil conditions.	<p><i>Mitigation Measure 4.8-3:</i> Prior to approval of grading permits, a complete subsurface geotechnical investigation of the proposed development area shall be performed to evaluate the thickness and/or the in situ condition of the compacted and hydraulic fill materials and the bay deposits. The geotechnical investigation would also provide site-specific remedial grading recommendations, foundation design criteria, and recommendations for the design of surficial improvements. The recommendations shall be implemented as part of project construction.</p>	Mitigated to below a level of significance.

TABLE S-1
Summary of Impacts and Mitigation Measures

ISSUE AREA	SIGNIFICANT IMPACT(S)	MITIGATION MEASURE(S)	SIGNIFICANCE OF IMPACT(S) AFTER MITIGATION
Geology/Soils (Continued)			
		<p><i>Mitigation Measure 4.8-4:</i> Prior to issuance of a grading permit for the implementation of projects associated with Master Plan Update the disposal of any anticipated construction-related dewatering effluent shall be permitted by either the City of San Diego or the RWQCB. The effluent could either be directed to the Mission Bay or the San Diego sewer system. If the effluent is discharged to Mission Bay, then the discharge shall meet the effluent limits specified by the RWQCB (Order No. 95-25) and Federal National Pollution Discharge Elimination System (NPDES) requirement. Effluent discharged to the City of San Diego sewer system shall meet the City's standards.</p>	
Air Quality			
Ambient Air Quality	No potentially significant air quality impacts were identified. The following mitigation would reduce adverse but less than significant air quality impacts.	<p><i>Mitigation Measure 4.9-1:</i> As a condition of any grading or building permit, construction management procedures shall be implemented to clean up dirt and debris spillage from public roads, and route construction traffic through the least sensitive areas. Use of transportation control measures to encourage carpooling among construction workers and to schedule deliveries to non-peak traffic hours is recommended to reduce adverse, but less than significant impacts from construction-related exhaust emissions.</p>	<p>No significant impact. <u>Mitigated to below a level of significance.</u></p>
Odors	The project would not significantly exceed national and state air quality standards regarding discharge of fetid odors.	No mitigation, monitoring, and reporting would be required.	No significant impact.

TABLE S-1
Summary of Impacts and Mitigation Measures

ISSUE AREA	SIGNIFICANT IMPACT(S)	MITIGATION MEASURE(S)	SIGNIFICANCE OF IMPACT(S) AFTER MITIGATION
Recreational Resources			
Traffic	The proposed project would not result in adverse traffic conditions that would impede vehicular access to, or pedestrian/bicycle usage of, recreational facilities in Mission Bay Park or the Mission Beach area. Therefore, the project would not result in significant impacts relative to recreational facilities access.	Because no significant impact is identified, no mitigation measures are recommended.	No significant impact.
Human Health/Public Safety			
Hazardous materials in inactive landfill	Compliance with the conditions of required permits would protect workers and the general public from potential risk of exposure. The rules and regulations associated with the permits would also provide measures to reduce the potential risk of unauthorized releases of hazardous wastes/materials to the environment. Therefore no significant impact would occur for Tier 2 projects, Special Projects and Tier 1 projects.	Because no significant impact is identified no mitigation measures are recommended.	No significant impact.
Energy			
Energy Conservation	No significant impacts are identified. However, in an effort to continually develop programs to increase energy efficiency, SeaWorld would implement an energy conservation mitigation measure.	Mitigation Measure 4.12-1: Prior to operation of any new attraction, SeaWorld shall apply its existing energy conservation programs and shall consider implementation of project-specific energy conservation programs to minimize electrical fuel, and/or natural gas consumption associated with the new attraction.	No significant impact.

TABLE S-1
Summary of Impacts and Mitigation Measures

ISSUE AREA	SIGNIFICANT IMPACT(S)	MITIGATION MEASURE(S)	SIGNIFICANCE OF IMPACT(S) AFTER MITIGATION
Water Conservation			
Water Consumption	No significant impacts are identified. However, In an effort to continually decrease water consumption, SeaWorld would implement the following measure.	<i>Mitigation Measure 4.13-1:</i> Prior to operation of any new attraction or facility, SeaWorld shall apply its existing water conservation programs and shall consider implementation of project-specific water conservation programs to minimize water consumption associated with the new attraction or facility.	No significant impact.
Landscaping	Because the proposed landscaping would conform with the SeaWorld Master Plan Update Design Guidelines, no significant water conservation impacts associated with landscaping would result from the proposed project.	Because no significant impacts were identified, no mitigation measures are recommended.	No significant impact.

TABLE S-2
Summary Comparison of Project Alternatives to the Proposed Project

DESCRIPTION	ADVANTAGES	DISADVANTAGES
No Project Alternative		
<ul style="list-style-type: none"> • Development would occur under the existing adopted Master Plan. Includes the un-built 300-room hotel and 200-slip marina expansion • Assumes that attendance levels would remain relatively unchanged as they have over the past ten years. 	<ul style="list-style-type: none"> • Significant unmitigable impacts to neighborhood character/aesthetics would be avoided. • Significant unmitigable impacts to transportation/circulation would be lessened. • Significant, mitigable impacts to land use; traffic/circulation; light, glare, and shading; water quality; biology, as it pertains to perching opportunities; and noise would be avoided. • Other issue impacts are either not significant or could occur under the existing SeaWorld Master Plan. 	<ul style="list-style-type: none"> • This alternative would not meet any of the project objectives.
More Regulated Alternative		
<ul style="list-style-type: none"> • This alternative would preclude the rental of personal watercrafts (PWCs). In place of the six PWCs, two boat mooring slips would be provided. • Limits development height of three tier 2 development areas to 160 feet and three for shows and three for exhibits. 	<ul style="list-style-type: none"> • Would lessen water quality and visual impacts. 	<ul style="list-style-type: none"> • Alternative rental locations of PWCs would occur elsewhere on Mission Bay, therefore the water quality impact that would be lessened at the SeaWorld Marina would likely still occur. • Reduction of Tier 2 160-foot high development areas from four to three would lessen visual impacts, but not to a level below significance. • Not allowing SeaWorld to comply with the voter-approved Proposition D with respect to allowing development up to 160 feet for the hotel site. • Constrain SeaWorld's flexibility in the development and redevelopment of new attractions that would in turn affect the economic viability of SeaWorld. • Constrain SeaWorld's ability to develop attractions that appeal to a broad range of family members.

TABLE S-2
Summary Comparison of Project Alternatives to the Proposed Project

DESCRIPTION	ADVANTAGES	DISADVANTAGES
Enhanced Public Access Alternative		
<ul style="list-style-type: none"> This alternative would entail a revised site plan to accommodate pedestrian and/or bicycle traffic along the entire water frontage of the leasehold. 	<ul style="list-style-type: none"> Complies with the goals of the Mission Bay Park Master Plan Update to have pedestrian access along the entire Mission Bay waterfront. 	<ul style="list-style-type: none"> Abandonment of an existing service vehicle road access to accommodate pedestrian access. This would severely compromise service and emergency access required for safe operation of the existing SeaWorld facility. Extensive modification of existing structures and water treatment infrastructure would be required resulting in significant costs associated with these improvements that would compromise the economic viability of the SeaWorld operation. Loss of the ability to maintain the attractions that are already constructed near the shoreline affecting SeaWorld's ability to remain an economically-feasible, high quality theme park. Diverting resources to enhance waterfront access would make these resources unavailable to renovate older areas of the park.
No Hotel And Marina Alternative		
<ul style="list-style-type: none"> Assumes that the proposed 650-room hotel and marina expansion would not occur. 	<ul style="list-style-type: none"> Results in a considerable reduction in trip generation (48%, or 7,300 ADT). Significant, unmitigable traffic impacts would be lessened, but not to a level below significance. Results in a lessening of the significant unmitigable visual impacts associated with the 90-foot high hotel, however, not to a level below significance. This alternative would eliminate the significant and mitigable impact to eelgrass beds from the marina in Perez Cove, since the Marina would not expand over existing eelgrass beds, a sensitive biological resource. 	<ul style="list-style-type: none"> Not allowing SeaWorld to comply with the voter-approved Proposition D with respect to allowing development up to 160 feet for the hotel site. Loss of potential hotel and marina related revenue to the City of San Diego. Result in a reduction in the number of permanent and part-time construction and operation employment opportunities that would be created by the project. The loss of the hotel and marina aspects of the project would not be in compliance with the goals of the Coastal Act.

TABLE S-2
Summary Comparison of Project Alternatives to the Proposed Project

DESCRIPTION	ADVANTAGES	DISADVANTAGES
Underground Parking Garage Alternative		
<ul style="list-style-type: none"> • Would require the parking garage special project to be located underground. 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • The major engineering and regulatory constraints associated with this facility would make it unbuildable or pose a major cost to the applicant. • Would not lessen any identified significant environmental impacts and would result in significant water quality impacts. • Costs of undergrounding the facility would compromise the economic viability of SeaWorld. • Costs of undergrounding the facility would compromise the economic viability of SeaWorld and hence would decrease the likelihood of increased revenues to the City.
No Parking Structure Or Hotel Over 30 Feet High Alternative		
<ul style="list-style-type: none"> • Assumes a hotel with 300-rooms with a height of 30 feet. • Assumes that the parking garage footprint will remain the same. The height of the garage would be reduced from 45 feet to 30 feet, reducing the proposed parking capacity by approximately one-third. 	<ul style="list-style-type: none"> • Visual impacts would be lessened, but not to a level below significance. 	<ul style="list-style-type: none"> • Other components of the SeaWorld Master Plan Update proposed in Area 1 would remain and therefore the visual impacts would remain significant and unmitigable. • Reduction in parking capacity could result in a significant parking impact because the parking structure is designed to accommodate increases in attendance over the next 20 years. • Not allowing SeaWorld to comply with the voter-approved Proposition D with respect to allowing development up to 160 feet for the hotel site. • Limiting the height of the parking structure would limit attendance and the corresponding revenue, reducing the economic viability of SeaWorld.

TABLE S-2
Summary Comparison of Project Alternatives to the Proposed Project

DESCRIPTION	ADVANTAGES	DISADVANTAGES
No Parking Structure Or Hotel Over 30 Feet High Alternative (Continued)		
		<ul style="list-style-type: none"> • Reduction in the height of the hotel would reduce potential transient occupancy tax (TOT) that could be generated for the City. • Result in a reduction in the number of permanent and part-time construction and operation employment opportunities that would be created by the project. • The reduction in the size of the hotel reduces the number of people who could be accommodated adjacent to the coast. This would compromise the Coastal Act priority visitor serving use.
Less Visually Intrusive Alternative		
<ul style="list-style-type: none"> • More restrictive design guidelines that focus on maximum bulk for various heights of future structures and, restrictions on the maximum heights of future structures from visually sensitive areas. 	<ul style="list-style-type: none"> • Visual impacts would be lessened, but not to a level below significance. 	<ul style="list-style-type: none"> • Not allowing SeaWorld to comply with the voter-approved Proposition D with respect to allowing development up to 160 feet for the hotel site. • Constrain SeaWorld's flexibility in the development and redevelopment of new attractions that would in turn affect the economic viability of SeaWorld. • Constrain SeaWorld's ability to develop attractions that appeal to a broad range of family members. • Constrain SeaWorld's flexibility in the development and redevelopment of new attractions that would in turn affect the economic viability of SeaWorld. This would also negatively affect revenues to the City.

TABLE S-2
Summary Comparison of Project Alternatives to the Proposed Project

DESCRIPTION	ADVANTAGES	DISADVANTAGES
Combination Alternative		
<p>This alternative would focus future attraction development on marine education and conservation. It would incorporate some of the aspects from the foregoing alternatives to address a variety of environmental issues including the following:</p> <ul style="list-style-type: none"> • Future structures would be limited to no more than 30 feet in height. • No new amusement type rides or hotels would be part of the Master Plan. • The Plan Update would include enhanced public access along the waterfront. 	<ul style="list-style-type: none"> • Significant unmitigable impacts to neighborhood character/aesthetics would be avoided. • Significant unmitigable impacts to transportation/circulation would be lessened. • Significant, mitigable impacts to land use; traffic/circulation; light, glare, and shading; water quality; biology, as it pertains to perching opportunities; and noise would be avoided. • Complies with the goals of the Mission Bay Park Master Plan Update to have pedestrian access along the entire Mission Bay waterfront. 	<ul style="list-style-type: none"> • This alternative would not meet any of the project objectives. • Reduction in parking capacity could result in a significant parking impact because the parking structure is designed to accommodate increases in attendance over the next 20 years. • Not allowing SeaWorld to comply with the voter-approved Proposition D with respect to allowing development up to 160 feet for the hotel site. • Limiting the height of the parking structure would limit attendance and the corresponding revenue, reducing the economic viability of SeaWorld. • Elimination of the hotel would reduce potential transient occupancy tax (TOT) that could be generated for the City. • Result in a reduction in the number of permanent and part-time construction and operation employment opportunities that would be created by the project. • Elimination of the hotel reduces the number of people who could be accommodated adjacent to the coast. This would compromise the Coastal Act priority visitor serving use. • Abandonment of an existing service vehicle road access to accommodate pedestrian access. This would severely compromise service and emergency access required for safe operation of the existing SeaWorld facility.

TABLE S-2
Summary Comparison of Project Alternatives to the Proposed Project

DESCRIPTION	ADVANTAGES	DISADVANTAGES
Combination Alternative (Continued)		
		<ul style="list-style-type: none"> • Extensive modification of existing structures and water treatment infrastructure would be required resulting in significant costs associated with these improvements that would compromise the economic viability of the SeaWorld operation. • Loss of the ability to maintain the attractions that are already constructed near the shoreline would affect SeaWorld's ability to remain an economically-feasible, high quality theme park. • Diverting resources to enhance waterfront access would make these resources unavailable to renovate older areas of the park. • Constrain SeaWorld's flexibility in the development and redevelopment of new attractions that would in turn affect the economic viability of SeaWorld. • Constrain SeaWorld's ability to develop attractions that appeal to a broad range of family members. • Constrain SeaWorld's flexibility in the development and redevelopment of new attractions that would in turn affect the economic viability of SeaWorld. This would also negatively affect revenues to the City.



Volume I

Final
Environmental Impact Report

for the proposed

SeaWorld
Master Plan Update

May 31, 2001

FINAL
ENVIRONMENTAL IMPACT REPORT
for the proposed
SEAWORLD MASTER PLAN UPDATE

LDR No. 99-0618
SCH No. 1984030708

May 31, 2001

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CHAPTER 1.0

INTRODUCTION

1.1 Background

In November 1998, the voters of the City of San Diego approved the SeaWorld Initiative, Proposition D, which amended the City of San Diego Municipal Code to allow development up to a maximum height of 160 feet on the SeaWorld leasehold in Mission Bay Park (Appendix H). Passage of the SeaWorld Initiative created an inconsistency between the Municipal Code, and the Mission Bay Park Master Plan Update, which serves as both the community plan and the Local Coastal Program (LCP) for Mission Bay Park.

The Mission Bay Park Master Plan Update Design Guidelines prohibit development above 30 feet. To eliminate the inconsistency caused by passage of the SeaWorld Initiative, the Mission Bay Park Master Plan Update must be amended.

To further implement the SeaWorld Initiative, SeaWorld is updating the SeaWorld Master Plan, concurrent with amendments to the Mission Bay Park Master Plan Update. The SeaWorld Master Plan is the “Development Plan” described in the lease between SeaWorld and the City of San Diego. The Lease provides that the Development Plan may be amended from time to time by the City and SeaWorld.

Subsequent to voter approval, SeaWorld began updating the SeaWorld Master Plan and requested the initiation of the Mission Bay Park Master Plan Update Amendment from the City of San Diego Planning Commission to integrate the height limit change into the Plan. The Planning Commission granted the request for initiation of the plan amendment process at a public hearing in October 1999. At this hearing the City of San Diego Planning Commission requested that SeaWorld undertake a public outreach program to solicit input regarding the issues associated with the Plan Update and how they may guide development of SeaWorlds Master Plan Update.

In response to this request, SeaWorld undertook a two-phased public outreach program, with the goal to hold them throughout the City at various times and locations to make them accessible to the largest number of people. The first phase was conducted in January 2000, and included

public forums at four locations: Carmel Mountain, Del Cerro, Mission Beach, and Sherman Heights. The second phase was conducted in June 2000, also at four locations: Normal Heights, Emerald Hills, Rancho Penasquitos, and Clairemont. A total of 225 participants attended, and over 500 comments were generated from all eight public forums. At the conclusion of the public outreach program, a City of San Diego Planning Commission Workshop was held in July 2000, at SeaWorld to familiarize the Planning Commissioners with the SeaWorld operation and the components of the Master Plan Update.

During the preparation of the SeaWorld Master Plan Update, the Plan evolved. At the outset, after voter approval of the development height limit change, the entire leasehold could be developed with structures up to 160 feet in height. During the early preparation of the Master Plan Update, SeaWorld reduced the area where development could exceed 30 feet in height. Subsequent to the first series of public forums in January, SeaWorld again revised the Master Plan Update to further reduce the areas where development could exceed 30 feet. As a result the SeaWorld Master Plan Update was divided into five Development Areas. Area 1 is the Theme Park, which would be 87.7 acres of the SeaWorld 189.4-acre leasehold. Within Area 1, the maximum height allocation as a percentage of the 87.7-acre area would be divided as shown in Table 1.1-1. In no case would a structure exceed a height of 160 feet.

**Table 1.1-1
Area 1 Height Allocation**

Height (feet)	Coverage (acres)	Percent Coverage of Area 1
0-30	65.82	75%
30+- 60	13.1	15%
60+- 100	6.1	7%
100+- 130	1.8	2%
130+- 160	0.88	1%
Total	87.7	100%

Source: SeaWorld, 2000.

In addition, in Area 2 a parking structure is proposed that would be up to 45 feet in height and in Area 5 a future hotel is proposed that would be up to 90 feet in height.

1.2 SeaWorld Master Plan Update

This Environmental Impact Report (EIR) evaluates the potential direct, indirect, and cumulative environmental impacts associated with the proposed SeaWorld Master Plan Update, which guides development on a City of San Diego 189.4-acre leasehold in Mission Bay Park. SeaWorld is an existing aquatic theme park with an annual attendance that has varied over the past ten years between 3.6 and 3.9 million visitors. The proposed project is an update of

SeaWorld's Master Plan, including the identification of near term specific development projects, called Tier 1 Projects, and long-term future Tier 2 Projects and Special Projects. Tier 1 and Tier 2 projects are located in Area 1: Theme Park (See Figure 3.3-1), while Special Projects are located within the other remaining four areas of the leasehold. The Tier 1 Projects include a Splashdown Ride, Educational Facility, Front Gate Renovation, and Special Events Center Expansion. The Tier 2 Projects consist of eight areas where future projects are identified as either an exhibit, ride or show. Within the Tier 2 projects, the future development could be a new project or redevelopment of an existing facility.

In addition to the SeaWorld Master Plan amendment, the proposed project also includes amendments to the Mission Bay Park Master Plan Update, and the Local Coastal Program (LCP). Additional discretionary actions that may be required to implement individual development projects when they are proposed include: California Coastal Commission Coastal Development Permit, Regional Water Quality Control Board General Construction Activity Stormwater Permit, Section 10 of the Rivers and Harbors Act, and U.S. Army Corps of Engineers 404 Permit.

The project site is located along the south perimeter of Mission Bay Park, north and adjacent to SeaWorld Drive, in the northwest quadrant of the SeaWorld Drive/Ingraham Street intersection. The property is bounded by Ingraham Street and Perez Cove Way on the western and southwestern property boundaries. The leasehold includes water area in Mission Bay where Waterfront Stadium is located in the Theme Park and Perez Cove, where SeaWorld operates a marina.

The City of San Diego as Lead Agency will review and consider this EIR in their decision to approve, revise, or deny the proposed project. Major discretionary actions required for overall project approval are listed above and provided under Project Description, Section 3.4, Discretionary Actions.

1.3 CEQA Requirements

1.3.1 CEQA Compliance

This EIR complies with the criteria, standards, and procedures of the California Environmental Quality Act (CEQA) of 1970 (California Public Resources Code, Section 21000, et seq.); the State CEQA Guidelines (California Administrative Code, Section 15000, et seq.); and the City of San Diego EIR Guidelines, as revised June 1992.

1.3.2 Initial Study and Notice of Preparation

The scope of analysis of this EIR was determined by the City of San Diego as a result of an Initial Study conducted in compliance with Section 15063 of the CEQA Guidelines; a scoping letter dated July 12, 2000; and responses to the Notice of Preparation (NOP) dated July 12, 2000 prepared in compliance with Section 15082 of the CEQA Guidelines. The City's scoping letter,

NOP, and associated responses are attached in Appendix A of this document. The following issues were determined to be potentially significant and are addressed in this EIR:

Land Use	Transportation/Circulation
Neighborhood Character/Aesthetics	Geology/Soils
Water Quality	Biological Resources
Air Quality	Human Health/Public Safety
Noise	Recreational Resources
Energy	Water Conservation
Light/Glare/Shading	

Other mandatory sections required by CEQA include a discussion of growth inducement, cumulative impacts, and alternatives to the proposed project.

Issues that were not determined to be significant are addressed in Chapter 7 of this EIR.

1.3.3 Purpose and Uses of This EIR

This EIR for the proposed SeaWorld Master Plan Update and related Mission Bay Master Plan Update Amendment has been prepared in compliance with California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.). This EIR has been prepared as a Program EIR, as provided in Section 15168 of the State CEQA Guidelines. A Program EIR is recommended for a series of actions that are related geographically, as logical part of a chain of contemplated actions, and in connection with the issuance of plans that govern the conduct of a continuing program [Section 15168 (a)]. The advantages of a Program EIR include the ability to provide a more exhaustive consideration of alternatives and cumulative effects than might be possible in single project specific EIRs; to avoid duplication of basic policy considerations; and to provide the Lead Agency with the ability to consider broad program-wide policies and mitigation measures that will apply to specific projects within the overall program [Section 15168 (b)].

This EIR will be distributed for review to the public and public agencies for a 45 day review period for the purpose of providing comments "on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided and mitigated" (Section 15204). The draft EIR will also be available for review at the City of San Diego Development Services Department, 1222 First Avenue, Fifth Floor, San Diego, CA 92101. The City of San Diego, as Lead Agency, will consider written comments received on the draft EIR in making its decision to certify the EIR as complete and in compliance with CEQA, and whether to approve or deny the proposed project.

1.4 Previous Environmental Documentation

1.4.1 SeaWorld Master Plan EIR

The SeaWorld Master Plan was the subject of an EIR (EQD No. 84-0160, SCH No. 84030708) prepared in 1984 and finalized in 1985. The main features of this Master Plan were expansion of

the theme park, marina and parking areas, and construction of a 300-room hotel. The EIR identified significant and mitigated impacts with respect to traffic circulation, bicycle/pedestrian circulation, urban design/visual quality, and biological resources. A significant and unmitigated impact was identified for the loss of dry boat storage in Mission Bay Park. A Statement of Overriding Considerations was adopted for this unmitigated impact. This 1985 EIR is available for review at the City of San Diego's Development Services Department.

1.4.2 Mission Bay Park Master Plan Update EIR

On August 2, 1994, the City Council approved the *Mission Bay Park Master Plan Update* and certified the associated Environmental Impact Report (DEP EIR No. 91-0898; SCH No. 93041010). This document was a comprehensive update of the Master Plan adopted in 1978. The Master Plan Update established four distinctive recreational areas (Regional, Neighborhood, Commercial, and Habitat) within Mission Bay Park organized according to regions of compatible use. The EIR for the updated Master Plan concluded the regional parkland area would be increased by 112 acres (50% increase). Commercial lease land was anticipated to expand by up to 18 acres (SeaWorld added ~~44~~16.5 acres in 1998 as anticipated by the Plan). As indicated in the EIR for the updated Mission Bay Park Master Plan, between 343 and 378 acres of additional wildlife habitat acreage would be restored. Based on the information available at the time, the EIR found that the Master Plan Update would result in significant but mitigable impacts to Biological Resources, Water Quality, and Circulation/Traffic. The Mission Bay Master Plan Update EIR further found that an increase in the number of guest residences by 350 to 950 rooms and the increase in number of parking spaces by 7,500 would potentially result in significant but mitigable impacts to police and fire services.

CHAPTER 2.0

ENVIRONMENTAL SETTING

2.1 Existing Uses and Topography

The SeaWorld Master Plan Update site consists of approximately 17 acres of water area and 172.4 acres of land area within Mission Bay Park. The project site is relatively flat varying from ten to 20 feet Above Mean Sea Level (AMSL). The existing SeaWorld leasehold contains a variety of uses, most of which either relate to or support the SeaWorld theme park. These uses include: attractions that are an exhibit, show or ride; restaurants; stores; parking lots; special events building; and supporting mechanical facilities. Other associated uses in the leasehold area include the Perez Cove Marina and Hubbs Research Area.

South of SeaWorld, beyond Sea World Drive, is the West Mission Bay Drive/Sunset Boulevard/Sea World Drive interchange system and the San Diego River. The interchange area and both sides of Ingraham Street are densely landscaped with various species of pines and eucalyptus trees, with the exception of an interchange loop and adjacent area south of Sea World Drive, which has been set aside as a least tern nesting site.

To the west of West Mission Bay Drive is the Quivira Basin commercial recreation area, which is occupied by a fish processing facility and restaurant, marinas and conference center, and the Hyatt Islandia Hotel. Hospitality Point, the primary landform within Quivira Basin, is the location of the City's Park and Recreation Department, Mission Bay Park headquarters. It also houses the Lifeguard Services Division and San Diego Police Department's Harbor Unit.

The eastern boundary of the SeaWorld site extends to Mission Bay Parkway, a sparsely traveled road leading to the boat ramp. The eastern boundary lies adjacent to the parklands of the South Shores area.

The northern boundary of the SeaWorld leasehold generally conforms to the shoreline except on the west side of the park where 17 acres of open water area for the SeaWorld Marina, Waterfront Stadium and Sky Ride are included in the leasehold. To the north lies Fiesta Island, which forms the southern boundary of the Pacific Passage, and the open waters of Mission Bay Park.

2.2 Regional Plans

The project site lies within the boundaries of the following regional plans: Multiple Species Conservation Program (MSCP) Subarea Plan, Congestion Management Plan, Regional Air Quality Strategy, and Regional Water Quality Control Plan.

2.2.1 City of San Diego Multiple Species Conservation Program (MSCP) Subarea Plan

As discussed in Section 4.6, Biological Resources, the project site exhibits no sensitive terrestrial biological resources. Vegetation is limited to landscaped areas. However, the water area of the leasehold does include sensitive eelgrass beds. Furthermore, the project site is not located in any Multi-Habitat Planning Area (MHPA) of the MSCP.

2.2.2 San Diego County Congestion Management Plan

The Congestion Management Plan (CMP) adopted for San Diego County requires evaluation of regional impacts of large-scale projects, and establishes operational standards for specific arterials and highways. The CMP analysis is included in Section 4.4, Transportation/Circulation, of this EIR.

2.2.3 San Diego County Regional Air Quality Strategy

The Regional Air Quality Strategy (RAQS) is aimed at reducing air pollution by establishing a number of strategies for individual projects and local governments to follow. Strategies include car pooling, parking regulations, and development density and mixes to achieve minimum clean air standards set by the Air Pollution Control District (APCD). Project compliance with the RAQS is discussed in detail in Environmental Analysis Section 4.9, Air Quality, of this EIR.

2.2.4 San Diego Regional Water Quality Control Board Basin Plan

The San Diego Regional Water Quality Control Board's (RWQCB) Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. The proposed project is located in the Peñasquitos Hydrologic Unit of the Basin Plan, a triangular shaped area of about 170 square miles extending from Poway on the east to La Jolla on the west. Major creeks draining into this unit include Rose Creek, Carroll Canyon Creek, and Sorrento Creek. Miramar Reservoir, a major storage facility, contains imported Colorado River water. The Peñasquitos Hydrologic Unit contains two coastal lagoons: Peñasquitos Lagoon and Mission Bay. Mission Bay and the mouth of the San Diego River form a 4,000-acre aquatic park. Water quality within Mission Bay is generally lower than that of the coastal ocean water due to the poor flushing characteristics of the bay and the input of nutrient material from urban storm runoff. Groundwater in the project vicinity is not designated as having current or potential

beneficial use in the San Diego Basin Plan, and further, is noted as being exempt from the municipal use designation. An analysis of water quality is provided in Section 4.5, Water Quality.

2.2.5 General Plans

The project site is subject to the City of San Diego's *Progress Guide and General Plan*. Environmental Analysis Section 4.1, Land Use, contains a full discussion of the relationship of the project to the City's General Plan and the Mission Bay Park Master Plan Update. As discussed in the land use section, the proposed SeaWorld Master Plan Update would be consistent with the overall goals of the General Plan and *Guidelines for Future Development* in making more efficient use of existing facilities and improvements. Overall, the Progress Guide and General Plan provides regional goals and policies which are more relevant to the development of community plans than in guiding specific development proposals. Appropriately, the General Plan includes a series of community plans that define the General Plan goals for individual communities providing more project-specific guidance for development in San Diego. The SeaWorld Master Plan Update is located in the Mission Bay Park Master Plan Update, which functions as the community plan for the area within the boundaries of Mission Bay Park.

Within the framework of the Mission Bay Park Master Plan Update, the land use component identifies three guiding principles:

1. Mission Bay Park should be an aquatic-oriented park which provides a diversity of public, commercial, and natural land uses for the enjoyment and benefit of all the citizens of San Diego and visitors from outside communities;
2. Mission Bay Park should be a park in which land uses are located and managed so as to maximize their recreation and environmental functions, minimize adverse impacts on adjacent areas, facilitate public access and circulation, and capture the distinctive aesthetic quality of each area of the Bay; and
3. Mission Bay Park should also enhance the viability and use of other connected open space areas to promote the creation of a comprehensive, integrated open space system into and out of Mission Bay.

Dedicated lease areas in Mission Bay Park, comprised of both non-profit and commercial leases, contribute to the revenues of the City while providing a variety of recreation opportunities to Park visitors. Of the nearly 472 allowable acres dedicated for lease areas in the Park, about 85 percent are currently in use. The SeaWorld site is identified in the Mission Bay Park Master Plan Update as "dedicated lease area". The relevant objectives for dedicated lease areas as listed in the Plan include:

1. Existing commercial leases should be intensified to the greatest extent possible, so as to minimize the taking of public land to expand or create new commercial leases elsewhere in the Park;

2. Commercial leases should provide a variety of recreational opportunities, i.e., high, as well as moderately-priced guest housing accommodations, recreational vehicle camping, and sites for primitive tent camping; and
3. Within the preceding objectives, commercial lease areas should render maximum revenue utility to the City.

The Mission Bay Park Master Plan Update also includes goals and objectives relating to water use, the environment, access and circulation, and design guidelines, all of which are described in detail in Section 4.1, Land Use.

Those portions of the site, which are undeveloped or would be redeveloped with newer uses proposed by the applicant, are described in the Project Description, Section 3.4, Proposed Master Plan Update and Operations.

2.2.6 California Coastal Commission

The project is located within the coastal zone and is therefore subject to the California Coastal Act. Issues of concern to the California Coastal Commission are expected to include public access, as well as public parking and marina slips, setback buffers from wetlands, and stormwater runoff into coastal waters. For a discussion of project features including public access, public parking and marina slips, please refer to Chapter 3.0, Project Description. For a discussion relating to public access to the waterfront and park areas both during and after construction, please refer to Environmental Analysis, Sections 4.1, Land Use; 4.4, Traffic and Circulation; and 4.10, Recreational Resources. Setback buffers are discussed in Sections 4.0, Land Use and in Neighborhood Character/Aesthetics. Water quality issues are discussed in Section 4.5, Water Quality.

CHAPTER 3.0

PROJECT DESCRIPTION

3.1 Project Location

The SeaWorld Master Plan Update project site is located in Mission Bay Park, within the city limits of the City of San Diego. The project site is approximately eight miles northwest of the downtown/civic center area (Figure 3.1-1). The boundaries of Mission Bay Park are Interstate 5 on the east, the Pacific Ocean on the west, Interstate 8 and the San Diego River Floodway on the south, and Grand Avenue on the north (Figure 3.1-2).

The SeaWorld site is located north of Sea World Drive, east of Ingraham Street and West Mission Bay Drive, south of Pacific Passage in the Bay and west of the South Shores area of Mission Bay Park (Figure 3.1-3). Access to the site is from Sea World Drive and Perez Cove Way to the main park entrance. Access to the site is also available via Ingraham Street to Perez Cove Way.

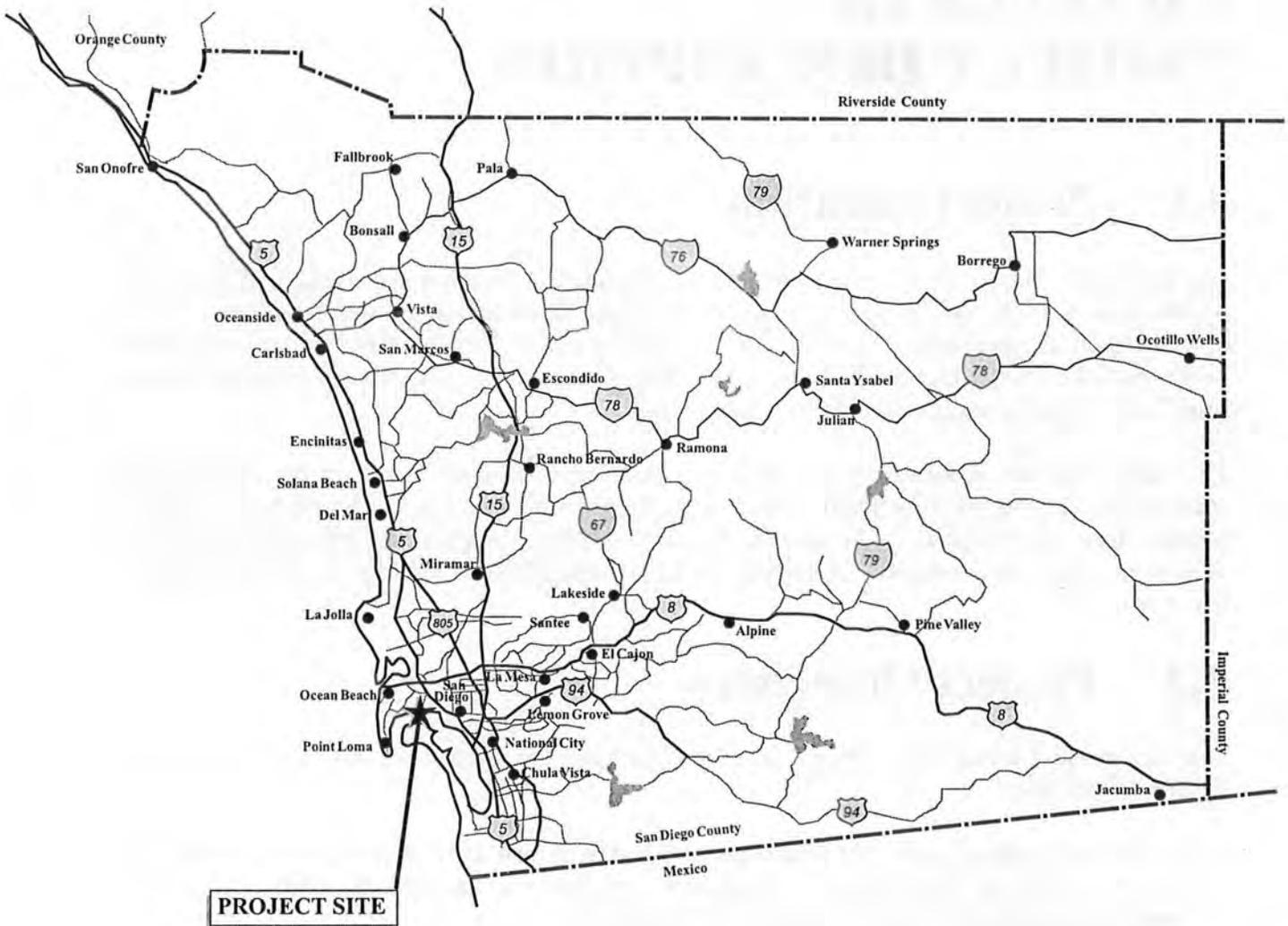
3.2 Project Objectives

The SeaWorld Master Plan Update project objectives are guided by the SeaWorld vision statement, which is:

- To be recognized globally for achieving new levels of distinction and respect by leading the industry with live marine animal experience, innovative entertainment, education, research and conservation that ensures our growth and success.

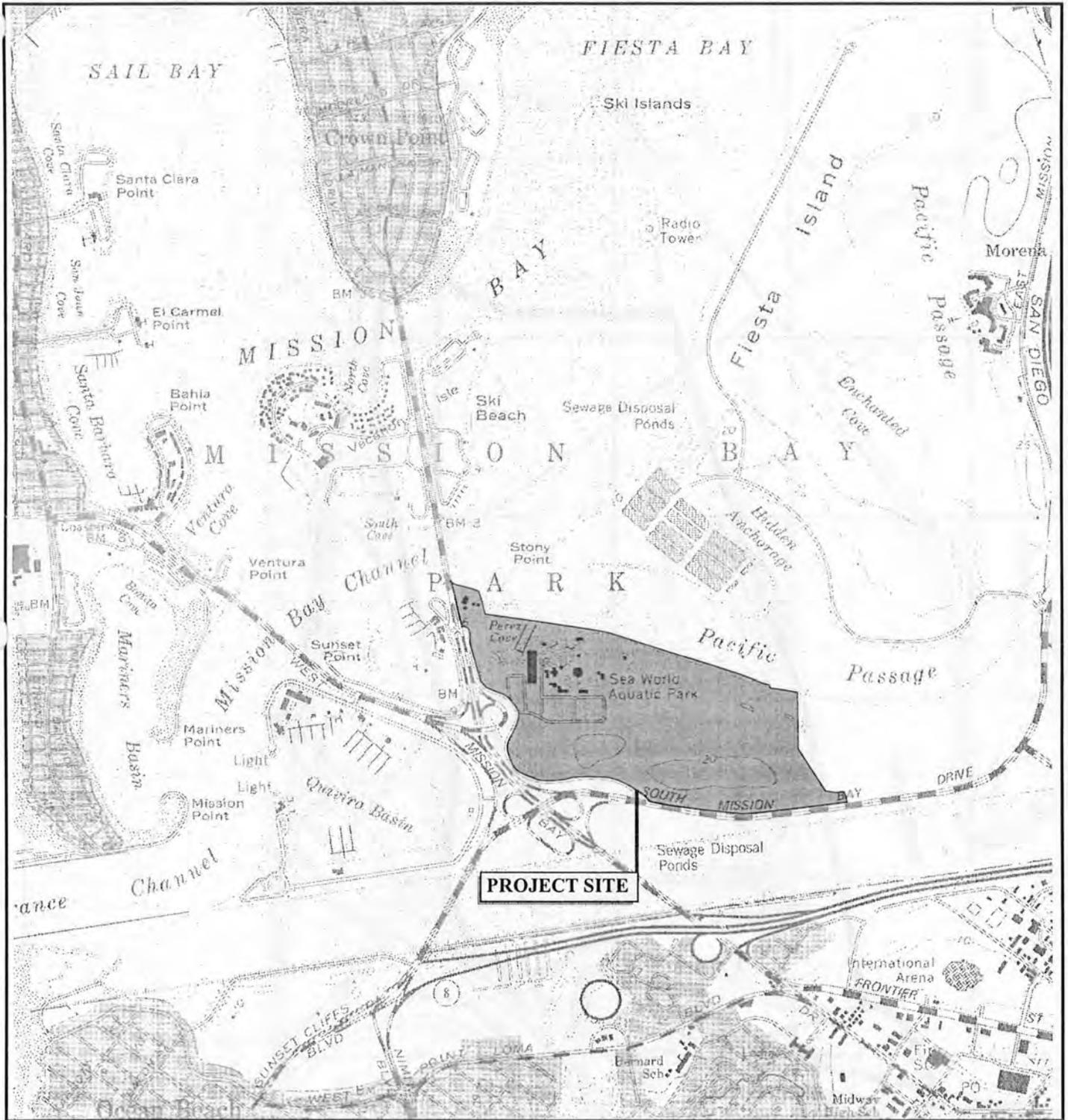
SeaWorld's project objectives are:

1. To implement the SeaWorld Initiative, Proposition D, approved by the electorate of the City in November 1998. The SeaWorld Initiative allows development up to a maximum height of 160 feet on the entire SeaWorld leasehold;



Regional Location Map

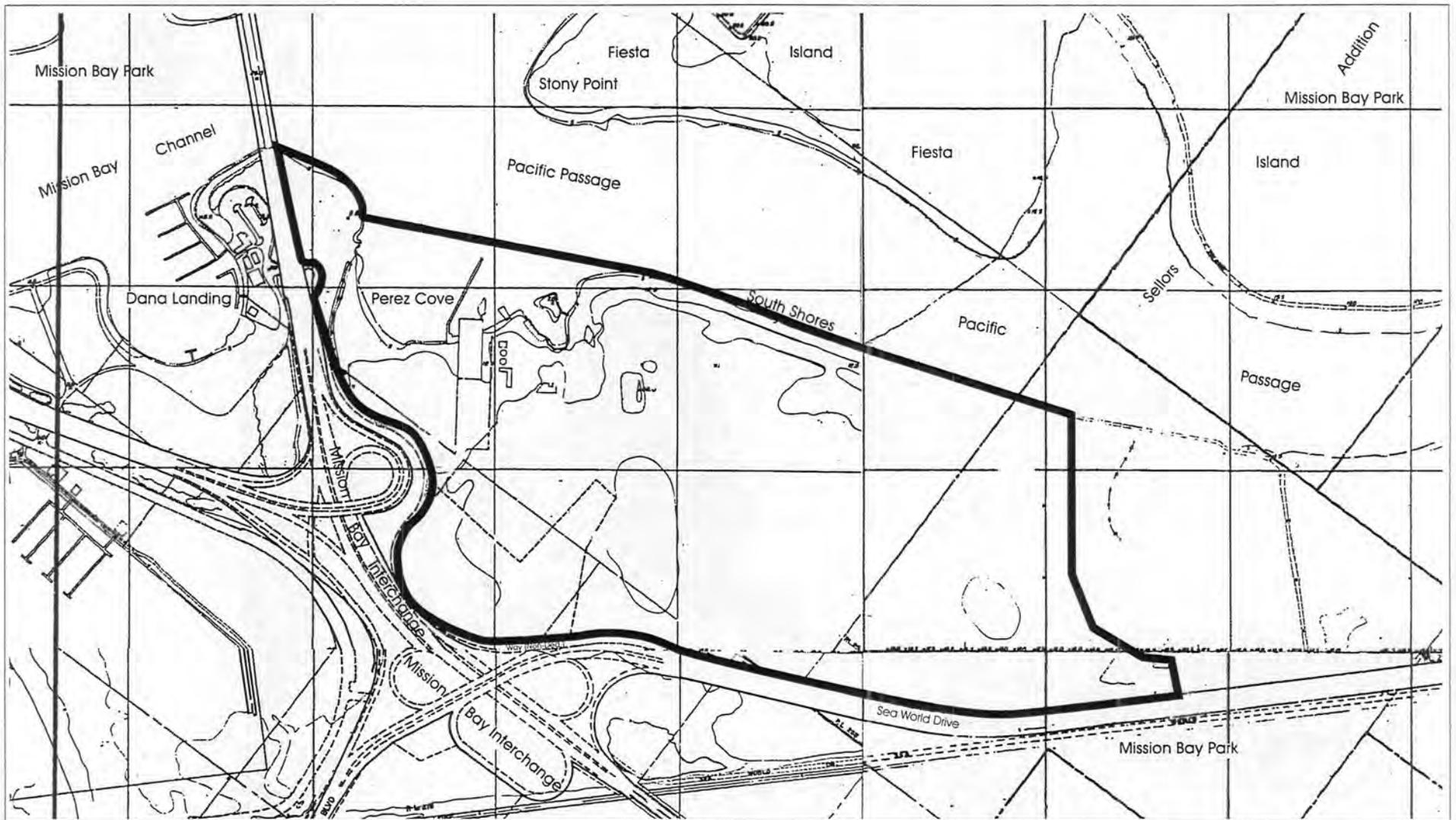
Figure 3.1-1



Source: USGS 7.5 Minute Series, La Jolla Quadrangle



Not to Scale



LEGEND

 Project Site



1 inch = 800 feet

Source: City of San Diego 800' Scale Map

Project Location Map

Figure 3.1-3

2. Provide for an updated comprehensive Master Plan that addresses the entire SeaWorld leasehold;
3. Continue to operate and improve on an economically-feasible, high quality theme park environment;
4. Provide attractions which appeal to a broader range of family members;
5. Renovate older areas of the park;
6. Increase revenues to the City of San Diego;
7. Continue to create permanent and part-time, local employment opportunities;
8. Provide an updated Master Plan that reflects the policies of Chapter 3 of the California Coastal Act and the Mission Bay Park Master Plan Update;
9. Remain competitive with other theme parks.
10. Eliminate the inconsistency with the Mission Bay Park Master Plan Update caused by the passage of the SeaWorld Initiative.
11. Allow renovation of existing buildings over 30 feet in height.

These objectives are in alignment with City of San Diego's goals for the site as set forth in the Mission Bay Park Master Plan Update and Progress Guide and General Plan. Specifically, the updated Master Plan would intensify the existing commercial lease by providing of a variety of recreational opportunities and increasing revenues to the City. Further discussion of how the project objectives support the City's goals is found in Section 4.1, Land Use.

3.3 Existing Operations

This section summarizes the facilities and activities, which currently comprise SeaWorld. The primary purpose of this summary is to establish a baseline condition against which this EIR can evaluate the potential environmental impacts, which may occur from new facilities as a result of the proposed amendments to SeaWorld's existing Master Plan.

SeaWorld is an ongoing operation that demonstrates a variety of characteristics, ranging from water treatment to fireworks displays. Furthermore, SeaWorld has an existing, adopted Master Plan, which allows for a variety of uses on the SeaWorld leasehold. The following provides a discussion of these baseline conditions.

3.3.1 Existing Facilities and Master Plan

The SeaWorld Master Plan was adopted in 1985 and consists primarily of a site plan and list of conceptual development proposals. Since 1985, nearly all of the proposed facilities have been built, with the notable exception of the marina expansion and a hotel in the Perez Cove Shoreline area.

The SeaWorld leasehold is 189.4 acres, which is occupied by a variety of land and water uses including 7.3 acres of right-of-way (Perez Cove Way). To more easily understand the variety of uses, the following discussion is organized by five functional areas as defined by the proposed Master Plan Update (Figure 3.3-1).

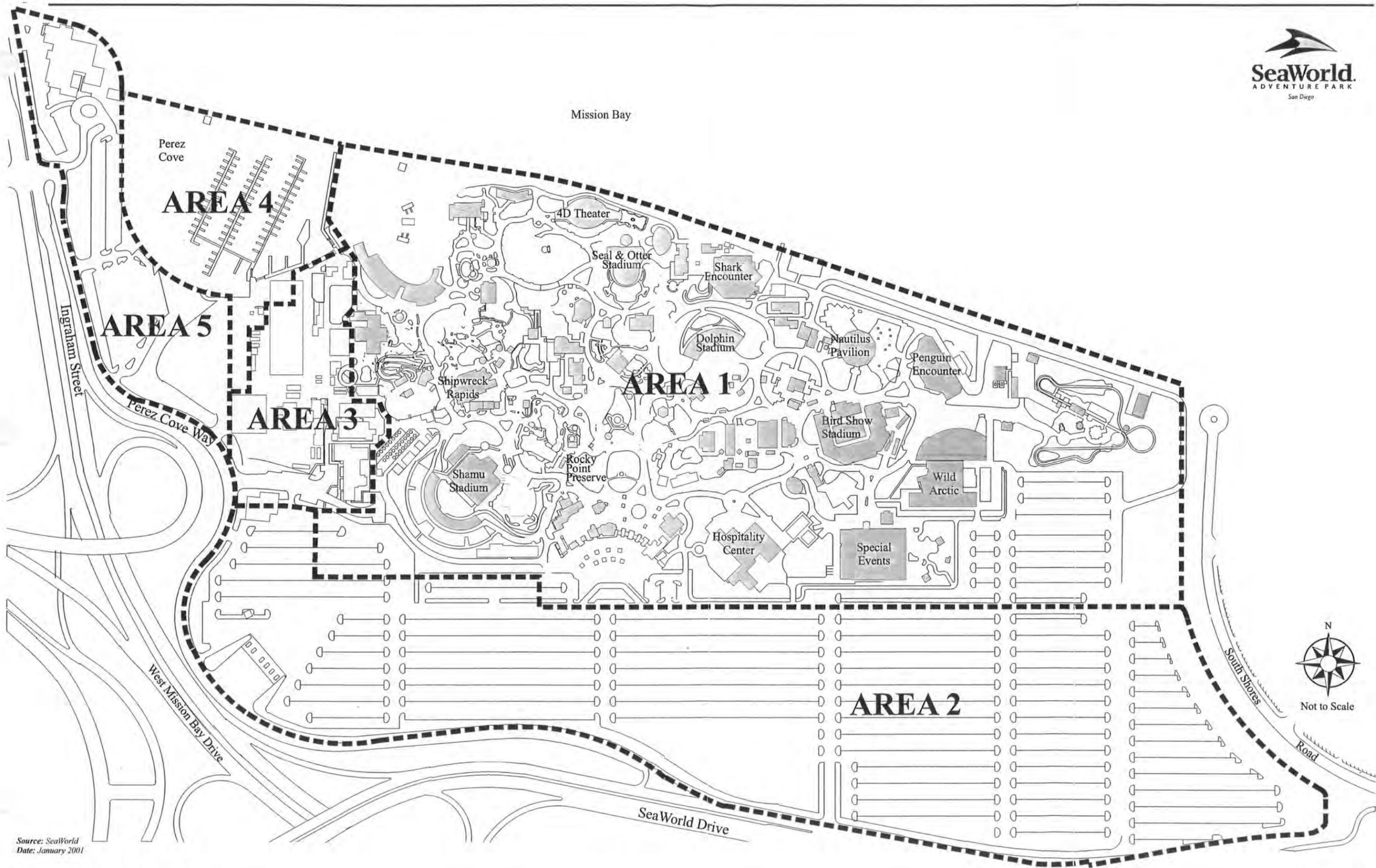
Area 1: SeaWorld Theme Park

The SeaWorld Theme Park area consists of 87.7 acres bounded by the Pacific Passage channel of Mission Bay to the north, the Administration and Support area to the west, the South Shores area of Mission Bay Park to the east, and the Guest Parking area to the south. In addition to the land development, this area includes seven acres of open water area used for water shows at Waterfront Stadium. The Theme Park area is developed with a variety of marine-related attractions and support facilities. Tall trees reaching 60 feet or more in height are located within the western portion of this area.

The SeaWorld Tower, located in the Theme Park, is 320 feet in height and is a prominent landmark and focal point for all of Mission Bay Park and the vicinity. Other notable taller existing structures in the Theme Park area are the Harbor Side Café, an approximately 45-foot-high, A-frame building located adjacent to Mission Bay and the Sky Ride Barn; the approximately 40-foot-high Forbidden Reef Entry Structure located east of the Shipwreck Rapids ride; and the two approximately 100-foot-high pylons that support the Sky Ride in Perez Cove. The remaining existing structures are 30 feet or less in height. Within the park, the existing facilities reflect the dominant marine animal theme and the primary emphasis areas of entertainment, education, research, and conservation, as set forth in SeaWorld's vision statement. A list of the existing facilities in Area 1 is provided in Table 3.3-1, which also illustrates a high degree of integration and overlap because any single attraction or facility may incorporate one or more of the four emphasis areas.

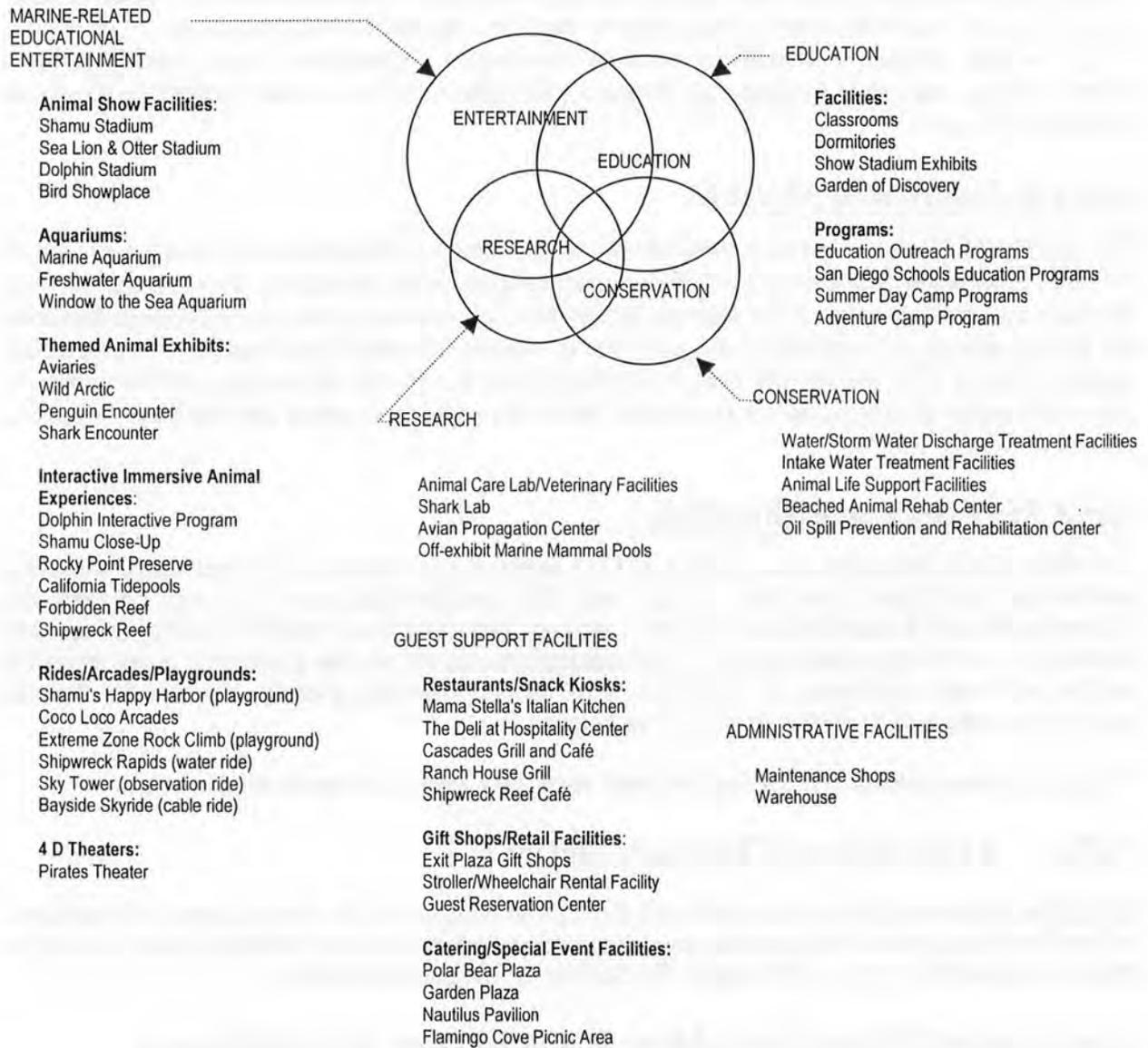
Area 2: Guest Parking

The Guest Parking area covers 63.5 acres along the south side of the leasehold between the SeaWorld Theme Park (Area 1) and Sea World Drive. Access to the parking area is through the main vehicular entryway located in the southwest corner of the Guest Parking area. The Guest Parking exit is in the central southern part of Area 2 at the Sea World Way/Sea World Drive intersection. A total of 6,692 parking spaces are provided in Area 2.



Source: SeaWorld
Date: January 2001

**TABLE 3.3-1
Area 1 Facilities**



Area 3: Administration and Support

The Administration and Support Area consists of 8.5 acres of land located immediately to the west of the SeaWorld Theme Park (Area 1) between the SeaWorld Marina and the Guest Parking area. This area contains many of the support facilities needed for the operation of SeaWorld. These include administrative offices, security building, a cogeneration plant, water treatment plant, storage, and other facilities. A reserved parking/carpool lot is also located in the south portion of the area.

Area 4: SeaWorld Marina

The SeaWorld Marina contains a small shoreline land area of 1.0 acre and an open water area of 10 acres. The water area contains a 200-slip marina operated by SeaWorld. The marina complex includes a launching crane, a dry storage facility for 37 boats, and restroom and lounge facilities for marina guests. An expansion of the marina to include 200 additional boat slips is part of the existing Master Plan but has not been built (See Figure 3.3-1). On the east side of the marina is the water intake platform, one of two intake areas that provide seawater for SeaWorld's marine animal exhibits.

Area 5: Perez Cove Shoreline

The Perez Cove Shoreline area consists of 11.4 acres of land between the Perez Cove shoreline on the east and Perez Cove Way on the west. The northern portion of the area contains the Hubbs-SeaWorld Research Institute and a parking lot. Additional asphalt parking areas and landscaping cover the remaining area. The parking area serves marina guests and as an auxiliary lot for SeaWorld employees. A 300-room hotel and boat-landing pier are allowed for the site under the existing Master Plan, but have not been built.

Table 3.3-2 summarizes the existing land and water uses within the SeaWorld leasehold.

3.3.2 Attendance Characteristics

Attendance characteristics were developed through an analysis of the past ten years of operation. In addition, background information regarding theme park attendance characteristics throughout the U.S. is described to provide context for SeaWorld's attendance history.

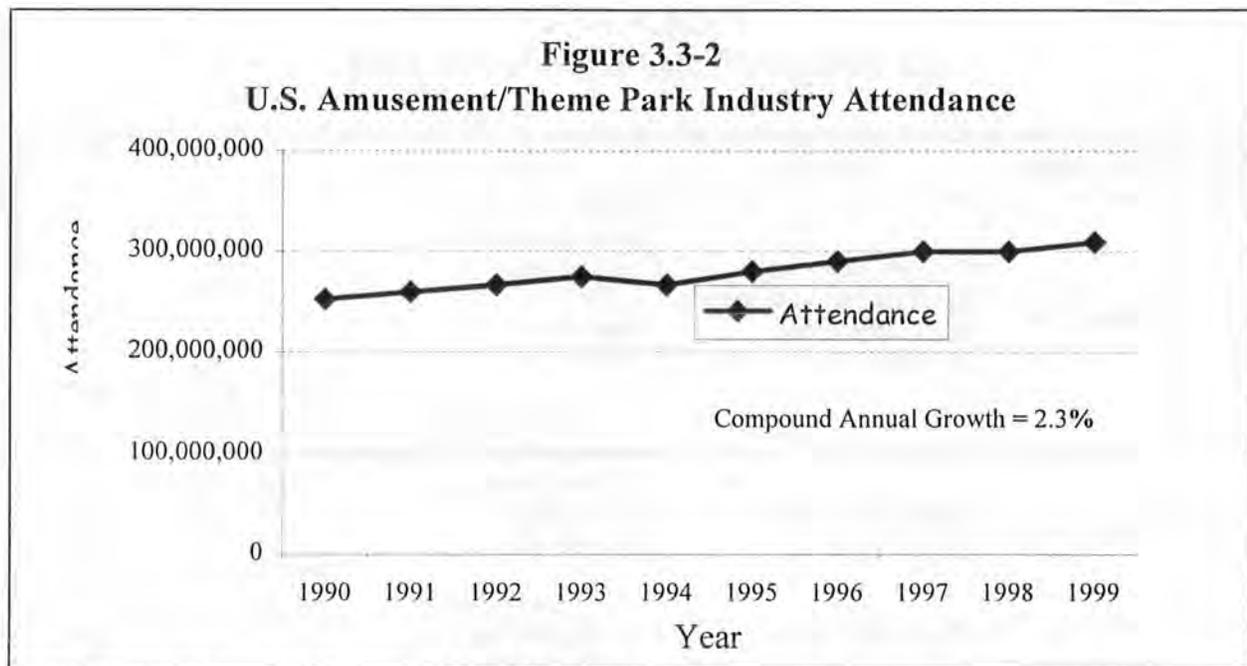
Amusement/Theme Park Attendance History and Influences

The United States has approximately 450 amusement parks and attractions with an estimated 1999 attendance of 309 million. According to the International Association of Amusement Parks and Attractions (IAAPA) attendance at U.S. Amusement/Theme Parks has grown 2.3% compounded annually over the past ten years (Figure 3.3-2). Factors influencing the industry's attendance include, but are not limited to, new parks entering the market, weather, international economies and travel patterns.

**TABLE 3.3-2
Existing SeaWorld Land/Water Uses**

Area	Description	Facilities	Land/Water Use	Acres	%
1	Theme Park	Exhibits, rides, shows, guest support, park support and multi purpose facilities.	Building Coverage	11.6	13
			Hardscape/Pathways	23.6	27
			Landscaping	35.3	40
			Pools	3.0	3
			Open Water	7.0	8
			Unimproved	7.2	8
			Total	87.7	100%
	Parking Spaces	922			
2	Guest Parking	Main parking area for theme park.	Hardscape/Internal Roadways	28.2	44
			ChipSeal Pavement	21.0	33
			Landscaping	5.1	8
			Unimproved	9.2	14
			Total	63.5	100%
	Parking Spaces	6,692			
3	Administration and Support	Theme park support facilities, administrative offices and employee parking lot.	Building Coverage	1.5	18
			Hardscape/Pathways	7.0	82
			Total	8.5	100%
	Parking Spaces	142			
4	SeaWorld Marina	Boat docks, dry boat storage, and marina support.	Hardscape/Pathways	1.0	9
			Open Water	10.0	91
			Total	11.0	100%
			Boat Slips	200	
			Dry Boat Storage	37	
	Parking Spaces	65			
5	Perez Cove Shoreline	Hubbs-SeaWorld Research Institute, employee parking lot.	Building Coverage	.5	4
			Hardscape/Pathways	4.4	39
			Landscaping	6.5	57
			Total	11.4	100%
				Parking Spaces	650
			Summary	Acres	%
			Building Coverage	13.6	7
			Hardscape/Pathway/Roadways	64.2	33
			ChipSeal Pavement	21.0	11
			Landscaping	46.9	25
			Pools	3.0	2
			Open Water	17.0	9
			Unimproved	16.4	9
			Additional right-of-way	7.3	4
			Total Land	172.4	91%
			Total Water	17.0	9%
			Total Leasehold	189.4	100%
			Total Parking	8,471	

Source: SeaWorld, 2000.



Source: International Association of Amusement Park and Attractions

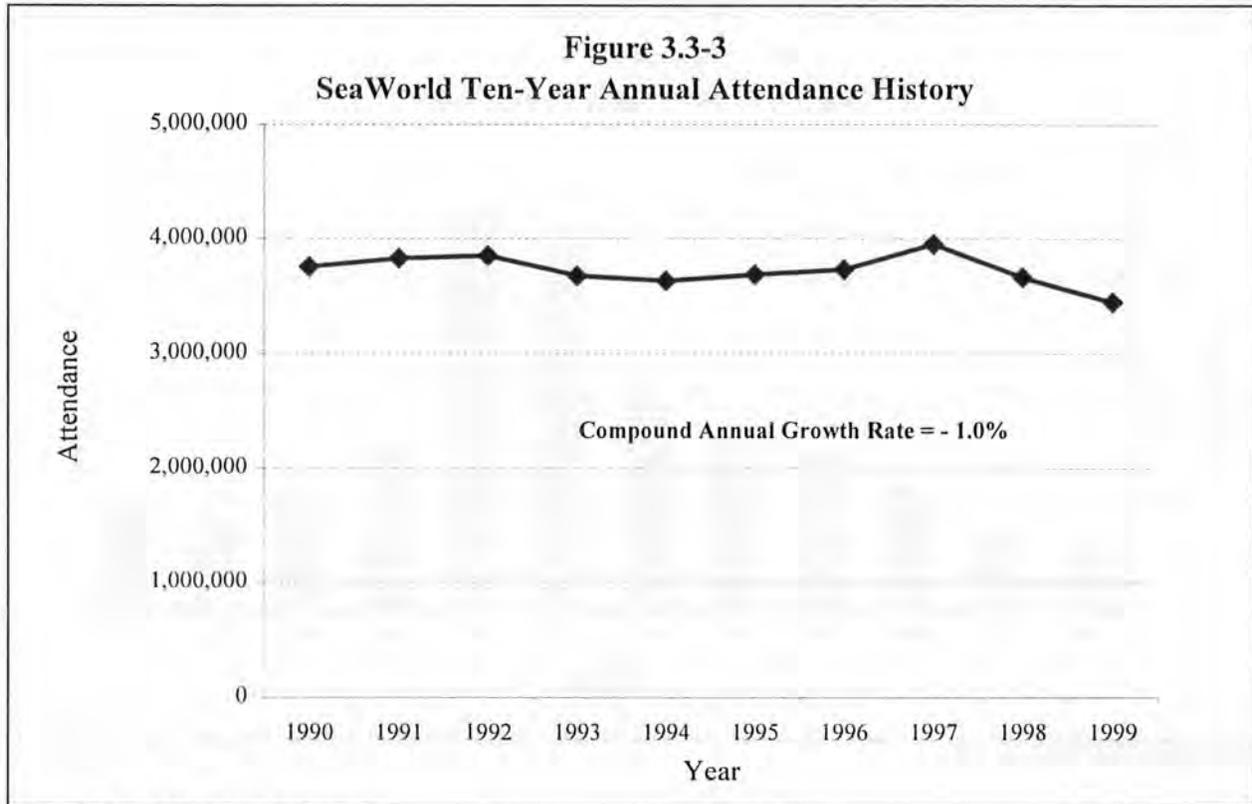
In reviewing the national attendance history, several anomalies in the growth trend are important to note. In 1994, the industry suffered a three percent attendance loss due to an unusually cold and wet summer season. In 1998, several factors contributed to a year of flat attendance: severe weather due to El Niño; a decrease in Canadian and Asian tourism; and wild fires and hurricanes in Florida (the theme park capital of the world).

SeaWorld Attendance History

SeaWorld attendance for the last ten years has actually decreased by an average of one percent based on a Compounded Annual Growth (CAG) rate (Figure 3.3-3). The average annual attendance for this ten-year period is 3,722,061. This relatively flat attendance situation has occurred despite the new attractions, which have been added throughout the past decade. While new attractions have increased attendance by as much as 100,000 - 150,000 visitors in their first year of operation, that increase historically has not translated into a net attendance gain for the park on an annual ongoing basis. Along with the factors influencing the amusement/theme park industry, SeaWorld has faced other challenges in the local market that have offset attendance gains from new attractions. Recently, heavy entrance fee discounting at other Southern California theme parks and the development of Legoland in March of 1999 in nearby Carlsbad, have negatively impacted SeaWorld attendance.

SeaWorld Seasonal Attendance Patterns

SeaWorld's seasonal attendance patterns are similar from year to year, which has been well documented over the last 25 years. This attendance history indicates that attendance is spread proportionately throughout the year with the monthly percentages of the total remaining fairly constant from year to year. Daily attendance figures follow this same principle. Approximately

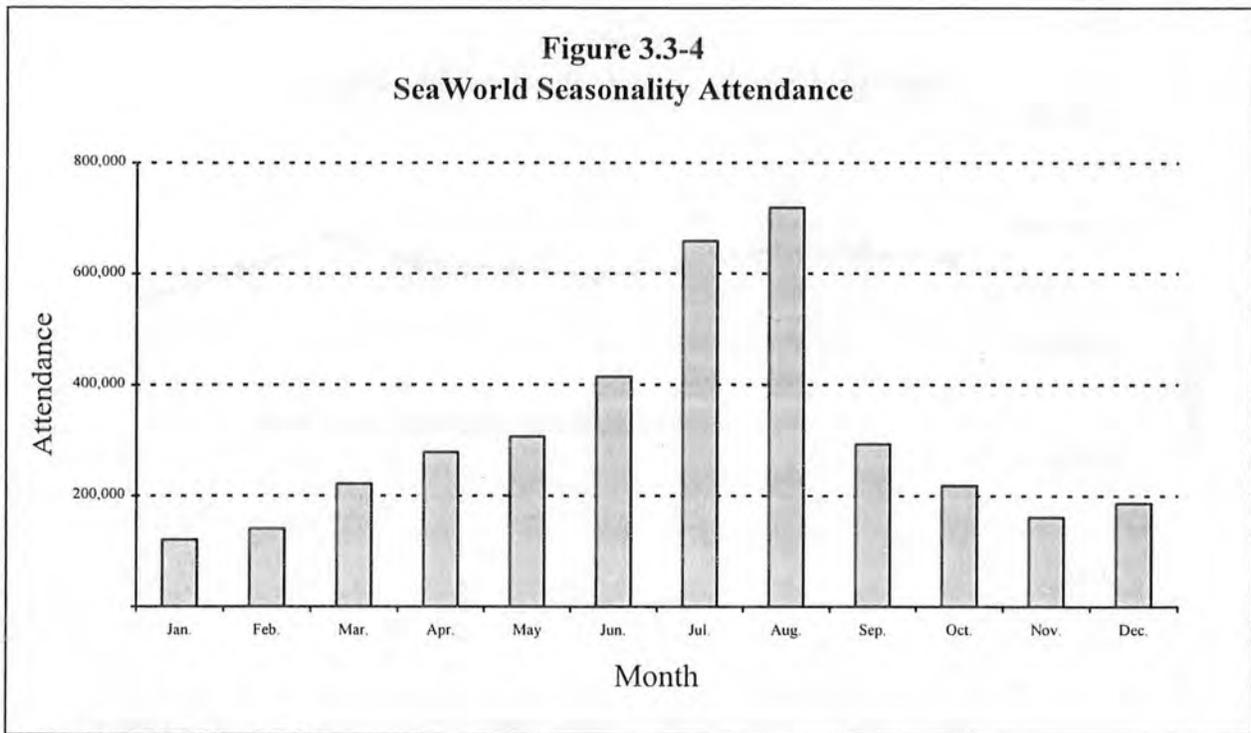


Source: SeaWorld San Diego, 2000.

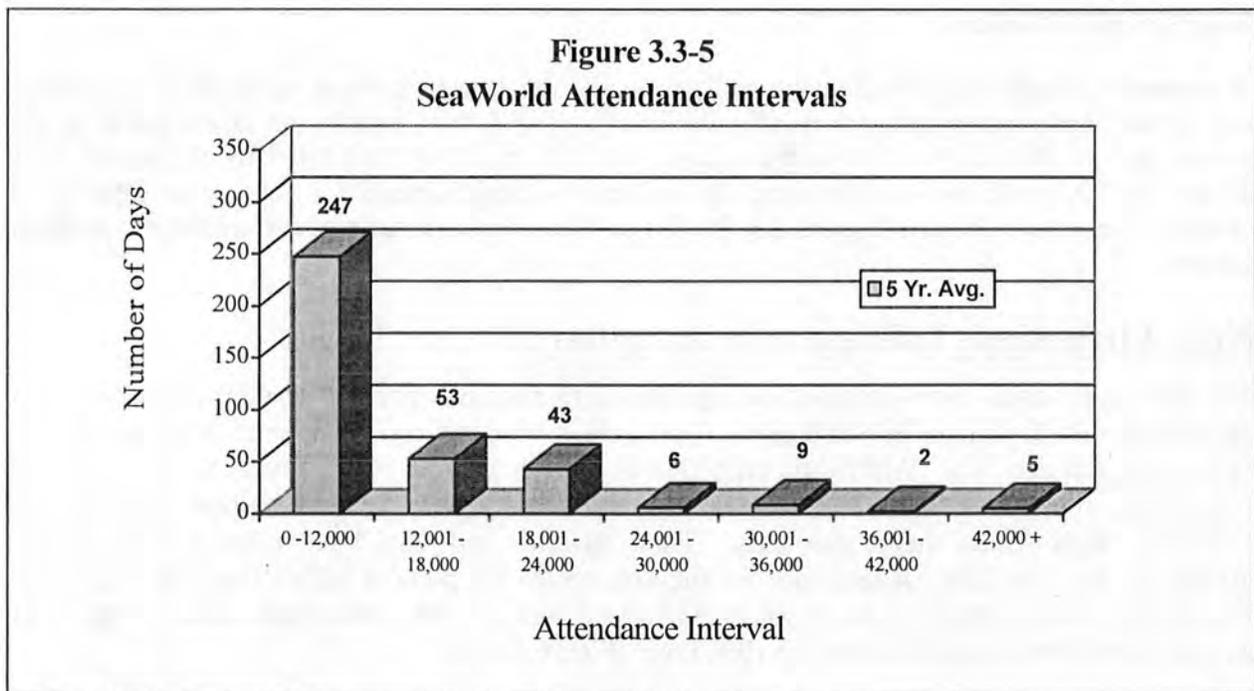
50 percent of SeaWorld attendance is realized during the summer season, when daily attendance lies in the higher attendance levels (Figure 3.3-4). The lowest attendance levels occur in the winter season. Based on a five-year average, over 80 percent of the year daily attendance falls below 18,000, while only two percent of the year, or approximately 7 days, does attendance reach a level above 36,000 (Figure 3.3-5). Those 7 days traditionally occur within the summer season.

New Attractions Influence on Attendance

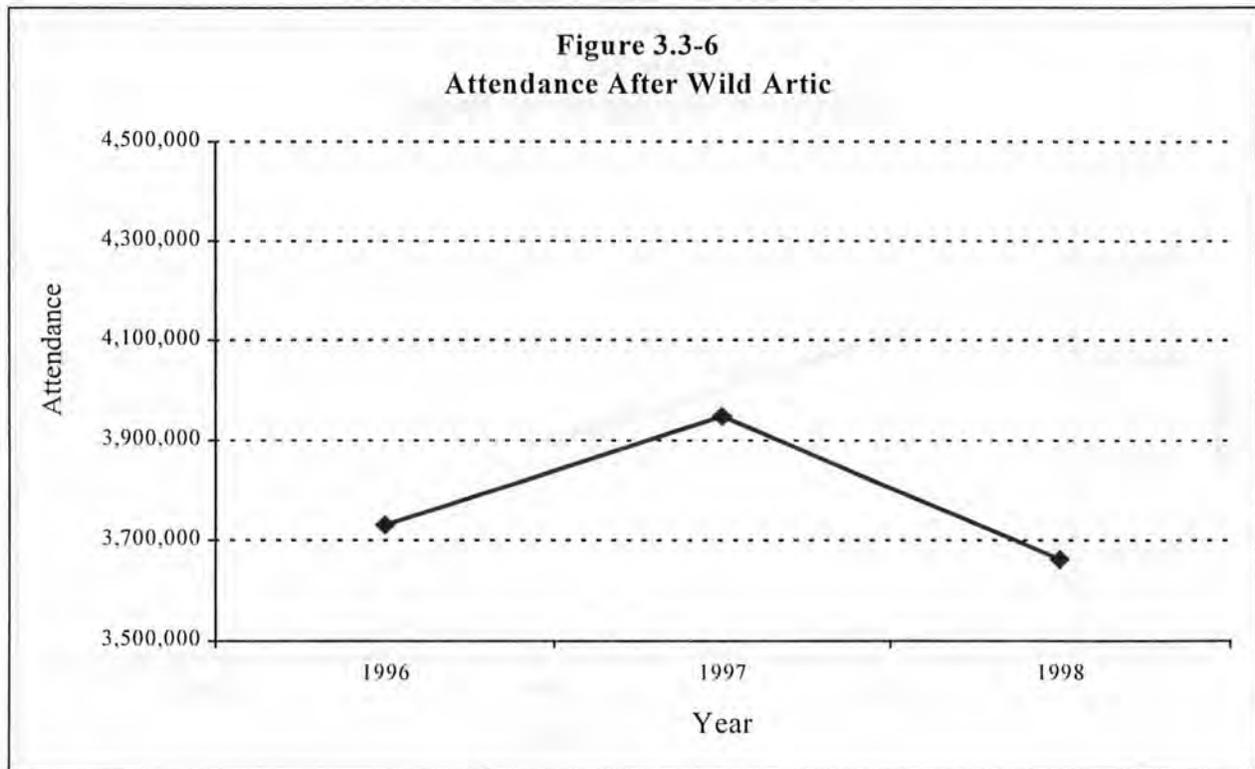
The following discussion provides background information regarding the influences of new attractions on attendance at SeaWorld. Two new attractions are discussed: Wild Arctic and Shipwreck Rapids. The Wild Arctic attraction opened in May of 1997. It was SeaWorld's first completely immersive attraction with a motion-based theater, several animal exhibits and extensive Wild Arctic theme elements. This attraction introduced polar bears to SeaWorld guests for the first time. Attendance for the year ended six percent higher than the prior year. However, this attendance increase was not sustained, and in 1998, annual attendance dropped by seven percent, or returned to near the 1996 level (Figure 3.3-6).



Source: SeaWorld San Diego, 2000.



Source: SeaWorld San Diego, 2000.



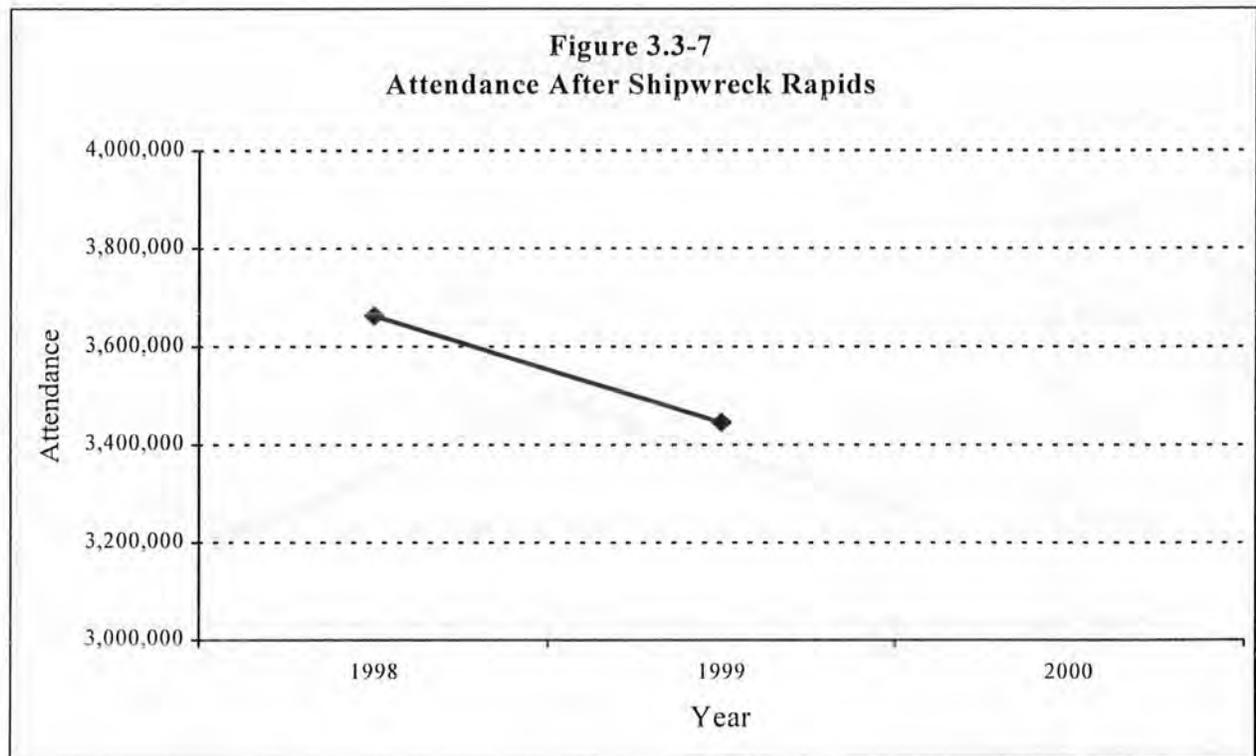
Source: SeaWorld San Diego, 2000.

Shipwreck Rapids, which is also an attraction with extensive theme elements, is designed to create a white-water river ride experience. This relatively new attraction was introduced at SeaWorld in May of 1999. Shipwreck Rapids also included a restaurant with entertainers and several animal elements. Yet even with this new attraction, attendance for the 1999 year ended six percent down from 1998 and 13 percent down from 1997 (Figure 3.3-7). The shortfall in attendance is attributed to a decrease in Asian tourism and the addition of the Legoland theme park to the San Diego market in the summer of 1999. The former is considered a temporary condition, while the latter would result in larger impact to attendance in the first several of years of operation.

As demonstrated in the foregoing analysis, SeaWorld operates in a highly competitive market that requires constant improvements of their exhibits and attractions in order to maintain attendance levels. Without new attractions, SeaWorld expects that attendance would decline.

3.3.3 SeaWorld Operational Characteristics

The following discussion focuses on the operational characteristics of SeaWorld's facilities, which have a bearing on the environmental effects evaluated in this EIR. More detail concerning the existing operational characteristics is provided in the appropriate topical impact analysis discussions that follow the project description.



Source: SeaWorld, 2000.

Hours of Operation

SeaWorld's hours of operation vary with the time of year and peak attendance. In the wintertime, the typical hours of operation are 10:00 AM to 5:00 PM, while in summertime SeaWorld is open from 9:00 AM to 11:00 PM. There is some deviation from these daily hours of operation typically associated with a holiday, e.g., longer hours of operation associated with the Christmas holiday season.

Attractions

SeaWorld provides three major types of attraction in Area 1: Theme Park. These are exhibits, rides and shows (See Table 3.1-1). Exhibits are typically housed in buildings or outdoor areas depending on the animals featured. For instance, the Penguin and Shark Encounters are two different exhibits that are located within buildings where visitors can view the animals, while aviaries and tide pool exhibits are outside. Types of rides range from Shipwreck Rapids, a thrill ride, to more passive observation rides, such as the Bayside Skyride and the Sky Tower.

SeaWorld conducts a variety of shows as part of its daily operation. Examples include the Shamu Show, Dolphin Show and Bird Show. The number of times these shows are presented in a day depends on the time of year and attendance levels. For example, the Shamu Show occurs two times daily in the wintertime, and in the summertime occurs six times daily, including two shows in the evening.

SeaWorld's employment levels also vary with the time of year. Approximate employment is 700 fulltime and 1,200 part-time staff, and 2,000 seasonal employees during peak summertime activity.

Water Treatment

SeaWorld operates a water treatment system to treat marine animal water as well as a portion of the facilities' stormwater. Many of the exhibits and shows at SeaWorld revolve around marine life and, therefore, SeaWorld maintains a pumping and filtering system of seawater for the various marine animal exhibits. In addition, approximately 25 percent of the parking lot storm runoff and 96 percent of the theme park area storm runoff is collected and treated in this system. There are two discrete water runoff collection systems that are connected to two separate treatment plants: the East Wastewater Treatment Plant and the West Wastewater Treatment Plant (WWTP). The treatment systems collect and treat the water with sodium hypochlorite and sodium bisulfite prior to being discharged into Perez Cove in Mission Bay along the northern boundary of the park. Furthermore, each of the two treatment facilities are designed with a diversion weir to collect and hold storm water flows when the system capacity is exceeded due to high storm water discharges. This weir functions as a high-flow bypass; therefore, treatment of "first flush" storm water is provided even during large storm events.

Discharges from the two WWTPs are covered under SeaWorld's National Pollutant Discharge Elimination System Permit No. CA0107336. This permit is granted by the Regional Water Quality Control Board for the discharge of water into Mission Bay. This permit was granted on April 22, 2000 and will expire on April 21, 2005. This permit requires monitoring of the discharge to Mission Bay at two points: at the East and West WWTP outfalls to Mission Bay. The monitoring includes an analysis of volume, total coliform, copper, total suspended solids, oil and grease, pH, turbidity, total residual chlorine, and acute toxicity. The monitoring period for each constituent varies with the constituent. For instance, acute toxicity is measured annually, while pH and total coliform are measured weekly.

Operational Permits

SeaWorld has obtained more than 20 permits from governmental entities to conduct operations. These include permits related to air quality, water quality and fireworks. SeaWorld's operational permits are listed in Table 3.3-3.

Fireworks Displays

Fireworks have been used at SeaWorld since 1968. From 1968 to 1985, fireworks were used for special events, July 4th celebrations and private parties. Every summer since 1985, fireworks have been used nightly from mid-June through Labor Day, and for the past three years the schedule has been expanded to include three additional weekends starting on Memorial Day weekend. SeaWorld continues to use fireworks for special events (e.g., July 4th), private parties and celebrations. Since 1987, the fireworks shows have been shot from a barge anchored in Mission Bay near the south end of Fiesta Island in Pacific Passage. Currently, on average, SeaWorld has approximately 110 – 120 fireworks shows per year. A typical fireworks

**TABLE 3.3-3
SeaWorld Operational Permits**

Activity	Agency	Permit Name	Permit Number
<u>AIR QUALITY</u>			
Paint Spray Booth	APCD	Permit to Operate	040661
Paint Spray Guns	APCD	Permit to Operate	040662
Spray Booth	APCD	Permit to Operate	040663
Generator	APCD	Permit to Operate	007801
Generator	APCD	Permit to Operate	008134
Generator	APCD	Permit to Operate	007802
Generator	APCD	Permit to Operate	851067
Paint Spray Booth	APCD	Permit to Operate	040759
Marine Coating Application Station	APCD	Permit to Operate	860278
Gasoline Service Site	APCD	Permit to Operate	900920
Shark Exhibit Saltwater Ozone Treatment System	APCD	Permit to Operate	910276
Water Dechlorination System	APCD	Permit to Operate	891087
Dolphin Community Pool Saltwater Ozone Treatment System	APCD	Permit to Operate	920864
Sea Otter Exhibit Saltwater Ozone Treatment System	APCD	Permit to Operate	920865
Penguin Encounter/Polar Exhibit Saltwater Ozone Treatment System	APCD	Permit to Operate	941141
Shamu Support System Saltwater Ozone Treatment System	APCD	Permit to Operate	941142
Dolphin Support System Saltwater Ozone Treatment System	APCD	Permit to Operate	941143
Killer Whale Backstage Exhibit Saltwater Ozone Treatment System	APCD	Permit to Operate	950379
Wild Artic Exhibit Seawater Ozone Treatment Systems	APCD	Permit to Operate	950564

**TABLE 3.3-3
SeaWorld Operational Permits**

Activity	Agency	Permit Name	Permit Number
Shamu Support System Backup Seawater Ozone Treatment System	APCD	Permit to Operate	961082
Gasoline Service Site	APCD	Permit to Operate	930503
Boiler	APCD	Permit to Operate	960519
Aquasol Controllers (Snow Making Machine)	APCD	Certificate of Exemption	970888
<u>WATER QUALITY</u>			
Wastewater discharge	RWQCB	NPDES	CA0107336
<u>FIREWORKS</u>			
Fireworks Displays	City of San Diego Fire Department	Single Event Permit	Varies with Application
Fireworks Displays	California Dept. of Forestry and Fire Protection	Pre-Display and Post Display Report	None
Fireworks Displays	City of San Diego, Parks and Recreation Department	July 4 th Permit	None
<u>OTHER PERMIT</u>			
Hazardous Waste Storage	County of San Diego, Department of Environmental Health	Health Permit	Est. No.: H00905

Source: SeaWorld, 2000.

summertime show is approximately 5.5 minutes in length and begins at about 9:50 PM. Shows typically entail the use of approximately 223 shells varying in size from two to six inches in diameter. The summertime shows do not include the concussive non-color reports and salutes. The July 4th show is shot from the southern part of Fiesta Island and is approximately 20 minutes in length and entails about 1,700 shells, varying from two to 16 inches in diameter. Subsequent to the fireworks show, SeaWorld performs a water sweep for duds and/or debris. Also, early in the morning following each fireworks display, a beach sweep on Fiesta Island is performed to retrieve any duds and/or debris that may have washed up on the shore.

Historically, SeaWorld attracts the greatest percentage of its visitors during the summer months, including the Memorial Day and Labor Day weekends. New attractions, shows and other new development in the past have not changed that attendance pattern. The summer fireworks shows are timed to coincide with these historic attendance patterns.

SeaWorld complies with both State of California and local permitting requirements for the fireworks shows. This includes filing a pre-display report with the State of California Department of Forestry and Fire Protection and obtaining two types of City of San Diego permits. One permit is obtained from the City of San Diego Fire Department, while the other is from the City's Park and Recreation Department for the July 4th fireworks show. In addition, following each fireworks display, a post-display report is prepared and submitted to the State of California Department of Forestry and Fire Protection. Lastly, SeaWorld complies with City of San Diego Council Policy 500-06 Regulation of Fireworks Displays, which does not permit fireworks displays after 10:00 PM on evenings prior to a workday or 11:00 PM on evenings prior to a weekend day or holiday. It also limits the size of concussive non-color (salutes and reports) to no greater than three inches in size. Finally, this policy requires that fireworks displays that use salutes or reports are limited to three events per a 30-day period in each zip code area.

SeaWorld fireworks shows are unrelated to new entertainment or new attractions. The number of fireworks shows, their size, length and intensity, are based on entertainment criteria, not new development. SeaWorld's decision process to include fireworks as part of its operation is determined exclusive of the Master Plan. As indicated above, SeaWorld has been including fireworks as a major feature of its evening entertainment since 1985. As part of developing evening entertainment programs, SeaWorld considers different themes and approaches, however, they have always included a summer fireworks program as a culmination to visitor's evening experience. The fireworks shows are also varied, in that SeaWorld produces different music for the show and different colors, sizes and numbers of fireworks. Fireworks shows are also a way in which SeaWorld endeavors to retain visitors in the park later in the evening. Fireworks shows are not considered a visitor draw. As part of the decision to include fireworks in the evening entertainment program, SeaWorld recreates the experience parents had as children, when fireworks were part of the "end of the evening" experience at a fair or Independence Day celebration.

3.4 Proposed Master Plan Update And Operations

3.4.1 Master Plan Policies and Regulations

The proposed SeaWorld Master Plan Update (Proposed Plan) provides guidelines for both the leasehold as well as each of the five major areas. These are called the Development Criteria. The development parameters found in the Development Criteria are intended to ensure that all future development will be distributed and constructed in a manner that, to the extent feasible, minimizes impacts to the established visual quality of Mission Bay. To achieve this goal, the Plan includes a height allocation, design guidelines, shoreline and bulk plane setbacks, and landscape guidelines. The Design Guidelines address landscaping, lighting, signs and architecture.

Development Criteria

The Master Plan provides a variety of parameters for project development. These are height, transparency, setbacks and buffers.

Height

Within Area 1, the maximum height allocation as a percentage of the 87.7-acre area would be divided as shown in Table 3.4-1. In no case may a structure exceed a height of 160 feet.

**Table 3.4-1
Area 1 Height Allocation**

Height (feet)	Coverage (acres)	Percent Coverage of Area 1
0-30	87.7	100%
30+– 60	13.1	15%
60+– 100	6.1	7%
100+– 130	1.8	2%
130+– 160	0.88	1%

Source: SeaWorld, 2000.

Furthermore, not more than any four of the eight conceptual development sites, identified in Figure 3.4-1, would be developed with structures exceeding 100 feet in height.

Transparency

Within Area 1, all structures above 100 feet in height would be at least 50 percent open to light and air, unless the structure consists of a single tower. An example of transparency is a lattice structure, e.g., a dome that is made up of a frame and windows.

Setbacks and Buffers

Shoreline Setback

A minimum 25-foot shoreline setback would be required of all future development except for water- or shoreline-dependent uses such as marina facilities, water intake and discharge facilities, or park attractions oriented toward open water use. The setback shall begin at the top edge of the existing riprap revetment, or the bluff edge, whichever elevation is greater (Figure 3.4-2).

Shoreline Bulk Plane Setback

All new development (except in Areas 4 & 5) would be setback behind a bulk plane line beginning at the shoreline setback (25 feet from the existing rip-rap or bluff edge) at a height of 30 feet and inclined at a one-to-one angle (45°) until the 160-foot height limit is reached (See Figure 3.4-2).

Perimeter Bulk Plane Setback

All new development would be setback behind a bulk plane line beginning at the perimeter landscaped area (20 feet from the perimeter on the eastern and southern leasehold perimeter boundaries) at a height of 30 feet and inclined at one-to-one angle (45°) until the 160-foot height limit is reached (See Figure 3.4-2).

Landscape Buffer Area A minimum 20-foot wide landscaped area would be provided along all exterior leasehold boundaries. Plantings would be consistent with the Design Guidelines discussed below.

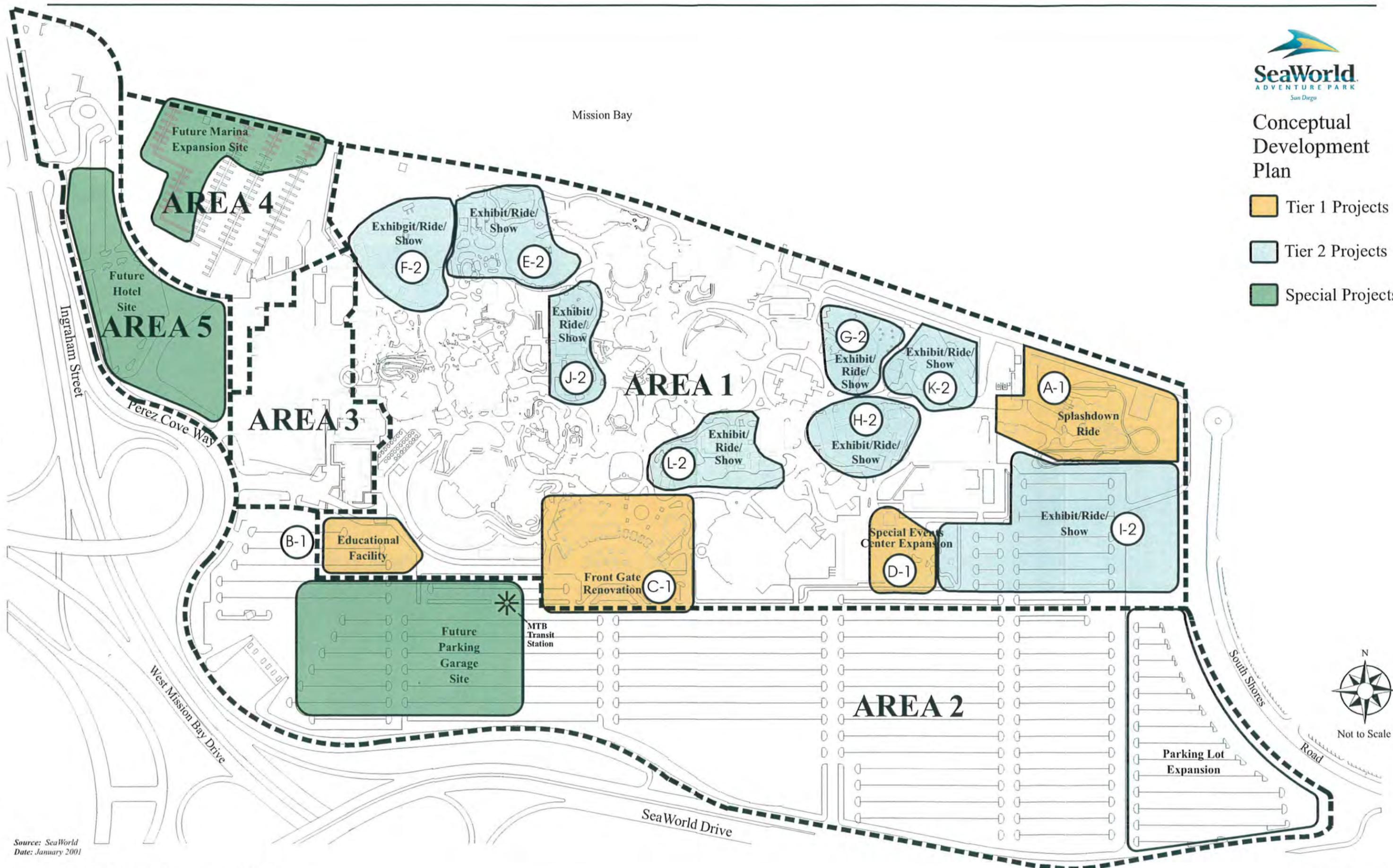
All perimeter and parking lot landscaping would be consistent with the applicable requirements of the Mission Bay Park Master Plan Update and the landscape regulations of the City of San Diego's Land Development Code.

Design Guidelines

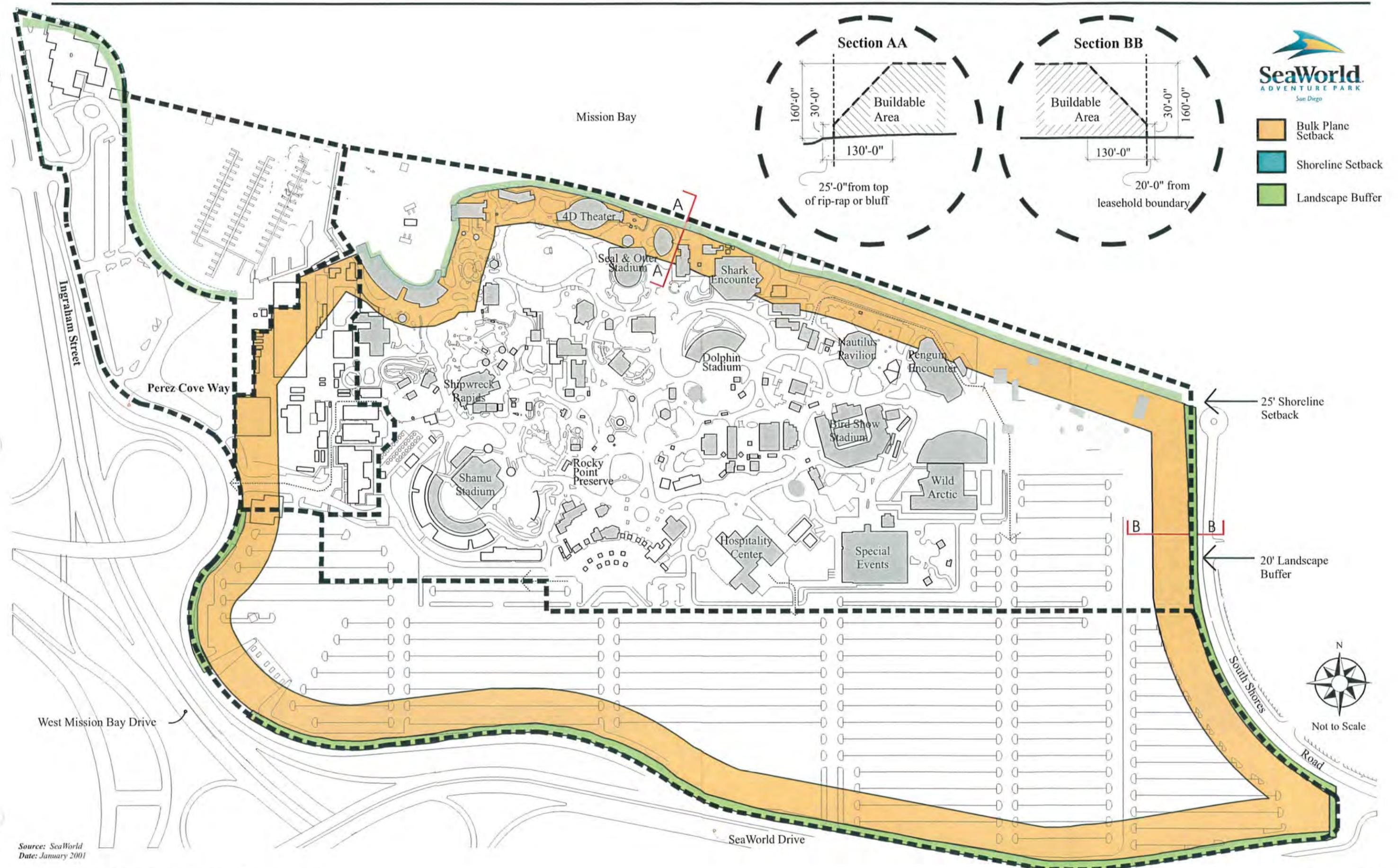
The Design Guidelines are intended as standards to be used by SeaWorld designers of buildings, landscaping, signage and lighting as well as by maintenance personnel. The City of San Diego Real Estate Assets, Parks and Recreation, and Development Review Departments, parks advisory committees and City Council would utilize the Design Guidelines as a standard for evaluation of proposed new projects or for modifications to existing development.

Conceptual Development Plan

- Tier 1 Projects
- Tier 2 Projects
- Special Projects



Source: SeaWorld
Date: January 2001



Source: SeaWorld
Date: January 2001

Setback & Landscape Buffer Plan

Figure 3.4-2

The primary focus of the design guidelines is to assure aesthetically pleasing public views of SeaWorld from outside its leasehold. For this reason, the design guidelines address the perimeter and some limited areas within the leasehold. The guidelines are not intended to regulate the internal design, operations and maintenance of SeaWorld that are not visible from public view outside the leasehold. The following summary of the Design Guidelines is divided into four areas: landscape, lighting, signs, and architecture.

Landscape

Landscape Design

The Mission Bay Park Master Plan Update landscape design guidelines identify two objectives: to use the landscape to define the park as a special recreation source and to reduce the consumption of water for irrigation by emphasizing the use of drought tolerant plants. The Master Plan design guidelines identify the area encompassing SeaWorld as a Mediterranean landscape consisting predominantly of native plants and drought tolerant species endemic to the world's Mediterranean climate.

These design guidelines support the Mission Bay Park Master Plan Update objectives. SeaWorld endeavors to not only provide a beautiful landscape, but one that is distinctive, educational, and environmentally responsible. During its 36-year history, SeaWorld has been a horticultural leader in San Diego. Over 4000 species of plants are currently cultivated and SeaWorld continually tests new plant species and horticultural methods that are shared with the community. A plant palette for current and future use is provided. This list is not intended to be comprehensive or restrictive. On-going maintenance and enhancement of SeaWorld provides an opportunity for design flexibility and continual improvements. The plant list specifies "theme" species, particularly trees, which are used throughout SeaWorld to provide continuity in the landscape.

The following are general landscape design guidelines:

1. Maintain the aesthetic landscape qualities that identify SeaWorld as a landmark in San Diego.
2. Maintain the wide variety of plant species that enhance SeaWorld as a botanical garden.
3. Preserve mature trees and relocate mature trees within SeaWorld where possible.
4. Continue to plant drought tolerant species, particularly in perimeter landscapes.
5. Continue to plant species that are compatible with the natural habitats of Mission Bay.
6. Avoid introduction of species or horticultural practices that may be harmful to the Mission Bay ecosystem.
7. Utilize dense plantings of shrubs and trees to screen utility areas, where feasible.

8. Utilize tall trees to provide partial screening and soften views of tall structures, where feasible.
9. Utilize trees, shrubs, vines and groundcovers to enhance and soften the appearance of buildings and fences.

Landscape Design Zones

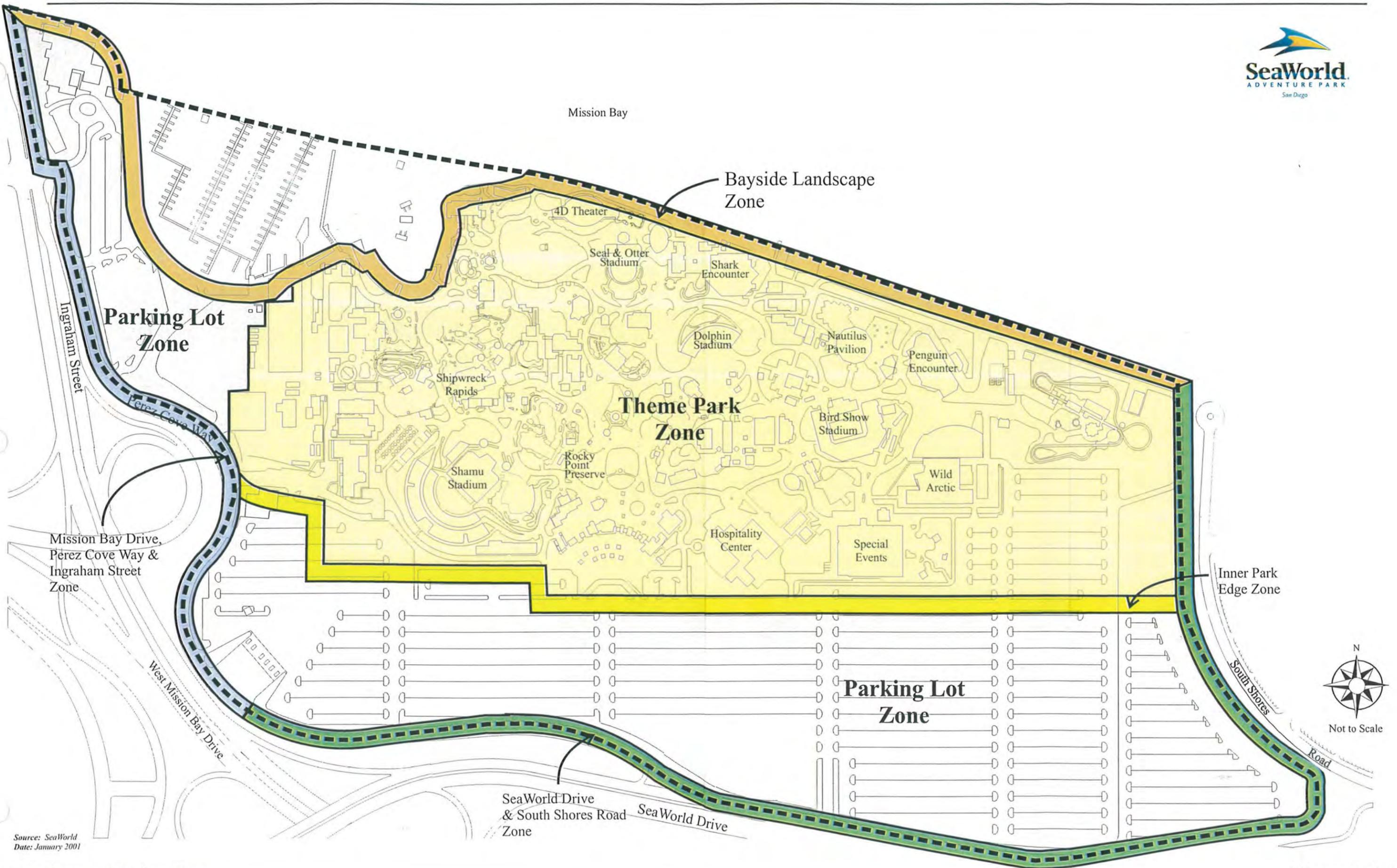
Six distinct landscape design zones are identified and described by the guidelines (Figure 3.4-3). Each of these landscape zones has unique characteristics that are not only an integral part of the SeaWorld experience, but contribute to the landmark status of SeaWorld in San Diego. Each of the zones has special functions that require specific design treatment. The landscape zones are:

- Sea World Drive and South Shores Road Landscape
- Mission Bay Drive, Perez Cove Way and Ingraham Street Landscape
- Bayside Landscape
- Inner Park Edge
- Parking Lots
- Theme Park

Sea World Drive and South Shores Road Landscape

The design concept for Sea World Drive and South Shores Road is to create a vibrant scenic drive landscape that screens the SeaWorld parking lot from public view. SeaWorld designed and implemented the north side of the Sea World Drive landscape in 1992. To date, at approximately 12 feet in height, the landscape provides dense screening. The landscape design consists of a 20-foot-wide parkway with a two-foot-four-inch-high berm (Figure 3.4-4). The bermed landform adds interest to the otherwise flat landscape and adds height for optimum screening of parked cars and headlights. The dense planting includes shrubs and groundcovers to provide texture and color at varying heights. Torrey pines were selected as the theme street tree for several reasons: they are a theme tree within the environs of SeaWorld, a drought-tolerant San Diego native, their open form provides partial, but not dense, screening from distant views, they provide a shade canopy over the pedestrian/bike trail at the edge of the parkway, and they are complementary to the river landscape. The Torrey pines in the landscape will reach approximately 15 to 20 feet within the next 10 years and 40 to 60 feet at maturity, in approximately 30 years. In addition to the area at the perimeter of its leasehold, SeaWorld maintains the median planting in Sea World Drive between the southwest park entrance and Friars Road to the east.

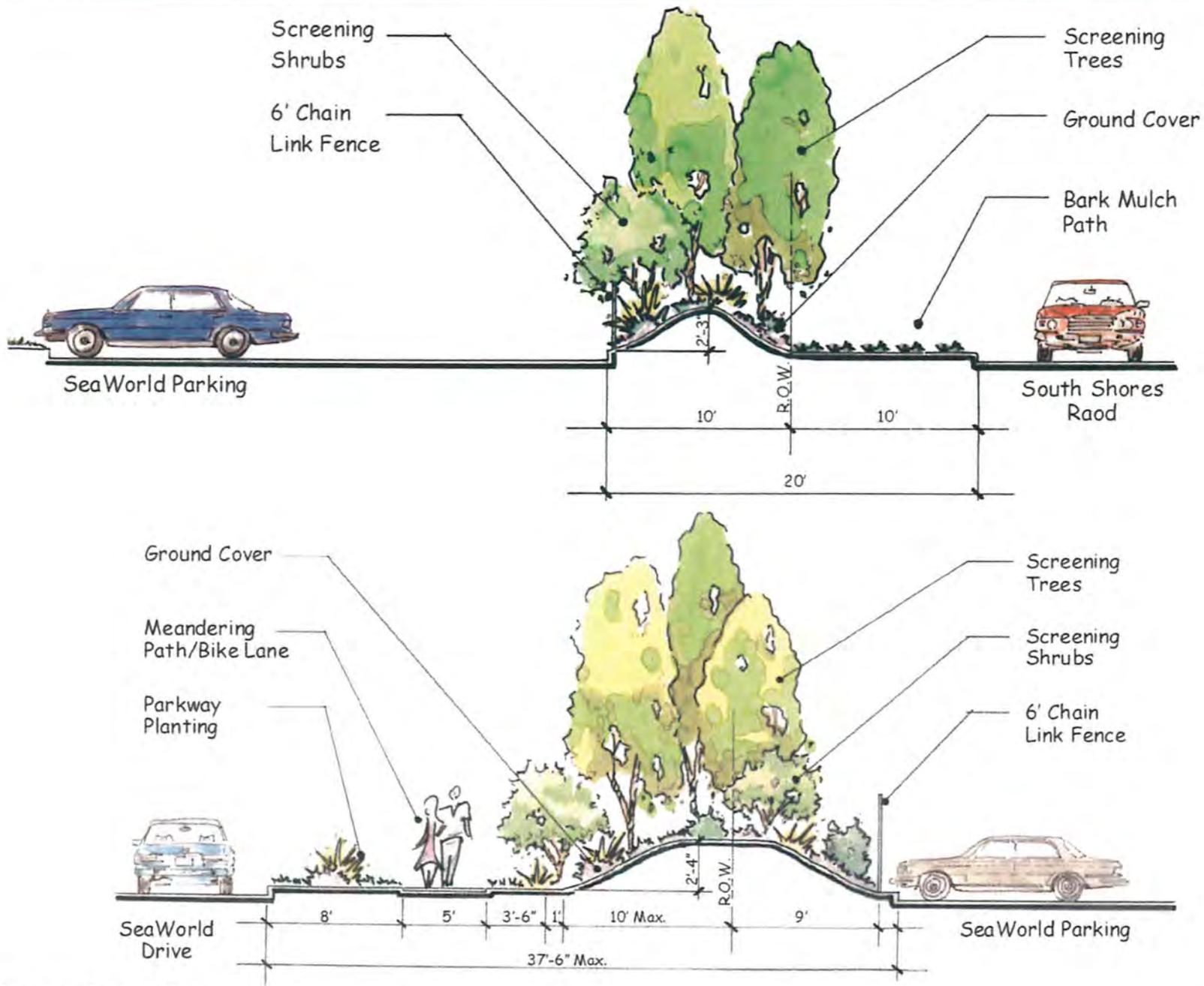
The landscape plan for South Shores Road would continue the design theme of Sea World Drive. The west side of the South Shores Road landscape is scheduled for implementation in 2001-2002.



Source: SeaWorld
Date: January 2001

Landscape Design Zones

Figure 3.4-3



Source: Project Design Consultants, 2001

SeaWorld Drive/South Shores Road Landscape Sections _____ Figure 3.4-4

Mission Bay Drive, Perez Cove Way and Ingraham Street Landscape

The Mission Bay Drive, Perez Cove Way and Ingraham Street landscape consists of lawns, shrubs and mature trees that contribute to the scenic qualities of Mission Bay Park. Public views towards SeaWorld from the west are quite limited due to the topography of the Ingraham Street/Mission Bay Drive cloverleaf interchange. There are some public views towards SeaWorld from Ingraham Street; however, existing mature landscaping screens most of the views.

The existing mature landscape consists of bermed areas planted with lawns, groundcovers and shrubs, and Torrey pines as the theme tree with groves of Washingtonia palms in accent areas. The landscape will continue to be maintained by SeaWorld in its present design. Future development in Master Plan Area 5 may necessitate modification of the landscape. Future modifications would maintain mature trees to the extent possible and improve and enhance the park-like atmosphere of the area.

Bayside Landscape

The bayside area on the north perimeter of SeaWorld is visible from various areas within Mission Bay Park. With the exception of views from Fiesta Island and the water, most of the views are from a distance that minimizes the visual details of this area. Two distinct landscapes occur along the bayside: the Perez Cove shoreline and the shoreline between the Waterfront Stadium and South Shores Road.

Perez Cove Shoreline

In the northern portion of Perez Cove near the Hubbs-SeaWorld Research Institute, the shoreline consists of naturalistic landscaping with mature trees, shrubs and groundcovers. A portion of this area is planned as a future hotel site with a boat-landing pier. Future development would maintain the existing mature landscaping to the extent possible and add new improvements. Pedestrian paths would be maintained along the shoreline to enhance the waterfront experience for hotel guests and the general public.

The SeaWorld Marina landscape consists of boats, docks, a launching crane, dry boat storage, restroom and lounge facilities for marina guests. On the east side of the marina is an intake facility that provides seawater for SeaWorld's marine animals. The marina landscape is a significant element in the makeup of Mission Bay Park as an aquatic recreation area. The functional aspects of the boating and water intake facilities necessitate their locations on the water's edge. Existing landscaping in this area consists primarily of mature trees in parking areas that serve as a backdrop to the marina. Future development is not expected to alter the bayside views, however, if landscape areas should become available in this area, they would be planted in accordance with the design concepts established for the northern portion of Perez Cove.

SeaWorld's Waterfront Stadium is located to the east of the SeaWorld Marina. The "stage" area, a dark metal grid structure, is located on a small island in the cove and partially screens views of the expanse of stadium seating inside. The island and perimeter areas visible from the bay are

are necessary to add screening. A dense mass of tall trees should be avoided in order to preserve long-distance views to the water from surrounding higher elevation neighborhoods.

Parking Lots

Parking lots at SeaWorld are screened from public view by perimeter landscaping along surrounding streets as described previously. Trees planted in the parking lots also improve public views towards SeaWorld and provide shade, reduce glare and soften views of large expanses of pavement for guests. In order to accommodate traffic flow in the parking lots, large landscape islands consisting of trees, shrubs and groundcovers are located to define the travel ways.

The parking lots for the Hubbs-SeaWorld Research facility and SeaWorld Marina contain fairly mature Rustyleaf Fig trees located in curbed planter areas. Future development in this area would maintain the existing design concept and, where feasible, existing trees would be maintained or relocated on site.

The SeaWorld guest parking lot is planted with Alders, Italian Stone Pines, Southern Live Oaks and New Zealand Christmas trees. Parking lot trees are located in curbed planters between parking spaces and in larger planters that form the driveways within the parking lots. The eastern parking, expansion scheduled for 2001-2002, would be similarly planted and use Catalina Ironwood as the parking lot theme tree.

Theme Park

These design guidelines provide direction for perimeter landscapes that are visible from outside SeaWorld. The guidelines do not apply to the overall interior landscapes of the SeaWorld theme park, which are not within public view. SeaWorld strives to maintain a high quality of design and maintenance for the interior landscapes, which are fundamental to the theme park atmosphere. However, interior landscape that is intended to screen and mitigate views of tall structures is subject to City design review.

It is expected that the existing perimeter landscaping would provide most of the necessary screening. Proposed buildings and special attractions would be reviewed to determine if they would be visible from public areas outside of SeaWorld and if landscaping is needed to enhance or screen public views. If it is determined that interior landscaping is necessary to provide screening, such landscaping would be subject to City design review. Typical screening measures would be the addition of tall trees in strategic locations either in perimeter landscape areas or within the park adjacent to proposed tall structures. Dense groves of trees should be avoided to preserve long-range views to Mission Bay Park.

Landscape Management

Landscape management practices within SeaWorld are in conformance with the City of San Diego, California Coastal Commission and Regional Water Quality Control Board landscape requirements. SeaWorld employs Best Management Practices (BMPs) for maintenance of the landscape.

Future lighting in SeaWorld would continue to meet or exceed the municipal code regulations on lighting and the Mission Bay Park Master Plan Update. However, SeaWorld's nighttime functions require a unique approach to lighting that is not addressed by the Mission Bay Park Master Plan Update. Additional guidelines are provided to describe special lighting that would enhance function, safety and aesthetics within the parking and activity areas of SeaWorld. While adequate lighting is necessary in SeaWorld, it would be balanced with considerations for sensitive habitats in Mission Bay and neighboring park and community uses. The following guidelines would be followed for SeaWorld lighting:

1. Lighting shall provide a desirable level of illumination to promote safety for pedestrians and vehicles.
2. Lighting should be directed to use areas and not spill over into areas adjacent to SeaWorld.
3. Parking lot lighting shall be directed downwards and designed in conformance with City standards.
4. Lighting shall be used to accentuate architectural features and landscaping and provide ambient lighting for pedestrian areas.
5. Accent lighting of buildings and structures over 30 feet in height shall be located to minimize spillover outside the leasehold.
6. Accent and decorative lighting shall avoid excessive illumination and use of multiple colors.
7. Theme park attraction and ride lighting may be used to enhance the design theme and accentuate the sculptural aspects of the structure. Garish, "carnival" style lighting with excessive illumination, colors and motion (chaser lighting) is not permitted.
8. Holiday seasonal lighting is permitted in conformance with City standards.
9. The use of searchlights, lasers and other moving lighting shall be limited to special events and used in conformance with City standards.
10. All lighting should be of type that conserves energy in conformance with City standards. Where feasible, functional and aesthetic lighting shall be combined to reduce energy costs and avoid over-illumination.
11. Sign lighting shall be illuminated from the exterior and on the sign face only.

Signs

A goal of the Mission Bay Park Master Plan Update design guidelines is to better integrate the design of commercial, informational, interpretive and regulatory signs into a coordinated system unique to the park. Existing Mission Bay Park signs associated with SeaWorld include Mission Bay Park directional signs located on surrounding streets. The SeaWorld parking lot entry gate is the only area of the park where signs may be visible to the public outside the park. This area

a theme park and utilizes authentic architectural styles and images, based on classical design, to enhance the aquatic environment and create a festive atmosphere.

The functional aspects of the theme park area of SeaWorld require design flexibility that allows for on-going renovations of exhibits and attractions to keep the park interesting for visitors. In order to provide design flexibility, buildings and attractions within the theme park that are not visible from outside the SeaWorld leasehold are not regulated by these design guidelines. Proposed projects that would be regulated by these design guidelines are those which may be visible from outside the SeaWorld leasehold.

Building Design

Proposed new buildings that may be visible from outside the park, such as the hotel and parking garage, will adhere to the Mission Bay Park Master Plan Update architectural design guidelines. The Mission Bay Park Master Plan Update provides architectural guidelines for building height and massing, roof design and materials, façade treatments and ornamentation. The following guidelines should also be applied:

1. Large expanses of strong or bright colors on exterior building walls shall be avoided.
2. Large expanses of highly reflective materials on exterior building walls shall be avoided.
3. Use of thematic elements shall be used with discretion near the perimeter of the theme park where they may be visible from outside the park.
4. Although the majority of the bayside perimeter should be screened by landscaping, interesting and appropriate architectural elements such as bay-view restaurants, patios or decks with trellises, building façade treatments, banners and awnings may be used to create a sense of openness and connection to the Bay. Signs, logos or elements that may be perceived as advertising are not permitted in this area.
5. Mechanical equipment and storage areas shall be screened from public view by elements such as architectural treatments, fencing and landscaping.
6. New mechanical equipment and storage areas should be located away from the leasehold perimeter where feasible, to avoid public views towards unsightly utilitarian areas.

Theme Park Attractions

Proposed theme park attractions that may be visible from outside the park would adhere to the SeaWorld Master Plan Update allowances for height, mass and transparency. The following guidelines would apply to theme park attractions that are visible from outside the park:

1. Theme park attractions and rides shall use light or neutral colors for large mass areas and reserve bright colors and reflective surfaces for accents.

Tier 1 Projects

Tier 1 conceptual development sites are shown in Figure 3.4-1. The specific locations of each individual development site may vary (+/- 100 feet) as actual development is implemented. The following provides a brief description of each of the four Tier 1 projects shown for Area 1 in the Plan.

Site A-1: Splashdown Ride

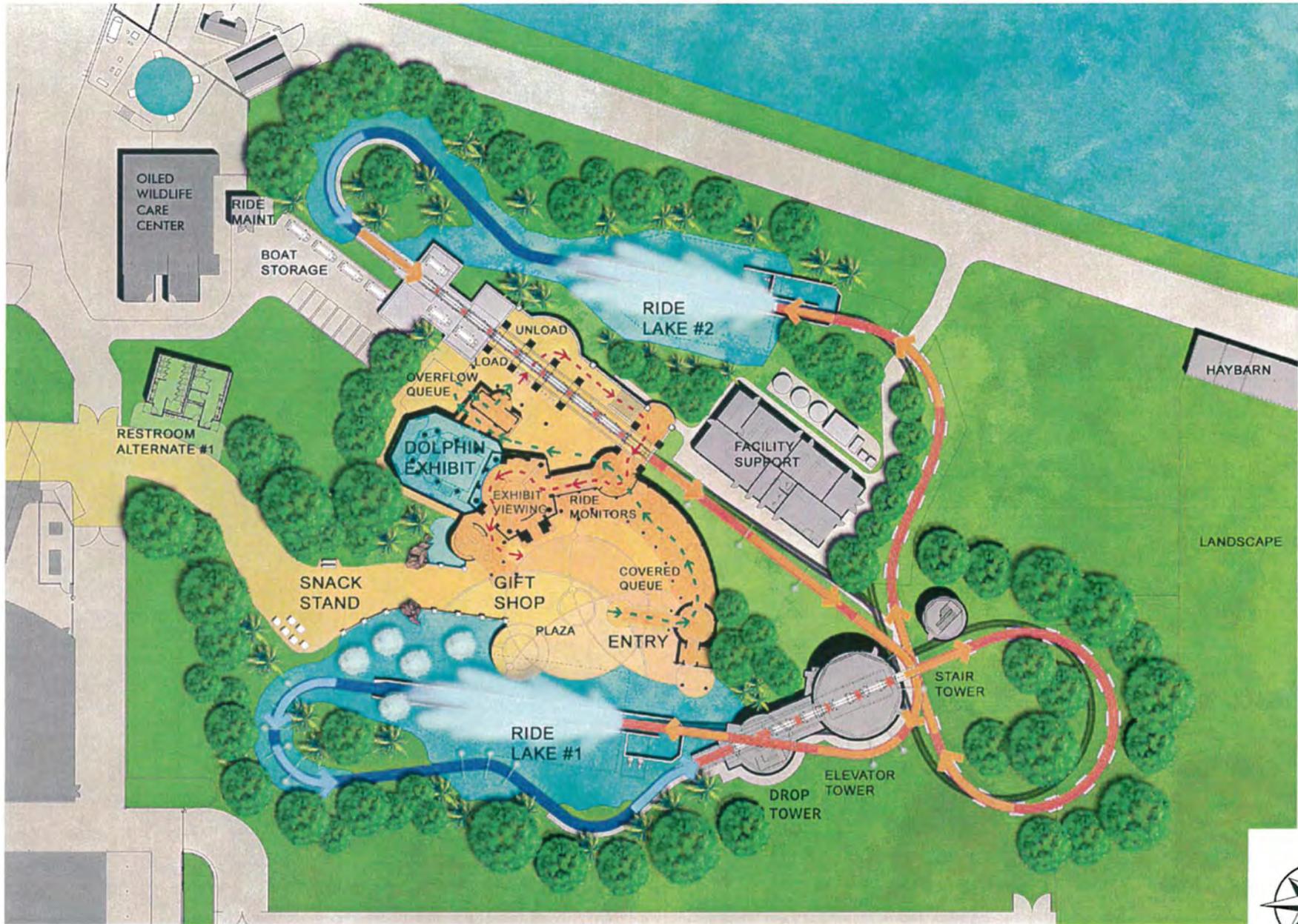
Existing Use

This site is located on 4.5 acres of land on the northeast corner of Area 1 (See Figure 3.4-1). Existing uses on the site include a landscape nursery and associated storage areas, trash compactor, and recycling facilities. The eastern portion of the site is undeveloped.

Description

Prior to development, the existing uses on the site would be relocated to the eastern part of the SeaWorld leasehold. The Splashdown ride would be a water flume and tracked ride attraction. The attraction would include guest services (e.g., gift shop, snack bar, etc.) along with structures to support the rail and flume elements of the ride. Three tower elements would comprise the major components of the ride, which would be connected by the water flumes and track (Figure 3.4-5). The largest tower would be approximately 95 feet high and 50 feet in diameter, while the second tower (nearest the tallest tower) would be approximately 83 feet high and 35 feet in diameter, and the third tower would be 89 feet high and 24 feet in diameter (Figure 3.4-6). The combined footprint of the towers would be approximately 3,400 square feet while the overall building footprint would be approximately 11,000 square feet (Figure 3.4-7). The Splashdown ride would be built in conformance with the guidelines set forth in the Development Criteria as well as the following specific criteria.

1. Limit total height of structure to 95 feet.
2. Limit structural bulk and mass above the 40-foot level.
3. Provide extensive tree plantings particularly on the north and east sides to soften the visual impact of the structure from adjacent land and water areas of Mission Bay Park (Figure 3.4-8). Selected species should have the potential to provide dense year round foliage and attain heights in excess of 60 feet at maturity.
4. Low-level lighting may be used to highlight sculptural details of the structures. Harsh lighting or glare directed toward the Bay or upward into the night sky shall not be allowed.



Not to Scale

Source: SeaWorld, 2001

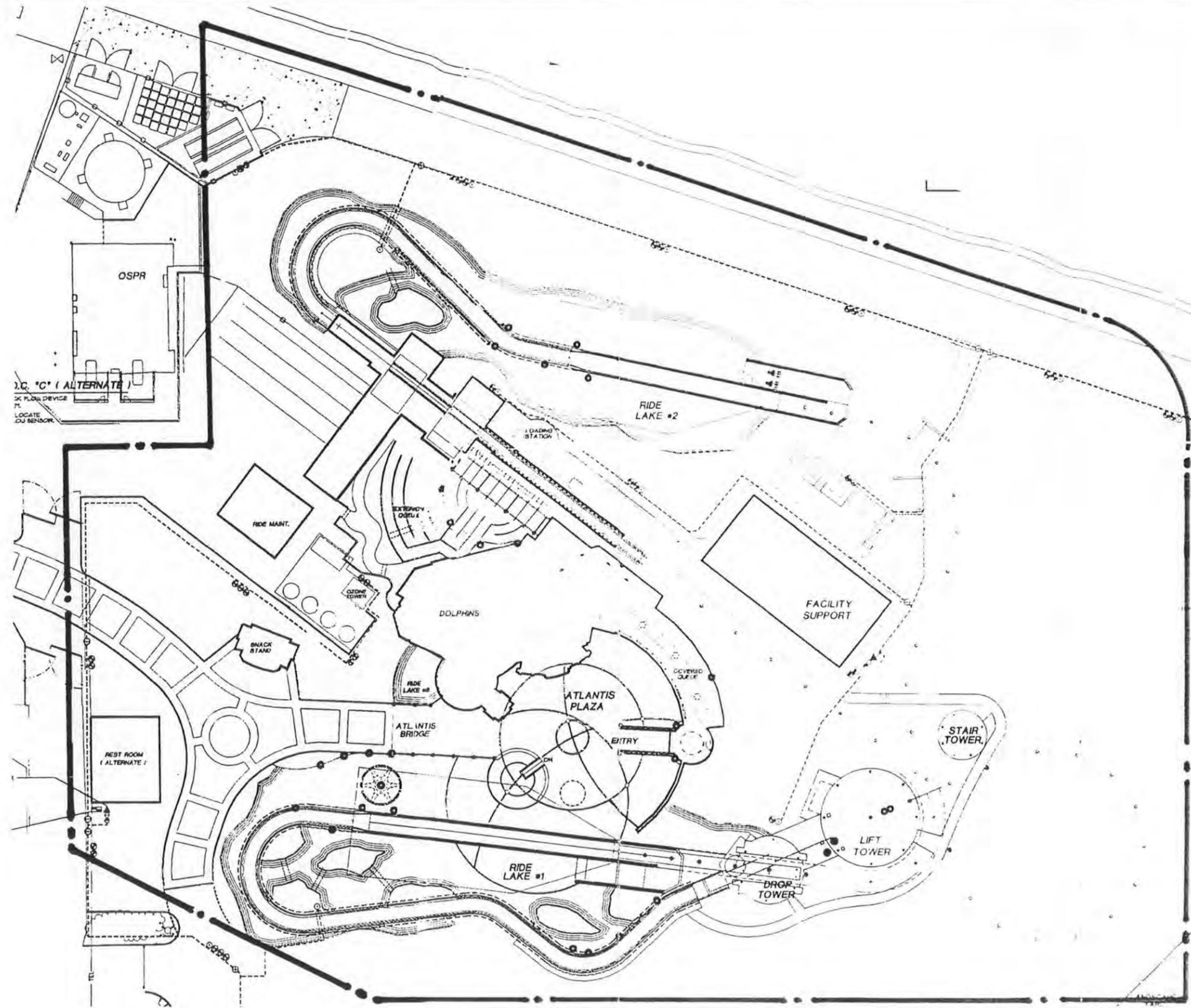
Splashdown Ride Illustrative Site Plan

Figure 3.4-5



Source: SeaWorld, 2001

Splashdown Ride Elevation _____ Figure 3.4-6



Source: SeaWorld
 Date: January 2001



Splashdown Ride Site Plan

Figure 3.4-7

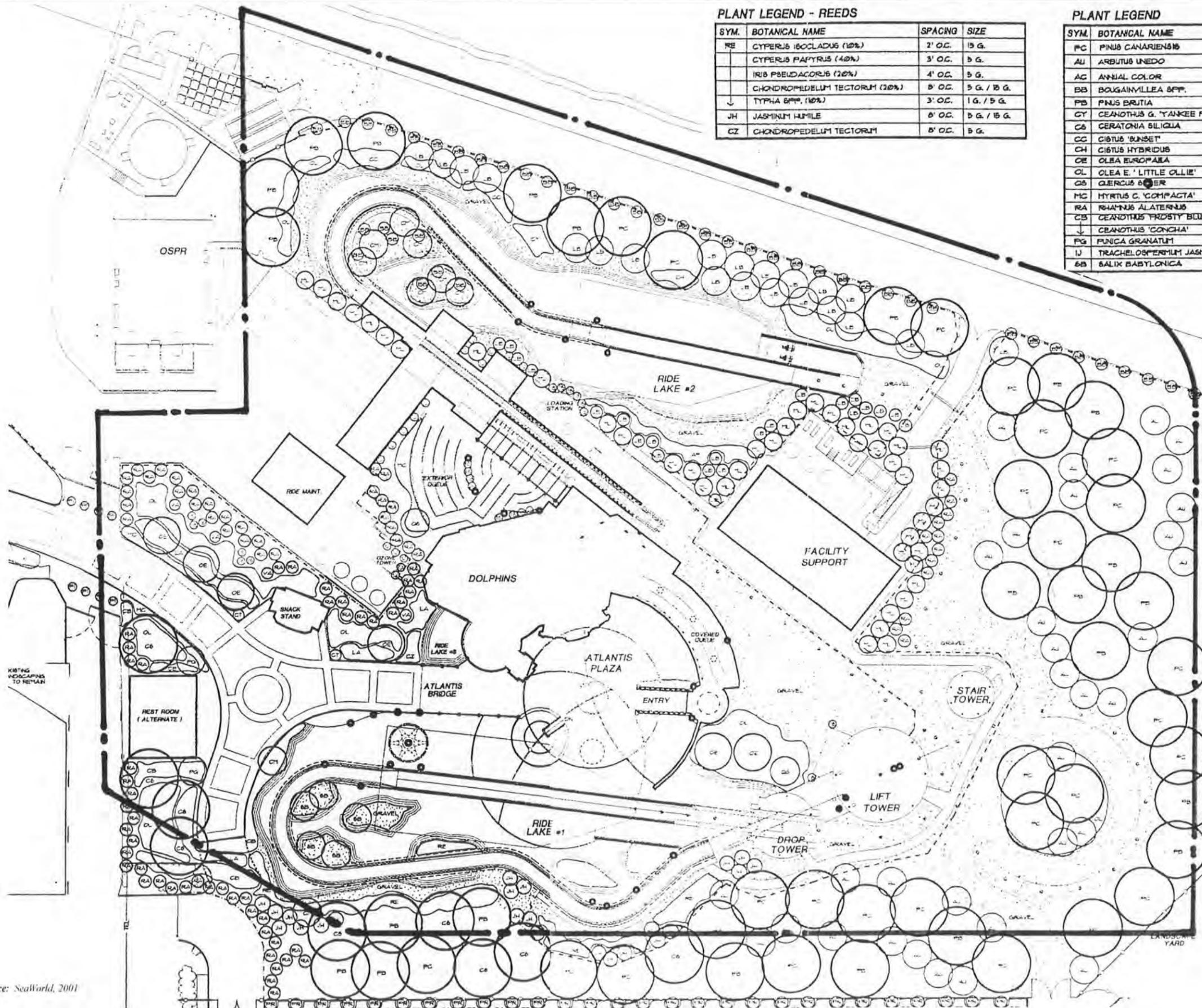
PLANT LEGEND - REEDS

SYM.	BOTANICAL NAME	SPACING	SIZE
RE	CYPERUS BOCCADUS (10%)	2' O.C.	15 G.
	CYPERUS PAPHYRUS (40%)	3' O.C.	5 G.
	IRIS PSEUDACORIS (20%)	4' O.C.	5 G.
	CHONDROPEDELUM TECTORUM (20%)	5' O.C.	5 G. / 15 G.
	TYPHA SPP. (10%)	3' O.C.	1 G. / 5 G.
JH	JASMINUM HUMILE	5' O.C.	5 G. / 15 G.
CZ	CHONDROPEDELUM TECTORUM	5' O.C.	5 G.

PLANT LEGEND

SYM.	BOTANICAL NAME	SPACING	SIZE
PC	PINUS CANARIENSIS	AS SHOWN	40" B.
AU	ARBUTUS UNEDO	AS SHOWN	24" B.
AC	ANNUAL COLOR	5' O.C.	FLATS (4' P.)
BB	BOUGAINVILLEA SPP.	17' O.C.	15 G.
PB	PINUS BRITIA	AS SHOWN	40" B.
CT	CEANOTHUS G. 'YANKEE POINT'	4' O.C.	1 G.
CS	CERATONIA BILIGUA	AS SHOWN	60" B.
CC	CISTUS 'SUNSET'	3' O.C.	1 G.
CH	CISTUS HYBRIDUS	3' O.C.	1 G.
OE	OLEA EUROPAEA	AS SHOWN	36"/40" B.
OL	OLEA E. 'LITTLE OLLIE'	3' O.C.	5 G.
QS	QUERCUS SPP.	AS SHOWN	36" B.
MC	MYRTUS C. 'COMPACTA'	3' O.C.	5 G.
RA	RHAMNUS ALATERNUS	10' O.C.	15 G.
CS	CEANOTHUS 'PROSTY BLUE'	4' O.C.	15 G.
	CEANOTHUS 'CONCHA'	4' O.C.	15 G.
FG	FUNICIA GRANATUM	AS SHOWN	36" B.
IJ	TRACHELOSPERMUM JASMINOIDES	10' O.C.	15 G.
SB	SALIX BABYLONICA	AS SHOWN	24" B.

SYM.	BOTANICAL NAME	SPACING	SIZE
VA	VITEX AGNUS-CASTUS	AS SHOWN	15 G.
CT	CITRUS SPP.	AS SHOWN	15 G.
LA	ROSEMARYS O. 'TUSCAN BLUE'	2' O.C.	5 G.
	LAVANDULA SPP.	18" O.C.	1 G.
	ACHILLEA CLAVENNAE	12" O.C.	1 G.
	CISTUS BALVIFOLIUS	2' O.C.	1 G.
	ARTERIA MARITIMA	5' O.C.	4" P.
	VERBENA RIGIDA	5' O.C.	4" P.
IB	CUPRESSUS SEMPERVIRENS	AS SHOWN	24" B.
ML	MYOPORUM L. 'CARSONII'	AS SHOWN	24" B.
LB	LAVATERA BICOLOR	AS SHOWN	15 G.
AP	ARTEMISIA POWIS CASTLE'	24" O.C.	1 G. / 5 G.
	HELICTOTRICHON SEMPERVIRENS	24" O.C.	1 G.
	VERBENA SPP.	24" O.C.	1 G.
CH	CHAMAEROPS HUMILIS	AS SHOWN	36" B.
PI	STRELITZIA NICOLII	AS SHOWN	24" B.
RB	RHAPHIOLEPIS INDICA	3' O.C.	1 G.
FR	PODOCARPUS GRACILIOR	AS SHOWN	36" B.
CA	CARRIBA MACROCARPA	3' O.C.	1 G.
CB	CARRIBA MACROCARPA	3' O.C.	15 G.

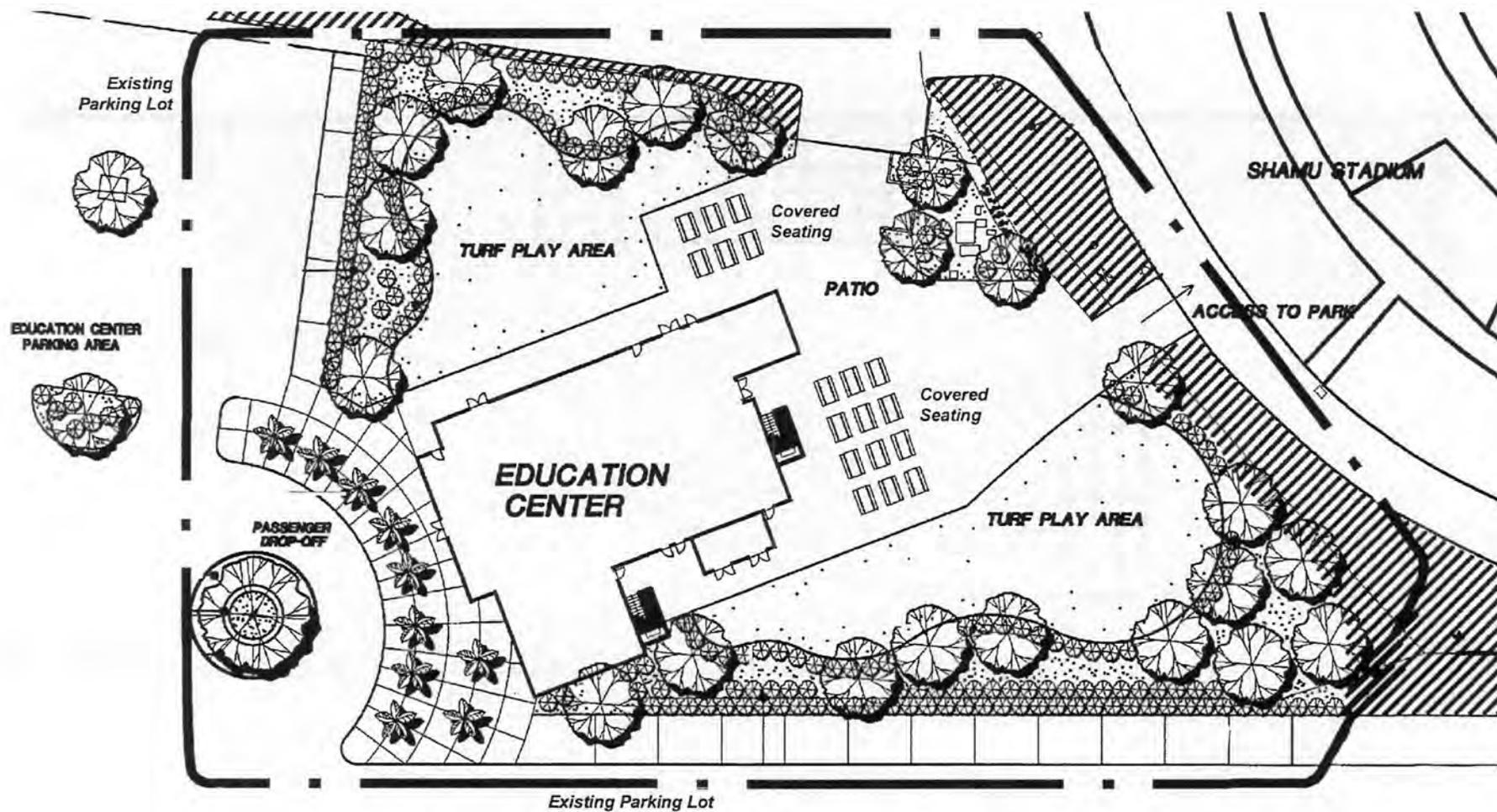


Not to Scale

Source: SeaWorld, 2001

Splashdown Ride Landscape Plan

Figure 3.4-8



Source: SeaWorld, 2001

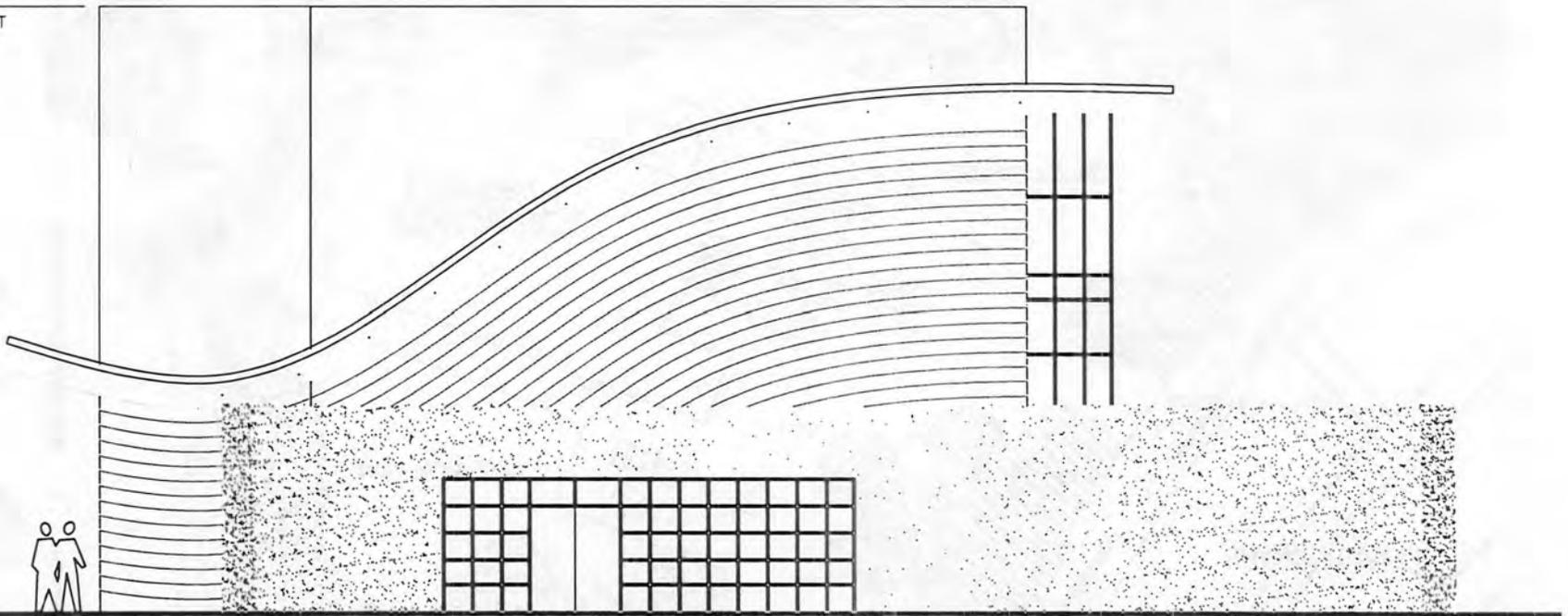
Not to Scale

Educational Facility Site Plan

Figure 3.4-9

+ 41'-0"
TOP OF PARAPET

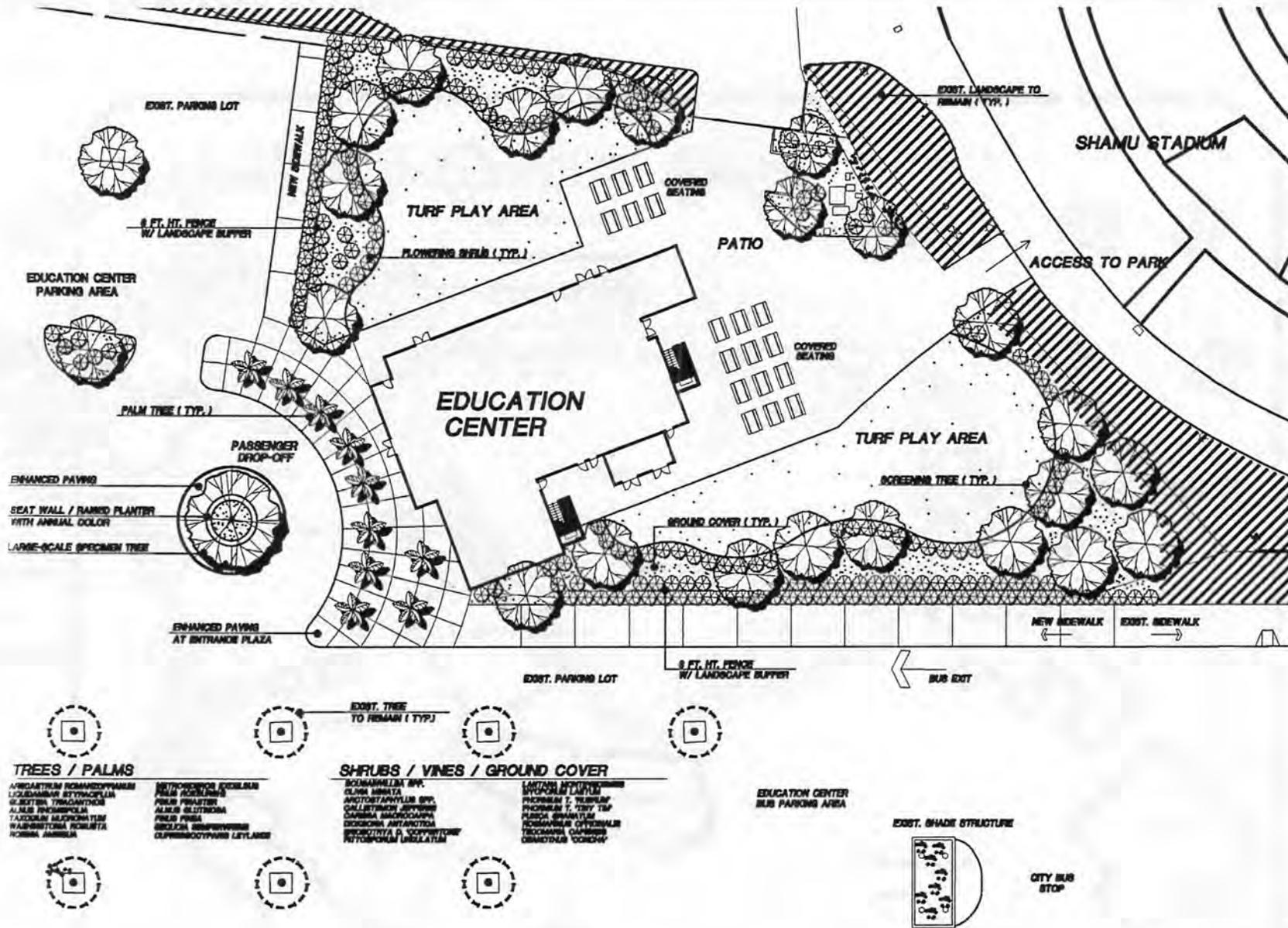
+ 0'-0"
FINISH GRADE



Source: SeaWorld, 2001

Not to Scale

Educational Facility Elevation _____ Figure 3.4-10



TREES / PALMS

- ARIDIASTRUM ROMANOFFIANUM
- LEUCODENDRON BRYANTII
- ALBERTIA THALICTRIODE
- ALBIS INDIANAPOLIS
- TAXODIUM MEXICANUM
- WASHINGTONIA ROBERTA
- ROBINIA AMBLYA

- ANTHURUS CROCEUS
- HELIOPSIS SCUTELLARIA
- PERLA PERASTRA
- ALBIS GLUTINOSA
- PERLA PERLA
- ERUCA SEMPERVIRENS
- GLYPHISOPHYLLIS LEYLANDI

SHRUBS / VINES / GROUND COVER

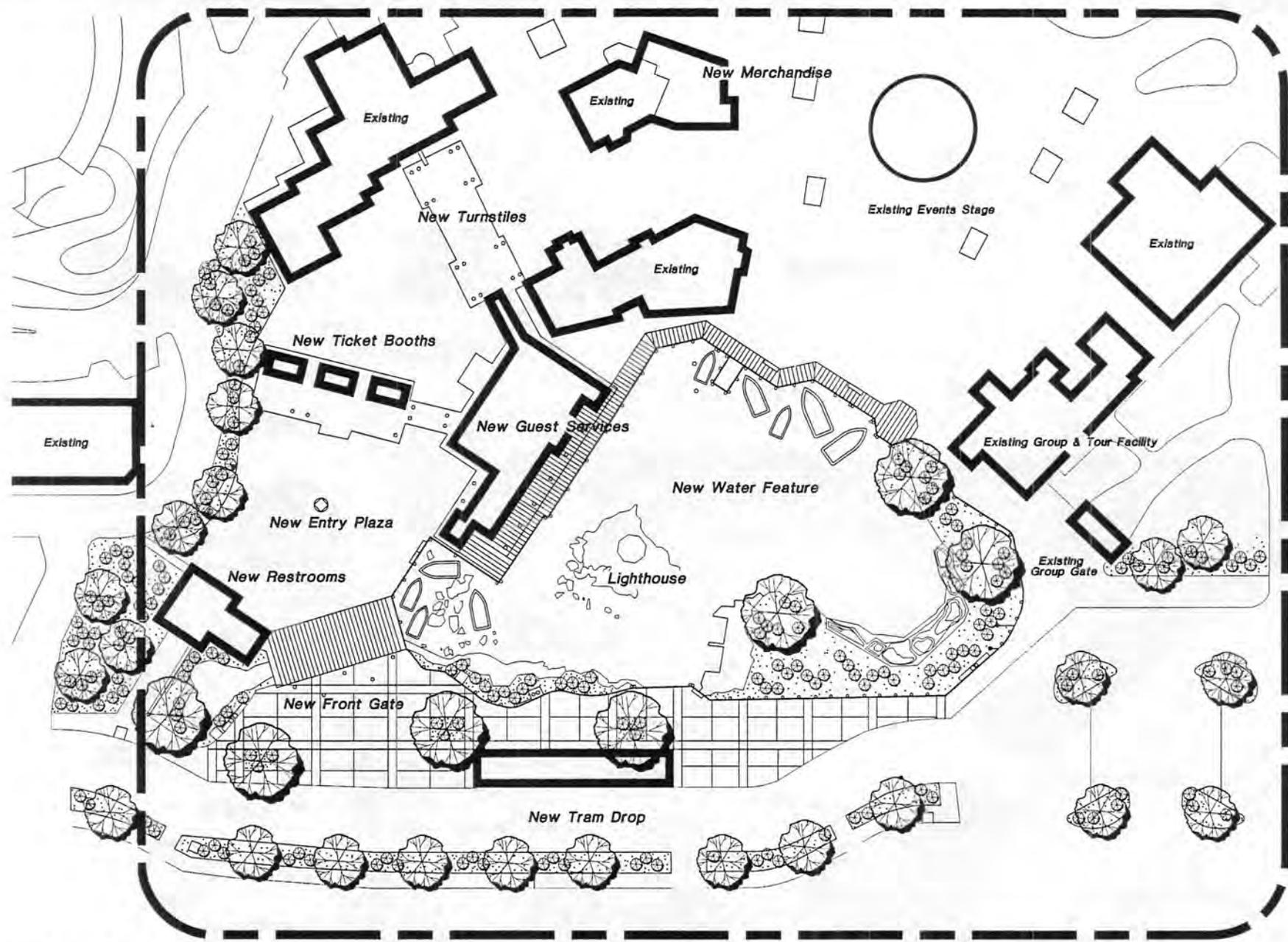
- ROSMARINUS OFFICINALIS
- OLIVA BABINGTONIA
- ANTHURUS CROCEUS
- CALLISTEMUM SPICIFOLIUM
- GARDNERIA MAGNOLIFOLIA
- GEORGINA ANTARCTICA
- PERICLYMENUM SPICIFOLIUM
- PHYTOPLACUM UNICOLORUM

- LANTANA SPICIFOLIUM
- PROPERISIA T. TIBURUM
- PROPERISIA T. TIBURUM
- PLUCHA SPICIFOLIUM
- ROSMARINUS OFFICINALIS
- TEUCARIUM GARDNERI
- ORNITHOGALUM VINCETOXICUM

Source: SeaWorld, 2001



Educational Facility Landscape Plan _____ Figure 3.4-11



Not to Scale

Source: SeaWorld, 2001

Conceptual Front Gate Site Plan

Figure 3.4-12

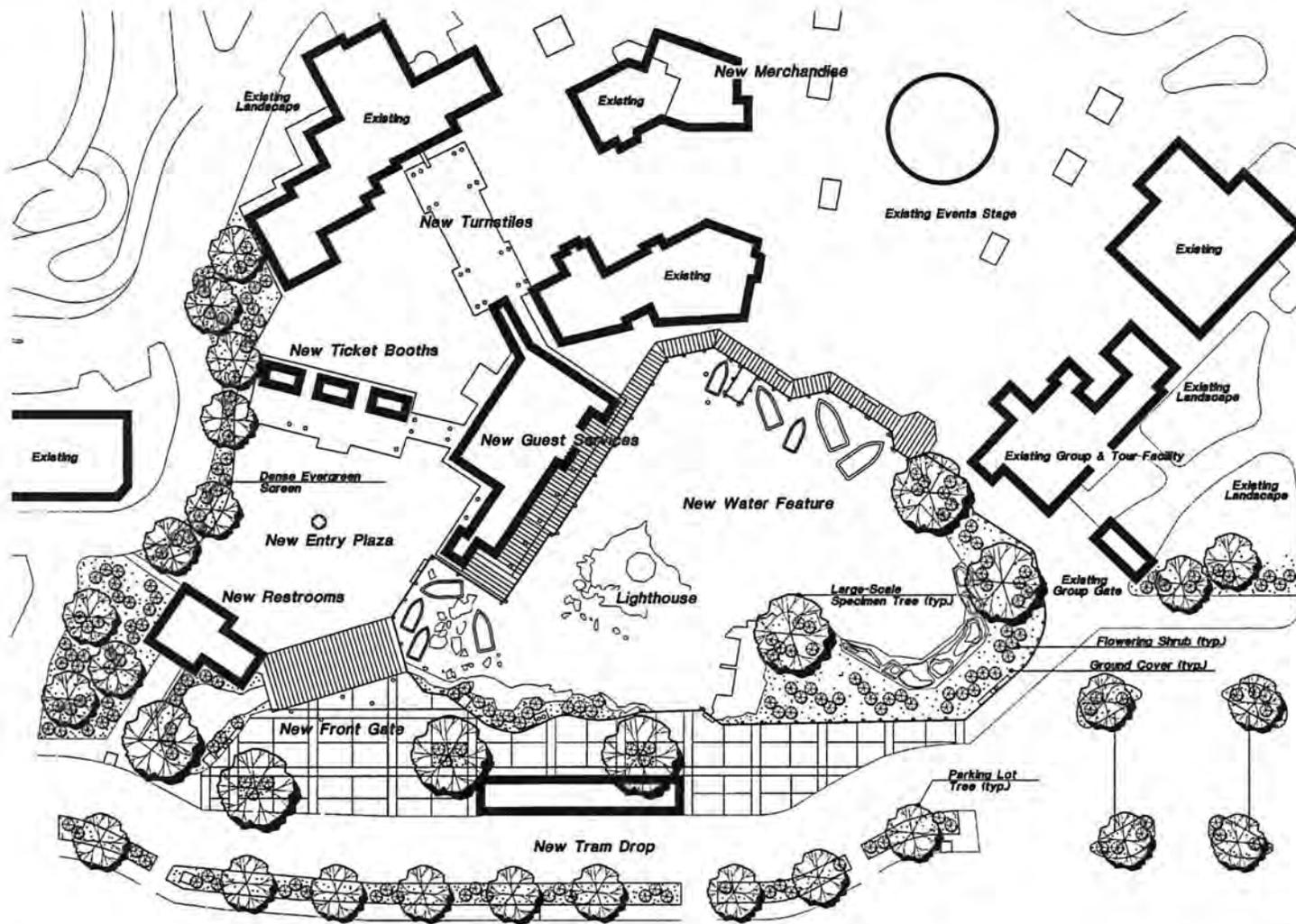


Note: Lighthouse shown in this drawing is less than the maximum allowed height of 90 feet.

Source: SeaWorld



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TREES / PALMS

- PINUS CANARIENSIS
- PINUS ELIARICA
- OLENTSIA TRIACANTHOS
- ALNUS RHOMBIFOLIA
- TAXODRUM MUCRONATUM
- WASHINGTONIA ROBUSTA
- ARECASTRUM ROMANZOFFIANUM

- METROSIDEROS EXCELSUS
- PINUS ROXBURGHII
- PINUS PINASTER
- TRISTANIA CONFERTA
- PINUS PINEA
- SEQUOIA SEMPERVIRENS
- CUPRESSOCYPARIS LEYLANDII

SHRUBS / VINES / GROUND COVER

- BOUGAINVILLEA SPP.
- PYRACANTHA SPP.
- ARCTOSTAPHYLLUS SPP.
- CALLISTEMON JEFFERSII
- JASMINUM LERATI
- DICKSONIA ANTARCTICA
- ERIOBOTRYA D. 'COPPERTONE'
- PITTIOSPORUM UNDULATUM

- LANTANA MONTEVEDENSIS
- CEANOTUS GRISEUS HORIZONTALIS
- PHORMIUM T. 'RUBRUM'
- PHORMIUM T. 'TINY TIM'
- CEANOTHUS 'FROSTY BLUE'
- ROSMARINUS OFFICINALIS
- TECOMARIA CAPENSIS
- CEANOTHUS 'CONCHA'



Source: SeaWorld, 2000

Front Gate Renovation Landscape Plan

Figure 3.4-14

facility would contain a ballroom, catering facilities, and meeting rooms). The 1.5-acre site is accessible from the adjacent guest parking area without the need to enter the theme park.

Description

Under the proposed Master Plan Update, the unbuilt Special Events Center would be expanded to approximately double the size of the facility immediately east of the approved center (Figures 3.4-15 and 3.4-16). The Plan calls for two design guidelines for this Tier 1 Project: 1) the bulk of structural addition should be 30 feet in height with an allowance for roof articulation to a height of 40 feet to avoid the flat roof effect, and 2) that one icon structure would be permitted to a maximum height of 60 feet above ground level. The landscape plan for the special events center expansion is shown on Figure 3.4-17).

Tier 2 Projects

Tier 2 projects may include but are not limited to:

- aquariums;
- special-effects theaters;
- land-based adventure rides;
- pelagic fish exhibits (large fish tanks);
- water play attractions;
- themed track or water rides;
- special format projection attractions;
- playgrounds;
- wildlife performance venues;
- boat rides;
- historic reenactment presentations;
- research facilities;
- live performance venues; and
- and wildlife exhibits.

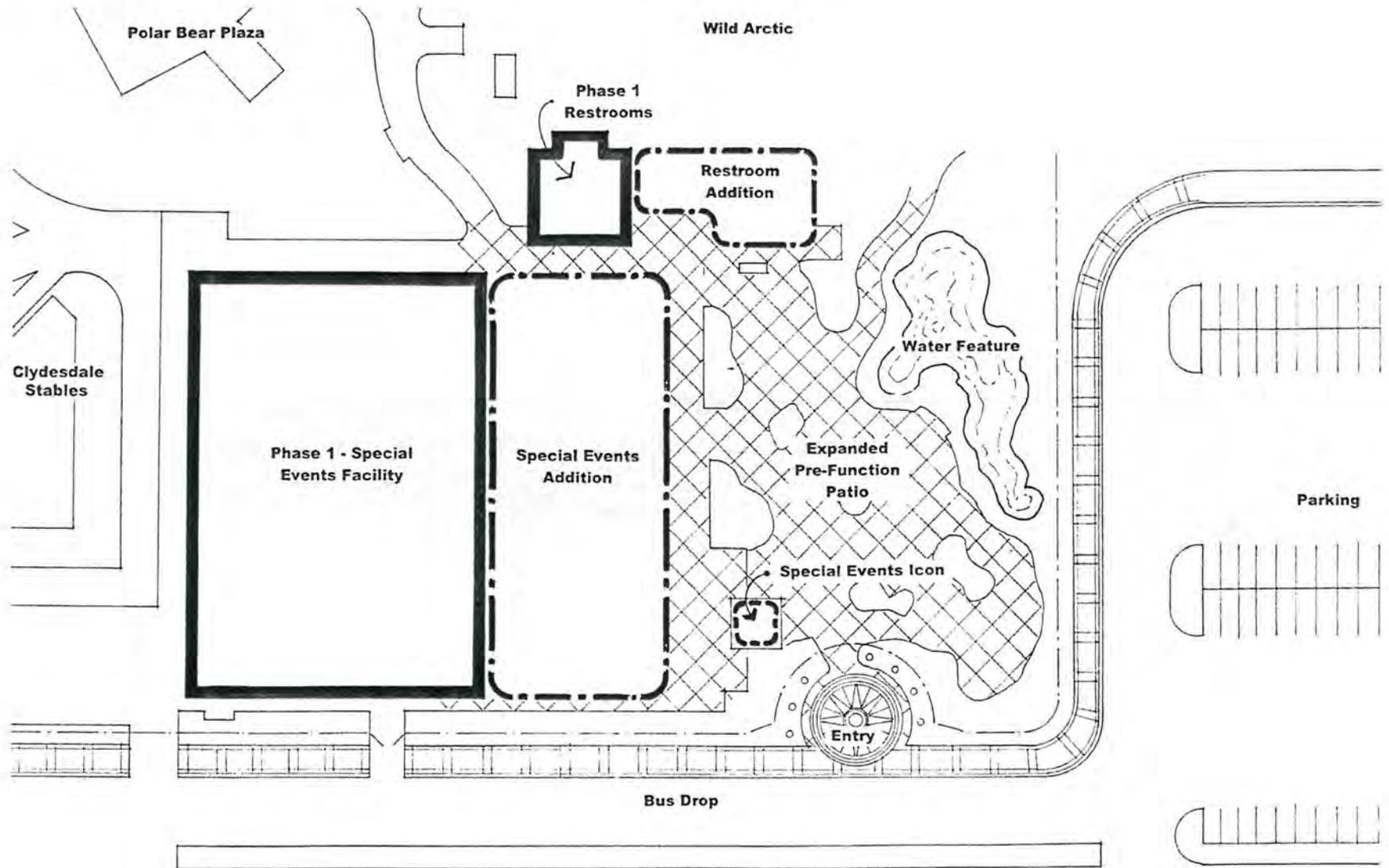
In some cases, an existing attraction may be renovated, or expanded. The Plan provides three general categories for development in Tier 2 areas. These are: 1) exhibit, 2) ride, and 3) show. Area 1 has eight Tier 2 areas where development or redevelopment could occur (See Figure 3.4-1). Each of the eight sites is briefly discussed below.

Site E-2: Exhibit/Ride/Show

One of the park's oldest sites, this 2.9-acre shoreline site contains the Harbor Side Café. Due to the condition of the building, the restaurant has been closed. Surrounding the restaurant is a small holding area for seals and sea lions, a seldom used special events/picnic area; the Skyride barn; and the Caribbean flamingos exhibit.

Site F-2: Exhibit/Ride/Show

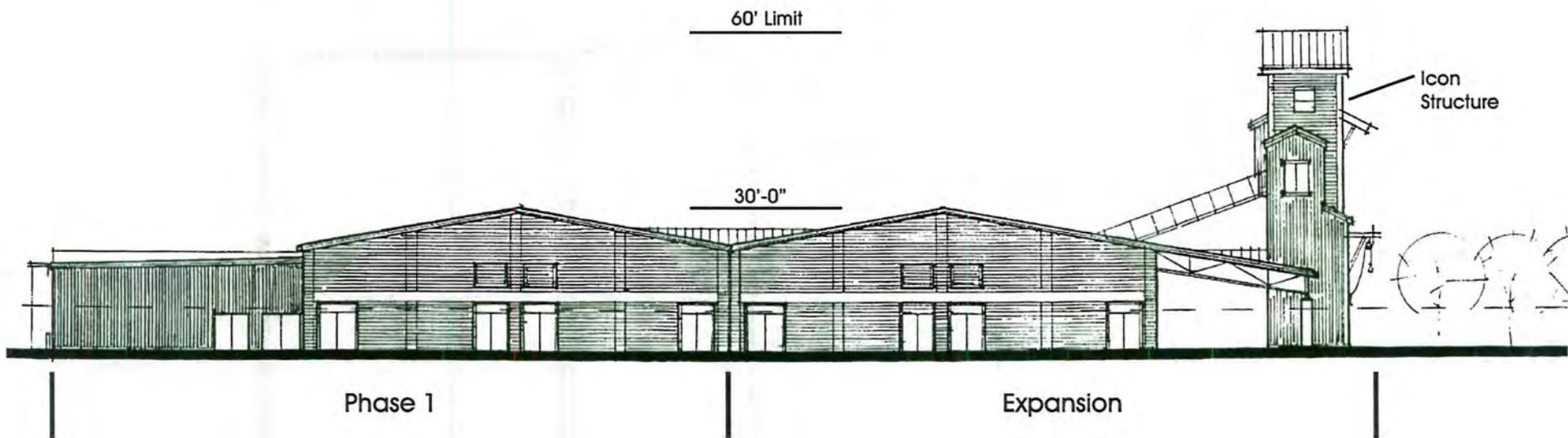
This unique 2.6-acre shoreline site is developed with the Waterfront Stadium. The site overlooks a small open water area within the leasehold boundary. Over the years, a variety of aquatic-oriented shows and educational seminars have been performed at this location and various set changes have been required. In its current configuration, however, the stadium has not completely fulfilled its potential and various alternative uses are being studied for this site.



Source: SeaWorld, 2001



Special Events Center Site Plan _____ Figure 3.4-15

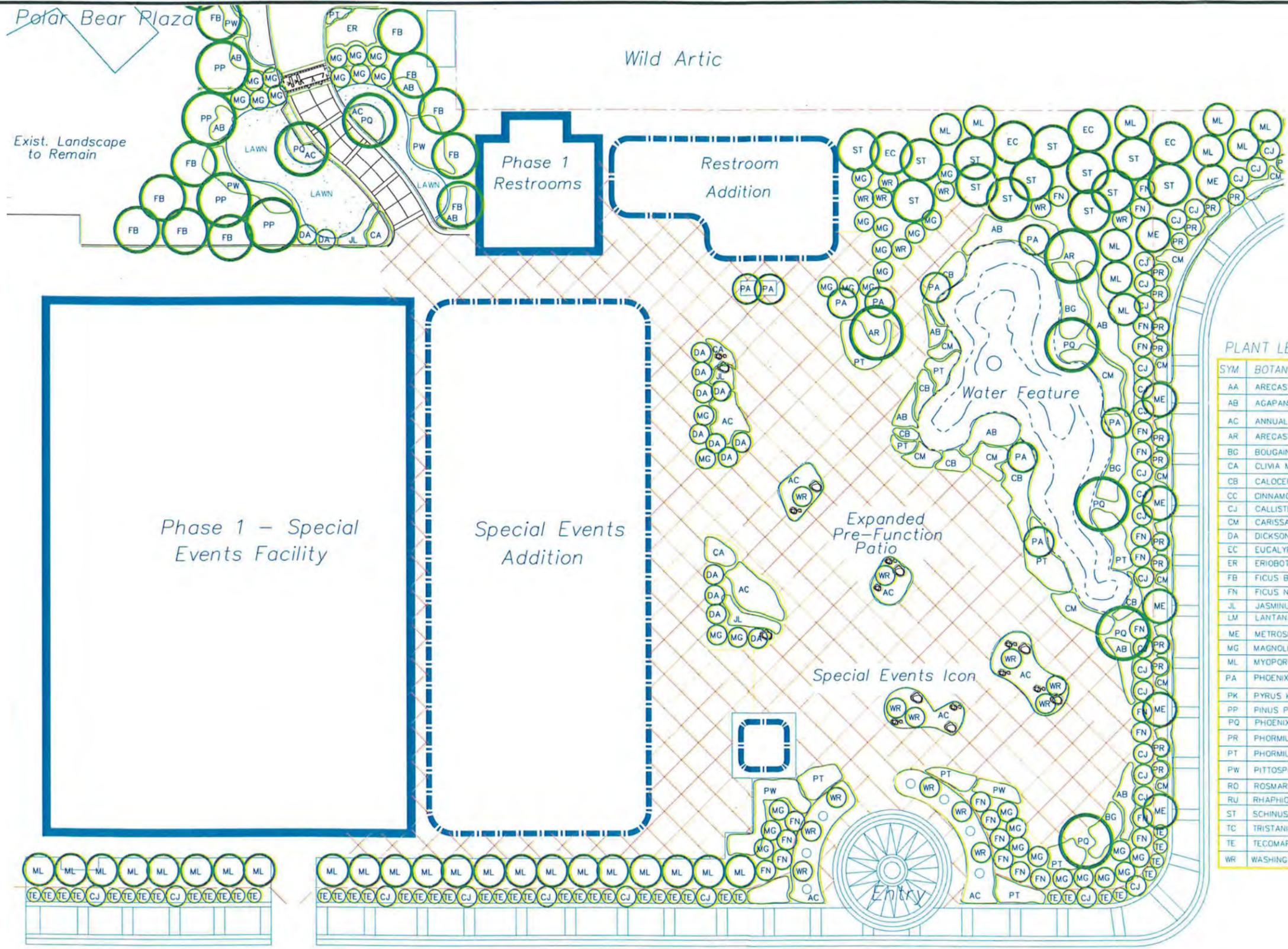


Source: SeaWorld, 2001

Not to Scale

Special Events Center Elevation

Figure 3.4-16



PLANT LEGEND

SYM	BOTANICAL NAME	SPACING	SIZE
AA	ARECASTRUM ROMANZOFFIANUM	PER PLAN	48" B
AB	AGAPANTHUS SPP	2' O.C.	5G. / 15 G.
AC	ANNUAL COLOR & SAND/SHELLS	8" O.C.	FLATS (4" P.)
AR	ARECASTRUM ROMANZOFFIANUM	PER PLAN	72" B
BG	BOUGAINVILLEA SPP	2' O.C.	5G. / 15 G.
CA	CLIVIA MINIATA	2' O.C.	5G. / 15 G.
CB	CALOCEPHALUS BROWNII	2' O.C.	5G. / 15 G.
CC	CINNAMOMUM CAMPHORA (EXIST.)		
CJ	CALLISTEMON JEFFERSII	PER PLAN	36" B
CM	CARISSA MACROCARPA	2' O.C.	5G. / 15 G.
DA	DICKSONIA ANTARCTICA	PER PLAN	15 G.
EC	EUCALYPTUS CITRIODORA	PER PLAN	36" B.
ER	ERIOBOTRYA D 'COPPERTONE'	4' O.C.	15 G.
FB	FICUS BENJAMINA	PER PLAN	36" B.
FN	FICUS NITIDA	PER PLAN	36" B.
JL	JASMINUM LERATTII	2 5" O.C.	5G. / 15 G.
LM	LANTANA MONTEVEDENSIS	2' O.C.	1 G.
ME	METROSIDEROS EXCELSUS	PER PLAN	36" B.
MG	MAGNOLIA 'LITTLE GEM'	PER PLAN	24" B. / 36" B.
ML	MYOPORUM LAETUM	PER PLAN	36" B.
PA	PHOENIX ROEBELII	PER PLAN	36" B.
PK	PYRUS KAWAKAMII (EXIST.)		
PP	PINUS PINEA	PER PLAN	72" B.
PQ	PHOENIX RECLINATA	PER PLAN	60" B.
PR	PHORMIUM T 'RUBRUM'	PER PLAN	5G. / 15 G.
PT	PHORMIUM T 'TINY TIM'	2' O.C.	5G. / 15 G.
PW	PITTIOSPORUM T 'WHEELER'S DWARF'	2' O.C.	5G. / 15 G.
RO	ROSMARINUS OFFICINALIS	2' O.C.	1 G.
RU	RHAPHIOLEPIS U. 'MINOR'	18" O.C.	5G. / 15 G.
ST	SCHINUS TEREBINTHIFOLIS	PER PLAN	36" B.
TC	TRISTANIA CONFERTA	PER PLAN	48" B.
TE	TECOMARIA CAPENSIS	PER PLAN	5G. / 15 G.
WR	WASHINGTONIA ROBUSTA	PER PLAN	48" B.



Source: SeaWorld, 2001



Special Events Center Landscape Plan

Figure 3.4-17

Site G-2: Exhibit/Ride/Show

This 1.5-acre site contains the Nautilus Pavilion special events facility and picnic area which hosts hundreds of day and night parties for mid- to large-sized groups each year. Demand for the Nautilus Pavilion is expected to decline, however, as the new state-of-the-art special events center planned for the front of the park is constructed as one of the Tier 1 projects.

Site H-2: Exhibit/Ride/Show

This 2.1-acre site contains a 4,500-seat, multi-use stadium, which currently supports bird and animal related shows. The facility is also used as a summer season venue for ice skating and acrobatic shows. The shape of this facility does not offer premiere viewing from all bleacher locations. Several options are under consideration to improve the attraction including complete redevelopment of the site.

Site I-2: Exhibit/Ride/Show

This 8.0-acre site is located on the eastern boundary of the leasehold. The central and western portions of the site are paved and used for bus and guest parking. The eastern portion is unimproved and is used on rare occasions as a guest parking overflow lot.

Site J-2: Exhibit/Ride/Show

This 1.7-acre site is developed with the Cascades food service complex, gift shops, and exhibit support facilities. These facilities are among the oldest in the park. Various options, including upgrading the adjacent sea lion facilities into a multi-species attraction, are under study.

Site K-2: Exhibit/Ride/Show

This 1.8-acre site contains the Penguin Encounter exhibit. Alternatives under consideration include renovation and expansion of the existing exhibit as well as redevelopment options.

Site L-2: Exhibit/Ride/Show

This site contains the Shamu's Happy Harbor children's playground area. The playground attractions are periodically updated to maintain their vitality and provide new experiences for the children.

Special Projects

Special Projects are conceptual development proposals that have been identified for sites within Areas 2, 4, and 5. Like Tier 2 projects, these are not proposed to be built for many years. Unlike Tier 2 projects, specific uses have been identified for each of these sites.

Parking Garage

Within Area 2, the proposed Plan indicates that a future parking garage is a proposed long-term Special Project. This parking garage would be located in the western part of the existing parking

lot, between the Main Entrance and the Front Gate (See Figure 3.4-1). The parking garage would be up to four levels in height, with half of the first level approximately six feet below grade. The parking garage would not be needed until many of the park attractions in the SeaWorld Master Plan Update are built and park attendance justifies the additional parking capacity. Based on a projected compounded attendance growth rate of 1.3 percent per year, the total available visitor parking that now exists would reach capacity in about 2011. However, timing for construction of the proposed parking garage will depend on whether the attendance increases at the projected rate, as well as several other factors including, future vehicle occupancy rates, use of the existing overflow parking area, expansion of the park into the existing parking area, and encroachment of the planned hotel onto the employee parking area. Therefore, construction of the parking garage will depend on when the demand for parking would exceed supply. As a result, a monitoring program that would take these variables into account would be part of the project to determine when the parking garage should be constructed. The design guidelines for the parking garage would limit the overall height to 45 feet above finished grade. The edges of the building would be softened with landscape features such as screen trees, a roof top trellis or hanging vines.

Transit Station

In addition to the Parking Garage, the Plan indicates a location for a future Metropolitan Transit Development Board (MTDB) transit station in the northeast corner of the parking garage, near the Front Gate (Figure 3.4-1). MTDB is currently studying a transit route in this area as part of the North Bay and Beach Area Guideway Study. This route would provide a guideway transit link from inland San Diego (most likely the Old Town Station) to the beach and bay activity centers. The study currently envisions the use of automated people mover (APM) technology for this project. APM includes a variety of automated guideway technologies ranging from small-vehicle people movers to large monorails. Two alignments are presently under consideration, with the goal of serving several key activity centers, including SeaWorld, Sports Arena redevelopment, Belmont Park, Mission Bay Park, Quivira Basin, proposed Mission Bay Amphitheater, Mission Valley and downtown hotels, and the beach communities.

The proposed design guidelines relative to the transit station are outlined below.

1. Coordinate the design of the parking garage to accommodate the transit station, if feasible;
2. Enhance the Transit Station exterior treatments to integrate with the SeaWorld theme;
3. Provide vertical circulation, including elevators and stairs, to accommodate the pedestrian volumes at the Transit Station;
4. Provide a pedestrian link from the Transit Station/Parking Structure directly to the front gate of SeaWorld; and
5. Limit the Transit Station and guideway height to 60 feet.

Sea World Marina Expansion

Within Area 4, the proposed Master Plan Update identifies a long-term Special Project that would increase the number of boat slips to 315, adding 115 slips to the 200 slips, which exist today. This proposed expansion is 85 less boat slips than allowed in the existing approved Master Plan. The expansion would entail the extension of the three existing docks and adding a fourth dock to the west (Figure 3.4-18). These slips could be used for the storage of private boats or for storage of boats or personal watercraft for rent. The characteristics of such an operation are discussed below under Boat Leasing Operations.

Boat Leasing Operations

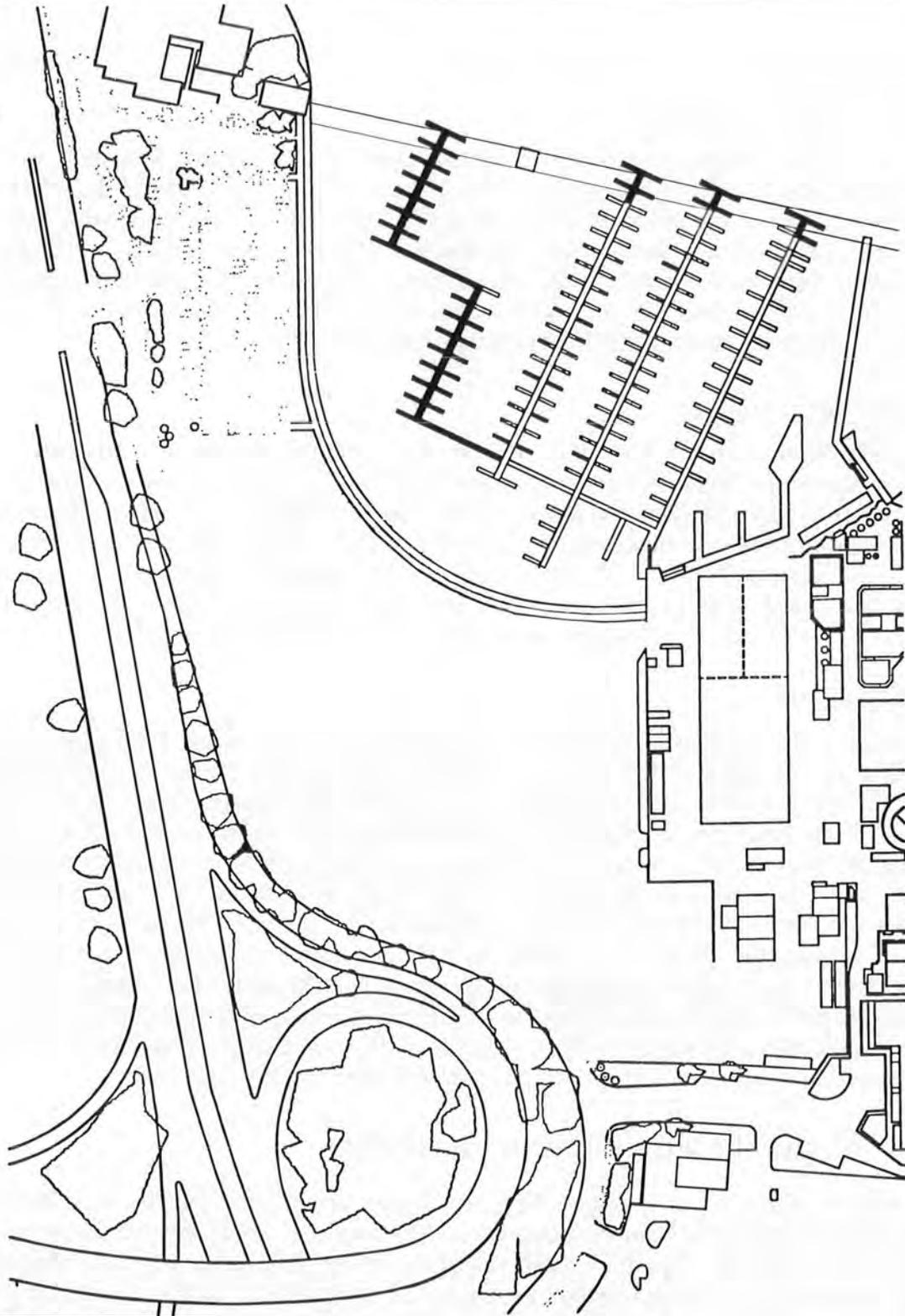
Although SeaWorld has not and does not currently operate a personal watercraft (PWC) (commonly known as “jet skis”) rental concession at the Marina, it could under its existing lease, operate such a facility. To provide a basis to analyze such an operation, a survey was conducted of existing PWC rental operations on Mission and San Diego Bays. The results of this survey are presented below in Table 3.4-2. The average number of PWCs at these rental operations is currently six. Based on this it is assumed that future PWC rental operations at SeaWorld would include six PWCs, which would require two boat slips of the 315-boat slip total.

Hotel Expansion

Within Area 5, the existing 300-room hotel entitlement provided in the 1985 Master Plan is proposed to be increased to 650 rooms. This long-term Special Project concept includes a ballroom, meeting rooms, surface parking, and a parking structure (Figure 3.4-19). A small landing dock, for hotel guests, would be built on the Perez Cove Shoreline adjacent to the hotel. According to the proposed Plan, prior to project review, SeaWorld would provide an economic feasibility analysis assessing the need for another hotel in Mission Bay Park. The design guidelines for the hotel indicate that the maximum height would be 90 feet. If the hotel is developed, a minimum 10-foot wide public (vertical) accessway from Perez Cove Way to the shoreline would be provided generally in an east/west direction in the mid-site area. The accessway would be located and designed to facilitate connection with the existing bikeway and pedestrian path along Perez Cove Way. Additionally, a public shoreline walkway (lateral shoreline access) along the waterfront would be incorporated into the hotel design.

3.4.3 Typical Construction Activities

Construction of Tier 1, 2 or long-term Special Projects would vary with the type of project. However, they would follow similar procedures. The first step would involve site preparation that depending on the location may entail demolition of existing facilities. Once the site has been cleared, grading operations would be conducted to provide a suitable foundation for the structure. The grading operation would vary with the building and structure(s) to be built. For a heavy structure, such as a parking garage, towers or rides, piles would likely be installed with a pile driver. Other buildings, that are not as heavy, would require the excavation of existing soils,

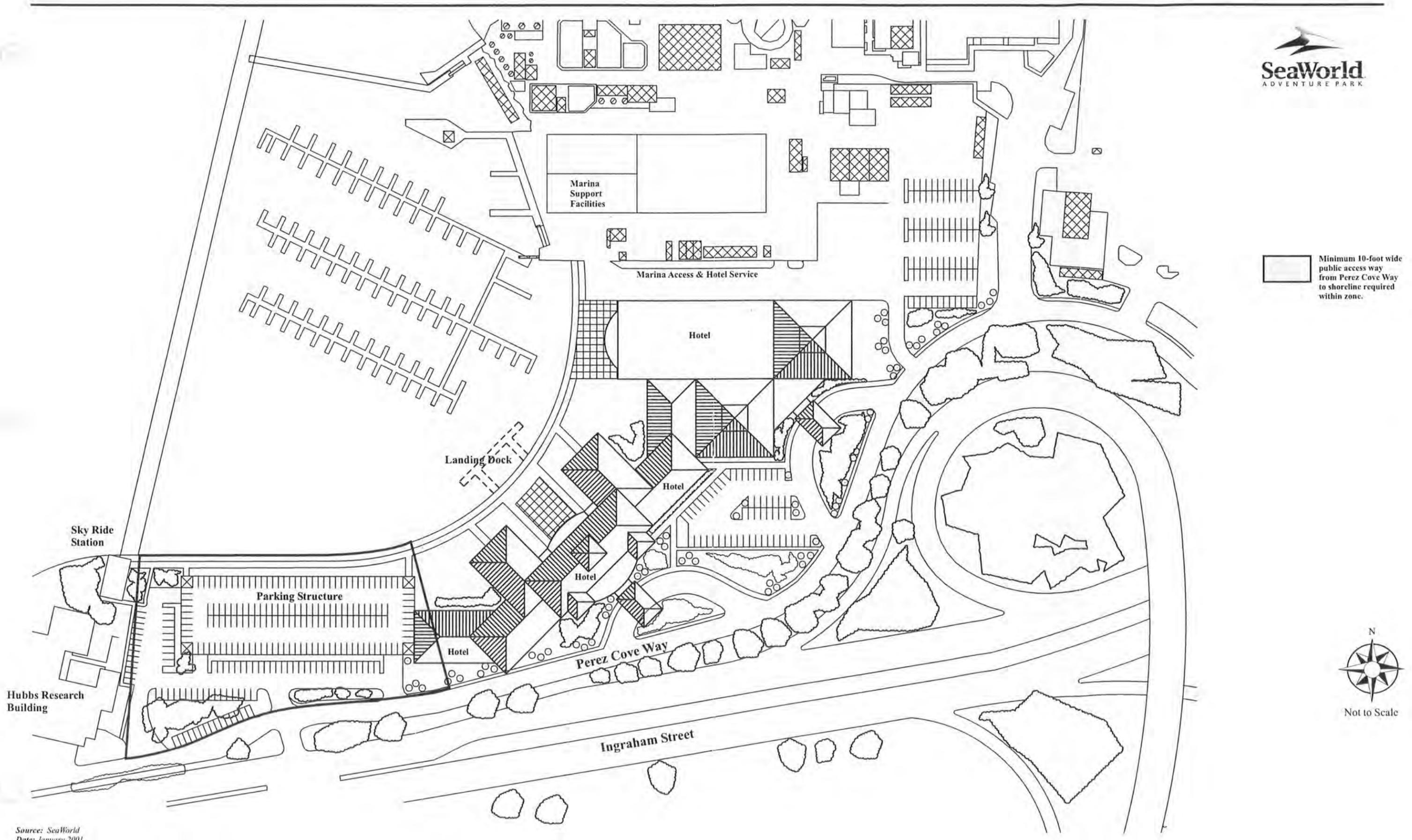


LEGEND	
	Existing
	Proposed

Source: SeaWorld, January 2001



Marina Expansion Site Plan _____ Figure 3.4-18



Source: SeaWorld
Date: January 2001

Conceptual Hotel Site Plan

Figure 3.4-19

TABLE 3.4-2
Existing Personal Watercraft
Rental Operation Characteristics

PWC Rental Company	Location	No. of PWCs
Seaforth		
Downtown	Between Marriott and Seaport Village	6
Mission Bay	1641 Quivira Road	12
Coronado	1715 Strand Way	6
Mission Bay Sportcenter	1010 Santa Clara Place	6
Resort Watersports		
Bahia Hotel	998 West Mission Bay Drive	2
Catamaran Hotel	3999 Mission Blvd.	4
CP Watersports, Inc.		
Hilton Hotel	1775 East Mission Bay Drive	9
AVERAGE		6

Source: PDC, July 18, 2000.

and varying site preparation depending on the structure. For relatively light structures, such as small single-story buildings (restrooms, retail buildings, etc.), excavated soils would be replaced with a mat of uniformly compacted fill dirt five to eight feet thick. For these buildings, site preparation would be expected to extend about ten to 15 feet beyond the structure perimeter. In some locations on the leasehold, this effort may not be necessary, with only compaction of existing soils or special foundations required.

For the parking structure, excavation is expected to extend to just above the groundwater table, and would require the installation of a rock mat/pore pressure dissipation blanket. For this facility site preparation would include the area about 20 feet outside the perimeter of the structure. The structure would be supported by a pile foundation.

For construction of the Marina Expansion in Perez Cove, construction would entail jet or driven piles to retain the docks in position. The docks would be constructed offsite and installed subsequent to the completion of the pile system.

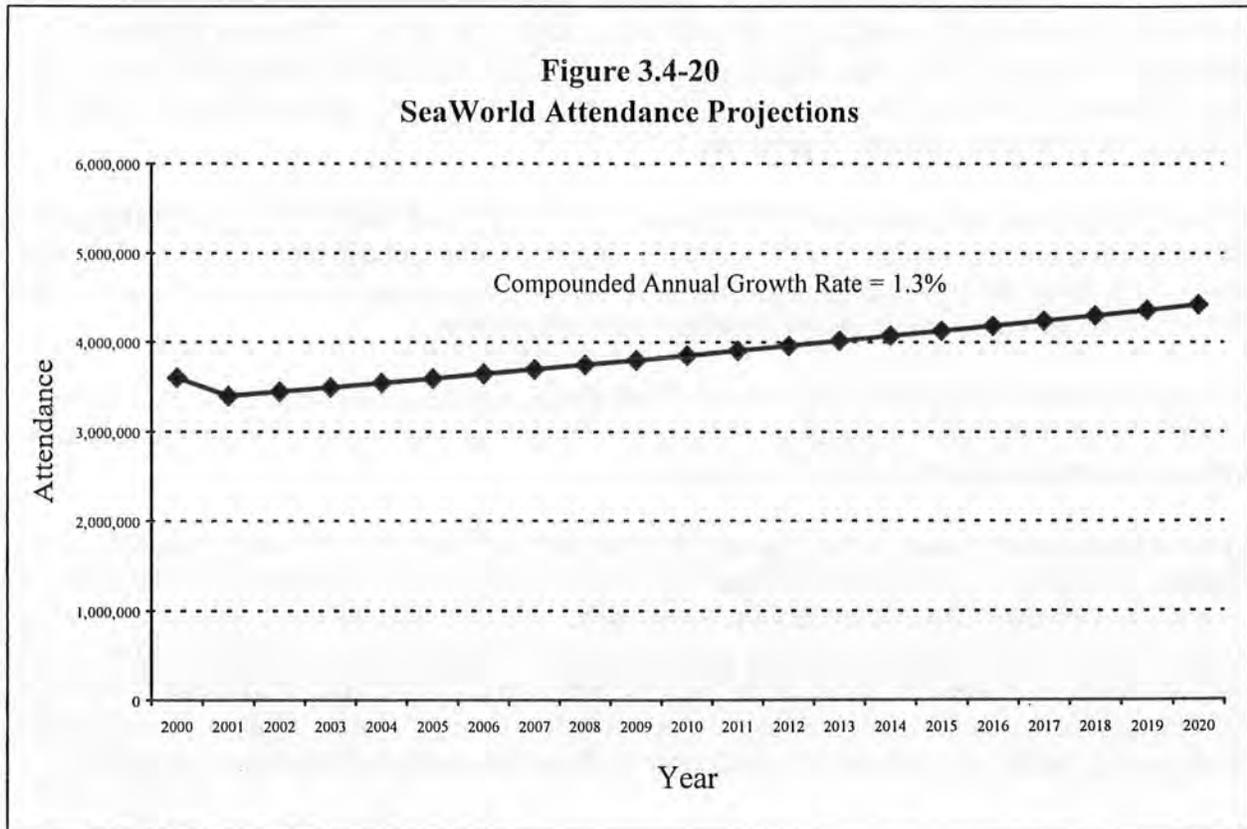
Where a future pool would be constructed, dirt would be excavated and transported offsite for disposal. The quantity of dirt would depend on the size of the pool. Depending on the depth of the pool, the excavated area may require dewatering. The excavation for the pool bowls may have 1:1 to 1.5:1 side slopes depending on the location. Where existing buildings, utilities, or sensitive areas exist nearby, sheet piling may be necessary. Pools may also have foundation anchors, depending on whether their depth extends below the water table. This is because when a pool is emptied for maintenance it could pop-out of the ground due to hydrostatic pressure.

For all projects, the construction would conform with approved engineering and safety guidelines. Any soils removed from the site or deposited onsite would be required to adhere to all City and State regulations.

3.4.4 Attendance Projection

SeaWorld attendance projections were developed through a review of the past ten years of SeaWorld’s attendance history; existing and proposed regional competitors; and plans for future attractions. SeaWorld’s attendance history and characteristics, as well as existing regional competitors were discussed earlier in this section.

SeaWorld plans on introducing new attractions about every three years, which is anticipated to result in an attendance increase of 150,000 visitors per year. Furthermore, the attendance projections assume that the competitive environment will continue to affect SeaWorld as it has in the past decade. A future competitor is the proposed Disney California Adventure, which opened in Anaheim in February 2001. The introduction of this new theme park in the southern California region is expected to have a negative effect on SeaWorld attendance. Accounting for all of these factors, SeaWorld forecasts an annual growth rate of 1.3 percent. Therefore, SeaWorld is anticipated to reach 4.4 million annual attendees by the year 2020 (Figure 3.4- 20).



Source: SeaWorld San Diego

In addition to the annual forecast, SeaWorld has developed 2020 attendance forecasts for a peak and average conditions (Table 3.4-3). These include: peak holiday weekend (July 4th); average (mean) summer weekend; and average summer weekday.

**TABLE 3.4-3
SeaWorld Attendance Projections Summary**

	Attendance Projection
Total Attendance 2001	3,400,000
Total Attendance 2020 (CAG 1.3%)	4,400,000
Summer holiday weekend 2020 (4 th of July)	47,000
Summer weekend 2020 (mean)	28,000
Summer weekday 2020 (mean)	25,000

Source: SeaWorld, 2000.

3.5 Mission Bay Park Master Plan Update Amendment

Amendments to the Mission Bay Park Master Plan Update are proposed as part of the project to implement the voter approved Proposition D, which allows an increase in development height on the SeaWorld leasehold up to 160 feet. However, the 30-foot height limit may be exceeded only on a limited percentage of the leasehold and in accordance with height allocation formulas set forth in the SeaWorld Master Plan Update. The following text provides the specific revisions proposed to the Plan.

Add the following paragraph to the Executive Summary/Key Recommendations/viii. Aesthetics and Design (page 16) of the Mission Bay Park Master Plan Update:

In order to allow greater flexibility in designing new facilities within the Sea World leasehold, the City of San Diego's Coastal Height Limit Overlay Zone was amended by public vote in November 1998. The amendment allows development to a maximum height of 160 feet within the SeaWorld property. Specific criteria governing the height, scale, massing, and visual impacts of all Sea World development shall be governed by the SeaWorld Master Plan Update, which is incorporated by reference into the Mission Bay Park Master Plan Update and LCP Land Use Plan.

Add the following sentence to item 27, (page 26) of Appendix G, Design Guidelines of the Mission Bay Park Master Plan Update:

27. Low Rise Emphasis: Mission Bay is an expansive area with wide and open views of the ocean from the surrounding hillsides. Low-scale buildings reinforce the open quality

of the bay while minimally obstructing views to the sky and distant landforms. For this reason, and in recognition of the public mandate for a 30-foot height limit within the City's coastal areas (Municipal Code 101.0451), the Park buildings should continue to be low rise, except in the SeaWorld leasehold where the voter approved amendment to the City's Coastal Height Limit Overlay Zone (Proposition D, 1998) allows building heights to a maximum of 160 feet. Because of the special character and unique commercial requirements of the SeaWorld theme park, development height within the leasehold shall be governed by the SeaWorld Master Plan Update.

Delete the entire recommendation for the South Shores Commercial Parcel (page 50) of the Land Use Component of the Mission Bay Park Master Plan Update:

~~**21. South Shores Commercial Parcel:** Because of its limited water access and isolation from other areas of the Park, this 16.5-acre site is considered more suitable for commercial recreation purposes. The parcel has been configured such that its northern half lies outside the limits of the South Shores landfill while capturing a wide stretch of waterfront facing Pacific Passage. This allows a number of possible commercial uses to be considered, including the expansion of SeaWorld attractions, a 200-room motel, or a water-oriented entertainment center.~~

~~The underlying objective is that this parcel is "best use" as commercial recreation or visitor-serving commercial support facilities. In accordance with the public consensus on this issue, "best use" should not mean permanent and exclusive commercially-supporting parking. Any new and permanent parking should be of such quantity and proportion as would be required to serve whatever commercial use may be proposed.~~

Delete the entire recommendation for the South Shores Commercial Parcel (page 125) of the South Shores and Fiesta Island Component of the Mission Bay Park Master Plan Update:

~~**113. Commercial Parcel:** The proposed 16.5+/- acre "best use" commercial parcel is configured to take maximum advantage of the waterfront while still allowing the relocation of the Ski Club to the planned embayment. Its configuration also permits the retention of the existing restrooms. The actual boundary of the lease parcel should depend on the Ski Club area and shore public access requirements, but should not be less than 300 feet; this depth is the minimum necessary for a guest-housing, motel-type development as an optional commercial use.~~

Add the following section to replace recommendation 21 (starting on page 50) of the Land Use Component of the Mission Bay Park Master Plan Update:

21. SeaWorld: SeaWorld is a special visitor-serving attraction which provides a focal point for Mission Bay Park and serves an important role in San Diego's local economy.

In 1998, the City of San Diego's voters approved an amendment to the Coastal Height Limitation Overlay Zone allowing SeaWorld greater flexibility to develop future park attractions. In keeping with the intent of the Mission Bay Park Master Plan Update to preserve existing viewsheds and visual corridors, the additional height available to SeaWorld should be used judiciously. Therefore, the development criteria for the SeaWorld leasehold shall be governed by the SeaWorld Master Plan (also known as the lease development plan) which is incorporated by reference into the Mission Bay Park Master Plan Update and LCP Land Use Plan.

Add the following to recommendation 47 (page 70) of the Water Use Component of the Mission Bay Park Master Plan Update:

47. Additional Wet Slips: The recreational and navigational use of the Bay water are valued substantially more than the dedication of water areas for wet slips and anchorage. Accordingly, no new slip or mooring areas are recommended, with the following exceptions:

Current wet slip expansions proposed by the Bahia Hotel (41 slips), the Princess Resort (58 slips), the Mission Bay Yacht Club (27 slips), and SeaWorld (115 slips), should proceed. These are limited expansions that do not impact the recreational or navigational use of their immediate water areas. The new slips proposed by the Princess Resort and SeaWorld would be within the current leasehold area.

3.6 Discretionary Actions

3.6.1 Project Review Process

Both the City of San Diego and the California Coastal Commission would review future individual SeaWorld projects. The City would determine whether a proposed project conforms with the SeaWorld Master Plan Update, while the Coastal Commission, which retains original jurisdiction over the SeaWorld site, would determine whether the proposed projects would be consistent with the Coastal Development Act.

The proposed Master Plan Update indicates that SeaWorld would first submit projects for formal public review to the City. They would be processed through one of two different processes, which are called Level 1 and Level 2. The City review process would take place before a project application would be submitted to the Coastal Commission. The relevant City body, whether the City Council or the Park and Recreation Board, would submit the application to the Coastal Commission to approve, approve with conditions, or deny the Coastal Development Permit. The City approval body also would make findings as to whether the project substantially conforms to the SeaWorld Master Plan Update. The City's finding, recommendations, comments and proposed conditions would be submitted to the Coastal Commission concurrently with the SeaWorld Coastal Development Permit application. Projects would not be submitted to the

Coastal Commission unless the City finds that they substantially conform to the SeaWorld Master Plan Update. The two City review processes are briefly described below.

Level 1

Level 1 is identical to the current process for project review within Mission Bay Park. Projects within the SeaWorld leasehold would require a determination of consistency with the SeaWorld Master Plan Update by the Real Estate Assets Department in consultation with the Park and Recreation Department, and the Development Services Department. An environmental review, conducted by the Environmental Analysis Section, to determine consistency with the Master Plan EIR may be requested. In accordance with existing administrative guidelines, projects may either be referred to the Mission Bay Park Committee as an information item or, alternatively, considered as an action item. Where appropriate, projects would be referred to the Design Review Committee and the Park and Recreation Board. Approved projects would then be submitted to the Coastal Commission for approval or denial of a Coastal Development Permit.

Level 2

Level 2 requires review and recommendation by the Mission Bay Park Committee, review by the Design Review Committee of the Park and Recreation Board, and public hearings before the Park and Recreation Board and the City Council. An environmental review, conducted by the Environmental Analysis Section to determine consistency with the Master Plan EIR would also be performed prior to the public hearing at City Council. The recommendations of those bodies would then be submitted to the Coastal Commission for approval or denial of a Coastal Development Permit.

The choice of which of the two City levels of review would occur would be based on whether a project would exceed a particular height threshold. Table 3.6-1 shows the height threshold criteria for each of the two levels of review.

**Table 3.6-1
Height Thresholds for Determining Project Review Level**

Leasehold Area	Level of Review	
	Level 1	Level 2
Area 1 – Theme Park	0 – 90 feet	90+ feet
Area 2 – Guest Parking	0 – 45 feet	45+ feet
Area 3 – Admin. & Support	0 – 45 feet	45+ feet
Area 4 – SeaWorld Marina	0 – 30 feet	30+ feet
Area 5 – Perez Cove Shoreline	0 – 30 feet	30+ feet

In addition to the height threshold, an interior renovation or replacement of an existing structure within the same footprint, height and building envelope as the original structure would require a Level 1 review.

A Level 2 review would be required, regardless of height, where a project involves any of the following:

1. A change to a use other than the theme park, parking, administration, support, marina, hotel and other uses described in the SeaWorld Master Plan Update;
2. A modification of the shoreline; and/or
3. A change in a sub-area boundary (e.g. expansion of the theme park [Area 1] into the existing guest parking lot [Area 2]).

A diagram of the Project Review Process is shown in Figure 3.6-1. All reviews and public hearings would be intended to assist the Real Estate Assets Department in determining a project's consistency with the SeaWorld Master Plan. Additionally, recommendations would be forwarded to the Coastal Commission with the Local Agency Review Form for the project.

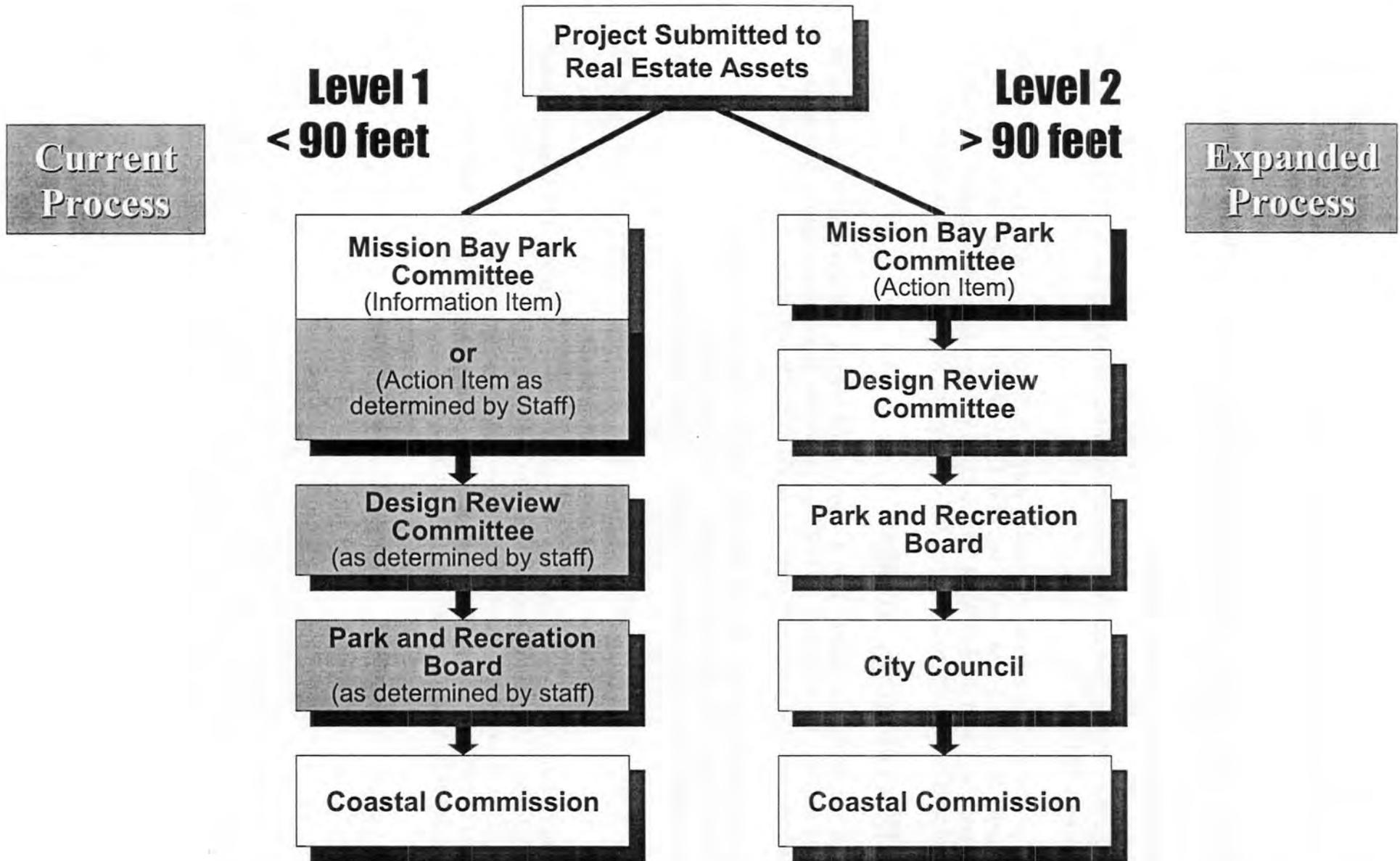
3.6.2 Discretionary Actions

Approval of the SeaWorld Master Plan Update would require the approval of a number of discretionary actions. The following list indicates the various discretionary actions that would be required to implement the proposed project SeaWorld Master Plan Update.

Amendment to the Mission Bay Park Master Plan Update – City of San Diego
Approval of the SeaWorld Master Plan Update – City of San Diego
California Coastal Development Permit – California Coastal Commission

In addition, depending on the nature of the proposed development, the following permits may be required.

General Construction Activity Stormwater Permit – Regional Water Quality Control Board
Section 404 Permit – U.S. Army Corps of Engineers
Section 10 of the Rivers and Harbors Act – U.S. Army Corps of Engineers
Section 1603 Streambed Alteration Agreement – California Department of Fish and Game
California Coastal Development Permits – California Coastal Commission



CHAPTER 4.0

ENVIRONMENTAL ANALYSIS

The following Environmental Analysis chapter provides information relative to thirteen environmental topics as it pertains to each component of the proposed project. Each topical section describes existing conditions; the impact significance criteria used to determine whether an impact would be significant; impact analysis; significance of impacts; and mitigation monitoring and reporting measures for significant impacts. The Lead Agency will require that the mitigation measures identified in this EIR be implemented by the project proponent except in the following cases:

1. Either the proponent offers alternative mitigation that reduces the significant impact to a similar level as would be achieved by the mitigation identified in the EIR; or,
2. The proponent presents substantial evidence that the required mitigation measure is infeasible and that there is no feasible mitigation measure or alternative. In this case, the Lead Agency must balance the benefits of the proposed project against the unavoidable significant environmental impacts to determine whether the unmitigated significant impacts are acceptable in view of specific overriding economic, social or other considerations (CEQA Guidelines Sec. 15093).

The topics addressed in Chapter 4.0 are the following:

- Land Use
- Neighborhood Character/Aesthetics
- Light, Glare and Shading
- Transportation/Circulation
- Water Quality
- Biological Resources
- Noise
- Geology/Soils
- Air Quality
- Recreational Resources
- Human Health/Public Safety
- Energy
- Water Conservation

4.1 Land Use

4.1.1 Existing Conditions

Onsite Uses

The SeaWorld Master Plan Update covers a 189.4-acre leasehold within Mission Bay Park. The leasehold consists of 172.4 acres of land and 17 acres of open water. The major uses of the site are the SeaWorld Adventure Park (theme park, administrative support area, guest and employee parking lot), an auxiliary employee parking lot, the Hubbs-SeaWorld Research Institute, and the SeaWorld Marina at Perez Cove. Please refer to Project Description, Section 3.3.1, Existing Facilities and Master Plan for a more detailed description of the onsite uses.

Surrounding Land Uses

SeaWorld is located on the south side of Mission Bay Park just north of the San Diego River Flood Control Channel, approximately halfway between the Pacific Ocean and I-5 (Figure 4.1-1). The site has well defined edges including a northern shoreline boundary with Mission Bay, a western boundary with Perez Cove Way and Ingraham Street, a southern boundary with Sea World Drive, and an eastern boundary with the Shore Shores area of Mission Bay Park. The immediate surrounding uses are representative of the diverse recreational, environmental, and commercial uses of Mission Bay Park. Bordering Mission Bay Park and extending from the Pacific Ocean into the nearby hillsides are the communities of Mission Beach, Pacific Beach, Clairemont Mesa, Linda Vista, Midway, Peninsula, and Ocean Beach. Following the general compass directions, a more detailed description of the surrounding land uses located within one-half mile from the SeaWorld site is provided below.

North

To the north of SeaWorld is the Pacific Passage channel of Mission Bay. This area is a regulated "no wake area" characterized by light aquatic activities such as low speed power boating, kayaking, rowing, and sailing. Further north, across the channel, is Fiesta Island. The interior of the island is largely undeveloped with most recreational activities occurring along the eastern, western, and southeastern shoreline areas. At present, the sparsely landscaped spaciousness of the island and the ability to park recreational vehicles close to the shoreline creates a unique recreational experience. The shoreline and surrounding water areas are used for a variety of activities including beach sports, personal watercraft (jet skis), swimming and fishing. Fiesta Island also has an equestrian area, youth camping facility and is the site of San Diego's Over-the-Line tournament. The southern portions of the island, across the channel from the SeaWorld site, were formerly used as sludge drying beds and are presently undeveloped. Presently, these areas, including the south shoreline, are not accessible by vehicles and are used by relatively few people. However, the Fiesta Island Concept Plan of the Mission Bay Park Master Plan Update recommends that the southern portions of the Island be more intensively developed with "islands" of turfed parkland, playgrounds, open beaches, swimming areas, pedestrian and

LEGEND	
1	Belmont Park
2	Dana Inn Hotel & Marina
3	Hyatt Islandia
4	Presido Park
5	Princess Resort
6	SeaWorld Marina
7	South Shores Boat Launch
8	Sports Arena



Source: SeaWorld, 2000

Surrounding Land Use

Figure 4.1-1

bicycle/skating paths, and parking areas. A California least tern preserve is located at Stony Point at the southwest tip of Fiesta Island.

West

To the northwest of the SeaWorld site, the Pacific Passage channel joins with the Mission Bay Channel. Across from the Mission Bay Channel is Vacation Isle. The eastern and southern portions of Vacation Isle, closest to Sea World, are developed primarily with turfing parkland and parking lots. The area known as Ski Beach is located along the east shoreline of the Vacation Isle, and is a popular launching spot for personal watercraft. Fiesta Bay, the largest body of water within Mission Bay, is located to the east between Vacation Isle and Fiesta Island. Fiesta Bay is used intensively for personal watercraft, power boating, and some water skiing. Fiesta Bay is also the site of Thunderboat Racing and the San Diego Crew Classic. The northwest portion of the island contains the Princess Resort Hotel.

The area to the west of SeaWorld between Ingraham Street, Mission Bay Drive and the shoreline is characterized by a mix of visitor-serving commercial uses and developed parkland. Uses include the Dana Marina small boat facility, Dana Landing public boat launching ramp, the Dana Inn Motor Hotel, Red Hen Restaurant and Sunset Point Park.

To the southwest of SeaWorld, between Mission Bay Drive, Ingraham Street, Sunset Cliffs Boulevard, and the entrance channel to Mission Bay, is the Hyatt Islandia Hotel and Marina and the Quivira Basin commercial center designed primarily for sport fishing, ocean-oriented boating activities, marinas, and conference facilities. Hospitality Point, the primary landform within Quivira Basin, is the location of the City's Park and Recreation Department, Mission Bay Park headquarters. It also houses the Lifeguard Services Division and San Diego Police Department's Harbor Unit. Existing uses in the Quivira Basin commercial center include Seaforth Sportfishing, Sportsmen's Seafood fish processing site and restaurant, Marina Village commercial site and marina, Mission Bay Marina, and Driscoll Mission Bay LLC boatyard. Marina Village currently uses most of its space for meeting rooms or special event facilities. A redevelopment proposal for Quivira Basin including, an upgrade of existing facilities, new hotel rooms and an improved roadway access is currently being reviewed by the City.

South

To the south of SeaWorld, opposite the Sea World Drive/Sunset Cliffs Boulevard transition, are three upland parcels described in the Mission Bay Park Master Plan Update as salt pan habitat. Two of the parcels, the Ingraham Street "cloverleaf" and the adjacent parcel to the east, are California least tern preserves. Immediately south of these parcels is the San Diego River Flood Control Channel. The channel is designated as wetland habitat and is protected as part of the Southern Wildlife Preserve. The channel is lined on both sides by rip-rap. On top of the rip-rap are combined pedestrian/bike paths connecting to the Mission Bay Park and City of San Diego regional trail system. The pathway along the north rim (closest to SeaWorld) is actually a two-lane, divided roadway that can accommodate vehicular use as well as bikes and pedestrians.

Along the south side of the San Diego River Flood Control Channel is Interstate 8. Further south, the area between I-8 and West Point Loma Boulevard is characterized by multifamily residential development with a neighborhood shopping complex at the northwest corner of West Point Loma and Midway Drive. Major residential developments in the area include Loma Riviera Apartments, East Orleans, Rue D'Orleans, Westview and Mariner's Cove. The area to the southeast, between I-8 and Sports Arena Boulevard is characterized by a mix of commercial, light industrial, office, and residential. The Orchard Senior Apartments are located between Sports Area Drive and Channel way, just south of I-8.

East

To the east of SeaWorld is the South Shores area of Mission Bay Park. Portions of the park adjacent to the SeaWorld property have been developed with a boat ramp, restrooms, and boat trailer parking. The area to the east of the boat trailer parking is undeveloped.

Beneath the ground surface of the South Shores area and extending westward into the southeast corner of the SeaWorld site is an old landfill. The landfill is stable but adds certain constraints to development.

The Mission Bay Park Master Plan Update recommends that the South Shores area be further developed with turf parkland, active play areas, sand courts, a public amphitheater, waterfront promenade and shoreline modifications to create improved beach areas.

Relevant Plans and Policies

Several City of San Diego plans and policies have been adopted which address the site or potentially affected surrounding environs of the proposed SeaWorld Master Plan Update. The plans and policies governing the development in the site of the Master Plan are discussed in the following narrative.

Progress Guide and General Plan

The City of San Diego Progress Guide and General Plan is a comprehensive long-term plan for the physical development of the City presenting overall policies for the entire City. The General Plan designates Mission Bay Park as public and semi-public open space, and a resource-based park. As stated in the Open Space Element, public and semi-public Open Space consists primarily of the many resource-based parks that are located throughout the City. These unique parks contain features that not only distinguish the open space system but also add significantly to the overall image and quality of life typical of San Diego. Resource-based parks are further defined in the Recreation Element as parks that serve users from the entire City and elsewhere, and are located at or centered around some natural or man-made features. Mission Bay Park is sited as a prime example of a resource-based park.

Overall, the Progress Guide and General Plan provides regional goals and policies which are more relevant to the development of community plans than in guiding specific development proposals. Appropriately, the General Plan includes a series of community plans that define the General Plan

goals for individual communities providing more project-specific guidance for development in San Diego. The SeaWorld Master Plan Update is located in the Mission Bay Park Master Plan Update (MBPMP), which functions as the community plan for the area within the boundaries of Mission Bay Park. The Mission Bay Park Master Plan Update is discussed in detail in the following section.

Mission Bay Park Master Plan Update

The major policies and objectives related directly to future development in Mission Bay Park are outlined in the City of San Diego's Mission Bay Park Master Plan Update. The Mission Bay Park Master Plan Update implements the City's Progress Guide and General Plan for Mission Bay Park and serves as the Local Coastal Program (LCP) Land Use Plan for the Mission Bay area.

The fundamental goal of the Mission Bay Park Master Plan Update is to "chart a course for continuing development of the Mission Bay Park which will sustain the diversity and quality of recreation, and protect and enhance the Bay's environment for future generations to come". A notable feature of the Plan is the "Parks within a Park" concept which depends in part on the congregation of compatible uses in distinctive regions around the Park so as to gain multiple benefits from any given land and water area.

Components of the Mission Bay Park Master Plan Update that are relevant to the SeaWorld Master Plan Update include Land Use, Water Use, Environment, Access and Circulation, South Shores/Fiesta Island and Design Guidelines. Each component contains one or more general goals and a series of policy recommendations. The general goals are summarized in the following paragraphs while key policy recommendations are summarized in Table 4.1-1.

Land Use

While more than half of the Mission Bay Park area is open water, a majority of park visitors engage the water as a setting for land-based recreation, such as walking, jogging, bicycling, and picnicking. Meeting the demand on the Park's resources brought on by an increase in the population, while retaining the inherent amenity of the Park's aquatic setting, is the principal aim of the land use component of the Mission Bay Park Master Plan Update. Within the framework of the Mission Bay Park Master Plan Update, the land use component identifies three guiding principles:

1. Mission Bay Park should be an aquatic-oriented park which provides a diversity of public, commercial, and natural land uses for the enjoyment and benefit of all the citizens of San Diego and visitors from outside communities;
2. Mission Bay Park should be a park in which land uses are located and managed so as to maximize their recreation and environmental functions, minimize adverse impacts on adjacent areas, facilitate public access and circulation, and capture the distinctive aesthetic quality of each area of the Bay; and

TABLE 4.1-1
Mission Bay Park Master Plan/Policy Consistency Summary

MBPMP Plan Element/Section	MBPMP Recommendation/Designation	SeaWorld Master Plan Consistency Evaluation
<i>Land Use</i>		
Aquatic Orientation	A 300-foot wide public waterfront zone, is established to give priority to passive recreation uses or uses compatible with the water setting and to discourage uses which restrict public access and enjoyment of the shore. The public waterfront zone is not applicable to SeaWorld's property.	The SeaWorld Master Plan would not conflict with any public water front zone identified in the MBPMP as the SeaWorld project is explicitly exempted in the Plan from this criteria.
Regional Parkland	Designated regional parkland areas are shown on Figure 9, page 39 of the MBPMP. These areas consist mostly of sandy beaches backed by ornamental turf, vegetation, and support parking. No regional parkland areas are designated on SeaWorld property.	The SeaWorld Master Plan would not conflict with any existing or potential regional parkland areas identified in the MBPMP.
Natural Areas	Designated natural areas are shown on Figure 10, page 41 of the MBPMP. "Natural" areas in the context of Mission Bay Park include open beach areas backed by coastal strand vegetation, upland areas vegetated by coastal sage scrub species, and wetland area. None of the "natural" areas lie within the SeaWorld Master Plan area. No natural recreation areas are designated on SeaWorld property.	The SeaWorld Master Plan would not conflict with the maintenance or enhancement of any natural recreation areas identified in the MBPMP as no natural areas are located within the SeaWorld leasehold.
Dedicated Lease Areas	South Shores Commercial Parcel (MBPMP, page 50). The recommendation for the South Shores commercial parcel allows a number of possible commercial uses, including the expansion of SeaWorld attractions, a 200-room motel, or a water-oriented entertainment center.	Consistent with the recommendation in the MBPMP, the South Shores parcel was added to the SeaWorld leasehold in 1998. The northern half of the site includes portions of two conceptual development sites contained in the SeaWorld Master Plan. The northernmost site (A-1, Figure 3.4-1) would be developed with a combination water flume and track ride (Splashdown Ride). The conceptual development site to the south (I-2, Figure 3.4-1) is designated for long term development as an exhibit, ride, or show. The southern half of the former South Shores parcel would be used for parking. Implementation of this recommendation would be reflected by the proposed amendment to the MBPMP.
Active Recreation	Designated active recreation areas are shown on Figure 16, page 57 of the MBPMP. Active recreation areas include playing fields, play areas, sand areas, and potential joint use areas for a variety of recreational pursuits. No active recreation areas are designated on SeaWorld's property.	The SeaWorld Master Plan would not conflict with any active recreation areas identified in the MBPMP as no active recreation areas are located on or near the SeaWorld leasehold.

TABLE 4.1-1
Mission Bay Park Master Plan/Policy Consistency Summary

MBPMP Plan Element/Section	MBPMP Recommendation/Designation	SeaWorld Master Plan Consistency Evaluation
<i>Water Use</i>		
Wet Slips and Anchorage	The plan states that the demand for more marinas must be weighed against the recreational and navigational value of the limited water areas (MBPMP, page 70). No new wet slips are recommended for Mission Bay Park with the exception of current expansions proposed by the Bahia Hotel, Princess Resort, and the Mission Bay Yacht Club. Up to 24 wet-slips may be provided for day-use only, as part of new docks for the Ski Club.	The existing SeaWorld 1985 Master Plan entitlement includes a 200 wet slip expansion. The amendment to the MBPMP plan would clarify SeaWorld's proposed expansion of 115 wet-slips within the existing water lease area. As the proposed project would not create more slips than allowed under the 1985 Master plan it would not conflict with this recommendation.
Swimming	Designated swimming areas are shown on Figure 4.1-4 in this Draft EIR. A proposed swimming area is designated on the south side of Fiesta Island, across the channel from SeaWorld.	The SeaWorld Master Plan would not conflict with any swimming area identified in the MBPMP. No existing or proposed swimming areas are designated along the SeaWorld shoreline. The proposed project would be compatible with swimming activities on the South side of Fiesta Island.
Shoreline Treatment	Designated shoreline treatment areas are shown on Figure 4.1-5. SeaWorld's entire shoreline is designated as Jetty (rip-rap revetment). The MBPMP does not propose any shoreline modifications or dredge or fill areas for the SeaWorld site.	The SeaWorld Master plan would not conflict with any shoreline treatment area identified in the MBPMP. No shoreline modifications are proposed in the SeaWorld Master Plan Update.
<i>Environment</i>		
Improving Water Quality	The MBPMP outlines a multi-faceted approach to improve the Bay's water quality at both the Park and watershed scale (MBPMP, pages 85-87). Recommendations apply broadly to the City of San Diego, businesses and non-profit organizations within the park, as well as businesses and residents within the 57 square mile Mission Bay Park water shed.	Sea World has instituted a comprehensive Water Quality/Best Management Practices (BMPs) Program for its operation including both storm water runoff and aquaria activities. SeaWorld is also a supporter of the "Think Blue" public awareness campaign to curb the contamination of public waters. SeaWorld's water treatment system is regulated by the Regional Water Quality Control Board. The treated water SeaWorld discharges into the Bay is as clean or cleaner than upon intake. Altogether, SeaWorld's water quality program is in full compliance with the MBPMP. Existing water treatment capacity is expected to be adequate to handle any increased needs generated by attractions anticipated in the SeaWorld Master Plan.
Wetland Habitat	Designated wetland habitat areas are shown on Figure 4.6-6 in this Draft EIR. No existing or proposed wetland habitat areas are shown anywhere on or adjacent to the SeaWorld site. The nearest wetland area is located in the San Diego River Channel to the south of SeaWorld site. The channel is buffered from the SeaWorld site by Sea World Drive and a paved pedestrian/bicycle path along the top of the northern river embankment.	The SeaWorld Master Plan would not conflict with any wetland habitat identified in the MBPMP as the nearest wetland habitat is located at least 300 feet from the SeaWorld leasehold.

TABLE 4.1-1
Mission Bay Park Master Plan/Policy Consistency Summary

MBPMP Plan Element/Section	MBPMP Recommendation/Designation	SeaWorld Master Plan Consistency Evaluation
Submerged (Benthic) Habitat	Designated Benthic Habitat areas are shown on Figure 23, page 93 of the MBPMP. Eelgrass beds are identified in Perez Cove in the vicinity of the SeaWorld Marina expansion and all along the SeaWorld shoreline of Pacific Passage.	The proposed marina expansion would result in a significant loss of eelgrass habitat in Perez Cove due to shading. However, implementation of the mitigation measures contained in Sections 4.3 and 4.6 would reduce these impacts to below a level of significance.
Upland Habitats	Designated Upland Habitats are shown on Figure 24, page 95 of the MBPMP. Within the general vicinity of SeaWorld (but not on site) least tern preserves are identified on the north shore of the San Diego River Channel near Sea World Drive, by the Ingraham Street "clover leaf" and at Stony Point (the southwestern tip of Fiesta Island). Only the river channel site is currently being used by least terns. The plan proposes that the Stony Point and Cloverleaf site be abandoned and replaced at other locations.	The development allowed by the SeaWorld Master Plan, including the two Tier 2 projects (E-2 and F-2) in closest proximity to the Stony Point least tern preserve, would not have a significant impact on the least terns due to noise or potential predator perching sites.
Environmental Education and Research	Designated Environmental Education sites are shown on Figure 25, page 97 of the MBPMP. The Plan recommends that a nature center be built in the vicinity of the Northern Wildlife Preserve and also discusses Hubbs-SeaWorld Research Institutes' interest in expanding their facilities to include educational programs and displays that would enhance public awareness about the Bay and the regions' coastal environment. The plan targets the Hubbs-SeaWorld Research Institute as a more significant venue for interpretive displays and educational programs should the Northern Wildlife preserve nature center be pre-empted by the need to expand wetland areas west of Rose Creek.	While the SeaWorld Master Plan does not contain a reference to a nature center at the Hubbs-SeaWorld Research Institute such a use would not conflict with the plan for this site and would not be precluded by the proposed Master Plan Update.
<i>Access and Circulation</i>		
Land Use Guidance	Designated Primary Regional Recreation and Freeway Access points are shown on Figure 26, page 101 of the MBPMP. While SeaWorld and the identified primary regional recreation areas share proximity to the same freeway access points, no portion of the SeaWorld site is identified as a regional recreation area, as these lands are primarily developed parklands. The Plan encourages optimum use of these areas, with good freeway access, to minimize vehicular circulation through the Park and adjacent neighborhoods.	The SeaWorld Master Plan would not conflict with the primary regional recreation areas identified in the MBPMP as no portion of the SeaWorld leasehold is designated or suitable for regional recreation.

TABLE 4.1-1
Mission Bay Park Master Plan/Policy Consistency Summary

MBPMP Plan Element/Section	MBPMP Recommendation/Designation	SeaWorld Master Plan Consistency Evaluation
Parking Provisions	Recommendations pertaining to public parking areas including overflow parking, parking for persons with disabilities, recreational vehicles, curbside parking, and drop-off and loading are provided on pages 104-108 of the MBPMP. In general the parking recommendations are directed to the southeast areas of the park—primarily South Shores and Fiesta Island and are not applicable to the SeaWorld site.	The SeaWorld Master Plan would not conflict with the parking recommendations of the MBPMP as these are directed primarily to the developing South Shores and Fiesta Island areas of Mission Bay Park..
Public Tram	A possible tram service looping around the Park through Pacific Beach with a stop at the Morena Boulevard Trolley Station and SeaWorld is identified as a transit option (MBPMP, page 110). The Plan states that additional feasibility studies are required.	The SeaWorld Master Plan would not conflict with the Tram option. The SeaWorld Master Plan identifies a transit stop for MTDB's proposed Automated People Mover system, which is currently under study. The guideway and station would be integrated into the SeaWorld parking garage.
Roadway Improvements	The Proposed Roadway System is shown on Figure 28, page 113 of the MBPMP. Specific improvements are identified on pages 111-114. Some of the recommendations such as the widening of SeaWorld Drive, and the provision of signalized pedestrian crossings at the intersections of SeaWorld Drive with Friars Road and Pacific Highway have already been implemented. A park road separate from SeaWorld Drive in South Shores has been implemented on the west side however the link to Friars Road remains to be completed. The Plan also recommends completion of the two remaining interchange ramps between Interstates 5 and 8 to remove congestion from local streets and reduce the level of commuter traffic from Park roads.	The SeaWorld Master Plan would not conflict with any roadway improvement identified in the MBPMP as future development within the leasehold would not preclude any improvement option. Additionally, SeaWorld will make fair share contributions towards specific roadway improvements and other traffic mitigations identified in Section 4.4. Such mitigations would be based on attendance and sequenced in accordance with the traffic monitoring program set forth in Section 4.4.
Bicycle and Pedestrian Paths	The Proposed Pedestrian/Bicycle Path Improvement Plan is shown on Figure 4.1-8 of this Draft EIR. The Plan shows a proposed pedestrian/bicycle path along Sea World Drive from SeaWorld's eastern boundary to the SeaWorld exit road. To the east, the path, which is now complete, meanders through the South Shores area connecting with the pedestrian/bike path on the east side of Mission Bay Park. To the west of the SeaWorld exit road, the Plan shows a roadside bicycle lane (also complete) which follows Perez Cove Way around the SeaWorld property where it connects with the Ingraham Street Bridge (to Pacific Beach) and an existing pedestrian/bicycle path underneath the bridge (to Mission Beach). The Plan also identifies the need for a grade-separated pathway spanning SeaWorld's exit roadway. The Plan recommends that in general, contiguous public access, either improved or unimproved, shall be provided around the entire waterfront of Mission Bay. However, the	Although the proposed Master Plan Update does not include measures to provide shoreline access to the Bay, such access is not considered reasonable or feasible for the following reasons. <ol style="list-style-type: none"> 1. The existing bicycle/pedestrian accessway along SeaWorld's southern and western perimeter already completes the link needed to provide contiguous public access around the Bay with connection to the regional system of recreational paths. 2. Access to SeaWorld must be limited to the front gate. A public use area along the shoreline side of the park would require the addition of a fence or other type of barrier to prevent unauthorized entry. Such a barrier would interfere with SeaWorld's unique physical connection with the Bay now enjoyed by park guests. Additionally, water-dependent facilities such as the seawater

TABLE 4.1-1
Mission Bay Park Master Plan/Policy Consistency Summary

MBPMP Plan Element/Section	MBPMP Recommendation/Designation	SeaWorld Master Plan Consistency Evaluation
	<p>SeaWorld lease area is identified as a current exception site along with eight other locations. Regarding these exceptions the plan states that where such access does not now exist, as leases or uses come up for renegotiation or changes, the issue of public shoreline access will be re-examined consistent with security, safety, and specific public aquatic/recreational needs and requirements.</p>	<p>intake and discharge areas that are vital to the animal life support system would have to remain in the public use area. In general, bayside access would increase SeaWorld's security risks to an unacceptable level.</p> <p>3. Existing structures such as the Waterfront Stadium and the water filtration facility would have to be relocated or alternatively the public accessway area would need to be routed around these facilities through the interior of the park. The latter alternative would however compromise the basic intent of the shoreline accessway. Either way, the solutions would require substantial capital improvements while SeaWorld would lose the use of a significant amount of land area and would have to accept greater design constraints in the siting of future attractions.</p> <p>4. The low levels of public usage of the South Shores shoreline immediately to the east suggest that a public accessway along SeaWorld's shoreline would be underutilized. The entire shoreline consists of rip-rap revetment with no opportunity for beach usage.</p>
<i>South Shores and Fiesta Island</i>		
South Shores	<p>The MBPMP recommends that as a "landscape overture," South Shores should afford wide and open views of the Park from the entrance roadways – namely Tecolote Road, Pacific Highway, Friars Road, and Sea World Drive (MBPMP, page 121).</p>	<p>Development allowed by the SeaWorld Master Plan would not alter the wide open foreground views (blue water views) of the Bay from any of the entrance roadways identified in the MBPMP. The proposed Splashdown Ride (Tier 1) and Tier 2 future projects would impact the visual character of Mission Bay Park as seen from the identified entrance roadways. The extent of the impact and proposed mitigation measures are discussed in Section 4.2, Neighborhood Character/Aesthetics of the EIR</p>

TABLE 4.1-1
Mission Bay Park Master Plan/Policy Consistency Summary

MBPMP Plan Element/Section	MBPMP Recommendation/Designation	SeaWorld Master Plan Consistency Evaluation
<i>Design Guidelines Appendix G</i>		
Overview	The MBPMP Design Guidelines provide minimum standards, where necessary, along with specific statements of design intent to help designers generate creative and innovative solutions for all Mission Bay Park improvements. In the relatively unimproved areas of Mission Bay Park (such as South Shores and Fiesta Island) the Guidelines are intended to be applied fully as new park improvements are contemplated. In established areas of the Park, the Guidelines should be relaxed where overriding existing conditions preempt their implementation. In such cases, the provisions of the Guidelines should be pursued "to the greatest extent possible," as conditions permit.	Future projects would be reviewed for consistency with the Mission Bay Park Master Plan Design Guidelines and the site-specific design guidelines of the SeaWorld Master Plan. The SeaWorld Master Plan Design guidelines would address landscape, lighting, signs and architecture.
Views and Access	The MBPMP Design Guidelines identify a number of public roadways from which Mission Bay Park is highly visible: southbound lanes of I-5 between Grand Avenue and Clairemont Drive; the westbound lanes of I-8; the Friars Road, Pacific Highway, and Mission Bay Drive entrances; the Midway Drive, Ingraham Street and Sunset Cliffs Boulevard bridges; and Clairemont Drive as it descends from the Clairemont hills (Design Guidelines, page 3). The park area from any one of these vantage points is called a viewshed. The Design Guidelines state that: to ensure as unencumbered and amenable a view of the bay environment as possible, no structure, earth form, or landscape feature should be constructed within the major public view corridors, or viewsheds, so as to impede, diminish or negatively affect the view of the Bay's environment.	The Splashdown Ride (Tier 1), Tier 2 future projects, and the future hotel project would impact the visual character of Mission Bay Park from a number of the identified vantage points. The extent of the impact and proposed mitigation measures are discussed in Section 4.2, Neighborhood Character/Aesthetics of the EIR.
Parkland	The MBPMP Design Guidelines define parkland as the turfed areas adjacent to the Park's beach and water areas (MBPMP Design Guidelines, page 6). An important guideline for the parkland areas is the 300-foot water influence zone. The SeaWorld Master Plan lies entirely outside designated Parkland areas.	The SeaWorld Master Plan would not conflict with any Parkland recommendation including the 300-foot water influence zone as it has been exempted from this designation.

TABLE 4.1-1
Mission Bay Park Master Plan/Policy Consistency Summary

MBPMP Plan Element/Section	MBPMP Recommendation/Designation	SeaWorld Master Plan Consistency Evaluation
Shoreline Access	The MBPMP Design Guidelines state that as a water-oriented recreation area, the Park's shore should remain accessible for public use throughout its length (Design Guidelines, page 7). Within leasehold areas, a 50-foot minimum public use zone should be maintained measured from the top of the bulkhead or rip-rap. The Park's combined bicycle and pedestrian path should be sited within the public use zone. Additionally, buildings should be set back an average of 25 feet from the public use zone. The guideline assumes that the 50-foot public use zone would be located between the top of the rip-rap and the leasehold property line. SeaWorld's property line, however, extends to the shoreline. A substantial amount of development exists within 50 feet of the shoreline.	As previously discussed, SeaWorld is identified as a current exception site with respect to continuous waterfront access (see Bicycle/Pedestrian Path above). Additionally, as shown in Figure 4.1-2, no portion of the SeaWorld site is included in the primary zone of water influence where public access is most critical. A 50-foot minimum public use zone, as described in the MBPMP Design Guidelines, could not be created on the SeaWorld site without removing or altering many existing structures, including the marina support building, Waterfront Stadium, Pirates 4D Theater, Shark Encounter and the Beached Animal Exhibit. It should be noted, however, that continuous public access through and around the SeaWorld site, in accordance with the bicycle/pedestrian path shown in Figure 4.1-8, is currently available. The existing path links to the Mission Bay Park and regional system of recreational paths.
Roads and Parking	The MBPMP Design Guidelines state that roads and parking areas should be conveniently sited to serve the recreation areas of the Park, but without detracting from the landscape, the views, and the physical space required for recreation (Design Guidelines, page 10). The Design Guidelines also contains commercial parking standards for hotels, banquet rooms, meeting or conference facilities, scientific research and development, and amusement/theme park (Design Guidelines, page 12) which are applicable to the SeaWorld leasehold.	The existing parking supply of 8,471 paved spaces and a total paved and unpaved supply of 9,971 spaces is adequate to fulfill current parking demand. The SeaWorld Master Plan provides for a future parking garage that would add guest parking to accommodate increased visitor demand over the next 20 years. Based on growth forecasts, it is estimated that the existing supply of visitor parking would reach capacity is about 2010 (Section 4.4).
Lighting	The MBPMP Design Guidelines contains specific standards for lighting including height of light fixtures, level of illumination and average uniformity ratios (Design Guidelines, page 15).	The SeaWorld Master Plan Design Guidelines contains site-specific lighting standards that are consistent with the Mission Bay Park Master Plan Design Guidelines.
Furnishings and Fences	The MBPMP Design Guidelines state that utility or security fences between public areas and private leaseholds should be as inconspicuous as possible and be screened by landscaping (Design Guidelines, page 15). The furnishing standards are for public use areas and are not applicable to the interior areas of SeaWorld.	The SeaWorld Master Plan Design Guidelines contains site-specific standards for furnishings, fences, and landscaping that are designed to improve the overall appearance of the SeaWorld theme park including the Bayside edge between the Shark Encounter Exhibit and South Shores Road.

**TABLE 4.1-1
Mission Bay Park Master Plan/Policy Consistency Summary**

MBPMP Plan Element/Section	MBPMP Recommendation/Designation	SeaWorld Master Plan Consistency Evaluation
Landscape	The MBPMP Design Guidelines identify four broad landscape types to help define Mission Bay Park as a special recreation resource and to reinforce the overall land use pattern proposed for the Park. The guidelines state that the Mediterranean landscape is associated with the resort hotels, theme park, and other commercial and non-profit lease areas in Mission Bay. The typical Mediterranean plantscape list is included on page 12 of the Design Guidelines. Invasive exotics (e.g., giant reed and pampas grass) are prohibited.	The SeaWorld Master Plan Design contains site-specific landscaping standards for areas visible around the perimeter of the park, from public parklands and roadways within Mission Bay Park. The landscaping would be consistent with the Mediterranean landscape identified in the Mission Bay Park Master Plan Design Guidelines. Greater landscaping flexibility is reserved for the interior of the park, which features botanical exhibits and exotic landscapes to achieve theming objectives or create dramatic special effects. However, as these areas would not be highly visible from surrounding areas, they would not conflict with this recommendation. Invasive exotics would be prohibited.
Architecture	The architectural guidelines encourage buildings, whether public or private, to contribute significantly to the image of Mission Bay as a water-oriented recreation environment (MBPMP Design Guidelines, page 25). Through the manipulation of building form, details, materials and color, the Park's architecture should aim to capture and express the special marine quality of the Bay.	SeaWorld's buildings exhibit a contemporary architecture, which is highly compatible with the surrounding aquatic environment. The Educational Center, Splashdown Ride, Special Events Center and Front Gate Renovation would continue this tradition. The SeaWorld Master Plan Design Guidelines contains site-specific architectural standards for buildings visible from public parklands and roadways within Mission Bay Park.
Building Height and Massing	The MBPMP Design Guidelines recommend low-scale buildings to reinforce the open quality of the bay while minimally obstructing views to the sky and distant shore (Design Guidelines, page 26). The 30-foot height limit within the City's Coastal areas is recognized as a public mandate to continue low-rise development. The Design Guidelines also point out that under the 30-foot height limit only a flat roof profile is possible for 3-story buildings. The Guidelines recommend that a 10-foot "roofscape variance" should be pursued for the Park buildings to promote the design of more interesting and graceful roof profiles. Therefore, the maximum height should be 40 feet. The Design Guidelines also recommend that buildings in Mission Bay Park should stand in contrast to and accentuate the Bay's inherent horizontal visual character. Building massing should be broken at suitable interval to establish consistent vertical planes, recessed, openings or projections that can act as counterpoints to the landscape.	The accompanying amendment to the Mission Bay Park Master Plan changes this specific guideline to allow heights up to 160 feet on the SeaWorld Property as approved by voters under Proposition D. The SeaWorld Master Plan, however, restricts the use of heights above 30 feet to 25% of the leasehold. Within the theme park (Area 1), further limits are placed on heights above 60 feet, 100 feet, and 130 feet. The SeaWorld Master Plan allows additional height to accommodate certain attractions that would not be possible under the 30-foot height limit such as the proposed Splashdown Ride. The additional height would also allow greater design flexibility for many lower profile attractions and facilities such as the Front Gate Renovation, Educational Facility, and Special Events Center Expansion. In these cases, the increased height would be used to provide more interesting roof articulation and/or visual icons that support the aquatic theme of Mission Bay Park.

TABLE 4.1-1
Mission Bay Park Master Plan/Policy Consistency Summary

MBPMP Plan Element/Section	MBPMP Recommendation/Designation	SeaWorld Master Plan Consistency Evaluation
Materials and Façade Treatment	<p>The MBPMP Design Guidelines state that the “emblematic” value of Mission Bay Park is the water, the sky, the shore, and all of the marine components. To this end, building materials, their form, and assemblage should be perceived to accommodate the marine environment, both in function and empathy (Design Guidelines, page 28). In summary the guidelines provide that:</p> <ol style="list-style-type: none"> 1. Through appropriate use of materials, building facades should appear increasingly “lighter” (in visual weight) as they rise from the ground; 2. Roof materials should reinforce the façade treatments intent. Preferred roof materials should be flat, smooth and light tone tiles, standing seam panels, corrugated metal sheets, fiberglass or wood shingles; 3. Superfluous or excessive ornamentation and finishes should be avoided. Materials should remain natural or be painted and stained to retain their natural textures whenever possible; and 4. Painted exteriors should be light in hue and of varying shades to afford a variety of reflections of atmospheric light—except pure white, which can be highly contrasting. Bright, more playful colors should be restricted to the detail of the object, not its overall mass. 	<p>The SeaWorld Master Plan Design Guidelines contains site-specific guidelines for building materials and colors focusing on structures that may be visible from public areas outside the theme park. The standards are consistent with the materials and façade guidelines in the Mission Bay Park Master Plan Design Guidelines. The 50% transparency requirements for portions of structures exceeding 100 feet in height responds directly to the principle that buildings appear increasingly lighter as they rise from the ground.</p>
Signage	<p>The MBPMP Design Guidelines recommend that a comprehensive and detailed design program should be undertaken for Mission Bay Park with the aim of integrating commercial, informational, interpretive and regulatory signs into a coordinated system unique to the Park (page 31). For commercial signs, the guidelines provide that freestanding commercial signs should be low, close to the ground, shall not exceed eight feet in height and shall be placed in a landscaped setting. An exception may be granted for large resort hotels, to accommodate sign designs or site identification within other architectural features such as entry walls or gatehouses. Roof signs are specifically prohibited. Commercial signage which is visible from public areas of the Park should be restricted to those which directly serves the public interest as related to the Park’s primary mission as an aquatic recreation and resort area. This would include directional and entrance signs for the leaseholds (Design Guidelines, page 33).</p>	<p>The SeaWorld Master Plan contains site-specific sign standards to limit the visual impact of signs from public parklands and roadways within Mission Bay Park. Additionally, the City’s Land Development Code for the Coastal Zone areas limits freestanding monument signs to eight feet in height and prohibits roof signs. The proposed front gate and special event center icons would be located well into the interior of the leasehold and would not be classifiable as monument or roof signs.</p>

3. Mission Bay Park should also enhance the viability and use of other connected open space areas to promote the creation of a comprehensive, integrated open space system into and out of Mission Bay.

Dedicated lease areas on Mission Bay Park, comprised of both non-profit and commercial leases, contribute to the revenues of the City while providing a variety of recreation opportunities to Park visitors. Of the nearly 472 allowable acres dedicated for lease areas in the Park, about 85 percent are currently in use. The SeaWorld site is identified in the Mission Bay Park Master Plan Update as "dedicated lease area". The relevant objectives for dedicated lease areas as listed in the Plan include:

1. Existing commercial leases should be intensified to the greatest extent possible, so as to minimize the taking of public land to expand or create new commercial leases elsewhere in the Park;
2. Commercial leases should provide a variety of recreational opportunities, i.e., high, as well as moderately-priced guest housing accommodations, recreational vehicle camping, and sites for primitive tent camping; and
3. Within the preceding objectives, commercial lease areas should render maximum revenue utility to the City.

Water Use

Mission Bay Park provides an arena for a wide variety of water sport uses including water skis, rowboats, paddle boats, canoes and kayaks, jet skis, fishing, power boats, sail boats, and swimming. Organized sport activities range from sailing regattas and sculling to speedboat and thunderboat racing. This component of the Mission Bay Park Master Plan Update contains key water-use management recommendations, including water-use space and time allocations, and water access limitations. This component identifies one guiding principle:

1. Mission Bay Park's water areas should be allocated and maintained to support the diverse aquatic interests of those visiting Mission Bay, ensuring adequate access to, and the safety and enjoyment of, the Park's aquatic resources. In the interest of sustaining a desired level of recreation, the Park waters shall be so used as to preserve an appropriate level of biological quality, benefiting both human activities and the interests of wildlife.

Environment

Mission Bay is a human-crafted aquatic embayment satisfying a wide range of recreation demands. In shaping the Park to satisfy these recreation demands, mostly through dredging, much of its biological and ecological health has been lost. The Northern Wildlife Preserve, a 31-acre wetland, constitutes the only natural remnant of what once was a 4,000-acre habitat serving the Pacific flyway. Over the years, values have shifted. Today's environmental values demand a higher awareness of the potential impacts of development upon natural resources - and adequate action to protect and enhance them. The environmental component of the Mission Bay Park

Master Plan Update is, in effect, a reflection of these new values. This component identifies a single guiding principle:

1. Mission Bay Park should be planned, designed, and managed for long-term environmental health. The highest water quality; sustained biodiversity; ongoing education and research; and the reduction of traffic, noise, and air pollution should all be priorities. The Park's natural resources should be conserved and enhanced not only to reflect environmental values, but also for aesthetic and recreational benefits.

Access and Circulation

As one of San Diego's preferred recreation destinations, during the peak tourist season, Mission Bay Park is subject to considerable motorist, bicycle, and pedestrian traffic. Contributing to the traffic problems is a significant volume of commuter traffic on Ingraham Street and Sea World Drive, which are major roadways serving Mission Bay Park. Through land use planning, parking, and access controls, the provision of convenient public transit, and enhanced bikeways and paths, this component of the Mission Bay Park Master Plan aims to address the traffic problems facing the Mission Bay Park and further enhance its mission as a regional recreation attraction. The guiding principle of the access and circulation component of the Mission Bay Park Master Plan Update is:

1. Mission Bay Park should provide safe, efficient and enjoyable access to all of its recreation areas, minimizing circulation and parking impacts on adjacent residential areas. Traffic and parking should support, but not overwhelm, the Park's recreation areas, the regional parkland areas in particular. Bicycle and pedestrian paths should reach all areas of the Park and extend to adjacent open space corridors in as safe and enjoyable a manner as possible.

South Shores/Fiesta Island

Encompassing over 600 acres of land, South Shores and Fiesta Island represent a significant part of the future of Mission Bay Park. Consistent with the Mission Bay Park Master Plan Update, the SeaWorld Master Plan Update area now includes the 16.5-acre "best use" commercial area located along the western boundary of the South Shores concept plan. Fiesta Island lies directly north of the SeaWorld leasehold, separated by the Pacific Passage. The guiding principles for the South Shores/Fiesta Island component of the of the Mission Bay Park Master Plan Update are:

1. South Shores should be an intensively used park area that attracts visitors to a variety of public and commercial recreation venues yielding, in aggregate, a summary view of the Park's grand aquatic identity; and
2. For its part, Fiesta Island should remain essentially open yet supportive of a diversity of regional-serving public and low-key, for-profit recreation and natural enhancement functions.

Design Guidelines

The Design Guidelines, found in Appendix G of the Mission Bay Park Master Plan Update, address functional and aesthetic issues in the following areas: site design; landscape; architecture; and signage. By necessity, the Guidelines are general in nature, not site specific. They provide minimum standards, where necessary, along with specific statements of design intent to help designers generate creative and innovative solutions for all Park improvements. In relatively unimproved areas of the Park, such as South Shores, the Guidelines are to be applied fully as new park improvements are contemplated. In established areas of the Park, the Guidelines should be relaxed where overriding existing conditions preempt their implementation. In such areas, the provisions of the guidelines should be pursued "to the greatest extent possible," as conditions permit.

Site Design

Site design guidelines relate to the overall control of views, the organization of public recreation areas, roads, parking, and paths, and the types of furnishings required to support recreational activity. The general intent of the Site Design Guidelines is to ensure optimum, secure, and comfortable visual and physical access to the shore areas and water bodies of Mission Bay.

Landscape

The general aim of the Park's landscaping is to help define Mission Bay Park as a special recreation resource, uniquely different from other City parks in form and character, and attuned to the Bay's coastal setting. Another objective is to reduce the consumption of water for irrigation by emphasizing the use of drought-tolerant plants wherever not in conflict with the Park's recreation and land use functions. To meet these objectives, and to ensure that the Park's landscape efficiently accommodates the various planned recreation activities, four broad landscape types are recommended: Beach/Coastal Strand; Coastal Sage Scrub; Mediterranean; and Parkland. These landscape types reinforce the overall land use pattern proposed for the Park as defined in the Master Plan.

Architecture

The architectural guidelines apply to the design of new facilities, as well as to the renovation/rehabilitation of existing ones. The overall intent of these guidelines is to preclude from Mission Bay Park a "theme park" architecture. Through the manipulation of building form, details, materials, and colors, the Park architecture should aim to capture and express the special marine quality of the Bay.

Signage

Signage is an integral and necessary component of the Bay's landscape. Signage is generally of four types: commercial, informational, interpretive, and regulatory. The aim of this component is to integrate commercial, informational, interpretive, and regulatory signs into a coordinated system unique to the Park.

City of San Diego Land Development Code

Property within Mission Bay Park is not zoned. The Real Estates Assets Department administers the project review process for Mission Bay Park, which focuses on consistency with the lease, the “lease development plan” (currently the 1985 SeaWorld Master Plan), and the Mission Bay Park Master Plan Update. The SeaWorld Master Plan Update would become the new “lease development plan” for the SeaWorld site and, by reference, part of the Mission Bay Park Master Plan Update. Additionally, the Mission Bay Park Master Plan Update contains specific recommendations and policy guidelines for architecture, landscaping, signage, parking and other aspects of project design. However, city-wide provisions of the Land Development Code, such as sign, parking and landscape regulations, would be applicable to the SeaWorld site for “major projects”. In such cases, the Park and Recreation Department and Development Services Department staff forward their recommendations to the Real Estate Assets Department for a final ministerial action. The Environmentally Sensitive Lands (ESL) provisions of the Land Development Code are not currently applicable to Mission Bay Park as the entire Park is located within the jurisdiction of the California Coastal Commission. The Coastal Zone Height Limit Overlay Zone, which is part of the Land Development Code, does apply to all property in Mission Bay Park and is referenced in the Mission Bay Park Master Plan Update. The Coastal Zone Height Limit Overlay Zone was amended by initiative in 1998 to allow heights up to 160 feet on the SeaWorld leasehold.

Mission Bay Park Natural Resource Management Plan

The Mission Bay Park Natural Resource Management Plan (MBPNRMP) recognizes the presence of natural resources in Mission Bay Park and provides guidelines and programs for the protection, enhancement, and management of these resources. The Plan objectives are to:

1. Establish management practices to preserve and protect biological resources while providing for future recreational development, maintenance, and land use in Mission Bay Park;
2. Provide a framework for mitigation acceptable to the City and resource permitting agencies;
3. Provide opportunities for innovative resource enhancement in Mission Bay Park; and
4. Establish a foundation for increased educational and research opportunities in the Park.

Many of the goals and objectives of the MBPNRMP are reflected in the Mission Bay Park Master Plan Update as the entire MBPNRMP has been added to the Mission Bay Park Master Plan as an appendix.

The MBPNRMP contains a comprehensive inventory of marine, wetland, and terrestrial resources within Mission Bay Park, and outlines development guidelines and mitigation options to preserve or enhance the various types of habitat.

According to the MBPNRMP, eelgrass habitat occurs in the Perez Cove water lease area and all along the SeaWorld shoreline. No other resources are identified on or adjacent to the SeaWorld

site, however, three California least tern habitat areas occur within the general proximity to the SeaWorld site.

City of San Diego Multiple Species Conservation Program

The Multiple Species Conversation Program (MSCP) Subarea Plan is a comprehensive habitat conservation planning program for southwestern San Diego County. The plan is designed to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. The MSCP targets specific areas within the City which should be preserved to assure viable biological resources remain in the City. These are identified as Multi-Habitat Preserve Areas (MHPA). Two MHPA areas have been identified in Mission Bay Park: 1) the Northern Wildlife Preserve near the mouth of Rose Creek, and 2) the Southern Wildlife Preserve in the San Diego River Channel. Neither area is located on or adjacent to the SeaWorld property.

4.1.2 Significance Criteria

Based on City and/or CEQA thresholds, land use impacts would be significant if the proposed project:

1. Is substantially inconsistent or conflicts with the goals, objectives, regulations and/or policies of governmental agencies with jurisdiction over the proposed project;
2. Is incompatible with adjacent land uses and surrounding densities.

4.1.3 Environmental Impacts

Issue 1: Would the project result in a conflict with the goals, objectives and recommendations of the Mission Bay Park Master Plan Update? Would the project conflict with adopted environmental plans for the area?

Tier 1 Projects

Tier 1 projects consist of the Educational Facility, Splashdown Ride, Special Events Center Expansion and Front Gate Renovation proposed for Area 1 of the SeaWorld Master Plan Update. Area 1 includes the main theme park area containing SeaWorld's primary attractions and support facilities.

City of San Diego Progress Guide and General Plan

The most applicable provision of the General Plan relates to the general land use designation. As discussed above, the entire SeaWorld site is designated as "resource-based parkland". Development allowed within resource based parkland is determined by the specific resource involved, expected use, available land, and location. In Mission Bay Park, resource-based parkland is further defined by the Mission Bay Park Master Plan Update. Visitor-serving

commercial uses are specifically allowed at various locations throughout Mission Bay Park including the SeaWorld site.

All Tier 1 projects are compatible with existing land uses within the SeaWorld theme park and representative of SeaWorld's program of renovation, renewal, and periodic provision of new attractions. The Splashdown Ride is a new ride/attraction that is expected to generate high levels of excitement comparable to the existing Shipwreck Rapids ride or the simulator portion of Wild Arctic Adventure. The ride would be significantly taller than those attractions built between 1972 and 1998 under the original coastal zone height initiative, although two attractions built prior to 1972 would be taller than the proposed Splashdown Ride (95 feet high). The proposed Front Gate Renovation is designed to enhance the entry experience for SeaWorld's guests. The proposed Educational Facility is designed to support SeaWorld's existing education program replacing obsolete and inadequate facilities. The proposed Special Events Center Expansion would approximately double the capacity of a currently proposed (but not yet built) special events center. The Tier 1 projects would, therefore, be compatible with the goals of the Progress Guide and General Plan for regional parkland within Mission Bay Park.

Mission Bay Park Master Plan Update

The Mission Bay Park Master Plan Update contains goals and policies which apply park-wide or to specific Park regions. Few recommendations, however, apply specifically to the SeaWorld site. A consistency evaluation between the SeaWorld Master Plan Update and the key policies of the Mission Bay Park Master Plan Update is provided in Table 4.1-1.

The following discussion focuses on the compatibility of the proposed Tier 1 projects with the goals and key policy recommendations of Mission Bay Park Master Plan Update. Portions of the discussion describing specific recommendations of the Mission Bay Park Master Plan Update may have general applicability to the entire leasehold including the future Tier 2 and Special Projects.

Land Use

The proposed Tier 1 projects would not significantly impact Mission Bay Park Master Plan Update goals to promote the aquatic orientation of Mission Bay Park. The Tier 1 projects generally continue the existing uses and pattern of development within the SeaWorld theme park. As theme park attractions, the Splashdown Ride and Front Gate Renovation would be complementary to the aquatic environment of Mission Bay Park. The proposed Splashdown Ride would contain three primary water elements: 1) a flume in which the boats are transported through the ride, 2) a pool into which the primary and secondary drops are made and 3) an aquarium built into the guest services areas. The Front Gate Renovation would contain a large pool designed to resemble a small seaport with scale model ships and a lighthouse.

The Educational Facility would house and support SeaWorld's educational program which offers many unique activities involving the marine environment. The Special Events Center Expansion like other banquet rooms, meeting rooms, or catering facilities in Mission Bay Park is enhanced by its proximity to the SeaWorld theme park and Mission Bay.

The key policy recommendation in the Mission Bay Park Master Plan Update to promote the aquatic orientation of the Mission Bay Park is the establishment of a 300-foot wide public water front zone (Figure 4.1-2). Within this zone, priority is to be given to passive recreation uses or uses compatible with the water setting. The entire SeaWorld site, which includes all of the Tier 1 and 2 future project sites, is located outside of the 300-foot public water front zone.

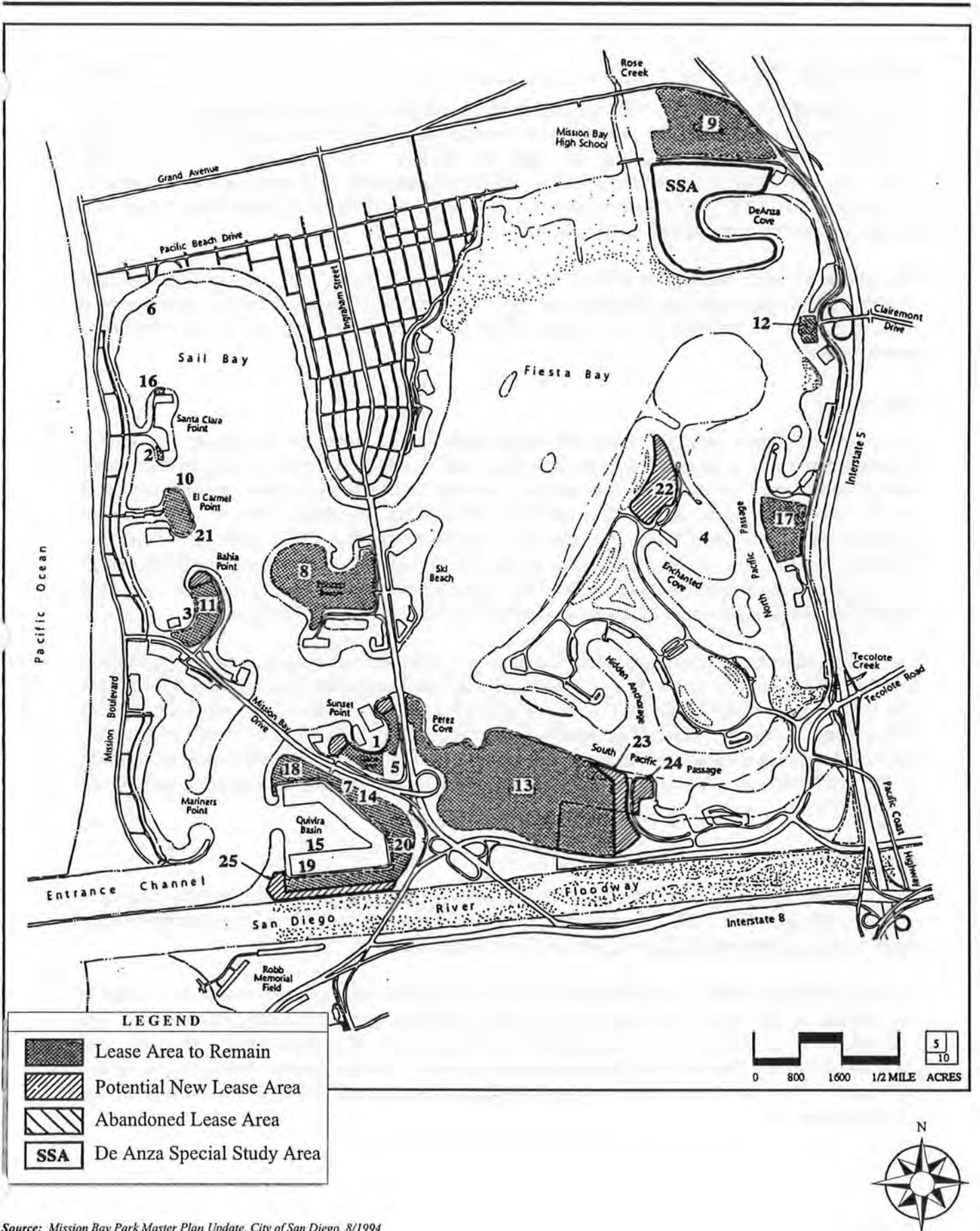
The proposed Tier 1 projects would be consistent with Mission Bay Park Master Plan Update goals to maximize the recreational and environmental functions of various land uses within Mission Bay Park. SeaWorld offers a unique type of commercial-oriented recreation which supports the “maximum sustainable benefit” concept set forth in the Mission Bay Park Master Plan Update. The Splashdown Ride would add a new attraction to SeaWorld’s existing commercial recreation offerings. The Front Gate Renovation would upgrade an existing facility thereby enhancing the recreational experience of SeaWorld’s guests. The Educational Facility would allow SeaWorld to expand its day camp, resident camp, teacher education, adult education and other educational programs. The Special Events Center Expansion would extend SeaWorld’s capabilities in serving the catering and special event segment of the visitor and tourist market. While commercial recreational opportunities would be intensified on the site, none of the proposed Tier 1 projects would impact environmentally-sensitive areas in Mission Bay Park.

The proposed Tier 1 projects would be consistent with the Mission Bay Park Master Plan Update goals to intensify existing commercial leases to the greatest extent possible, to provide a variety of recreational opportunities, and to render maximum revenue to the City. The Splashdown Ride would make use of a currently vacant commercial parcel. The Front Gate Renovation would revitalize an underutilized area of the park. The Educational Facility would enhance SeaWorld’s existing educational program and free up land within the interior of SeaWorld for future attractions. The proposed Special Events Center Expansion would add new meeting and catering capacity to SeaWorld’s existing operations. Together, the Tier 1 projects would intensify the use of the SeaWorld property improving the commercial viability of the site.

The Dedicated Lease Areas section of the Mission Bay Park Master Plan Update Land Use Component identifies all commercial and non-profit lease areas within Mission Bay Park and provides site-specific recommendations for certain leases. The SeaWorld site is identified as a dedicated lease area to remain (Figure 4.1-3). No lease recommendations are provided for any area within the SeaWorld Master Plan Update with the exception of the 16.5-acre South Shores commercial parcel added to the SeaWorld leasehold in 1998.

The MBPMP recommendation for the South Shores commercial parcel is as follows:

South Shores Commercial Parcel: Because of its limited water access and isolation from other areas of the Park, this 16.5-acre site is considered more suitable for commercial recreation purposes. The parcel has been configured such that its northern half lies outside the limits of the South Shores landfill while capturing a wide stretch of waterfront facing Pacific Passage. This allows a number of possible commercial uses to be considered, including the expansion of SeaWorld attractions, a 200-room motel, or a water-oriented entertainment center.



Source: Mission Bay Park Master Plan Update, City of San Diego, 8/1994

Mission Bay Park Master Plan - Dedicated Lease Areas _____ Figure 4.1-3

The SeaWorld Master Plan Update fulfills this recommendation of the Mission Bay Park Master Plan Update by designating the South Shores commercial parcel for the expansion of SeaWorld attractions. The northern half of the site would be developed with theme park attractions (both Tier 1 and Tier 2) while the southern half would be used parking. The proposed amendment to the Mission Bay Park Master Plan Update would remove all Plan references to this parcel as it has already been integrated into the SeaWorld site.

Should SeaWorld be required to widen Sea World Drive to six lanes, this action would not have significant land use impact on Mission Bay Park because this roadway is already classified as a six-lane facility in the Mission Bay Master Plan Update and, thus, would be an anticipated improvement.

Water Use

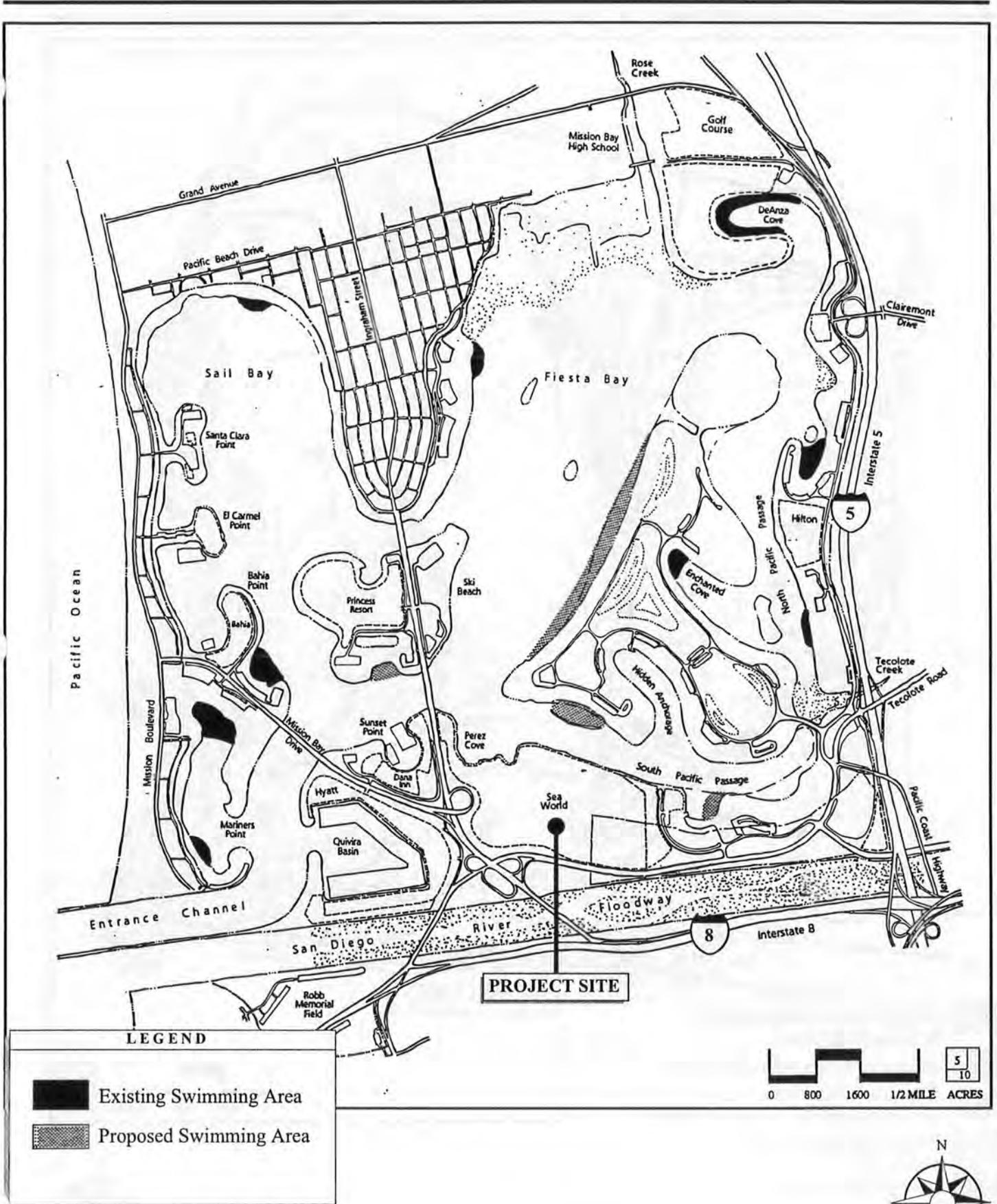
The proposed Tier 1 projects would not significantly impact goals to: 1) support the diverse aquatic interests of visitors to Mission Bay Park and 2) ensure adequate access to the Park's aquatic resources. None of the four projects involve shoreline alterations or structures that would impair existing access to the water areas of Mission Bay Park. Due to similarities in location, the discussion of the Tier 1 projects in regard to the Water Use goals of the Mission Bay Park Master Plan Update also applies to the Tier 2 projects. A more focused discussion of the shoreline access issues relating to the Tier 2 future projects and the SeaWorld Master Plan Update in general is provided in the Access and Circulation section which follows.

Key policy recommendations regarding existing and potential swimming areas, and proposed shoreline modifications to create new water use and beach areas are identified in the Mission Bay Park Master Plan Update (Figures 4.1-4 and 4.1-5). SeaWorld's entire shoreline is lined with a rip-rap revetment which is generally unsuitable for swimming. As a reflection of this fact, the MBPMP designates no swimming areas or proposed shoreline modifications on, or adjacent to, the SeaWorld site. Thus, the proposed project would not conflict with existing or planned swimming areas.

Environment

The proposed Tier 1 projects would not significantly impact goals to provide for the long-term health of Mission Bay Park. As noted in the Plan, Mission Bay is virtually a human-crafted, aquatic embayment satisfying a wide range of recreation demands.

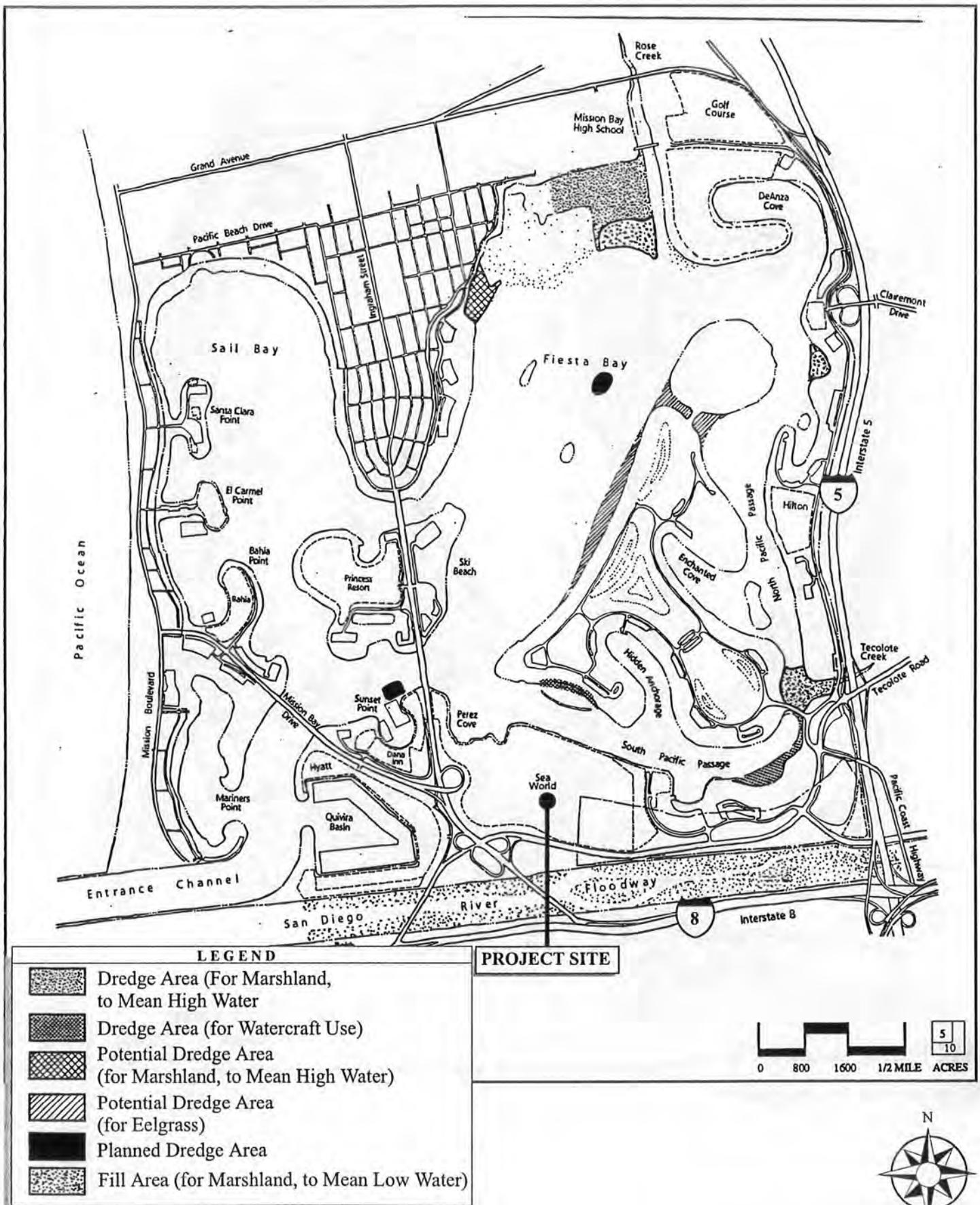
The Educational Facility, Front Gate Renovation, and Special Events Center would be located in the interior of the SeaWorld property on areas that have been previously developed. The Splashdown Ride would be located on land which is partially within the existing theme park and partially within the former South Shores commercial parcel. Approximately two acres of the site are undeveloped and have been previously graded. No significant biological resources are present on the site.



Source: Mission Bay Park Master Plan Update, City of San Diego, 8 1994

Mission Bay Park Master Plan - Supervised Public Swimming

Figure 4.1-4



Source: Mission Bay Park Master Plan Update, City of San Diego, 8/1994

Mission Bay Park Master Plan - Dredge and Fill Areas _____ Figure 4.1-5

The Splashdown Ride will contain a 120,000-gallon marine animal exhibit. The water for the exhibit will be processed through the existing water treatment system. Additionally, when the Splashdown Ride is built, the storm water runoff for the site (which presently drains into the city storm system) would be collected and processed through the existing water treatment system.

The storm water runoff for all other Tier 1 project sites would also be processed through the existing water treatment system. All Tier 1 projects would therefore be consistent with the water quality goals for Mission Bay Park.

No existing or proposed wetland habitat areas are shown in the Mission Bay Park Master Plan Update on or adjacent to the SeaWorld site (Figure 4.1-6). The Tier 1 projects therefore would not conflict with Mission Bay Park Master Plan Update goals for the protection of identified wetland habitat areas.

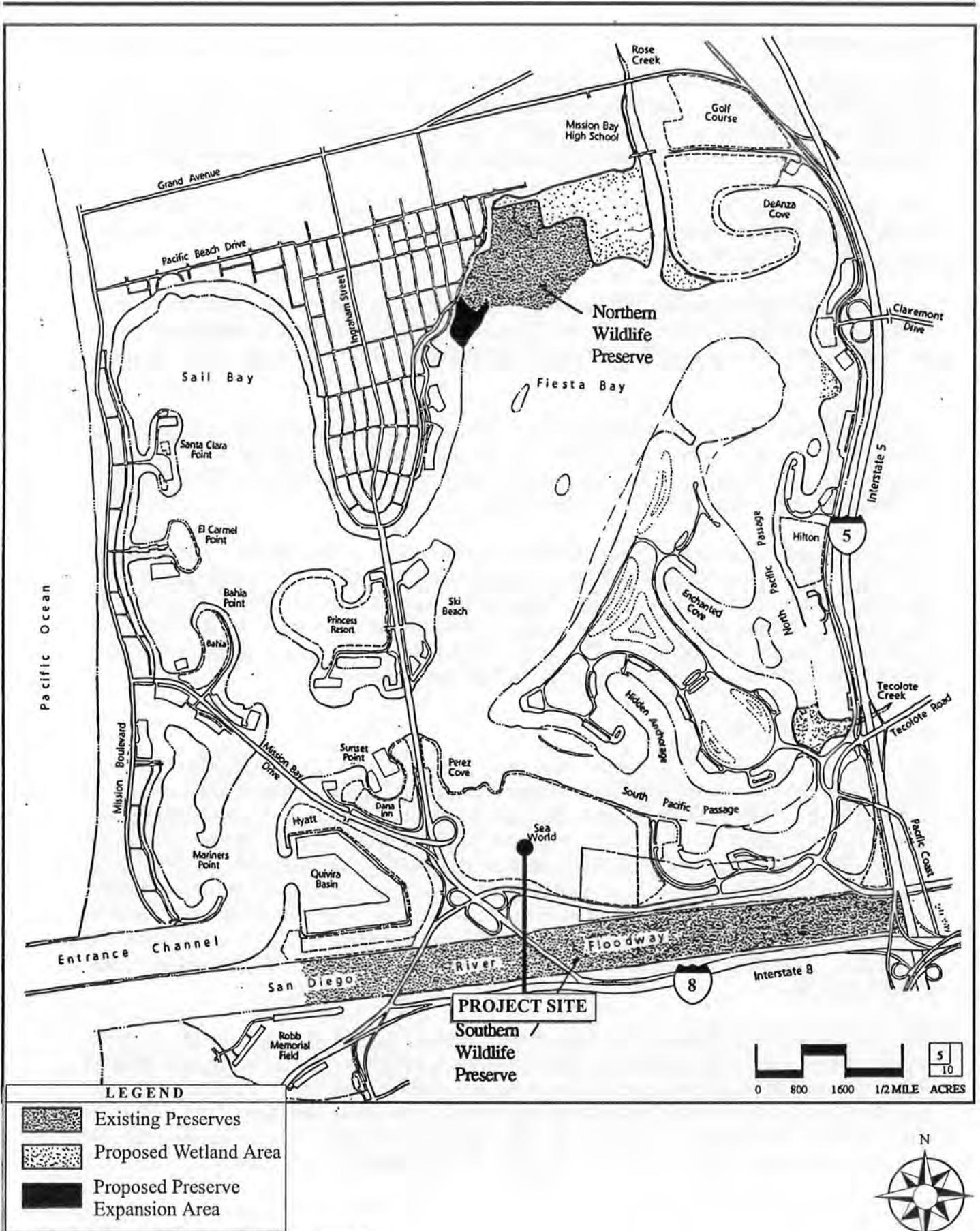
Eelgrass, which is sensitive to shading, occurs in abundance, along the shoreline adjacent to the Splashdown Ride site. A shadow analysis of the Splashdown Ride indicates no significant impact to the eelgrass beds would result due to shading from the ride (Section 4.3, Light Glare and Shading and Section 4.6, Biological Resources).

Designated Upland Habitats within the Mission Bay Park Master Plan Update are identified in Figure 4.1-7. Within the vicinity of SeaWorld (but not on site) California least tern preserves are identified on the north shore of the San Diego River channel near Sea World Drive, by the Ingraham Street "clover leaf" and at Stony Point at the southwestern tip of Fiesta Island. As discussed in Section 4.6, Biological Resources, development of the Tier 1 future project sites would not result in any significant impacts to the least tern preserves.

Access and Circulation

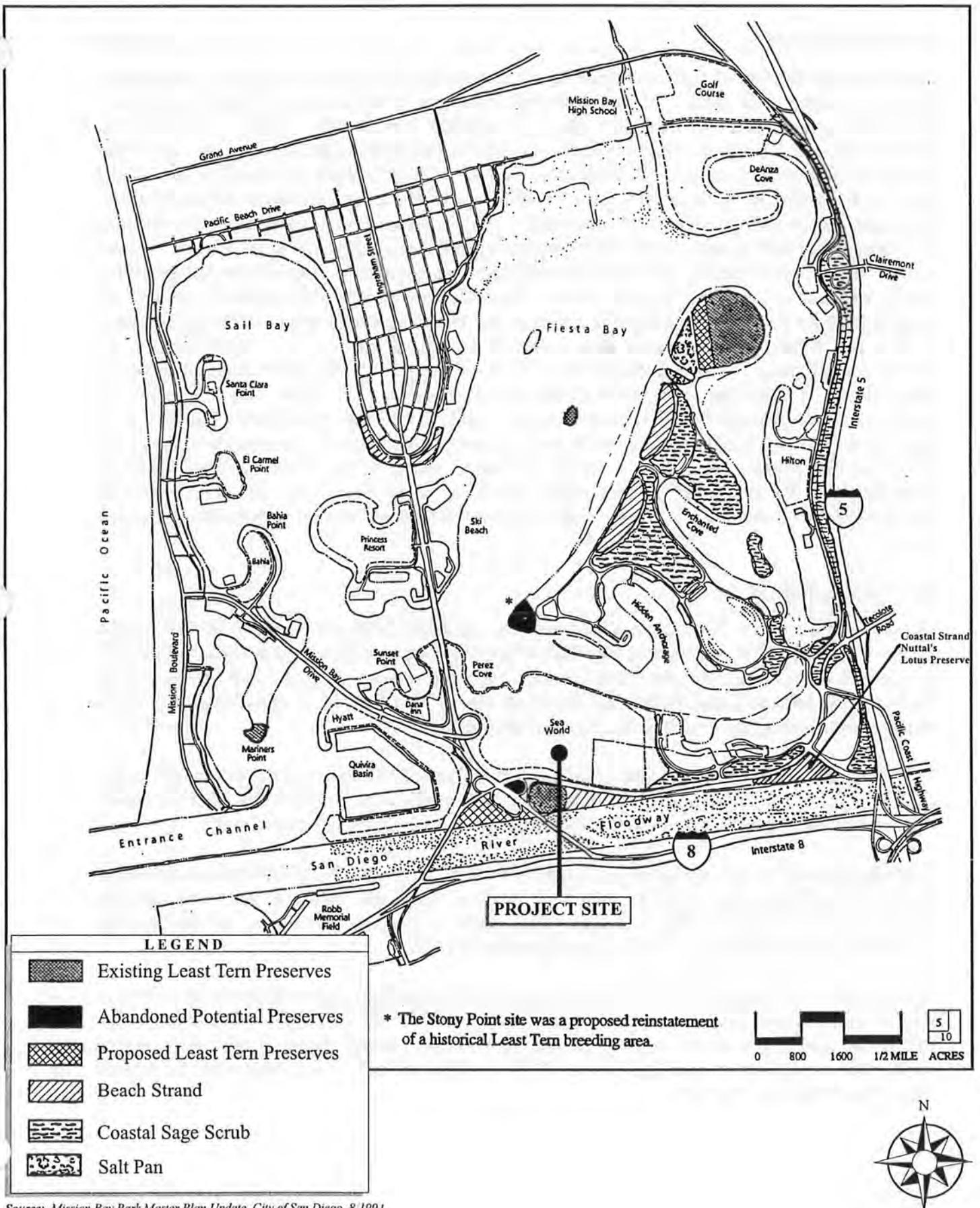
The proposed Tier 1 projects are part of an ongoing program to update the SeaWorld theme park through renovations and new attractions. Therefore, the Tier 1 projects are anticipated to result in an increase in visitor attendance and additional trips to the Educational Facility and Special Events Center Expansion. The traffic associated with the attendance for the overall project would result in significant but mitigable impacts to Mission Bay Park Master Plan Update goals to ameliorate the traffic problems facing the Mission Bay Park including the provision of safe, efficient and enjoyable access to all of its recreations areas. A discussion of the transportation and circulation impacts of the overall project is provided in Section 4.4, Transportation and Circulation. A discussion of circulation impacts to recreational resources is discussed in Section 4.10 of this EIR.

The Mission Bay Park Master Plan Update recommends that, in general, contiguous public access, either improved or unimproved, shall be provided around the entire waterfront of Mission Bay. However, the SeaWorld lease area is identified as a current exception site along with eight other locations in Mission Bay Park. Continuous public access along the shoreline in this area is not considered reasonable or feasible for the following reasons: 1) An existing bicycle pedestrian accessway along SeaWorld's southern and western perimeter already completes the



Source: Mission Bay Park Master Plan Update, City of San Diego, 8 1994

Mission Bay Park Master Plan - Wetland Habitat _____ Figure 4.1-6



Source: Mission Bay Park Master Plan Update, City of San Diego, 8 1994

Mission Bay Park Master Plan - Upland Habitat _____ Figure 4.1-7

link needed to provide contiguous public access around the Bay with connection to the regional system of recreational paths. The existing path conforms to the Proposed Pedestrian/Bicycle Path Improvement Plan shown in the Mission Bay Park Master Plan Update (Figure 4.1-8). None of the Tier 1 projects would interfere with the existing pedestrian/bicycle path. 2) Access to SeaWorld must be limited to the front gate. A public use area along the shoreline side of the park would require the addition of a fence or other type of barrier to prevent unauthorized entry. Such a barrier would interfere with SeaWorld's unique physical and connection with the Bay now enjoyed by park guests. Additionally, water-dependent facilities such as the seawater intake and discharge areas that are vital to the animal life support system would have to remain in the public use area. In general, bayside access would increase SeaWorld's security risks to an unacceptable level. 3) Existing structures such as the Waterfront Stadium and the water filtration facility would have to be relocated or alternatively the public accessway area would need to be routed around these facilities through the interior of the park. The latter alternative would however compromise the basic intent of the shoreline accessway. Either way, the solutions would require substantial capital improvements while SeaWorld would lose the use of a significant amount of land area and would have to accept greater design constraints in the siting of future attractions. 4) The low levels of public usage of the South Shores shoreline immediately to the east suggest that a public accessway along SeaWorld's shoreline would be underutilized. The entire shoreline consists of rip-rap revetment with no opportunity for beach usage.

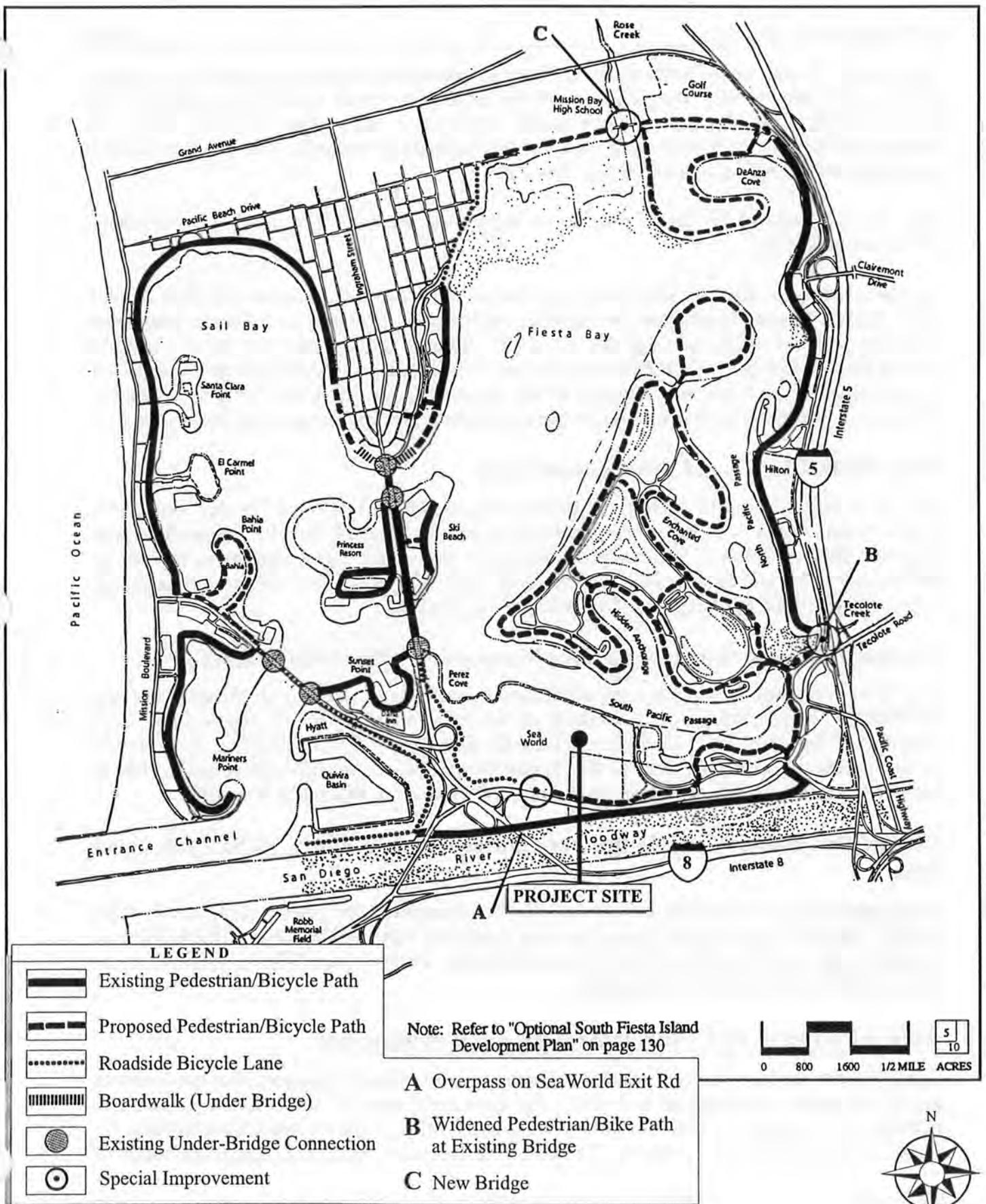
Design Guidelines

Elements of the Tier 1 projects would not be consistent with the current 30-foot height limitations contained in the Mission Bay Park Master Plan Update Design Guidelines. However, the Coastal Zone Height Overlay Zone has been amended to allow heights of up to 160 feet on the SeaWorld leasehold and the Mission Bay Park Master Plan Update Design Guidelines would be amended accordingly as part of the proposed project.

The Splashdown Ride would consist of three towers of 95 feet, 89 feet, and 83 feet, respectively, connected by a combination of water flumes and steel track. The structure will alter the visual character of Mission Bay Park to some degree but will not block any existing views.

The Educational Facility would have a height of 45 feet. Given the building's location it would not be visible from outside the site. The existing trees within the SeaWorld site would provide screening up to 70 feet on the west side of the park. The perimeter parking lot landscaping would also provide effective screening from Sea World Drive.

The Front Gate Renovation would largely consist of low scale development less than 40 feet in height with a lighthouse tower (icon structure) up to 90 feet in height. The Front Gate Renovation would not be visible from outside the leasehold, except for the tower. The 20-foot wide tower would have a maritime theme which would be visually compatible with the aquatic character of Mission Bay Park.



Source: Mission Bay Park Master Plan Update, City of San Diego, 8 1994

Mission Bay Park Master Plan - Pedestrian/Bicycle Path Improvement

Figure 4.1-8

The Special Events Center Expansion will have an articulated roofline up to 40 feet in height with an allowance for one icon structure within the project site up to 60 feet in height. The Special Events Center Expansion may be visible from some vantage points outside the leasehold, but the building would be consistent with the predominantly low-profile scale of development within SeaWorld and throughout Mission Bay Park.

The visual impacts of the Tier 1 projects are further discussed in Section 4.2, Neighborhood Character/Aesthetics.

As discussed above, the Tier 1 projects would be compatible with the Mission Bay Park Master Plan Update Design Guidelines for lighting, landscaping, materials and façade treatments (including exterior colors), and signage. These guidelines are further articulated in the SeaWorld Master Plan Update Design Guidelines in a manner which specifically addresses the needs of the SeaWorld site. The following discussion of the visual compatibility of the Tier 2 sites with the Mission Bay Park Master Plan Update Design guidelines is also applicable to the Tier 1 sites.

City of San Diego Land Development Code

The Tier 1 projects would be consistent with the Coastal Zone Height Limit Overlay zone which allows heights up to 160 feet on the SeaWorld property. None of the Tier 1 projects would approach this height level. The maximum heights for each of the Tier 1 projects as set forth in the design criteria are: Splashdown Ride (95 feet), Front Gate Renovation (90 feet), Educational Center (45 feet), and Special Events Center Expansion (60 feet).

Mission Bay Park Natural Resource Management Plan (MBPNRMP)

The Tier 1 projects would have no significant impact on the goals and objectives of the MBPNRMP. None of the marine, wetland, or terrestrial resources within Mission Bay Park identified in the MBPNRMP would be significantly affected by the Tier 1 projects. A discussion of the potential shading impacts of the Splashdown Ride on the offshore eelgrass beds is provided in Section 4.3, Light Glare and Shading and Section 4.6 Biological Resources.

City of San Diego Multiple Species Conservation Program (MSCP) Subarea Plan

The proposed Tier 1 projects would have no significant impact on the goals and objectives of the MSCP. The Tier 1 projects are located at least 1,000 feet from the Southern Wildlife Preserve located in the San Diego River Flood Control Channel. The Southern Wildlife Preserve is the closest MHPA to the SeaWorld leasehold.

Tier 2 Projects and Plan Development Parameters

Tier 2 projects are long-range potential development or redevelopment projects that may occur in any of the eight sites identified in Area 1. The three basic types of Tier 2 future projects are: exhibits, rides, and shows (See Section 3.3.4, Proposed Master Plan Update Characteristics, for further description of Tier 2 projects). The following analysis assumes a maximum utilization of

the height allocation as defined in the Development Criteria. Further, the analysis assumes that the four sites permitted to have structural development exceeding 100 feet in height would be located in the most environmentally-sensitive locations relative to the resource or impact under consideration. In general, the Tier 2 future projects differ from Tier 1 projects only in timing, specificity, and the potential to use height allocations not previously realized. Because the plan offers general guidance for the development of the Tier 2 sites, the analysis of the Tier 2 future projects implicitly evaluates the impacts of the general development parameters contained in the SeaWorld Master Plan Update.

City of San Diego Progress Guide and General Plan

The SeaWorld theme park (Area 1) is an established visitor-serving commercial use within Mission Bay Park providing a variety of attractions (exhibits, rides, and shows) and guest support services centered on entertainment and educational themes. The Tier 2 future projects would continue SeaWorld's established program of periodic renovation and provision of new attractions. The attractions anticipated within the Tier 2 future project sites would be compatible with the present uses of the SeaWorld theme park, varying only in height and the use of available technology. Therefore, the Tier 2 future projects would be consistent with the resource-based parkland designation of the City's Progress Guide and General Plan.

Mission Bay Park Master Plan Update

The following discussion focuses on the compatibility of the proposed Tier 2 future projects (as defined through the SeaWorld Master Plan Development Criteria) with the goals and policy recommendations of Mission Bay Park Master Plan Update.

Land Use

The Mission Bay Park Master Plan Update recognizes SeaWorld as an existing theme park and tourist attraction which is compatible with the commercial recreational component of the Plan. Recent concerns, identified in the planning process for the SeaWorld Master Plan Update, have questioned the compatibility of certain types of SeaWorld attractions (specifically attractions offering high levels of excitement or thrills) with the Mission Bay Park Master Plan Update. Existing SeaWorld attractions with "thrill" components include Shipwreck Rapids and Wild Arctic. Other attractions, such as the Shamu show and Waterfront Stadium, are designed, in part, to generate excitement. Additionally, numerous recreational activities in Mission Bay Park, such as the use of personal watercraft, water skiing, and thunderboat racing, are endorsed by the Plan and offer similar levels of thrills and excitement. The Mission Bay Park Master Plan Update contains no goals or policy recommendations that would specifically limit the type of theme park uses or attractions permitted on the SeaWorld site. Absent specific guidance in the Mission Bay Park Master Plan Update regarding this issue, it may be concluded that "thrill-rides" and other excitement generating attractions are acceptable uses within the context of the SeaWorld theme park.

The Tier 2 future projects would not significantly impact goals to promote the aquatic orientation of Mission Bay Park. The gradual development of new exhibits, rides, or shows continue the

existing land use and pattern of development within the SeaWorld theme park. SeaWorld's existing exhibits, rides, and shows center around a marine animal/ocean theme which compliments the aquatic orientation of Mission Bay Park. Like many of SeaWorld's existing attractions such as Manatee Rescue (exhibit), Shipwreck Rapids (ride), and Dolphin Stadium (show) many of the Tier 2 future projects would contain water elements that are complimentary to the aquatic environment of Mission Bay Park.

The Tier 2 future projects would be compatible with the Mission Bay Park Master Plan Update goals to maximize the recreational and environmental functions of various land uses within Mission Bay Park. In its discussion of the "maximum sustainable benefit" concept the Mission Bay Park Master Plan Update recommends that the Park should be organized according to "regions" of compatible uses. The SeaWorld site is designated in the Plan as most suitable for commercial-oriented recreation. SeaWorld offers a special type of commercial-oriented recreation which supports the "maximum sustainable benefit" concept. All of the Tier 2 future projects would be compatible with the existing commercial recreational uses of the SeaWorld site. Collectively, the future exhibits, rides, and shows that comprise the Tier 2 projects would enhance the variety and maintain the quality of commercial recreation opportunities at the SeaWorld site.

The proposed Tier 2 future projects would be consistent with Mission Bay Park Master Plan Update goals to intensify existing commercial leases to the greatest extent possible, to provide a variety of recreational opportunities, and to maintain an important economic role in San Diego's economy. The gradual development of the eight Tier 2 future projects with exhibits, rides, and shows would provide SeaWorld the opportunity to maintain and enhance its unique commercial recreation offerings well into the future. As one of San Diego's major tourist attractions, SeaWorld has an important role in San Diego's economy. Out of town visitors to SeaWorld support the local hotel industry and bring "new" money into the local economy. SeaWorld's continued growth would have a positive fiscal impact to the City of San Diego through increased lease revenue and the potential expansion of Transient Occupancy Tax (TOT) revenues.

Water Use

The proposed Tier 2 future projects would not significantly impact goals to: 1) support the diverse aquatic interests of visitors to Mission Bay Park, and 2) ensure adequate access to the Park's aquatic resources. The proposed project would not reduce public access to the Bay as none exists now nor is recommended by the MBPMP. Furthermore, none of the eight future projects involve shoreline alterations or structures that would impair existing access to the water areas of Mission Bay Park.

Environment

The proposed Tier 2 future projects would not significantly impact Mission Bay Park Master Plan Update goals to provide for the long-term health of Mission Bay Park.

Seven of the Tier 2 future project sites, E-2, F-2, G-2, H-2, L-2, and J-2, (Figure 3.3-8) would be located on land that has been previously developed with structures, landscaping, pedestrian

pathways, or parking. The I-2 future project site is located partially on land used for parking and partially on undeveloped land. The undeveloped portion, which is part of the South Shores parcel, has no identified biological resources.

Four of the Tier 2 future project sites, E-2, F-2, G-2 and K-2, (Figure 3.3-8) are located on, or in close proximity to, the shoreline. Eelgrass, which is highly sensitive to shading impacts, occurs in abundance along SeaWorld's entire shoreline. A shadow analysis of a maximum concentration of height (up to 160 feet) in these four sites and subject to the bulk plane setback, indicates a significant but mitigable shading impact to the eelgrass (See Section 4.3, Light, Glare and Shading and Section 4.6 Biological Resources).

Tier 2 future project sites are in close enough proximity to the existing least tern preserve at Stony Point (on the southwest tip of Fiesta Island) to be evaluated for their potential effects on least tern nesting. Under certain conditions, tall structures may disturb least terns if such structures provide or are perceived as viable predator perching sites. As discussed in Section 4.6, Biological Resources, it has been concluded that future development of Tier 2 sites may provide predator perching opportunities if there is a clear line-of-sight from the new structure to the Preserve. This potential impact is identified as significant and mitigable through appropriate design features.

The Tier 2 future project site F-2, which is presently occupied by the existing Waterfront-Stadium, is unique in that it includes approximately two acres of open water area. The design criteria for the F-2 site would not allow any development or filling in the open water area of the site, including expansion of the existing island. Therefore, any potential impact to the eelgrass beds in this area from encroachment into the water area would be avoided.

The Tier 2 projects would be consistent with the goals of the Mission Bay Park Master Plan Update to improve water quality. The Mission Bay Park Master Plan Update contains a key policy recommendation which outlines a multi-faceted approach to improve the Bay's water quality at both the Park and watershed scale. These recommendations apply broadly to the City of San Diego, businesses and non-profit organizations within the Park as well as businesses and residents within the 57-square-mile, Mission Bay Park watershed. As described in Section 3.3, Existing Operations, SeaWorld operates a water treatment system to treat the marine animal water as well as a portion of the surface stormwater runoff. Ninety-six percent of the stormwater runoff in Area 1 is treated in this manner. Additionally, SeaWorld employs a comprehensive "Best Management Practices" (BMP) program that requires regular sweeping of the grounds to remove potential pollutants and restricts the use of pesticides and fertilizers. All of the Tier 2 future projects sites would be included in the existing programs.

All Tier 2 future projects have the potential to include marine life. The water treatment system utilizes water from Mission Bay, treats it for marine life use, circulates it through the aquaria facilities (including exhibits, rides, and shows) and treats it again for discharge back into Mission Bay. The development of Tier 2 future projects containing marine life elements are, therefore, limited to the available capacity of the water treatment system and/or the discharge limitations covered under SeaWorld's NPDES permit. As discussed in Section 4.5, Water Quality, the

NPDES permit, which is issued and enforced by the California Regional Water Quality Control Board (CRWQCB), contains strict discharge standards. These standards are well above what is required for human contact. Additionally, most Tier 2 future projects would be located in the interior of the theme park (Area 1) where the storm water runoff is currently collected and processed through the water treatment system (See discussion of “existing condition” described in Section 4.2, Project Description). Therefore, all Tier 2 future projects would be compatible with the Mission Bay Park Master Plan Update goals to improve the Bay’s water quality.

No existing or proposed wetland habitat areas are shown in the Mission Bay Park Master Plan Update on or adjacent to the SeaWorld site (Figure 4.1-6). The Tier 2 future projects, therefore, would not conflict with Mission Bay Park Master Plan Update goals for the protection of identified wetland habitat areas.

Designated Upland Habitats within the Mission Bay Park Master Plan Update are identified in (Figure 4.1-7). Within the vicinity of SeaWorld (but not on site) California least tern preserves are identified on the north shore of the San Diego River Flood Control Channel near Sea World Drive, by the Ingraham Street “clover leaf” and at Stony Point at the southwestern tip of Fiesta Island. The Mission Bay Park Master Plan Update proposes that the Stony Point and Cloverleaf site be abandoned and replaced at other locations. As discussed in Section 4.6, Biological Resources, development of the Tier 2 future project sites would not result in any significant impacts to the least tern preserves.

Access and Circulation

The proposed Tier 2 future projects are part of a program of periodic upgrading of the SeaWorld theme park, which is anticipated to result in a gradual increase in visitor attendance. In Section 4.4, Transportation/Circulation, traffic impacts are evaluated for significance under both the near term (2005) condition and the buildout (2020) condition. The additional traffic associated with the attendance increase would have significant impacts on several roadway segments and intersections under both the near term and buildout conditions. While traffic mitigation measures identified in Section 4.4 would mitigate many of the impacts, impacts of the project’s traffic on several primary roadway segments and freeway interchanges may not be reduced to below a level of significance due the potential lack of full funding to accomplish the improvements to which SeaWorld will be required to make a fair share contribution. In light of the fact that congestion on these primary roadway segments will occur with or without Sea World, the impact of the project would not significantly conflict with the Mission Bay Park Master Plan Update goals to ameliorate the traffic problems facing the Park including the provision of safe, efficient and enjoyable access to all of its recreation areas. In fact, the fair share contributions would help implement improvements which are already needed. A discussion of the transportation and circulation impacts of the overall project and proposed mitigation is provided in Section 4.4, Transportation and Circulation.

The Tier 2 future projects would not interfere with the existing pedestrian bicycle path, which conforms to the Pedestrian/Bicycle Path Improvement Plan of the Mission Bay Park Master Plan Update (Figure 4.1-8).

Vertical access to the shoreline would remain available from South Shores Road on the east side of SeaWorld and at Perez Cove on the west side.

South Shores/Fiesta Island

As noted in the Tier 1 discussion for the South Shores area, the proposed expansion of the Tier 1 and Tier 2 sites into the South Shores commercial parcel would fulfill the Mission Bay Park Master Plan Update recommendations for this area. The remaining portions of the South Shores area lie immediately to the east of SeaWorld.

A primary recommendation of the South Shores concept plan is to preserve wide open views of Mission Bay Park from the entrance roadways – specifically Tecolote Road, Pacific Highway, Friars Road, and Sea World Drive. All eight Tier 2 future projects could have structures up to 100 feet in height and four of the sites (at any location) could have structures up to 160 feet in height. While a maximum buildout of all Tier 2 future project sites would not block any views of Mission Bay Park from the South Shores entrance roadways, this scenario would have a significant impact on the visual character of Mission Bay Park from these and other public vantage points. For a more detailed assessment of the visual impacts, see Section 4.2, Neighborhood Character/Aesthetics.

Design Guidelines

The Tier 2 future projects, due to their potential height, would not be consistent with the Mission Bay Park Master Plan Update Design Guidelines for building height and massing which recommends low-scale buildings to reinforce the open quality of the bay while minimally obstructing views to the sky and distant shore. However, the Coastal Zone Height Overlay Zone has been amended to allow heights of up to 160 feet on the SeaWorld leasehold and the Mission Bay Park Master Plan Update Design Guidelines would be amended accordingly as part of the proposed project.

The visual impacts posed by the introduction of taller structures on the SeaWorld site are addressed by several components of the plan including the Development Criteria, and the Design Guidelines of the SeaWorld Master Plan Update. First, the SeaWorld Master Plan Update limits the amount of area that can be built to heights above 30 feet. Second, the number of development sites that may have structures exceeding 100 feet in height is limited to four. Third, structural elements above 100 feet in height must have a 50% transparency. Fourth, the plan contains architectural and landscaping guidelines that are designed to soften the visual impact of the taller structures to the extent feasible. These guidelines are intended to prevent an “exaggerated theme park architecture” that would negatively impact the built environment of Mission Bay Park. Nevertheless, as discussed in Section 4.2, several of the Tier 2 developments may be highly visible from beyond the SeaWorld leasehold and would significantly alter the visual character of Mission Bay Park.

The future Tier 2 projects would be generally compatible with the Mission Bay Park Master Plan Update Design Guidelines for landscaping, lighting, materials and façade treatments, exterior colors, and signage. The SeaWorld Master Plan Update Design Guidelines specifically address

these topics and provide site-specific interpretations for the unique needs of the SeaWorld site. Carnival-style lighting with excessive illumination colors and motion would not be permitted. Horizontal cut-offs and limitations on light spilling into adjacent areas are also required. Exterior colors for all Tier 2 attractions would be limited to light or neutral colors for large mass areas; bright colors and reflective surfaces would be reserved for accents. Signs incorporated into new park attractions would be designed to blend with the architecture rather than appearing as a billboard. Landscaping requirements for theme park attractions would be applied on a situational basis to soften visual impacts to the extent feasible.

City of San Diego Land Development Code

The Tier 2 future projects will be consistent with the Coastal Zone Height Limit Overlay zone which allows heights up to 160 feet on the SeaWorld property with the passage of Proposition D. The SeaWorld Master Plan Update limits heights of 160 feet to 1% of the theme park area (Area 1). All Tier 2 future projects are subject to the 1% provision. No other environmental aspects of the Land Development Code apply directly to the SeaWorld property.

Mission Bay Park Natural Resource Management Plan

The Tier 2 future projects would have no significant impact on the goals and objectives of the Mission Bay Park Natural Resource Management Plan (MBPNRMP). None of the marine, wetland, or terrestrial resources within Mission Bay Park identified in the MBPNRMP would be significantly affected by the Tier 2 projects. A discussion of the potential shading impacts of the Tier 2 future projects on the offshore eelgrass beds is provided in Section 4.3, Light Glare and Shading and Section 4.6 Biological Resources. As discussed in Section 4.6, Biological Resources, Tier 2 projects would not interfere with nearby least tern nesting preserves.

City of San Diego Multiple Species Conservation Program (MSCP) Subarea Plan

The proposed Tier 2 future projects would have no significant impact on the goals and objectives of the MSCP. The Tier 2 future projects are located at least 1,000 feet from the Southern Wildlife Preserve located in the San Diego River Flood Control Channel. The Southern Wildlife Preserve is the closest MHPA to the SeaWorld leasehold.

Special Projects

Special projects are specific long-range development projects identified in Areas 2, 4 and 5 of the SeaWorld Master Plan Update. The four projects identified in the plan are the parking garage, transit station, marina expansion and hotel. The ultimate heights of each of these future projects are specified in the individual project design criteria and are not a part of the Area 1 height allowance.

City of San Diego San Diego Progress Guide and General Plan

As previously discussed, the General Plan land use designation for the SeaWorld leasehold is "resource-based parkland". The Special Projects would be consistent with the resource-based

parkland designation of the City's Progress Guide and General Plan, as defined by the Mission Bay Park Master Plan Update. The future parking garage and transit station would support an established visitor serving use (SeaWorld) and improve traffic circulation within Mission Bay Park. The future hotel use would provide additional guest housing opportunities within Mission Bay Park. The future marina expansion would intensify an existing aquatic use within the Park.

Mission Bay Park Master Plan Update

Land Use

The future marina expansion and hotel would further Mission Bay Park Master Plan Update goals to promote the aquatic orientation of Mission Bay Park. The marina expansion will enhance the use and viability of the existing aquatic facility. The hotel would provide additional guest housing within Mission Bay Park and convenient access to SeaWorld and the marina.

The future parking garage, transit station, and future hotel would be compatible with Mission Bay Park Master Plan Update goals to maximize the recreational and environmental functions of various land uses within Mission Bay Park. The future parking garage would permit SeaWorld to continue park renovation and expansion plans without impacting public parking areas at other locations within Mission Bay Park. The incorporation of the transit station would improve public access to Mission Bay Park and may potentially reduce the number of vehicle trips using local roads to reach the SeaWorld theme park. The future hotel would provide new guest housing in close proximity to SeaWorld and may also reduce the number of vehicles trips using local roads to reach SeaWorld. Together, these facilities help maximize the existing commercial recreation functions of the SeaWorld leasehold.

The future parking garage, transit station, marina expansion, and hotel would be consistent with the Mission Bay Park Master Plan Update goals to intensify existing commercial leases to the greatest extent possible, to provide a variety of recreational opportunities, and to render maximum revenue to the City. The future parking structure would free up land presently devoted to existing surface parking for more theme park attractions and special facilities. The future transit station would promote overall access to Mission Bay Park and beach areas and would offer convenient transit access to the SeaWorld theme park from other hotels and convention facilities in Mission Bay Park, Mission Valley and downtown San Diego. The future marina expansion would provide additional recreational boating opportunities. The future 650-room hotel would provide new guest housing with views and access to the Bay.

Enhancements to SeaWorld would also translate into increased revenues to the City of San Diego through sales and transient occupancy tax (TOT) revenues. SeaWorld presently receives between 3.5 and 4 million annual visitors of which more than 60% are from outside San Diego County. Construction of the hotel would provide a new source of TOT revenues. Increased attendance would result in increased sales tax revenue.

As previously mentioned the Mission Bay Park Master Plan Update does not provide specific recommendations for the SeaWorld site. However, the SeaWorld Master Plan Update, as referenced in the proposed amendment to the Mission Bay Park Master Plan Update, does

provide conceptual development recommendations for the SeaWorld site. Such recommendations include a 650-room hotel.

Water Use

The future parking garage, transit station and hotel would not significantly impact goals to: 1) support the diverse aquatic interests of visitors to Mission Bay Park and 2) ensure adequate access to the Park's aquatic resources. The parking garage would not be located near the water and would not impair existing access to the water areas of Mission Bay Park.

The future marina expansion would support the aquatic interests of visitors to Mission Bay Park through the provision of 115 new boat slips. A policy recommendation of the Mission Bay Park Master Plan Update states that no new wet slips are recommended for Mission Bay Park with the exception of current expansions proposed by the Bahia Hotel, Princess Resort, and the Mission Bay Yacht Club and that up to 24 wet-slips may be provided for day-use only, as part of new docks for the Ski Club. However, the 1985 SeaWorld Master Plan and lease agreement entitles the SeaWorld Marina to 200 additional boat slips. The proposed amendment to the Mission Bay Park Master Plan Update therefore would update SeaWorld's existing entitlement to reflect the proposed 115 wet-slip expansion. The marina expansion would take place entirely within SeaWorld's existing water lease area and would enhance recreational boating opportunities in Mission Bay Park.

The future hotel would be compatible with Mission Bay Park Master Plan Update goals to support visitor access to aquatic resources within Mission Bay Park, as the hotel will be located adjacent to the existing SeaWorld Marina. The SeaWorld Master Plan Update development criteria for the future hotel site require a 25-foot setback between the hotel facilities and the top of the rip-rap revetment. The setback area would be developed with a public walkway providing public access along the Perez Cove shoreline.

Environment

The future parking garage, transit station and hotel would not significantly impact goals to provide for the long-term health of Mission Bay Park. The parking garage and transit station would be located in the interior of the SeaWorld property on areas that have been previously developed with existing surface parking. The hotel would also be developed on land that is presently used for parking. No significant biological resources are present on either site.

Stormwater runoff from these sites drains into the existing City storm water system. The stormwater is carried into Mission Bay and discharged at the Perez Cove outfall. Because these areas are presently covered with impervious surfaces (mostly asphalt), future development of the parking structure, transit station and the hotel would not increase runoff above the "existing condition" described in Section 3.3.1, Project Description.

The proposed marina expansion has some potential to increase water pollution due to the handling of oils and fuels needed for powerboats and personal watercraft, bacteria from sanitary

waste spills, heavy metals from antifouling paints, and litter. A discussion of these potential impacts and proposed mitigation is provided in Section 4.5, Water Quality.

In summary, the development of the Special Projects would not significantly impact the water quality goals for Mission Bay Park.

The Mission Bay Park Master Plan Update identifies extensive eelgrass beds in Perez Cove. Due to shading caused by the expansion of the marina docks and new berthing areas, significant impacts to the eelgrass would result. A discussion of the eelgrass impacts and proposed mitigation measures is provided in Section 4.3, Light, Glare and Shading and Section 4.6, Biological Resources.

None of the future Special Projects would be located close enough to existing California least tern preserves to have any potential impact.

Access and Circulation

The future parking garage would be consistent with Mission Bay Park Master Plan Update goals to assure appropriate levels of onsite parking for commercial recreation uses within Mission Bay Park. The inclusion of the transit center is also consistent with Mission Bay Plan Update goals to ameliorate the traffic problems facing the park, as it provides an alternative to the automobile. The proposed marina would not result in significant traffic increases. The additional parking spaces needed for the 115-slip marina expansion would be provided by expanding the existing marina parking into surplus spaces from the adjacent employee parking lot. Additional reconfiguration of the marina parking may be necessary to accommodate future plans for the hotel.

The additional traffic associated with the future hotel would contribute to the overall traffic for the project (SeaWorld Master Plan Update), which would have significant but mitigable impacts to Mission Bay Park Master Plan Update goals to ameliorate the traffic problems in Mission Bay Park. A discussion of the transportation and circulation impacts of the overall project is provided in Section 4.4, Transportation/Circulation.

The future parking garage, transit station, marina expansion and hotel projects would not impact the existing pedestrian bicycle path, which conforms to the Pedestrian/Bicycle Path Improvement Plan of the Mission Bay Park Master Plan Update (Figure 4.1-8). In accordance with the leasehold development criteria, the future hotel building and hotel parking garage would be located at least 25 feet from the top of the existing shoreline revetment. The design criteria for the future hotel require the development of a pedestrian accessway along the waterfront and a minimum 10-foot wide vertical accessway through the site to the waterfront. The vertical accessway would be designed to facilitate connection with the existing bikeway and pedestrian path along Perez Cove Way.

Design Guidelines

The future parking garage, transit station, and hotel projects would not be consistent with the current height requirements contained in the Mission Bay Park Master Plan Update Design Guidelines which emphasizes low rise development under 30 feet in height. However, as previously discussed, the Coastal Zone Height Overlay Zone has been amended to allow heights up to 160 feet on the SeaWorld leasehold and the Mission Bay Park Master Plan Update Design Guidelines are proposed to be amended accordingly.

The future parking garage would have a maximum height of 45 feet. Located in the southwest corner of the SeaWorld site, the parking garage would generally not be visible from other areas in Mission Bay Park. The future parking garage may be intermittently visible from the West Mission Bay Drive Bridge crossing the San Diego River and from Sea World Drive. Consistent with the Mission Bay Park Master Plan Update Design Guidelines, the future parking garage would not block any views of the bay or encroach into the views of distant hillsides. The future transit station, which would be integrated into the parking garage, would not add any additional height or potential visual impacts to the parking garage. The guideway leading to the transit station is not a part of the SeaWorld Master Plan Update and would be evaluated for consistency with the Mission Bay Park Master Plan Update Design Guidelines as a separate project.

The future hotel would have a maximum height of 90 feet and would be most visible from the eastern portions of Mission Bay Park (east of Ingraham Street). The tall trees between Ingraham Street and Perez Cove Way (up to 70 feet in height) would help screen the hotel from the western portions of Mission Bay Park and provide a visual backdrop to lessen visual impacts when viewed from the east. The trees would also soften the visual impacts from elevated vantage points such as the Pacific Beach, Clairemont Mesa and Point Loma hillsides. However, even with the landscape screening the hotel would have a significant impact on the visual character of Mission Bay Park. Additionally, the hotel and associated parking garage would partially block an intermittent view of Mission Bay (Perez Cove and Fiesta Bay) from Ingraham Street and Perez Cove Way. The visual impacts of the future parking garage, transit station, and hotel projects are further discussed in Section 4.2 Neighborhood Character/Aesthetics.

The future marina expansion would not involve any structures above ten feet in height and would be fully consistent with the visual impact goals of Mission Bay Park Master Plan Update Design Guidelines.

The future parking garage, transit station, marina expansion and hotel projects would be compatible with the Mission Bay Park Master Plan Update Design Guidelines for lighting, landscaping, materials and façade treatments, and signage. These guidelines are further articulated in the SeaWorld Master Plan Update Design Guidelines in a manner, which specifically addresses the needs of the SeaWorld site. The architecture for the parking garage and hotel would follow the Mission Bay Park Master Plan Update Guidelines for horizontal forms, varied roof lines and building massing. Landscaping would be used to screen the parking areas and soften the visual impact of the parking garage. Lighting for the parking garage and hotel would not be allowed to spill over into adjacent areas of Mission Bay Park.

City of San Diego Land Development Code

The future parking garage, transit station, marina expansion, and hotel projects will be consistent with the Coastal Zone Height Limit Overlay zone which allows heights up to 160 feet on the SeaWorld property. The maximum height for the future parking garage and transit station would be 45 feet. The future marina expansion would remain well under 30 feet, which is the maximum height for this area. The future hotel would not exceed 90 feet.

Mission Bay Park Natural Resource Management Plan (MBPNRMP)

The future parking garage, transit station, and hotel projects would have no significant impact on the goals and objectives of the MBPNRMP. None of the marine, wetland, or terrestrial resources within Mission Bay Park identified in the MBPNRMP would be significantly affected by these projects. The future marina expansion, however, could have a significant impact on the eelgrass beds identified in the MBPNRMP. A discussion of the shading impacts of the marina expansion and proposed mitigation measures is provided in Section 4.3, Light Glare and Shading and Section 4.6 Biological Resources.

City of San Diego Multiple Species Conservation Program (MSCP) Subarea Plan

The future parking garage, transit station, marina expansion and hotel projects would have no significant impact on the goals and objectives of the MSCP. The closest MHPA area is the Southern Wildlife Preserve located in the San Diego River Channel. The Southern Wildlife Preserve is located approximately 300 feet from the future parking garage site and is buffered by Sea World Drive, undeveloped salt pan habitat, and the pedestrian/bicycle/vehicle accessway along the top of the river channel embankment.

4.1.4 Significance of Impact

The proposed Tier 1 projects, Tier 2 future projects, and the future hotel project would have a significant impact on the Mission Bay Park Master Plan Update goals to ameliorate the traffic problems facing the Park.

The proposed height and scale of the Splashdown Ride (Tier 1) and future hotel project, and the potential height and scale of all Tier 2 future projects, would have a significant visual impact on the character of Mission Bay Park and, therefore, would significantly impact the vistas from the South Shores entry roadways identified in the Mission Bay Park Master Plan Update.

The proposed height and scale of the Splashdown Ride (Tier 1 project) and future hotel project, and the potential height and scale of all Tier 2 future projects would represent a significant inconsistency with the Mission Bay Park Master Plan Update Design Guidelines for building height and massing. While the proposed amendment to the Mission Bay Park Master Plan Update would resolve the height inconsistency, collectively the projects have the potential to significantly alter the existing visual character of Mission Bay Park in ways not anticipated by the Mission Bay Park Master Plan Update Design Guidelines.

The future marina expansion would significantly impact the eelgrass beds in Perez Cove creating a conflict with the environmental goals of the Mission Bay Park Master Plan Update and the Mission Bay Park Natural Resource Management Plan.

4.1.5 Mitigation, Monitoring and Reporting

Reduction of land use compatibility and policy impacts would be achieved through implementation of activity-specific mitigation measures associated with transportation/circulation, biological resources, and neighborhood characteristics/aesthetics and described in Sections 4.2, 4.4 and 4.6. In addition, approval of the Mission Bay Park Master Plan Update Amendment and SeaWorld Master Plan Update which are proposed as part of this project would avoid the impacts related to inconsistencies with adopted plans and policies or reduce them to below a level of significance.

4.2 Neighborhood Character/Aesthetics

4.2.1 Existing Conditions

Topography and Landform

The project site is located in a low-lying area where the land area topographic elevations range from ten to 20 feet above mean sea level. The SeaWorld leasehold upland area is relatively flat, with the water level in the leasehold portion of the leasehold fluctuating with the tides. Topography surrounding the project site is also relatively flat in the Mission Bay Park area. Hillside areas are located beyond the Mission Bay Park boundaries to the south as part of the Ocean Beach Community; to the east in the Bay Park area; to the southeast in the Presidio Park area; and to the north in the northern part of Pacific Beach. To the west are Mission Beach, which is relatively flat, and the Pacific Ocean.

Visual Environment

The visual environment surrounding SeaWorld contains both land and water elements. The water component is made up by Mission Bay, and contains marinas and boating activities. The land component, for the most part, is developed as a park with low level (under 30 feet) structures. There are a few notable exceptions. These include the Hilton (eight stories) and Hyatt Islandia (17 stories) hotels, as well as the Ingraham and West Mission Bay Drive bridges in the Park. In addition, the SeaWorld leasehold includes the 320-foot-high Sky Tower and two approximately 100-foot-high pylons that support the Skyway.

The Mission Bay Park landscaping is characterized by a variety of plant materials, however most of the Park is landscaped with lawn, with numerous tree areas. The tree areas near SeaWorld include a grove of eucalyptus along the eastern half of the southern leasehold boundary and a grove of pine trees along most of the western leasehold boundary (See Figure 4.1-1). These trees are typically about 60 feet in height. There is also a grove of mostly pine trees within the ramp interchange area southwest and northeast of the SeaWorld/Ingraham Street intersection (See Figure 4.1-1).

Visual Policies

The Mission Bay Park Master Plan Update also provides design guidelines that relate to the appearance of future development in the Park. These include varied roof profiles and an average building setback of 25 feet from public use zones. The Plan also states that “To ensure as unencumbered and amenable a view of the bay environment as possible, no structure, earthform, or landscape feature should be constructed within the major public view corridors, or viewsheds, so as to impede, diminish or negatively affect the view of the Bay’s environment.” More detail on adopted land use policies related to visual resources can be found in Section 4.1, Land Use.

Key Vantage Points

Important viewsheds that include the SeaWorld leasehold have been identified as key vantage points (KVP). These KVPs are typically public viewing areas, and include road viewsheds, public viewpoints and parks. Since the Mission Bay Park surrounds the SeaWorld leasehold, most of the KVPs are within this Park. In addition, KVPs were identified outside Mission Bay Park to provide a description of the visual environment from the surrounding community.

The KVPs were determined through a number of sources, including extensive fieldwork, a review of adopted plans and policies, viewpoint locations identified during the public forums, and concerns of the California Coastal Commission. Among the most important sources for determining KVPs is the Mission Bay Park Master Plan Update, which includes Design Guidelines (Appendix G of the Master Plan), which indicate that "Mission Bay Park is highly visible from a number of public roadways. These include the southbound lanes of I-5 between Grand Avenue and Clairemont Drive; the westbound lanes of I-8; the Friars Road, Pacific Highway, and Mission Bay Drive entrances; the Midway Drive, Ingraham Street and Sunset Cliffs Boulevard bridges; and Clairemont Drive as it descends from the Clairemont hills, among several surrounding roadways."

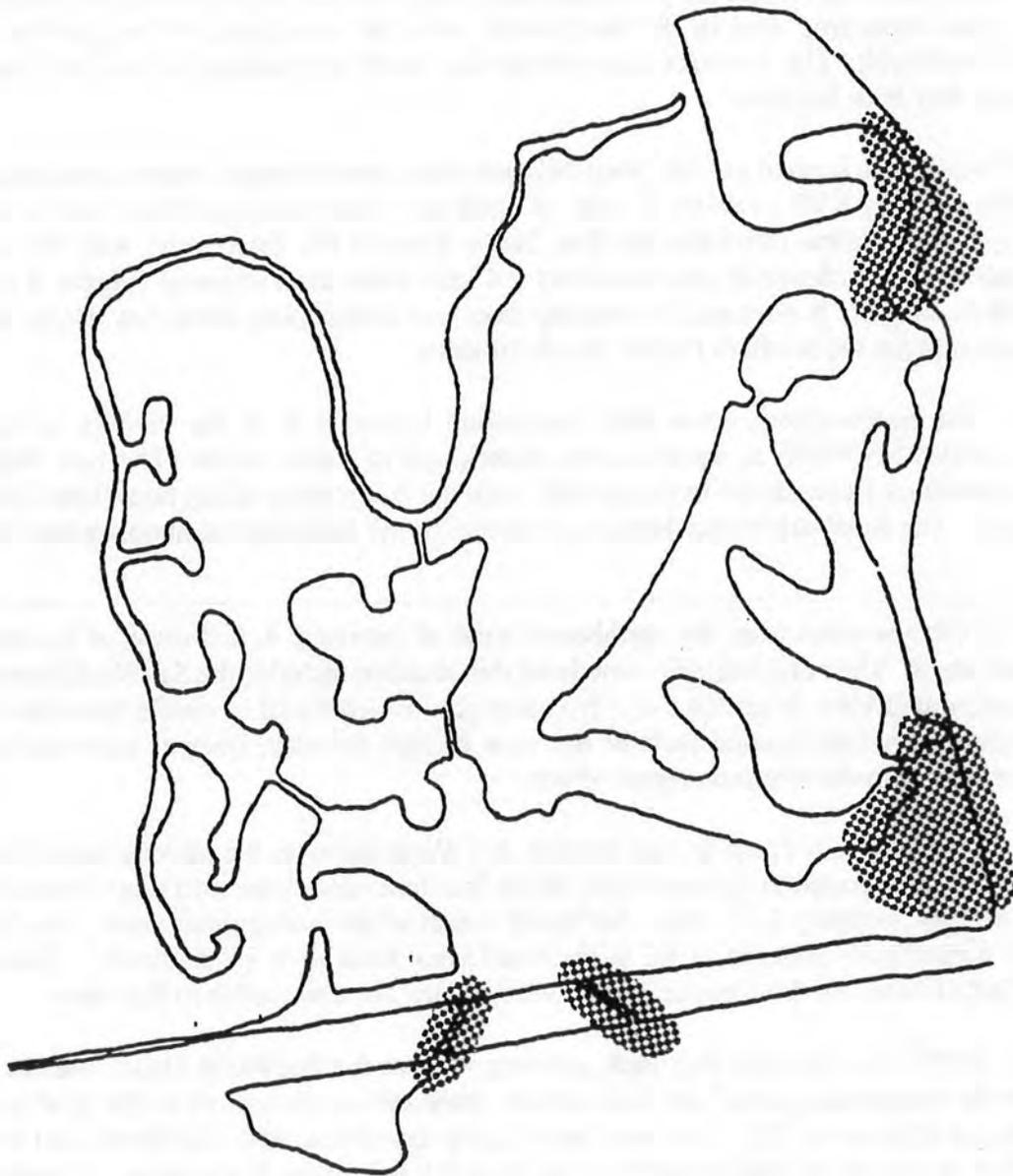
The Mission Bay Park Master Plan Update Design Guidelines also identify viewsheds at the perimeter of the Park (Figure 4.2-1). Major views into the Park are again discussed in the South Shores and Fiesta Island section of the Park Master Plan. This section of the Mission Bay Master Plan Update indicates that "... South Shores should afford wide and open views of the Park from entrance roadways – namely Tecolote Road, Pacific Highway, Friars Road and Sea World Drive."

Participants in the various public forum workshops that were held as part of the SeaWorld Master Plan Update identified potential impacts to views and viewsheds due to increased height of buildings and attractions as a key issue. During these workshops key viewpoints were identified by the participants and were cited in the Plan Update. These viewpoints are also included in this analysis.

The California Coastal Commission staff concurred with the viewpoints identified in the Mission Bay Master Plan Update and added one at the south end of Fiesta Island to provide an analysis of view impact to future recreational uses planned for this part of the Park.

A map of the KVPs is shown on Figure 4.2-2. This map also indicates which KVPs are identified in the Mission Bay Park Master Plan Update, by SeaWorld Master Plan Update public forum participants, community planning groups and by Coastal Commission staff. A brief description of each KVP follows, which are keyed to the location map.

KVP 1: This northeasterly view from Robb Field toward SeaWorld includes the San Diego River in the foreground (Figure 4.2-3). In the midground is a dense tree area that obscures SeaWorld, with the exception of the SeaWorld tower, which is visible as part of the midground



Source: Mission Bay Park Master Plan Update, 1994



Not to Scale

view. The community of Bay Park is only visible in the southern part of the view because the trees in the foreground block most of Bay Park.

KVP 2: The KVP 2 view towards SeaWorld is from the northbound lanes on the Sunset Cliffs Boulevard Bridge, where it crosses the San Diego River. The foreground part of this view includes San Diego River, and the palm and other trees on the north side of the riverbank (Figure 4.2-4). The dense tree area in the foreground, with the exception of the SeaWorld tower, obscures SeaWorld. The tree area also screens the SeaWorld parking lot and the background view of the Bay Park hillsides.

KVP 3: KVP 3 is located on the West Mission Bay Drive Bridge, where it crosses the San Diego River. This KVP provides a view of SeaWorld from the northbound traffic lanes. A photograph of this view illustrates the San Diego River in the foreground with the SeaWorld theme park in the midground, approximately 0.4 mile from the viewpoint (Figure 4.2-5). The SeaWorld parking lot is obscured by existing trees and landscaping along Sea World Drive. In the background are the northern Pacific Beach hillsides.

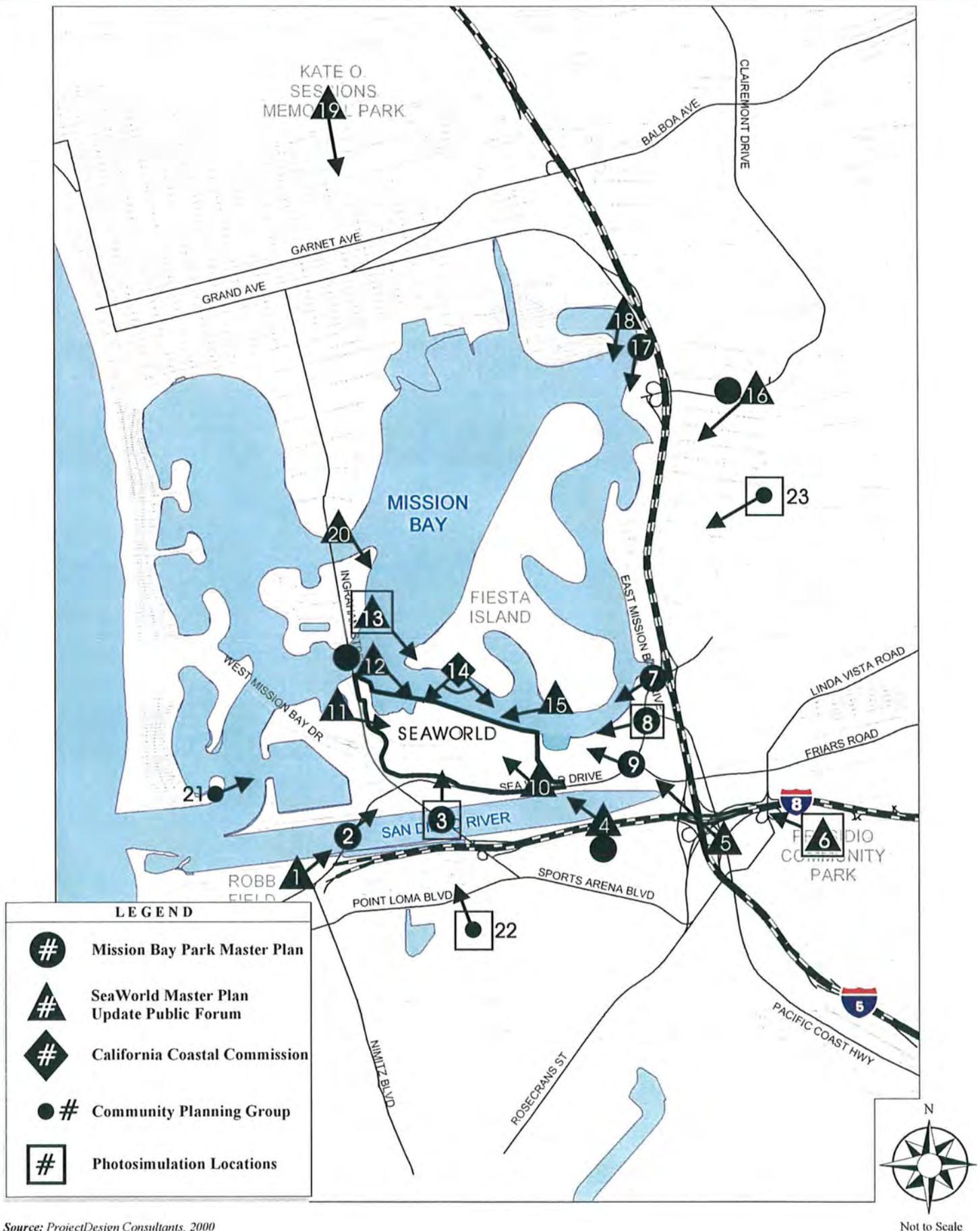
KVP 4: The northwesterly view from westbound Interstate 8, in the vicinity of the Sports Arena, includes SeaWorld as shown on the photograph in Figure 4.2-6. The San Diego River and the associated wetlands are in foreground, with the landscaping along SeaWorld Drive in the midground. The SeaWorld tower is a major feature in the landscape at almost a mile from this KVP.

KVP 5: KVP 5 is taken from the northbound lanes of Interstate 5, just south of its intersection with Interstate 8. The northwesterly view from this location includes the SeaWorld tower as part of the background view (Figure 4.2-7). No other part of SeaWorld is visible from this location. The foreground and midground parts of the view include freeway, freeway signs and scattered trees, mostly within the Interstate rights-of-way.

KVP 6: The view from Presidio Park towards SeaWorld includes the intersection of Interstates 5 and 8 in the foreground/midground area, which is a dominant element in this viewshed (Figure 4.2-8). At approximately 1.75 miles, SeaWorld is part of the background view. The SeaWorld Tower is a prominent element in the background view because it is "skylined." The southern part of Fiesta Island and the Passage part of Mission Bay are also visible in this view.

KVP 7: KVP 7 is a Mission Bay Park gateway view at the SeaWorld Drive/Interstate 5 park entry. In the foreground part of the view are low trees and shrubs as well as the southern part of Fiesta Island (Figure 4.2-9). The tree landscaping associated with SeaWorld and the South Shores Park is part of the background view at about 0.9 mile from this location. However, given the height of SeaWorld tower, it is a prominent element in this landscape view.

KVP 8: KVP 8 is a Mission Bay Park gateway view near the park entry on Pacific Highway where it intersects with SeaWorld Drive. From this location the Mission Bay Pacific Passage and the South Shores Park are visible in the foreground and midground (Figure 4.2-10). SeaWorld is approximately 0.75 mile from this location and is in the midground to background



Key Vantage Point Locations

Figure 4.2-2

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Source: Project Design Consultants, 2000

View from Robb Field (KVP 1) _____ Figure 4.2-3

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Source: Project Design Consultants, 2000

View from Sunset Cliffs Boulevard Bridge (KVP 2) _____ Figure 4.2-4

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Source: Project Design Consultants, 2000

View from West Mission Bay Drive Bridge (KVP 3) _____ Figure 4.2-5

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Source: Project Design Consultants, 2000

View from Westbound Interstate 8 (KVP 4)

Figure 4.2-6

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Source: Project Design Consultants, 2000

View from Northbound Interstate 5 (KVP 5) _____ Figure 4.2-7

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Source: Project Design Consultants, 2000

View from Presidio Park (KVP 6) _____ Figure 4.2-8

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Source: Project Design Consultants, 2000

View from Sea World Drive/Interstate 5 Park Entry (KVP 7) _____ Figure 4.2-9

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Source: Project Design Consultants, 2000

View from Pacific Highway Park Entry (KVP 8) _____ Figure 4.2-10

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part of the view. Some of the SeaWorld buildings are visible as well as the tree landscaping associated with the SeaWorld leasehold. However, perimeter landscaping screens the SeaWorld parking lot.

KVP 9: From the intersection of SeaWorld Drive and Friars Road, this Mission Bay Park gateway view includes the undeveloped and recently developed South Shores area in the foreground and midground (Figure 4.2-11). The SeaWorld tower is approximately one mile from this location in the background part of this view. However, the existing SeaWorld development is barely visible.

KVP 10: This view of SeaWorld is from SeaWorld Drive, however most of SeaWorld is not visible due to the landscaped berm next to the north side of SeaWorld Drive (Figure 4.2-12). Also, the SeaWorld parking lot is obscured by the roadside berm and associated landscaping. However, the SeaWorld tower is visible as part of the midground view.

KVP 11: At the intersection of Ingraham Street and Perez Cove Way, the view towards SeaWorld is mostly obscured by existing trees along Ingraham Street. In addition, a variety of trees exist on the SeaWorld leasehold in this area that also obscures the SeaWorld theme park area. However, the SeaWorld tower is very visible as part of the midground view (Figure 4.2-13).

KVP 12: The view from the Ingraham Street Bridge is elevated above the surrounding parkland, and provides an open vantage point to SeaWorld (Figure 4.2-14). The foreground view from the eastern pedestrian walkway is of Mission Bay, the SeaWorld Marina and the Skyway, as well as parts of the Hubbs Research facility, which is screened by trees. Waterfront Stadium and other SeaWorld structures are also visible in this location along with tree landscaping. The midground view includes the SeaWorld tower, while other, more eastern parts of the theme park, including the SeaWorld parking lot are not visible due to the structures in the foreground.

KVP 13: This KVP is located on Ski Beach, just east of Ingraham Street. The southeasterly view from this location includes Mission Bay in the foreground (Figure 4.2-15). The SeaWorld Marina, Sky Tram, Waterfront Stadium and the SeaWorld tower are visible midground features on the SeaWorld leasehold from this viewpoint. The view of SeaWorld also includes a significant amount of trees in the landscape.

KVP 14: This view, from the southern end of Fiesta Island, is approximately 0.2 mile from the northern SeaWorld leasehold boundary. Pacific Passage of Mission Bay as well as the northern part of SeaWorld is in the foreground view from this KVP (Figure 4.2-16). The various SeaWorld structures are very visible from this location. The background view includes the hillsides associated with the Ocean Beach/Lomal Portal area.

KVP 15: This KVP is also located at the southern end of Fiesta Island; however it is east of the SeaWorld leasehold, across Pacific Passage from the South Shores boat launch. The westerly view of SeaWorld from this location includes Pacific Passage and the eastern half of SeaWorld

in the foreground view (Figure 4.2-17). This includes the various SeaWorld structures as well as the trees on the leasehold. The midground view includes the SeaWorld tower, while the background view includes the Sky Tram and the Ingraham Street Bridge.

KVP 16: This KVP is associated with Clairemont Drive, about 2.1 miles to the northeast of SeaWorld. This viewpoint is elevated above Mission Bay, and provides an open view westward. However the view towards SeaWorld is somewhat obscured by intervening homes and landscaping (Figure 4.2-18). The SeaWorld tower is a noticeable element in the view, in part because it protrudes above the background topography.

KVP 17: SeaWorld is approximately 2.3 miles from the Interstate 5 between Grand Avenue and Clairemont Drive KVP. At this location, SeaWorld is part of an intermittent background view (Figure 4.2-19).

KVP 18: This northeast gateway to Mission Bay Park in the DeAnza Cove area provides a background view of SeaWorld through the DeAnza Mobile Home Park and the approximately 40-foot-high palm trees in the mobile home park (Figure 4.2-20). Only the SeaWorld tower is barely visible from this location. The remaining part of the park is hidden by the mobile homes.

KVP 19: Located in Kate O. Sessions Memorial Park this viewpoint is more than three miles from SeaWorld. SeaWorld is a part of the background view from this KVP and is back dropped by development in the Ocean Beach, Peninsula and Midway Communities (Figure 4.1-21).

KVP 20: This KVP is located just to the east of the Ingraham Street/Crown Point Drive intersection. The view from this location includes SeaWorld as a background element at almost one mile from this KVP (Figure 4.2-22). In the foreground is the Ski Beach part of Vacation Isle. The midground view includes Fiesta Island.

KVP 21: This KVP is located at Mission Point in Mission Bay Park in the South Mission Beach community. The view from this location to the east includes Mission Bay Channel in the foreground, Quivira Basin in the midground and SeaWorld tower in the background at more than one mile from this viewpoint (Figure 4.2-23). From this location the only feature on the SeaWorld leasehold that is visible is the SeaWorld tower. All other features on SeaWorld on screened by intervening vegetation.

KVP 22: This KVP is located at the south end of Nipoma Place in the northerly hillsides of Point Loma. From this elevated location SeaWorld is situated in the midground/background part of the view (Figure 4.2-24). The SeaWorld tower is the most prominent feature in this view (about one mile from this KVP), which is mostly backdropped by the Pacific Beach hillsides. Other structures on the middle and eastern part of the SeaWorld leasehold are visible, while most structures in the western part of the leasehold are screened by trees. From this elevated location the project site is backdropped by the Pacific Beach and Bay Park hillsides.



Source: Project Design Consultants, 2000

View from Sea World Drive/Friars Road Park Entry (KVP 9) _____ Figure 4.2-11

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Source: Project Design Consultants, 2000

View from Sea World Drive near Seaworld (KVP 10) _____ Figure 4.2-12

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Source: Project Design Consultants, 2000

View from Ingraham Street/Perez Cove Way (KVP 11) _____ Figure 4.2-13

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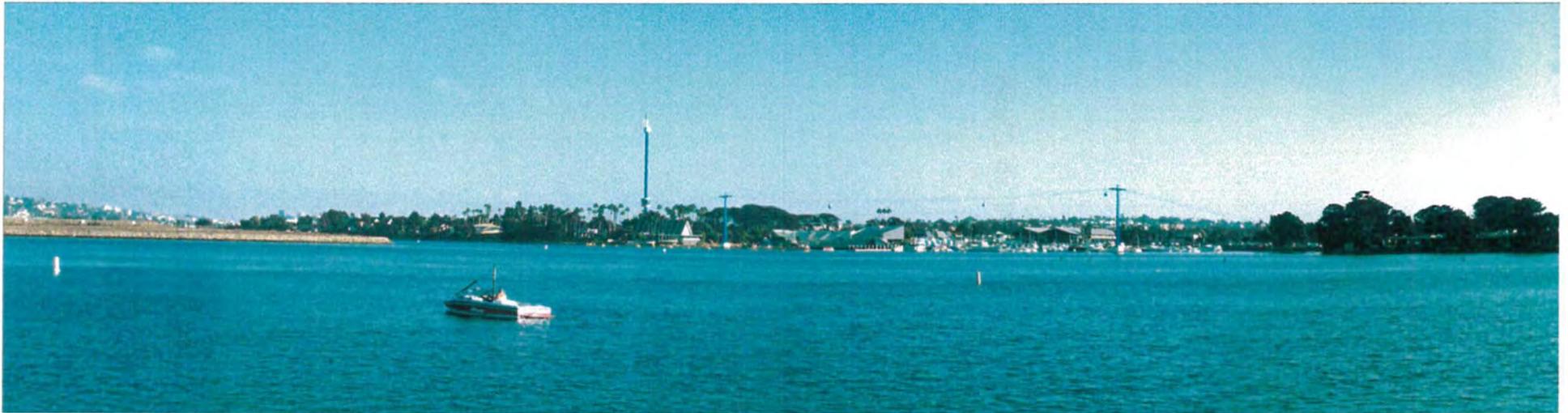


Source: Project Design Consultants, 2000

View from Ingraham Street Bridge (KVP 12)

Figure 4.2-14

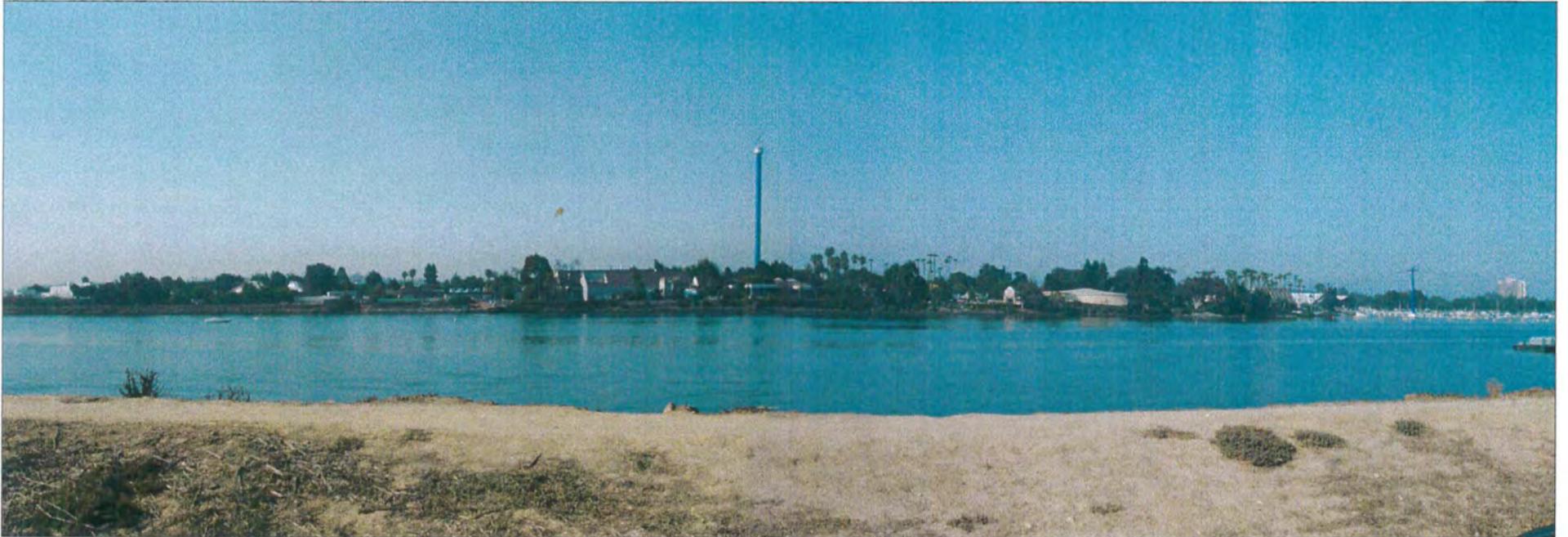
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Source: Project Design Consultants, 2000

View from Ski Beach (KVP 13) _____ Figure 4.2-15

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Source: ProjectDesign Consultants, 2000

View from the Southern end of Fiesta Island (KVP 14) _____ Figure 4.2-16

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Source: Project Design Consultants, 2000

View from the Southeast part of Fiesta Island (KVP 15) _____ Figure 4.2-17

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Source: Project Design Consultants, 2000

View from Clairemont Drive (KVP 16)

Figure 4.2-18

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Source: Project Design Consultants, 2000

View from Southbound Interstate 5 near Clairemont Drive (KVP 17) _____ Figure 4.2-19

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Source: Project Design Consultants, 2000

View from Mission Bay Park Northeast Gateway (KVP 18) _____ Figure 4.2-20

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Source: Project Design Consultants, 2000

View from Kate O. Sessions Park (KVP 19) _____ Figure 4.2-21

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Source: Project Design Consultants, 2000

View from Ingraham Street/Crown Point Drive (KVP 20) _____ Figure 4.2-22

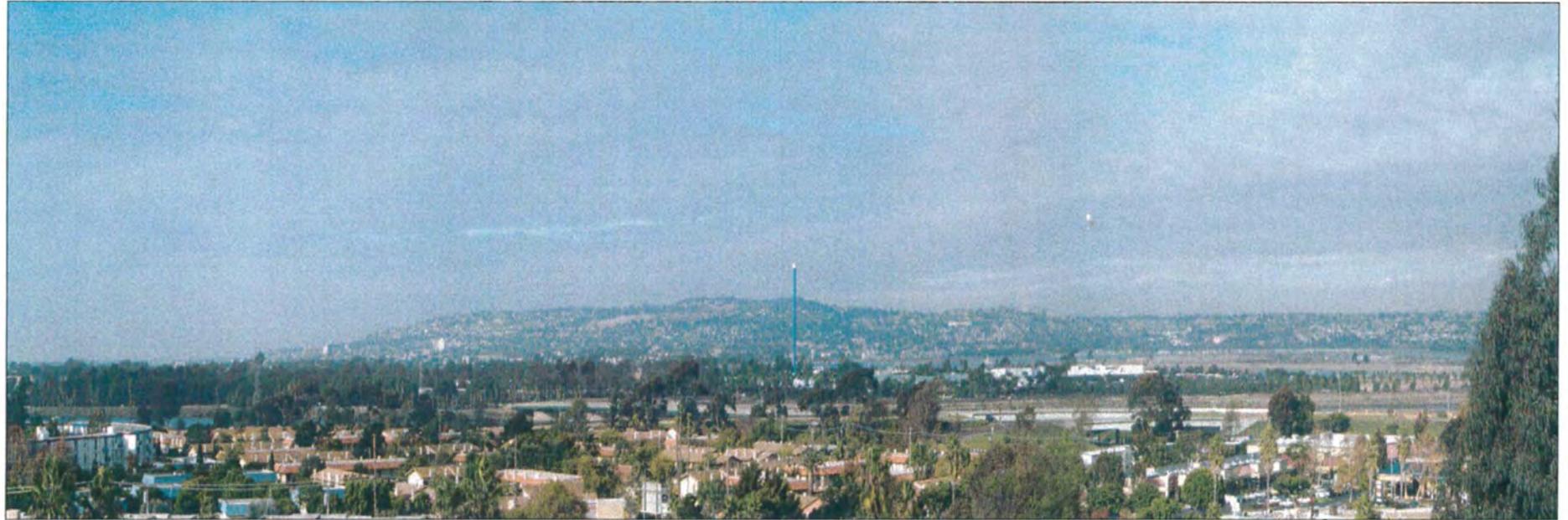
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Source: Project Design Consultants, 2000

View from Mission Point (KVP 21) _____ Figure 4.2-23

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Source: Project Design Consultants, 2000

View from Nipoma Place (KVP 22) _____ Figure 4.2-24

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KVP 23: Located in the Bay Park community, this KVP is situated in an elevated position on Illion Street in a church parking lot, about 1.9 miles from the SeaWorld tower. From this elevated location, the entire SeaWorld leasehold is in the background view (Figure 4.2-25). In addition, because of the elevated position of this KVP, the development on the leasehold, with the exception of the SeaWorld tower, is backdropped by topography and vegetation.

4.2.2 Significance Criteria

Based on City of San Diego's thresholds, visual quality impacts relative to change in site character and views of the site would be significant if the proposed project would:

1. Exceed the allowed height or bulk regulations causing unnecessary view blockages;
2. Substantially conflict with the natural topography or visual character of the area by creating an architectural style that is in stark contrast with the surrounding environment through excessive bulk, signage or architectural features.

4.2.3 Impact

Issue 1: Would the proposal result in the obstruction of any vista or scenic views from a public viewing area?

Issue 2: Would the proposal result in the creation of a negative aesthetic site or project?

Issue 3: Would the project include bulk, scale, materials or style, which would be incompatible with surrounding development?

Issue 4: Would the project result in substantial alteration to the existing character of the area?

Photosimulation Criteria

The four issue questions listed above are addressed in one impact analysis discussion because of the interrelationship among the issue questions. The visual impact analysis will focus on six KVPs for which photosimulations were performed. However, the potential impact to each KVP is also addressed. The photosimulation locations were selected to provide a representative visual impact analysis from different directions at different distances. The photosimulation locations selected are KVPs 3, 6, 8, 13, 22, and 23.

Of the four Tier 1 projects, two were considered to have project elements that would be high enough to result in a noticeable change in the visual environment outside of the SeaWorld leasehold. The first is the Splashdown Ride with its major visual elements consisting of the three towers, which range in height from 83 to 95 feet. The 95-foot high tower would be 50 feet in diameter; the 83-foot tower would be 35 feet diameter; and the 89-foot high tower would be 24 feet wide. The second is the lighthouse element in the Front Gate renovation project, which

could be up to 90 feet high and 20 feet in diameter. The other parts of the Front Gate project, as well as the other Tier 1 projects would not be high enough to constitute a noticeable visual effect beyond the SeaWorld leasehold because of intervening topography and trees.

Tier 2 projects visual analysis is based on a worst-case scenario, or maximum development, within the limitations imposed by the SeaWorld Master Plan Update. A massing model of the development envelopes created for the photosimulations was based on the Master Plan area and height criteria, taking into account that development within four of the eight Tier 2 project areas could be 160 feet in height, with the other four development areas limited to a height of 100 feet. The Plan Update requires that the development above 100 feet shall be a minimum of 50 percent transparent. Therefore, two representative geometric shapes (cylinders and pyramids) were used to illustrate the transparency requirement.

The photosimulations also include two of the three Special Projects since they would be high enough to potentially be noticeable visible outside the SeaWorld leasehold. These are the Future Hotel, which can be up to 90 feet in height, and the Parking Garage, which can be up to 45 feet in height. The Future Hotel development envelope was based on the footprint of the conceptual hotel site plan shown in the SeaWorld Master Plan Update.

Tier 1 Projects

A-1 Splashdown Ride

Photosimulations that include the Splashdown Ride are illustrated in Figures 4.2-26, 27, 28, 29, 30 and 31. The visual impact of the Splashdown Ride is evaluated separately here and in combination with other Tier 1, Tier 2 and Special Projects in the latter part of this analysis under SeaWorld Master Plan Update. The Splashdown Ride would be similar in height to the two existing pylons that support the Skyway in the western part of the leasehold. It would also be one-third the height of the existing SeaWorld tower. In addition, it would be similar in height to the Hilton hotel located about one mile to the northeast and about one-half the height of the Hyatt Islandia, located about one mile to the west. The three Splashdown Ride towers vary in height, are arranged in a staggered location, and although each separately would be somewhat slender, the three towers would combine visually to create a larger visual mass. It therefore, would result in a new visual element within Mission Bay Park that would be consistent with the higher structures in Mission Bay Park.

In the photosimulation from the West Mission Bay Bridge over San Diego River (KVP 3), the Splashdown Ride would be a noticeable new visual element in the northeast foreground/midground view. The Ride would be "backdropped" by the hillsides associated with Bay Park, just east of Interstate 5. From Presidio Park (KVP 6) the Splashdown Ride would be in the background westerly view. From this location, the Ride would not be as noticeable in the view because the observer would be elevated and 1.8 miles away, and the Splashdown Ride towers would be "backdropped" by existing trees in the area of the West Mission Bay Drive/Ingraham intersection. From the Pacific Highway park gateway (KVP 8), the Splashdown Ride would be a very prominent element in the foreground view given the relatively flat topography between the KVP and the Ride. The photosimulation from the Ski Beach area (KVP



Source: Project Design Consultants, 2000

View from South Illion Place (KVP 23) _____ Figure 4.2-25

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13) also illustrates a clear view of the Splashdown Ride in the foreground/midground view. The photosimulation from KVP 22 (Nipoma Place) shows the proposed Splashdown Ride backdropped by Fiesta Island and the Bay Park/Clairemont Hills. The Splashdown Ride would be visible from this location, however it would be a small visual element in an expansive view. From Illion Street (KVP 23), the proposed Splashdown Ride would be in the background view and would also be backdropped by development in the Midway/Ocean Beach area. From this location the Splashdown Ride would also be a small part of this southwesterly view.

The Splashdown Ride would be a major foreground/midground visual element in the views from KVP's 1, 2, 4, 14 and 15. Views of the Splashdown Ride would be obscured from motorists traveling on SeaWorld Drive and Interstate 5 due to landscaping (trees) and/or berms. From the remaining KVPs, the Splashdown Ride would be in small part of a background view.

Based on the Splashdown Ride visual mass and prominence from many KVPs in the foreground view, this Tier 1 project would result in a significant visual quality impact.

C-1 Front Gate Renovation

The Front Gate Renovation Tier 1 project could have a lighthouse element with a height of up to 90 feet and 20 feet in diameter. This feature would be visible from some locations in the Mission Bay Park and the vicinity. Six photosimulations were developed which illustrate the lighthouse element of the Front Gate Renovation project (See Figures 4.2-26, 27, 28, 29, 30 and 31). In the photosimulation from the West Mission Bay Bridge over San Diego River (KVP 3), the lighthouse would be a noticeable new visual element in the northeast foreground/midground view. The lower elevations (approximately 40 feet) of the lighthouse would be screened by existing trees along the perimeter and within the SeaWorld leasehold. The middle and higher elevations of the lighthouse would be "backdropped" by the hillsides associated with Bay Park, just east of Interstate 5. From Presidio Park (KVP 6) the lighthouse would be a hardly noticeable narrow vertical visual feature in a background view 1.8 miles from the observer. Furthermore, the observer would be elevated and the lighthouse would be "backdropped" by existing trees in the area of the West Mission Bay Drive/Ingraham intersection. From the Pacific Highway park gateway (KVP 8), the lighthouse would be a minor visual element in the midground view with the lower elevations screened by trees in the leasehold and backdropped by trees in the West Mission Bay Drive/Ingraham intersection. The photosimulation from the Ski Beach area (KVP 13) also illustrates a view where trees in the Theme Park would screen the lower portions of the lighthouse and the upper elevations would be barely noticeable because they would be backdropped by the hills in the Lomal Portal community. From KVP 22 on Nipoma Place, the proposed lighthouse would be a very minor backdropped element in a large expansive view. Although located to the northeast of the proposed lighthouse, the view from KVP 23 on Illion Street would be similar to KVP 22, i.e., the tower would be a very minor backdropped element in a large expansive view. Therefore, because of existing tree screening, topographic backdrop and the slender 20-foot-wide lighthouse, the visual impact from this Front Gate Renovation project component would be less than significant.

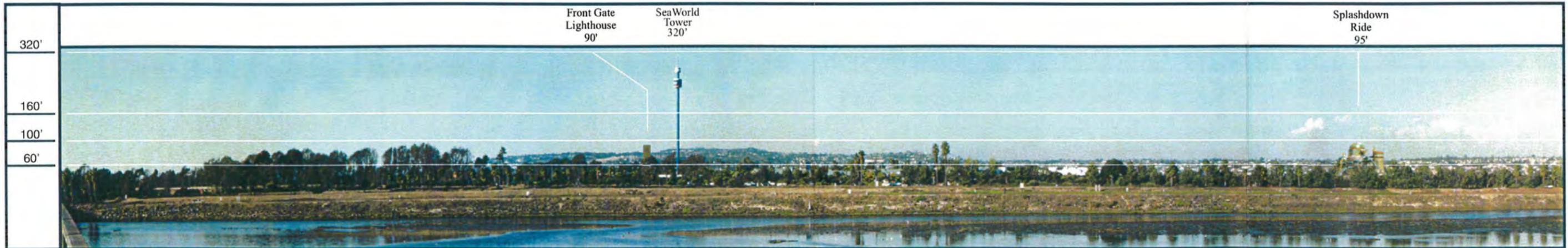
SeaWorld Master Plan Update

Tier 1, Tier 2 and Special Projects are included in this part of the analysis to evaluate the visual quality impacts of "buildout" of the Master Plan. The visual characteristics, i.e., height, mass and transparency development envelope requirements that were used in developing the photosimulations were described above at the beginning of Section 4.2.3, Impact, Photosimulation Criteria. The visual representation of the worst-case development envelopes allowed by the SeaWorld Master Plan Update are shown in Figures 4.2-32, 33, 34, 35, 36 and 37.

Figure 4.2-32 illustrates a photosimulation of the Master Plan Update from the West Mission Bay Bridge (KVP 3). It shows that the Parking Garage and Marina Expansion would not be visible from this location due to screening by existing trees. The top, approximately 25 feet of the Future Hotel, would be visible from this location, with the lower approximately 65 feet of the hotel screened by the existing trees near the Sea World Drive/West Mission Bay Drive intersection. The Tier 2 project maximum potential development envelopes would be very prominent in the foreground/midground part of the view. These elements would represent a major visual change in the landscape and would dominate the visual landscape from this location. For this reason the Tier 2 projects would result in a significant visual impact from this key vantage point.

Figure 4.2-33 illustrates the photosimulation of the Master Plan Update development envelopes from Presidio Park (KVP 6). From this location the panoramic view to the west includes the narrow north/south width of the SeaWorld leasehold. This key vantage point would therefore provide a view of Tier 1 and Tier 2 projects as well as the Future Hotel where they would be viewed one in front of the other. This illustrates the building envelopes of new theme park development in the background view approximately 1.75 miles from SeaWorld. The major visual elements of the Tier 2 projects and the Splashdown Ride located at the east end of the Theme Park (Area 1) would be most visible from this location, with other Tier 2 project areas, such as L-2 and J-2, partially blocked by development near the eastern part of the Theme Park. Both existing and future development in the Theme Park would also obscure most of the Future Hotel, with only the upper elevations of this structure somewhat visible. The view of SeaWorld from this location would provide a view of future SeaWorld development that would be a smaller part of the overall panoramic view. However, because the Tier 2 and Tier 1 projects would visually "stack-up", the visual mass would be greater, reducing the transparency in the upper 60 feet of four Tier 2 project areas. For these reasons the visual impact of the proposed Master Plan Update would result in a significant visual impact.

The Mission Bay Park westerly gateway view from the intersection of Pacific Highway and Friars Road (KVP 8) is about 0.75 mile from the eastern SeaWorld leasehold boundary. The photosimulation of the development envelopes for buildout of the Master Plan Update illustrates that future development in the eastern portion of Area 1 would mostly obscure future development west of this area, including other Tier 2 development areas and most of the Future Hotel (Figure 4.2-34). The photosimulation provides a foreground to midground view of the Master Plan Update with the higher, above 60 feet, elevations of future projects prominently visible. Lower elevations of future Tier 2 projects and the Parking Garage would not be visible from this gateway location due primarily to trees within the SeaWorld leasehold.



320'
160'
100'
60'

Front Gate
Lighthouse
90'

SeaWorld
Tower
320'

Splashdown
Ride
95'

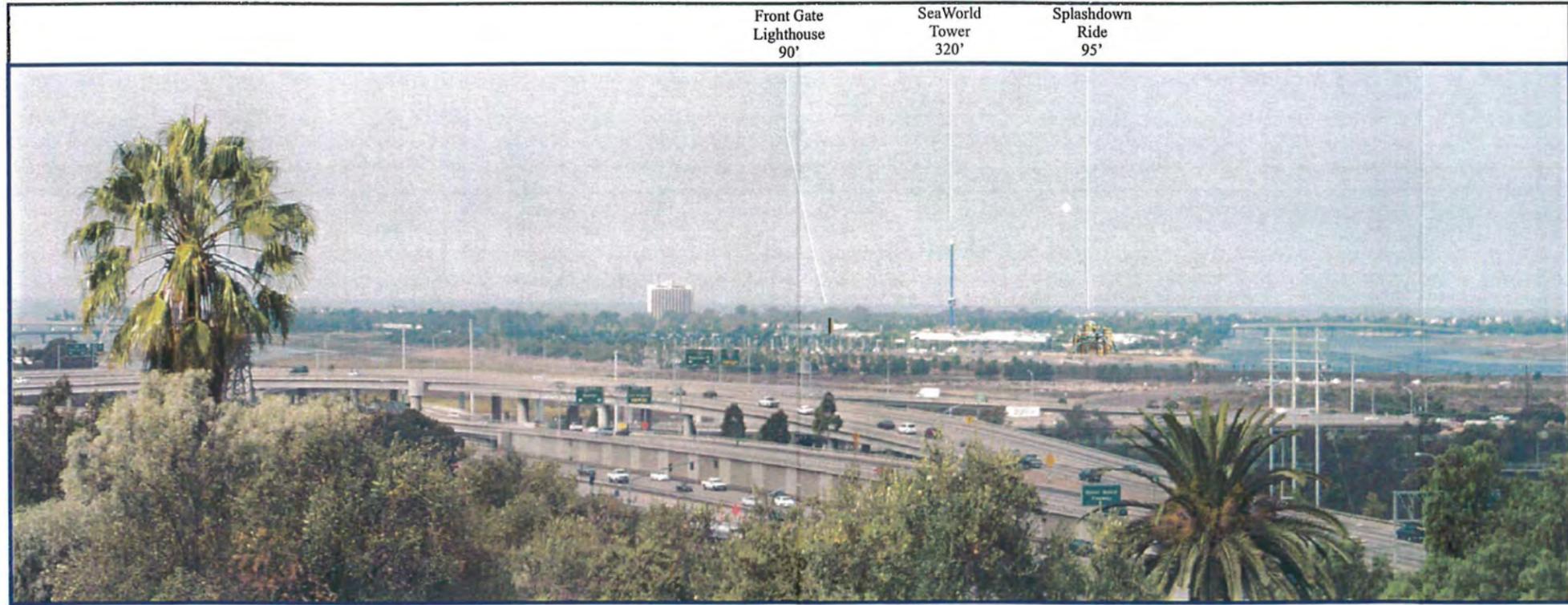
*Education Facility 45'
is obscured by
existing landscaping*

*Special Events Center
buildings 40' are obscured
by existing landscaping*

Source: SeaWorld
Date: January 2001

Photosimulation of Tier 1 Projects
From West Mission Bay Bridge (KVP 3)

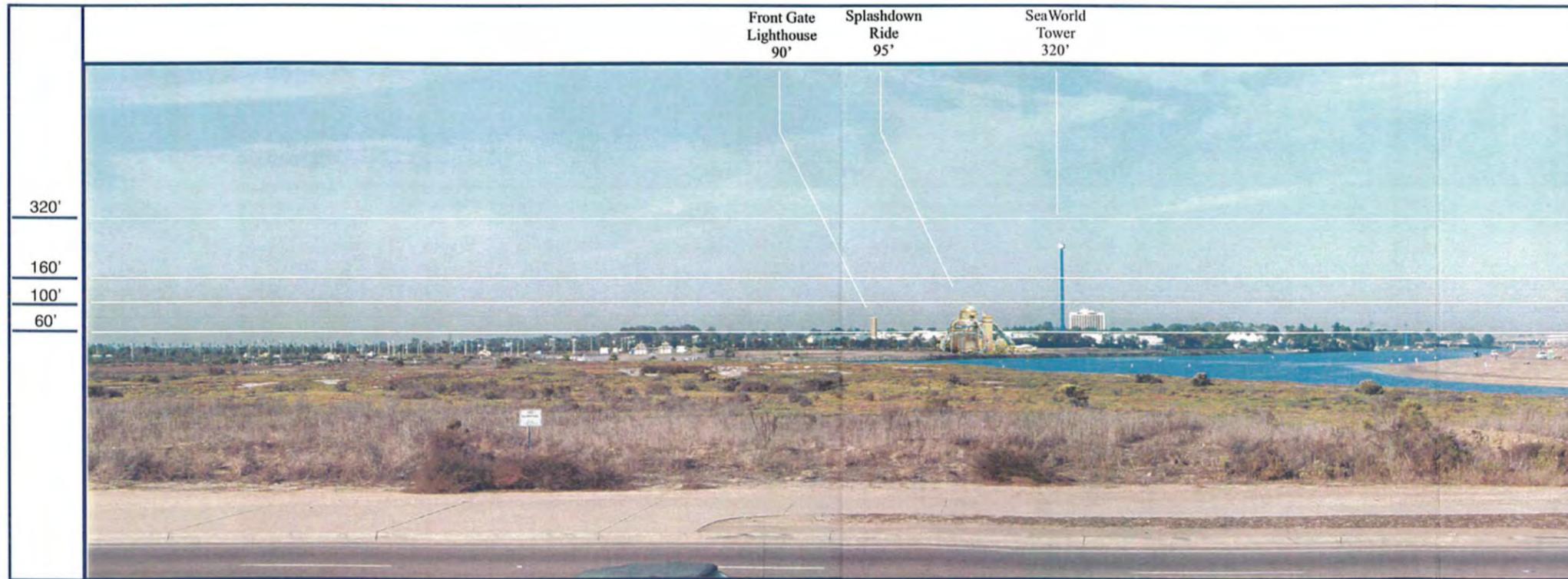
Figure 4.2-26



Source: SeaWorld
Date: January 2001

Photosimulation of Tier 1 Projects
From Presido Park (KVP 6)

Figure 4.2-27



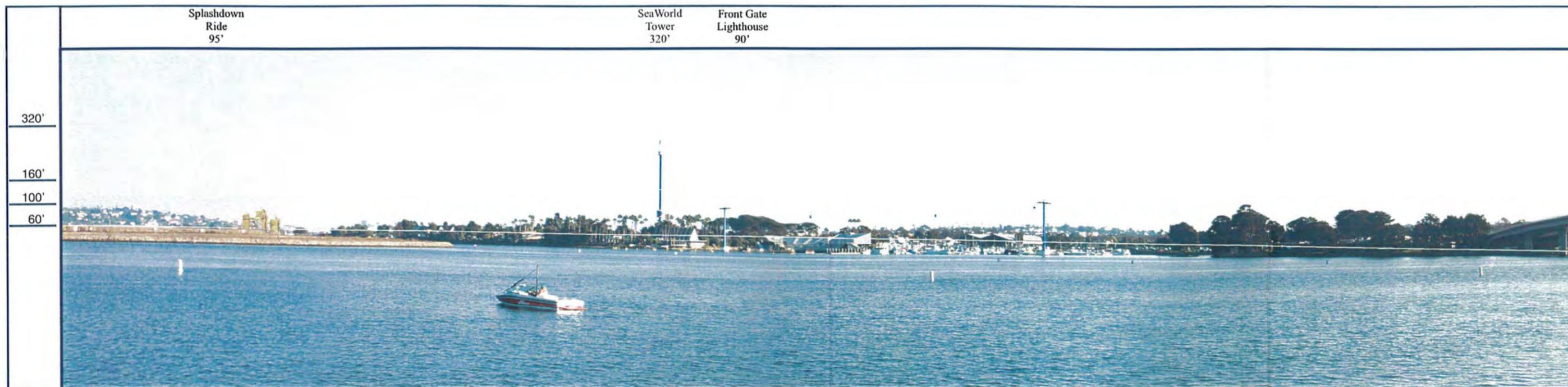
Special Events Center buildings 40' are obscured by existing landscaping

Front Gate Renovation buildings 40' are obscured by existing landscaping

Education Facility 45' is obscured by existing landscaping

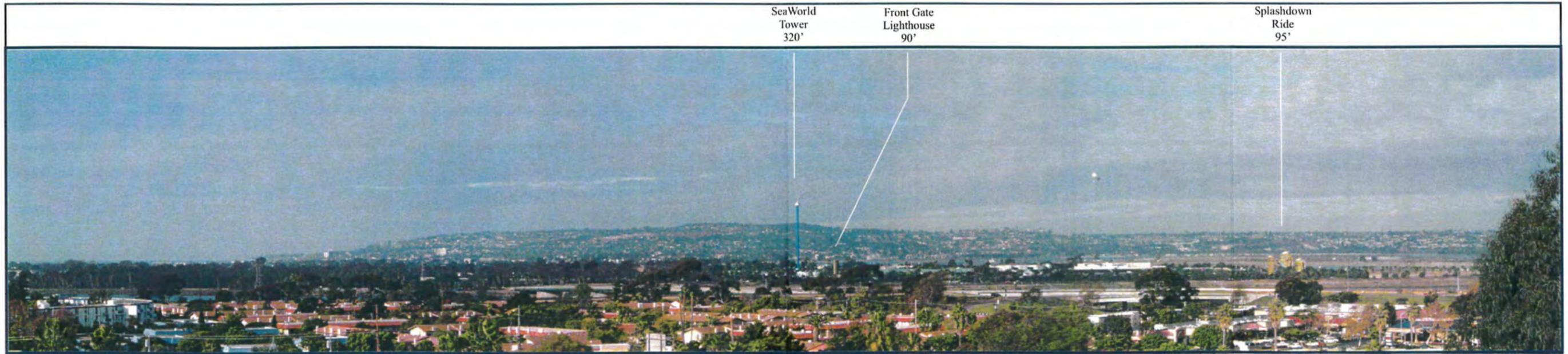
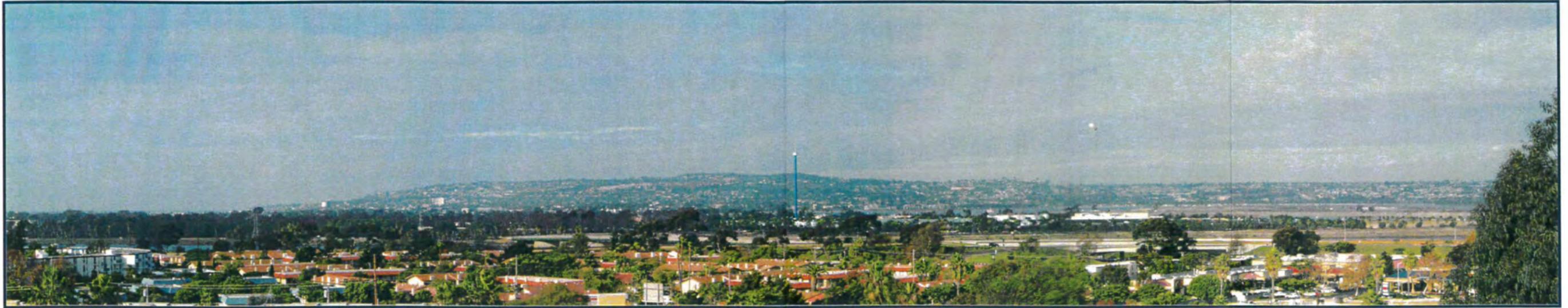
Parking Structure 45' is obscured by existing landscaping

*Source: SeaWorld
Date: January 2001*



Education Facility 45', Front Gate Renovation buildings 40', and Special Events Center buildings 40' are obscured by existing buildings and landscaping.

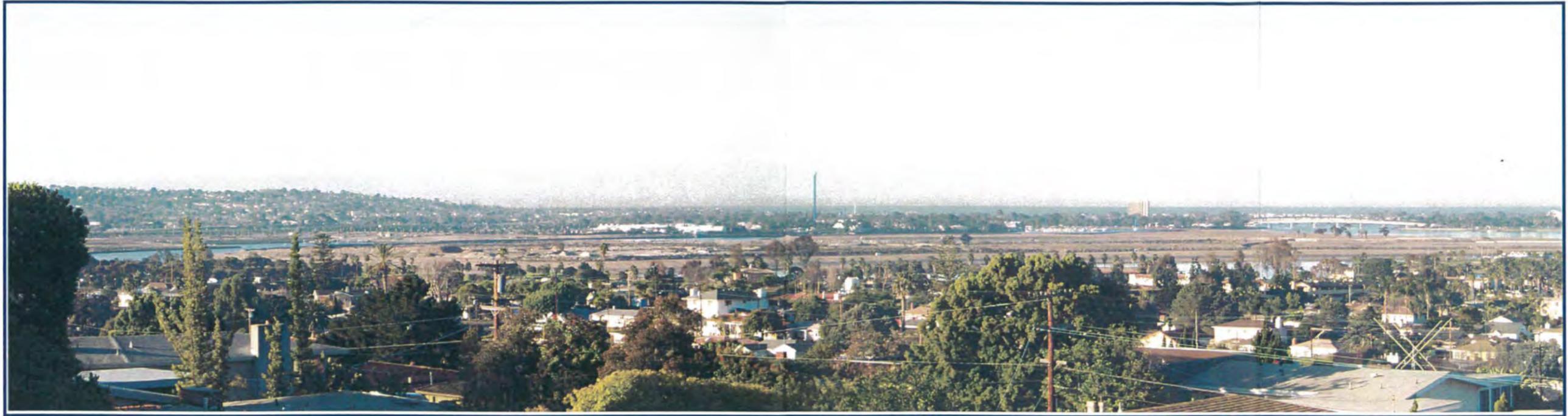
Source: SeaWorld
Date: January 2000



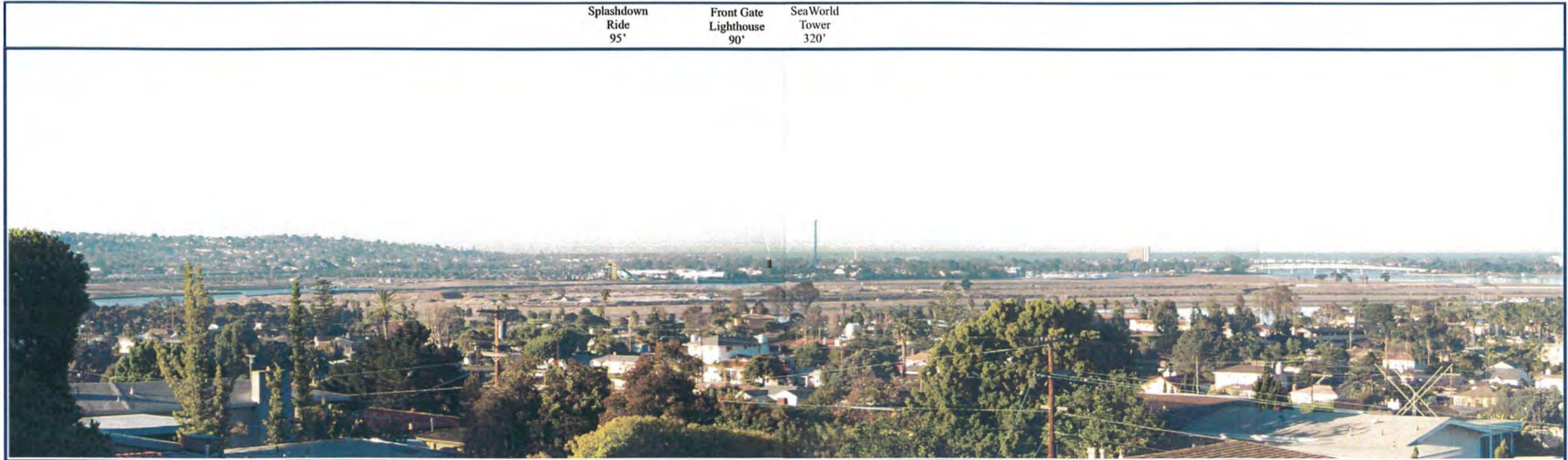
Source: SeaWorld
Date: January 2001

Photosimulation of Tier 1 Projects
From Nipoma Place (KVP 22)

Figure 4.2-30



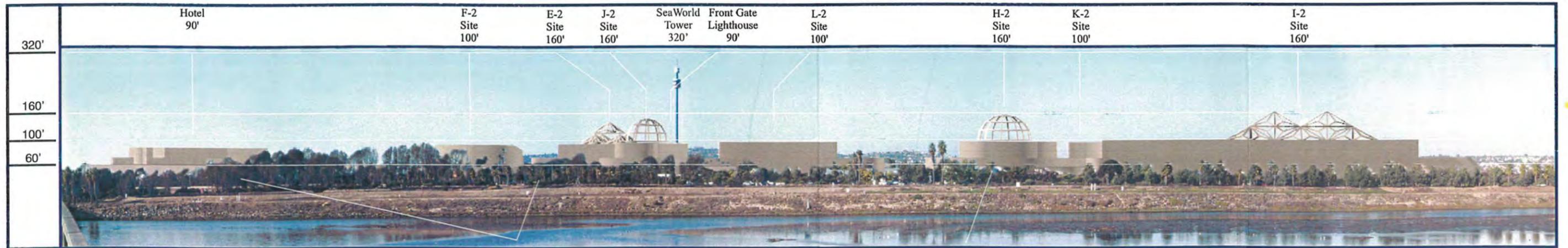
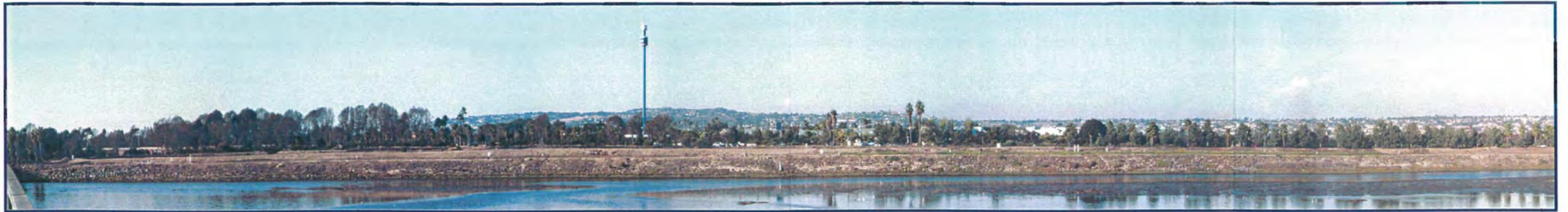
Splashdown Ride 95'	Front Gate Lighthouse 90'	SeaWorld Tower 320'
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Source: SeaWorld
Date: January 2001

Photosimulation of Tier 1 Projects
From Illion Street (KVP 23)

Figure 4.2-31



*Education Facility 45'
is obscured by
existing landscaping*

*Parking Structure 45'
is obscured by
existing landscaping*

*Front Gate Renovation
buildings 40' are obscured
by existing landscaping*

*G-2 Site obscured by
H-2 Site envelope*

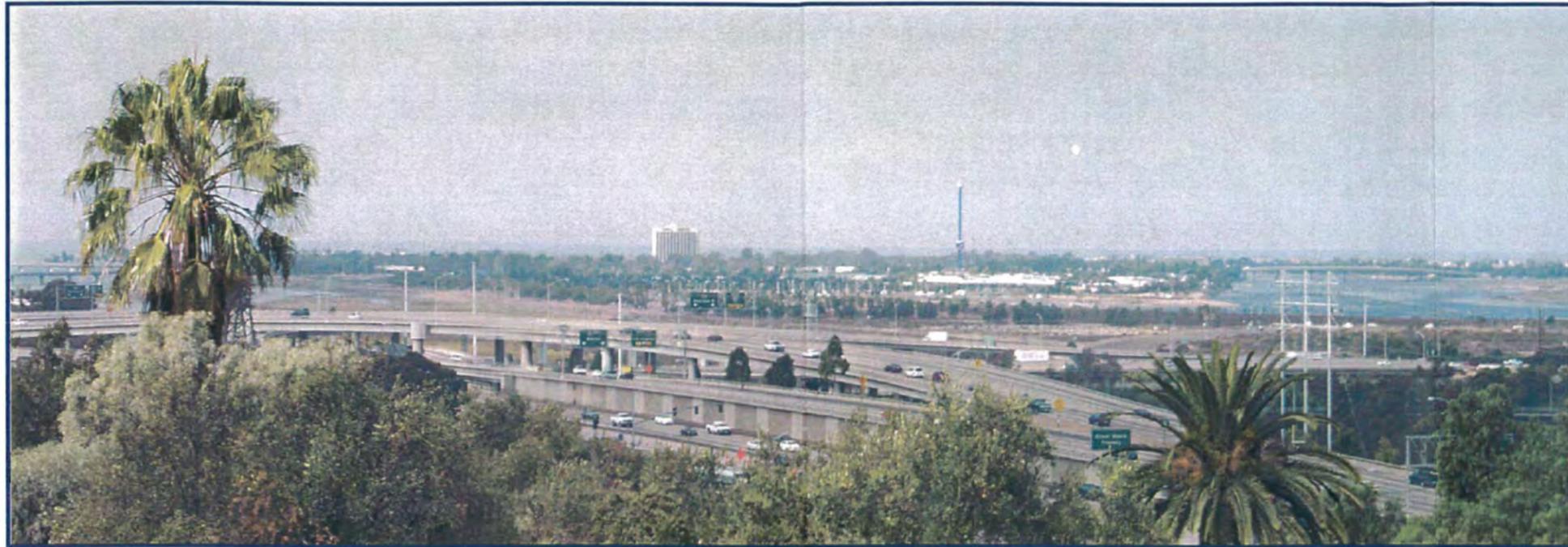
*Special Events Center
buildings 40' are obscured
by existing landscaping*

The shapes of future development in this photosimulation illustrate maximum development envelopes of Tier 2 and Special Projects, and Tier 1 projects. The massing model shapes do not illustrate proposed projects.

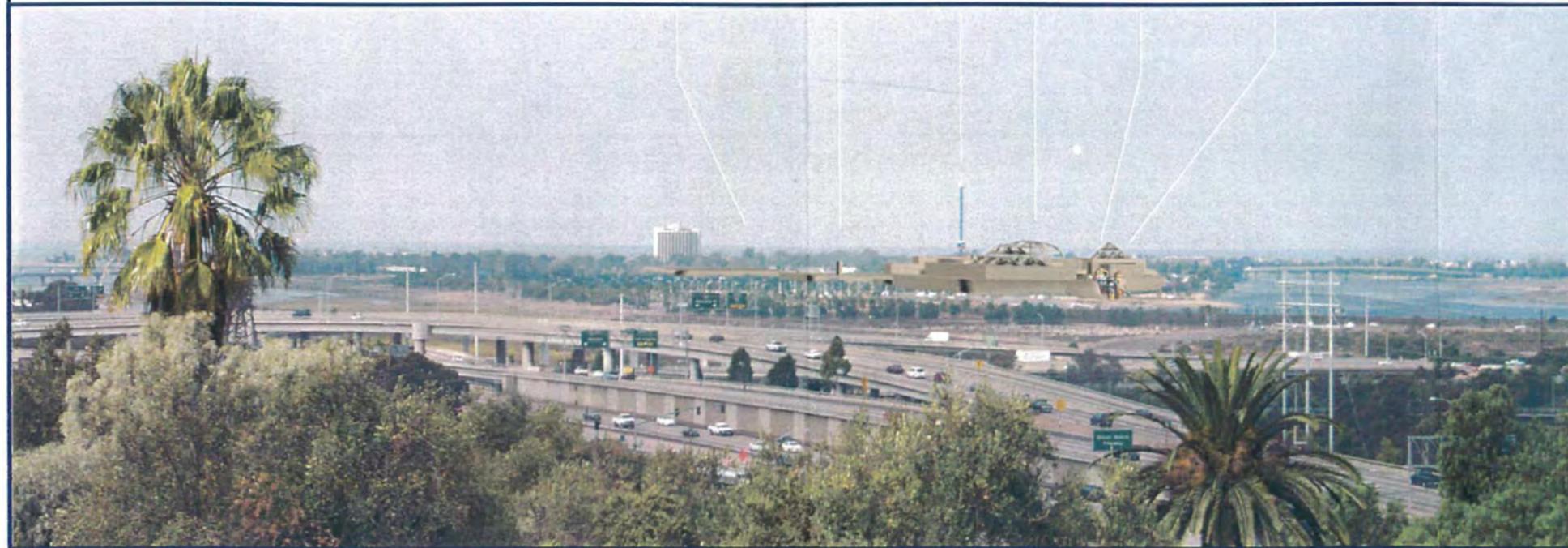
*Source: SeaWorld
Date: January 2001*

Photosimulation of SeaWorld Master Plan Update Maximum Potential Building Mass From West Mission Bay Bridge (KVP 3)

Figure 4.2-32



Parking Structure	Front Gate Lighthouse	SeaWorld Tower	J-2 Site	Splashdown Ride	E-2 Site
45'	90'	320'	160'	95'	160'

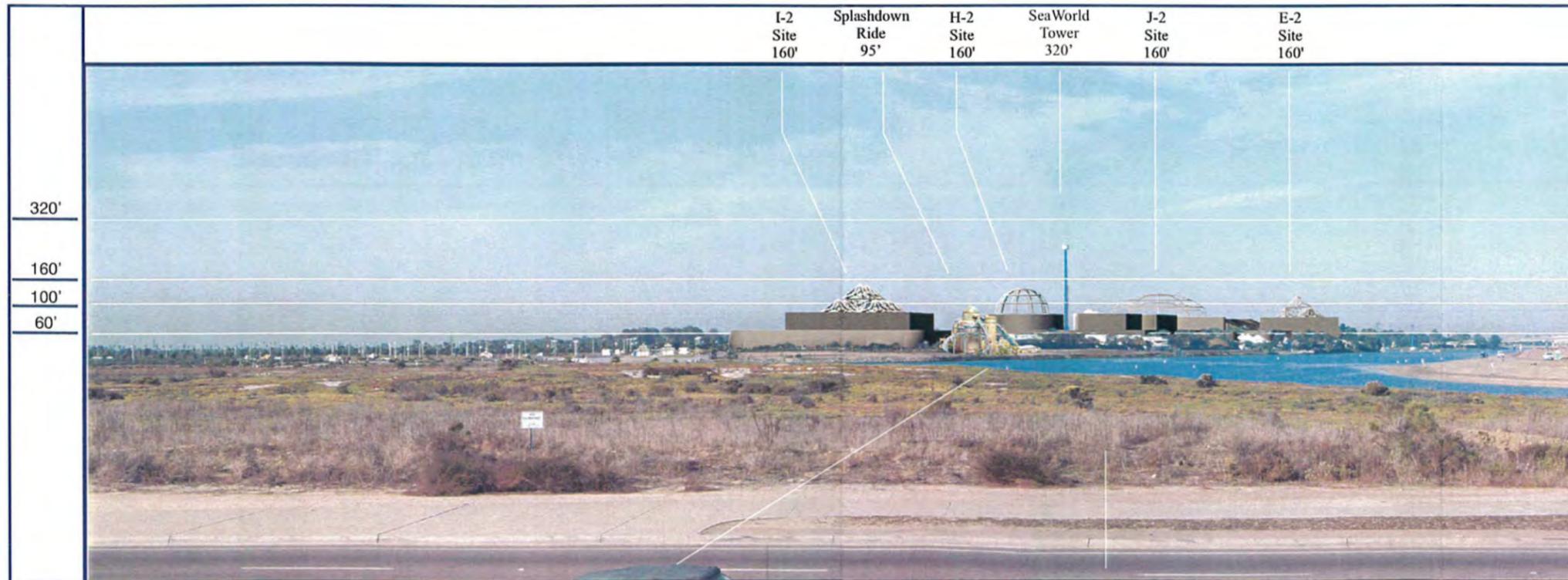


The shapes of future development in this photosimulation illustrate maximum development envelopes of Tier 2 and Special Projects, and Tier 1 projects. The massing model shapes **do not** illustrate proposed projects.

Source: SeaWorld
Date: January 2001

Photosimulation of SeaWorld Master Plan Update Maximum Potential Building Mass From Presido Park (KVP 6)

Figure 4.2-33



The shapes of future development in this photosimulation illustrate maximum development envelopes of Tier 2 and Special Projects, and Tier 1 projects. The massing model shapes do not illustrate proposed projects.

Source: SeaWorld
Date: January 2001

L-2 Site 100' is obscured by I-2 Site envelope

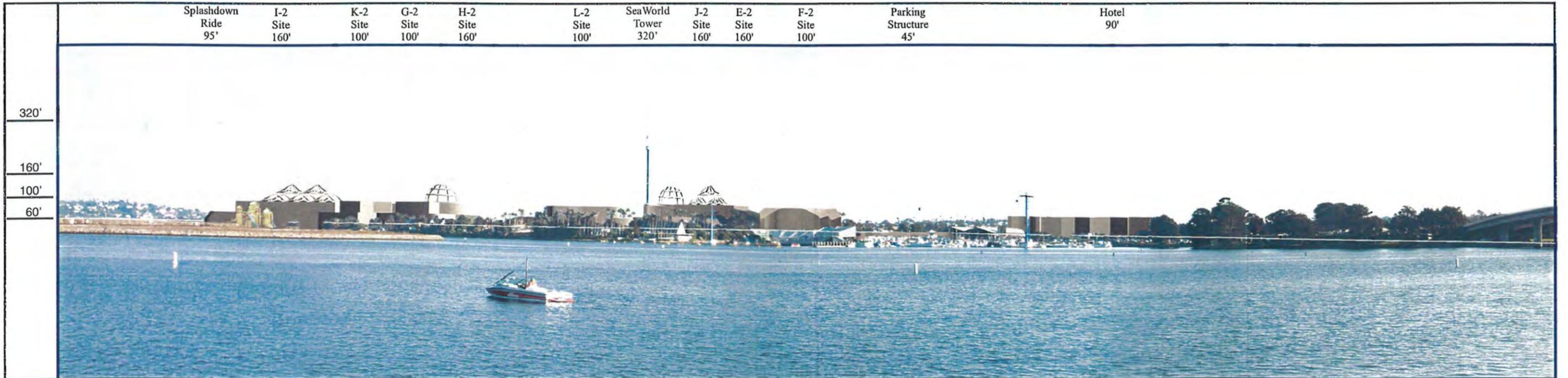
K-2 Site 100' and G-2 Site 100' are in the foreground

F-2 Site 100' is obscured by E-2 Site envelope

Education Facility 45', Front Gate Renovation buildings 40', Lighthouse 90', Special Events Center buildings 40', Parking Structure 45, and Hotel 90' are obscured by Tier 2 building envelopes.

Photosimulation of SeaWorld Master Plan Update Maximum Potential Building Mass From Pacific Highway Gateway (KVP 8)

Figure 4.2-34



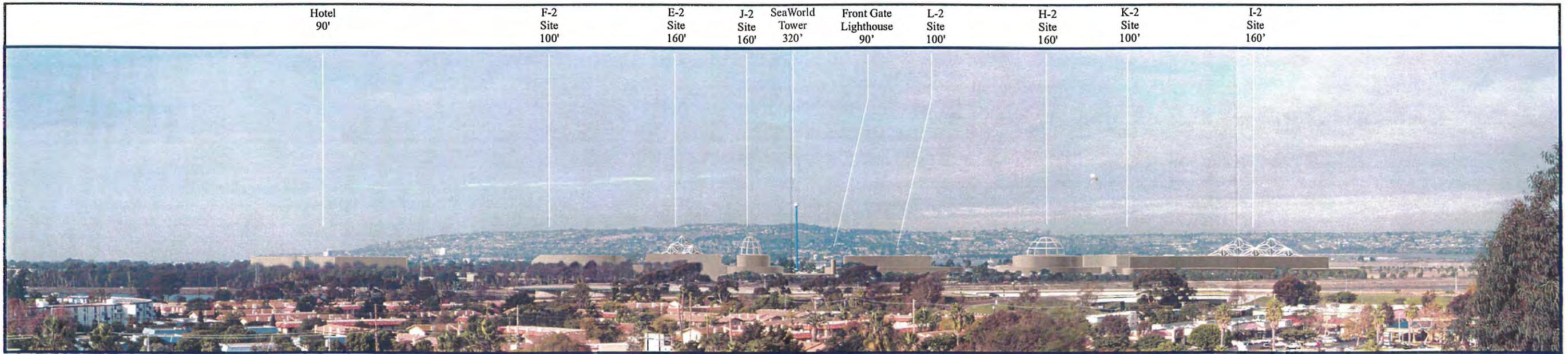
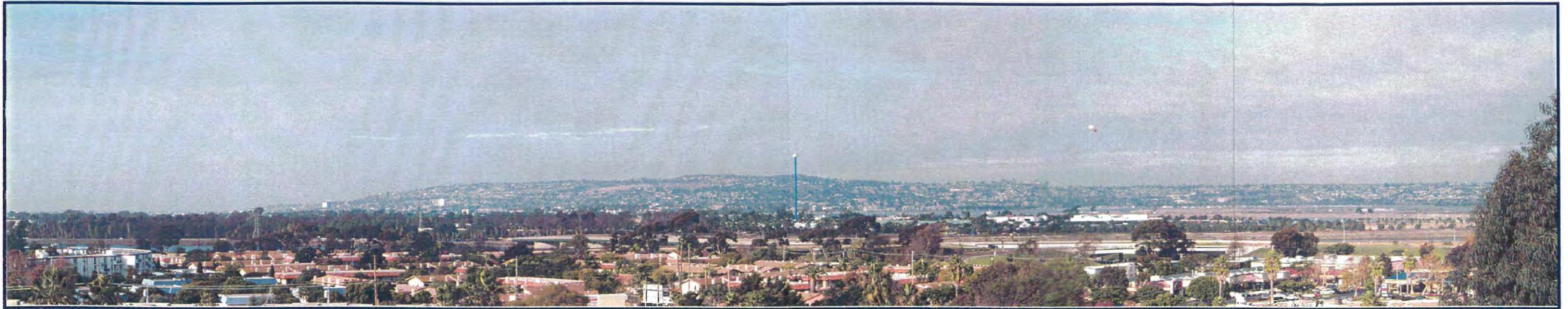
Education Facility 45', Front Gate Renovation buildings 40', Lighthouse 90', Special Events Center buildings 40', and Parking Structure 45' are obscured by Tier 2 building envelopes and existing landscaping.

The shapes of future development in this photosimulation illustrate maximum development envelopes of Tier 2 and Special Projects, and Tier 1 projects. The massing model shapes do not illustrate proposed projects.

*Source: SeaWorld
Date: January 2000*

Photosimulation of SeaWorld Master Plan Update Maximum Potential Building Mass From Ski Beach (KVP 13)

Figure 4.2-35

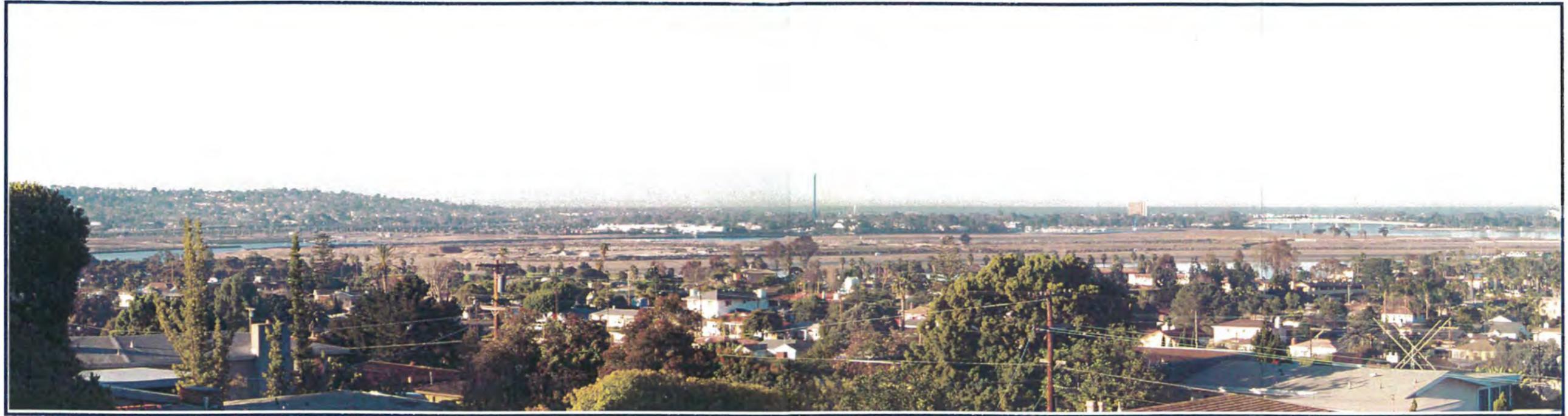


The shapes of future development in this photosimulation illustrate maximum development envelopes of Tier 2 and Special Projects, and Tier 1 projects. The massing model shapes do not illustrate proposed projects.

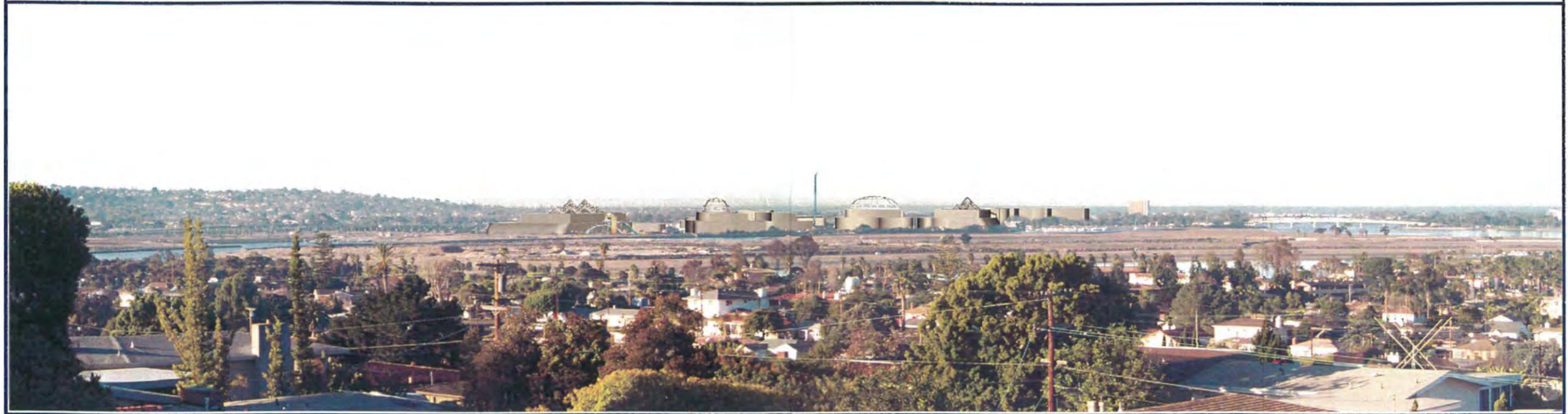
Source: SeaWorld
Date: January 2001

Photosimulation of SeaWorld Master Plan Update Maximum Potential Building Mass From Nipoma Place (KVP 22)

Figure 4.2-36



I-2 Site 160'	Splashdown Ride 95'	H-2 Site 160'	G-2 Site 100'	SeaWorld Tower 320'	J-2 Site 160'	E-2 Site 160'	Hotel 90'
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The shapes of future development in this photosimulation illustrate maximum development envelopes of Tier 2 and Special Projects, and Tier 1 projects. The massing model shapes do not illustrate proposed projects.

Source: SeaWorld
Date: January 2001

Photosimulation of SeaWorld Master Plan Update Maximum Potential Building Mass From Illion Street (KVP 23)

Figure 4.2-37

The photosimulation illustrating buildout of the Master Plan Update from the Ski Beach area of Vacation Isle (Figure 4.2-35, KVP 13) provides a foreground to midground view of the project. The immediate foreground includes Mission Bay with Perez Cove and the SeaWorld Marina as part of the water view. The lower, approximately 45 feet of future development associated with buildout of the SeaWorld Master Plan Update would, for most part, be screened by existing trees and theme park development. The lower elevations (about 60 feet) of the Future Hotel would also be screened by the Hubbs Research facility and tall pine trees. However, the upper elevations of the Future Hotel, as well as future Tier 2 projects would be very prominent visual elements in the view due primarily to their height above 60 feet.

Figure 4.2-36 illustrates KVP 22 located at Nipoma Place, which from this location, shows that the potential building envelopes associated with the Master Plan Update would introduce a major visual element in the midground/background part of the view. However all of the building envelopes would be backdropped by existing development on the northerly Pacific Beach and westerly Clairemont hillsides. Within the proposed Master Plan Update only the upper approximately 30 feet of the future hotel (90 feet high) and Site F-2 (100 feet high) would be visible due to screening by existing trees, while in the central and eastern parts of the leasehold the building envelopes would be more visible, since there are less trees to screen the lower parts of the building envelopes, and also in this area portions of the building envelopes are 160 feet high.

KVP 23, located on Illion Street (See Figure 4.2-37), depicts a southwesterly view, where the building envelopes of the Master Plan Update would be a major new visual element in the background view from this location. Nearly all of the building envelopes would be backdropped, however the very upper portions (from about 130 to 160 feet) of four building envelopes would be silhouetted against the sky. From this location, existing trees would screen the lower half of the future hotel, while only the very lowest parts of some of the Theme Park building envelopes would be screened by existing trees from this location.

Finally to provide an understanding of how the SeaWorld Master Plan Update building envelopes relate to future development projects, a photosimulation is included which illustrates the building envelope for the Splashdown Ride and beneath it the Splashdown Ride photosimulation, with an outline of the building envelope around it (Figure 4.2-38). This photosimulation shows that, in this case, the proposed Splashdown Ride has used very little of the building envelope. Therefore, the maximum potential building mass associated with the Splashdown Ride building envelope illustrates a much greater visual impact than the proposed project. While the photosimulations for the Tier 2 projects building envelopes have been illustrated as a worst-case analysis, the illustration showing the comparison of the Splashdown Ride to its building envelope is the more likely case for future project development of Tier 2 projects.

Conclusions

In conclusion, the project would result in the partial obstruction of public viewing areas within Mission Bay Park. The project would also introduce new taller structural elements in Mission Bay Park that are somewhat similar to some taller elements in Mission Bay Park, however, the future development would be regulated by the SeaWorld Master Plan Update Design Guidelines which would require landscaping, color and light design. Although Mission Bay Park includes structures that are tall and bulky, the buildout of the Master Plan would result in additional structures that could be bulky, large-scale and a style that would generally be incompatible with surrounding park uses. Finally, with buildout of the Master Plan Update, the project would result in substantial alteration of the existing visual character of the southern part of Mission Bay Park.

4.2.4 Significance of Impacts

Tier 1 Projects

The Splashdown Ride would result in a significant visual impact based on the 95 height of the tallest structure and the combined visual mass of the tower components.

SeaWorld Master Plan Update

The proposed Master Plan Update Tier 1, Tier 2 and Special projects would result in a significant visual quality impact because of the potential extensive visual mass and visibility of future development above 60 feet in height in Mission Bay Park.

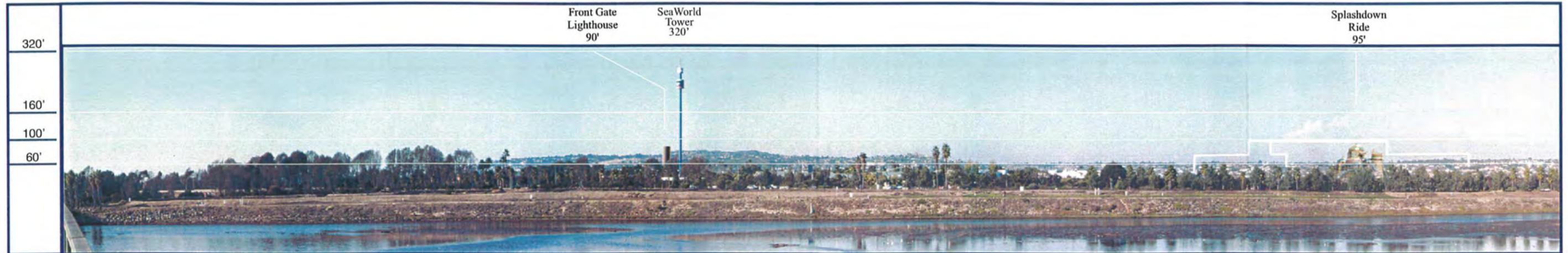
4.2.5 Mitigation Monitoring and Reporting

Tier 1 Projects

The Splashdown Ride would result in a significant visual impact, which would be lessened by the following measures that are proposed by the applicant. These measures include:

Mitigation Measure 4.2-1: Prior to development the applicant will prepare and implement a site plan for the project, which complies with the Master Plan Update landscape buffer and bulk/plane setbacks. The site plan will also adhere to the Master Plan Update Design Guidelines that pertain to landscaping, lighting, signs and architectural guidelines, which are generally described in the Section 3.4.1, Master Plan Policies and Regulations.

The above measure would lessen but not fully mitigate the visual impact associated with the Splashdown Ride. Reducing the height of the Splashdown Ride would be the only measure, which would reduce the visual quality impact to below a level of significance. This measure is addressed as a project alternative in the Chapter 9, Project Alternatives.



*Education Facility 45'
is obscured by
existing landscaping*

*Special Events Center
buildings 40' are obscured
by existing landscaping*

Source: SeaWorld
Date: January 2001

Photosimulation of the Splashdown Ride in Comparison to the Building Envelope
From West Mission Bay Bridge (KVP 3)

Figure 4.2-38

SeaWorld Master Plan Update

Buildout of the SeaWorld Master would result in a significant visual quality impact, which would be lessened by the following mitigation measures that are proposed by the applicant.

Mitigation Measure 4.2-2: Prior to each future development, the applicant will prepare and implement a site plan for the project, which complies with the Master Plan Update landscape buffer and bulk/plane setbacks. The site plan will also adhere to the Master Plan Update Design Guidelines that pertain to landscaping, lighting, signs and architectural guidelines, which are generally described in the Section 3.4.1, Master Plan Policies and Regulations.

The above measure would lessen but not fully mitigate the visual impact associated with buildout of the Master Plan. Reducing the height of Tier 2 projects and the Future Hotel would be the only measure, which would reduce the visual quality impact to below a level of significance. This measure is addressed as a project alternative in the Chapter 9, Project Alternatives.

Section 101 - Water Quality

Section 101 of the Clean Water Act (CWA) requires that all discharges of pollutants into navigable waters be authorized by the National Pollutant Discharge Elimination System (NPDES) permit program. The permit program is administered by the EPA and the states.

Under the CWA, the permit program is designed to ensure that the quality of the nation's waters is protected and improved. The permit program requires that all dischargers obtain a permit that specifies the amount and type of pollutants that can be discharged into the water. The permit also requires that the discharger monitor the quality of the water and report any violations to the EPA or the state.

The permit program is a key component of the CWA. It is designed to ensure that the quality of the nation's waters is protected and improved. The permit program requires that all dischargers obtain a permit that specifies the amount and type of pollutants that can be discharged into the water. The permit also requires that the discharger monitor the quality of the water and report any violations to the EPA or the state.

4.3 Light, Glare and Shading

4.3.1 Existing Conditions

Definitions

Light and glare levels are normally measured in units known as foot-candles. For reference purposes, Table 4.3-1 presents examples of different lighting levels to serve as a point of reference for the following discussion. Light levels cover a relatively wide range due to the variation typically associated with the activities.

**TABLE 4.3-1
Typical Light Levels**

Light Source	Luminance (horizontal foot-candles)
Full Moon	0.05 to 0.10
Typical Downtown Parking Lot	0.25 to 2.00
Street Lights - Urban	0.25 to 3.00
Street Lights - Residential Neighborhoods	0.00 to 0.25
Office/Classroom	30 to 75
Professional Baseball Field	250 to 300
Sunny Day	3,000 to 10,000

In addition, the dispersion of light into the surrounding area is commonly referred to as light pollution which can be further separated into spill light and glare. Impacts from spill light are normally related to interruption of sleep but may also interfere with other light-sensitive uses such as driving or theater performances. Glare results from a direct line of sight to a light source and the reflection from a light source. Glare can be disabling to motorists and patrons walking in and near SeaWorld. The effect of light is often determined by the contrast posed with the immediate background. Spill light can be a nuisance and glare can be disabling.

Current Lighting Conditions

Lighting in the SeaWorld leasehold and the surrounding area typically comes from three sources: street lights, building security lights, and decorative building lights. The standard streetlight in the area is approximately 12 feet tall and uses a 150-watt, high-pressure sodium (HPS) lamp in a decorative globe without shielding. Building security lights are mounted on buildings to provide security lighting and parking lot lighting in the form of floodlights.

Lighting Regulations

Lighting associated with SeaWorld is controlled by the City of San Diego's Light Pollution Law (Sections 101.1300 - 101.1309 of the Municipal Code) and guided by the Mission Bay Park Master Plan Update Design Guidelines and the SeaWorld Design Guidelines.

City of San Diego Municipal Code Light Pollution Law

The City's Light Pollution Law is intended to protect surrounding land uses as well as astronomical activities at the Palomar and Mt. Laguna observatories from excessive light generated by new development. The Light Pollution Law requires that outdoor light fixtures associated with new commercial, industrial or multi-family development comply with the following:

1. Where color rendition is required for commercial and industrial purposes, such as in sales, assembly and repair areas, the outdoor lighting fixtures shall be shielded, be equipped with automatic timing devices and utilize only the minimum amount of light necessary;
2. Where used for security purposes or to illuminate walkways, roadways, equipment yards and parking lots, only shielded low-pressure sodium outdoor light fixtures shall be utilized;
3. Where used for on or off premises signs or for decorative effects or recreation facilities, such as for building, landscape or ballfield illumination, the outdoor light fixtures shall be equipped with automatic timing devices and where feasible, be shielded and/or focused (aimed) to minimize light pollution;
4. All outdoor light fixtures, existing or hereafter installed and maintained on private property within commercial, industrial and multi-family zones, shall be turned off between 11:00 PM and sunrise except when used for:
 - commercial and industrial uses, such as in sales, assembly and repair areas, where such use continues after 11:00 PM but only for so long as such use continues;
 - security purposes or to illuminate walkways, roadways, equipment yards and parking lots; and
 - recreation use that continues after 11:00 PM but only for so long as such use continues.
5. All illuminated on premises signs and search lighting for advertising purposes shall be turned off between 11:00 PM and sunrise, except that on premises signs may be illuminated while the business facility on the premises is open to the public. All illuminated off premises signs shall be turned off between 12:00 midnight and sunrise.

Mission Bay Park Master Plan Update Design Guidelines

The Mission Bay Park Master Plan Update Design Guidelines address Parking and Path Lighting and Lighting Standards. The Guidelines state, "Lighting in the Park serves two functions, security and nighttime use." The Plan states that both parking areas and Park paths should receive continuous nighttime lighting for security and nighttime use. However, parking area lighting should be limited to that area closest to the water to provide residual illumination into parkland or beach areas. The Lighting Standards indicate that the lighting should be provided by cut-off, non-glare fixtures. The height of light fixtures shall be 12 to 15 feet above the adjacent path surface. Where a path fronts residential and/or resort hotel areas, bollard lighting 2.5 to 3.5 feet in height should be used so as not to affect the nighttime view of the Bay from residences and guest rooms. The minimum level of illumination should be one-half foot-candle at the ground surface and the uniformity ratio should be no greater than four to one within the paved area. Lastly, the Guidelines state that ambient light supplied by surrounding buildings should be considered when determining the lighting requirements for the Park.

Shading

Shading from structures is a function of the location and dimensions of structures, the presentation of the earth's surface to the sun relative to the earth's axis, and the sun's position in the sky as perceived from the earth. The sun's position in the sky changes as the seasons progress from summer to winter in both the northern and southern hemisphere. These factors influence the length and position of shadows. During any season, the sun is in its most nearly vertical position, relative to the earth's surface, at approximately 12 o'clock noon. This is when shadows are the shortest.

On June 21 in the northern hemisphere (summer solstice), the sun appears to be highest in the sky and shadows are the shortest. As winter approaches, the sun's angle relative to the earth's horizon changes and shadow lengths become longer. On December 21 in the northern hemisphere (winter solstice), the sun appears to be lowest in the sky, and shadows are greatest. Sun and shadow conditions for the project during the summer and winter solstices are as follows:

Sunrise:	June 21	28 degrees north of due east
Sunset:	June 21	28 degrees north of due west
Sunrise:	December 21	28 degrees south of due east
Sunset:	December 21	28 degrees south of due west

At noon on June 21, the sun is 81 degrees above the south horizon. At noon on December 21, the sun is 34 degrees above the south horizon.

Shadows can also be affected by local topography (i.e., slope of the land). On the west coast in the northern hemisphere, the sun casts its rays from the southern sky. Consequently, land which slopes downward away from the sun (i.e., land sloping to the north) has the effect of lengthening the shadows of objects to the south, compared to level terrain. Land which slopes to the south has the opposite effect, shortening shadows.

4.3.2 Significance Criteria

For purposes of this EIR, light, glare, and shading impacts would be significant if the proposed project would:

1. Substantially increase glare on nearby roadways or intersections;
2. Substantially impact astronomical operations at regional observatories,
3. Create excessive light and glare impacts to offsite viewers, including motorists, or
4. Shade more than 50 percent of a park or open space area for more than one hour between 11 AM and 2 PM

4.3.3 Impact

Issue 1: Would the proposal result in substantial light, glare, or shading?

Light

SeaWorld Design Guidelines

In addition to conforming with the Municipal Code and Mission Bay Master Plan, the SeaWorld Master Plan Update includes design guidelines which were created to enhance function, safety, and aesthetics within the parking and activity areas of SeaWorld. These guidelines indicate that adequate lighting is necessary in SeaWorld, however it would be balanced with considerations for sensitive habitats in Mission Bay and neighboring park and community uses. The SeaWorld Master Plan states that all outdoor light fixtures associated with new development must adhere to the following guidelines:

1. Lighting shall provide a desirable level of illumination to promote safety for pedestrians and vehicles;
2. Lighting should be directed to use areas and not spill over into areas adjacent to SeaWorld;
3. Parking lot lighting shall be directed downwards and designed in conformance with City standards;
4. Lighting shall be used to accentuate architectural features and landscaping and provide ambient lighting for pedestrian areas;
5. Accent lighting of buildings and structures over 30 feet in height shall be located to minimize glare and spillover outside the leasehold;
6. Accent and decorative lighting shall avoid excessive illumination and use of multiple colors;

7. Theme park attraction and ride lighting may be used to enhance the design theme and accentuate the sculptural aspects of the structure. "Carnival" style lighting with excessive illumination, colors and motion is not permitted;
8. Holiday seasonal lighting is permitted in conformance with City Standards;
9. The use of search lights, lasers and moving lighting shall be limited to special events and used in conformance with City Standards;
10. All lighting should be of type that conserves energy. Where feasible, functional and aesthetic lighting shall be combined to reduce energy costs and avoid over-illumination; and
11. Sign lighting shall be illuminated from the exterior and on the sign face only.

Tier 1 Projects

All Tier 1 Projects would incorporate lighting that would adhere to the City of San Diego Municipal Code, the Mission Bay Park Master Plan Update Design Guidelines, and the SeaWorld Design Guidelines. The lighting design guidelines indicate that future SeaWorld development projects would not be designed to attract public attention outside of the SeaWorld leasehold. The proposed Splashdown Ride attraction would include low-level lighting that would enhance and accentuate the design of the attraction. Consistent with the SeaWorld Design Guidelines, "carnival" style lighting consisting of excessive illumination, colors, or motion would not be permitted. Furthermore, search lights, lasers and moving lighting would only be allowed for special events, which demonstrates that as part of SeaWorlds regular operation, lighting would not be used to attract public attention outside the leasehold. Lighting associated with the proposed Educational Facility and Special Events Center Expansion, would be designed to accentuate architectural features and provide adequate ambient lighting while minimizing spillover and glare. In addition, these buildings at a maximum height of 45 feet would not be high enough to be noticeable visible outside the SeaWorld leasehold. See Section 4.2, Neighborhood Character/Aesthetics for more information regarding the visibility of these Tier 1 projects. The Front Gate Renovation would incorporate lighting that would provide a desirable level of illumination to promote pedestrian and vehicular safety without the use of excessive illumination. It could however, include a lighthouse that would be up to 90 feet in height. Lighting of this structure would follow the design guidelines using only uplighting. Therefore lighting and glare associated with Tier 1 projects would not result in a significant impact.

Tier 2 Projects

As with the Tier 1 Projects, Tier 2 projects would incorporate lighting in conformance with the Municipal Code, the Mission Bay Park Design Guidelines, and SeaWorld Design Guidelines. Adherence to these standards would ensure significant light impacts would not occur.

Special Projects

The Future Hotel, Parking Garage, and Marina Expansion projects would all adhere to the applicable standards and guidelines regulating lighting. The upper level of the parking garage

could potentially create lighting, which would illuminate surrounding areas. However, lighting criteria specified in the SeaWorld Design Guidelines require the use of directional lighting to minimize spillover into surrounding areas. Lighting along pathways adjacent to the proposed Future Hotel could potentially affect nighttime views of Mission Bay from guest rooms. This is highly unlikely, as lighting standards in the Mission Bay Master Plan Update require the use of bollard lights along Park pathways fronting hotels. Similarly, any lighting associated with the proposed Marina Expansion would incorporate specific lighting criteria as to not affect Perez Cove. Adherence to the lighting design guidelines would ensure that the proposed Special Projects would not result in significant impacts associated with lighting.

Glare

The glare impacts on surrounding roadways resulting from the reflection of natural or artificial light off structural façades could represent a significant safety impact to persons operating motor vehicles. Similarly, pedestrians in and around SeaWorld as well as bicyclists could potentially be impacted. However, potential glare impacts to offsite motorists and pedestrians in and around SeaWorld would be highly unlikely as non-glare building materials and directional lighting in accordance with the Sea World Design Guidelines would be incorporated into the design of any new development within SeaWorld. As with lighting, glare would be minimized through implementation of glare control techniques required by the Municipal Code, Mission Bay Park Master Plan Update Design Guidelines, and SeaWorld Design Guidelines. Tier 1, Tier 2, and Special Projects would comply with the standards and guidelines set forth in the aforementioned guidelines to ensure significant glare impacts to Mission Bay, the surrounding road network, and other adjacent uses would not occur.

Shading

A shadow analysis was conducted for the Tier 1, Tier 2 and Special Projects that could result in a shadow either on Mission Bay, including Perez Cove, South Pacific Passage and the Waterfront Stadium Lagoon, or on adjacent uses including South Shores Park. The concern with respect to shadows on Mission Bay is potential impacts to eelgrass beds, while the concern for adjacent uses is a shadow impact on a public park. The proposed Splashdown Ride is the only Tier 1 project that could potentially create a shadow impact on Mission Bay or South Shores Park. Of the eight Tier 2 project areas, only sites F-2, E-2, G-2, K-2, and I-2 could potentially create a shadow impact on the Bay or South Shores Park. Lastly, the Marina Expansion and Future Hotel Special Projects could potentially create similar shadow impacts. Other Tier 1, Tier 2, and Special Projects would cast shadows within the SeaWorld leasehold and therefore, were not analyzed.

To assess the shadow effect of the proposed project on adjacent areas, shadow lengths were determined through the use of the 3D Studio MAX, Release 3 computer program. The shadows were developed for the dates listed below, which include the summer and winter solstices. For each date, the shadow was determined for 10:00 AM, 1:00 PM, and 4:00 PM

- April 15;
- June 21, Summer Solstice;
- August 15;
- October 15; and
- December 21, Winter Solstice.

The results of the shadow analysis are displayed in Figures 4.3-1, 2, 3, 4 and 5. The results of the shadow effect on eelgrass are discussed in Section 4.6, Biological Resources, which identified significant shading impacts to this marine biological resource.

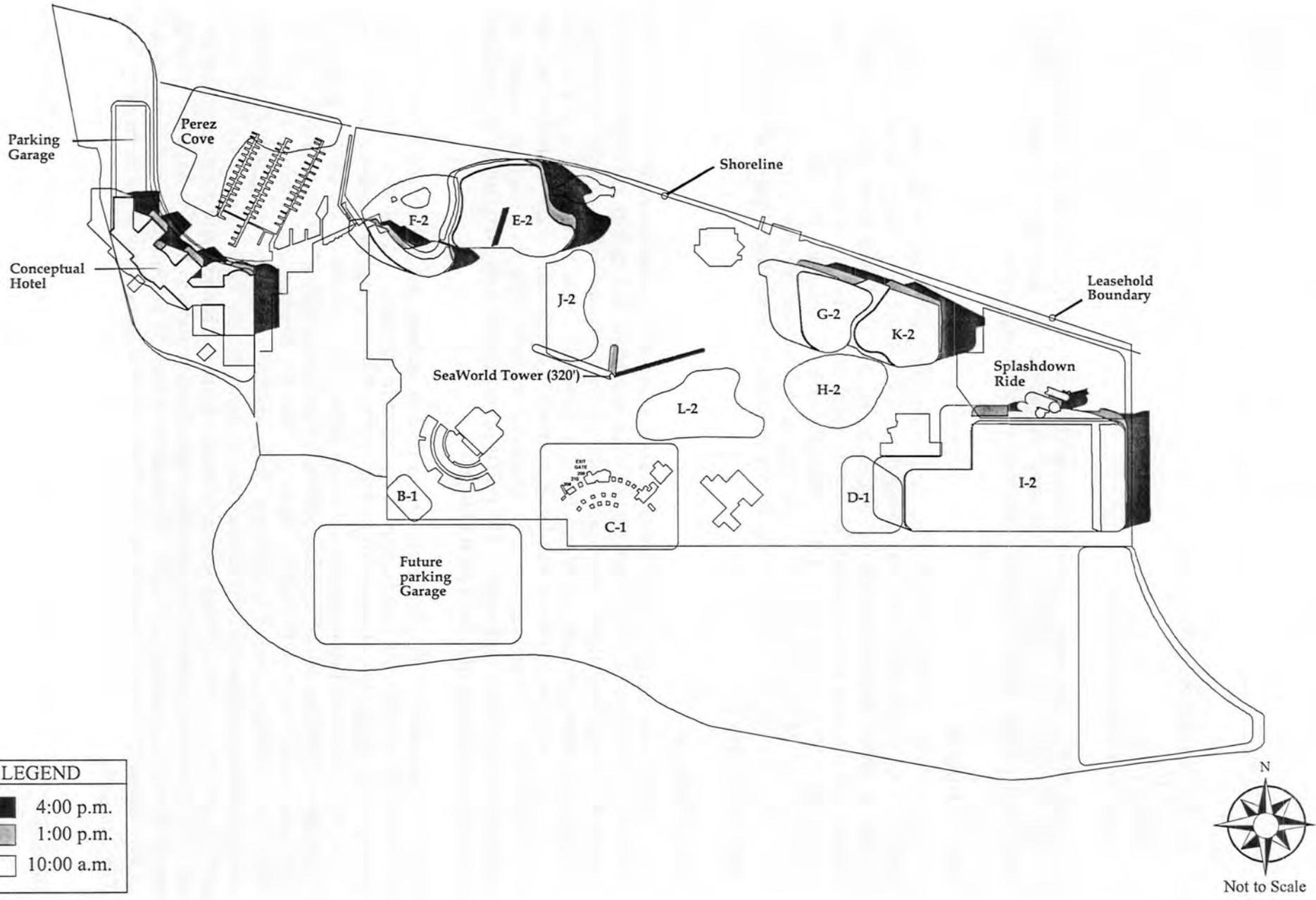
Tier 1 Projects

The shadow analysis was conducted by first determining the shape of the various project elements. As mentioned earlier, the Splashdown Ride is the only Tier 1 project with the potential to create shadow impacts on adjacent areas. For the Splashdown ride, the shadow analysis used the three tower elements since they might cast a shadow on Mission Bay or South Shores Park. As shown on Figures 4.3-1 through 4.3-5, the analysis concluded that shadows associated with the Splashdown Ride would not extend either onto Mission Bay or South Shores Park. Thus, no significant shadow impacts would occur resulting from Splashdown Ride and other Tier 1 projects.

Tier 2 Projects

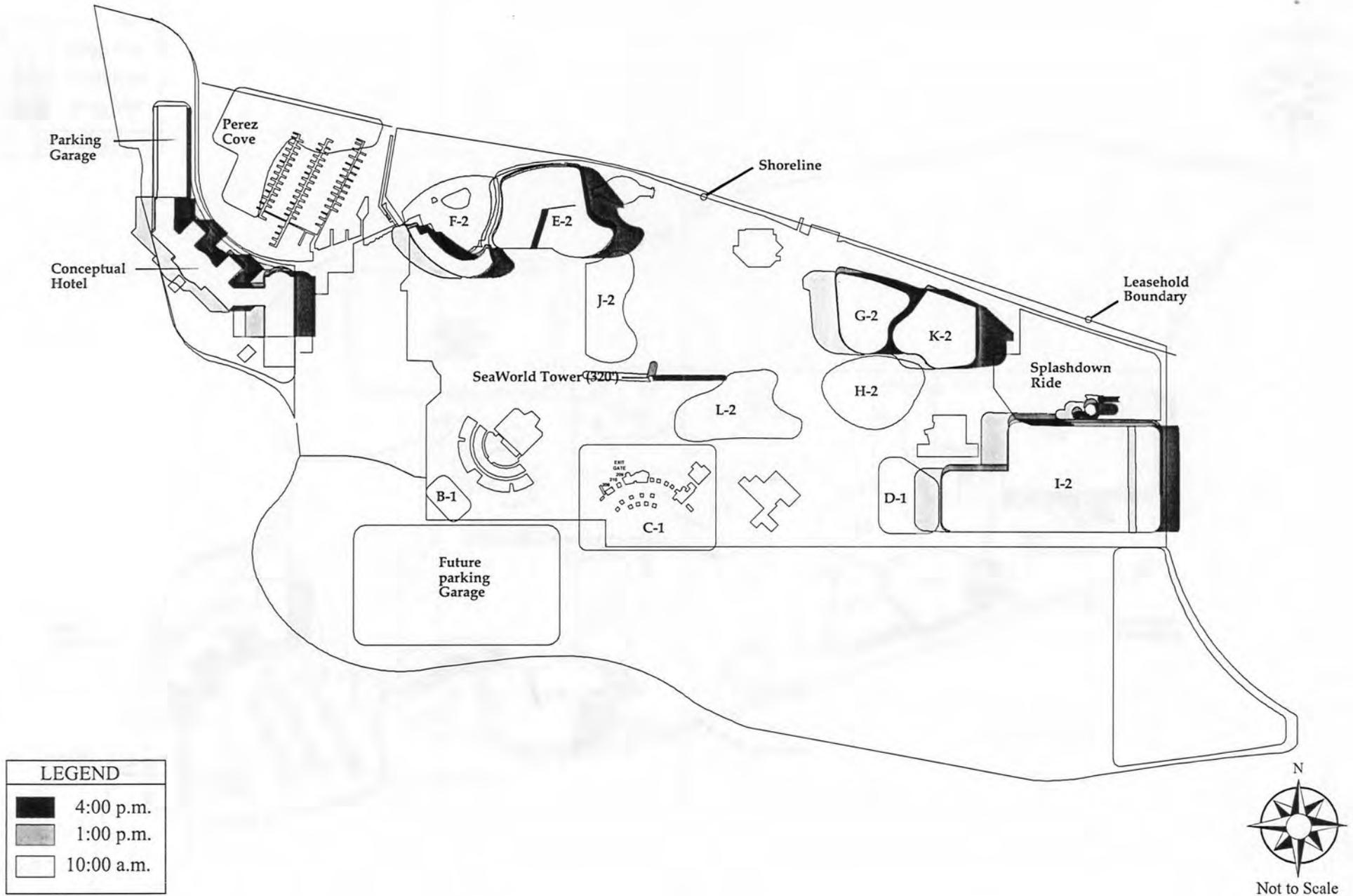
Tier 2 project areas were evaluated based on a maximum development envelope that would be allowed by the SeaWorld Master Plan Update. The maximum development envelopes took into account the bulk plane setback, shoreline setback and the landscape buffer, as well as the height limitations on future development within Tier 2 project areas. Sites F-2, E-2, G-2, and K-2 are the Tier 2 project areas closest to Mission Bay, which could potentially create shadow impacts on Mission Bay. These shadows were developed to assist with the biological analysis of potential shadow effects on eelgrass. The results of the analysis concerning impacts on eelgrass are discussed in Section 4.6, Biological Resources.

Due to its proximity to South Shores Park, a shadow analysis was determined for site I-2 to determine the potential for shadow impacts on adjacent parkland. As shown on Figures 4.3-1 through 4.3-5, during late afternoon (from 1:00 PM to 4:00 PM) shadows would extend beyond the SeaWorld leasehold onto a portion of South Shores Park. However, the affected portion of South Shores Park consists of a surface parking lot associated with a boat launch ramp. Passive parklands would not be affected by shadows from the development envelope on site I-2. Moreover, the affected area of South Shores Park would be minimal, occurring only during mid-afternoon to late afternoon in the summertime as shown for the shadows on April 15, June 21 and August 15th. In the fall and wintertime these afternoon shadows would extend further into the parking lot area, a time of the year when there are less visitors to Mission Bay Park. Finally, the shadow on the parking lot would not exceed more than 50 percent of the park area between 11:00 AM and 2:00 PM. Therefore, no significant shadow impacts would occur resulting from Tier 2 projects.



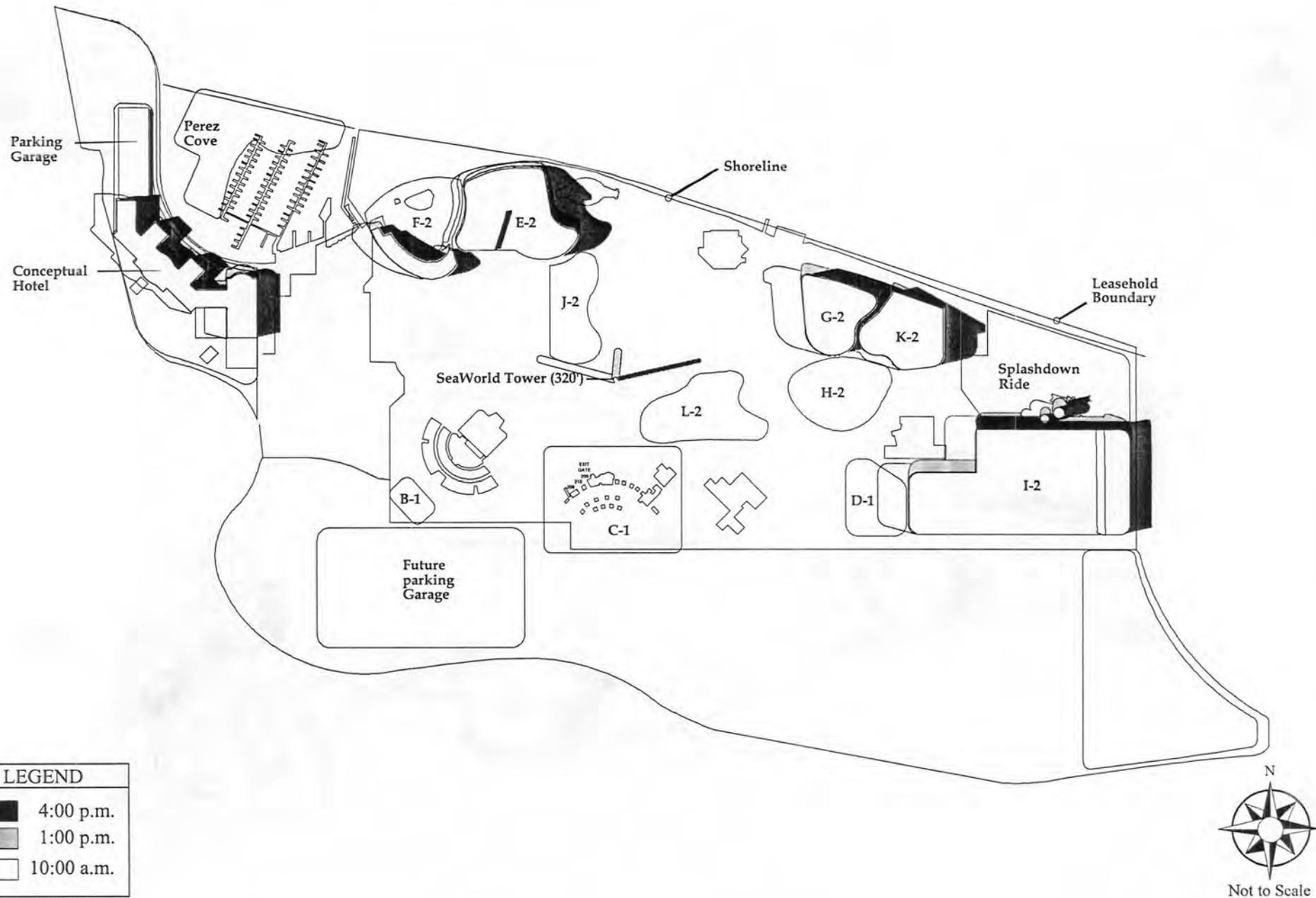
Shadow Analysis for April 21

Figure 4.3-1



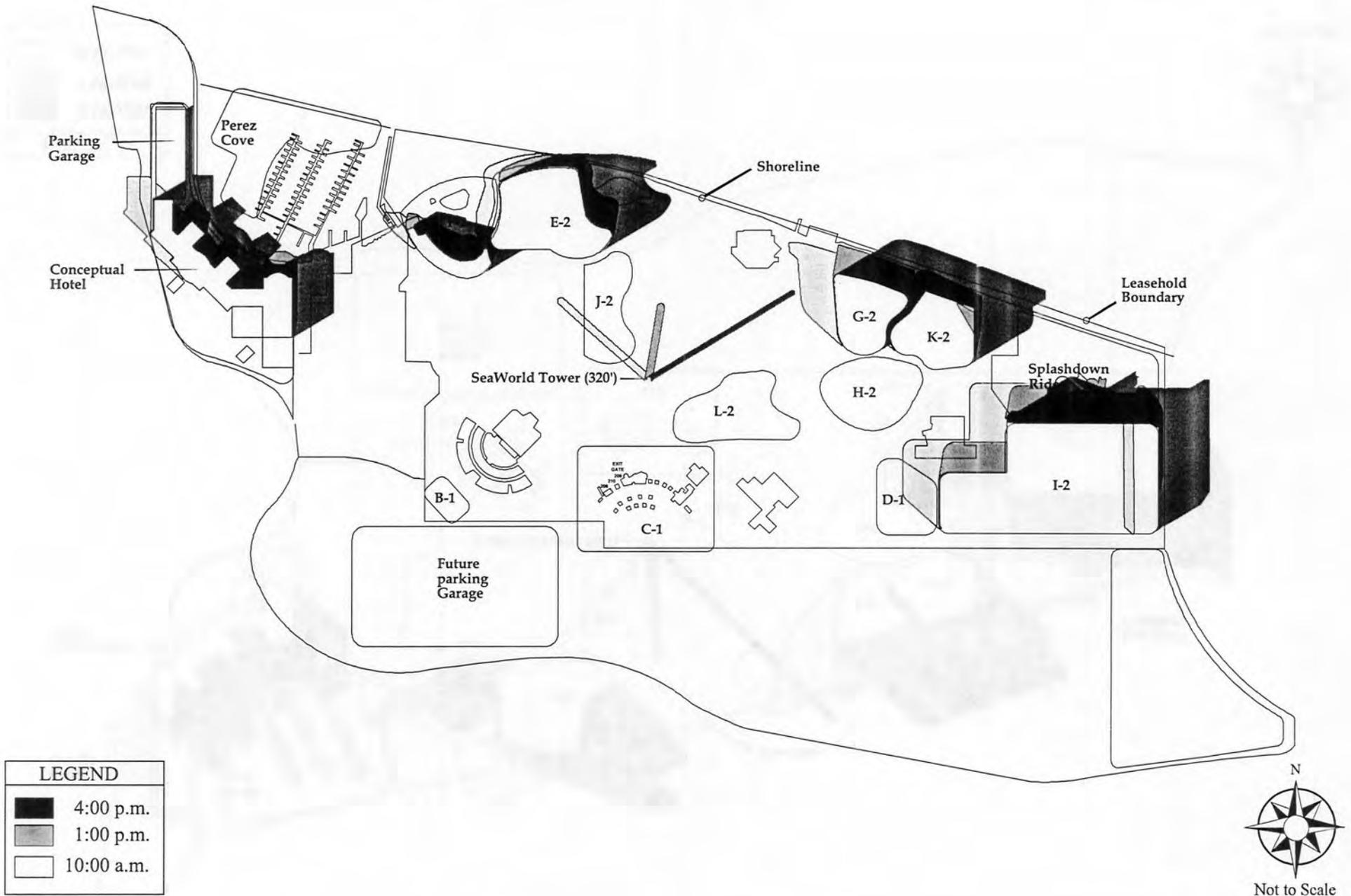
Shadow Analysis for June 21

Figure 4.3-2



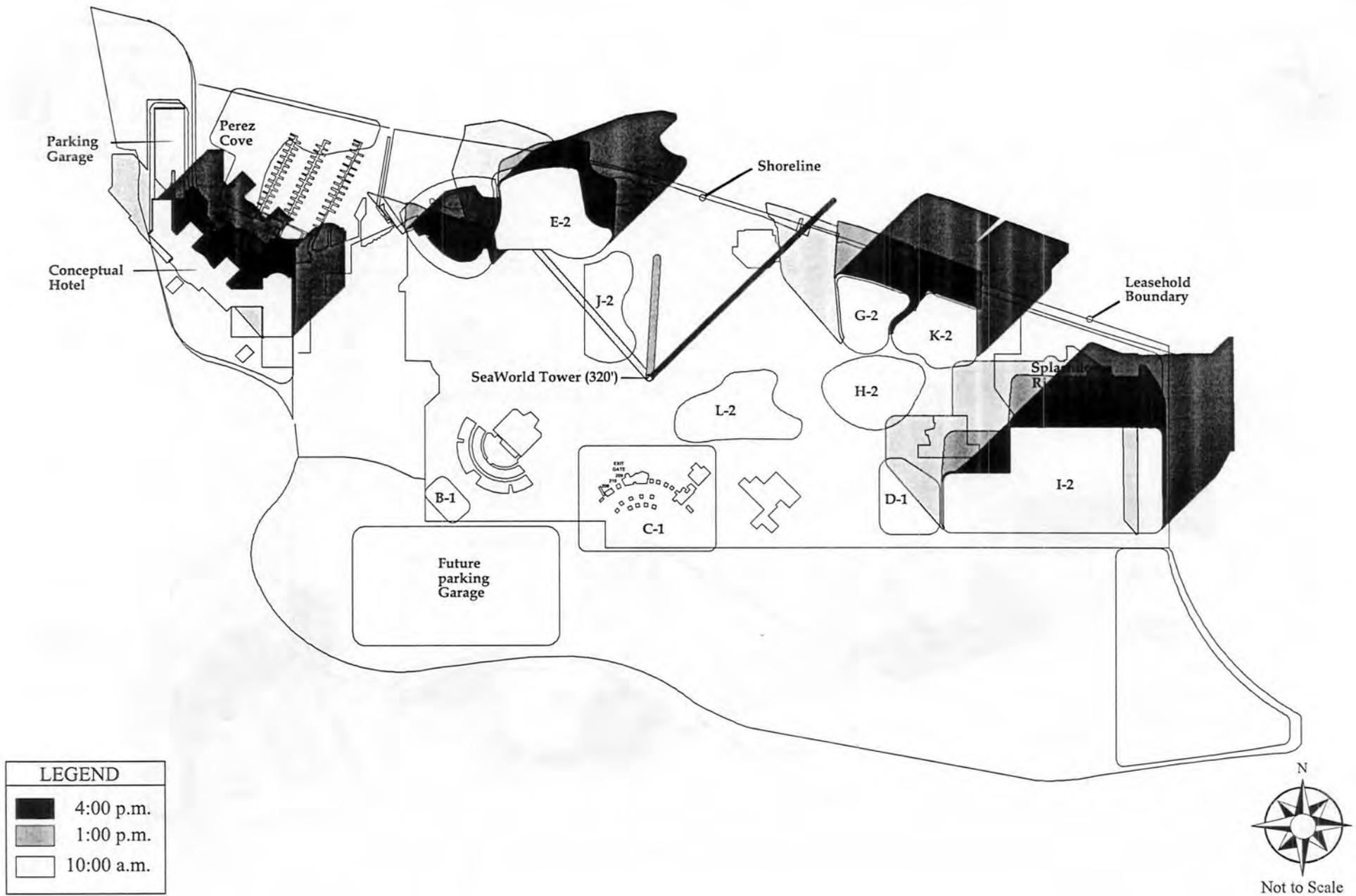
Shadow Analysis for August 15

Figure 4.3-3



Shadow Analysis for October 15

Figure 4.3-4



Shadow Analysis for December 21

Figure 4.3-5

Special Projects

The proposed Marina Expansion and Future Hotel are the only Special projects that could potentially create shadow impacts on adjacent areas. For the Marina Expansion, the shadow area was based on the proposed docks and slips, which assumed that all slips would house boats all the time. The Future Hotel assumed a maximum height of 90 feet for the development footprint shown on the Hotel Conceptual Plan and 14 feet for the one-level parking garage that is part of the Hotel project. The landing dock, which is also a part of the Future Hotel, was included as a shadow producing structure; while no shadow for boats tied up to this dock was determined, because of the transient nature of boats using this facility. As illustrated in Figures 4.3-1 through 4.3-5, the Future Hotel would cast a shadow onto the adjacent roadway, Perez Cove Way during the morning hours, and onto Perez Cove during the late afternoon hours. Shading onto Perez Cove Way would not result in significant impacts. Impacts associated with shading onto Perez Cove from the Marina Expansion and Future Hotel are discussed in Section 4.6, Biological Resources, which identified significant shading impacts to eelgrass.

4.3.4 Significance of Impact

Implementation of the design guidelines contained in the SeaWorld Master Plan Update Design Guidelines and the Mission Bay Park Master Plan Update Design Guidelines as well as the Light Pollution Law within the San Diego Municipal Code would result in less than significant impacts resulting from lighting and glare. A shadow analysis was performed to evaluate shading impacts. The analysis concluded that shading impacts would result in less than significant impacts on human activities within SeaWorld and adjacent areas within Mission Bay Park. However significant shading impacts to eelgrass beds are identified in Section 4.6, Biological Resources.

4.3.5 Mitigation, Monitoring and Reporting

Because no significant light, glare or shading impacts were identified no mitigation measures are recommended.

4.4 Transportation and Circulation

A traffic study, *Traffic Impact Analysis, SeaWorld Master Plan Update*, was prepared by Linscott, Law, and Greenspan, and is included in this EIR as Appendix B. In this study, traffic conditions were analyzed for the following scenarios:

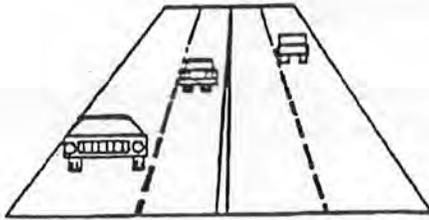
1. Existing Conditions (weekday and weekend day);
2. Near Term (2005) with cumulative projects and without project (weekday only);
3. Near Term (2005) with cumulative projects and with project (weekday only);
4. Buildout (2020) without project (weekday only); and
5. Buildout (2020) with project (weekday only).

4.4.1 Existing Conditions

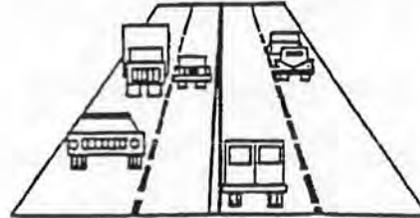
Methodology for Determining Level of Service

Roadway system and intersection operating conditions are typically described in terms of “Level of Service” (LOS). LOS is a qualitative measure of a roadway’s or an intersection’s operating performance and the motorists’ perception of roadway performance. LOS is expressed as a letter designation from A to F, with A representing the best operating conditions, and F the worst (Figure 4.4-1). LOS C is generally considered the acceptable operating condition in newly developing communities; however, LOS D is considered an acceptable operating condition in a more urbanized environment. The City of San Diego considers LOS D an acceptable operating condition in the project vicinity. LOS C is characterized by stable flow and the point at which maneuverability and speed, motorist comfort, and convenience begin to decline noticeably. LOS D is an unstable flow condition, wherein delays become extensive and the effects of congestion on speed and maneuverability become more noticeable. LOS for roadway segments is based on the ratio of the traffic volume to the capacity of the roadway [volume/capacity (V/C)].

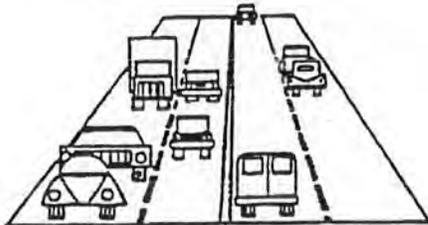
While roadway LOS based on daily traffic volumes is useful in describing traffic operating conditions, roadway performance is most often controlled by the performance of intersections, and more specifically, intersection performance during peak traffic periods. Intersection performance is important because traffic control at intersections interrupts traffic flow, which would otherwise be relatively unimpeded except for the influences of on-street parking, access to adjacent uses or other factors, which result in interaction among vehicles between controlled intersections.



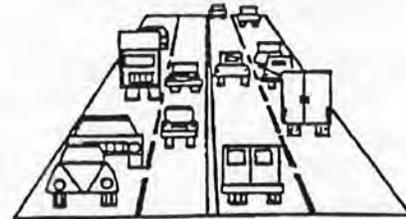
Level of Service A is the highest quality of service a particular class of highway can provide. It is a condition of free flow in which there is little or no restriction of speed or maneuverability caused by the presence of other vehicles. Operating speed is in the highest range and density is low.



Level of Service B is a zone of stable flow. However, operating speed is beginning to be restricted by other traffic. Under freeway conditions the density is low, restriction on maneuverability is negligible, and there is a little probability of major reduction in speed or flow rate. This level of service approximates typical design volumes for high type rural highways including freeways.



Level of Service C is still a zone of stable flow but at this volume and density level, most drivers are becoming restricted in their freedom to select speed, change lanes, or pass. Operating speeds are still in the range of 2/3 to 3/4 maximum. Density is from 30 to 35 vehicles per lane mile on freeways. This service level is generally selected as being an appropriate criterion for design purposes, particularly for urban freeways where the cost of providing the higher service levels during peak periods may be prohibitive.



Level of Service D approaches unstable flow. Tolerable average operating speeds are maintained but are subject to considerable sudden variation. Freedom to maneuver and driving comfort are low because lane density has increased to between 45 and 50 vpm, and the probability of accidents has increased. Most drivers would probably consider this service level unsatisfactory.



The upper limit of **Level of Service E** is the capacity of the facility. Operation in this zone is unstable, speeds and flow rates fluctuate, and there is little independence of speed selection or ability to maneuver. Since headways are short and operating speeds subject to rapid fluctuation, driving comfort is low and accident potential high. Although circumstances may make operation of facilities under these conditions necessary, it is clearly undesirable and should be avoided wherever feasible.



Level of Service F describes forced low operations after density has exceeded optimum which is normally in the range of 70 to 75 vpm on the free flowing facilities. Speed and rate of flow are below the levels attained in the zone E and may, for short time periods, drop to zero.

Source: BRG

The City of San Diego traffic study guidelines require that intersections be analyzed using the Highway Capacity Manual (HCM) methodologies for signalized intersections. The measure of effectiveness for signalized intersections is the average stopped delay in seconds per vehicle. Delay values correspond to LOS A through F. The level of service table from the 1994 HCM for signalized intersections is shown on Table 4.4-1.

TABLE 4.4-1
HCM Signalized Intersection
Level of Service and Stopped Delay Criteria

Signalized Intersection	
Level of Service	Stopped Delay per Vehicle (SEC)
A	≤5.0
B	>5.0 and ≤15.0
C	>15.0 and ≤25.0
D	>25.0 and ≤40.0
E	>40.0 and ≤60.0
F	>60.0

Source: Highway Capacity Manual (October 1994)

Note: Delay is expressed in terms of seconds and represents the average delay for all vehicles entering an intersection during the peak hour.

Congestion Management Program (CMP) Compliance

The San Diego County Congestion Management Program (CMP) was developed in response to California Proposition 111, approved in June 1990, and is intended to directly link land use, transportation, and air quality. Among the elements of the CMP is a land use analysis program, which established an "enhanced CEQA (California Environmental Quality Act) review process" implemented by October 1992. This enhanced CEQA process applies to all discretionary projects that would be expected to generate 2,400 or more daily trips or 200 or more peak hour trips upon completion, and requires a more detailed analysis of regional impacts to state highways and significant regional arterial roadways. The CMP identifies a 687-mile CMP System, which includes those highways that provide the highest level of regional traffic service, serve major regional facilities, and provide significant inter-community traffic service and freeway congestion relief. The proposed project would generate approximately 15,300 weekday daily trips, including 799 trips in the morning peak hour and 1,088 trips in the afternoon peak hour. These traffic volumes would trigger the requirement for a CMP analysis. The CMP has established a minimum level of service standard of LOS E, or LOS F if the 1990 base year is LOS F.

Street Segments

Figure 4.4-2 shows the existing street system and intersections in the project area, while Figure 4.4-3 shows existing weekday traffic volumes. The following paragraphs describe the six major roadways.

Sea World Drive

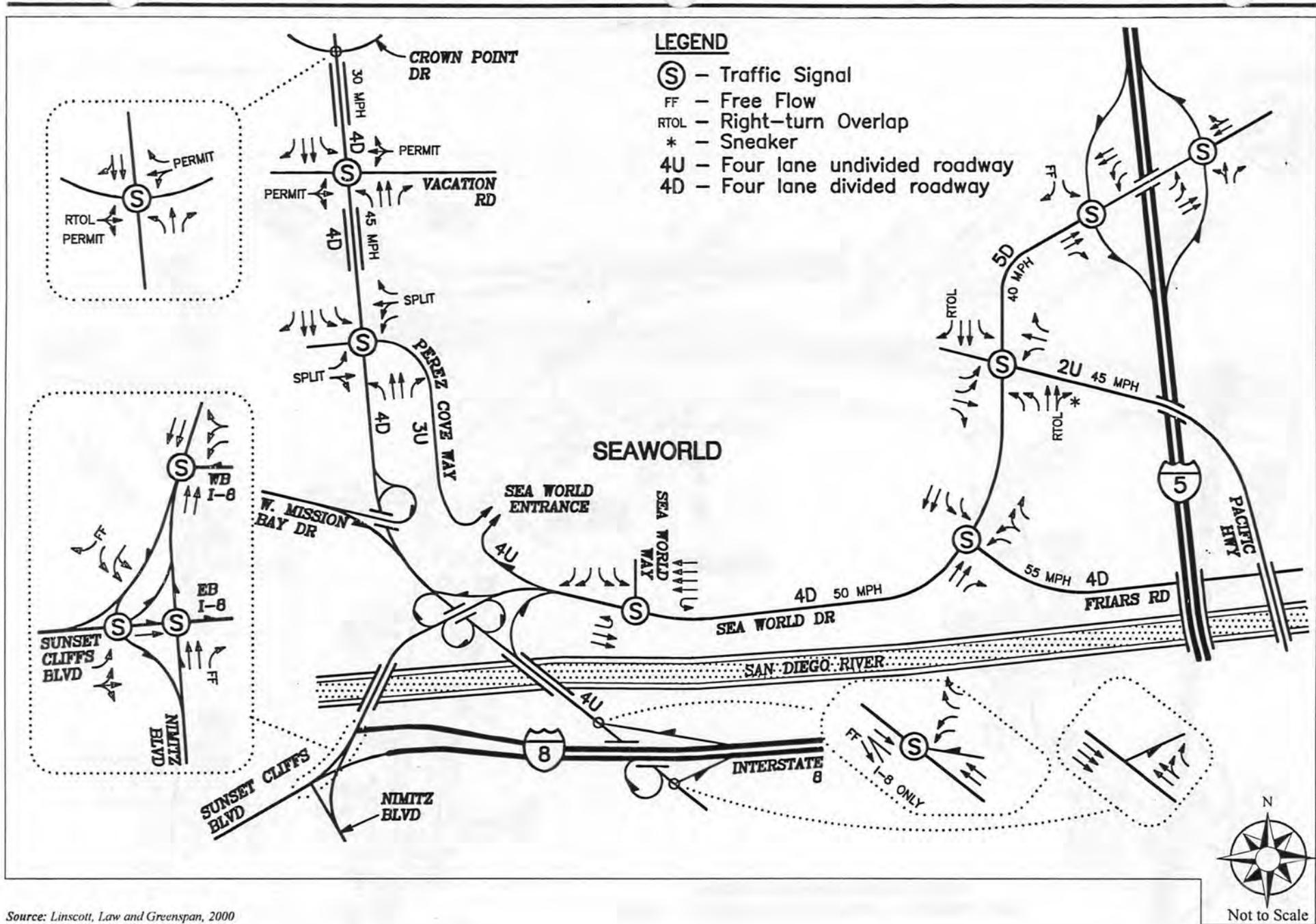
Sea World Drive is classified as a four-lane primary arterial from Interstate 5 (I-5) to West Mission Bay Drive, and continues to be a four-lane primary arterial as it connects to Sunset Cliffs Boulevard. It generally provides two lanes in each direction with a raised median. Parking is prohibited and bike lanes are provided. Signals are located at the I-5 ramps, Pacific Highway, Friars Road, and Sea World Way. Sea World Drive, between Pacific Highway and I-5 operates at an LOS E with a volume of 35,300 vehicles per day. The portion of Sea World Drive between Friars Road and Pacific Highway operates at an LOS E with a volume of 36,420 vehicles per day. The section of Sea World Drive between Sea World Way and Friars Road operates at an LOS E with a volume of 37,750 vehicles per day. Sea World Drive, between Sea World Way and West Mission Bay Drive operates at an LOS E with a volume of 37,900 vehicles per day. Sea World Drive serves Mission Bay Park and provides a commuter link from Mission Beach and Ocean Beach to I-5.

West Mission Bay Drive

West Mission Bay Drive is classified as a four-lane primary arterial within the project area. It provides two travel lanes in each direction. On-street parking is prohibited and bike lanes are provided. West Mission Bay Drive, between Ingraham Street and Dana Landing Road operates at an LOS E with a volume of 37,200 vehicles per day. The portion of West Mission Bay Drive between Sea World Drive and Ingraham Street operates at an LOS F with a volume of 72,400 vehicles per day. The section of West Mission Bay Drive between Interstate 8 (I-8) and Sea World Drive operates at an LOS F with a volume of 56,400 vehicles per day. West Mission Bay Drive, between I-8 and Sports Arena Boulevard operates at an LOS E with a volume of 35,200 vehicles per day. West Mission Bay Drive serves Mission Bay Park as well as a commuter link from Mission Beach to I-8 and I-5.

Ingraham Street

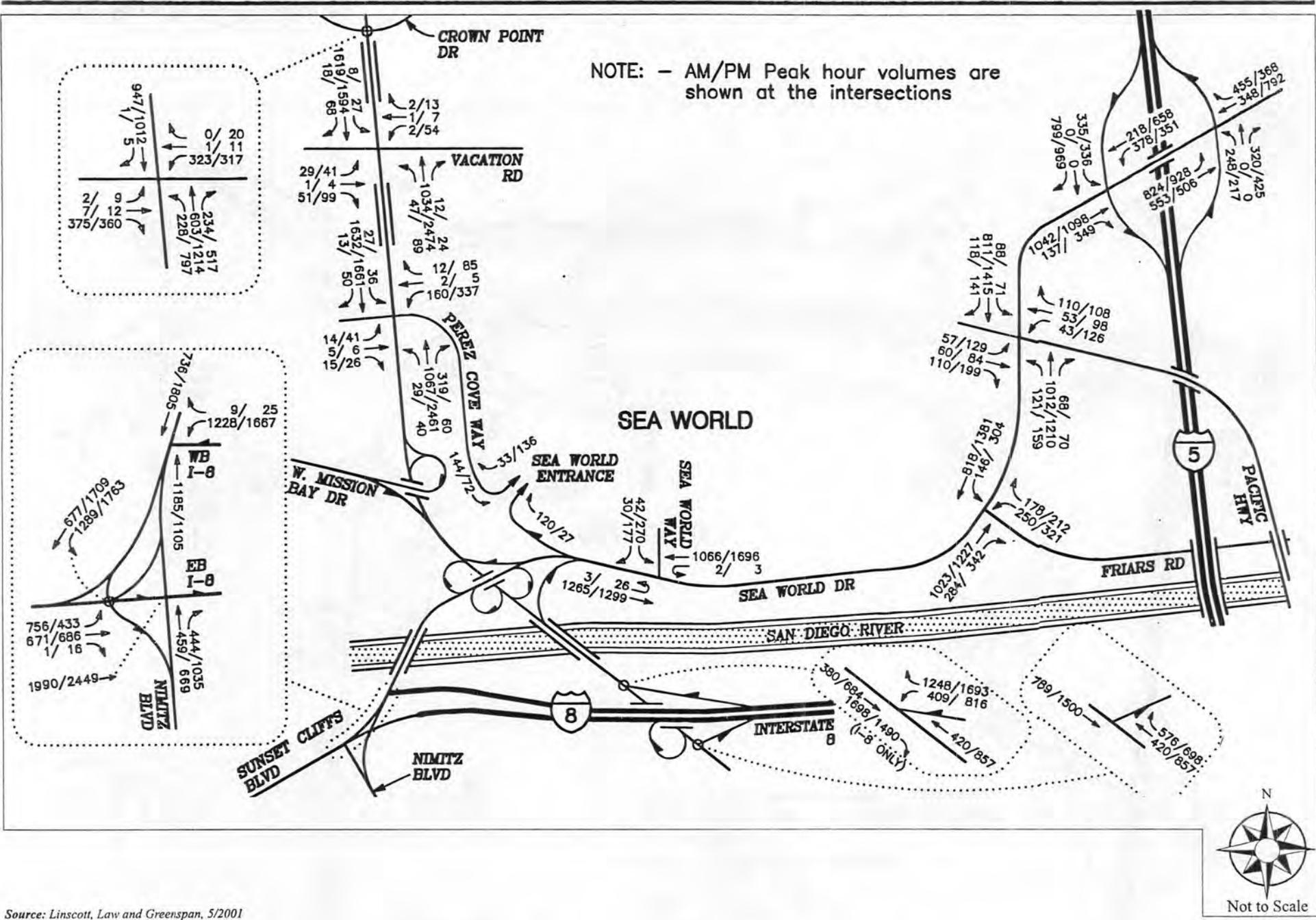
Ingraham Street is classified as a four-lane primary arterial within the project area. It is signalized at its intersection with Perez Cove Way and on-street parking is prohibited. Ingraham Street, between Vacation Road and Crown Point Drive operates at an LOS F with a volume of 40,170 vehicles per day. The portion of Ingraham Street between Perez Cove Way and Vacation Road operates at an LOS F with a volume of 43,110 vehicles per day. Ingraham Street, between Perez Cove Way and West Mission Bay Drive operates at an LOS F with a volume of 50,300 vehicles per day.



Source: Linscott, Law and Greenspan, 2000

Existing Roadway Network

Figure 4.4-2



Source: Linscott, Law and Greenspan, 5/2001

Existing Street Segment and Intersection Traffic Volumes (Revised) _____ Figure 4.4-3

Perez Cove Way

Perez Cove Way is within the SeaWorld leasehold and is an unclassified roadway and providing access to SeaWorld's main entrance. Perez Cove Way is signalized at its intersection with Ingraham Street. A bike path is located on the southwest side of Perez Cove Way. Perez Cove Way, between Ingraham Street and SeaWorld's main entrance operates at an LOS C with a volume of 8,430 vehicles per day.

Perez Cove Way, between SeaWorld's main entrance and Sea World Drive operates at an LOS A with a volume of 3,140 vehicles per day.

Friars Road

Friars Road is classified as a four-lane major street within the project area. Parking is prohibited and a bike path is provided on the south side of Friars Road. Friars Road is signalized at Sea World Way. Friars Road, between Sea World Drive and Pacific Highway operates at an LOS A with a volume of 11,900 vehicles per day.

Sunset Cliffs Boulevard

Sunset Cliffs Boulevard is classified as a four-lane prime arterial, with two lanes in each direction in the project vicinity. Sunset Cliffs Boulevard, between I-8 and West Mission Bay Drive, operates at an LOS E with a volume of 35,590 vehicles per day. The portion of Sunset Cliffs Boulevard between Nimitz and I-8 operates at an LOS F with a volume of 40,390 vehicles per day.

Street Segments Analysis

Table 4.4-2 lists the existing street segments and provides an analysis of the operations on these street segments based on the roadway ADT. As indicated in Table 4.4-2, a majority of the roadway segments in the vicinity of the proposed project currently operate at LOS E or F. These segments include:

1. Sea World Drive, between Pacific Highway and I-5 (LOS E);
2. Sea World Drive, between Pacific Highway and Friars Road (LOS E);
3. Sea World Drive, between Friars Road and Sea World Way (LOS E);
4. Sea World Drive, between Sea World Way and West Mission Bay Drive (LOS E);
5. West Mission Bay Drive, between Ingraham Street and Dana Landing Road (LOS E);
6. West Mission Bay Drive, between Ingraham Street and Sea World Drive (LOS F);
7. West Mission Bay Drive, between Sea World Drive and I-8 (LOS F);

TABLE 4.4-2
Existing Weekday Street Segment Conditions

Street Segment	Direction	Classification	Total Number of Lanes	Capacity at LOS E	24-Hour Volume (ADT) ¹	LOS
Sea World Drive						
Between Pacific Highway and I-5	EB/WB	Prime Arterial	4	40,000	35,300	E
Between Friars Road and Pacific Highway	EB/WB	Prime Arterial	4	40,000	36,420	E
Between Sea World Way and Friars Road	EB/WB	Prime Arterial	4	40,000	37,750	E
Between Sea World Way and West Mission Bay Drive	EB/WB	Prime Arterial	4	40,000	37,900	E
Friars Road						
Between Sea World Drive and Pacific Highway	EB/WB	Major Street	4	40,000	11,900	A
West Mission Bay Drive						
Between Ingraham Street and Dana Landing Road	NB/SB	Prime Arterial	4	40,000	37,200	E
Between Sea World Drive and Ingraham Street	NB/SB	Prime Arterial	6	60,000	72,400	F
Between I-8 and Sea World Drive	NB/SB	Prime Arterial	4	40,000	56,400	F
Between I-8 and Sports Arena Boulevard	NB/SB	Prime Arterial	4	40,000	35,200	E
Perez Cove Way						
Between Ingraham Street and SeaWorld's Main Entrance	NB/SB	Collector	3	15,000	8,430	C
Between SeaWorld's Main Entrance and West Mission Bay Drive	NB	Collector	3	15,000	3,140	A
Ingraham Street						
Between Vacation Road and Crown Point Drive	NB/SB	Major Arterial	4	40,000	40,170	F
Between Perez Cove Way and Vacation Road	NB/SB	Major Arterial	4	40,000	43,110	F
Between Perez Cove Way and West Mission Bay Drive	NB/SB	Major Arterial	4	40,000	50,300	F
Sunset Cliffs Boulevard						
Between I-8 and West Mission Bay Drive	EB/WB	Prime Arterial	4	40,000	35,950	E
Between Nimitz Boulevard and I-8	NB/SB	Prime Arterial	4	40,000	40,390	F

Source: Linscott Law and Greenspan, 2001.

¹ Southland Car Counters June 19, 2000.

Bold: Does not meet City standard of LOS D or better.

8. West Mission Bay Drive, between I-8 and Sports Arena Boulevard (LOS E);
9. Ingraham Street, between Vacation Road and Crown Point Drive (LOS F);
10. Ingraham Street, between Vacation Road and Perez Cove Way (LOS F);
11. Ingraham Street, between Perez Cove Way and West Mission Bay Drive (LOS F);
12. Sunset Cliffs Boulevard, between I-8 and West Mission Bay Drive (LOS E); and
13. Sunset Cliffs Boulevard, between I-8 and Nimitz Boulevard (LOS F).

Key Intersections

Existing peak hour operating conditions were evaluated at key intersections in the project area. Signalized intersections were analyzed during summer weekday and summer holiday and non-holiday weekend peak hours to evaluate both weekday commuter traffic and weekend visitor traffic, and to determine which resulted in more traffic impacts. Intersection levels of service were analyzed using the 1997 Highway Capacity Manual methodologies.

Weekday Peak Hours

Table 4.4-3 shows the levels of service and delay during the summer weekday peak hours for twelve intersections analyzed for the proposed project. As indicated in the table, summer weekday intersection operations were calculated to currently operate at LOS D or better during both the AM and PM peak hours with the exception of five intersections. These intersections include:

1. Sea World Drive and I-5 northbound ramps (LOS E, PM peak);
2. Ingraham Street and Crown Point Drive (LOS E, PM peak);
3. West Mission Bay Drive and I-8 westbound offramp (LOS F, PM peak);
4. Sunset Cliffs Boulevard and I-8 westbound offramp (LOS F, PM peak); and
5. Nimitz Boulevard and Sunset Cliffs Boulevard (LOS F, AM and PM peaks).

Weekend Peak Hours

Weekend intersection counts were collected to evaluate summer holiday and non-holiday weekend conditions. Summertime is defined as beginning on Memorial Day (late May) and ending on Labor Day (early September). Based on attendance history, Memorial Day, Fourth of July, and Labor Day weekends typically draw the highest daily SeaWorld attendance. Although these periods are seasonal and occur only a limited number of days, traffic counts were conducted on these holiday weekends to characterize worst-case weekend operating conditions. In addition, weekend counts were collected on a summer non-holiday weekend to typify summer

TABLE 4.4-3
Existing Weekday Intersection Operations

Intersection	Period	Existing	
		Delay	LOS
Sea World Drive/I-5 Northbound Ramps	AM	31.4	C
	PM	58.9	E
Sea World Drive/I-5 Southbound Ramps	AM	29.1	C
	PM	25.3	C
Sea World Drive/Pacific Highway	AM	18.4	B
	PM	32.1	C
Sea World Drive/Friars Road	AM	14.6	B
	PM	18.0	B
Sea World Drive/Sea World Way	AM	7.0	A
	PM	13.2	B
Ingraham Street/Crown Point Drive	AM	22.3	C
	PM	61.0	E
Ingraham Street/Vacation Road	AM	11.3	B
	PM	33.7	C
Ingraham Street/Perez Cove Way	AM	17.9	B
	PM	40.0	D
West Mission Bay Drive/I-8 Westbound Offramp	AM	23.2	C
	PM	91.4	F
Sunset Cliffs Boulevard/I-8 Westbound Offramp	AM	30.6	C
	PM	128.9	F
Nimitz Boulevard/I-8 Eastbound Onramp	AM	20.5	C
	PM	24.6	C
Nimitz Boulevard/Sunset Cliffs Boulevard	AM	93.0	F
	PM	136.9	F

Source: Linscott Law & Greenspan, 2001.

Delay: Measured in seconds per vehicle

LOS: Level of Service

Delay: Does not meet City standard of LOS D or better

weekend conditions. The levels of service and delay during weekend peak hours were evaluated for six key intersections near the project area. Based on traffic counts and SeaWorld attendance history, weekend peak hours were defined between 10:00 AM and 12:00 PM in the morning and between 5:00 PM and 7:00 PM in the evening. The analysis concluded that all study intersections were calculated to operate at LOS D or better during the AM and PM peak hour with the exception of Sea World Drive and Interstate 5 northbound ramps, which were calculated to operate at LOS E during the PM peak hour on July 4, 1999.

A comparison between weekday and weekend traffic conditions shows that more intersections operate under lower levels of service during weekdays. The absence of commuter traffic from

surrounding areas accounts for this disparity. Thus, under existing operating conditions, summer weekday traffic during peak hours results in the worst-case traffic conditions.

Freeway Ramp Meters

Analysis of freeway operations included an evaluation of I-5 ramp meters and freeway segments on I-5 and I-8. Ramp meter analysis estimates the peak hour queues and delays at freeway ramps by comparing existing and projected traffic volumes to the meter rate for a given location. Where the demand significantly exceeds the meter rate, long queues and delays occur at affected onramps. Table 4.4-4 provides a summary of the freeway ramp meter delays expected based on analysis for existing weekday conditions. As indicated in the table, the theoretical demand on the I-5 northbound onramp from Sea World Drive during the AM peak hour exceeds the meter rate by 221 vehicles per hour, resulting in a delay of 13 minutes. The average queue length with this delay would be approximately 6,409 feet. This does not compare well with field observations, which indicated a delay of five minutes and a queue of 1,300 feet. The PM peak hour for this onramp would not exceed the meter rate, resulting in no delay or queue.

TABLE 4.4-4
Existing Weekday Onramp Meter Analysis

Location	Peak Hour	Peak Hour Demand D	Flow F	Excess Demand E	Delay (min)	Queue
<i>Observed Conditions</i>						
Sea World Drive/NB I-5	AM	1279	N/A	N/A	5	1300
	PM	1296	N/A	N/A	0	0
SeaWorld Drive/SB I-5 (SOV (1))	AM	464	N/A	N/A	2	150
	PM	0	N/A	N/A	0	0
West Mission Bay Drive/EB I-8	AM	0	N/A	N/A	0	0
	PM	1490	N/A	N/A	5	800
<i>Theoretical Analysis</i>						
Sea World Drive/NB I-5	AM	1279	1058	221	13	6409
	PM	1296	1372	0	0	0
SeaWorld Drive/SB I-5 (SOV) ¹	AM	464	313	151	29	4379
	PM	N/A	N/A	0	0	0
West Mission Bay Drive/EB I-8	AM	N/A	N/A	0	0	0
	PM	1490	1058	432	24	12528
<i>Assuming A 15-Minute Maximum Delay</i>						
Sea World Drive/NB I-5	AM	1279	1058	221	13	6409
	PM	1296	1372	0	0	0
SeaWorld Drive/SB I-5 (SOV (1))	AM	464	371	93	15	2691
	PM	0	0	0	0	0
West Mission Bay Drive/EB I-8	AM	0	0	0	0	0
	PM	1,490	1,192	298	15	8,642

Source: Linscott, Law and Greenspan, 2001.

¹ SOV demand at 90% of total demand and SOV ramp meter rate as specified by Caltrans.

The I-5 southbound onramp from Sea World Drive during the AM peak hour would result in a theoretical demand that would exceed the meter rate by 151 vehicles per hour, resulting in a delay of 29 minutes and a queue of 4,379 feet, approximately three quarters of a mile. This also does not compare well with field observations, which indicated a delay of two minutes and a queue of 150 feet. The PM peak hour would not exceed the meter rate and thus, would not result in delays or queues.

The I-8 eastbound onramp from West Mission Bay Drive during the PM peak hour would result in a theoretical demand that would exceed the meter rate by 432 vehicles per hour, resulting in a delay of 24 minutes and a queue of 12,528 feet. As with the other freeway ramps, this does not compare well with field operations which indicated a delay of five minutes and a queue of 800 feet. The AM peak hour would not exceed the meter rate and therefore, would not result in delays or queues.

Congestion Management Program (CMP)

CMP Arterials

The CMP arterial operating conditions were determined using a peak hour arterial analysis conducted in conformance with the requirements of the San Diego Regional Congestion Management Program. Table 4.4-5 presents the existing weekday arterial level of service.

Sea World Drive is the only identified CMP Arterial that would likely be affected by traffic generated by the proposed project study area. Between Sunset Cliffs Boulevard and I-5, Sea World Drive currently operates at LOS B during the morning peak period for the westbound direction and LOS C during the morning for eastbound direction as well as the afternoon peak hours for both the westbound and eastbound direction.

**TABLE 4.4-5
Existing Weekday CMP Arterial Operations**

Arterial	Peak Period	Direction	Existing	
			Speed (mph)	LOS
Sea World Drive Sunset Cliffs Boulevard to I-5	AM	EB	25.4	C
		WB	32.1	B
	PM	EB	22.3	C
		WB	28.0	C

Source: Linscott Law & Greenspan, 2000.

LOS: Level of Service
EB: Eastbound, etc.

CMP Freeway Segments

Interstate 5 is an eight to ten-lane freeway running in a north-south direction east of the project site. I-5 has onramp and offramp intersections for all directions at Sea World Drive. Interstate 8

is located south of the project and has a westbound offramp and an eastbound onramp at West Mission Bay Drive.

Key CMP freeway segments, including four segments of I-5 and two segments of I-8 were evaluated during weekday AM and PM peak hours in compliance with CMP requirements. As shown in Table 4.4-6, four segments currently operate below LOS D. These segments include:

1. Southbound I-5 north of Sea World Drive (LOS E, PM peak);
2. Northbound I-5 south of Sea World Drive (LOS E, PM peak);
3. Southbound I-5 south of Sea World Drive (LOS E, AM peak); and
4. Eastbound I-8 east of West Mission Bay Drive (LOS F, PM peak).

4.4.2 Significance Criteria

The City of San Diego guidelines provide significance thresholds that are used to determine whether a project would contribute enough traffic to a street segment or intersection to require mitigation measures. Table 4.4-7 lists these significance thresholds for allowable increases in delay, volume-to-capacity ratio, and speed at intersections and roadway sections. The guidelines state that if a project exceeds the thresholds shown in the table, the impacts are considered significant, and improvements would be required to mitigate the project's impact to the level of service of the facility prior to the project's traffic impacts.

The City's current policy for ramp metering impacts indicates that delays of 15 minutes are unacceptable. For any ramp meter where the delay is in excess of 15 minutes, project increases of more than two minutes would be considered direct significant impacts under short-term future conditions. Under long-term future conditions, if the delay without the proposed project is in excess of 15 minutes and the project increases the delay by more than two minutes, the impact would be considered a significant cumulative impact.

For purposes of this EIR, the project would create a direct significant impact on circulation if its traffic would:

1. Cause a delay of two or more seconds at an intersection which is operating at LOS D, E or F;
2. Result in an increase in the volume-to-capacity (v/c) ratio of 0.02 or greater on a freeway or roadway segment which is operating at LOS D, E or F;
3. Increase the wait time of two minutes at a freeway ramp which is already experiencing delays in excess of 15 minutes;
4. Decrease the speed (MPH) by more than 1 mph for CMP arterials operating at LOS D, E, or F; more than 2 mph at LOS C; and more than 3 MPH at LOS B; or
5. Result in significant operational congestion based on observed conditions.

**TABLE 4.4-6
Existing Weekday CMP Freeway Segment Operations**

Freeway Link	No. of Lanes	Total Capacity (PCPH)	AM Peak Hour				PM Peak Hour			
			VPH	(PCPHPL)	V/C	LOS	VPH	(PCPHPL)	V/C	LOS
Interstate 5										
North of Sea World Drive (NB)	5	11,000	7,249	1,560	0.71	D	8,178	1,760	0.80	D
North of Sea World Drive (SB)	5	11,000	8,648	1,861	0.85	D	9,504	2,045	0.93	E
South of Sea World Drive (NB)	5	11,000	8,108	1,745	0.79	D	8,956	1,927	0.88	E
South of Sea World Drive (SB)	5	11,000	8,749	1,882	0.86	E	8,450	1,818	0.83	D
Interstate 8										
East of West Mission Boulevard (EB)	4	8,800	6,929	1,864	0.85	D	9,200	2,474	1.12	F
East of West Mission Boulevard (WB)	4	8,800	6,671	1,794	0.82	D	6,244	1,679	0.76	D

Source: Linscott Law and Greenspan, 2001.

Notes:

Freeway Link Capacity (ideal conditions) = 2,200 PCPHPL

V/C = Volume (PCPHPL)/Capacity (PCPHPL)

Vehicles per Hour /4.6477325 = Passenger Cars Per hour Per Lane (PCPHPL) 5 Lanes

Vehicles per Hour /3.718186 = Passenger Cars Per hour Per Lane (PCPHPL) 4 Lanes

Data source from Caltrans counts

PCPHPL = Passenger Car Per Hour Per Lane

VPH = Vehicles Per Hour

LOS = Level of Service

**TABLE 4.4-7
Transportation Impact Significance Thresholds**

Level of Service with Project	Allowable Increase Due to Project Impacts ¹		
	Intersections Delay (Sec.)	Roadway Sections	
		V/C	Speed (MPH)
A	N/A	0.10	5
B	6	0.06	3
C	4	0.04	2
D ²	2	0.02	1
E ²	2	0.02	1
F ²	2	0.02	1

Source: Linscott Law and Greenspan, 2001

Delay: Average stopped delay per vehicle measured in seconds.

V/C: Volume to capacity ratio (capacity at LOS E should be used).

Speed: arterial speed measured in miles per hour.

N/A: Not Applicable

¹ If a proposed project's traffic impacts exceeds the values shown in the table, then the impacts are deemed "significant". The project applicant shall provide "feasible mitigations", to bring the facility back to the level previously held by the facility prior to the projects traffic impacts.

² The acceptable Level of Service (LOS) standard for roadways and intersections in San Diego is LOS D. However, for undeveloped locations, the goal is to achieve a LOS C.

4.4.3 Impact

Issue 1: Would the proposal result in an increase in projected traffic, which is substantial in relation to the capacity of the street system?

Issue 2: Would the proposal result in substantial impacts upon existing or planned transportation systems?

The above two issues have been grouped together because they are interrelated and therefore are discussed concurrently.

New Attractions Influence on Attendance and Traffic

SeaWorld has experienced a net decrease in attendance over the past decade. During this time, new rides and attractions have been implemented and yet, attendance figures remained relatively consistent. Although the implementation of new rides or attractions may initially result in an attendance increase, historical trends show that they do not cause a sustained increase in attendance. Therefore, the introduction of a specific ride or attraction does not have a direct correlation to increases in attendance. Please refer to the discussion of attendance history in Section 3.3.2 for further information on the influence of new attractions on attendance.

Accordingly, if the introduction of new attractions does not result in sustained increases in attendance, then new attractions at SeaWorld would not increase SeaWorld traffic. If an attendance increase were sustained, SeaWorld traffic would increase, but not as a result of a specific ride or attraction. Therefore, proposed Tier 1 and Tier 2 projects would not generate increased traffic and do not have documented City of San Diego traffic generation rates. The Future Hotel and Marina Expansion Special Projects would cause a sustained traffic increase and thus, have traffic generation rates. Consequently, the traffic analysis is based on traffic increases resulting from attendance increases and proposed traffic-generating projects (hotel and marina).

Project Trip Generation and Distribution

Trip Generation

The number of trips estimated to be generated by the proposed project was based on existing ADT counts and on driveway generation rates published by the City of San Diego (September 1998). The ADT counts were used to calculate the overall growth of SeaWorld, while City driveway counts were used to calculate the trips for the planned hotel and marina expansion. Both weekday and weekend day project trips were calculated to evaluate the respective impacts on summer weekdays and summer weekend days. Although some reduction in the number of automobile trips may occur with implementation of the planned North Bay and Beach Area Guideway system, the system is insufficiently defined at this time to make any estimate of the number of SeaWorld patrons which may decide to use this system to reach facility. Therefore the influence of this system on ultimate trip generation was not taken into account in the trip generation calculations performed by the project traffic engineer.

Weekday Project Generation

The weekday project generation was used to assess daily and peak hour impacts for the near term (2005) and buildout (2020) analyses. The year 2005 weekday project generation consisted of SeaWorld growth only (2,000 ADT) while the year 2020 weekday total project generation consisted of SeaWorld growth, the planned hotel, and the marina expansion. Traffic generation associated with SeaWorld growth was determined by establishing the existing traffic generation and subtracting that amount from the forecasted 2020 weekday traffic generation. The existing weekday traffic generation was determined to be 15,000 ADT, and the 2020 weekday traffic generation was determined to be 23,000 ADT (without the planned hotel and marina expansion). Consequently, the growth for the SeaWorld theme park over the next twenty years would result in a calculated increase of 8,000 ADT during summer weekdays. The weekday hotel traffic generation was calculated at 6,500 ADT with 390 morning peak trips and 520 afternoon peak trips. The weekday marina expansion traffic generation was calculated at 800 ADT with 24 morning peak trips and 56 afternoon peak trips. Both the hotel and marina trip generations were calculated using the City of San Diego driveway rates. Combining trip generations from SeaWorld growth (8,000 ADT), the planned hotel (6,500 ADT), and the marina expansion (800 ADT), the project would generate 15,300 ADT with 799 morning peak trips and 1,088 afternoon peak trips. Morning peak hours occur between 7 and 9 AM, while afternoon peak hours occur between four and six PM

Weekend Project Generation

The weekend project generation was used to evaluate intersection operations on weekends as well as to quantify the impact of 40,000 SeaWorld visitors on a weekend day. The weekend traffic generation was calculated from the average of eight weekend days during 1999 including Memorial Day weekend, Fourth of July weekend, Labor Day weekend, and a non-holiday summer weekend. Holiday and non-holiday summer weekends were evaluated to produce worst-case conditions, as SeaWorld attendance is the highest during these seasonal periods. The weekend traffic generation was calculated to be 15,592 ADT with 1,681 morning peak trips and 1,310 afternoon peak trips (without the planned hotel and marina expansion). The weekend hotel traffic generation was calculated at 6,175 ADT with 527 morning peak trips and 527 afternoon peak trips. The weekend marina expansion traffic generation was calculated at 960 ADT with 54 morning peak trips and 54 afternoon peak trips. Combining 1999 trip generations from SeaWorld growth (15,592 ADT), the planned hotel (6,175 ADT), and the marina expansion (960 ADT), the project would generate 22,727 ADT with 2,262 morning peak trips and 1,891 afternoon peak trips. Morning weekend peak hours occur between 10 and 11 AM, while afternoon weekend peak hours occurred between 6 and 7 PM. As discussed above, the traffic analysis conducted for the project did not evaluate the weekend condition since the weekday PM peak hour is the worst-case condition.

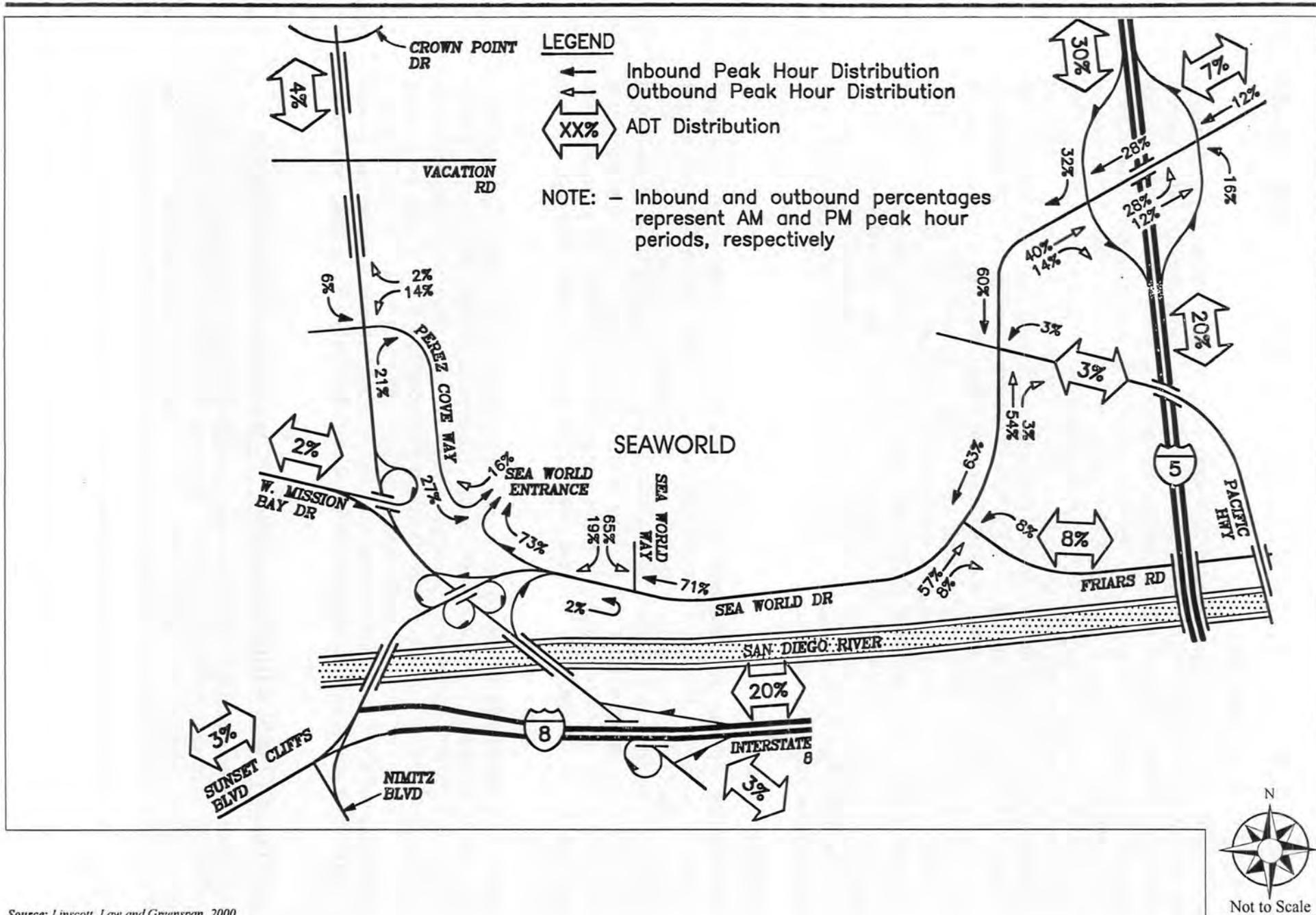
Trip Distribution

The distribution of project generated traffic by the City of San Diego Series 9 traffic model was reviewed for accuracy. The Select Zone Assignment (SZA) within the traffic model did not provide a reasonable distribution; therefore, the model-generated SZA percentages were modified to more accurately represent the expected distribution of project trips. The modified percentages were determined through a review of the existing peak hour ingress and egress patterns and source of visitor residency, which was provided by SeaWorld. Distributions were determined for a weekday and weekend with adjustments for peak hour and 24-hour distributions.

The peak hour counts also indicate the SeaWorld traffic patterns as they ingress and egress the project site, with the daily and peak hour percentages varying due to driver behavior. Figure 4.4-4 shows the SeaWorld distribution percentages. The ADT percentages are primarily derived from the model, while the peak hour percentages are from existing counts. Figure 4.4-4 shows that about 30 percent of SeaWorld traffic comes to and from the north via the Sea World Drive/I-5 interchange and about 20 percent from the south on I-5. The remaining 50 percent use I-8 and the nearby local streets such as Ingraham Street, Mission Bay Drive, Friars Road and Pacific Highway.

Near Term (2005) with Cumulative Projects and without Project

As discussed earlier, the traffic analysis for existing conditions concluded that summer weekdays presented the worst-case operating conditions. Thus, the 2005 analysis was based on summer weekday traffic. The near term (2005) traffic volumes were developed using the City of San Diego Series 9 Traffic Model. The buildout (2020) model was completed first and subsequently



Source: Linscott, Law and Greenspan, 2000

SeaWorld Trip Distribution

Figure 4.4-4

factored downward to produce the 2005 ADTs without the proposed project. As part of the Series 9 Model, Traffic Analysis Zone (TAZ) updates were developed, which included the forecasted SeaWorld growth, two identified cumulative proposed projects (Quivira Basin Redevelopment Project and the Dana Point Inn Landing and Hotel Expansion), and other major proposed and approved projects (North Bay Redevelopment, Marine Corps Recruit Depot Reuse, Naval Training Center Reuse, De Anza Cove, and a new Lindbergh Field airport terminal on Pacific Highway). Last, no changes in the roadway network were assumed for the year 2005 analysis.

Street Segments

Figure 4.4-5 presents the projected daily traffic volumes for the year 2005 without the proposed project. The associated levels of service without the proposed project indicated in Table 4.4-8 conclude that a majority of the street segments were calculated to operate below LOS D on a daily basis. These segments include:

1. Sea World Drive between Pacific Highway and I-5 (LOS E);
2. Sea World Drive from Friars Road to Pacific Highway (LOS E);
3. Sea World Drive between Sea World Way and Friars Road (LOS F);
4. Sea World Drive between Sea World Way and West Mission Bay Drive (LOS E);
5. West Mission Bay Drive between Ingraham Street and Dana Landing Road (LOS E);
6. West Mission Bay Drive between Sea World Drive and Ingraham Street (LOS F);
7. West Mission Bay Drive between I-8 and Sea World Drive (LOS E);
8. Ingraham Street from Vacation Road to Crown Point Drive (LOS F);
9. Ingraham Street between Perez Cove Way and Vacation Road (LOS F);
10. Ingraham Street between Perez Cove Way and West Mission Bay Drive (LOS F);
11. Sunset Cliffs Boulevard between I-8 and West Mission Bay Drive (LOS E); and
12. Sunset Cliffs Boulevard between Nimitz Boulevard and I-8 (LOS F).

**TABLE 4.4-8
2005 Weekday Street Segment Operations**

Street Segment	Direction	Classification	Capacity at LOS E	Without Project			With Project				
				ADT	V/C	LOS	ADT	V/C	LOS	Δ	Sig?
Sea World Drive at 4-Lanes											
Between Pacific Highway and I-5	EB/WB	4 Lane Prime Arterial	40,000	36,700	0.92	E	37,840	0.95	E	0.029	Yes
Between Friars Road and Pacific Highway	EB/WB	4 Lane Prime Arterial	40,000	37,610	0.94	E	38,810	0.97	E	0.030	Yes
Between Sea World Way and Friars Road	EB/WB	4 Lane Prime Arterial	40,000	43,000	1.08	F	44,360	1.11	F	0.034	Yes
Between Sea World Way and W. Mission Bay Dr.	EB/WB	4 Lane Prime Arterial	40,000	38,560	0.96	E	38,620	0.97	F	0.002	No
Sea World Drive at 6-Lanes											
Between Pacific Highway and I-5	EB/WB	6 Lane Prime Arterial	60,000	36,700	0.61	C	37,840	0.63	C	0.019	No
Between Friars Road and Pacific Highway	EB/WB	6 Lane Prime Arterial	60,000	37,610	0.63	C	38,810	0.65	C	0.020	No
Between Sea World Way and Friars Road	EB/WB	6 Lane Prime Arterial	60,000	43,000	0.72	C	44,360	0.74	C	0.023	No
Friars Road											
Between Sea World Drive and Pacific Highway	EB/WB	4 Lane Major Street	40,000	12,680	0.32	A	12,840	0.32	A	0.004	No
W. Mission Bay Drive											
Between Ingraham Street and Dana Landing	NB/SB	4 Lane Prime Arterial	40,000	38,260	0.96	E	38,300	0.96	F	0.001	No
Between Sea World Drive and Ingraham Street	NB/SB	6 Lane Prime Arterial	60,000	75,060	1.25	F	75,580	1.26	F	0.009	No
Between I-8 and Sea World Drive	NB/SB	4 Lane Prime Arterial	40,000	59,160	1.48	E	59,620	1.49	F	0.012	No
Between I-8 Sports Arena Boulevard	NB/SB	6 Lane Prime Arterial	60,000	36,900	0.62	C	36,960	0.62	C	0.001	No
Ingraham Street											
Between Vacation Road and Crown Point Drive	NB/SB	4 Lane Major Arterial	40,000	40,820	1.02	F	40,900	1.02	F	0.002	No
Between Perez Cove Way and Vacation Road	NB/SB	4 Lane Major Arterial	40,000	43,640	1.09	F	43,720	1.09	F	0.002	No
Between Perez Cove Way and W. Mission Bay Dr.	NB/SB	4 Lane Major Arterial	40,000	52,120	1.30	F	52,680	1.32	F	0.014	No
Sunset Cliffs Boulevard											
Between I-8 and W. Mission Bay Dr.	EB/WB	4 Lane Prime Arterial	40,000	38,560	0.97	E	38,620	0.97	E	0.002	No
Between Nimitz and I-8	NB/SB	4 Lane Prime Arterial	40,000	42,890	1.07	F	42,950	1.07	F	0.002	No

Source: Linscott, Law and Greenspan, 2001.

Δ: Change in V/C due to project

N/A: Not applicable

Bold : Does not meet City standard of LOS D or better

Key Intersections

As indicated in Table 4.4-9, for the without project scenario, all intersections would operate at LOS D or better except the following five intersections:

1. Sea World Drive and I-5 northbound ramp (LOS E, PM);
2. Ingraham Street and Crown Point Drive (LOS F, PM);
3. West Mission Bay Drive and I-8 westbound offramp (LOS F, PM);
4. Sunset Cliffs Boulevard and I-8 westbound offramp (LOS F, PM); and
5. Nimitz Boulevard and Sunset Cliffs Boulevard (LOS F, AM and PM).

Freeway Ramps

Under this scenario, three ramps would experience substantial delays. As indicated in Table 4.4-10, the northbound I-5 onramp at Sea World Drive would result in a theoretical delay of 17 minutes and the southbound I-5 onramp at Sea World Drive would result in a theoretical delay of 35 minutes during the morning peak hour. The eastbound I-8 onramp at West Mission Bay Drive would result in a theoretical delay of 17 minutes during the morning peak hour and 27 minutes during the afternoon peak hour.

Congestion Management Program (CMP)

CMP Arterials

As presented in Table 4.4-11, the CMP peak hour arterial analysis indicates that Sea World Drive, between Sunset Cliffs Boulevard and I-5, eastbound traffic would operate at an LOS C during both morning and evening peak hours. Westbound traffic would operate at an LOS B during both morning and evening peak hours.

CMP Freeway Segments

As indicated in Table 4.4-12, while segments of I-8 would operate at LOS C, three segments of I-5 would operate below LOS D. These segments include:

1. Southbound I-5, north of Sea World Drive (LOS E, PM);
2. Northbound I-5, south of Sea World Drive (LOS E, PM); and
3. Southbound I-5, south of Sea World Drive (LOS E, PM).

**TABLE 4.4-9
2005 Weekday Intersection Operations**

Intersection	Peak Hour	Existing		Without Project		With Project			
		Delay	LOS	Delay	LOS	Delay	LOS	Δ	Significant
Sea World Drive/I-5 NB Ramps	AM	31.4	C	38.4	D	39.0	D	0.6	No
	PM	58.9	E	71.4	E	72.8	E	1.4	No
Sea World Drive/I-5 SB Ramps	AM	29.1	C	30.3	C	30.3	C	0.0	No
	PM	25.3	C	26.5	C	26.8	C	0.3	No
Sea World Drive/Pacific Highway	AM	18.4	B	24.0	C	24.5	C	0.5	No
	PM	32.1	C	34.0	C	34.3	C	0.3	No
Sea World Drive/Friars Road	AM	14.6	B	16.8	B	16.8	B	0.0	No
	PM	18.0	B	18.5	B	18.6	B	0.1	No
Sea World Drive/Sea World Way	AM	3.2	A	8.3	A	8.6	A	0.3	No
	PM	13.5	B	13.5	B	15.0	B	1.5	No
Ingraham Street/Crown Point Drive	AM	22.3	C	31.5	C	32.2	C	0.7	No
	PM	31.0	E	108.7	F	109.8	F	1.1	No
Ingraham Street/Vacation Road	AM	11.3	B	11.5	B	11.5	B	0.0	No
	PM	33.7	C	36.1	D	36.8	D	0.7	No
Ingraham Street/Perez Cove Way	AM	24.7	C	24.8	B	25.5	C	0.7	No
	PM	40.6	D	44.0	D	46.8	D	2.8	No
W. Mission Bay Drive/I-8 WB Offramp	AM	23.2	C	25.0	C	25.2	C	0.2	No
	PM	91.4	F	98.9	F	99.9	F	1.0	No
Sunset Cliffs Boulevard/I-8 WB Offramp	AM	30.6	C	34.9	C	34.9	C	0.0	No
	PM	128.9	F	164.1	F	164.9	F	0.8	No
Nimitz Boulevard/I-8 EB Onramp	AM	20.5	D	23.1	C	23.1	C	0.0	No
	PM	24.6	C	26.2	C	26.2	C	0.0	No
Nimitz Boulevard/Sunset Cliffs Boulevard	AM	93.0	F	126.0	F	126.0	F	0.0	No
	PM	136.9	F	164.2	F	164.6	F	0.4	No

Source: Linscott Law and Greenspan, 2000.

LOS: Level of Service based on 1997 Highway Capacity Manual

Δ: Change in delay due to project

Delay: Seconds per vehicle

**TABLE 4.4-10
2005 Weekday Onramp Meter Analysis**

Location	Peak Hour	Without Project					With Project					
		Peak Hour Demand D	Flow F ²	Excess Demand E	Delay (min)	Queue (ft)	Peak Hour Demand D	Flow F ²	Excess Demand E	Delay (min)	Queue (ft)	Project Inc. (min)
<i>Theoretical Analysis</i>												
Sea World Drive/NB I-5	AM	1364	1058	306	17	8874	1373	1058	315	18	9135	1
	PM	1358	1372	0	0	0	1392	1372	20	1	580	1
SeaWorld Drive/SB I-5 (SOV) ¹	AM	495	313	182	35	5278	499	313	186	36	5394	1
	PM	664	614	50	5	1450	674	614	60	6	1740	1
West Mission Bay Drive/EB I-8	AM	1751	1357	394	17	11426	1756	1357	399	18	11571	0
	PM	1539	1058	481	27	13949	1554	1058	496	28	14384	1
<i>Assuming a 15-minute Maximum Delay</i>												
Sea World Drive/NB I-5	AM	1364	1091	273	15	7911	1373	1098	275	15	7963	0
	PM	1358	1372	0	0	0	1392	1372	20	1	580	1
SeaWorld Drive/SB I-5 (SOV) ¹	AM	495	396	99	15	2871	499	399	100	15	2894	0
	PM	664	614	50	5	1450	674	614	60	6	1740	1
West Mission Bay Drive/EB I-8	AM	1751	1401	350	15	10156	1756	1405	351	15	10185	0
	PM	1539	1231	308	15	8926	1554	1243	311	15	9013	0

Source: Linscott Law & Greenspan, 2001.

¹ SOV demand at 90% of total demand and SOV ramp meter rate as specified by Caltrans.

² If a Caltrans rate was not available, then 1999 ramp volumes were used as the flow rate. The ramp volumes were obtained from the Caltrans' 1987-1999 "Traffic Volumes" book.

**TABLE 4.4-11
2005 Weekday CMP Arterial Operations**

Arterial	Peak Period	Direction	2005 Without Project		2005 With Project			
			Speed (mph)	LOS	Speed (mph)	LOS	Δ	Significant
Sea World Drive Sunset Cliffs Boulevard to I-5	AM	EB	25.3	C	24.8	C	(0.5)	No
		WB	31.8	B	31.6	B	(0.2)	No
	PM	EB	23.6	C	23.5	C	(0.1)	No
		WB	28.5	B	28.3	C	(0.2)	No

Source: Linscott Law and Greenspan, 2001.

EB Eastbound, etc.
Δ Change in mph due to SeaWorld traffic

**TABLE 4.4-12
2005 Weekday CMP Freeway Segment Operations**

Freeway Link	# of Lanes	Total Capacity (PCPH)	Peak Hour	Without Project				With Project					
				VPH	PCPPHPL	V/C	LOS	VPH	PCPPHPL	V/C	LOS	Δ	Sig.?
Interstate 5													
North of Sea World Drive (NB)	5	11,000	AM	5,856	1,260	0.573	C	5,880	1,265	0.575	C	0.002	No
			PM	7,320	1,575	0.716	D	7,350	1,581	0.719	D	0.003	No
North of Sea World Drive (SB)	5	11,000	AM	7,680	1,652	0.751	D	7,704	1,658	0.753	D	0.002	No
			PM	9,600	2,066	0.939	E	9,630	2,072	0.942	E	0.003	No
South of Sea World Drive (NB)	5	11,000	AM	7,816	1,682	0.764	D	7,832	1,685	0.766	D	0.001	No
			PM	9,770	2,102	0.956	E	9,790	2,106	0.957	E	0.001	No
South of Sea World Drive (SB)	5	11,000	AM	7,912	1,702	0.774	D	7,928	1,706	0.775	D	0.001	No
			PM	9,890	2,128	0.967	E	9,910	2,132	0.969	E	0.002	No
Interstate 8													
East of W. Mission Blvd. (EB)	4	8,800	AM	3,848	1,035	0.470	C	3,864	1,039	0.472	C	0.002	No
			PM	4,810	1,294	0.588	C	4,830	1,299	0.590	C	0.002	No
East of W. Mission Blvd. (WB)	4	8,800	AM	3,296	886	0.403	B	3,312	891	0.405	B	0.002	No
			PM	4,120	1,108	0.504	C	4,140	1,113	0.506	C	0.002	No

Source: Lincostt Law and Greenspan, 2001.

Notes:

Freeway Link Capacity (ideal conditions) = 2,200 PCPHPL

V/C = Volume (PCPHPL)/Capacity (PCPHPL)

Vehicles per Hour/4.6477325 = Passenger Cars Per Hour Per Lane (PCPHPL) 5 Lanes

Vehicles per Hour/3.718186 = Passenger Cars Per Hour Per Lane (PCPHPL) 4 Lanes

Data source from Caltrans counts

PCPHPL = Passenger Car Per Hour Per Lane

VPH = Vehicles Per Hour

LOS = Level of Service

Sig? = Significant

Δ Change in delay due to project

Bold Does not meet City standards of LOS D or better

FREE FLOW SPEED = 65 MPH

LOS	MPH	(PCPHPL)
A	65.0	0.283
B	65.0	0.452
C	64.5	0.673
D	61.0	0.849
E	53.0	1.00
F	VAR	VAR

Near Term (2005) with Cumulative Projects and Project

Street Segments

Figure 4.4-6 presents the project-generated daily traffic volumes for the year 2005, while Figure 4.4-7 shows the street segment traffic volumes with the project. Impacts are considered significant when the change in volume-to-capacity ratio exceeds the significance thresholds defined in the City of San Diego Traffic Impact Study Manual as shown on Table 4.4-7. According to Table 4.4-8, the proposed project would significantly impact the following street segments:

1. Sea World Drive (4 lanes), between Pacific Highway and I-5;
2. Sea World Drive (4 lanes), between Friars Road and Pacific Highway; and
3. Sea World Drive (4 lanes), between Sea World Way and Friars Road.

Key Intersections

Figure 4.4-7 illustrates 2005 key intersections traffic volumes with the project. As indicated in Table 4.4-9, the proposed project would not cause a significant traffic impact at any intersections for the 2005 analysis. Although several intersections operate at LOS E or F, they are not considered significant impacts. Impacts are considered significant when the project increases the delay by more than two seconds for intersections that would operate at LOS D, E, or F without the project.

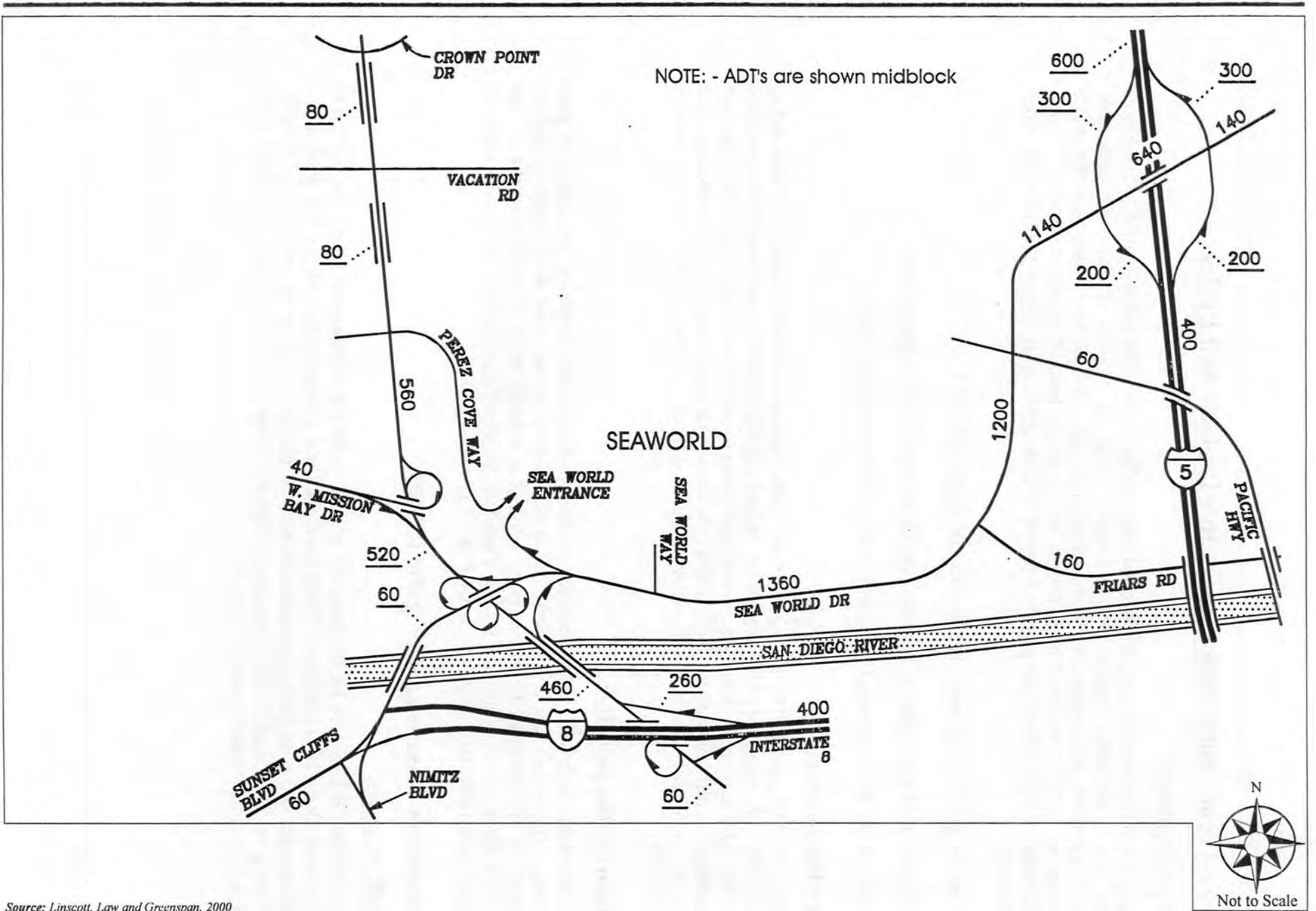
Freeway Ramp Meters

As shown in Table 4.4-11, the proposed project would increase delays by one minute at each onramp. Impacts to freeway onramps are considered significant when delay times exceed 15 minutes or are increased by two or more minutes as a result of the project where there is an existing delay of 15 minutes or more. Therefore, no significant impacts to freeway onramps would occur under this scenario as a result of the proposed project.

Congestion Management Program (CMP)

CMP Arterials

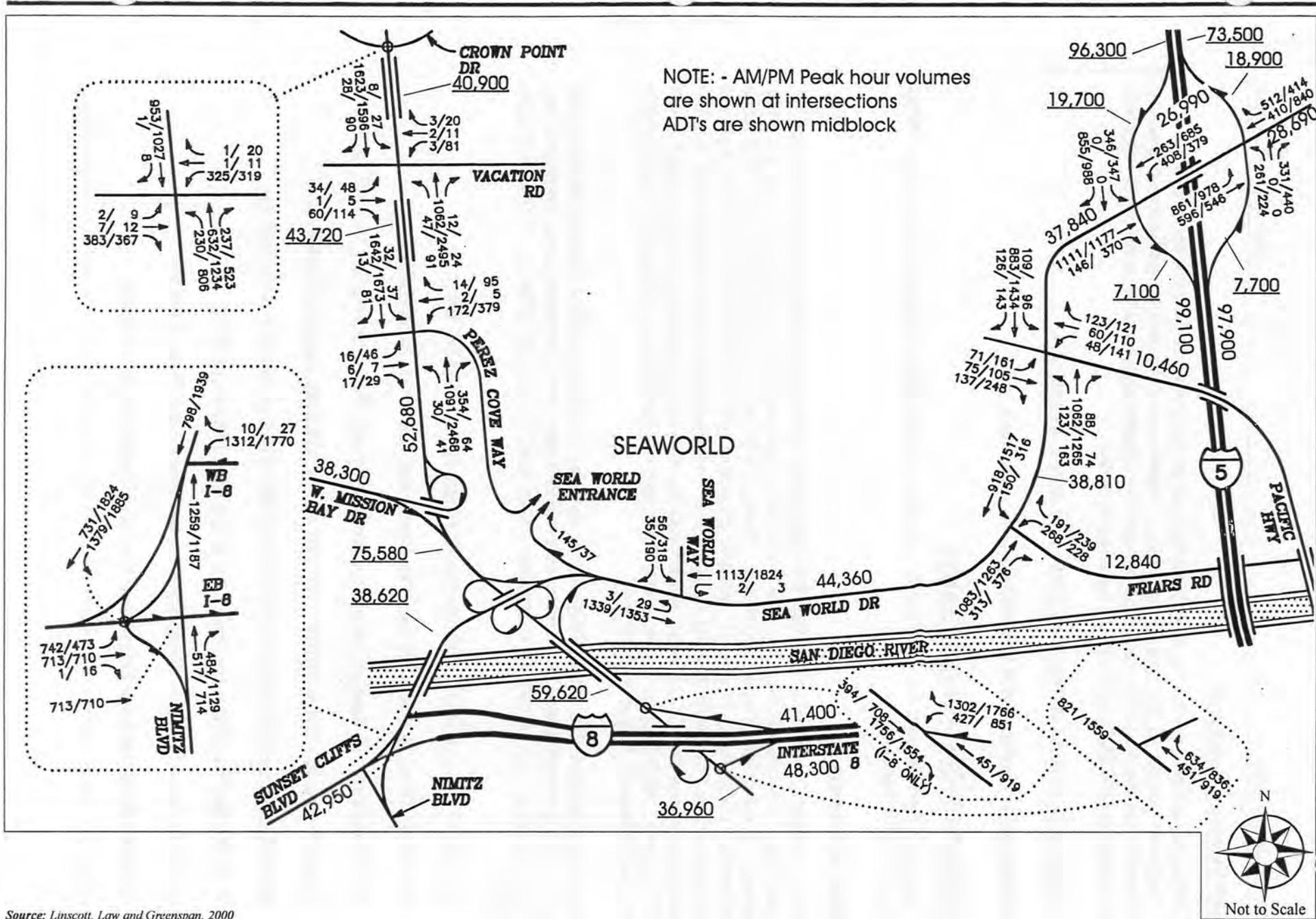
As indicated in Table 4.4-11, the proposed project would not significantly impact the portion of Sea World Drive between Sunset Cliffs Boulevard and I-5 during the AM or PM peak hours. Impacts are not considered significant unless the change in speed due to SeaWorld traffic decreases by more than 2 MPH for segments that would operate at LOS C and more than 3 MPH for segments that would operate at LOS B.



Source: Linscott, Law and Greenspan, 2000

2005 Project-Generated Traffic

Figure 4.4-6



Source: Linscott, Law and Greenspan, 2000

2005 Road Segment and Intersection Traffic Volumes with Project _____ Figure 4.4-7

CMP Freeway Segments

As indicated in Table 4.4-12, no significant impacts to segments of I-5 would occur as a result of the proposed project in the near term (2005). ~~Impacts are considered significant on freeway segments when the project increases the volume-to-capacity ratio by 0.02 or more for segments that operate at LOS D, E, or F. These segments include:~~

- ~~1. Northbound I-5, north of Sea World Drive (PM peak hour); and~~
- ~~2. Southbound I-5, north of Sea World Drive (PM peak hour).~~

Buildout (2020) without Project

As mentioned previously, the 2020 traffic volumes were developed using the City of San Diego Series 9 Traffic Model.

Street Segments

Street conditions were updated in the 2020 analysis to reflect improvements planned in the City of San Diego Circulation Element. Sea World Drive was modeled as both as four and six lanes between I-5 and West Mission Bay Drive. Sunset Cliffs Boulevard was modeled as four lanes over the San Diego River Floodway. West Mission Bay Drive was modeled as six lanes over the San Diego River Floodway [Capitol Improvement Projects (CIP) 52-643]. The Barnett Avenue extension between Pacific Highway and I-5 Old Town Avenue interchange was included in the 2020 analysis. Additionally, Sports Arena Boulevard was modeled as six lanes between Midway Drive and Rosecrans Street (CIP 52-503).

Figure 4.4-8 presents the future daily traffic volumes for the year 2020 without the proposed project. The associated levels of service indicated in Table 4.4-13 conclude that a majority of the street segments were calculated to operate below LOS D on a daily basis. These segments include:

1. Sea World Drive (4 lanes) between Pacific Highway and I-5 (LOS E);
2. Sea World Drive (4 lanes) between Sea World Way and Friars Road (LOS F);
3. Sea World Drive (4 lanes) between Sea World Way and West Mission Bay Drive (LOS F);
4. West Mission Bay Drive between Ingraham Street and Dana Landing Road (LOS F);
5. West Mission Bay Drive between Sea World Drive and Ingraham Street (LOS F);
6. West Mission Bay Drive between I-8 and Sea World Drive (LOS F);
7. Ingraham Street between Vacation Road and Crown Point Drive (LOS F);
8. Ingraham Street between Perez Cove Way and Vacation Road (LOS F);

**TABLE 4.4-13
2020 Weekday Street Segment Operations**

Street Segment	Direction	Classification	Capacity at LOS E	2020 Without Project			2020 With Project				
				ADT	V/C	LOS	ADT	V/C	LOS	Δ	Sig?
Sea World Drive at 4-Lanes											
Between Pacific Highway and I-5	EB/WB	4 Lane Prime Arterial	40,000	36,850	0.92	E	43,500	1.09	F	0.166	Yes ¹
Between Friars Road and Pacific Highway	EB/WB	4 Lane Prime Arterial	40,000	31,630	0.79	D	38,600	0.97	E	0.174	Yes ¹
Between Sea World Way and Friars Road	EB/WB	4 Lane Prime Arterial	40,000	45,290	1.13	F	52,900	1.32	F	0.190	Yes ¹
Between Sea World Way and W. Mission Bay Dr.	EB/WB	4 Lane Prime Arterial	40,000	46,190	1.15	F	46,840	1.17	F	0.016	No
Sea World Drive at 6-Lanes											
Between Pacific Highway and I-5	EB/WB	6 Lane Prime Arterial	60,000	39,320	0.65	C	45,970	0.77	C	0.111	No
Between Friars Road and Pacific Highway	EB/WB	6 Lane Prime Arterial	60,000	34,200	0.57	B	41,170	0.69	C	0.116	No
Between Sea World Way and Friars Road	EB/WB	6 Lane Prime Arterial	60,000	47,460	0.79	C	55,070	0.92	E	0.127	Yes ²
Between Sea World Way and W. Mission Bay Dr.	EB/WB	6 Lane Prime Arterial	60,000	46,190	0.77	C	46,840	0.78	C	0.011	No
Friars Road											
Between Sea World Drive and Pacific Highway	EB/WB	4 Lane Major Street	40,000	14,360	0.36	A	15,000	0.37	A	0.01	No
W. Mission Bay Drive (without bridge widening)											
Between Ingraham Street and Dana Landing	NB/SB	6 Lane Prime Arterial	60,000	40,600	1.02	F	41,450	1.04	F	0.014	No
Between Sea World Drive and Ingraham Street	NB/SB	6 Lane Prime Arterial	60,000	76,120	0.95	F	83,040	1.04	F	0.086	Yes ²
Between I-8 and Sea World Drive	NB/SB	4 Lane Prime Arterial	40,000	62,270	1.56	F	67,420	1.69	F	0.128	Yes
Between I-8 Sports Arena Boulevard	NB/SB	6 Lane Prime Arterial	60,000	48,070	0.08	B	49,060	0.82	B	0.017	No
W. Mission Bay Drive (with bridge widening)											
Between I-8 and Sea World Drive	NB/SB	6 Lane Prime Arterial	60,000	62,270	1.04	F	67,420	1.12	F	0.086	Yes ²
Ingraham Street											
Between Vacation Road and Crown Point Drive	NB/SB	4 Lane Major Arterial	40,000	41,770	1.04	F	42,740	1.07	F	0.024	No
Between Perez Cove Way and Vacation Road	NB/SB	4 Lane Major Arterial	40,000	44,190	1.10	F	45,240	1.13	F	0.026	Yes ²
Between Perez Cove Way and W. Mission Bay Dr.	NB/SB	4 Lane Major Arterial	40,000	49,610	1.24	F	55,370	1.38	F	0.144	Yes ²
Sunset Cliffs Boulevard											
Between I-8 and W. Mission Bay Dr.	EB/WB	4 Lane Prime Arterial	40,000	46,190	1.15	F	46,840	1.17	F	0.016	No
Between Nimitz and I-8	NB/SB	4 Lane Prime Arterila	40,000	42,660	1.07	F	43,230	1.08	F	0.014	No

Source: Linscott Law and Greenspan, 2001

¹ This segment is not considered significant, as the recommended mitigation is to widen to 6-lanes as shown in this table; however, the 4-lane version is included for completeness.

² This segment is not considered significant, as the intersection and arterial calculations show acceptable LOS.

Bold: Does not meet City standard of LOS D or better

Δ Change in V/C

Sig? Significant

9. Ingraham Street between Perez Cove Way and West Mission Bay Drive (LOS F);
10. Sunset Cliffs Boulevard between I-8 and West Mission Bay Drive (LOS F); and
11. Sunset Cliffs Boulevard between Nimitz and I-8 (LOS F).

Key Intersections

As indicated in Table 4.4-14, the following five intersections would operate below LOS D during peak hours without the proposed project:

1. Sea World Drive and I-5 northbound ramps (LOS E, AM; LOS F, PM);
2. Ingraham Street and Crown Point Drive (LOS F, PM);
3. West Mission Bay Drive and I-8 westbound offramp (LOS F, PM);
4. Sunset Cliffs Boulevard and I-8 westbound offramp (LOS E, AM; LOS F, PM); and
5. Nimitz Boulevard and Sunset Cliffs Boulevard (LOS F, AM and PM).

Freeway Ramp Meters

The theoretical analysis indicates that the 2020 without project scenario, three ramps would experience substantial delays. As indicated in Table 4.4-15, the northbound I-5 onramp at Sea World Drive was calculated at a 32-minute delay and the southbound I-5 onramp at Sea World Drive was calculated at a 53-minute delay during the morning peak hour. The eastbound I-8 onramp at West Mission Bay Drive was calculated at a 24-minute delay during the morning peak hour and a 33-minute delay during the afternoon peak hour.

Congestion Management Plan (CMP)

CMP Arterials

As presented in Table 4.4-16, the CMP peak hour arterial analysis indicates that Sea World Drive, between Sunset Cliffs Boulevard and I-5, eastbound traffic would operate at LOS C and westbound traffic would operate at LOS B during the morning peak hour. During the PM peak hour, eastbound traffic would operate at LOS D while westbound traffic would operate at LOS C.

**TABLE 4.4-14
2020 Intersection Operations**

Intersection	Peak Hour	Without Project		With Project			
		Delay	LOS	Delay	LOS	Δ	Significant
Sea World Drive/I-5 NB Ramps	AM	57.9	E	66.7	E	8.8	Yes
	PM	105.1	F	129.9	F	24.8	Yes
Sea World Drive/I-5 SB Ramps	AM	39.0	D	41.3	D	2.3	No
	PM	30.9	C	36.1	D	5.2	No
Sea World Drive/Pacific Highway	AM	28.3	C	29.0	C	0.7	No
	PM	52.7	D	66.4	E	13.7	Yes
Sea World Drive/Friars Road	AM	17.7	B	17.9	B	0.2	No
	PM	22.8	C	23.7	C	0.9	No
Sea World Drive/Sea World Way	AM	9.8	A	10.9	A	1.1	No
	PM	13.5	B	17.8	C	4.3	No
Ingraham Street/Crown Point Drive	AM	31.9	C	31.9	C	0.0	No
	PM	123.0	F	123.9	F	0.9	No
Ingraham Street/Vacation Road	AM	12.2	B	12.3	B	0.1	No
	PM	39.2	D	40.1	D	0.9	No
Ingraham Street/Perez Cove Way	AM	26.4	C	29.1	C	2.7	No
	PM	49.6	D	59.9	E	10.0	Yes
W. Mission Bay Drive/I-8 WB Offramp	AM	32.3	C	35.9	D	3.6	No
	PM	149.7	F	153.8	F	4.1	Yes
Sunset Cliffs Boulevard/I-8 WB Offramp	AM	60.5	E	61.3	E	0.8	No
	PM	266.9	F	267.0	F	0.1	No
Nimitz Boulevard/I-8 EB Onramp	AM	26.0	C	26.3	C	0.3	No
	PM	28.1	C	28.1	C	0.0	No
Nimitz Boulevard/Sunset Cliffs Boulevard	AM	157.5	F	158.1	F	0.6	No
	PM	174.1	F	175.8	F	1.7	No

Source: Linscott Law and Greenspan, 2001.

LOS: Level of Service based on 1997 Highway Capacity Manual.

Δ: Change in delay due to project.

Delay: Seconds per vehicle.

**TABLE 4.4-15
2020 Weekday Onramp Meter Analysis**

Location	Peak Hour	Without Project					With Project					
		Peak Hour Demand D	Flow F ²	Excess Demand E	Delay (min)	Queue (ft)	Peak Hour Demand D	Flow F ²	Excess Demand E	Delay (min)	Queue (ft)	Project Inc. (min)
<i>Theoretical Analysis</i>												
Sea World Drive/NB I-5	AM	1615	1058	557	32	16153	1692	1058	634	36	18386	4
	PM	1492	1372	120	5	3480	1684	1372	312	14	9048	8
SeaWorld Drive/SB I-5 (SOV) ¹	AM	588	313	275	53	7975	608	313	295	57	8555	4
	PM	764	614	150	15	4350	814	614	200	20	5800	5
West Mission Bay Drive/EB I-8	AM	1910	1357	553	24	16037	1992	1357	635	28	18415	4
	PM	1634	1058	576	33	16704	1775	1058	717	41	20793	8
<i>Assuming a 15-minute Maximum Delay</i>												
Sea World Drive/NB I-5	AM	1615	1292	323	15	9367	1692	1354	338	15	9814	0
	PM	1492	1372	120	5	3480	1684	1372	312	14	9048	8
SeaWorld Drive/SB I-5 (SOV) ¹	AM	588	470	118	15	3410	608	486	122	15	3526	0
	PM	764	614	150	15	4350	814	651	163	15	4721	0
West Mission Bay Drive/EB I-8	AM	1910	1528	382	15	11078	1992	1594	398	15	11554	0
	PM	1634	1307	327	15	9477	1775	1420	355	15	10295	0

Source: Linscott Law & Greenspan, 2001.

¹ SOV demand at 90% of total demand and SOV ramp meter rate as specified by Caltrans.

² If a Caltrans rate was not available, then 1999 ramp volumes were used as the flow rate. The ramp volumes were obtained from the Caltrans' 1987-1999 "Traffic Volumes" book.

**TABLE 4.4-16
2020 Weekday CMP Arterial Operations**

Arterial	Peak Period	Direction	2005 Without Project		2005 With Project			
			Speed (mph)	LOS	Speed (mph)	LOS	Δ (mph)	Significant
Sea World Drive Sunset Cliffs Boulevard to I-5	AM	EB	23.6	C	23.4	C	(0.2)	No
		WB	31.1	B	30.8	B	(0.3)	No
	PM	EB	20.2	D	20.1	D	(0.1)	No
		WB	24.7	C	24.1	C	(0.6)	No
W. Mission Bay Drive ¹ I-8 to Ingraham	AM	NB	39.1	A	39.1	A	(0.0)	No
		SB	22.0	C	21.9	D	(0.1)	No
	PM	NB	39.3	A	38.7	A	(0.6)	No
		SB	23.3	C	17.4	D	(5.9)	No
Ingraham Street ¹ W. Mission Bay Dr. to Vacation Rd.	AM	NB	35.2	A	35.1	A	(0.1)	No
		SB	30.4	B	24.8	C	(5.6)	No
	PM	NB	22.0	D	20.2	D	(1.8)	No
		SB	25.8	C	22.8	C	(3.0)	No

Source: Linscott Law and Greenspan, 2001.

¹ With existing lane geometry

LOS Level of Service

EB Eastbound, etc.

Δ Change in mph due to SeaWorld traffic

CMP Freeway Segments

As indicated in Table 4.4-17, while segments of I-8 would operate at LOS D or better, all four freeway segments of I-5 would operate at an unacceptable LOS E or F either in the AM, PM, or both peak hour periods in the vicinity of Sea World Drive without the proposed project. These segments include:

1. Northbound I-5, north of Sea World Drive (LOS E, AM; LOS F, PM);
2. Southbound I-5, north of Sea World Drive (LOS F, PM);
3. Northbound I-5, south of Sea World Drive (LOS F, PM); and
4. Southbound I-5, south of Sea World Drive (LOS E, AM; LOS F, PM).

Buildout (2020) with Project

Street Segments

Figure 4.4-9 illustrates the project-generated daily traffic volumes for the year 2020, while Figure 4.4-10 shows 2020 traffic volumes with the proposed project. Impacts to street segments are considered significant when the project increases the volume-to-capacity ratio by more than 0.02 for segments that would operate at LOS D, E, or F. As shown in Table 4.4-13, the proposed project would significantly impact the following street segments at buildout:

1. Sea World Drive (4 lanes), between Pacific Highway and I-5;
2. Sea World Drive (4 lanes), between Friars Road and Pacific Highway;
3. Sea World Drive (4 lanes), between Sea World Way and Friars Road;
4. Sea World Drive (6 lanes); between Sea World Way and Friars Road;
5. West Mission Bay Drive, between Sea World Drive and Ingraham Street;
6. West Mission Bay Drive; between I-8 and Sea World Drive;
7. Ingraham Street, between Perez Cove Way and Vacation Road; and
8. Ingraham Street, between Perez Cove Way and West Mission Bay Drive.

**TABLE 4.4-17
2020 Weekday CMP Freeway Segment Operations**

Freeway Link	# of Lanes	Total Capacity (PCPH)	Peak Hour	Without Project				With Project					
				VPH	PCPPHPL	V/C	LOS	VPH	PCPPHPL	V/C	LOS	Δ	Sig.?
Interstate 5													
North of Sea World Drive (NB)	5	11,000	AM	9,780	2,104	0.956	E	10,060	2,164	0.984	E	0.028	Yes
			PM	12,080	2,599	1.181	F	12,300	2,646	1.203	F	0.022	Yes
North of Sea World Drive (SB)	5	11,000	AM	8,200	1,764	0.802	D	8,260	1,777	0.808	D	0.006	No
			PM	10,390	2,235	1.016	F	10,590	2,279	1.036	F	0.020	Yes
South of Sea World Drive (NB)	5	11,000	AM	8,480	1,825	0.829	D	8,560	1,842	0.837	D	0.008	No
			PM	11,340	2,440	1.109	F	11,440	2,461	1.119	F	0.010	No
South of Sea World Drive (SB)	5	11,000	AM	9,150	1,969	0.895	E	9,230	1,986	0.903	E	0.008	No
			PM	10,700	2,302	1.046	F	10,790	2,322	1.055	F	0.009	No
Interstate 8													
East of W. Mission Blvd. (EB)	4	8,800	AM	4,125	1,109	0.504	C	4,290	1,154	0.524	C	0.020	No
			PM	4,250	1,143	0.520	C	4,420	1,189	0.540	C	0.020	No
East of W. Mission Blvd. (WB)	4	8,800	AM	4,285	1,152	0.524	C	4,450	1,197	0.544	C	0.020	No
			PM	6,260	1,684	0.765	D	6,510	1,751	0.796	D	0.031	No

Source: Lincostt Law and Greenspan, 2001.

Notes:

Freeway Link Capacity (ideal conditions) = 2,200 PCPHPL

V/C = Volume (PCPHPL)/Capacity (PCPHPL)

Vehicles per Hour/4.6477325 = Passenger Cars Per Hour Per Lane (PCPHPL) 5 Lanes

Vehicles per Hour/3.718186 = Passenger Cars Per Hour Per Lane (PCPHPL) 4 Lanes

Data source from Caltrans counts

PCPHPL = Passenger Car Per Hour Per Lane

VPH = Vehicles Per Hour

LOS = Level of Service

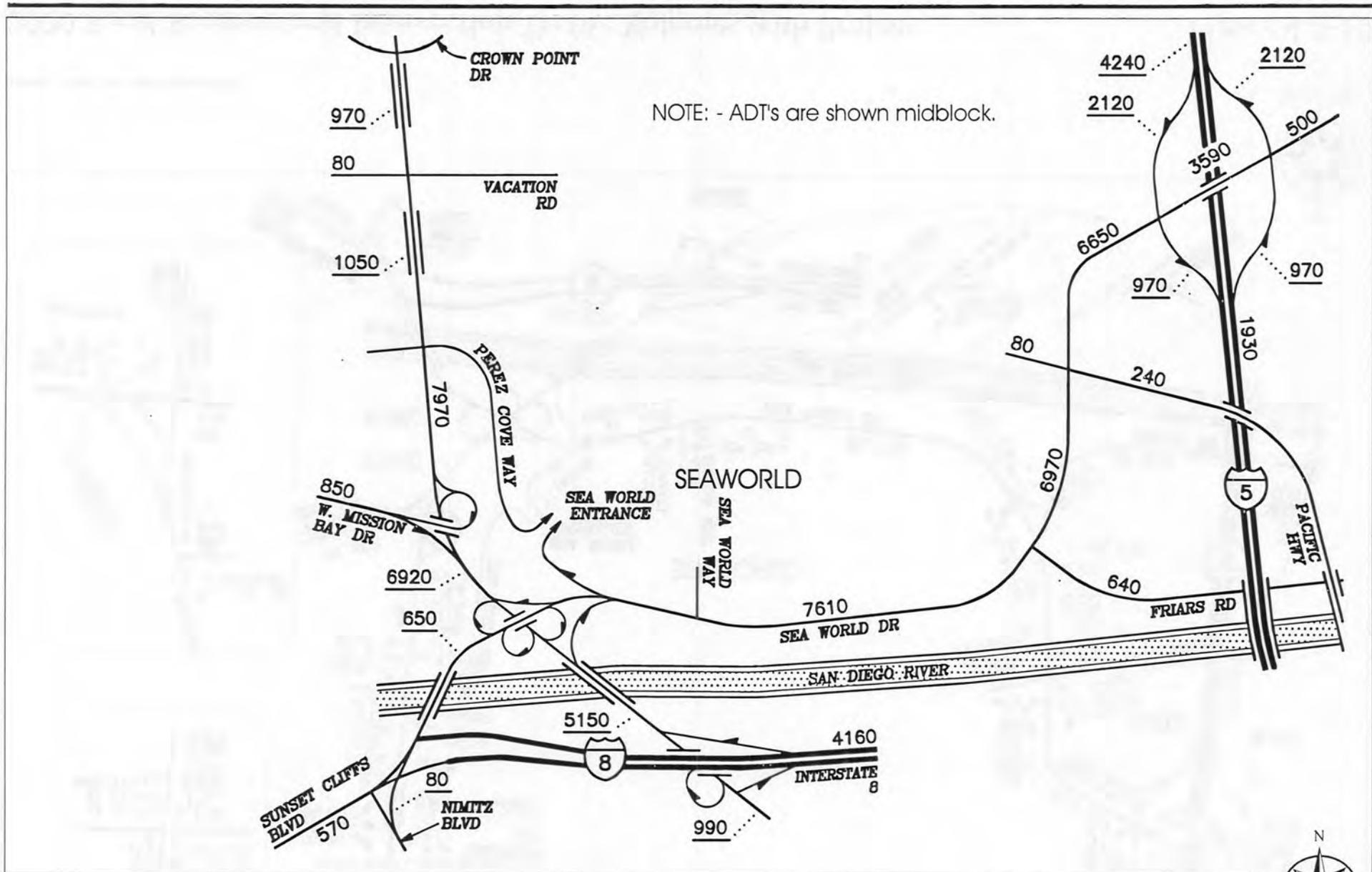
Sig? = Significant

Δ Change in delay due to project

Bold Dose not meet City standards of LOS D or better

FREE FLOW SPEED = 65 MPH

LOS	MPH	(PCPHPL)
A	65.0	0.283
B	65.0	0.452
C	64.5	0.673
D	61.0	0.849
E	53.0	1.00
F	VAR	VAR

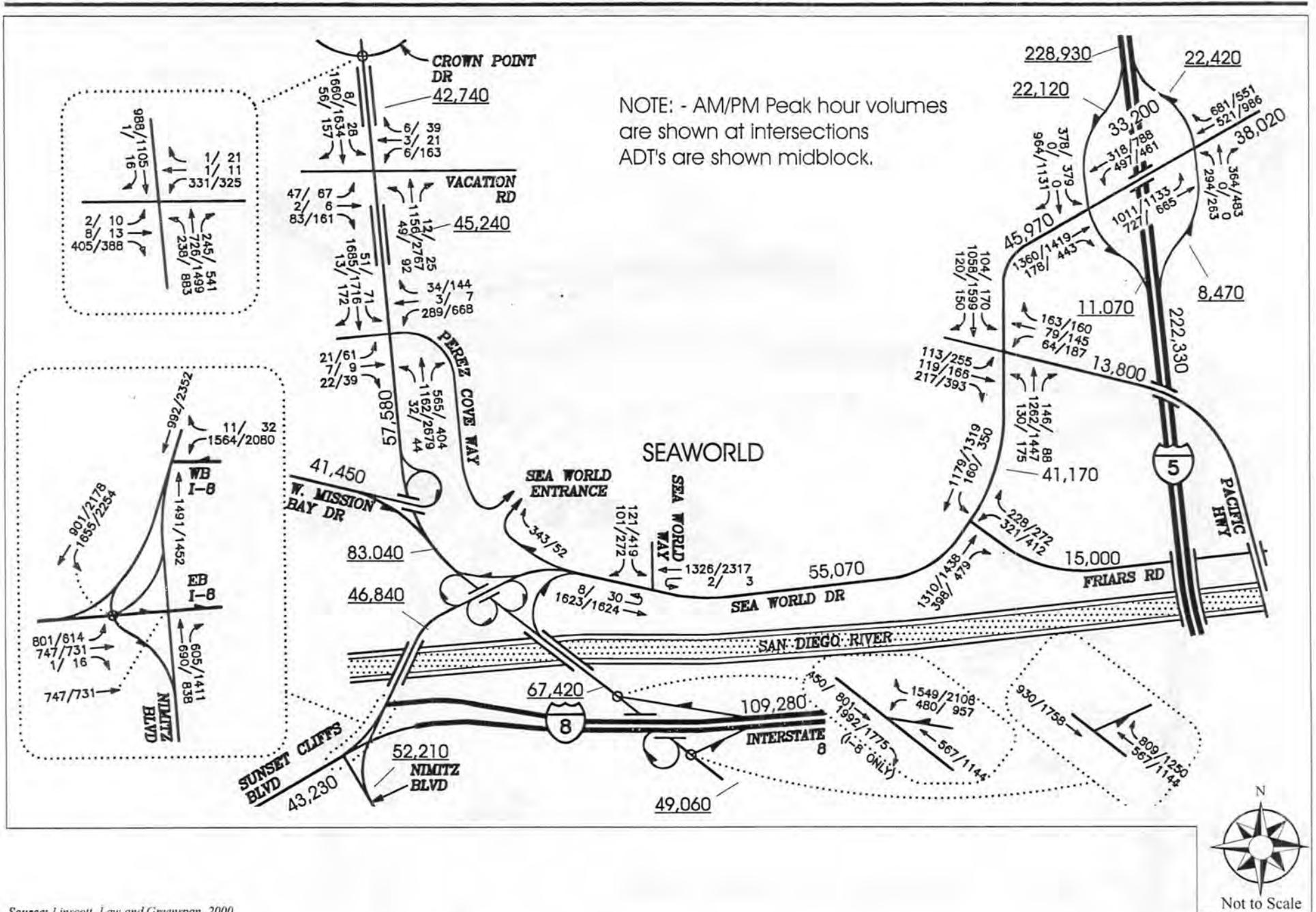


Source: Linscott, Law and Greenspan, 2000



2020 Project-Generated Traffic Volumes

Figure 4.4-9



Source: Linscott, Law and Greenspan, 2000

2020 Road Segment and Intersection Traffic Volumes with Project _____ Figure 4.4-10

Key Intersections

Table 4.4-14 shows that the project would cause significant traffic impacts at the following intersections during the morning and afternoon peak hours at buildout:

1. Sea World Drive and I-5 northbound ramps (AM and PM peak hours);
2. Sea World Drive and Pacific Highway (PM peak hour);
3. Ingraham Street and Perez Cove Way (PM peak hour); and
4. West Mission Bay Drive and I-8 westbound offramp (PM peak hour).

Freeway Ramp Meters

As indicated in Table 4.4-15, substantial delays would occur at all ramps during one or both peak hours. Project traffic would add to delays at locations already experiencing delays in excess of 15 minutes. Thus, project traffic would result in a significant 2020 buildout impact at the following freeway ramp meters:

1. Sea World Drive and northbound I-5 (AM peak hour);
2. Sea World Drive and southbound I-5 (AM and PM peak hours); and
3. West Mission Bay Drive and eastbound I-8 (AM and PM peak hours).

Congestion Management Program (CMP)

CMP Arterials

As indicated Table 4.4-16, CMP arterials would operate at LOS D or better in both directions during both the morning and afternoon peak hours. The addition of project traffic would not create a significant impact on CMP arterials.

CMP Freeway Segments

Table 4.4-17 shows that the project would increase the volume to capacity ratio by more than 0.02 on segments of I-5 and I-8 that operate at LOS E or F. These segments include:

1. Northbound I-5, north of Sea World Drive (AM and PM peak hours); and
2. Southbound I-5, north of Sea World Drive (PM peak hour).

Transit

MTDB is currently studying a transit route in the project area as part of the North Bay and Beach Area Guideway Study. This route would provide a guideway transit link from inland San Diego (most likely the Old Town Station) to the beach and bay activity centers. The Guideway Study

currently envisions the use of automated people mover (APM) technology for this project. APM includes a variety of automated guideway technologies ranging from small-vehicle people movers to large monorails. Two alignments are presently under consideration, with the goal of serving several key activity centers, including SeaWorld, Sports Arena redevelopment, Belmont Park, Mission Bay Park, Quivira Basin, proposed Mission Bay Amphitheater, Mission Valley and downtown hotels, and the beach communities. A future station is planned at SeaWorld. More specifically, the station would be located in the northeast corner of the planned parking garage, near the entrance to SeaWorld.

Entry – Exit Operations

As discussed in the 1993 SeaWorld Traffic Study, queues were observed during various summer holidays at the entrance (toll plaza) and exit (Sea World Way) during the AM inbound and PM outbound peaks. Queue counts were also conducted during the eight days of traffic counts in 1999. These counts were conducted 10:00 AM – 12:00 NOON at the entrance and 5:00 PM to 7:00 PM at the exit. Queue counts were recorded every five minutes. The maximum queues per day ranged from 6 to 25 vehicles in the longest lane. The maximum queues observed at the entrance were predominately at the tollgate nearest the curb lane (extreme right). Maximum queues at the exit were observed to back up about 16 vehicles (about 400 feet) from the Sea World Way/Sea World Drive intersection. It should be noted that this queue was observed at the #2 southbound left-turn lane.

Knowing the average queue and entering volumes, an average service rate of 120 vehicles/hour/gate is calculated at the entrance. Observations and calculations shows that the current entry-exit system can adequately handle the existing summer holiday weekend traffic with queues not anticipated to reach Sea World Drive.

4.4.4 Significance of Impact

Roadway Segments

Based on the City's threshold criteria for significance of impact, the proposed project contribution to traffic on roadway segments would exceed the acceptable V/C threshold of significance on three segments under the near term (2005) condition and eight segments under the buildout (2020) condition with the proposed project.

The proposed project would have a significant impact on the following roadway segments under the near term (2005) condition:

1. Sea World Drive (4 lanes), between Pacific Highway and I-5;
2. Sea World Drive (4 lanes), between Friars Road and Pacific Highway; and
3. Sea World Drive (4 lanes), between Sea World Way and Friars Road.

The proposed project would have a significant impact on the following roadway segments in the buildout (2020) condition:

1. Sea World Drive (6 lanes), between Sea World Way and Friars Road;
2. West Mission Bay Drive, between Ingraham Street and Sea World Drive;
3. West Mission Bay Drive, between Sea World Drive and I-8; and
4. Ingraham Street, between Vacation Road and West Mission Bay Drive.

Key Intersections

The project will not generate a significant direct impact on intersections under the near term (2005) condition.

The project would have a significant impact on the following intersections under the buildout (2020) condition:

1. Sea World Drive and I-5 northbound ramps (AM and PM peak hours);
2. Sea World Drive and Pacific Highway (PM peak hour);
3. Ingraham Street and Perez Cove Way (PM peak hour); and
4. West Mission Bay Drive and I-8 westbound offramp (PM peak hour).

Freeway Ramps

The project will not generate a significant direct impact on freeway ramps under the near term (2005) condition. However, under the buildout (2020) condition, project traffic would result in a significant cumulative impact at three freeway ramps already expected to experience delays in excess of 15 minutes, which include:

1. Sea World Drive northbound I-5 onramp (AM and PM peak hours);
2. Sea World Drive southbound I-5 onramp (AM and PM peak hours); and
3. West Mission Bay Drive eastbound I-8 onramp (AM and PM peak hours).

Congestion Management Program (CMP)

CMP Arterials

The contribution of traffic from the proposed project would not exceed the significance thresholds on CMP arterials. Thus, no significant project impacts would occur.

CMP Freeway Segments

The project would have a significant impact on the following freeway segments under the near term (2005) condition:

1. Northbound I-5, north of Sea World Drive; and
2. Southbound I-5, north of Sea World Drive.

The project would have a significant impact on the following freeway segments under the buildout (2020) condition:

1. Northbound I-5, north of Sea World Drive; and
2. Southbound I-5, north of Sea World Drive.

Weekend Significant Impacts

Significant busy weekend day intersection calculated impacts occur at the Sea World Drive/I-5 NB Ramp. In addition, busy weekend day significant impacts occur at the SeaWorld entrance.

4.4.5 Mitigation, Monitoring, and Reporting

The analyses with and without the project in 2005 and 2020 indicate that there are significant impacts which require mitigation. With the exception of those improvements where SeaWorld must only make a fair share contribution toward the cost of improvements needed to solve congestion which will occur with or without the proposed expansion plans, the mitigation measures presented below would reduce impacts to below a level of significance. Impacts to the roadway segments or intersections which require fair share contributions are considered potentially unmitigated because inadequate assurances exist that the necessary Capital Improvement Projects (CIP) would be approved by the City and/or sufficiently funded to complete the needed improvements. The recommended mitigation measures are listed below with a measure of effectiveness summary provided in Table 4.4-18.

Monitoring Program

Even though the significant impacts and respective mitigation measures were calculated for years 2005 and 2020, it is recommended that those mitigation measures not be tied to a specific year. Those years were for analysis purposes only. Rather, a monitoring program can better indicate when an improvement is necessary and who the major contributors are. For example, SeaWorld is anticipating 4,000,000 visitors in 2012; however, if the attendance does not materialize, then SeaWorld's impacts would be less than anticipated. Conversely, if there is an attendance increase greater than forecasted, then the mitigation measures should be implemented sooner.

TABLE 4.4-18
Weekday Intersection Mitigation

Intersection	Peak Hour	Existing		2020 With Project			
				Without Mitigation		With Mitigation	
		Delay	LOS	Delay	LOS	Delay	LOS
Sea World Drive/I-5 Northbound Ramps	AM	31.4	C	66.7	E	58.3	E ¹
	PM	58.9	E	129.9	F	75.5	E ¹
Sea World Drive/Pacific Highway	AM	18.4	B	29.0	C	28.3	C ²
	PM	32.1	C	66.4	E	45.0	D ²
Ingraham Street/Perez Cove Way	AM	24.7	C	29.1	C	29.3	C ³
	PM	40.6	D	59.9	E	54.7	D ³
W. Mission Bay Drive/I-8 Westbound Ramp	AM	23.2	C	35.9	D	20.9	C ⁴
	PM	91.4	F	153.8	F	41.0	D ⁴

Source: Linscott Law and Greenspan, 2001.

- ¹ A westbound right-turn lane and northbound dual left-turn lanes at the northbound ramps. Pre-project LOS E improvement to LOS D to be determined by planned I-5 Interchange CIP.
- ² Six lanes on Sea World Drive from just south of Pacific Highway to the I-5 southbound ramps.
- ³ Remove east/west split signal phasing and re-program signal. Re-striping for eastbound and westbound approaches.
- ⁴ A third westbound right-turn lane to be added for a final configuration of dual westbound left-turn and triple westbound right-turn lanes in addition to improvements associated with CIP 52-643.

Timing for project related roadway mitigation measures would be tied to a monitoring program due to the relative uncertainty of future SeaWorld visitors based on the previous ten-year flat attendance record. It is recommended that the monitoring program be part of a Mitigation Monitoring Report Program (MMRP) and commence one year after approval of the Sea World Master Plan Update approval by the California Coastal Commission. SeaWorld Adventure Park agrees to a Roadway and Parking MMRP as outlined below. The monitoring program would involve the following major elements.

1. SeaWorld will conduct annual 24-hour tube counts (ADT's) at all SeaWorld leasehold access points to determine whether there has been an increase in traffic generation. The counts would be done on a Tuesday, Wednesday, and Thursday for two separate non-holiday summer weeks in July or August. The six days of counts should then be averaged to provide documentation of the daily variation and the average peak hour segment and daily volumes. This traffic generation level would be compared to 2000 counts to determine whether there had been an increase in traffic. If no increase in traffic generation has occurred then no mitigation measures would be implemented. Conversely, if a traffic generation increase has occurred then intersection counts would be conducted for key intersections identified in the following measure and the appropriate level of mitigation would be implemented.

2. SeaWorld will conduct 24-hour tube counts (ADT's) on Sea World Drive at two locations (between I-5 and Pacific Highway and between Friars Road and Sea World Way). The counts would be done on a Tuesday, Wednesday, and Thursday for two separate non-holiday summer weeks in July or August. The six days of counts should then be averaged to provide documentation of the daily variation and the average peak hour segment and daily volumes.
3. SeaWorld will conduct peak hour intersection counts at Ingraham Street/Perez Cove Way, Sea World Drive/I-5 NB Ramp, Sea World Drive/I-5 SB Ramp, Sea World Drive/Pacific Highway, and at Sea World Drive/Friars Road. The counts should be done for one day on a Tuesday, Wednesday, or Thursday in July or August, during the period that the tube counts are conducted. These volumes should be used for analysis purposes.
4. Intersections as identified in 3. above, which are operating at LOS E or LOS F will be analyzed to determine if a significant impact is caused by SeaWorld traffic based on the City of San Diego criteria (delay increase of 2.0 seconds or more at LOS E or F). If the analysis determines that SeaWorld traffic causes a significant impact, SeaWorld will be responsible for mitigating such significant impact. Since improvements should be completed concurrently with impacts, SeaWorld will construct the improvements under a City public improvement permit with bond within one year of identification of the impact unless they are a part of a City of San Diego Capital Improvement Program (CIP).

All analyses in 1. through 4. above must be completed and turned into the City's Transportation Development Section by September 1 of each year. A list of mitigation measures that would achieve a reduction in impact is listed below.

Weekday Project Mitigation

The following project mitigation measures would reduce the impacts of the proposed project on weekday traffic at impacted surface street roadway segments and intersections. However, in some cases, the mitigation may not be adequately assured to conclude that the impact would be reduced to below a level of significance. In these cases, the mitigation measure includes an identifying statement. The mitigation measures would be implemented based on the amount of SeaWorld's increase in traffic generation and in accordance with the monitoring program.

Near-term (2005) Measures

Mitigation Measure 4.4-1: At the time the monitoring program indicates that it is necessary, one of the following measures shall be undertaken by SeaWorld.

1. SeaWorld shall widen Sea World Drive to six lanes between I-5 and Sea World Way; or
2. If the City has formed a CIP for the combined improvements to Sea World Drive and its interchange with I-5, SeaWorld shall contribute to the CIP an amount which is equivalent to 44 percent of the estimated cost of widening Sea World Drive to six lanes between I-5 and SeaWorld Way. In the event this alternative form of mitigation is selected, the short-

term impacts of SeaWorld on Sea World Drive may not be fully mitigated due to the fact that full funding for the CIP may be delayed or never achieved.

Mitigation Measure 4.4-2: SeaWorld will install signal coordination on Sea World Drive from Friars Road to I-5 NB Ramp and construct a 400-foot extension of the eastbound right-turn lane on Sea World Drive at the SB I-5 SB onramp. SeaWorld's cost participation shall be 100 percent.

Buildout (2020) Measures

Mitigation Measure 4.4-3: At the time the monitoring program indicates that it is necessary, SeaWorld will reconfigure the Ingraham Street/Perez Cove Way intersection to remove the split east/west signal phasing, by combining the westbound thru movement with the right-turn movement to create dual left-turn lanes and a shared thru/right-turn lane. The only pedestrian crossing across Ingraham Street should remain on the north leg (north side of the intersection). SeaWorld's fair share for this improvement is 100 percent.

Mitigation Measure 4.4-4: At the time the monitoring program indicates that it is necessary, SeaWorld shall make fair share contributions for the following interchange improvements at the specified percentages.

Intersection

1. Dual northbound to westbound left-turn lanes on the northbound I-5 offramp and a separate right-turn lane on westbound SeaWorld Drive to the northbound I-5 onramp (29 percent).

Ramps

2. Additional storage lane, or the equivalent, on the southbound I-5 onramp (27 percent).
3. Additional storage lane, or the equivalent, on the northbound I-5 onramp (50 percent).

As these improvements are expected to be a part of a CIP project which may or may not be fully funded, the long-term impacts of SeaWorld on the Sea World Drive/I-5 interchange are considered unmitigated.

Mitigation Measure 4.4-5: At the time the monitoring program indicates that it is necessary, reconstruct the Sea World Drive/Pacific Highway intersection to provide six lanes of thru traffic on Sea World Drive. The southbound right-turn movement from Sea World Drive to Fiesta Island Road (Pacific Highway) would be shared with the thru lane by converting the existing southbound right-turn lane on Sea World Drive to provide three southbound thru lanes and one southbound right turn lane. Sea World Drive south of Pacific Highway shall be widened for about 300 feet plus a 600-foot taper. SeaWorld's fair share of the cost of these improvements shall be 36 percent. As SeaWorld is only obligated to pay for a portion of the improvement and

no funding source exists for the balance of the cost, the long-term impacts of SeaWorld on the Sea World Drive/Pacific Highway intersection are considered unmitigated.

The northbound lane addition shall be carried through the intersection to the Sea World Drive/I-5 SB onramp intersection by widening Sea World Drive to provide a third northbound (eastbound) lane that starts about 300-foot south of (west of) Pacific Highway and traps (ends) as a right-turn lane at the southbound I-5 onramps. Both curb lanes on Sea World Drive at Pacific Highway shall be 20 feet wide to accommodate right-turn sneakers. This measure is 100 percent SeaWorld's responsibility.

Mitigation Measure 4.4-6: At the time the monitoring program indicates that it is necessary, a third, westbound right-turn lane shall be added to the westbound I-8 offramp to West Mission Bay Drive intersection to create a configuration which will consist of dual, westbound left-turn and triple, westbound right-turn lanes. SeaWorld's fair share estimate shall be 28 percent. This improvement will only be required in the event the West Mission Bay Drive bridge is widened to six lanes. As these improvements would only be constructed if CIP 52-643 is implemented and fully funded, the long-term impacts of SeaWorld on the westbound I-8 offramp to West Mission Bay Drive are considered unmitigated.

Mitigation Measure 4.4-7: At the time the monitoring program indicates that it is necessary, widen the West Mission Bay Drive bridge to six lanes and widen southbound West Mission Bay Drive to three lanes between the bridge and the eastbound I-8 onramp. These improvements would be included in the City's CIP No. 52-643. SeaWorld's fair share contribution to the cost of widening the bridge and creating three southbound lanes between the bridge and the eastbound onramp to I-8 shall be 47 percent of the City's cost of these improvements. The City's cost is 20 percent of the total cost. In light of the fact that this CIP may not be sufficiently funded or implemented coincident with SeaWorld's needs, SeaWorld's long-term impact on West Mission Bay Drive between Sea World Drive and I-8 as well as the I-8 eastbound onramp would be unmitigated because it is infeasible for SeaWorld to bear the full cost of these improvements.

Weekend Project Mitigation

The following project mitigation would reduce project impacts on a busy weekend day to below a level of significance and would be implemented when determined necessary by the monitoring program. More specifically, these measures would mitigate the calculated failure of Sea World Drive/I-5 NB Ramp during the 4th of July weekend in 1999, and observed entrance circulation issues. These measures would be implemented in the summer following approval of the SeaWorld Master Plan Update by the California Coastal Commission.

Near-term (2005) Measures

Mitigation Measure 4.4-8: Provide traffic event officers from the San Diego Police Department at the I-5/Sea World Drive interchange during busy days to override the traffic signals and respond to traffic conditions, if Caltrans concurs.

Mitigation Measure 4.4-9: Improve lane management at the entrance gates to maximize vehicle storage as well as help visitors waiting in line to determine which lanes are open or shorter.

Mitigation Measure 4.4-10: Distribute promotional material to employees and repeat patrons that would promote I-8 or Ingraham Street as alternative routes to SeaWorld.

Significant Unmitigated Impacts

Significant impacts on West Mission Bay Drive between I-8 and Sea World Drive as well as the I-8 eastbound onramp and westbound offramp at West Mission Bay Drive would be unmitigable if CIP 52-643 is not implemented by the City because it would be economically infeasible for SeaWorld to pay for widening of the West Mission Bay Drive bridge.

Impacts on Sea World Drive between Sea World Way and I-5 would be unmitigated if a fair share contribution is made for impacts to Sea World Drive rather than direct widening of this segment to the planned six-lane configuration. This conclusion is based on the potential for the necessary CIP to not be approved by the City and/or sufficient funding not be available to fully implement the CIP. Impacts to the Sea World Drive/I-5 interchange are also considered potentially unmitigated due to the potential for the necessary CIP to not be approved by the City and/or sufficient funding not be available to fully implement the CIP. Similarly, impacts to the Pacific Highway/Sea World Drive intersection are considered unmitigable as no source of funding is available to complete the improvements to which SeaWorld would make a fair share contribution.

Significant project impacts were calculated at the mainline freeway segment of I-5 north and south of Sea World Drive. These significant impacts are considered unmitigable due the excessive costs to widen I-5.

4.4.6 Impact

Issue 3: Would the proposal result in an increase demand in offsite parking?

Existing Parking Supply

The total SeaWorld leasehold area provides parking for guests and others (employees, vendors, and the SeaWorld Marina and Shoreline). The guest parking area (Area 2) covers 63.5 acres along the south side of the leasehold between the SeaWorld Theme Park (Area 1) and Sea World Drive. Access to the parking area is through the main vehicular entryway located in the southwest corner of the guest parking area. The guest-parking exit is in the central southern part of Area 2 at the Sea World Way/Sea World Drive intersection. A total of 7,614 guest parking spaces are provided in Area 2 and the eastern portions of Area 1, although approximately 450 spaces in the northwest portion of Area 2 are typically used for employee parking. This leaves a total of 7,164 guest spaces available. Additionally, an unpaved guest overflow parking area of approximately 1,500 spaces exists within the southwest corner of Area 2 shown as the parking

lot relocation. Thus, the total available (paved and unpaved) guest parking equals approximately 8,664 spaces. The other parking areas for administration, support, employee overflow, Hubbs-SeaWorld Research Institute and the SeaWorld Marina are provided in Areas 3, 4, and 5 with 1,307 spaces. Access to these areas is through Perez Cove Way. This results in a total paved parking supply of 8,471 spaces and a total paved and unpaved supply of 9,971 spaces.

Future Guest Parking Demand

The future guest parking demand is determined by 1) calculating the usable parking supply, 2) assuming a design parking supply, and 3) forecasting the visitor demand over the next twenty years.

The usable parking supply is determined to be 95 percent of the available guest spaces in Areas 1 and 2. This is because on busy days, vehicles are directed to the southeast corner and directed to park in sequence to best fill the parking area. However, after the lot is filled, remaining vehicles must circulate the entire facility in search of the last few spaces or spaces that have become available. To account for this phenomenon, the parking area is considered "full" at 95 percent occupancy. As a result 95 percent of the 7,164 paved guest parking spaces is about 6,800 spaces. In 1999 there were 3 to 4 days when vehicles were required to park in an adjacent dirt overflow lot (located on the southeast corner of the visitor parking area). Use of the overflow lot was verified by analyzing parking demand data obtained from the SeaWorld vehicle tollbooth. In 1999, the Area 1 and 2 visitor parking demand exceeded the paved usable (95%) parking supply of 6,800 spaces during three days, but was well within the total available supply of about 8,200 spaces (95% of 8,664 total paved and unpaved guest parking area).

Future visitor parking demand was calculated to account for about 100 percent of the demand. The parking demand for SeaWorld has a distinct weekday trend with peaks occurring mostly on weekends. Additionally, all but 15 weekend days show a demand for less than 5,000 spaces. The current number of spaces required to account for 100 percent of the demand is estimated to be about 7,100 spaces. This number is determined by estimating how much demand exceeded the usable supply, which equals about 150 spaces.

If the visitor vehicle occupancy remains relatively constant over the next twenty years, then the future visitor parking demand can be forecasted by projecting the current demand by a compounded annual growth rate of 1.3 percent as provided by SeaWorld. Assuming a visitor parking demand for 100 percent usable occupancy and an annual growth rate of 1.3 percent, the future parking demand in 20 years is forecasted to be about a total of 9,200 spaces.

The exact point in time when additional visitor parking would be necessary depends on several factors including future vehicle occupancy rates, use of the existing overflow parking area, expansion of the park into the existing parking area, encroachment of the planned hotel onto the employee parking area, and the schedule of the proposed parking structure. Assuming that the vehicle occupancy remains the same and that the overflow parking of about 1,500 spaces remains available, then the total available visitor parking of about 8,200 spaces (95% of 8,664) would reach capacity in about 2011.

Parking Garage

Within Area 2, the Proposed Plan indicates that a future parking garage is a long-term Special Project. This parking garage would be located in the western part of the existing parking lot, between the Main Entrance and the Front Gate. The parking garage would be up to four levels in height, with half of the first level approximately six feet below grade. The parking garage would not be needed until park attendance justifies the additional parking capacity. The parking garage would meet the additional demand for parking when parking demand would require it. Therefore, the project would not result in a significant impact to the offsite parking supply.

4.4.7 Significance of Impact

For year 2005, the minimum parking requirements were forecasted at approximately 7,600 spaces. The current usable supply is about 8,000 spaces; therefore, no significant impacts would occur in the near term (2005). For year 2020, the minimum parking requirements were forecasted at approximately 9,200 spaces, which would exceed the current usable supply. As discussed previously, the existing usable supply is forecasted to reach capacity in about 2010. Because the exact number of parking spaces that the planned parking structure would provide is not known, significant impacts may occur beyond the year 2010.

4.4.8 Mitigation, Monitoring, and Reporting

Monitoring Program

Timing for project-related parking mitigation measures would be tied to a monitoring program due to the relative uncertainty of future SeaWorld visitors based on the previous ten-year flat attendance record. It is recommended that the monitoring program be part of a Mitigation Monitoring Report Program (MMRP), and commence one year after project approval by the California Coastal Commission. The monitoring program would involve the following major elements.

1. Generate an annual summer parking demand report using SeaWorld's vehicular toll booth and patron data. The report should include the overall, peak, and overflow parking demands;
2. Identify the encroachment impacts of all planned park attractions upon the existing parking supply. The timing for each planned attraction has not been identified at this time; therefore, the timing will be determined by the parking monitoring program;
3. Identify the parking-design-day when the demand for the available 8,000 parking spaces (paved and unpaved) is exceeded during most summer weekends;
4. Identify the parking structure supply;
5. Identify the parking demand thresholds to trigger the paving of the adjacent overflow lot, provision of alternative/satellite parking, and/or the construction of the parking structure;

6. Explore and implement alternative/satellite parking locations and shuttle/MTDB transit operations as appropriate to meet the parking demand; and
7. Building permits may be withheld if it has been established that additional parking must be provided, and SeaWorld has not provided the needed parking.

Project Mitigation

Implementation of the following mitigation measures would reduce parking impacts to below a level of significance.

Mitigation Measure 4.4-11: At the time the parking monitoring program indicates that it is necessary, complete one or more of the following improvements, as dictated by the monitoring program: (1) pave the existing unpaved guest overflow parking area located in the southwest corner of Area 2; (2) implement offsite parking or shuttle/MTDB transit options; and/or (3) construct the planned parking structure.

4.4.9 Impact

Issue 4: **Would the proposal result in traffic generation in excess of specific/community plan allocation?**

The major policies and objectives related directly to future development in Mission Bay Park are outlined in the City of San Diego's Mission Bay Park Master Plan Update, which is administered by the Park and Recreation Department and functions as the community plan for the Park. As such, the Mission Bay Park Master Plan does not identify a specific allocation of traffic generation for SeaWorld. Furthermore the SeaWorld Master Plan Update is consistent with the land use designations in the Mission Bay Park Master Plan Update. Please refer to Section 4.1, Land Use, for a discussion of these regulatory plans.

4.4.10 Significance of Impact

The Mission Bay Park Master Plan does not allocate specific traffic generation figures for SeaWorld and the SeaWorld Master Plan Update land use designations are consistent with the Mission Bay Park Master Plan Update; therefore, no significant impact would occur to a Community Plan traffic generation allocation.

4.4.11 Mitigation, Monitoring, and Reporting

Because no significant impact is identified, no mitigation measures are recommended.

4.4.12 Impact

Issue 5: Would the proposal result in a discouragement to other Mission Bay Park users?

Circulation System

Inadequate functioning of the circulation system in Mission Bay Park may discourage use of the Park. The proposed project may result in significant impacts to the circulation system in the vicinity of SeaWorld. However, these impacts would be mitigated to below a level of significance as described above. As a result, the proposed project would not result in a significant impact to the Mission Bay Park circulation system, and therefore would not discourage park users from frequenting the park.

Access

The entrance at Perez Cove Way and the exit at Sea World Way were observed on Memorial Day weekend, Fourth of July weekend, Labor Day weekend, and a non-holiday summer weekend during 1999 to determine the operating conditions. Queue counts were conducted between 10 AM and 12 PM at the entrance and between 5 and 7 PM at the exit. The maximum daily queues ranged from 6 to 25 vehicles with an average queue of 5 vehicles per hour per gate for the entrance and 2 vehicles per lane per hour at the exit. Based on these counts, the calculated service rate of 120 vehicles per hour per gate was determined as acceptable operating conditions.

Because ingress and egress to SeaWorld is adequate, the proposed project would not cause a significant impact to traffic conditions that would discourage other Mission Bay Park users from frequenting the Park.

Parking

As discussed earlier, the existing parking supply is sufficient for current SeaWorld attendance. Additionally, a parking garage is planned as a Special Project to be constructed when attendance warrants the additional capacity. Therefore, there is no demand for offsite parking. The proposed project would not affect the offsite parking supply, which is generally provided for other Mission Bay Park patrons.

4.4.13 Significance of Impact

The proposed project would not result in adverse traffic conditions or a parking deficit that would discourage Mission Bay Park users from visiting the Park. Therefore, the project would not result in any significant impacts relative to Park usage.

4.4.14 Mitigation, Monitoring, and Reporting

Because no significant impact is identified, no mitigation measures are recommended.

4.4.15 Impact

Issue 6: Would the proposal result in an increase in hazards to motor vehicles, bicyclists, or pedestrians?

The proposed Tier 1, Tier 2, and Special Projects would be designed according to current safety standards and would not put motor vehicles, bicyclists, or pedestrians at risk. Furthermore, the project would not affect the operational characteristics of existing bicycle or pedestrian pathways in Mission Bay Park.

4.4.16 Significance of Impact

No significant impact with respect to an increase in hazards to motor vehicles, bicyclists, or pedestrians would occur from the proposed project.

4.4.17 Mitigation, Monitoring, and Reporting

Because no significant impact is identified, no mitigation measures are recommended.

4.5 Water Quality

A report entitled *Water Quality Best Management Practices Plan Update* was prepared by URS in September 2000 to describe the existing water quality of Mission Bay and the potential impacts associated with the proposed Sea World Master Plan Update. The report is presented in its entirety in Appendix C. This report incorporates the Water Quality/Best Management Practices Program for SeaWorld of San Diego, which was prepared in April 1998 in response to Condition 2 of the January 14, 1998 California Coastal Commission's Notice of Intent to Issue Permit for SeaWorld of California – San Diego (Permit No. 6-97-121). The BMPs provided in this document are described below under the section entitled Existing Urban Runoff Control Program. Within this section, the subsections Aquaria Water Treatment, Surface Runoff Controls, Spill Prevention and Control, Material Storage and Use Controls, Vehicle Maintenance Controls, Waste Management and Recycling, and Landscape Management provide the description of the BMPs put into operation at SeaWorld in compliance with the Coastal Commission's Notice of Intent to Issue Permit.

4.5.1 Existing Conditions

Mission Bay Water Quality

Mission Bay is located along the coast of San Diego, just north of the mouth of the San Diego River. It is tidally influenced and receives freshwater input from Rose Creek, Tecolote Creek, and numerous storm drains.

Recently, the water quality in Mission Bay has diminished as a result of urban runoff generated from development within the watershed of the tributary creeks. This urban stormwater runoff contains a variety of pollutants, including oil and grease, heavy metals, sediment, and bacteria. Of these sources, bacteria, atrophic (nutrients that stimulate algae growth) and lead have been the primary problems. From 1996 through 1998, there were more than 205–378 beach and bay closures and advisories issued for Mission Bay. ~~The majority of the closures~~ Of this number, 61 were the result of sewer spills and overflows; none were attributable to SeaWorld operations.

Urban pollutants transported to the Bay via storm drains are also a major contributor to water quality problems. The urban pollutants are largely caused by residential uses and paved surfaces. Low flow and dry weather flows through storm drains are particularly a problem because the volume of water is not able to dilute the urban pollutants. Initial rainfall events are also a problem because they create a “first flush” effect caused by the accumulation of urban pollutants between rainfall events which is picked up and transported in the early stages of a rain storm to the storm drain system.

In order to help reduce the impact of urban pollutants on Mission Bay, the majority of the storm drain facilities as well as the two creeks have been fitted with low-flow interceptors to direct non-storm water flows to the sanitary sewer. Low flows generally contain the highest concentration of urban pollutants. During storm events, the low-flow interceptors are bypassed,

allowing storm flows to directly enter the Bay. High storm water flows reduce the impact of urban pollutants by diluting the pollutants with the higher water volumes.

Of these components, bacterial indicators (total coliform, fecal coliform and *Enterococcus*) have been of greatest concern due to the associated public health risk. In fact, these sources are the primary source of water quality impacts in the immediate vicinity of SeaWorld; lead and eutrophication problems are generally found in other parts of the Bay.

The City of San Diego Metropolitan Wastewater Department has performed extensive monitoring of bacterial indicators over the past 15 years at 21 locations throughout the Bay on a weekly basis. Thus, at times, the densities of bacteria observed in Mission Bay exceed the standards for water-contact recreation (REC-1). These incidents have led to postings of portions of Mission Bay, providing health warnings to people using the Bay.

Data from the City of San Diego's Metropolitan Wastewater Department measurements indicate widespread presence of total coliform, fecal coliform and *Enterococcus* throughout most portions of Mission Bay. Results from the City's Wastewater Department show that the concentrations of these indicator bacteria range from less than two Most Probable Number (MPN)/100 ml to several thousands MPN/100 ml.

Total coliform, fecal coliform and *Enterococcus* measurements have also been taken by the Regional Water Quality Control Board (RWQCB). Preliminary results from May 2000 indicate that total coliform was present in most of the samples, ranging from less than 2 to 13,000 MPN/100ml. Fecal coliform was also identified in many samples at levels ranging from less than 2 to 5,200 MPN/100 ml. *Enterococcus* was analyzed at a subset of locations and ranged from less than 2 to 1,400 MPN ml.

The standards established for these three bacterial components are set in terms of most probable numbers per 100 ml (MPN/100 ml). The applicable standards for Mission Bay are aimed at maintaining safe levels for contact recreation (e.g. swimming). These standards, collectively referred to as REC-1, are as follows: total coliform (10,000 MPN/100 ml), fecal coliform (400 MPN/100 ml), and *Enterococcus* (104 MPN/100 ml).

In addition to bacterial sampling, the RWQCB has conducted sampling at 47 locations within Mission Bay to test for ambient levels of other potential pollutants. These samples were analyzed with respect to the following constituents:

- Total coliform;
- Fecal coliform;
- *Enterococcus*;
- Nutrients;
- Ammonia;
- Biological oxygen demand (BOD);
- Gasoline;
- Oil and grease;
- MTBE/BTEX;
- Dissolved oxygen;
- Salinity;
- pH;
- Total suspended solids;
- Copper;
- Silver;
- Pesticides; and
- Chlorine residual.

Methyl tert-Butyl Ether (MtBE) was detected in several of the samples. MtBE is the chemical oxygenate most added to gasoline. BTEX, which refers to a group of compounds comprised of benzene, toluene, ethylbenzene, and xylene isomers which are also found in gasoline and other fuels, were also identified. Both of these compounds are also highly soluble in water and easily transported in surface and ground water. MtBE was reported for two of the samples in concentrations of 8.8 and 18 µg/l.

The City of San Diego Environmental Services Department also conducts ongoing sampling in the general vicinity of SeaWorld. These measures are taken at the Pacific Passage area of Mission Bay and in the San Diego River near the Mission Bay Landfill. These samples have been analyzed once or twice a year since 1993. Surface water samples are analyzed for pH, ammonia, nitrate nitrogen, nitrate plus nitrite nitrogen, total dissolved solids, fluoride, chloride, sulfate, sulfide, oil and grease, bicarbonate, conductivity, a suite of metals, and a variety of volatile and semivolatile organic compounds. The results of this monitoring is presented in Table 4.5-1. ~~It should be noted, however, that the levels identified in these measurements tend to be higher than other areas of the Bay due to the influence of the San Diego River and the Mission Bay Landfill.~~

Water Quality Regulations

A number of local and state regulations govern proposed development with respect to water quality. A brief description of these regulations is provided below.

City of San Diego Municipal Code

Grading and Erosion Control

The City of San Diego sets forth requirements for grading and land development, including specifications for grading permits, in Municipal Code Sections 62.0401 through 62.0423. In accordance with these requirements, the City must review and approve grading plans as well as a revegetation plans. Grading plans must include procedures to control erosion and minimize sediment runoff draining from land undergoing development.

Reduction of Pollutants in Stormwater

The City of San Diego also sets forth requirements for the reduction of pollutants in stormwater in Municipal Code Section 43.0308. This section outlines requirements related to business activities such as preparation of a Stormwater Pollution Prevention Plan and a Hazardous Materials Release Response and Inventory Plan, as required under Chapter 6.95 of the California Health and Safety Code. Section 43.0308 of the Municipal Code also requires project compliance with NPDES permitting for stormwater discharges and General Construction Activities; regular cleaning or sweeping of parking lots and impervious areas; and compliance with stormwater best management practices (BMPs).

TABLE 4.5-1
Concentrations of Constituents in Mission Bay
and The San Diego River Near City Landfill Location

Constituent	Sampling Locations							
	MBSW-1	MBSW-2	MBSW-3	MBSW-4	SDRSW-5	SDRSW-6	SDRSW-7	SDRSW-8
pH (SU)	7.71-8.47	7.90-8.32	7.22-8.36	7.80-8.37	7.31-8.20	6.95-8.61	6.84-8.25	n/a
Ammonia (mg/L)	<0.1-0.23	<0.1-0.93	0.13-12.9	<0.1-0.98	<0.1-0.38	<0.1-3.15	<0.1-3.9	n/a
Nitrate-N (mg/L)	0.50-147	<0.05-117	0.08-117	<0.02-104	<0.02-14.7	<0.02-108	<0.02-102	n/a
Nitrate- Nitrite (mg/L)	n/a	0.7 ¹	<0.5 ¹	n/a	0.28 ¹	n/a	n/a	n/a
TDS (mg/L)	33,500-40,300	33,400-52,900	31,900-43,700	34,400-40,300	1,810-9,030	24,200-35,300	21,300-34,700	n/a
Fluoride (mg/L)	0.90-1.70	0.95-1.90	0.95-4.40	0.85-2.20	0.54-0.82	0.75-2.00	0.75*	n/a
Chloride (mg/L)	1,450-26,200	1,000-25,500	850-27,900	1,300-29,900	1,000-3,050	1,750-19,500	16,000-18,200	n/a
Sulfate (mg/L)	2,430-3,070	1,150-3,000	1,230-2,880	2,400-3,050	129-1,910	1,830-2,920	1,630-2,790	n/a
Sulfide (mg/L)	<0.01-0.10	<0.01-0.08	<0.01-0.08	<0.01-<0.05	<0.01-0.11	<0.01-<0.05	<0.01-0.01	n/a
Oil & Grease (mg/L)	<1.0-0.60	<1.0-2	<1.0-1.7	<1.0-14.3	<1.0-2	<1.0-1	<1.0-1	n/a
Bicarbonate (mg/L)	108-2,000	40-1,750	100-1,750	104-1,800	216-900	152-1,900	148-1,350	n/a
Conductivity (umhos/cm)	31,900-51,100	29,400-50,500	32,700-52,300	29,100-50,900	1,810-9,750	29,500-44,300	32,800-47,100	n/a
Antimony ²	<0.03-0.04	<0.03-0.09	<0.03-0.14	<0.03-0.07	<0.03-0.11	<0.03-0.06	<0.03-0.10	<0.03-0.13
Arsenic ²	<0.002-0.081	<0.002-0.014	<0.002-0.01	<0.002-0.031	<0.002-0.041	<0.002-0.040	<0.002-0.007	<0.002-0.006
Barium ²	<0.005-0.073	<0.005-0.011	<0.005-0.07	<0.005-0.020	<0.005-0.09	<0.005-0.09	<0.005-0.08	<0.005-0.05
Beryllium ²	<0.001-0.003	<0.001-0.002	<0.001- <0.005	<0.001- <0.005	<0.001- <0.005	<0.001- <0.005	<0.001- <0.005	<0.001
Cadmium ²	<0.005-0.015	<0.005-0.032	<0.005-0.009	<0.005-0.011	<0.005-0.010	<0.005-0.011	<0.005-0.009	<0.005-0.012
Chromium ²	<0.01-0.03	<0.01-0.04	<0.01-0.03	<0.01-0.02	<0.005-0.02	<0.01-0.02	<0.01-0.03	<0.01-0.02
Cobalt ²	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

TABLE 4.5-1
Concentrations of Constituents in Mission Bay
and The San Diego River Near City Landfill Location

Constituent	Sampling Locations							
	MBSW-1	MBSW-2	MBSW-3	MBSW-4	SDRSW-5	SDRSW-6	SDRSW-7	SDRSW-8
Copper ²	<0.01-0.06	<0.01-0.06	<0.01-0.06	<0.01-0.006	<0.01	<0.01	<0.01-0.01	<0.01
Iron ²	0.30-19	<0.1-1.7	1.2-11	0.22-1.3	0.19-0.29	0.2-5.5	0.8-30	0.47-6.5
Lead ²	<0.001-0.01	<0.001-0.009	<0.001-0.014	<0.001-0.082	<0.002-0.006	<0.002-0.015	<0.001-0.024	<0.001-0.015
Mercury ²	<0.001-0.011	<0.001-0.12	<0.001-0.002	<0.001-0.011	<0.001	<0.001	<0.001-0.030	<0.001
Molybdenum ²	<0.01-0.03	<0.01-0.05	<0.01-0.04	<0.01-0.03	<0.01-0.03	<0.01-0.04	<0.01-0.04	0.02
Nickel ²	<0.01-0.11	<0.01-0.23	<0.01-0.15	<0.01-0.31	<0.01-0.01	<0.01-0.38	<0.01-0.19	<0.01
Selenium ²	<0.003-0.11	<0.003-0.089	<0.003-0.069	<0.003-0.071	<0.003- <0.005	<0.003-0.069	<0.003-0.069	<0.003
Silver ²	<0.01	<0.01-0.03	<0.01-0.23	<0.01-<0.02	<0.01-0.05	<0.01-0.02	<0.01-0.01	<0.01-0.03
Thalium ²	<0.005-0.010	<0.005-0.011	<0.005-0.16	<0.005-0.084	<0.005- <0.055	<0.005-0.007	<0.005-0.005	<0.005-0.006
Vanadium ²	<0.01-0.07	<0.01-0.03	<0.01-0.04	<0.01-0.01	<0.01-0.02	<0.01-0.02	<0.01-0.04	<0.01-0.03
Zinc ²	<0.01-0.12	<0.05-0.13	<0.01-0.10	<0.01-0.12	<0.01-0.08	<0.01-0.10	<0.01-0.63	<0.01-0.14

Source: URS, 2000.

- ¹ One data point only
² All metals measured in mg/L.

Storage of Hazardous Materials

Hazardous material storage is regulated by the City of San Diego Fire Code (City of San Diego Municipal Code Sections 55.0101 through 55.9201). The San Diego Fire Code has adopted provisions of the Uniform Fire Code with respect to storage requirements for hazardous materials. In accordance with Section 8003 of the UFC (1994), secondary containment is required for the storage of solid and liquid hazardous materials.

National Pollution Discharge Elimination System (NPDES)

Surface, ground and coastal water quality are regulated by the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCB) under the authority of the federal Clean Water Act and the State of California Porter-Cologne Act. All construction and subsequent drainage improvements that disturb five acres or more are subject to NPDES regulations under statewide permits issued by the SWRCB.

City of San Diego Stormwater Permit

The City of San Diego is covered under a municipal NPDES stormwater permit for discharges of stormwater runoff (RWQCB Order 90-42 and Monitoring and Reporting Order 95-76). In accordance with the provisions of this permit, the City of San Diego participates in a Comprehensive Stormwater and Urban Runoff Management Program.

The Comprehensive Program includes a number of programs which are implemented by the City. Education is an important part of the overall program. Education programs are aimed at promoting proper disposal of hazardous materials, managing pesticide application and storage, conservation of irrigation water to minimize runoff, catch-basin stenciling to discourage illegal discharge to storm water systems, and programs to encourage public reporting of illicit connections and illegal discharges. In addition, specific construction period measures are identified including temporary erosion control measures (e.g. drain inlet protection, sandbags, etc.), and revegetation. Long-term programs encourage onsite containment of urban runoff contaminants, hazardous materials storage procedures, and street sweeping.

General Construction Activity Stormwater Permit

Construction activities resulting in the disturbance of more than five acres also need an NPDES general permit for stormwater discharge associated with construction activity. Based on current regulations, a Notice of Intent (NOI) must be submitted to the SWRCB for consideration under a General Construction Activity Stormwater Permit. This permit requires applicants to develop, implement and monitor a Stormwater Pollution Prevention Plan (SWPPP) consisting of BMPs to eliminate or reduce pollutants in nonpoint source stormwater discharges.

Regional Water Quality Control Board (RWQCB) Basin Plan

The San Diego RWQCB Basin Plan sets forth water quality objectives for constituents which could potentially cause an adverse effect or impact on the beneficial uses of water. The following beneficial uses are designated for Mission Bay in the San Diego RWQCB Basin Plan:

Industrial Service Supply (IND);
Contact Water Recreation (REC-1);
Non-contact Water Recreation (REC-2);
Commercial and Sport Fishing (COMM);
Estuarine Habitat (EST);

Wildlife Habitat (WILD);
Shellfish Harvesting (SHELL);
Marine Habitat (MAR);
Migration of Aquatic Systems (MIGR); and
Rare, Threatened, or Endangered Species
(RARE).

Construction Dewatering

Construction dewatering discharges must be permitted either by the San Diego RWQCB under an NPDES general permit for construction dewatering discharge to surface waters or by the City of San Diego Metropolitan Wastewater Department for discharge to the city sanitary sewer under the Industrial Waste Pretreatment Program. Discharge via either of these mechanisms must meet applicable water quality objectives, constituent limitations, and pre-treatment requirements.

Existing SeaWorld Water Quality Conditions

This discussion identifies the sources of pollutants associated with ongoing SeaWorld activities and describes the water quality control program currently carried out by SeaWorld to serve as a baseline for evaluating potential impacts associated with the proposed Master Plan Update.

Existing Pollutant Sources

Ongoing activities within SeaWorld generate materials which, if not properly controlled, would adversely affect water quality in Mission Bay. These activities include:

1. Animal waste generated from aquaria displays and shows;
2. Litter and automobile by-products (e.g. gasoline, oil and brake linings) accumulating on parking lots;
3. Fertilizers and pesticides used on landscaping;
4. Use of water to wash down the grounds; and
5. Food waste and litter within the theme park.

Aquaria-based exhibits and shows are an integral part of SeaWorld activities. These exhibits rely on seawater drawn from the Bay to support the aquatic organisms in these exhibits and shows. Seawater is circulated through the exhibits and shows, treated, and then returned to the Bay. The primary potential source of water quality impact associated with this process is potential bacterial components related to warm-blooded animal waste which are contained in the seawater.

The large asphalt parking lots represent a major potential source of automobile by-products. Oil, gas, and antifreeze dripping from parked cars accumulates on the surface. Stop and go traffic in the parking lots would also result in deposition of copper which is a component of brake linings.

If uncontrolled, rainfall would pick up these automobile by-products as well as general litter and transport them to the Bay.

General maintenance of the landscape areas within the theme park involve application of fertilizers and pesticides. If improperly administered, these products would adversely impact water quality in the Bay by being transported in irrigation water as well as stormwater runoff. Trace amounts of herbicides and pesticides could be toxic to marine organisms. In addition, nitrogen and phosphorous compounds found in fertilizers would stimulate algae growth which would deplete oxygen levels in the bay water and contribute to eutrophication.

Wash water associated with hosing down the grounds contains litter and food substances which could enter the surface water and significantly impact the Bay if not properly contained onsite. Litter would serve as a substrate for algae growth as well as insects. Food materials would undergo bacterial decomposition in the Bay which would contribute to eutrophication and promote growth of coliforms, pathogens and viruses. Any detergents used in the cleaning process could have high levels of nitrogen and phosphorous which would impact water quality, as described earlier.

Improper storage of hazardous materials within SeaWorld and improper disposal of waste materials generated by equipment servicing could significantly impact the Bay by introducing additional toxic substances.

Existing Urban Runoff Control Program

SeaWorld has a comprehensive program for controlling potential sources of water pollution including:

1. Aquaria water treatment;
2. Theme Park surface runoff collection and treatment;
3. Spill prevention and control; and
4. Parking area sweeping;

Aquaria Water Treatment

SeaWorld has developed a formal Interoffice Memorandum entitled "*Prohibition of Discharges of Aquarium Waters to Mission Bay*" to ensure compliance with the facility's NPDES discharge permit. Specifically, the Memorandum states that there shall be no direct discharges of aquaria waters to Mission Bay without treatment; and that aquaria and pool draining operations are prohibited upon the commencement of a storm event in order to minimize the use of storm water bypasses at the east and west outfalls.

The salt water used to provide habitat for aquatic animals is collected and transported to one of two treatment plants within SeaWorld which are referred to as the East and West Wastewater

Treatment Plants (WWTP). Initially, the solids are screened from the salt water. The recovered solids are hauled away to a suitable disposal site. The water is then transferred from diverter basins into chlorine contact chambers where the water is disinfected by injecting sodium hypochlorite. After an extended contact period, during which water is moved through a series of contact chambers, residual chlorine is neutralized with sodium bisulfite before being discharged to the Bay. Residual chlorine levels are measured to assure that the desired residual chlorine level of 0.0 mg/L is achieved. The plant is designed to operate automatically, but can be operated semi-automatically or manually if the need arises.

Discharges from the WWTPs are covered under SeaWorld's National Pollutant Discharge Elimination System Permit No. CA0107336, "Waste Discharge Requirements for SeaWorld of California, San Diego County" as revised by Order No. 2000-25. This permit requires monitoring of the discharge to Mission Bay at the East and West WWTP outfalls. The NPDES permit covers the treatment plant discharge of continuous flows from the aquarium pools, intermittent flows from pool draining, facility irrigation and wash down waters, and stormwater discharges. Maximum permissible discharges under the permit are 3.24 million gallons per day for the East WWTP and 6.12 million gallons per day for the West WWTP. At this time, SeaWorld has excess capacity in the collection and treatment system, except during periods of high rainfall (major storm events). During major storm events, which occurs between four and six times per year, the capacity of SeaWorld's stormdrain collection system is exceeded and the storm runoff flows directly into Mission Bay. During these periods pollutant loads in the runoff are very low due to the BMP measures implemented by SeaWorld to eliminate pollutants before they reach the storm water collection system, and the high dilution levels associated with the high runoff volume. The average combined total flow during dry weather is less than 6 million gallons per day. Sea World is required to monitor the water quality of the effluent from its outfalls. The monitoring includes an analysis of flow quantity, total coliform, fecal coliform, *Enterococcus*, copper, silver, settleable solids, suspended solids, turbidity, oil and grease, pH, ammonia, total residual chlorine, halomethanes, and acute and chronic toxicity (Table 4.5-2).

The standards for total coliform and fecal coliform are based on rolling 30-day average values. The standards are stringent and are designed to protect shellfish harvesting. For fecal coliform, the concentration shall not exceed the log mean of 200 MPN/100 ml based on at least five samples in any 30-day period, and no more than 10 percent of the samples in any given 30-day period shall exceed 400 MPN/100 ml. For total coliform, the median concentration shall not exceed 70 MPN/100 ml in any 30-day period, and no more than 10 percent of the samples in any given 30-day period shall exceed 230 MPN/100 ml (five-tube test) or 330 MPN/100 ml (3-tube test). To assure compliance, SeaWorld collects and tests samples of its discharge on a weekly basis, at a minimum. Testing is accomplished for following sixteen parameters: acute toxicity, chronic toxicity, ammonia, chlorine residual, halomethanes, copper, silver, oil/grease, pH, settleable solids, suspended solids, enterococcus, fecal coliform, total coliform, turbidity, and maximum flow.

**TABLE 4.5-2
NPDES Discharge Limitations**

Constituent	Unit	6-Month Median	Monthly Average	Daily Maximum	Maximum at any Time
Acute Toxicity	TUa	--	1.5	--	2.5
Chronic Toxicity	TUc	--	--	22	--
Ammonia	mg/L	--	--	--	0.55
Chlorine Residual	mg/L	--	0.21	--	0.42
Halomethanes	ug/L	--	2,900	--	--
Copper	ug/L	24	--	220	620
Silver	ug/L	6.5	--	36	96
Oil & Grease	mg/L	--	25	--	75
PH	pH units	7.0 – 9.0	7.0 – 9.0	7.0 – 9.0	7.0 – 9.0
Settleable Solids	mL/L	--	1.0	--	3.0
Suspended Solids	mg/L	--	10	15	--
Enterococcus	CFU/100 mL	--	--	--	104
Fecal Coliform	MPN/100 mL	Narrative	Narrative	Narrative	Narrative
Total Coliform	MPN/100 mL	Narrative	Narrative	Narrative	Narrative
Turbidity	NTU	--	75	--	225

Source: Regional Water Quality Control Board, 1998.

As part of its compliance with the NPDES permit, SeaWorld has developed a work plan to conduct an eutrophication study in Mission Bay. Eutrophication is caused by the oversupply of inorganic nutrients, primarily nitrogen and phosphorus, which promote algal growth. Increased algal growth can reduce the amount of light available to other plants, reduce oxygen levels, and may be toxic to fish and other vertebrates. The study will examine inputs of nitrates and phosphates into the Mission Bay system and measure the levels of dissolved oxygen and phytoplankton (algae). This study will provide current information regarding nutrient loading and nutrient levels in the Bay.

Surface Runoff Controls

Surface runoff within the Theme Park area is collected and transported to one of the two WWTPs for treatment before being discharged into the Bay. Each of the two treatment facilities is designed with a diversion weir to collect storm water flows when system capacity is exceeded due to stormwater discharges. This weir functions as a high-flow bypass; therefore, treatment of “first flush” storm water is provided even during large storm events. The East and West WWTPs effluent is discharge into the Bay.

In addition, SeaWorld implements an aggressive sweeping program. Parking lots, walkways, and internal streets are swept on a daily basis to remove litter, oils and grease, and particulate matter. SeaWorld owns and operates two full-size sweepers. Vacuum sweepers are used instead of mechanical brush sweepers because they are more effective in removing fine particulate

matter. In addition, SeaWorld has developed a Standard Operating Procedure (SOP) for pavement sweeping and cleaning. The SOP emphasizes the use of dry cleanup methods.

Trashcans are located throughout the parking lot and along walkways throughout the park. SeaWorld conducts daily trash pickup. In addition, employees continually police walkways and parking areas to pick up stray litter.

SeaWorld has written and implemented a streamlined Storm Water Pollution Prevention Plan (SWPPP). Specifically, the SWPPP lists the training; maintenance, inspection, and repair; and program implementation efforts undertaken at SeaWorld that are specific to storm water quality control. The SWPPP contains appendices that include an informational brochure on storm water quality developed by the City of San Diego, a Storm Water Bulletin prepared by PSA, and a copy of SeaWorld's Policy Memo (No. 4.1-1-001) entitled *Surface Water Runoff and Storm Drain Discharges*. This memo states that there shall be no discharge or disposal to the storm drain system of the following:

1. Any hazardous material or hazardous waste;
2. Cleaning compounds or detergents – biodegradable or otherwise;
3. Cleaning operations of food containment vessels or transport devices;
4. Unauthorized debris washdown/washoff that contains organic matter either manmade or natural;
5. Liquid food products such as syrup, soft drinks, and grease;
6. Painting materials and paint cleaning operations; and
7. Anything else that is of a questionable nature.

Spill Prevention and Control

SeaWorld has prepared a Spill Prevention Control and Countermeasure Plan (SPCC Plan). The SPCC Plan was developed to be used as a guideline for the prevention of oil and chemical spills and as a guide for controlling and ultimately cleaning up a spill. The SPCC Plan lists all known bulk storage tanks and storage areas located throughout the facility. For each storage tank or area, the plan provides details regarding the location; delivery, storage capacity, and type of material stored; estimated quantity of material potentially discharged; possible spill pathway; spill prevention measures; spill controls; and spill countermeasures.

Facility oversight is provided by operations, maintenance, or security personnel 24 hours per day, seven days per week. The facility grounds are surrounded by a security fence and routinely patrolled. Park access is limited to the main entrances and controlled through a guarded gate. Designated areas for the receiving and handling of oil and chemicals are restricted to the public. Delivery of chemicals to areas that require entrance and egress through public areas of the park

are limited to hours during which the park is closed. Storage areas are adequately lighted to provide for the discovery of leaks during darkness. Lighting is checked routinely.

The SPCC Plan specifies the names and 24-hour telephone numbers and pages for key personnel who are responsible for responding to spills. It also specifies procedures for internal notification, agency notification, corporate notification, written reports, external reports, and internal written reports in the event of a spill. The SPCC Plan outlines a training program to be given to appropriate employees when they are hired at the park. It includes an annual refresher for appropriate personnel. Copies of the SPCC Plan are kept at three locations within the theme park: Environmental Coordinator's office, water quality offices, and maintenance offices.

In addition to the SPCC Plan, SeaWorld has developed an SOP for chemical spill response procedures. The purpose of this SOP is to ensure that all chemical spills are managed and handled properly by trained personnel.

Material Storage and Use Controls

SeaWorld has established a material storage and use control program for the management of materials with a potential to contaminate storm water. This program is described in more detail in Section 4.11 Human Health and Public Safety.

1. All hazardous materials and hazardous wastes are stored in a separate roofed, secondary-contained, locked storage area. This area drains to a blind sump that can be pumped out in the event of a spill. All drums within the storage area are properly labeled as to their contents. Waste materials are segregated from unused products.
2. Bulk chemical storage tanks have concrete containment dikes with adequate capacity to provide secondary containment in the event of a failure.
3. Flammable materials are stored within approved storage lockers that have adequate ventilation and proper labeling.
4. Fueling areas and bulk storage areas are equipped with spill cleanup kits. There is also an emergency fuel shut-off switch located at the boat fueling area. SeaWorld has developed an SOP for proper filling of the underground fuel storage tank.
5. Restaurant wash areas and outdoor drains discharge to the sanitary sewer. Grease is collected in special containers and disposed offsite by an outside vendor. Restaurant operators clean up routine spills and maintain outside areas using dry cleanup methods that minimize the use of water.
6. Most shipping and receiving areas have covered loading docks (awnings over the doors).

Vehicle Maintenance Controls

SeaWorld implements vehicle maintenance controls to minimize contact of storm water with materials and activities that potentially contain pollutants. This program includes the following:

1. Vehicle maintenance is conducted indoors inside a clean maintenance shop. Drip pans are placed under the vehicles during maintenance activities to catch potential oil and vehicle fluids.
2. Vehicle washing and engine steam-cleaning is conducted at a specially-constructed wash rack that drains into a blind sump. The sump is pumped out periodically and the accumulated water is discharged to the sanitary sewer.
3. SeaWorld uses electric carts. The forklift is powered by liquid petroleum gas (LPG) powered.

Waste Management and Recycling

SeaWorld conducts daily trash and litter collection and offsite disposal. Trash receptacles are located throughout the park, along walkways, adjacent to exhibits, and throughout the parking lot. These receptacles are emptied into larger waste dumpsters located in the non-public areas of the park.

SeaWorld has implemented a comprehensive recycling program with dumpsters located throughout the theme park. In addition, SeaWorld implements the following practices related to waste management and recycling:

1. Trash compactors in the northeast area of the facility are located on a concrete pad that drains to the sanitary sewer.
2. Most waste and recycling collection dumpsters are covered or are stored within a roofed storage area.

Landscape Management

SeaWorld's landscape serves as a type of surface water runoff pollution control media by providing erosion control, filtration and vegetative uptake of pollutants. These areas also serve as a buffer zone between the northern boundary of the park and Mission Bay. SeaWorld implements herbicide/pesticide and fertilizer management practices designed to minimize stormwater contaminants from landscaping applications. Pesticides are applied in the minimum quantity possible by licensed applicators and only when needed. Irrigation rates are set to levels less than the soil absorption capacity using evapotranspiration rate technology and equipment. SeaWorld has installed computer-controlled leak detection equipment that automatically pages operators when a leak is detected and shuts off the water. Any breaks in the system are repaired promptly. The intentional disposal of landscape debris into a storm drain or receiving water, as well as the discharge of any other types of pollutants, such as motor oil or antifreeze, into a storm drain or receiving water is prohibited as an identified BMP that is implemented as a company policy. Compliance with this policy is ensured through active policing by SeaWorld staff. This policy is part of SeaWorld's BMP program and was implemented in early 1992..

4.5.2 Significance Criteria

Water Quality impacts would be significant if the proposed project:

1. Would result in substantial pollution or contamination of surface or groundwater; and/or
2. Would result in substantial erosion and subsequent sedimentation of water bodies.

4.5.3 Impacts

Issue 1: Would the proposal result in a discharge into surface or ground waters or in any alteration of surface or groundwater quality, including, but not limited to temperature, dissolved oxygen, turbidity, pesticides, herbicides, fertilizers, gas, oil, or other noxious chemicals?

Tier 1 Projects

Development of new rides, exhibits or shows would not result in a substantial increase in the potential for SeaWorld activities to adversely impact water quality. As indicated in the discussion of existing water quality conditions, SeaWorld already includes rides, exhibits and shows which have the potential to impact water quality. Ongoing water quality control measures combined with adherence to local and state regulations regarding construction and operational aspects of Tier 1 projects would be sufficient to accommodate the additional sources of potential water quality impacts associated with Tier 1 projects.

Short-term Construction Effects

As with any construction process, the activities associated with implementing the Tier 1 projects could have short-term impacts on water quality. However, adherence to NPDES requirements and implementation of the Storm Water Pollution Prevention Plan (SWPPP) mandated by these requirements would provide adequate controls for potential construction impacts.

High periods of rainfall during the grading operations could result in the transport of sediment into the Bay. Excessive erosion and sedimentation would affect marine organisms in the Bay by increasing levels of turbidity and total dissolved solids. Erosion control would be implemented in accordance with the SWPPP. Typical controls would include the use of sand bags, siltation basins, and silt fences.

In addition to causing erosion and sedimentation, rainfall coming in contact with construction materials could also adversely impact the Bay. Water quality concerns associated with construction materials would include hydrocarbon products related to operation and servicing of construction equipment as well as hazardous materials associated with building construction and demolition including paint, concrete wash, and asphalt. Hydrocarbon products (e.g., fuel, oil, and grease) would reduce oxygen levels in the Bay and increase eutrophication. Construction materials could be toxic to marine organisms.

Temporary dewatering during construction poses another risk to water quality. Groundwater lying beneath SeaWorld may contain contaminants as well as being high in sediment concentrations. Significant impacts to the Bay could result if untreated groundwater is discharged directly to the Bay. As discussed earlier, hydrocarbons and contaminants would adversely affect marine organisms and overall water quality in the Bay.

Long-term Operation

A-1 Splashdown Ride

Operation of the ride cars/boats and associated elevator lift would require the use of lubricants, solvents, paints, and other organic compounds. The splashdown ride would use large amounts of water. Water overspray may mobilize pollutants on paved surfaces and on the cars/boats moving along the track and ultimately be picked up in the storm drain system. Bacteria and viruses may be introduced by human body contact with the water and from animals in the aquarium associated with the facility. Landscape maintenance may also introduce sediments, nutrients, and organic compounds (pesticides and herbicides).

Other Tier 1 Projects

The Educational Facility (B-1) and the Special Events Center Expansion (D-1) would be buildings where all activities would occur indoors and would, therefore, not represent a potential source of water pollution. The Front Gate Renovation (C-1) would likely entail a large pond and outdoor activities. Sources of water quality impacts would not be substantially different than what exists currently because the area is already serving as an entrance where landscape maintenance and trash already represent potential water quality impacts.

Tier 2 Projects

Tier 2 projects are future projects that have not undergone extensive planning and design. This section of the water quality analysis considers each of the planned expansion areas and evaluates them under three possible scenarios of exhibit, ride, or show. All of the Tier 2 sites, with the exception of I-2, are redevelopment sites that would involve demolition of the existing land use and construction of new facilities and would involve the same potential short-term construction impacts as discussed for Tier 1 projects. Therefore, this discussion focuses on potential operational impacts.

Future Exhibits

Exhibits tend to focus on fish, aquatic life, and other animals including wildlife exhibits. It is likely that future exhibits would include aquariums and other water areas, research facilities, and fenced or otherwise controlled areas for animals. These areas would also include landscaped areas, pathways, and supporting facilities such as snack stands and restrooms.

The main sources of water quality impacts from exhibits would include aquarium water, hose down of animal areas, landscaping, and pedestrian traffic. Bacteria and viruses may be introduced by animal contact with the water in the aquarium, or by washing activities in animal

areas. Landscape maintenance may introduce sediments, nutrients, and organic chemicals from the use of pesticides and herbicides. In summary, the types of water quality pollutants expected to be present from future exhibits include:

1. Sediment;
2. Oil, grease, and other lubricants;
3. Organic compounds (paint, solvents, pesticides, herbicides, etc.);
4. Fecal coliform, other bacteria, and viruses;
5. Nutrients (nitrogen and phosphorous, from landscape maintenance); and
6. Litter.

Future Ride Attractions

Future rides may range from full water-contact rides and non-water contact boat rides to land-based dry rides and playgrounds.

Depending on the nature of the ride attraction, the water quality impacts may vary. For rides that include a track, cars, or other mechanical apparatus, operation and maintenance would likely require the use of lubricants, solvents, paints, and other organic compounds. For rides with a significant water element, water overspray may mobilize pollutants on paved surfaces and other areas. Bacteria and viruses may be introduced by human body contact with the water and from animals in the aquarium associated with the facility. In summary, the types of water quality pollutants expected to be present from future operation of rides include:

1. Sediment;
2. Oil, grease, and other lubricants;
3. Organic compounds (paint, solvents, pesticides, herbicides, etc.);
4. Fecal coliform, other bacteria, and viruses;
5. Nutrients (e.g., nitrogen and phosphorous) from landscape maintenance; and
6. Trash.

Future Shows

Future show attractions may include a variety of venues, from indoor, media-oriented theatre presentations and stage acting to outdoor performances featuring animals. The water quality impacts would depend upon the specific nature of the show. In general, indoor activities would tend to have less potential for water quality impacts than outdoor or open-air facilities.

Depending on the nature of the show, the water quality impacts may vary. Indoor shows would have minimal water quality impacts, mainly associated with parking and landscaping, and pedestrian traffic. Bacteria and viruses may be introduced by animal contact with the water in the aquarium, or by washing activities in animal areas (if the show includes animal participation). The types of water quality pollutants expected to be present from operation of the future shows may include:

1. Oil, grease, and other lubricants;
2. Organic chemicals from paint, solvents, pesticides, herbicides, etc.;
3. Fecal coliform, other bacteria, and viruses;
4. Nutrients (e.g., nitrogen and phosphorous) from landscape maintenance;
5. Sediment; and
6. Litter.

Special Projects

The Special Projects outlined in the Sea World Master Plan are long-term projects associated with improving the infrastructure of the park rather than building new attractions. They include a four-story parking garage with possible MTDB transit link, SeaWorld Marina expansion, and a Future Hotel. As with Tier 2, construction impacts could occur from all of the Special Projects so the emphasis here is placed on potential long-term water quality effects.

Parking Garage and Transit Link Development

The types of water quality pollutants expected to be present from operation of the parking structure include:

1. Oil, grease, and other lubricants (from vehicle leaks in the parking structure and operation and maintenance of transit station facilities);
2. Nutrients (e.g., nitrogen and phosphorous) from landscape maintenance; and
3. Sediment.

SeaWorld Marina Expansion

The SeaWorld Marina Expansion includes extending the three existing docks and adding a fourth dock at the existing marina. SeaWorld may also consider future rentals of a small number of jet skis.

In addition to the potential construction impacts associated with land development, the marina expansion would involve work in Mission Bay. Construction in the Bay would pose additional

sedimentation and turbidity concerns due to the disturbance of bottom sediments during the expansion of the boat docks. This sediment material is composed of fine-grained material which would be easily suspended when disturbed.

The types of water quality impacts associated with the operation of the expanded facility would be the same types as under the current operation. Since most uses of this facility occur directly in or adjacent to the Bay, the potential for direct discharge into the Bay is higher than for other SeaWorld uses. Potential pollutants expected from the operation of the marina include:

1. Fuel, oil, and grease (from boats and boat fueling);
2. Bacteria (from sanitary waste discharges/spills);
3. Heavy metals, particularly copper (from boat antifouling paints); and
4. Litter.

Hotel Development

Because most of the human activity associated with the future hotel would occur indoors, the majority of potential water quality impacts would be associated with parking, landscaping around the new facility, and use of the boat landing dock. The types of water quality pollutants expected to be present from operation of this facility include:

1. Fuel, oil, grease, and other lubricants (from vehicle leaks in the parking lot and leakage from boats at the landing dock);
2. Nutrients (nitrogen and phosphorous, from landscape maintenance);
3. Sediment; and
4. Litter.

4.5.4 Significance of Impact

The proposed project consists primarily of redevelopment and reuse of the site, with uses similar to the existing uses, and therefore would not result in significant direct impacts on water quality. However, due to the current degree of water quality problems in Mission Bay, the additional surface water pollutants generated by the redevelopment activities would result in significant cumulative impact on Mission Bay. Potential sources of these cumulative impacts are identified in Table 4.5-3.

**TABLE 4.5-3
Significant Water Quality Impacts**

Parameter	Impacts from Construction	Operational Impacts
Sediment	X	X
Fuel, oil, grease, and other lubricants	X	X
Organic chemicals	Paints, solvents, etc.	Paints, solvents, pesticides, herbicides, etc.
Nutrients	X	X
Concrete wastes	X	
Fecal coliform, other bacteria and viruses		X
Trash	X	
Litter		X

4.5.5 Mitigation, Monitoring, and Reporting

Application of the ongoing water quality control program currently being implemented by SeaWorld to new projects would reduce operational impacts associated with development under the proposed Master Plan Update. In addition to these measures, the following measures, in combination with the ongoing controls, would reduce cumulative operational impacts on water quality to below a level of significance.

Mitigation Measure 4.5-1: Future expansion activities at SeaWorld Marina shall include the following:

1. Install an automatic shutoff on the fuel pump;
2. Regular inspection of the sanitary pumpout on a routine basis;
3. Prohibit boat hull paint removal and repainting in the marina area; and
4. Prohibit in-water hull scraping to remove marine growth, and collect and properly dispose of any marine material removed from hulls.

Mitigation Measure 4.5-2: Within two years of the approval of the SeaWorld Master Plan Update by the Coastal Commission, install catch basin inserts such as a Fossil Filter, or equivalent, to capture oil and grease in runoff at the point where it enters the storm drain system from parking lots and fueling areas.

In order to reduce cumulative water quality impacts related to construction to below a level of significance, the following mitigation measure should be implemented.

Mitigation Measure 4.5-3: A Master Stormwater Pollution Prevention Plan (SWPPP) shall be prepared and approved by the City Engineer and Regional Water Quality Control Board. This

Master SWPPP shall include general as well as specific measures which will be implemented to control water pollution related to construction. At a minimum, the Master SWPPP shall include the following provisions or their equivalent.

Erosion and Sediment Controls

1. Surface runoff shall be directed to the SeaWorld surface runoff treatment collection system except during times of high rainfall;
2. Perimeter and shoreline controls (e.g., straw bales, silt fences) shall be used;
3. Street sweeping and dry cleanup shall be completed daily;
4. Stockpiles shall be covered;
5. Gravel construction entrances and/or tire washes shall be used; and
6. Temporary landscaping shall be used when prolonged exposure may occur.

Oil, Grease, and Lubricants

1. Conduct maintenance, fueling, and washing offsite;
2. Properly maintain vehicles and equipment;
3. Repair leaks promptly;
4. Place drip pans under vehicles or equipment that is parked or stored for long periods;
5. Have spill control kits on the site; and
6. Store fuels, oils, and lubricants in contained storage areas.

Concrete

1. Wash out concrete trucks into earthen pits and remove/dispose of the hardened material;
2. Fill concrete trucks with water and wash them offsite; and
3. Dry and dispose of concrete saw-cut slurry as solid waste.

4.6 Biological Resources

Four biological reports were prepared for this project. Merkel & Associates, Inc., prepared three, with one prepared by Ann Bowles, Senior Research Biologist, with Hubbs-SeaWorld Research Institute. An independent evaluation of Ms. Bowles' research was conducted by Kathleen Keane with Keane Biological. The studies which were completed include a *Terrestrial Assessment and Eelgrass Survey for the SeaWorld of California Master Plan Update*, a California least tern (*Sterna antillarum browni*) foraging survey, a *California least tern Nesting Site Assessment (1978-1999) for San Diego County* and *Noise Effects on California Least Tern Nesting Behavior*. Complete copies of these reports are included in Appendix D.

4.6.1 Existing Conditions

Terrestrial Resources

A terrestrial survey was conducted on the entire upland portion of the Sea World leasehold. These upland areas are previously filled wetlands created by the dredging of Mission Bay in the 1950s and 1960s. Native vegetation was nonexistent on the entire upland portion. No sensitive or threatened and endangered species were observed. Notable landscaped plants included several Torrey pines (*Pinus torreyana*) located in the northern tip of Area 5, near and around the Hubbs-SeaWorld Research Institute. Also, numerous pairs of great blue herons (*Ardea herodias*) have been observed nesting within these trees over a period of years.

Birds

Bird communities represented within the project area consist of a typical mix of coastal marine species and urban associates. Human tolerant species such as (rock doves) domestic pigeons, mourning doves, European starlings, house finches, and house sparrows reside in the area. Gulls, herons, and California brown pelicans were typical birds found in the vicinity on docks, boats, and along other shoreline areas.

California Least Tern

The California least tern (*Sterna antillarum browni*) is one of three least tern subspecies breeding in North America. It nests from April through August at coastal sites from San Francisco Bay to lower Baja California. The wintering range remains unknown, but they are thought to migrate to Central America or northern South America. Because their preferred nesting habitat is beach sand, they have experienced a large reduction in available breeding habitat due to development and human encroachment. This loss of undisturbed habitat has resulted in severe population declines. The subspecies was listed as endangered under the federal Endangered Species Act on October 13, 1970 and by the California Endangered Species Act on June 27, 1971.

The majority of the California least tern (hereafter 'least tern') population nests in southern California, which supports one of the highest human populations in North America. High human populations support high populations of several species of predators adapted to human

environments. The least tern is under heavy pressure from a number of these species, including both non-native species (red fox, feral cats, rats) and native species (coyotes, skunks, possums and American kestrels). Human disturbance of least tern nesting sites is also an occasional problem, but because most nesting sites are fenced, direct human disturbance, aside from temporary disturbance by researchers, is probably not common. Thus, destruction of traditional nesting habitat and the type and level of predation have been the primary human-related factors affecting reproductive success of the least tern. They almost certainly explain the failure of the population to recover.

The population in Mission Bay is an important one. Three least tern nesting sites are located in Mission Bay: Mariner's Point, FAA Island, and North Fiesta Island (refer to Figure 4.1-7). Two other Mission Bay sites have been used in past years by nesting terns. These are at: Stony Point (north of SeaWorld, across from Perez Cove, and unused for 5-8 years, the Flood Control Channel (along the San Diego River channel directly opposite to the Sea World main entrance and unused for 10 years).

Nesting Sites

From 1978 through 2000, a total of twenty-one California least tern nesting locations were documented in San Diego County. In 2000, nineteen of these nesting locations were utilized by the species. Four of these nesting sites were documented in Mission Bay from 1995 through 2000; however, only three of the Mission Bay sites are currently actively used by the species. The following discussion of nesting activity is presented in terms of productive rates, which is the number of fledglings per pair (Figure 4.6-1).

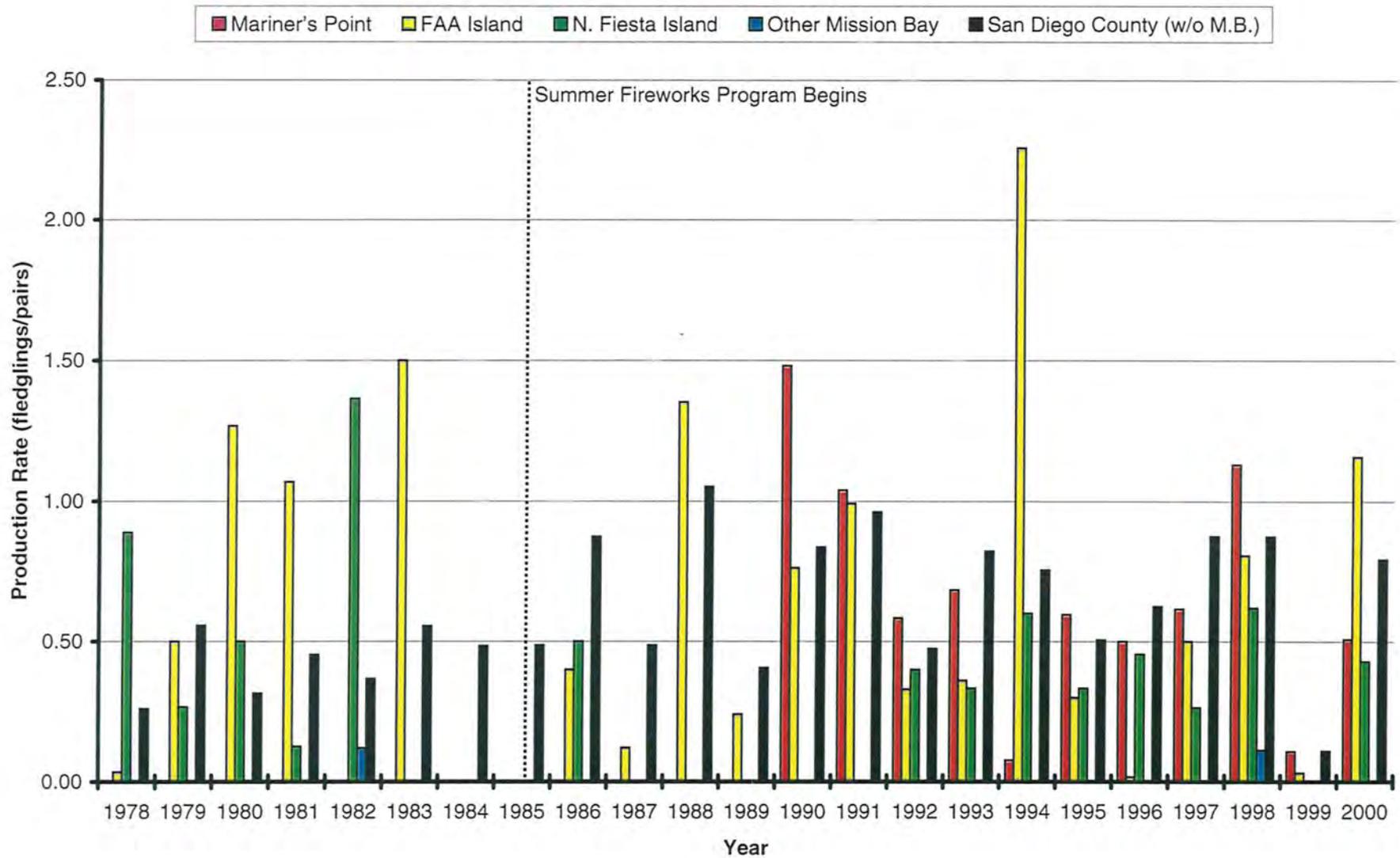
Mission Bay FAA Island

The Mission Bay FAA Island site was the most productive Mission Bay nesting site from 1979 to 1989 (See Figure 4.6-1). From 1990 through 1999 FAA Island was second in production to the Mariner's Point nesting site, while in 2000 FAA Island had the highest production rate. Within that time frame the FAA Island site's production rate has paralleled the trend of the Mariner's Point site. With the exception of 1996 and 1999 the FAA Island site has showed a steady increase in its production rate since 1992.

Within the last five years the number of pairs and nests greatly decreased from 200 pairs and 236 nests in 1995 to 20 pairs and 28 nests in 1997. Both the number of pairs and nests slightly increased from 1997 to 1999. The number of fledglings decreased from 60 fledglings in 1995 to three fledglings in 1996, increased to 25 fledglings in 1998, greatly declined again to two fledglings in 1999 and greatly increased to 200 fledglings in 2000.

Mission Bay Mariner's Point

The Mission Bay Mariner's Point site became a productive nesting site in Mission Bay in 1990, only one year after California least terns were first observed nesting there in 1989. Since 1990 Mariner's Point has been the most prolific and productive nesting site in Mission Bay.



Source: Merkel and Associates, 2001

California Least Tern Production Rate for Mission Bay _____ Figure 4.6-1

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Within the last five years there has been an observed increase in overall nest productivity from 1995 to 1998, but a decrease in nest productivity occurred in 1999. The number of pairs and nests increased from 210 pairs and 270 nests in 1995 to 562 pairs and 620 nests in 1999, however the number of pairs dropped to 345. The number of fledglings increased from 125 fledglings in 1995 to 596 fledglings in 1998, but greatly decreased to 60 fledglings in 1999. However, in 2000 the fledglings produced rebounded to 176.

Mission Bay North Fiesta Island

The Mission Bay North Fiesta Island site was the most productive site in Mission Bay in 1978, 1982, and 1986. Not until 1992 was North Fiesta Island again a productive nesting site. And from that time forward to 1999 its production rate closely followed that of FAA Island, with the exception of 1994 when FAA Island had a very high production rate of over 2.0, and in 1996 when FAA Island had a production rate of almost 0. Along with FAA Island and Mariner's Point, North Fiesta Island had a much lower than normal production rate in 1999, which rebounded in 2000, and exceeded FAA Island and Mariners Point by a more than double rate.

Within the last five years there has been an increase in overall nest productivity from 1995 to 1998, but a decrease in nest productivity occurred in 1997 and 1999. In 2000 nest productivity increased similar to the 1996 level. The number of pairs and nests greatly increased from 12 pairs and 12 nests in 1995 to 76 pairs and 82 nests in 1997, but decreased in 1998 to 21 pairs and 23 nests and yielded zero pairs of California least terns in 1999. The number of fledglings increased from four fledglings in 1995 to 20 fledglings in 1997, but decreased to 13 fledglings in 1998 and zero fledglings in 1999. The number of fledglings increased in 2000 to nine.

San Diego County Nesting Sites

The combined overall productivity rate of the remaining seventeen documented California least tern nesting sites throughout San Diego County (not including the Mission Bay sites) has followed the production rate trend observed in Mission Bay since 1988 (Figure 4.6-2). From 1983 to 1987 the production rate of the San Diego County nesting sites was higher than the Mission Bay sites but followed the same trend when there was an increase or decrease in the rate. From 1979 to 1982 the production rate for Mission Bay was higher than the rest of San Diego County and the production rate trends for these years were opposite each other. In 1999, there was a noticeable decrease in the production rate around San Diego County, including those nesting sites in Mission Bay, which rebounded in 2000.

Within the last five years there has been an increase in countywide production rates from 1995 to 1997, but a greatly decreased rate from 1998 to 1999. The combined number of pairs, nests and fledglings increased from 1,029 pairs, 1,186 nests and 520 fledglings in 1995 to 1,924 pairs, 2,150 nests and 1,684 fledglings in 1997. A combined total of 1,080 pairs yielded 945 fledglings in 1998; in 1999, a combined total of 1,686 pairs yielded 183 fledglings; and in 2000 2,130 pairs yielded 1,690 fledglings.

In 1982 and 1998, California least terns nested and fledged young at sites around Mission Bay other than the three prominent nesting sites. In 1982, 42 pairs of terns were observed that fledged five birds. In 1998, nine pairs of terns were noted that fledged one bird.

Foraging Surveys

A California least tern study performed for this project by Merkel & Associates focused on foraging behavior in the vicinity of the SeaWorld leasehold. Issues relating to predator perches and encroachment on foraging grounds were analyzed. Observations were made on California least tern, Forster's tern (*Sterna forsteri*), Caspian tern (*Sterna caspia*), royal tern (*Sterna maxima*), elegant tern (*Sterna elegans*), and common tern (*Sterna hirundo*).

Foraging surveys for the California least tern covered waters of the western portion of the Pacific Passage channel, with a focus area extending approximately 500 feet north from the edge of the SeaWorld leasehold. The study area included Pacific Passage extending from just east of the eastern limit of the SeaWorld leasehold (near the entrance to Hidden Anchorage) to the west and to a line from Stony Point to Hubbs-SeaWorld Research Institute, including Perez Cove. The study area was divided into six stations by bisecting Pacific Passage with north-south lines typically running through a mid-channel buoy.

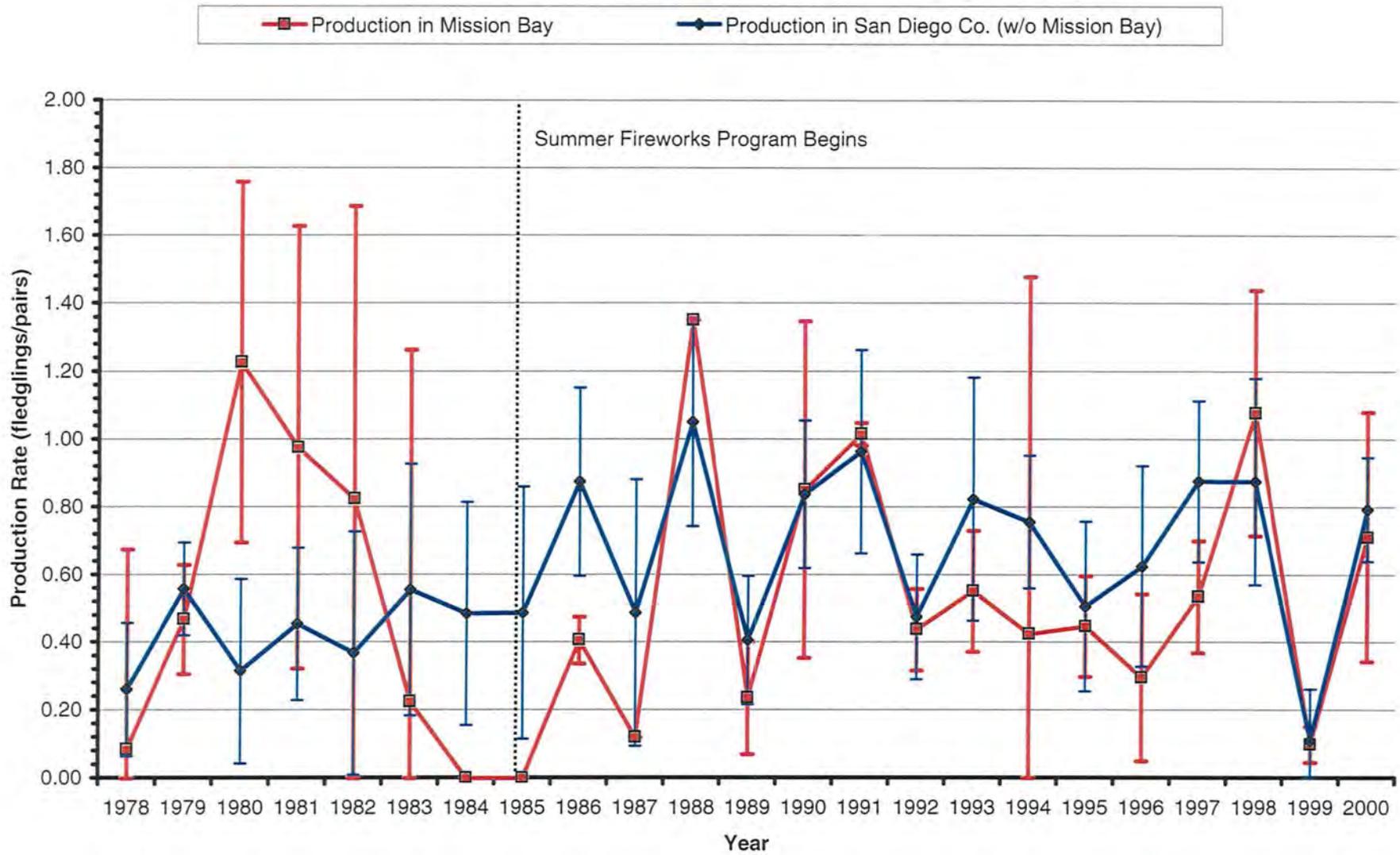
During the weekly surveys, each station was monitored for 20 minutes by biologists located on the southern shoreline. Data were recorded in a manner consistent with the methodology used in prior surveys of Mission Bay (Southwest Research Associates 1994). Current activity levels were compared with two survey stations used during the 1993, 1992, and 1989 Mission Bay bay-wide foraging studies

The highest amount of foraging, defined as the total of all plunge dive and searching activities, ranged from greater than 200 observations at Station 4, located in about the center of Pacific Passage to less than 20 observations at Station 6, which included the SeaWorld Marina. Foraging activities were observed to be the greatest in the spring and almost non-existent from mid-July through the end of August. These results indicate a higher level of activity as defined in the prior study summarized by Southwest Research Associates Inc. in 1994. However, it is not known whether or not this is due to a change in tern foraging habits between years or to a difference in sampling design.

Generally, least tern foraging in the study area was greatest in the northern and central part of Pacific Passage. The study showed that there is low to no foraging activity in the southern part of Pacific Passage near the SeaWorld leasehold and low foraging activity in Perez Cove.

Terrestrial Invertebrates

A number of coastal terrestrial invertebrates are considered sensitive due to their narrow distribution along coastal habitats and the extreme loss of these areas due to development, recreation, and beach maintenance impacts. These invertebrates include organisms such as Globose dune beetles (*Coleus*), a number of tiger beetles (cicindelids), and the salt marsh skipper



Source: Merkel and Associates, 2001

California Least Tern Production Rate
Within San Diego County and Mission Bay

Figure 4.6-2

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(*Panoquina errans*). Within the project area, none of the typical coastal habitats occupied by sensitive beetles are represented. The salt marsh skipper, a low rarity butterfly, is strongly associated with the occurrence of its larval host plant, coastal salt grass (*Distichlis spicata*), located within the immediate vicinity of the coast. This plant is relatively opportunistic in coastal areas. No individuals of the salt marsh skipper were observed in the project area. This species is a covered species within the City of San Diego Multiple Species Conservation Program Subarea Plan and is addressed by the conservation of salt marsh habitats, including those of the Northern and Southern Wildlife Preserves.

Marine Biological Resources

Summarized below is a brief description of the marine biological resources typical for the water area of the SeaWorld leasehold. This information was extracted from a previously prepared document, *Biological Impact of the Proposed Marina Village Redevelopment Project, Quivira Basin, Mission Bay*, prepared by Merkel & Associates, Inc., on February 29, 2000. Merkel & Associates verified the information below for its accuracy related to the SeaWorld leasehold in 2000.

Marine Invertebrates

No marine invertebrate investigations were conducted for this study; however, it is anticipated that a typical fouling community of encrusting organisms such as bryozoans, sponges, and tunicates dominate the piles and dock floats. Bryozoans or “moss animals” are aquatic organisms, which form colonies of interconnected individuals. They can encrust rocky surfaces, shells, or algae and are abundant in modern marine environments. Tunicates or sea squirts can form crusts of fused individuals. All three types of these encrusting organisms feed on plankton (primarily microscopic plants and animals that drift or float in the water) and bacteria.

Exposed riprap supports macroscopic and microscopic algal growth. Small mobile species such as crabs, shrimp, gastropods (snails), and annelids (e.g., marine worms) occur in both the encrusting communities and algal dominated areas.

Fish

Representative fish in the area include open coastal species such as garibaldi, seniorita, and kelp bass, which swim along the breakwater. Opaleye and striped mullet were also observed in the vicinity in harbor environments.

Eelgrass Surveys

Eelgrass (*Zostera marina*) is a rooted, flowering plant that grows under water in quiet areas of bays, estuaries, and protected shorelines where the water is clear and light is plentiful. The long, tapered leaves slow the water current promoting the deposition of suspended particles and larvae. Eelgrass habitats are biologically diverse and productive ecosystems with substantial economic impact. Valuable ecological functions of eelgrass beds include spawning areas and protective nurseries for many species of fish and invertebrates (e.g., shellfish and crustaceans), as well as erosion prevention, and increased shoreline stability. Eelgrass is also a primary producer of food

through the generation of detritus or decaying plant matter versus direct ingestion of the leaves. Bacteria, worms, and crabs feed on the detritus.

An eelgrass survey of Perez Cove was conducted in August 2000 by Merkel & Associates. Prior eelgrass surveys were conducted in 1997 and 1992 for all of Mission Bay including Perez Cove. Also a long-term eelgrass monitoring study as well as a pre and post-event eelgrass surveys were conducted in 1998 and 1999 for the Intensity Games show in Waterfront Stadium on the SeaWorld leasehold. Results of these eelgrass surveys are provided below for Perez Cove Marina, Pacific Passage, and Waterfront Stadium.

Perez Cove

An existing conditions eelgrass survey of Perez Cove was conducted to verify the mapping performed in 1992 and 1997. Focused surveys were also conducted where new docks are proposed. The methodology involved visual verification and transect analysis to verify previously mapped eelgrass beds. A boat was used to assist a diver around the cove to visually verify eelgrass bed coverage. Transects were spaced approximately 30 feet apart in line and at the end of the three existing docks and in the footprint of the proposed fourth dock. Transects were extended into the bay to cover the entire length of the area proposed to support docks. The eelgrass beds are described with respect to their depth below the Mean Lower Low Water. The MLLW is the average height of the lower low tides for a locality. Low water is the lowest level reached by the water surface at low tide before the rise toward high tide begins. Lower low water is the lower of two low tides occurring during a tidal day where tides are mixed. A mixed tide is one having two high waters and two low waters per tidal day as occurs in coastal California.

The survey revealed extensive coverage of eelgrass along the near shoreline extending from approximately -1 foot MLLW, adjacent to the riprap shoreline, and to depths of -7 feet MLLW closer to Pacific Passage. Eelgrass became slightly less dense at approximately -7 feet MLLW and deeper to -9 feet MLLW. The less dense eelgrass in the deeper portions of the cove is probably due to slightly less light reaching the bay bottom in the northern portion of the cove. Eelgrass coverage within the study area is consistent with the amount of eelgrass observed during the bay-wide surveys conducted in 1992 and 1997. The water quality in this portion of the bay is typically good because of the location of the cove's proximity to Mission Bay Channel, which is the main channel to the ocean.

There is little to no eelgrass growing underneath the boats and docks presently located within the central and eastern parts of the cove. This condition was also observed during the two most recent bay-wide surveys. The constant shade cast by the boats and docks precludes sufficient direct and indirect sunlight from reaching the bottom to support eelgrass growth. The areas between the existing docks support eelgrass, but were not included as part of the total eelgrass bed within this Perez Cove survey. Density measurements of the eelgrass beds survey were determined, which indicate that the densities are typical of a well-established, mature, stable eelgrass bed found in Mission Bay.

Pacific Passage

Historically, eelgrass has been located along and adjacent to the shoreline on both the north and south sides of Pacific Passage. According to the bay wide surveys conducted in 1992 and 1997 a band of eelgrass exists approximately 50 to 100 feet in width along both the north and south shorelines, while the central portion of the channel has little to no eelgrass present. The band of eelgrass located along the southern shoreline, between the SeaWorld Waterfront Stadium Lagoon and the South Shores Basin, was visually verified during the summer 2000 fieldwork. The bed of eelgrass along the Pacific Passage shoreline adjacent to the SeaWorld leasehold appears to be in good health and is very stable and well established. Currently the eelgrass bed extends at least 75 feet from the toe of the riprap shoreline, starting at approximately -1 foot MLLW in depth.

Waterfront Stadium Lagoon

Eelgrass exists within the Waterfront Stadium Lagoon located to the east of Perez Cove in Area 1 of the SeaWorld Master Plan Update. During the 1991 to 1996 yearly monitoring of the lagoon, eelgrass was present throughout the lagoon including the area adjacent to the island. In addition, eelgrass surveys conducted in 1998 and 1999 around the north, east, and south sides of the island, including portions of the Waterfront Stadium Lagoon, indicate that nearly the entire lagoon bottom is covered with eelgrass. The eelgrass bed was thinner and less dense along the southern portions of the lagoon, adjacent to the stadium seats. Also, when the floating ski show jump ramp was in place eelgrass was not present directly below the ramp.

4.6.2 Significance Criteria

Based on City and/or CEQA thresholds, biology impacts would be significant if the proposed project:

1. Substantially affects a sensitive, rare or endangered species of animal or plant or the habitat of the species,
2. Substantially interferes with the movement of any resident or migratory fish or wildlife species; or
3. Substantially diminishes habitat for fish, wildlife or plants.

Eelgrass

According to the Southern California Eelgrass Mitigation Policy (adopted July 31, 1991, revision 8) "eelgrass vegetated areas function as important habitat for a variety of fish and other wildlife." This policy was created to mitigate significant impacts to eelgrass resources and was adopted by National Marine Fisheries Service, U.S. Fish and Wildlife Service, and the California Department of Fish and Game. A significant impact to eelgrass would be the long-term and permanent loss of eelgrass, an eelgrass bed, or a portion thereof. An impact to eelgrass could be caused by a number of construction activities including dredging, excavation, fill, recontouring, and reduction of light.

The policy identifies the eelgrass active growth phase as the months of March through October. During the months of November through February eelgrass experiences a dieback phase where growth rates are reduced and the density of eelgrass beds are much thinner. During this time of year is when shading impacts to eelgrass would be reduced.

The shading analysis conducted by Merkel & Associates determined that a significant shadow impact for the area would occur where each of the three time frames: 10:00 AM, 1:00 PM and 4:00 PM overlapped. These would result in a three-hour shadow duration that could affect eelgrass growth.

4.6.3 Impact

Issue 1: Would the proposal result in a reduction in the number of any unique, rare, endangered, sensitive or fully protected species of plants or animals?

Terrestrial Resources

No naturally occurring unique, rare, endangered, sensitive or fully protection plants or animal species are found in the upland part of the SeaWorld leasehold. Therefore no direct significant impacts to terrestrial biological resources would occur from the proposed project.

Additionally, no native vegetation or sensitive animals occur within the area which could be impacted should SeaWorld be required to widen SeaWorld Drive as described in Mitigation Measure 4.4-1 as outlined in Section 4.4. Although the Southern Wildlife Refuge and an unused least tern nesting site lie to the south of SeaWorld Drive, the indirect impacts from any roadway widening would not be significantly greater than those which are associated with the existing roadway.

SeaWorld Master Plan Update

Birds

Potential impacts to the California least tern were analyzed from three perspectives: 1) impacts to foraging behavior 2) future development impacts to nesting sites related to raptor perching opportunities and 3) effects from increased number and/or intensity of fireworks noise impacts on breeding success.

Foraging

Least tern foraging behavior correlates to the location of small fish as a food resource for this bird. Based on the results of the survey, the foraging activity primarily occurs in the central and northern parts of Pacific Passage, which is far enough from the SeaWorld leasehold to not result in a significant direct or indirect impact on the least tern. Foraging activity in Perez Cove is very low and therefore the expansion of the existing marina also would not result in a significant impact to least tern foraging behavior.

Raptor Perching Opportunities

The two closest active least tern nesting sites within Mission Bay are located at least one mile from SeaWorld. Therefore, they would not be impacted by future building at SeaWorld because new construction and operation activities would be at a sufficient distance so as to not affect the California least tern. Furthermore, raptor perching opportunities already exist in closer proximity to least tern nesting areas. In the event that California least terns reestablish a nesting colony at Stony Point, the creation of additional potential predator (e.g., peregrine falcon) perch sites at SeaWorld on the SeaWorld leasehold could result in a significant adverse impact to least tern nesting success and/or site use. However, this is very unlikely since the Mission Bay Park Master Plan Update calls for this preserve to be abandoned. The only perch site issues, as they relate to California least tern, would be additional perch sites created near Stony Point when new buildings are constructed that could impact nesting colonies.

Fireworks Noise

Although fireworks shows have been a part of SeaWorld's operations since 1985, and have occurred nightly between the end of May and first week of September, expansion under the proposed Master Plan Update could result in more frequent shows throughout the year and/or longer shows. Of particular concern, is the effect that an increase in fireworks shows may have during the period when the least terns are beginning to establish nests (April and May). A review of existing literature, combined with personal observations, was conducted to assess the potential for increased frequency and intensity of fireworks shows to impact least terns; the results of this research can be found in Appendix D and is summarized below.

As indicated earlier, three active nesting sites occur within Mission Bay. The closest site to the barge where SeaWorld launches its fireworks is Mariner's Point which is approximately one mile from the fireworks barge. The other two sites, FAA Island and North Fiesta Island, are located approximately 1.25 and 2 miles away, respectively.

Based on measurements of fireworks noise taken from the roof of the Hubbs-SeaWorld Research Institute, at a distance of approximately 2,600 feet from the fireworks barge, fireworks noise levels on the ground near the barge approach 108 decibels (dB); this level is measured in terms of peak noise levels rather than A-weighted levels in order to give a better estimate of the "startle" response of birds. Startle response is the primary area of concern with fireworks noise because excessive startling could discourage the birds from establishing nests or cause them to abandon their nests for prolonged periods of time. Prolonged abandonment offers opportunities for predators to raid the nests.

Based on the peak noise levels generated at the barge, the nearest nesting area (Mariner's Point) would experience noise levels of 89 dB. Peak noise levels at the FAA Island and North Fiesta Island nesting sites are estimated to be 90 dB and 86-89 dB, respectively.

In order to determine the potential effect of fireworks noise on least terns, two forms of research were conducted. First, a comparison of the historic reproductive productivity of least terns at Mission Bay sites with nesting sites throughout the region was conducted to determine if there is

any evidence that fireworks have adversely affected nesting in Mission Bay. Second, a review of the literature was undertaken to determine if there is any information which may indicate that least terns are particularly susceptible to adverse startle response related to fireworks noise.

Historic Productivity Comparison

A comparison of the productivity of least tern breeding in Mission Bay with that of the region indicates that fireworks have not had a substantial adverse effect on least terns. As indicated earlier, least tern breeding is much more controlled by predation and human disturbance. Figure 4.6-2 illustrates that subsequent to the introduction of nighttime fireworks show by SeaWorld in 1985, the productivity rate for the three sites in Mission Bay increased at an uneven rate from 0 in 1985 to 1.4 in 1988. At the beginning of the same period, the County productivity rate was higher at 0.5 in 1985 and also increased at an uneven rate to 1.0 in 1988. Hence, during the first three years of SeaWorld summertime fireworks shows, the Mission Bay productivity rate increased faster than the County as a whole, culminating in a rate higher than the County rate. This would indicate that the productivity rate in Mission Bay was not affected by the introduction of summertime fireworks shows.

For the five-year period from 1988 to 1992, the Mission Bay productivity rate and the San Diego County productivity rate were nearly the same. During this timeframe, the SeaWorld fireworks summertime program continued. Therefore, the continuation of the summertime fireworks program did not alter the least tern productivity rate in Mission Bay as compared to San Diego County as a whole. For 1993, 1994, 1996 and 1997, the Mission Bay productivity rate was lower than the County of San Diego rate, while the 1995 rate was nearly the same. However, for the period 1993 to 1997, although Mission Bay productivity was lower than San Diego County, it followed a similar trend (See Figure 4.6-2). In 1998, the Mission Bay productivity rate exceeded the County rate and, in 1999, both the County and Mission Bay productivity rates declined precipitously to the same productivity level. In 2000, the productivity rate for both Mission Bay and San Diego County nesting sites rebounded dramatically at nearly the same production rate.

Susceptibility to Fireworks Noise

The second study, which was based on existing literature and personal experience, evaluated the impact of various sources of high noise levels on least tern nesting behavior. Several observational studies have suggested that the least tern (and terns in general) are tolerant of human-made noise as long as the noise is not accompanied by direct intrusion or perception of an attack. Least terns nesting near the runway at Lindbergh Field, from which over 400 aircraft take off each day, have been consistently successful. This is illustrative of the fact that the birds become accustomed (habituate) to high noise levels as long as they are not perceived as a threat. Airplane noise has not discouraged least terns from establishing nests, nor has it substantially impacted productivity rates. The same ability to distinguish between high noise levels and potential threats was revealed in studies of the response of least terns to rocket launches at Vandenberg Air Force Base.

Terns have been particularly likely to remain in their nests in the few actual experiments conducted with noisy sources. Crested Terns (*Sterna bergii*) were exposed to approach by light aircraft and observations indicated the terns stuck to their nests until the aircraft got within 30 meters. Thus, there is no direct evidence that terns experience increased tendency to abandon nests as a result of airborne noise alone.

The results of exposure to airborne noise must be sharply contrasted to the effects of exposure to human intrusion and artificially enhanced populations of nest predators, both of which correlate significantly with nesting failures. There is a large body of literature showing that many species of birds fly when exposed to close approach by intruders and that they are especially vulnerable to nest predators under these conditions.

With regard to potential physiological effects of fireworks noise on the least tern, no matter what size or type of fireworks shell, the levels are not sufficient to harm bird hearing, as birds are adapted to cope with high noise levels. Unlike mammals, birds are able to regenerate sound receptive hair cells in the ear damaged or lost due to high levels of noise exposure.

In addition to evaluating the overall effect of fireworks noise on least terns, the Bowles study evaluated the potential effect of more frequent firework shows during the months of April and May. Although the birds are less likely to startle once they have established a nest and laid their eggs, there is no evidence to suggest that more frequent fireworks during the months of April and May would represent a significant deterrent to least terns establishing nests on the actively-used nesting areas within Mission Bay.

A review of the fireworks shows over the last five years indicates that fireworks shows have occurred during these months. The number and dates of these shows are as follows: 1995 (May 5, 24 and 31), 1996 (April 19, May 21 and 22), 1997 (April 5, May 15, 19, 20 and 21), 1998 (May 19, 20 and 23), 1999 (April 30, May 14, 25, 27, 29 and May 30), and 2000 (April 4, 11, 15 and 20, May 4, 8, 17, 26, 27 and 28). Thus, any startle response which may have discouraged nesting would have already occurred. Furthermore, any increase in the frequency of shows during these months would result in habituation to the fireworks which, as stated earlier, serves to diminish a startle response.

As the terns are not considered to react significantly to fireworks shows, firework shows which may exceed the normal duration of six minutes would not have a significant impact on least tern breeding success. Furthermore, potential illumination of vegetation from fireworks shows is also not considered a significant disturbance to wildlife, particularly birds, within Mission Bay and the San Diego River channel. Illumination from firework displays would be very short in duration and would not increase the opportunities for predation by raptors. Furthermore, a substantial number of sources of more prolonged illumination already exist in these areas (e.g., street lights and automobile headlights).

Marine Biological Resources

The only sensitive marine biological resource of concern for the proposed project is potential impacts as a result of shading or sedimentation to eelgrass beds. Uncontrolled erosion during construction could deposit sedimentation in nearby eelgrass beds. However, there are several areas and projects within the proposed SeaWorld Master Plan Update that would not impact eelgrass resources because they would not cast a shadow over eelgrass beds. These include the following locations:

1. Area 1: Tier 2 Projects, Exhibit/Ride/Show H-2, I-2, J-2, and L-2;
2. Area 1: Tier 1 Projects, Front Gate Renovation (C-1), Educational Facility (B-1), Special Events Center Expansion (D-1) and the Splashdown Ride; and
3. Area 2: Future Parking Garage Site.

The following discussion on shading impacts is therefore limited to those proposed projects determined to have a potential impact on eelgrass resources. The impact analysis is based on shadow analyses completed for each of the sites under the worst case condition. The shadow determination is explained in Section 4.3, Light, Glare and Shading.

Tier 1 Projects

None of the Tier 1 projects within Area 1 are expected to have any impacts to eelgrass or aquatic resources located within Pacific Passage to the north. The only Tier 1 Site located near the water is Site A-1, Splashdown Ride. A shadow analysis conducted for the Splashdown Ride did not indicate any shadow would be cast over the water during December until as late as 4:00 PM. Therefore, the 3-hour impact significance criteria would not be met.

Tier 2 Projects

Sites G-2: Exhibit/Ride/Show and K-2: Exhibit/Ride/Show

For the purposes of the shadow analysis, a height of 160 feet was used for the highest point at both the G-2 and K-2 sites. Since the sites are adjacent, they were treated as one unit for the analysis. During the December equinox there would be an area approximately 9,900 sq. ft. (0.23 acre) of surface water in Pacific Passage that would be shaded between the hours of 10:00am to 4:00pm. This shaded area would occur on the north side of Sites G-2 and K-2 and cover approximately 325 feet of the riprap shoreline. At its furthest point, the shadow would extend approximately 40 feet over the water from the top of the riprap. This shadow would occur where eelgrass is currently growing, and therefore would meet the 3-hour shadow impact significance criteria. During all other times of the year the potential shadow angle and sweep during the day is such that no one area over the water would be covered longer than three hours.

Site E-2: Exhibit/Ride/Show

During the December equinox there would be a surface water area approximately 9,800 sq. ft. (0.22 acre) that would be shaded from 10:00am to 4:00pm. This shaded area would occur on the north side of Site E-2 in the Pacific Passage/Waterfront Stadium lagoon area and cover approximately 200 feet of the riprap shoreline. At its furthest point, the shadow would extend approximately 75 feet over the water from the top of the riprap. This shadow would occur where eelgrass is currently growing, and therefore would meet the 3-hour shadow impact significance criteria. During all other times of the year the potential shadow angle and sweep during the day is such that no one area over the water would be covered for longer than three hours.

Site F-2: Exhibit/Ride/Show

In December there would be a surface water area approximately 17,300 sq. ft. (0.40 acre) that would be shaded during the late afternoon. This shaded area would occur just north of the F-2 Site, within the southern portion of the small cove of the Waterfront Stadium lagoon. This shadow would occur where eelgrass is currently growing, and therefore would meet the 3-hour shadow impact significance criteria. During all other times of the year the potential shadow angle and sweep during the day is such that no one area over the water would be covered longer than three hours.

Special Projects

Marina Expansion

The marina expansion project would extend the three existing docks and build the fourth dock within Perez Cove. The most likely impact to eelgrass as a result of the placement of new docks would be due to shading. Fixed docks and permanently moored boats cause a constant shadow over the bay bottom and therefore would exceed the minimum 3-hour impact significance criteria. The current assessment regarding the amount of eelgrass that would be shaded and impacted was conducted using the proposed dock plan. Based on the current distribution of eelgrass within the study area a total of 40,820 sq. ft. (0.94 acre) of eelgrass would be impacted. This includes the dock area (16,180 sq. ft. (0.37 acre)) and an assumption that a boat would be placed in every slip. Impacts from piers, which hold the docks in place, are calculated as part of the dock area.

No direct impacts are expected to occur as a result of dock construction. However, pile driving results in the suspension of sediment in the water column and therefore would result in a significant impact to the California least tern during the nesting season (April 15 through September 15) because the suspended sediment would obscure fish prey. No additional long-term impacts are anticipated to occur as a result of the pier and dock construction.

Future Hotel

The Future Hotel project is proposed in Area 5 along the southern and western shoreline of Perez Cove. There are two sources of shading impacts to eelgrass within the southwestern portion of Perez Cove from the Future Hotel project. The first would be from the placement of the guest

dock adjacent to the hotel for which approximately 2,210 sq. ft. (0.05 acre) of eelgrass would be impacted. For this dock the impact would be limited to the footprint of the dock since boat traffic would be transitory in nature.

The second source of shading would occur from the shadow cast by the hotel structure over the water. During the month of December there would be an area of approximately 5,100 sq. ft. (0.12 acre) that would be blocked of direct sunlight, from the hours of 10:00am to 4:00pm. This area occurs to the northeast of the proposed hotel and covers approximately 100 feet of the riprap shoreline and at its furthest point extends approximately 35 feet over the water from the top of the riprap. During all other times of the year the potential shadow angle and sweep during the day is such that no one area over the water would be covered longer than 3 hours.

4.6.4 Significance of Impacts

Birds

According to the Mission Bay Park Master Plan Update, the Stony Point nesting preserve is proposed to be abandoned. However, should the currently unused Stony Point nesting preserve be recolonized by the California least tern, then a potential significant impact may occur to this endangered species due to the creation of perching opportunities on new structures associated with the Master Plan Update. The perching opportunities are a concern because birds, such as the peregrine falcon, would have a vantage point to prey upon on least tern chicks. Potential impacts to active nesting areas would not be created by perching opportunities posed by new development because of the intervening distance and existing perching opportunities in closer proximity.

No significant impact was identified to least tern productivity rates in the Mission Bay area as a result of existing or expanded SeaWorld fireworks displays. No significant impact to least tern foraging behavior within or near the SeaWorld leasehold would occur from the proposed SeaWorld Master Plan Update. However a significant impact to least tern nesting activity may occur to the nearby currently uncolonized Stony Point Least Tern Preserve should it be recolonized.

Eelgrass

During the late fall and winter months, typically November through February, there is a dieback or dormant period in the eelgrass life cycle in which growth is slow. A number of other environmental conditions including a lower sun angle, reduced water clarity, storms, increased urban and freshwater runoff, and colder water temperatures occur simultaneously with eelgrass dormancy. Potential shading, from future projects would occur in December when the sun angle is lowest in the sky. Shading is not an issue for the proposed SeaWorld Master Plan Update and future projects during the rest of the year when the sun angle is higher and shadow movement throughout the day allows direct sunlight for a large portion of the day. During the dormancy period, the amount of sunlight required by eelgrass is greatly reduced. With the onset of spring and higher sun angles, these areas are not anticipated to have a significant negative affect on the growth of eelgrass.

While a significant negative impact is not anticipated, the potential for a significant impact cannot be eliminated. It is possible that the projected shading affects, in conjunction with the dormant period, would have a negative impact on eelgrass growth and productivity resulting in a significant impact. If negative shading impacts occur, they would most likely affect the eelgrass beds immediately adjacent to the shoreline. The shoreline area would be subject to the longest period of reduced light penetration. In addition, the proposed Marina Expansion would result in a significant impact to eelgrass from the shadow of future docks and moored boats. Therefore, a significant eelgrass impact has been identified for those areas where a shadow impact has been identified.

No significant shadow impacts would occur from Tier 1 Projects.

Uncontrolled erosion during construction could result in deposition of sediment within nearby eelgrass bed resulting in a potentially significant impact.

4.6.5 Mitigation, Monitoring, and Reporting

The SeaWorld leasehold lies entirely within the Coastal Zone and is subject to project-specific permitting under the California Coastal Act. Future projects located in the water area of the SeaWorld leasehold would be subject to Section 404 of the Clean Water Act and possibly Section 10 of the Rivers and Harbors Act, both under jurisdiction of the Army Corps of Engineers. These permits, if required, would be obtained before construction begins on any of the in-water projects.

The following mitigation measures would reduce potential biological resource impacts to below a level of significance. In addition, implementation of erosion control measures associated with Mitigation Measure 4.5-3 would reduce sedimentation impacts on eelgrass beds to below a level of significance.

Mitigation Measure 4.6-1: Prior to Coastal Permit application the project proponent shall prepare a project-specific shadow analysis for Tier 2 projects located in future development areas F-2, E-2, G-2 and K-2; and the Future Hotel Special Project to determine the extent of shadow impacts on eelgrass in Pacific Passage, Perez Cove and the Waterfront Stadium lagoon. The shadow analysis shall be performed for the time periods described in Section 4.3, Light, Glare and Shading, in this EIR. ~~Furthermore, the shadow impact shall exceed a three-hour period between the hours of 10:00 AM to 4:00 PM in order to require mitigation.~~ If no shadow impact would occur as defined above in these areas as a result of the project specific analysis, no further mitigation would be required. If a shadow impact would occur during this timeframe it would only occur during the eelgrass dormant period as described in the impact analysis above. For shadow impacts that would occur during the eelgrass dormant period, a project-specific monitoring program shall be undertaken that includes the provisions described below under eelgrass monitoring program.

Eelgrass Monitoring Program

Once construction is completed at one of the potentially shade impact sites, three years of eelgrass monitoring shall be conducted, specifically in the early spring (April) and early fall (October) of the three years. These two times of the year would best track the initial growing phase of the eelgrass, in the spring and the post summer peak, and in the early fall, before the dormant period begins. The area to be monitored would be along the shore and out far enough into the water to cover the area where a shadow would be cast during the majority of the daylight hours in December. The monitoring program would be initiated once development is completed at each of the sites, and the monitoring schedule at each site would be independent of the other. If the monitoring indicates a reduction in the eelgrass bed coverage, then an eelgrass revegetation program shall be implemented in conformance with the Southern California Eelgrass Mitigation Policy as described below in Mitigation Measure 4.6-2.

Mitigation Measure 4.6-2: Prior to application for development of the Future Hotel project landing dock and the Marina Expansion project, a project-specific shadow analysis shall be conducted as described above in Mitigation Measure 4.6-1 to determine the exact area of impact resulting from docks and boats. For these impacts eelgrass shall be replaced at a 1.2:1 ratio, which is in conformance with the eelgrass replacement ratios outlined in the Southern California Eelgrass Mitigation Policy. Furthermore, a pre- and post-construction eelgrass survey shall be undertaken to determine the area of eelgrass habitat that would be impacted by the shadows. The proposed projects could require the creation of approximately 1.12 to 1.20 acres of eelgrass. This scenario assumes that all of the shading impacts would occur under the pier, dock, and permanent boat placement.

Eelgrass mitigation sites do not appear to be readily available within the water area of the SeaWorld leasehold. Further exploration of options and alternatives for eelgrass transplant in the amount needed to offset the impacts would have to be conducted under an eelgrass mitigation plan study, which would be determined when the marina expansion or landing dock would be developed. The eelgrass mitigation plan study and implementation would be conducted in conformance with the Southern California Eelgrass Mitigation Policy.

Mitigation Measure 4.6-3: Prior to construction of a new development project on the SeaWorld leasehold, a determination shall be made as to whether the Stony Point Preserve has been recolonized by the California least tern. If it has not been recolonized then implementation of the following mitigation measure would not be required. Should the Preserve be recolonized, a determination shall be made as to whether the new development project would provide a clear line-of-sight from perching opportunities on the proposed structure to the Stony Point Preserve. If it would not provide a clear line-of-sight then no mitigation would be necessary. Should a clear line-of-sight be available from perching locations on the new structure, then the structure would be required to include appropriate design features to eliminate the perching opportunity.

4.7 Noise

A noise study, *Environmental Noise Analysis, SeaWorld Master Plan San Diego*, dated August 18, 2000, was prepared for the project by Gordon Bricken & Associates, and is included in Appendix E. The study evaluated noise levels associated with existing SeaWorld operations, as well as noise associated with the Master Plan Update, future projects, including construction activities and vehicular traffic.

4.7.1 Existing Conditions

Noise Setting

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Noise is defined as unwanted sound. The sound pressure level is the most common descriptor used to characterize the noise loudness. The sound pressure level unit of measurement is a Bel, which is a unit for measuring the volume of sound, equal to the logarithm to the base ten of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals. A more typical sound pressure unit of measurement is a decibel (dBA), which is equal to ten Bels. Because sound or noise can vary in intensity by over one million times within the range of human hearing, a logarithmic loudness scale is used as a convenient and manageable means to characterize noise levels. Also, since the human ear is not equally sensitive to all sound frequencies within the entire spectrum, noise levels at maximum human sensitivity are factored more heavily into sound descriptions in a process called "A-weighting" written as dBA. Any further reference to decibels in this EIR written as "dBA" should be understood to be A-weighted.

Average noise levels over a period of minutes or hours are usually expressed as dBA L_{eq} , or the equivalent noise level for that period of time. The period of time average may be specified; $L_{eq(3)}$ would be a three-hour average; when no period is specified, only L_{eq} , a one-hour average is assumed. Noise standards for land use compatibility are addressed in the Transportation Element of the *Progress Guide and General Plan* of the City of San Diego, and are stated in terms of the Community Noise Equivalent Level (CNEL), which is a 24-hour weighted average measure of community noise. The computation of CNEL adds five dBA to the average hourly noise levels between 7:00 PM and 10:00 PM (the evening hours), and ten dBA to the average hourly noise levels between 10:00 PM and 7:00 AM (the nighttime hours). This weighting accounts for the increased human sensitivity to noise in the evening and nighttime hours. A similar 24-hour average is the Day-Night Average noise level (L_{dn} or LDN), which weights only the nighttime hours, and not the evening hours. CNEL is used primarily in California.

Applicable Standards

City of San Diego Land Use Compatibility Criteria

General community noise and land use compatibility guidelines are set forth in the Transportation Element in the City of San Diego General Plan as shown in Table 4.7-1.

**TABLE 4.7-1
Land Use Compatibility Chart**

Land Use	Annual Community Noise Equivalent Level in Decibels					
	50	55	60	65	70	75
1. Outdoor Amphitheaters (may be suitable for certain types of music)						
2. Schools, Libraries						
3. Nature Preserves, Wildlife Preserves						
4. Residential--Single Family, Multi-Family, Mobile Homes, Transient Housing						
5. Retirement Home, Intermediate Care Facilities, Convalescent Homes						
6. Hospitals						
7. Parks, Playgrounds						
8. Office Buildings, Business and Professional						
9. Auditoriums, Concert Halls, Indoor Arenas, Churches						
10. Riding Stables, Water Recreation Facilities						
11. Outdoor Spectator Sports, Golf Courses						
12. Livestock Farming, Animal Breeding						
13. Commercial-Retail, Shopping Centers, Restaurants, Movie Theaters						
14. Commercial-Wholesale, Industrial Manufacturing, Utilities						
15. Agriculture (except Livestock), Extractive Industry, Farming						
16. Cemeteries						

Source: *San Diego Progress Guide and General Plan*(Transportation Element)



COMPATIBLE
The average noise level is such that indoor and outdoor activities associated with the land use may be carried out with essentially no interference from noise.



INCOMPATIBLE
The average noise level is so severe that construction costs to make the indoor environment acceptable for performance of activities would probably be prohibitive. The outdoor environment would be intolerable for outdoor activities associated with the land use

These guidelines are based primarily on noise/land use recommendations from the State Department of Health Office of Noise Control. They are further modified based on the U.S. Department of Housing and Urban Development (HUD) document entitled "Planning Guidelines for Local Agencies." An exterior noise exposure of 65 dBA CNEL is compatible with residential and other noise sensitive uses. Noise standards for offices (business and professional) are 70 dBA CNEL. Least sensitive commercial, manufacturing and some recreational uses are considered compatible with noise levels up to 75 dBA CNEL.

City of San Diego Noise Ordinance

Construction, fixed source, and/or operational noise is governed by the City of San Diego Noise Ordinance Section 59.5.0401. The applicable sound level is a function of the time and day and land use zone. Sound levels are measured at the property line of the noise source. The limits are given in Table 4.7-2. In addition, Section 59.5.040A sets forth a requirement that construction activities may require a permit if such activities occur between the hours of 7:00 PM and 7:00 AM of the following day, or if construction activities create disturbing, excessive, or offensive noise. Section 59.5.040B states that the noise level shall not exceed an average sound level of 75 dBA for more than 12 hours between 7:00 AM and 7:00 PM at or beyond any residential property.

TABLE 4.7-2
City of San Diego Noise Ordinance Limits

Land Use Zone ¹	Time of Day	1 Hour Average Sound Level (decibels)
Residential: All R-1	7 AM to 7 PM	50
	7 PM to 10 PM	45
	10 PM to 7 a. m.	40
All R-2	7 AM to 7 PM	55
	7 PM to 10 PM	50
	10 PM to 7 AM	45
R-3, R-4 and all other Residential	7 AM to 7 PM	60
	7 PM to 10 PM	55
	10 PM to 7 AM	50
All Commercial	7 AM to 7 PM	65
	7 PM to 10 PM	60
	10 PM to 7 AM	60
Manufacturing, all other Industrial, Including Agriculture and Extractive Industry	any time	75

Source: City of San Diego Noise Ordinance Section 59.5.0401

¹ The sound level limit at a location on a boundary between two zoning districts is the arithmetic mean of the respective limits for the two districts

City of San Diego Council Policy 500-06

City of San Diego Council Policy 500-06 Regulation of Fireworks Displays establishes a policy regulating commercial fireworks displays. Historically, the City has received two types of noise

complaints resulting from commercial fireworks displays: noise resulting from loud concussive fireworks and the time in which fireworks displays are performed. Policy 500-06 prohibits fireworks displays after 10:00 PM on evenings prior to a workday or 11:00 PM on evenings prior to a weekend or holiday. In addition, the Council Policy indicates that no concussion type non-color shells (salutes or reports) greater than three inches shall be used. Fireworks displays using salutes or reports permitted by this policy are limited to three events per 30-day period in each zip code area. The City Manager or his designated representative may issue variances to this policy. SeaWorld does not typically use non-color concussive fireworks.

Ambient Noise Environment

Existing noise levels within the project area are generated from the existing operation of SeaWorld including the special attraction performing shows and fireworks displays, and external transportation sources including vehicular traffic on adjacent roadways and aircraft noise from Lindbergh Field.

To define existing baseline noise levels, measurements were conducted at 22 locations surrounding SeaWorld. The locations were selected to provide geographic coverage and to address areas with recorded noise complaints from the existing facility. Seven of the 22 locations were 24-hour measurements while the remaining 15 locations were short-term measurements. The locations are listed on Table 4.7-3 and illustrated on Figure 4.7-1. Table 4.7-3 also lists the distance to each location from the SeaWorld Tower. The average noise level, measured or estimated CNEL level, and short-term traffic counts including aircraft are given in Table 4.7-4.

SeaWorld Show Levels

Sound levels from SeaWorld were not audible from the 22 locations of ambient field measurements with the exception of faint emissions at the Fiesta Island location. Because the Shamu show is the largest venue of the current performing shows and has historically been the subject of noise-related complaints, special individual measurements were conducted to evaluate noise levels generated from this show. Noise levels were measured in Shamu Stadium above the sound booth, and at Location 1 for the 5:30 PM show and Location 10 for the 8:45 PM show on Saturday, August 5, 2000. The results of these measurements concluded that the maximum crowd noise was between 92 and 97 dBA and the public address system levels were between 80 and 92 dBA as measured near the source. The average level for the 5:30 PM show was 82 dBA and 83 dBA for the 8:45 PM show at the same measurement location.

Noise levels from the Shamu show were not audible at the two field locations (Locations 1 and 10) and the ambient levels were no less than 48 dBA at any time. Consequently, show levels could not have exceeded 30 to 35 dBA. Using this data, a propagation model to depict noise contours associated with the Shamu show was developed and is illustrated on Figure 4.7-2.

**TABLE 4.7-3
Ambient Noise Measurement Locations**

Location	Description	Distance ¹ (feet)
1	Nipoma Place	5,500
2	Clovis at Temecula	5,400
3	Interstate 8 at Mariners Cove Apartments	3,600
4	Vacation Isle	4,700
5	Tonopah at Morenci	7,800
6	Playa Pacific Park	7,800
7	Fiesta Island	3,400
8	South Shores Boat Launch	3,300
9	Interstate 8 and Orchard Apartments	4,300
10	Ocean Beach Athletic Club	6,800
11	Mission Point Park	6,500
12	Fanuel Street Park	11,000
13	Crown Point Shores Park	6,800
14	Crown Point at Honeycutt	10,100
15	Muir at Venice	7,800
16	Wells at Atascadero	10,100
17	La Paloma at Trieste	14,600
18	El Carmel Point	8,600
19	Baker south of Ticonderoga	14,800
20	Edison at Serbian	12,700
21	De Anza Resort RV Space #105	11,100
22	De Anza Resort, Shore at East Point	11,400

Source: Gordon Bricken and Associates, 2000.

¹ Distance is measured from the SeaWorld Tower.

Fireworks Displays

SeaWorld performs a fireworks show in the evening during selected periods of the year. Fireworks shows are performed only when weather conditions permit and generally last five to six minutes in length. Based on measurements taken at a fireworks display during a summertime display at Disneyland in Anaheim, California, it is estimated that fireworks noise would reach a level of 106 dBA at 800 feet. Under normal propagation conditions, the sound levels at the measurement locations would range from 81 dBA at the farthest location with an unobstructed view to 92dBA at the nearest location with an unobstructed view.

TABLE 4.7-4
Traffic Counts and Measurements for Ambient Noise Locations

No.	Location	10 Minute Traffic Count				Leq	CNEL
		Autos	Medium Truck	Heavy Truck	Aircraft		
1	Nipoma Place	1	0	0	2	65	68 ¹
2	Clovis at Temecula	1	0	0	5	65	67 ¹
3	I-8 at Mariners Cove Apts.	418	6	3	7	69	75 ¹
4	Vacation Isle	3	0	0	2	57	57 ¹
5	Tonopah at Morenci	102	30	15	0	64	67 ²
6	Playa Pacific Park	0	0	0	0	58	61 ²
7	Fiesta Island	0	0	0	0	51	51 ²
8	South Shores Boat Launch	0	0	0	0	56	56 ²
9	I-8 at Orchard Apts.	431	12	2	4	64	67 ²
10	Ocean Beach Athletic Park	0	0	0	2	62	65 ²
11	Mission Point Park	0	0	0	5	63	66 ¹
12	Fanuel Street Park	0	0	0	0	54	54 ²
13	Crown Point Shores Park	85	1	0	0	54	57 ²
14	Crown Point at Honeycutt	45	0	0	0	62	62 ²
15	Muir at Venice	17	0	0	2	65	65 ¹
16	Wells at Atascadero	3	0	0	6	68	71 ²
17	La Paloma at Trieste	3	0	0	2	53	56 ²
18	El Carmel Point	0	0	0	0	56	56 ²
19	Baker south of Ticonderoga	43	0	0	0	63	63 ²
20	Edison at Serbian	5	0	0	0	59	62 ²
21	De Anza Resort RV Space #105	0	0	0	0	58	58 ¹
22	De Anza Resort, Shore at East Point	0	0	0	0	56	56 ²

Source: Gordon Bricken and Associates, 2000.

1. 24-hour measurements.
2. Short-term values based on estimates from similar locations where 24-hour measurements were taken.

Aircraft Noise Levels

Lindbergh Field noise data is generated quarterly by the San Diego Port District. The Port District maintains a series of 22 automatic noise monitoring stations that record CNEL levels each day. This data is used to determine a single average daily CNEL level. Aircraft departure corridors operate over the areas south of SeaWorld and have the potential to result in noise impacts. The geographical area within the 65 dBA CNEL noise contour defines potential noise impact areas. Figure 4.7-3 illustrates the 65 dBA CNEL noise contour for the period between April 1, 1998 to March 31, 1999 and illustrates that SeaWorld is not within the 65 dBA

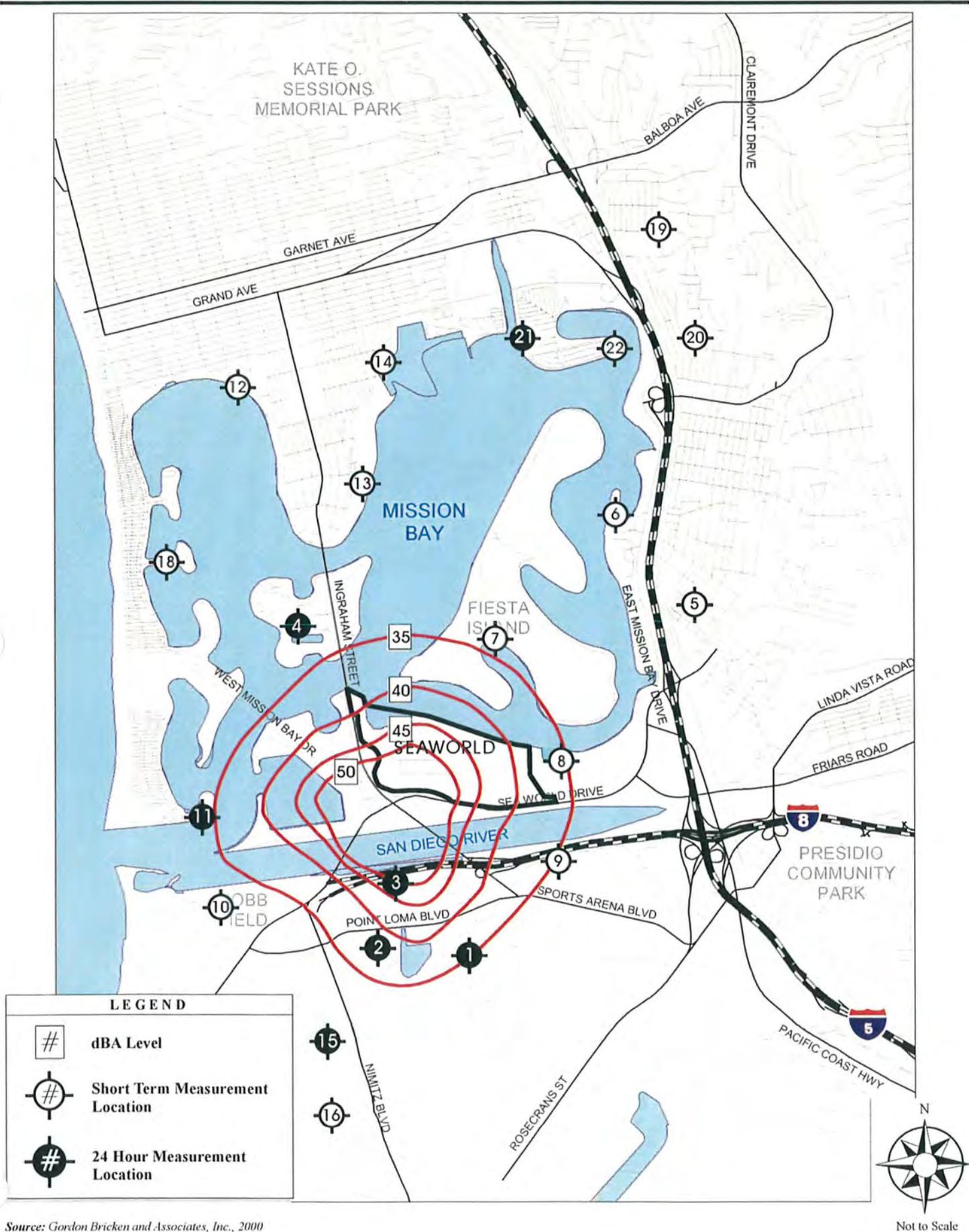


Source: Gordon Bricken and Associates, Inc., 2000

Not to Scale

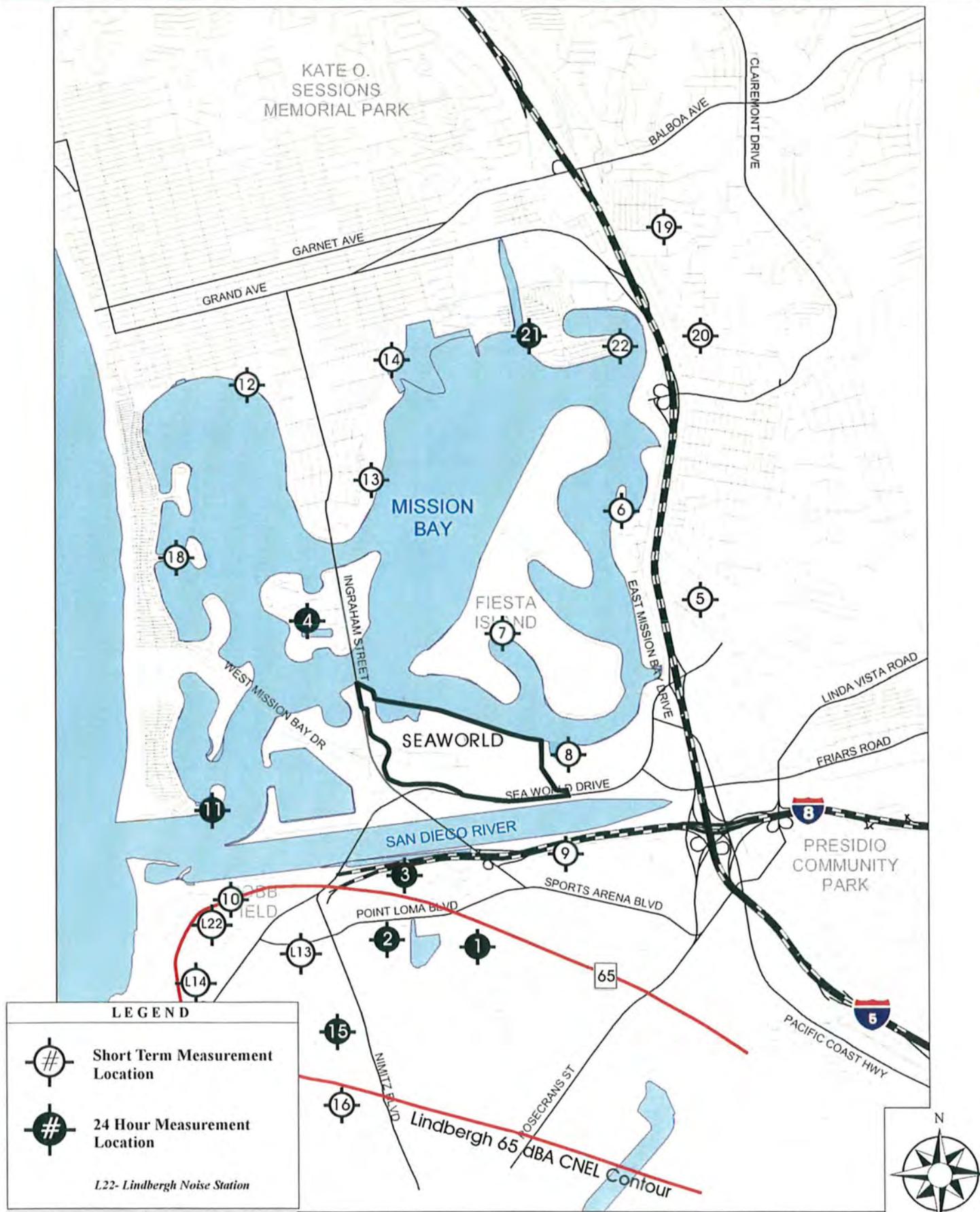
Ambient Noise Measurement Locations _____ Figure 4.7-1

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Shamu Show Maximum Noise Contours _____ Figure 4.7-2

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Source: Gordon Bricken and Associates, Inc., 2000

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Lindbergh Field 65 dBA Noise Contour _____ Figure 4.7-3

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CNEL noise contour. However, ambient measurement locations 1, 2, 10, and 15 are within the 65 dBA noise contour. Measured noise levels associated with aircraft at these measurement locations were 65 to 68 dBA CNEL. Although these values were determined from one day of readings, they appear representative of the numbers that would appear on a long-term basis.

Traffic Noise Levels

A series of 24-hour traffic counts for the existing street segments adjacent to the project site were produced. Noise levels associated with these traffic counts are summarized in Table 4.7-5.

TABLE 4.7-5
Existing Traffic CNEL Values
(50 feet from centerline of the nearest lane)

Roadway Segment	CNEL
Sunset Cliffs Boulevard	
West of Nimitz Boulevard	74.6
Nimitz Boulevard to Mission Bay Drive	74.1
Mission Bay Drive to Sea World Drive	N/A
Sea World Drive	
Mission Bay Drive to Friars Road	74.3
Friars Road to Pacific Highway	74.1
Pacific Highway to Interstate 5, southbound ramps	74.0
Interstate 5, southbound ramps to northbound ramps	N/A
East of Interstate 5, northbound ramps	N/A
Interstate 8	
East of Nimitz Boulevard	84.6
West of Nimitz Boulevard	71.1
Friars Road	
East of Sea World Drive	69.3
Pacific Highway	
East of Sea World Drive	N/A
Nimitz Boulevard	
South of Sunset Cliffs Drive	71.7
Mission Bay Drive	
South of Interstate 8	74.0
Interstate 8 to Sea World Drive	76.0
Sea World Drive to Ingraham Street	77.1
West of Ingraham Street	74.2
Ingraham Street	
Mission Bay Drive to Perez Cove Way	75.5
Perez Cove Way to Vacation Road	74.8
Vacation Road to Crown Point Road	74.5
Interstate 5	
North of Sea World Drive	N/A
South of Sea World Drive	N/A
Southbound off-ramp	77.4
Southbound on-ramp	73.4
Northbound off-ramp	74.4
Northbound on-ramp	76.2

Source: Gordon Bricken and Associates, 2000.

Most of the roadway segments identified above do not involve any sensitive land uses. However, certain segments including Nimitz Boulevard south of Sunset Cliffs Drive, Sunset Cliffs Drive west of Nimitz Boulevard, Ingraham Street north of Perez Cove, and Interstate 8 east of Nimitz Boulevard, contain adjacent residential uses. However, the 65 dBA CNEL contour is located far enough from the roadway that any residential use adjacent to the roadway would not be impacted by traffic noise.

4.7.2 Significance Criteria

Based on City and/or CEQA thresholds, noise impacts would be significant if the proposed project:

1. Exposes residential areas, schools, libraries, hospitals, day-care, convalescent homes, transit lodging, passive parks, or other noise-sensitive uses to exterior noise levels in excess of 65 dBA CNEL and/or interior noise levels in habitable areas of noise sensitive buildings in excess of 45 dBA;
2. Exposes usable areas associated with offices, churches, businesses, and professional uses to exterior noise levels in excess of 70 dBA CNEL; or
3. Exposes onsite and offsite noise-sensitive land uses and biological habitat to substantial noise levels from proposed operations including, but not limited to, roof-mounted equipment, loading dock activities, delivery trucks, and parking lot sweepers.

4.7.3 Impact

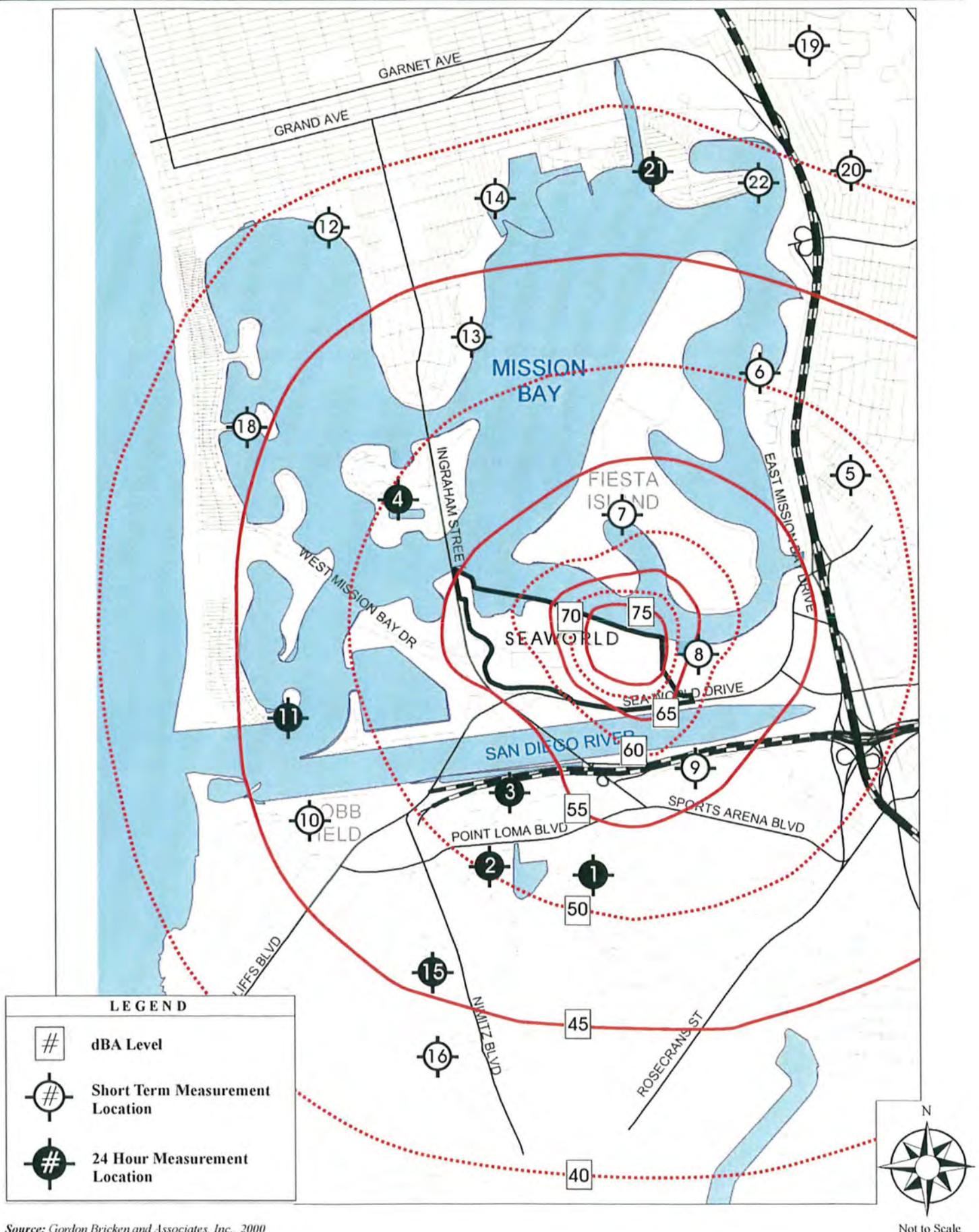
Issue 1: Would the proposal result in a significant increase in the existing ambient noise levels?

Issue 2: Would the proposal result in the exposure of people to current or future transportation noise levels which exceed standards established in the Transportation Element of the General Plan?

Tier 1 Projects

Site A-1: Splashdown Ride

Noise contours for the proposed Splashdown Ride were determined from a reference model based on various studies of noise levels associated with thrill rides. Based on the results of these studies, a reference level of 92 dBA at 50 feet was used as the noise reference for the Splashdown Ride. Using the ambient noise data in Table 4.7-3 and the noise contours illustrated on Figure 4.7-4, the noise levels at the 22 measurement locations are listed in Table 4.7-6.



Source: Gordon Bricken and Associates, Inc., 2000

Not to Scale

Splashdown Ride Noise Contours _____ Figure 4.7-4

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**TABLE 4.7-6
Splashdown Ride Noise Levels Compared to Existing Ambient Levels**

No.	Location	L_{eq}	CNEL	Splashdown ^{1,3}
1	Nipoma Place	65	68 ¹	52
2	Clovis at Temecula	65	67 ¹	50
3	I-8 at Mariners Cove Apts.	69	75 ¹	54
4	Vacation Isle	57	57 ¹	50
5	Tonopah at Morenci	64	67 ²	50
6	Playa Pacific Park	58	61 ²	49
7	Fiesta Island	51	51 ²	59
8	South Shores Boat Launch	56	56 ²	65
9	I-8 at Orchard Apts.	64	67 ²	58
10	Ocean Beach Athletic Park	62	65 ²	47
11	Mission Point Park	63	66 ¹	47
12	Fanuel Street Park	54	54 ²	41
13	Crown Point Shores Park	54	57 ²	48
14	Crown Point at Honeycutt	62	62 ²	43
15	Muir at Venice	65	65 ¹	46
16	Wells at Atascadero	68	71 ²	43
17	La Paloma at Trieste	53	56 ²	<40
18	El Carmel Point	56	56 ²	44
19	Baker south of Ticonderoga	63	63 ²	<40
20	Edison at Serbian	59	62 ²	40
21	De Anza Resort RV Space #105	58	58 ¹	42
22	De Anza Resort, Shore at East Point	56	56 ²	41

Source: Gordon Bricken and Associates, 2000.

¹ 24-hour measurement locations.

² Short-term CNEL values are based on estimates from similar locations.

³ Splashdown Ride values can be represented as either maximum, average, or CNEL levels.

With the exception of the Fiesta Island (Location 7) and South Shores Boat Launch (Location 8), the average sound level (L_{eq}) for the Splashdown Ride would not exceed ambient sound levels. Similarly, the CNEL levels for the Splashdown Ride are well below ambient CNEL sound levels except for Locations 7 and 8. Because the average noise levels associated with the Splashdown Ride are less than the ambient levels, measuring average levels is possible only at distances close to the ride. The City's Noise Ordinance limits are expressed in terms of average one-hour noise level (L_{eq}) and makes no accommodation for ambient noise levels. Therefore, according to the Noise Ordinance, any residential use subject to noise levels higher than 50 dBA L_{eq} would be impacted by noise. As Figure 4.7-4 shows, the 50 dBA L_{eq} noise contour consists of a circular

zone with an approximate radius of 7,000 feet. However, because ambient noise levels dominate the noise environment near the proposed Splashdown Ride no significant noise impact would occur from this Tier 1 project.

Immediately adjacent to the SeaWorld leasehold is South Shore Park, which is considered a sensitive receptor. As shown in Figure 4.7.4, a portion of South Shores Park would fall within the 75, 70, and 65 dBA Splashdown Ride noise contours. According to the General Plan land use compatibility criteria, the allowable limit for parks is 65 dBA CNEL. However, the portion of South Shores Park that would be impacted does not involve passive park uses. This potential impact area includes active noise generating uses such as a surface parking lot, boat launch ramp and Pacific Passage, a designated personal watercraft (jet-ski) area. Therefore, significant impacts would not occur because of active recreation noise-producing uses that occur adjacent to the proposed Splashdown Ride and the high ambient noise levels.

Other Tier 1 Projects

Tier 1 projects including the Educational Facility, the Front Gate Renovation, and the Special Events Center Expansion would not result in any noise impacts associated with their operational characteristics. The Front Gate Renovation would not contain any significant noise generators. The Educational Facility and the Special Events Center Expansion would contain mechanical equipment consisting of air conditioning equipment and possibly refrigeration units. The air conditioning units would be expected to have sound ratings of 9.0 Bels or lower. The overall configuration and design of the uses within the structures would dictate the number of units operating simultaneously. The noise level generated from five units would not exceed 9.7 Bels. At the closest sensitive land use, Location 3, 9.7 Bels is equivalent to 14 dBA (maximum or average level) and the minimum level in the middle of the night is 32 dBA. Therefore, the mechanical equipment would not be audible.

Tier 2 Projects

Tier 2 projects include future theme park attractions that feature a variety of noise sources which individually and collectively may create noise impacts on the community. Tier 2 projects may include, but are not limited to aquariums, special effects theaters, land-based adventure rides, pelagic fish exhibits, water play attractions, themed track or water rides, special format projection attractions, playgrounds, wildlife performance venues, boat rides, historic reenactment presentations, research facilities, live performance venues, and wildlife exhibits. Although future rides are not defined and may be located at any of the designated Tier 2 project sites, the reference noise level used for the Splashdown Ride could apply to future rides. Given the distance to the nearest sensitive land uses, the impacts for any one ride would be similar to those for the Splashdown Ride.

It is possible that several similar rides may operate simultaneously which may result in increased noise levels. However, it is unlikely that the combined noise levels would exceed the City's Land Use Compatibility criteria. As with the Splashdown Ride, the combined average noise level could not be measured accurately at the ambient measurement locations because existing ambient noise levels would be greater than the average noise levels generated by the rides.

Therefore, although the limits of the City's Noise Ordinance would theoretically be exceeded, ambient noise levels would not substantially increase. Therefore, no significant impacts would occur.

Special Projects

Future Parking Garage

Noise sources associated with parking garages generally include cars, car alarms, car horns, door slams, radios, voices, exhaust fans, and sweepers. Bracken and Associates determined reference sound levels for each of these parking garage noise sources as shown in Table 4.7-7.

**TABLE 4.7-7
Parking Structure Reference Sound Levels**

Source	Level (dBA)	Distance (feet)
Cars	68	25
Car Alarm Signal	75	25
Car Alarm Chirp	60	25
Car Horns	75	25
Door Slams	70	25
Talking	60	3
Radios	70	25
Exhaust Fan	69	25
Sweeper	85	50

Source: Gordon Bricken and Associates, 2000.

These figures conclude that sweepers would have the highest single or cumulative sound level from the garage. Sweepers are essentially point sources that would operate continuously during cleaning operations. The closest potentially affected sensitive land use is approximately 2,500 feet to the south in the vicinity of ambient measurement Location 3. From this location, the sound level generated by sweepers in the garage would be approximately 36 dBA. The minimum ambient level at Location 3 is 58 dBA during the day, and the 24-hour measurements indicate that the minimum levels never fall below 32 dBA. However, sound levels reach the minimum level for only approximately six minutes during early morning hours. Therefore, if the sweeper were to operate during this time, the noise generated by the sweeper would exceed the ambient noise level and the sweeper would be faintly audible at Location 3. The City's Noise Ordinance limits sound levels to 40 dBA L_{eq} between the hours of 10:00 PM and 7:00 AM. Based on the proposed location of the future parking garage, the limits of the 40 dBA L_{eq} noise contour would extend approximately to the middle of the San Diego River Channel and thus, would not impact the sensitive land uses in the vicinity of Location 3. As such, the operation of sweepers would not result in significant noise impacts. Furthermore, because sweepers generate

the highest sound levels from the garage, all other noise point sources would not generate sound levels that would result in significant impacts. Therefore, the proposed garage would not create significant impacts.

Marina Expansion

The Marina Expansion would expand the existing marina by extending the three existing docks and adding a fourth dock. An additional 115 slips would be added to the existing 200 slips for a total of 315 slips. The Marina Expansion could increase boating recreational use in Mission Bay. However, any resulting additional noise generated would be dispersed and increases in noise potential would be minimal compared with existing levels. Therefore, no significant impacts from the Marina Expansion would occur.

Future Hotel Site

For the Future Hotel Site, the noise issue pertains to noise impacts from exterior sources to hotel patrons. Interior noise levels in habitable areas of noise-sensitive buildings may not exceed 45 dBA CNEL according to Title 24 of the California State Administrative Code. Average noise attenuation within residential structures is about 10 - 20 dBA, depending on whether windows are open or closed. An exterior noise exposure of 65 dBA CNEL is typically the design exterior noise exposure for new residential dwellings, schools, or other noise-sensitive land uses in California because the 45 dBA CNEL can be met without any unusual structural upgrades. A level of 65 dBA is also the threshold where normal conversation is impeded by ambient noise. In new project development review for residential and other noise sensitive uses, the City of San Diego requires a noise study for meeting interior standards if the exterior exceeds 60 dBA CNEL (15 dBA of structural attenuation), but would approve such uses with exterior environments mitigated to 65 dBA CNEL if the 45 dBA CNEL interior can also be demonstrated to be met.

The proposed hotel would potentially be impacted by noise from surrounding traffic. The proposed hotel site is adjacent to Ingraham Street which generates a noise level of 76 dBA CNEL at 50 feet. The development footprint of the proposed hotel would be set back at a distance greater than 50 feet from Ingraham Street. If a 200-foot setback were assumed, upper floors of the hotel would experience sound levels as high as 70 dBA CNEL. In order to reduce noise levels to the required 45 dBA CNEL, implementation of sound attenuation measures may be required.

The proposed hotel would also potentially be impacted by noise from the theme park. As discussed previously, roller coaster rides would generate the highest noise levels among theme park activities. If the Splashdown Ride model of 92 dBA CNEL at 50 feet is assumed for the closest Tier 2 project site (approximately 1,000 feet from the future hotel site), the CNEL level could reach as high as 73 dBA CNEL. Furthermore, if portions of the hotel were exposed to sound levels from both the surrounding traffic and the park, noise levels would be as high as 75 dBA. In order to reduce noise levels to the required 45 dBA CNEL, special noise reduction features would be incorporated into the site and building design.

Although the proposed hotel may be impacted by noise from the surrounding traffic and theme park, the operation of the hotel would not create any significant noise impacts. The hotel would

require the use of mechanical equipment with similar sound level characteristics as the Educational Facility and Special Events Center. This equipment would primarily consist of air conditioning units which would not exceed required noise standards.

Construction Noise

Temporary construction noise increases would vary markedly because the noise strength of construction equipment ranges widely as a function of the equipment used and its activity level. Short-term construction noise increases tend to occur in discrete phases dominated initially by site grading, then by foundation and parking lot construction, and finally for structural finish construction. The grading activities would generally be the noisiest with equipment noise typically ranging from 75 to 90 dBA at 50 feet from the source; however, construction of the proposed project includes foundation systems that could include pile driving. Table 4.7-8 shows the range of noise emissions for various pieces of typical construction equipment.

Point sources of noise emissions are attenuated by a factor of 6 dBA per doubling of distance through geometrical (spherical) spreading of sound waves. The less noisy sources would drop to a 65 dBA exterior/45 dBA interior noise level by about 200 feet from the source while the loudest may require over 1000 feet from the source to reduce the 90+ dBA source strength to an acceptable 65 dBA exterior exposure level.

The City's Noise Ordinance contains a performance standard that limits the allowable noise from construction at the property line. The allowable average noise exposure during the permissible 12-hour construction "window" (i.e., 7:00 AM to 7:00 PM) is 75 dBA. Measurements have shown that this standard is not normally exceeded offsite from a construction project because the noisiest sources are mobile and construction projects rarely continue over a 12-hour period. It typically requires very loud, stationary equipment sources such as a pile driver operating in close proximity to a noise-sensitive land use to cause the ordinance standard to be exceeded. Pile driving would likely be required, but there would generally be adequate distance separation between new construction and occupied noise-sensitive land uses to preclude violating the noise ordinance performance standard. Adherence to the construction noise limits imposed by the City's Noise Ordinance would avoid significant construction noise impacts

Traffic Noise

Traffic counts projected for the year 2020 as part of the traffic study were used to determine potential noise impacts for surrounding roadway segments under two scenarios: with project and without project. The noise levels associated with the traffic counts are listed in Table 4.7-9.

These figures conclude that the only locations potentially impacted are those where there are adjacent sensitive land uses. These locations are the same as under existing conditions that were previously identified as Nimitz Boulevard south of Sunset Cliffs Drive, Sunset Cliffs Drive west of Nimitz Boulevard, Ingraham Street north of Perez Cove, and Interstate 8 east of Nimitz Boulevard. In no case is the difference in the project-generated traffic CNEL levels greater than + 0.1 dBA CNEL. Significant changes in noise level must at a minimum involve a change of 3 dBA; therefore, the changes would not result in significant noise impacts.

**TABLE 4.7-8
Typical Construction Equipment Noise Generation Levels**

		NOISE LEVEL (dBA) AT 50 FT				
		70	80	90	100	
Equipment Powered by Internal Combustion Engines	Earth Moving	Compactors (Rollers)	[Bar from ~72 to ~75]			
		Front Loaders	[Bar from ~72 to ~85]			
		Backhoes	[Bar from ~72 to ~95]			
		Tractors	[Bar from ~78 to ~98]			
		Scrapers, Graders	[Bar from ~80 to ~95]			
		Pavers	[Bar from ~85 to ~88]			
		Trucks	[Bar from ~82 to ~95]			
	Materials Handling	Concrete Mixers	[Bar from ~75 to ~88]			
		Concrete Pumps	[Bar from ~82 to ~85]			
		Cranes (Movable)	[Bar from ~75 to ~88]			
		Cranes (Derrick)	[Bar from ~85 to ~88]			
	Stationary	Pumps	[Bar from ~68 to ~72]			
		Generators	[Bar from ~72 to ~82]			
		Compressors	[Bar from ~75 to ~88]			
Impact Equipment	Pneumatic Wrenches	[Bar from ~82 to ~88]				
	Jack Hammers and Rock Drills	[Bar from ~82 to ~98]				
	Pile Drivers (Peaks)	[Bar from ~92 to ~105]				
Other	Vibrator	[Bar from ~70 to ~82]				
	Saws	[Bar from ~72 to ~82]				

Source: EPA PB 206717, Environmental Protection Agency, Dec. 31, 1971, "Noise from Construction Equipment & Operations"

**TABLE 4.7-9
Traffic Noise Level
(dBA CNEL at 50 feet from centerline of nearest lane)**

Roadway Segment	Existing	2020 w/o Project	2020 w/ Project
Sunset Cliffs Boulevard			
West of Nimitz Boulevard	74.6	74.8	74.9
Nimitz Boulevard to Mission Bay Drive	74.1	75.1	75.2
Mission Bay Drive to Sea World Drive	Na	Na	71.2
Sea World Drive			
Mission Bay Drive to Friars Road	74.3	75.3	75.8
Friars Road to Pacific Highway	74.1	73.9	74.5
Pacific Highway to Interstate 5, southbound ramps	74.0	74.4	75.0
Interstate 5, southbound ramps to northbound ramps	Na	73.2	73.7
East of Interstate 5, northbound ramps	Na	74.2	74.3
Interstate 8			
East of Nimitz Boulevard	84.6	84.9	85.0
West of Nimitz Boulevard	71.1	Na	Na
Friars Road			
East of Sea World Drive	69.3	70.1	70.3
Pacific Highway			
East of Sea World Drive	Na	69.8	69.9
Nimitz Boulevard			
South of Sunset Cliffs Drive	71.7	75.7	75.7
Mission Bay Drive			
South of Interstate 8	74.0	75.3	75.4
Interstate 8 to Sea World Drive	76.0	76.4	76.7
Sea World Drive to Ingraham Street	77.1	77.3	77.6
West of Ingraham Street	74.2	74.6	74.7
Ingraham Street			
Mission Bay Drive to Perez Cove Way	75.5	75.5	76.0
Perez Cove Way to Vacation Road	74.8	75.0	75.0
Vacation Road to Crown Point Road	74.5	74.7	74.8
Interstate 5			
North of Sea World Drive	Na	88.2	88.3
South of Sea World Drive	Na	88.1	88.2
Southbound offramp	77.4	77.7	78.1
Southbound onramp	73.4	74.8	75.1
Northbound offramp	74.4	76.5	73.9
Northbound onramp	76.2	77.8	78.1

Source: Gordon Bricken and Associates, 2000.

Fireworks Noise

SeaWorld may increase its fireworks displays above existing conditions as outlined at the end of Section 3.4.1, Master Plan Policies and Regulations. The increase in fireworks displays is addressed in Section 4.6, Biological Resources as it pertains impacts on the endangered least tern.

4.7.4 Significance of Impact

Ambient noise levels would increase temporarily as a result of construction activities. However, conformance with the City's Noise Ordinance, and conditions on construction permits limiting construction to weekday hours (7:00 AM to 7:00 PM) with least sensitivity, would ensure that these noise increases would not reach a level of significance.

Project generated traffic would result in minimal long-term increases to the ambient traffic noise levels. The project generated noise levels for 2020 traffic volumes would not conflict with any of the existing or proposed land uses and the General Plan Land Use Compatibility guidelines. Therefore, the project would not result in a significant traffic noise impact.

The proposed Splashdown Ride may periodically increase ambient noise levels by 3 dBA. Noise generated by the Splashdown Ride may be audible out to 7,000 feet from the theme park. However, ambient noise levels would not substantially increase. Other future roller coaster rides may result in similar impacts. In addition, Splashdown Ride would exceed the General Plan park standard of 65 dBA, as a portion of South Shores Park falls within the 65 dBA and 70 dBA noise level contours. However, this portion of South Shores Park consists of a parking lot and boat launch, where park visitors are not considered noise sensitive receptors because of the noise levels associated with the nearby active recreational boat launching, parking lot and "jet ski" activities associated with this area of the park. Therefore, the Splashdown Ride would not create a significant noise impact.

The Future Hotel project would be subject to exterior traffic noise levels that may result in a significant noise impact to hotel patrons, depending on the design of the hotel. This is considered a significant impact.

4.7.5 Mitigation, Monitoring, and Reporting

Implementation of the following Mitigation Measures would reduce noise impacts to below a level of significance.

Mitigation Measure 4.7-1: Prior to issuance of a Coastal Development Permit, a project-specific noise study prepared by a qualified acoustician shall be required for any new ride attraction or performance show and must demonstrate that sensitive receptors would not be exposed to noise levels in excess of applicable standards.

Mitigation Measure 4.7-2: Prior to issuance of building permits for the future hotel, verification that guest room interiors will meet the 45 dBA CNEL interior standard shall be required through the preparation of an interior noise study by a qualified acoustician. The measures recommended in this study shall be implemented to meet the required 45 dBA CNEL interior standard.

4.8 Geology/Soils

The following discussion summarizes the geotechnical study for the proposed project prepared by Christian Wheeler Engineering on June 12, 2000. The complete report is contained in Appendix F of the technical appendices.

4.8.1 Existing Conditions

The subject site is located in the Coastal Plains Physiographic Province of San Diego County north of Sea World Drive and east of Ingraham Street in the Mission Bay Park area of the City of San Diego. The site is presently occupied by several structures including holding tanks for the marine mammals and fishes, stadiums, concession booths, maintenance buildings, and an assortment of other structures. Undeveloped land and a public parking facility and boat ramp bound the Sea World property on the east and Mission Bay bounds the property on the north. The site is underlain by compacted fill materials and hydraulically-placed fill materials, over Quaternary-age bay deposits, which extend to depths of several tens of feet (and more) below existing site grades.

Compacted Fill

Compacted, man-placed fill materials extend to depths ranging from a few feet to in excess of ten feet below existing site grades. In general, the compacted fill consists of brown, reddish-brown, and orangish-brown, silty sands (SM), which are moist and medium dense in consistency. It should be noted that the compacted fill may not be present or may differ in composition and consistency within different areas of the park. Occasional layers of fat, plastic clays have been found in some of the fill material. This material is associated with the natural bay mud that formed at the bottom of the bay and was dredged up during the development of the park.

Hydraulic Fill

Hydraulically-placed fill materials generally consist of gray, fine- to medium-grained, poorly graded sand-silty sand (SP-SM), sandy silts (ML) and silty clays (CL) that extend to depths ranging up to approximately 20 feet below existing site grades. In addition, some areas of fat, highly plastic clay (CH) exist within the hydraulic fill. This material is associated with the original bay mud that formed at the bottom of the bay before the park was developed. In general, the hydraulic fill is moist and loose to medium dense and soft to stiff above the water table. The upper portions of this material may have been mechanically compacted during various grading operations at the site. Below the water table, the saturated hydraulic fill materials are generally loose or soft in consistency.

Bay Deposits

Quaternary-age bay deposits are present beneath the fill materials. In general, the bay deposits consist of gray, fine- to medium-grained, poorly graded sand-silty sand (SP-SM), with varying amounts of shell fragments. These bay deposits are generally saturated and loose to medium

dense to a depth of about 30 feet and generally medium dense to dense below 30 feet. However, bay muds consisting of soft, highly plastic clay (CH) exist in some areas near the original ground surface of Mission Bay where they were not removed by the dredging operations. This material is generally very soft and saturated, and very sticky.

Marine Sedimentary Rock

Refusal was encountered on Cretaceous-age sedimentary bedrock in the original borings for the observation tower at a depth at approximately 80 feet below the ground surface. This material probably consists of very dense, cemented sands and gravels and is believed to be the basement bedrock underlying the subject property.

Groundwater

Groundwater was encountered in the previous exploratory borings at depths ranging from approximately seven to seventeen feet below site grades existing at the time of drilling. Groundwater levels vary depending on the mean high tide elevation and diurnal tidal fluctuations. Groundwater depths could result in grading difficulties where remedial grading is necessary and must also be taken into account when establishing building pads or other similar structures.

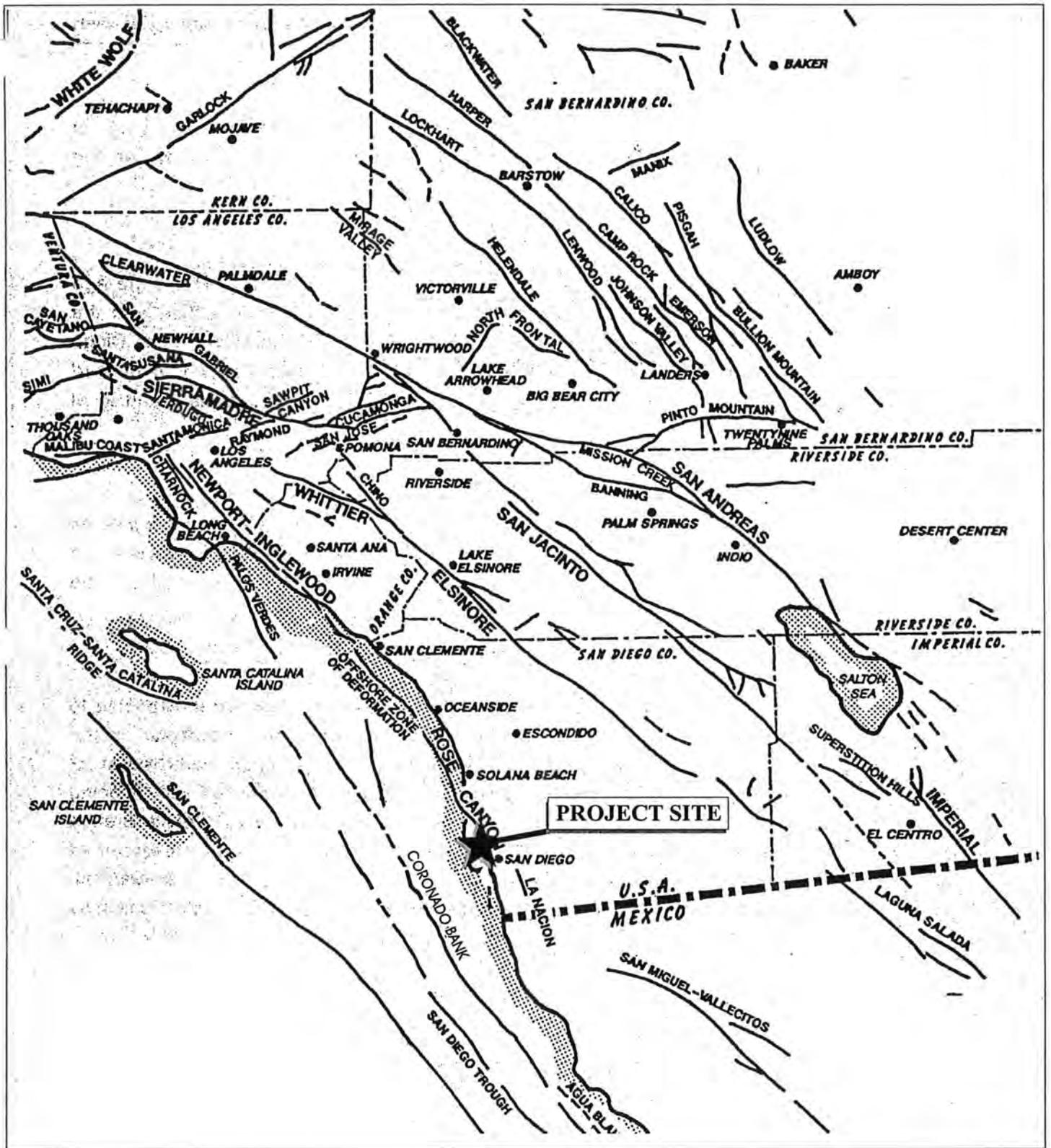
Seismicity

The project site is not located on any known active or potentially active faults. However, much of Southern California, including the San Diego County area, is characterized by a series of Quaternary-age fault zones, which typically consist of several individual faults that generally strike in a northerly to north-westerly direction. According to the criteria of the California Division of Mines and Geology, some of these fault zones (and the individual faults within the zones) are classified as active while others are classified as only potentially active (Figure 4.8-1). The nearest active fault is the Rose Canyon Fault, located approximately two miles east of the site. Other active faults which could subject the site to moderate to severe ground shaking in the event of a major earthquake include the Coronado Bank and San Clemente Fault Zones to the west and the Elsinore, San Jacinto, and San Andreas Fault Zones to the northeast. Table 4.8-1 summarizes major faults that may affect the Plan area, distances to major active faults, the maximum probable earthquake occurring along the nearest fault segments, and the maximum horizontal ground acceleration that may be generated at the site.

4.8.2 Significance Criteria

Based on City and/or CEQA thresholds, geology/soils impacts would be significant if the proposed project:

1. Is located in one or more of the following Hazard Category Zones identified on the City of San Diego's Geological Hazards Map: 21-27, 31, and 41-44; or
2. Would locate structures on unstable geologic formations or within 500 feet of an active fault.



Source: Ninyo & Moore



City of San Diego Seismic Safety Map _____ Figure 4.8-1

TABLE 4.8-1
Seismic Parameters for Maximum Probable Earthquakes

Fault Zone	Distance	Maximum Magnitude Probable Earthquake	Maximum Bedrock Acceleration
Rose Canyon	2 miles	6.9	0.60 g
Coronado Bank	11 miles	7.4	0.30 g
Elsinore	42 miles	7.1	0.10g
San Clemente	44 miles	7.3	0.10 g
San Jacinto	64 miles	6.8	0.05 g
San Andreas	92 miles	7.4	0.05 g

Source: Christian Wheeler Engineering, 2000.

4.8.3 Impact

Issue 1: Would the proposal result in the exposure of people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?

Geologic/Soil Stability

No geologic hazards of sufficient magnitude to preclude the construction at the site are known to exist. The subject site is located within Geologic Hazard Category 31 of the "City of San Diego Seismic Hazard Study, Geologic Hazards and Faults". Geologic Hazard Category 31 refers to areas which possess a high potential for soil liquefaction due to such factors as shallow groundwater and the presence of hydraulic fills. A portion of the City of San Diego Seismic Safety Study map, which shows the location of the Rose Canyon Fault Zone east of the park, is presented as Figure 4.8-1.

Seismicity

Groundshaking

A very likely geologic hazard to affect the site is groundshaking as a result of movement along a fault zone. Major earthquakes occurring on the Rose Canyon Fault, or other regional active faults located in the southern California area, could subject the site to moderate to severe ground shaking within the life span of proposed structures.

The estimated magnitude of a maximum probable earthquake along the Rose Canyon Fault Zone is approximately 6.9. The "maximum probable earthquake" is the maximum earthquake that is considered likely to occur during a 100-year time interval. A commonly used method to measure the severity of ground motion involves estimating maximum ground acceleration. Ground acceleration is defined as the increased velocity given to the ground by shock waves passing

through the geologic structure. Estimated maximum probable ground accelerations for the Rose Canyon Fault Zone at the project site were determined to be approximately 0.60 g. With the requirement that all buildings comply with the seismic design standards of the Uniform Building Code, the potential for significant structural damage due to groundshaking is unlikely.

Liquefaction

Liquefaction is a phenomenon where loose, saturated, and relatively cohesionless soil deposits lose strength during strong ground motions. Primary factors controlling the development of liquefaction include intensity and duration of ground accelerations, characteristics of the subsurface soil, in situ stress conditions, and depth of groundwater.

Research cited in the geotechnical study indicates that portions of the hydraulic fill and bay deposits are considered to be liquefiable. This condition could result in the collapse of a structure and/or loss of life during an earthquake.

Lateral Ground Spreading

Lateral ground spreading can occur when the viscous liquefied soils flow downslope, usually towards a river channel or shoreline. The site is located along the south shore of Mission Bay in an area that has a very gentle slope toward the shallow bay. Based on this relatively gentle slope and the shallow depth of Mission Bay, if liquefaction were to occur during an earthquake, the site would likely only experience minor lateral movement towards Mission Bay.

Flooding

As delineated on the Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency, the site is located outside of the boundaries of both the 100-year and 500-year flood zones (Map Number 06073C1613F, Panel 1613 of 2375, June 19, 1997). Therefore the potential for flooding is low.

Tsunamis

Tsunamis are long seismic sea waves generated by sudden movements of the ocean bottom during submarine earthquakes, landslides, or volcanic activity. Due to the site's setback from the ocean, it is unlikely that the site would be affected by a tsunami.

Seiches

Seiches are periodic oscillations in large bodies of water such as lakes, harbors, bays or reservoirs. Due to the size and configuration of Mission Bay, the risk potential for damage caused by seiches is relatively low.

4.8.4 Significance of Impact

The subject site is located in specific Hazard category Zones 31 and the site is underlain by fill soils and bay deposits that are characterized as relatively loose and cohesionless. Therefore, the impacts associated with liquefaction are considered significant.

4.8.5 Mitigation, Monitoring, and Reporting

Implementation of the following mitigation measure would reduce the geologic impacts to below a level of significance.

Mitigation Measure 4.8-1: Prior to issuance of a Grading Permit for each portion of the redevelopment, a soils investigation shall be approved by the City Engineer. As appropriate, the remedial measures identified in Appendix F of this EIR shall be incorporated into the grading plans. These measures shall include, but not be limited to the following: 1) monitoring of differential settlement during construction; 2) proper compaction of surficial soils; and 3) installation of a well-compacted structural fill mat (with possible inclusion of geotextile reinforcing fabrics) above the water table in building areas, and/or continuous foundation systems for the buildings.

4.8.6 Impact

Issue 2: **Would the proposal result in any increase in wind or water erosion of soils, either on or off the site?**

A number of onsite surficial deposits may be subject to erosion hazards in association with the construction of future projects. Specifically, project-related activities such as demolition and grading for site preparation, would involve the removal of both stabilizing vegetation and surface pavement and the construction of manufactured slopes. These conditions could accelerate erosion rates due to the generally loose and unconsolidated nature of graded areas and fill materials.

The northern limits of the land area leased by Sea World have a rip rap rock shoreline protection system. The angular rock is 6 inches to 24 inches in size, and extends from the top of the slope in most areas, to a couple of feet below the toe of the slope. The toe of the slope is under water by at least a few feet even during periods of very low tides. The inclination of the rock varies from about 2:1 (horizontal to vertical) to about 4:1. In the past, an approximately 100-foot-long portion of the riprap north of the east Ski Ride Station and the old Sparkletts Water Show slumped into the bay. This may have been a result of the sand and silts washing out from under the lower portions of the rock, the slope experiencing a slump caused by weak foundation soils, or settlement of soft bay mud under the slope area. Portions of the slope were repaired in the late 1980s by removing the rock and disturbed soils, installing a filter fabric or stabilization fabric in the slope key and up-slope, and then replacing the rock. Since those repairs were made, additional settlement has apparently occurred. This movement appears to only be vertical and the rocks did not move out beyond the toe of the riprap. In some areas, rocks have recently been

added to the top of the riprap area to rebuild the slope. A few other small areas were also noted where the riprap has sunk or the slope has slumped. These areas were generally only about ten to fifteen feet wide. Three such areas exist in the eastern side of the Waterfront Stadium basin. The potential for additional slumping could occur in the future. The areas where the slumping occurs could be repaired by adding rock as the existing riprap sinks into the supporting soils. Under the worst case scenario, it could be necessary to remove the rock and a portion of the supporting soils, install a stabilization fabric, and replace the rock.

4.8.7 Significance of Impact

The proposed project would have potentially significant but mitigable impacts associated with soil erosion during construction and shoreline rip rap slumping.

4.8.8 Mitigation, Monitoring, and Reporting

Implementation of the landscape plan would reduce the long-term erosion and sedimentation impacts of the project to below a level of significance. Erosion and sedimentation during construction would be reduced to below a level of significance through implementation of the following mitigation measure.

Mitigation Measure 4.8-2: Prior to issuance of the grading permits, the applicant shall prepare site-specific erosion control plans for the proposed development in conformance with the City's Grading Ordinance to the satisfaction of the City Engineer. The erosion control plans should be in substantial conformance with the Conceptual Landscape Plan and the Design Guidelines for the Mission Bay Park Master Plan Update and should include temporary and permanent erosion/siltation control measures and/or devices that would be installed both during and after site grading and construction, including, but not limited to, interim and post-development landscaping/hydro-seeding; jute netting (or other approved geotextile material) on manufactured slopes; sandbags, brow ditches, energy dissipaters and desilting detention basins; and any other methods to control short-term and long-term surficial runoff and erosion. Prior to approval of grading permits, the applicant shall retain a soils engineer to monitor the grading, construction, and installation of runoff control devices and revegetation of the development site. The soils engineer shall submit in writing to the City Engineer and the Environmental Review Manager of the Development Services Department certification that the development has complied with the required notes on the grading plan addressing erosion controls.

4.8.9 Impact

Issue 3: What is the nature of earthwork that would be required to adequately support proposed structures from the ground?

Tier 1 Projects

Site A-1: Splashdown Ride

Current soil or geologic conditions could significantly impact future development. The surficial soil may not be considered suitable for structural loads without adherence to project-specific recommendations of a qualified geotechnical engineer. Because the Splashdown Ride would consist of three towers ranging from 75 to 95 feet high, the surficial soil, compacted fill and hydraulic fill materials, may require special considerations during site preparation and construction of foundations. In addition, the relatively shallow groundwater table would also pose a risk to future development. The geologic study found that larger structures such as towers and thrill rides would require pile driven foundations similar to the Observation Tower in the central portion of the park and the Sky Ride on the north and northwest sides of the park. With pile foundations, site grading may be required for ancillary structures.

Two ponds are also proposed as part of the Splashdown Ride attraction. The construction of these ponds may incur significant impacts due to hydrostatic uplift pressures created by the shallow groundwater table. Soil anchors may be required to keep the pond from popping out of the ground during drainage due to hydrostatic pressure. In addition, if the ponds would exceed the depth of the groundwater table, dewatering may be required. Any dewatering resulting from construction of the proposed ponds would be directed to either Mission Bay or the San Diego sewer system. See Section 4.5, Water Quality, for a discussion of potential water quality impacts associated with dewatering activities.

Site B-1: Educational Facility

The Educational Facility would be a three-story building and may require a special foundation system such as a concrete mat or a pile driven foundation to support the structure due to the onsite soil conditions. The relatively shallow groundwater table could also pose a risk to this facility. The geotechnical study indicates that it may be necessary to support this structure with a special foundations system such as a concrete mat foundation or a driven pile foundation depending on the magnitude of vertical and lateral loads, amount of allowable settlement, column spacing, and configuration of the structure. The concrete mat foundation would require site preparation that would extend approximately 20 feet outside the perimeter of the structure. In addition, this type of structure may require surcharging the building pad to induce the settlements that could result from the weight of the building and the foundation loads which may require grading up to 30 feet outside the perimeter of the structure.

Site C-1: Front Gate Renovation

The Front Gate Renovation will not exceed 90 feet and may require special considerations during site preparation and construction of building foundations due to the onsite soil conditions that could significantly impact future development. The shallow groundwater table could also pose a risk to future development. The geotechnical study indicates that excavations to support larger one- or two-story structures would extend to approximately 6 feet, which lies just above the groundwater table and would require the installation of a rock/mat/pore pressure dissipation blanket. This generally involves removing the existing fills and bay deposits to just above the water table, constructing a two-foot-thick mat of crushed rock surrounded with stabilization and filter fabric, and replacing the excavated soil as compacted fill. The installation of the crushed rock and stabilization fabric would act as a means to dissipate excess water pressure. The site preparation would extend about 20 feet outside the perimeter of the structure.

The Front Gate Renovation may also include a water feature. The inclusion of a water feature could incur significant impacts due to the relatively shallow groundwater table. If the water feature were to consist of a pond or pool, soil anchors and/or dewatering may be required.

Site D-1: Special Events Center Expansion

Due to onsite soil conditions, the special events center expansion may significantly impact future development. In addition, the shallow groundwater table may also pose a risk to future development. The site preparation and foundation requirements would be similar to those discussed for the front gate renovation. However, where existing buildings exist within 20 feet of the building, sheet piling may be necessary. With sheet piling, excavation of areas more than a foot or two outside the structure would not be necessary.

Tier 2 Projects

Tier 2 projects may include but are not limited to aquariums, special effects theaters, land based adventure rides, pelagic fish exhibits, water play attractions, themed track or water rides, special format projection attractions, playgrounds, wildlife performance venues, and wildlife exhibits. In some cases, an existing attraction may be renovated or expanded.

Onsite geologic and soil conditions would determine the type and extent of site preparation and construction of foundations. For relatively light structures such as small single-story buildings, site preparation is expected to consist of constructing a mat of uniformly compacted fill five to eight feet thick. This procedure normally requires thickened on-grade slabs, deepened footings, and more heavily reinforced footings and on-grade slab. Site preparation for this operation can be expected to extend approximately 10 to 15 feet beyond the perimeter of the structures. For some structures in some locations of the park, site preparation may be limited to densification of soils from the surface by utilizing vibratory compactors and/or utilizing special foundations such as post-tensioned slab/foundation systems or thickened footings and slabs with heavier reinforcing. Larger and heavier one- or two-story structures would require special foundations and site preparation similar to those discussed for the Front Gate Renovation. Structures ranging from three to ten stories in height would require site preparation and special foundations similar

to those discussed for the Educational Facility. Larger structures such as towers and thrill rides would require driven pile foundations.

Soil anchors may also be necessary for development or renovation of performance pools. Soil anchors are necessary to allow drainage of the performance pool without it popping out of the ground due to hydrostatic uplift pressures created by the shallow groundwater. In addition, construction dewatering may occur as part of Tier 2 future development projects implemented in accordance with the Master Plan.

Special Projects

Parking Garage

A four-level parking garage is proposed on the west side of the existing SeaWorld parking lot. The development of the parking garage would not be necessary until many of the park attractions in the Master Plan are built and park attendance justifies the additional parking. Half of the first level will be below grade. The geotechnical study indicates that a two- to three-level parking structure will require excavations that would extend to approximately +6 feet, which is just above the groundwater table, therefore dewatering would be unnecessary. This would require the installation of a rock mat/pore pressure dissipation blanket. However, driven piles would also be required to support the structure. Site preparation would extend to 20 feet outside the perimeter of the structure.

Marina Expansion Site

SeaWorld proposes to expand the existing marina by extending the three existing docks and adding a fourth dock to the west. The marina expansion would add 200 slips to the existing 200 slips, totaling 400 slips. Driven piles would be used to hold the proposed floating docks in place.

Future Hotel Site

The 1985 Master Plan hotel entitlement would be expanded from 300 to 650 rooms. The conceptual proposal includes a ballroom, meeting rooms, surface parking for 105 cars, and a parking structure. A small landing dock serving hotel guests will be built on the Perez Cove shoreline directly behind the hotel. The maximum height for the future hotel would not exceed 90 feet and the appropriate site preparation and foundation system would likely include either a concrete mat or driven piles similar to that discussed previously.

4.8.10 Significance of Impact

Constraints on development of the site are potentially significant but mitigable provided the recommendations of a qualified geotechnical engineer are followed for site preparation, and building and pool foundations.

4.8.11 Mitigation, Monitoring, and Reporting

Implementation of the following mitigation measures would reduce potentially significant impacts associated with unstable geologic or soil conditions that would constrain development to below a level of significance.

Mitigation Measure 4.8-3: Prior to approval of grading permits, a complete subsurface geotechnical investigation of the proposed development area shall be performed to evaluate the thickness and/or the in situ condition of the compacted and hydraulic fill materials and the bay deposits. The geotechnical investigation would also provide site-specific remedial grading recommendations, foundation design criteria, and recommendations for the design of surficial improvements. The recommendations shall be implemented as part of project construction.

Mitigation Measure 4.8-4: Prior to issuance of a grading permit for the implementation of projects associated with the Master Plan Update, the disposal of any anticipated construction-related dewatering effluent shall be permitted by either the City of San Diego or the RWQCB. The effluent could either be directed to the Mission Bay or the San Diego sewer system. If the effluent is discharged to Mission Bay, then the discharge shall meet the effluent limits specified by the RWQCB (Order No. 95-25) and Federal National Pollution Discharge Elimination System (NPDES) requirement. Effluent discharged to the City of San Diego sewer system shall meet the City's standards.

4.9 Air Quality

An air quality study, *Air Quality Impact Analysis, SeaWorld Master Plan EIR*, was prepared by Giroux & Associates, Inc., on August 23, 2000. A complete copy of this report is included in Appendix G.

4.9.1 Existing Conditions

Climate

SeaWorld is located in the San Diego Air Basin (SDAB), which is coterminous with San Diego County. The climate of San Diego is characterized by a repetitive pattern of frequent early morning cloudiness, hazy afternoon sunshine, clean daytime onshore breezes and limited temperature change throughout the year. The average daily maximum in summer in downtown San Diego is in the upper 70s with an average daily maximum in the mid-60s in winter. The thermostatic action of the nearby oceanic heat reservoir keeps the daily oscillation of temperature close to 15 degrees. Summer nights in the Mission Bay area are in the low 60s, while early winter mornings drop to the upper 40s.

Occasional rainfall occurs in winter while summers are often completely dry. An average of 10 inches of rain falls each year from November to early April. Substantial year-to-year variations in rainfall amounts are the rule rather than the exception. Rainfall amounts of one-half or twice the annual average are not uncommon. Measurable rain falls on 20 days per year with only 6 days of moderate (0.5" in 24-hours) rainfall per year.

These same atmospheric conditions combine to limit the ability of the atmosphere to disperse the air pollution generated by the large regional population. The onshore winds across the coastline diminish quickly when they reach the foothill communities east of San Diego, and the sinking air within the offshore high pressure system forms a massive temperature inversion that traps all air pollutants near the ground. The resulting horizontal and vertical stagnation, in conjunction with ample sunshine, cause a number of reactive pollutants to undergo photochemical reactions and form smog that degrades visibility and irritates tear ducts and nasal membranes. Occasionally elevated smog levels in coastal communities may also occur when polluted air from the South Coast (Los Angeles) Air Basin (SCAB) drifts seaward and southward at night, and then blows onshore the next day. With successful smog programs in both San Diego County as well as the SCAB, the Mission Bay area rarely experiences the unhealthy air quality common in the 1970s or '80s. Pollution levels exceeding standards are infrequent, and the magnitude of any violations is small.

Meteorology

Meteorological conditions across Mission Bay conform well to the regional pattern of strong diurnal onshore winds during summer and weak nocturnal offshore winds during winter. These

local wind patterns are driven by the temperature difference between the cool ocean and the warm interior. During summer, moderate breezes of 8-12 mph blow onshore by day, and may continue throughout the night, as the land remains warmer than the ocean. During winter, the onshore flow is weaker, and reverses in the evening as the land becomes cooler than the ocean.

Daytime onshore winds and the nocturnal land breezes are accompanied by characteristic temperature inversions that control the vertical depth through which pollutants can be mixed. The strong onshore flow undercuts a deep layer of warm sinking air within the Pacific Ocean high pressure cell. The interface between the cool layer near the ground and the warm layer aloft is a boundary where the normal decrease of temperature with height is reversed (an inversion). As the polluted layer moves to topographically higher inland areas, the height of the inversion remains relatively the same and thus, becomes more concentrated.

During winter nights, the air near the ground cools from contact with the radiating ground surface, while the air aloft remains warm. The radiation inversion is very shallow and localized, and occurs in conjunction with nearly calm winds. The shallow vertical barrier and light horizontal transport lead to a marked stagnation of emissions from localized sources such as freeways, large parking lots, and major intersections. Such microscale "hot spots" associated with cool-season radiation inversions are less pervasive, less severe, and more amenable to mitigation than the regional photochemical air pollution that occurs in conjunction with the regional, warm-season marine/subsidence inversions.

Relevant Plans and Policies

The Federal Clean Air Act of 1970 and the Clean Air Act Amendments in 1977 required the adoption of national ambient air quality standards (NAAQS) to protect the public health, safety, and welfare from known or anticipated effects of air pollutants. Current standards are set for sulfur dioxide (SO₂), carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulates of less than 10 microns in size (PM₁₀), and lead (Pb). The State of California, Air Resources Board (CARB), has established state standards, generally more restrictive than the NAAQS, and has incorporated additional pollutants, including hydrogen sulfide (H₂S). Federal and state standards are shown in Table 4.9-1.

The entries in Table 4.9-1 include the federal standards for chronic (8-hour) ozone exposure or for ultra-small diameter particulate matter of 2.5 microns or less in diameter (PM-2.5). As a result of a recent Supreme Court decision, the Federal standard was upheld; however, the proposed implementation schedule was overturned and will require EPA revision in the near future. Data collection for these two standards is ongoing; however, until a final ruling is published, no attainment planning or enforcement is occurring at this time.

**TABLE 4.9-1
Ambient Air Quality Standards**

Pollutant	Averaging Time	California Standards		Federal Standards		
		Concentration	Method	Primary	Secondary	Method
Ozone (O ₃)	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	0.12 ppm (235 µg/m ³)	Same as Primary Standard	Ethylene Chemiluminescence
	8 Hour	---		0.08 ppm (157 µg/m ³)		
Respirable Particulate Matter (PM ₁₀)	Annual Geometric Mean	30 µg/m ³	Size Selective Inlet Sampler ARB Method P (8/22/85)	---	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	24 Hour	50 µg/m ³		150 µg/m ³		
	Annual Arithmetic Mean	---		50 µg/m ³		
Fine Particulate Matter (PM _{2.5})	24 Hour	No Separate State Standard		65 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean			15 µg/m ³		
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m ³)	Non-dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m ³)	None	Non-dispersive Infrared Photometry (NDIR)
	1 Hour	20 ppm (23 mg/m ³)		40 ppm (40 mg/m ³)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		---		
Nitrogen Dioxide (NO ₂)	Annual Arithmetic Mean	---	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m ³)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.25 ppm (470 µg/m ³)		---		
Lead	30 days average	1.5 µg/m ³	AIHL Method 54 (14/74) Atomic Absorption	---	---	High Volume Sampler and Atomic Absorption
	Calendar Quarter	---		1.5 µg/m ³	Same as Primary Standard	
Sulfur Dioxide (SO ₂)	Annual Arithmetic Mean	---	Florescence	0.030 ppm (80 µg/m ³)	---	Pararosaniline
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (365 µg/m ³)	---	
	3 Hour	---		---	0.5 ppm (1300 µg/m ³)	
	1 Hour	0.25 ppm (655 µg/m ³)		---	---	
Visibility Reducing Particles	8 Hour (10 am to 6 pm, PST)	In sufficient amount to produce an extinction coefficient of 0.232 per kilometer – visibility of ten miles or more (0.07 – 30 miles or more for Lake Tahoe) due to particles when the relative humidity is less than 70 percent. Method: ARB Method V (8/18/89).		No Federal Standards		
Sulfates	24 Hour	25 µg/m ³	Turbidimetric Barium Sulfate-AIHL Method 61 (2/76)			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Cadmium Hydroxide Stractan			

In San Diego County, the San Diego Air Pollution Control District (APCD) is the agency responsible for protecting the public health and welfare through the administration of federal and state air quality laws and policies. Included in the APCD's tasks are the monitoring of air pollution; the preparation of the State Implementation Plan (SIP); and the promulgation of Rules and Regulations. The SIP includes strategies and tactics to be used to attain acceptable air quality in the County; this list of strategies is called the Regional Air Quality Strategies (RAQS). The RAQS are a combination of mainly voluntary measures affecting car-pooling, parking regulations, and development density and mixes, as well as limitations on stationary sources.

Existing Air Quality

Project area air quality can be best characterized from ambient measurements made by APCD. The nearest station to Mission Bay where the APCD monitors a fairly complete spectrum of air pollutants is at its downtown air monitoring station at 330A 12th Street. Table 4.9-2 summarizes the last seven years of monitoring data from the downtown station.

TABLE 4.9-2
Downtown San Diego Air Quality Monitoring Summary
(Number of Days Standards were Exceeded and Maximum Levels During
Such Violations)

Pollutant/Standard	1992	1993	1994	1995	1996	1997	1998
Ozone:							
1-Hour>0.09 ppm	8	5	0	3	1	5	1
1-Hour>0.12 ppm	1	0	0	1	0	0	0
Max. 1-Hour Conc. (ppm)	0.13	0.11	0.09	0.13	0.11	0.12	0.10
Carbon Monoxide:							
1-Hour>20. ppm	0	0	0	0	0	0	0
8-Hour>9. ppm	0	0	0	0	0	0	0
Max. 1-Hour Conc. (ppm)	11	9	10	8	8	8	8
Max. 8-Hour Conc. (ppm)	7.0	6.5	7.3	5.9	5.5	5.5	4.8
Nitrogen Dioxide:							
1-Hour>0.25 ppm	0	0	0	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.14	0.13	0.13	0.14	0.11	0.11	0.09
Sulfur Dioxide:							
1-Hour>0.25 ppm	0	0	0	0	0	0	0
24-Hour>0.045 ppm	0	0	0	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.09	0.05	0.07	0.06	0.05	0.05	0.04
Max. 24-Hour Conc. (ppm)	0.020	0.019	0.013	0.017	0.013	0.014	0.11
Respirable Particulates:							
24-Hour>50 µg/m ³	---	6/30	5/61	9/59	1/59	3/60	0/56
24-Hour>150 µg/m ³	---	0/30	0/61	0/59	0/59	0/60	0/56
Max. Daily Conc. (µg/m ³)	---	73	76	115	92	74	48

Source: California Air Resources Board, Summary of Air Quality Data, Volumes XXIV-XXIX, 1992-98, and <http://www.sdapcd.co.san-diego.ca.us/air/score/htm>

--- = no data

1998 ozone - 1 hour exceeding State std., 0 hours exceeding federal std., max. 1 hour = 0.10 ppm.

Healthful air quality is seen in almost every pollution category. The only national standard that was exceeded in the San Diego Air Basin during the last seven years (one violation per year is allowed under federal guidelines) was an occasional violation of the national ozone standard. The more stringent state standards for ozone and for particulates were also exceeded. Encouraging improvement trends are seen for almost all pollutants. The following air pollution "bests" in downtown San Diego since the onset of measurements have been noted in the last decade:

1. Fewest violations of state ozone standard	1994, 1996, 1998
2. Fewest violations of federal ozone standard	1994, 1996, 1997, 1998
3. Lowest hourly maximum ozone level (0.09 ppm)	1994
4. Last year that CO standard was violated	1990
5. Lowest hourly maximum CO level (8 ppm)	1995-1998
6. Lowest 8-hour maximum CO level (4.8 ppm)	1998
7. Last year that state NO ₂ standard was violated	1989
8. Lowest hourly maximum NO ₂ level (0.09) ppm	1998
9. Last year that state SO ₂ standard was violated	1987
10. Lowest 24-hour maximum SO ₂ level (0.011 ppm)	1998
11. Fewest violations of state PM-10 standard	1998

Based on air quality measurements made throughout San Diego County, the attainment status for various pollutants is classified as "attainment" for all pollutants except as follows:

	<u>State</u>	<u>Federal</u>
1. 1-hour ozone	"Serious Non-attainment"	"Serious Non-attainment"
2. 8-hour ozone	-----	Unclassified
3. 24-hour PM-10	Non-attainment	Unclassified
4. 24-hour PM-2.5	-----	Unclassified

According to the federal guidelines, an airshed is in attainment of national clean air standards when they are exceeded no more than three times in the last three-year period. Table 4.9-2 indicates that the federal ozone standard was exceeded only twice since 1992, including zero times in 1998. Two violations in 7 years, or only one violation in 6 years (in 1995) of the one-hour standard makes the

downtown area (and presumably SeaWorld/Mission Bay) an attainment subarea within the larger designated "serious non-attainment" San Diego Air Basin. Meeting the standard in some part of the air basin but not in others does not relax the requirement for continuing to implement an aggressive pollution control program throughout the basin. It does suggest, however, that the project area will likely continue to remain in attainment for the ozone standard as regional emissions are further reduced to bring the entire basin into attainment.

Sources of Pollution

In San Diego County, daily emissions from the two precursors to photochemical smog formation (nitrogen oxide [NO_x] and reactive organic gases [ROG]) are approximately 278 tons of ROG and 238 tons of NO_x. Mobile sources (cars, ships, planes, heavy equipment, etc.) account for 64% of the ROG and 91% of the NO_x. Computer modeling of smog formation has shown that a reduction of about 25% each of NO_x and ROG would allow the SDAB to meet the federal standard on days when there is no substantial transport of pollution from the South Coast Air Basin or other airshed.

Ambient particulate levels have not significantly changed in the past decade, averaging 99 tons per day. Particulates primarily derive from vehicular travel on paved and unpaved roads, and from construction and demolition activities. Natural particulates such as sea salt are common in coastal environments, but are not included in the inventory.

Air Quality Management Planning

Violations of national AAQS in the San Diego Air Basin require the development of a plan addressing pollution controls aimed at improving air quality. Several Regional Air Quality Strategies (RAQS) were developed jointly by the APCD and SANDAG and adopted in the late 1970s and early 1980s. More recent planning efforts have included modifications, improvements, and updates of the earlier RAQS efforts.

The California Clean Air Act (AB-2595) required the development of a state clean air plan to meet state and federal standards. A basin plan was therefore developed and adopted in 1991, and predicted attainment of all national standards by the end of 1997 from pollution sources within the air basin, but little can be done about the problem of interbasin transport. Since the South Coast Air Basin is predicted to exceed the national ozone standard beyond the year 2000, the San Diego Air Basin will also not experience completely healthful air for the next several years.

A plan to meet the federal ozone standard was developed in 1994 through an update of the 1991 State Plan. This plan was combined with those from all other California non-attainment areas with serious ozone problems to create the California State Implementation Plan (SIP) which was adopted by the Air Resources Board (ARB) in November 1994 and approved by the U.S. EPA in 1996.

All progress towards attainment, including offsetting the efforts of growth, is expected to derive from existing local, state, and federal rules and regulations. With the continuance of year-to-year vehicular exhaust pollution reduction and with continued implementation of stationary source rules, small additional future emissions reductions are anticipated despite forecast basinwide population growth.

4.9.2 Significance Criteria

Based on City and/or CEQA thresholds, air quality impacts would be significant if the proposed project:

1. Conflicts with or obstructs implementation of the applicable air quality plan;
2. Violates any air quality standard or contributes substantially to an existing or projected air quality violation;
3. Exposes sensitive receptors to substantial pollutant concentrations; and
4. Creates objectionable odors affecting a substantial number of people.

For projects that create mainly automobile traffic whose emissions require complex photochemical reactions to reach their most harmful state, there is no way to measure the impact to establish a substantial contribution because individual impacts will be dispersed to immeasurably dilute levels. However, the cumulative impact of thousands of such small individual sources leads to regionally degraded air quality. Various air pollution control/management agencies have therefore developed guidelines using total project emissions instead of ambient air quality as a surrogate for determining regional impact potential. The City of San Diego has established air pollution emissions significance criteria that differentiate between microscale and/or regional significance. If project area traffic is already congested, or would become congested as a result of the proposed project, a microscale "hot spot" may be created. Emissions of carbon monoxide (CO) are thus potentially critical. In areas without traffic congestion, the project's contribution to regional smog formation is important. Reactive organic compounds (ROC) as smog precursors are important in a regional sense.

City of San Diego guidelines do not include the full spectrum of air pollution. Since the SDAB does not meet the airborne particulate matter (PM-10) standard, such emissions may also be important. Adverse health effects from particulate matter derive mainly from the ultra-small diameter fraction (2.5 microns or less, called "PM-2.5"). Because the federal PM-2.5 standard is still under judicial review, and because PM-2.5 emission factors for many activities or processes are not well known, there is no reasonable basis for deriving an emissions-based significance criterion for particulates. In the absence of a quantifiable significance threshold for PM-10, the non-attainment status of the airshed requires that particulate emissions be maintained at minimum levels even if their significance cannot be definitively determined. For the proposed SeaWorld Master Plan Update implementation, daily project emissions exceeding 100 pounds of ROG, or 550

pounds per day of CO, would therefore have a potentially significant air quality impact consistent with City of San Diego CEQA guidelines.

4.9.3 Impact

Issue 1: Would the proposal result in air emissions which would substantially deteriorate ambient air quality, including the exposure of sensitive receptors to substantial pollutant concentrations?

Sources of Impact

The proposed project would impact air quality almost exclusively through the traffic generated by increased site visitors. Mobile source impacts occur on two geographical scales. Regionally, site-related travel would add to regional trip generation and increase the vehicle miles traveled (VMT) within the overall airshed. Locally, project traffic would be added to the San Diego roadway system near the development site. Microscale air pollution "hot spots" can occur at the local scale if a number of conditions occur simultaneously. These include:

1. High traffic volumes during poor ventilation;
2. A large number of vehicles that have been "cold started";
3. Vehicles operating at pollution inefficient speeds; and
4. These vehicles are operating on roadways already crowded with non-project traffic.

The proposed SeaWorld Master Plan Update includes expansion of an existing marina and possibly a small personal watercraft ("jet-ski") concession. Engine exhaust from both the marina fleet and the recreation concession may be generated. Although the number of potential on-water emissions sources (one hundred additional boats and a few jet-skis) is small, their engines are often not well regulated in terms of emissions. Although pleasure boat engines have improved substantially over the last few decades, they are still proportionally much less pollution-efficient than automobiles. The emissions contribution from only a few boats is, therefore, not completely negligible.

A portion of the SeaWorld parking lot covers an old landfill which received some hazardous waste materials. The main concern is that air emissions from this landfill could affect operations at SeaWorld. Various monitoring programs have been conducted to track levels of both organic and toxic materials. Biodegradation of organic materials has occurred for over four decades, such that methane generation and the levels of odorant it carries with it are low. Currently, migration of air emissions has not been sufficient to warrant more than ongoing monitoring. See Section 4.11, Human Health/Public Safety for more information regarding air emissions from the inactive Mission Bay Landfill.

Impact Analysis

Construction Impacts

The demolition of existing uses, the excavation for utility installation, the preparation of foundations and footings, and building assembly would create temporary emissions of dusts, fumes, equipment exhaust and other air contaminants during the project construction period. In general, the most significant source of air pollution from project construction is typically the dust generated during demolition, excavation, and site preparation. Because such activities would occur in proximity to both large numbers of site visitors and pollution-sensitive marine species, a higher level of emissions control is generally applied than for construction with large distance buffers.

Typical dust lofting rates from construction activities are usually assumed to average 1.2 tons of dust per month per acre disturbed. This rate is for total suspended particulate (TSP). TSP contains a limited fraction of particulate matter small enough (10-micron or less, called PM-10) to enter into human lung tissue. The above factor also does not consider the dust control efficiency associated with normal construction practice. Dust control through regular watering and other fugitive dust abatement measures required by the San Diego APCD can reduce dust emission levels from 50-75 percent. Dust emissions rates, therefore, depend on the site development rate and the care with which dust abatement procedures are implemented.

Site development would be phased over multiple years, and would take up to twenty years for final site buildout. The maximum disturbance footprint at any point in time would only be a small portion of the total project area. For purposes of analysis, five acres for building the Perez Cove hotel and ancillary facilities was assumed to be the largest single disturbance area. For a five-acre site, PM-10 emissions are estimated to be 130 pounds per day with the use of standard dust control measures. There is no adopted standard of impact significance for fugitive construction dust. The non-attainment status of the air basin for particulates suggests, however, that PM-10 emission rates during construction should be minimized. Enhanced dust control measures can achieve eighty percent control efficiencies compared to fifty percent attainable with watering as the only standard dust control measure. With adoption of enhanced dust control measures, maximum daily PM-10 emissions can be maintained at approximately 50 pounds per day.

Recent research has shown that adverse health impacts from particulate inhalation derive almost completely from the very smallest diameter particles of 2.5 micron diameter or less (PM-2.5). A new national air quality standard for PM-2.5 was adopted in 1997. PM-2.5 is made up mainly from combustion sources or from chemical reactions among chemically active gaseous pollutants. Soil disturbance contributes negligibly to PM-2.5. Soil disturbance material is generally chemically inert. Despite the total magnitude of fugitive construction dust emissions, a finding of less than significant impact from PM-2.5 emissions is supported by the almost total absence of PM-2.5 in dust and the chemical inertness of the emissions in such dust.

In addition to small dust particles that remain suspended in the air semi-indefinitely, construction also generates many large diameter particles that are easily filtered by human breathing passages,

but settle out rapidly on parked cars and other nearby horizontal surfaces. Large particle emissions thus comprise more of a soiling nuisance rather than any potentially unhealthful air quality impact. With prevailing daytime onshore flow, dust soiling potential is likely greatest on any cars parked east of any construction area. Good control of fine particulates also results in reduction in nuisance potential from larger particulate matter. While dust deposition can be minimized, it often cannot be completely eliminated. Therefore, a temporary soiling nuisance is considered adverse, and does not constitute a significant air quality impact.

Equipment exhaust will also be released during temporary construction activities, particularly from mobile sources during site preparation and from on-site equipment during actual construction. Construction activities were assumed to require the expenditure of approximately 200,000 Brake Horsepower Hours (BHP-HR) of on-site equipment and off-site trucks to build out each acre. It was assumed that all such equipment is diesel-powered and that heaviest equipment operations occur in approximately 200 days. Table 4.9-3 shows the daily emissions that would be anticipated during buildout of the assumed largest five-acre disturbance site.

TABLE 4.9-3
Construction-Related Emissions During Buildout of Largest Site

Pollutant	Emissions (lb/day)	Significance Level (lb/day)
Reactive Organic Gases (ROG)	3	100
Carbon Monoxide (CO)	10	550
Nitrogen Oxide (NO _x)	43	n/a
Exhaust Particles (PM-10)	2	n/a
Sulfur Dioxide (SO ₂)	3	n/a

Source: Giroux & Associates, 2000.

Although the construction activity emission rates are non-negligible (especially NO_x from diesel-fueled trucks and onsite vehicles), they are less than the threshold levels identified above. Such emissions would be widely dispersed in space and time by the mobile nature of much of the equipment itself. Furthermore, daytime ventilation during much of the year in Mission Bay is usually more than adequate to disperse any local pollution accumulations near the project site. Any perceptible impacts from construction activity would, therefore, be confined to an occasional detection of characteristic diesel exhaust odor, but not in sufficient concentration to expose any nearby receptors to air pollution levels above acceptable standards.

Construction activities may result in "spillover" into the surrounding community. Spillage may be physical such as dirt tracked onto public streets or dropped from trucks. Spillover may also be through traffic congestion effects where detours, lane closures, or construction vehicle competition with non-project peak hour traffic slows beyond the immediate construction site to

less pollution-efficient travel speeds. For most projects proposed within SeaWorld Master Plan Update Areas 1 through 4, these effects would be minimal. Construction of the Future Hotel in Area 5 is most likely to result in potential spillover impacts. However, through conformance with City requirements with respect to dust control and traffic management these effects would not be significant.

Vehicular Emissions Impacts

Regional Effects

The greatest air quality concern from increased visitor traffic would come from mobile source emissions that result from project-related transportation. The project traffic study estimates that existing site-related traffic will increase by ~~12,960~~ 15,300 daily vehicle trips in 2020. This traffic volume would generate almost ~~200~~ 230,000 additional vehicle miles traveled to the basinwide travel burden, assuming an average trip length of 15 miles per visitor trip. The corresponding air pollution emissions associated with increased site-related travel was calculated using California Air Resources Board URBEMIS7G vehicular emissions computer model. The daily mobile source emissions at project buildout are shown in Table 4.9-4.

TABLE 4.9-4
Project-Related Vehicular Source Emissions
(pounds/day)

	ROG	NO_x	CO	PM-10
Existing Park	<u>618</u>	<u>423</u>	<u>2375</u>	<u>242</u>
Park Buildout	<u>325</u>	<u>394</u>	<u>1819</u>	<u>465</u>
Difference	<u><293></u>	<u><29></u>	<u><556></u>	<u>+223</u>
Significance Threshold	100.	100.	550.	n/a
Exceeds Threshold (?)	No	No	No	No

Source: URBEMIS7G Computer Model; Year = 2000 (existing); 2020 (buildout), Output in Appendix.

As indicated in the table, mobile source emissions reductions from a substantially “cleaner” future vehicle fleet would more than offset the daily traffic increase from 15,000 average daily trips (ADT) in 2000 to a forecast ADT level of ~~27,960~~ 30,300 in 2020. All mobile source pollutants except PM-10 would be substantially lower. This is because PM-10 depends mostly on vehicle miles traveled (VMT) from roadway dust, tire wear, brake pads, etc., and minimally on combustion efficiency. Because future VMT will almost double, PM-10 increases approximately keep pace. Project implementation would thus, be considered to have an individually less than significant impact.

Local Effects

Locally, any direct relationship between project-related emissions and air quality as a basis for evaluating impact significance focuses on pollutants that do not require chemical transformation to reach their most unhealthful form ("primary pollutants"). Such impacts would occur within onsite parking lots or at any congested intersections near the project site. To evaluate the potential for the formation of any air pollution "hot spots," a screening procedure based on the California line source dispersion model CALINE4 was used to estimate receptor exposure at various intersections near the proposed project site potentially impacted by increased traffic. Because of the substantial number of intersections and scenarios studied, one generic intersection analysis was run with the CALINE4 model and other intersections were then scaled according to their respective travel volumes and speeds [based on Level of Service (LOS)]. This analysis was undertaken with maximum traffic and minimum dispersion conditions, with and without project traffic, in order to generate a worst-case impact assessment. CO was used as the primary pollutant to determine if there was any air pollution "hot spot" potential.

The results of the microscale CO impact analysis are summarized in Table 4.9-5. The hourly CO exposure near the 12 analyzed intersections where maximum localized CO impacts are likely to occur would total 8 ppm or less at the Sunset Cliffs Boulevard/Nimitz Boulevard intersection. The maximum project-related increase would be +2 ppm at Ingraham Street and Crown Point Drive. Compared to an hourly standard of 20 ppm, the maximum increase of 2 ppm or less above the no-project conditions is not expected to create any new violations of the CO standard. In 1998, the maximum one-hour CO concentration was 8 ppm. If the maximum regional background were to occur simultaneously with the maximum local impact, it would require a microscale contribution of 12 ppm to equal the most stringent one-hour standard of 20 ppm. Maximum existing plus cumulative growth plus project microscale levels are 8 ppm. Therefore, the one-hour CO standard would not be exceeded at 25 feet from the most heavily congested intersection (Sunset Cliffs at Nimitz), nor at any other location around SeaWorld. Project-related CO emissions would not create any unhealthful air quality in the project area.

Stationary Source Impacts

The existing operations of SeaWorld entail the use of a number of stationary sources operating under APCD permits. Listed below are the 22 air pollution permits SeaWorld currently holds for facility operations on either the SeaWorld property or the Hancock Street Annex.

Hancock Street Annex

- Spray booth and paint guns;
- Paint spray guns; and
- Spray booth, guns, and spray-up system.

SeaWorld Property

- Cogeneration Set – 630 KW – Cat G399 (lean burn);
- Cogeneration Set – 650 KW – Cat G399 (lean burn);
- Cogeneration Set – 630 KW – Cat 3512 (lean burn);

Cogeneration Set – 650 KW – Cat G399 (lean burn);
 Paint spray booth;
 Marine coating station;
 Gasoline service, including boat service (3,000 gallons);
 Saltwater ozone treatment (9 units);
 Water dechlorination facility;
 Gasoline service (10,000 gallons);
 Boiler – natural gas-fired; and
 Snow making equipment (exempt from permits).

TABLE 4.9-5
Microscale Air Quality Impact Analysis
(Hourly CO concentration above background in ppm)

Intersection	Peak Hour	No Project	With Project	Impact
SeaWorld Drive and I-5 NB Ramps	AM	2	2	0
	PM	4	4	0
SeaWorld Drive and I-5 SB Ramps	AM	1	2	+1
	PM	2	2	0
SeaWorld Drive and Pacific Highway	AM	1	1	0
	PM	2	2	0
SeaWorld Drive and Friars Road	AM	1	1	0
	PM	2	2	0
SeaWorld Drive and SeaWorld Way	AM	1	1	0
	PM	1	2	+1
Ingraham Street and Crown Point Dr.	AM	1	1	0
	PM	3	5	+2
Ingraham Street and Vacation Road	AM	1	1	0
	PM	3	3	0
Ingraham Street and Perez Cove Way	AM	1	1	0
	PM	3	4	+1
West Mission Bay Drive and I-8 WB Offramp	AM	1	1	0
	PM	5	5	0
Sunset Cliffs Blvd. and I-8 WB Offramp	AM	5	5	0
	PM	5	5	0
Nimitz Blvd. and I-8 EB Onramp	AM	2	2	0
	PM	3	3	0
Nimitz Blvd. and Sunset Cliffs Blvd.	AM	5	5	0
	PM	8	8	0

Source: Caltrans (AQ TAN) Screening Procedure, 1988.

These permits require that air emission sources must operate using “best available control technology” (BACT). BACT is the level of control achieved by new equipment used in general practice. All SeaWorld stationary sources use BACT. Spray booths are equipped with vapor capture systems, and spray guns are high transfer efficiency units. All combustion sources are

“lean burn,” natural gas-fired units; vehicle gasoline service is equipped with vapor recovery; and water treatment systems have ozone destruct units and/or use liquid chemicals instead of gases for dechlorination.

The San Diego APCD tracks site-related air emissions in two ways: the maximum allowable emissions, and actual annual emissions. The maximum allowable emissions for a given permit unit is called the “potential to emit” (PTE), and actual annual emissions are a fraction of the PTE. The cogeneration sets have the greatest potential to emit because two are permitted to run continuously and two are permitted to each run approximately 6,000 hours per year. During summer, these cogeneration units typically run continuously and may not necessarily meet the total energy demand. Full operation is not required during winter due to the low onsite demand. SeaWorld therefore, does not use its full emissions budget by a substantial margin.

Table 4.9-6 compares the emission levels from actual operations to those if every emissions source at SeaWorld were operating at its maximum allowable time period (PTE). Actual annual emissions are in the range of 8-16 percent of the annual PTE. The wide gap between the actual levels versus the permitted levels allow for management of any new air emission sources while remaining within the facility’s currently allocated emissions.

TABLE 4.9-6
Stationary/Area Source Emissions Comparison
(tons/year)

Source	Pollutant				
	NO _x	CO	VOC	SO _x	PM-10
Actual Emissions					
SeaWorld Site	10.4	12.2	9.8	0.1	1.6
Hancock Annex	-----	-----	0.3	-----	-----
<i>Total</i>	<i>10.4</i>	<i>12.2</i>	<i>1.01</i>	<i>0.1</i>	<i>1.6</i>
Potential to Emit					
SeaWorld Site	134.1	138.1	65.8	0.9	10.2
Hancock Annex	-----	-----	21.3	-----	-----
<i>Total</i>	<i>134.1</i>	<i>138.1</i>	<i>87.1</i>	<i>0.9</i>	<i>10.2</i>
Actual vs. PTE	7.8%	8.8%	11.6%	11.1%	15.7%

Source: Giroux and Associates, 2000.

Since the cogeneration units are the most substantial onsite emissions sources, their combined use has undergone substantial review. Several options have been considered to accommodate anticipated additional energy demand created by implementation of the Master Plan Update. There are no specific energy generation systems included in the SeaWorld Master Plan Update. However, any major stationary source such as a generation unit would have to undergo a separate air quality impact analysis (AQIA) prior to obtaining APCD authority to construct and operate

with a permit. The AQIA would guarantee that the system would use BACT, that new emissions would be offset by retiring an equivalent amount of existing emissions, and by insuring that both local and regional air quality would not be adversely affected. Air quality impacts from any future energy demand management approaches would thus be less than significant.

On-Water Emissions Impacts

Increased air emissions may result from on-water recreational activities at the expanded marina and at the possible personal watercraft (PWC) concession. Emissions from new on-water activities were estimated using California Air Resources Board (CARB) emission factors for pleasure boating. Fuel use for increased on-water activities associated with future development was estimated at 10 gallons per week for marina users, and 10 gallons per day for the PWC activity. Marine use was assumed evenly split between gasoline and marine diesel. Fuel use may be higher on some warmer days, but fairly minimal during poor weather. The above values are typical estimates for average conditions.

These consumption estimates were combined with the CARB emission factors to produce an emissions estimate as shown in Table 4.9-7. "New" boating activities, assuming no improvements in emissions characteristics for boat engines in the next twenty years (an over-predictive assumption), will not exceed City of San Diego significance thresholds.

TABLE 4.9-7
On-Water Emissions Increases
(pounds/day)

Source	ROG	NO _x	CO	PM-10
Marina – Diesel	24	48	16	4
Marina – Gas	41	14	259	negligible
PWC – Gas	12	4	73	negligible
<i>TOTAL</i>	<i>77</i>	<i>66</i>	<i>348</i>	<i>4</i>
On-road Mobile Net Change (Table 4.9-4)	<355>	<87>	<970>	+282
Combined (roadway + on-water)	<278>	<21>	<622>	+286
Significance Threshold	+100	n/a	+550	n/a
Significant (?)	No	No	No	No

Source: Giroux and Associates, 2000.

Table 4.9-7 shows that except for PM-10, there would still be a net reduction in pollutants from combined on-road and on-water sources at buildout compared to existing conditions. Air quality impacts, on a local or regional scale, are therefore less than significant.

4.9.4 Significance of Impact

No potential significant air quality impacts have been identified. Construction activity “footprints” would be too small to create enough dust or to utilize enough heavy equipment to cause significance thresholds to be exceeded. The retirement of older cars from the vehicle fleet would offset increased visitor attendance travel emissions such that SeaWorld buildout travel emissions would be less than from the existing site visitor traffic for all pollutants except PM-10. Further, stationary sources would not substantially increase in that any new sources of emissions would be required to be offset by a 120 percent reduction of equivalent emissions elsewhere in the air basin. On-water activity emissions resulting from the marina expansion and a possible PWC concession would not exceed the City of San Diego thresholds. The combined on-road and “new” on-water emissions at buildout would be less than existing on-road emissions for all pollutants except PM-10.

4.9.5 Mitigation, Monitoring, and Reporting

Although no potentially significant air quality impacts were identified, mitigation to reduce adverse but less than significant air quality impacts include:

Mitigation Measure 4.9-1: As a condition of any grading or building permit, construction management procedures shall be implemented to clean up dirt and debris spillage from public roads, route construction traffic through the least sensitive areas. Use of transportation control measures to encourage carpooling among construction workers and to schedule deliveries to non-peak traffic hours is recommended to reduce adverse, but less than significant impacts from construction-related exhaust emissions.

4.9.6 Impact

Issue 2: Would the proposal result in the creation of objectionable odors?

The project would not result in the creation of any objectionable odors. Any new sources of emissions would require conformance with state and federal air quality standards that govern existing operations of SeaWorld. Temporary impacts from construction activity would consist of occasional diesel exhaust fumes, but would not be in sufficient concentration to expose any nearby receptors to air pollution levels above acceptable standards.

As discussed earlier, a portion of the SeaWorld parking lot is underlain by an old landfill. Various monitoring programs have been conducted to track organic and toxic levels. Biodegradation of organic materials has occurred for over forty years such that methane generation and the levels of odorant it carries with it are low. Any air quality impact associated with methane gas is not significant.

4.9.7 Significance of Impact

The project would not conflict with air quality standards such that objectionable odors would be generated and therefore, would not result in any significant air quality impacts.

4.9.8 Mitigation, Monitoring, and Reporting

The project would not significantly exceed national and state air quality standards regarding discharge of fetid odors; therefore, no mitigation, monitoring, and reporting would be required.

4.10 Recreational Resources

4.10.1 Existing Conditions

The focus of the recreational resources discussion pertains to whether the project could impede access to other existing recreational facilities in the area of the proposed project. The analysis pertains to vehicular and pedestrian access.

Access and Circulation

As one of San Diego's preferred recreation destinations, during the peak tourist season, Mission Bay Park is subject to considerable motorist, bicycle, and pedestrian traffic. Contributing to the traffic problems is a significant volume of weekday commuter traffic on Ingraham Street and SeaWorld Drive, which are major roadways serving Mission Bay Park. The major roadways in the project vicinity include SeaWorld Drive, Ingraham Street, West Mission Bay Drive, Sunset Cliffs Boulevard, Friars Road, Pacific Highway and Perez Cove Way. These routes provide access into and through the southern part of Mission Bay Park and to Mission Beach, which are where the major public recreational facilities are located in the area. These routes typically operate at acceptable levels of service, except during PM peak period weekdays and peak summertime holiday weekends. See Section 4.4, Transportation/Circulation for a complete discussion of existing roadway network operations.

In addition to the vehicular network, in the project vicinity there is a pedestrian and bicycle path that originates in the South Shores Park area near Mission Bay and then turns southward until it parallels Sea World Drive. It crosses Perez Cove Way and follows Perez Cove Way on its southern and western side until it meets up with Ingraham Street.

4.10.2 Significance Criteria

A significant impact would occur if the project would result in a substantial impediment to recreational facilities access in the area.

4.10.3 Impact

Issue 1: Would the proposal result in an impact upon the quality or quantity of existing recreational opportunities?

Circulation System

Inadequate functioning of the circulation system in Mission Bay Park may discourage use of the Park. The proposed project would result in significant impacts to the circulation system in the vicinity of SeaWorld in Mission Bay Park. However, ~~these SeaWorld's traffic~~ impacts would be mitigated to below a level of significance as described in Section 4.4, Transportation/Circulation

through fair-share contributions to various traffic improvements. In addition, the traffic analysis was conducted for the worst-case scenario, which was the PM peak period during the weekday. The primary reason this is the worst traffic condition, is due to commuter traffic traveling through the southern part of Mission Bay Park. Peak usage of Mission Bay Park occurs on the summer weekends, when commuter traffic would be absent from the Park roadway network. Therefore, the weekend operational characteristics relating to circulation access for recreational users of Mission Bay Park would be better than the weekday characteristics described in the Transportation/Circulation section during peak recreational usage times. As a result the proposed project would not result in a significant impact to Mission Bay Park circulation system, and therefore would not discourage park users from frequenting the park.

Access

The SeaWorld entrance at Perez Cove Way and exit at Sea World Way were observed on Memorial Day weekend, Fourth of July weekend, Labor Day weekend, and a non-holiday summer weekend during 1999 to determine the operating conditions. Queue counts were conducted between 10 AM and 12 PM at the entrance and between 5 and 7 PM at the exit. The maximum daily queues ranged from 6 to 25 vehicles with an average queue of 5 vehicles per hour per gate for the entrance and 2 vehicles per lane per hour at the exit. Based on these counts, the calculated service rate of 120 vehicles per hour per gate was determined as acceptable operating conditions. Because ingress and egress to SeaWorld is adequate, the proposed project would not cause a significant impact to traffic conditions that would discourage other Mission Bay Park users from frequenting the Park.

The existing pedestrian/bicycle pathway would also not be significantly affected by the Master Plan Update because vehicular circulation would not significantly impede pedestrian/bicycle circulation in the vicinity of SeaWorld.

4.10.4 Significance of Impact

The proposed project would not result in adverse traffic conditions that would impede vehicular access to, or pedestrian/bicycle usage of, recreational facilities in Mission Bay Park or the Mission Beach area. Therefore, the project would not result in significant impacts relative to recreational facilities access.

4.10.5 Mitigation, Monitoring, and Reporting

Because no significant impact is identified, no mitigation measures are recommended.

4.11 Human Health/Public Safety

4.11.1 Existing Conditions

Hazardous Materials

The existing operation of SeaWorld involves the use and storage of a variety of chemicals. Table 4.11-1 lists these materials, identifies their use, and quantifies the maximum quantity onsite at any single given time as well as the total yearly amount. SeaWorld follows the procedures described in their *Hazardous Materials Business Plan and Emergency Contingency Plan*, which establishes the protocol for emergency procedures in the event of hazardous materials spills, fire, or other emergency situation.

Inactive Landfill

A portion of the east side of the guest parking area is underlain by the inactive Mission Bay Landfill (Figure 4.11-1). This parking area is maintained by SeaWorld and covered with a chip-seal paving surface, which is impervious to water, but allows for gas diffusion. The SeaWorld lease with the City of San Diego prohibits SeaWorld from disturbing the inactive Mission Bay Landfill.

The City of San Diego owned and operated the landfill from July 1952 to December 1959. The landfill was operated as a "trench and fill" type disposal area and received approximately 25,000 cubic yards of domestic and public refuse monthly (Class II and III). The City also operated part of the site as an unrestricted Class I landfill and received up to 13,400 barrels of waste potentially containing up to 737,000 gallons of industrial waste consisting of waste acids, alkaline solutions, organic solvents, and paint waste. Trenches approximately 60 feet long and 15 feet deep were excavated and filled with waste with a three to four foot cover.

The City of San Diego, Environmental Services Department and the Park and Recreation Department are the owners/operators of the former landfill site. The majority of the former landfill area includes undeveloped open space and the South Shores Development Project (Phases I, II, and III) consisting of a boat launching basin, parking area, and landscaping improvements. The landfill site has been the subject of several studies before and after its closure.

The United States Environmental Protection Agency (EPA), the Regional Water Quality Control Board (RWQCB), the California Department of Toxic Substances Control (DTSC), the City of San Diego, the County of San Diego Environmental Health Department and Air Pollution Control District (APCD) were all involved in monitoring and regulating the closure of the landfill and Phases I, II and III of the South Shores Development Project.

Under contract with the City of San Diego, Woodward Clyde Consultants (WWC) submitted a summary of a comprehensive investigation into the extent and hazardous waste content of the Mission Bay Landfill in 1983. As result of this study, the RWQCB (Order 85-78, September 16,

**TABLE 4.11-1
Hazardous Materials Inventory**

Hazardous Material	Max amount at one time	Total yearly amount	Explosive	Use
Acetylene	1,650 ^b	3,700	Yes	Metal welding and cutting, illuminant.
Sodium Hypochlorite 10-15%	11,600 ²	302,00		Oxidizing bleach, fungicide.
Sulfuric Acid	750 ²	1,300	Yes	Fertilizers, paints, detergents.
Oxygen-Compressed Gas	4,600 ^b	15,000		Animal care lab, maintenance, dive tanks
Assorted Hydraulic Oils	165 ²	3,000		Various equipment
Zinc Oxide, 3%, Simplot 6-20-20	650 ¹	1,000		Fertilizer
Naphthalene, 6%, Safety Kleen Solvent	140 ²	780		Solvent
Sodium Thiosulfate	1,210 ¹	11,000		Photographic fixing agent, bleach
Sodium Bicarbonate, Soda Ash	1,800 ¹	4,500		
Sodium Chloride Salt	1,400 ¹	6,000		Salt
2-Butoxyethanol, 15-25%, Glance SC	60 ²	300		Glass Cleaner
Tetrasodium Salt, 5%, Triad II Disinfectant Cleaner	60 ²	300		Cleaner
Ethanol	160 ²	3,000		Foodservice Joy
Ethylene Glycol	60 ²	300	Yes	Antifreeze
Assorted 2 Cycle Oils	140 ²	4,000	Yes	Various equipment
Tetradecene-N-1, Flow Mate	60 ²	165		Natural Solvent for grease traps
Sodium Hypochlorite, 4%,	55 ²	330		Mildew stain remover
Sodium Molybdate, Trident 5202	55 ²	300		Water treatment cogen
Lacquer Thinner	55 ²	300		Solvent
Sodium Hydroxide, 7%, GP Forward	90 ¹	300		All purpose cleaner
N-Alkyl Dimethyl Benzyl Ammonium Chloride, 0.15%, Spray Nine	115 ²	1,000	Yes	Fungicide, insecticide
Calcium Sulfate	2,000 ¹	5,000		Gypsum
Ammonium Phosphate Sulfate, Turf Supreme 15-5-7	840 ¹	3,000		Fertilizer
Silicon Dioxide, Silica Sand	2,000 ³	20 ³		Sand

**TABLE 4.11-1
Hazardous Materials Inventory**

Hazardous Material	Max amount at one time	Total yearly amount	Explosive	Use
Helium	776 ^b	3,000		
Sodium Carbonate, 51%, Solid Fusion	750 ¹	1,500		Solid Detergent
Ammonia Nitrate, 64%, Nitra King 22-3-9	600 ¹	1,000		Fertilizer
Activated Carbon	8,000 ¹	20,000		
Argon compressed gas	750 ^b	3,000		
Liquid propane gas	3,000 ²	8,000	Yes	Fuel
Propylene Glycol	330 ²	650		Antifreeze
Sodium Laureth Sulfate, 20%, Triangle Lotion Soap	60 ²	500		Soap
Mono Ammonium Phosphate, 95%, ABC Dry Chemical Fire Extinguishers	2,500 ¹	7,500		Fire extinguishers
Sodium Hypochlorite, 5%	220 ²	500		Clorox Liquid Bleach
Compresses nitrogen gas	2,300 ^b	2,300		
Mineral Spirits, 30% Bipco-61 H Dri-Shield Sealer	55 ²	110		Concrete Sealer
Urea, Complete K 22-2-22, High potassium slow release fertilizer	670 ¹	3,000		Fertilizer
Freon R-123	3,740 ¹	7,000		Refrigerant
Assorted oil base paint	100 ²	200		Paint
Carbon dioxide compressed gas	26,000 ^b	600,000		
Sodium Carbonate	680 ¹	2,000		Institutional Formula Tide
Manganese, 13%, Stainless Steel	500 ¹	500		Metals
Nickel, 99%, Nickel Steel	500 ¹	200		Metals
Iron, 95%, Galvanized Steel	500 ¹	200		Metals
Potassium Alum Sulfate (liquid)	1,750 ²	600		
Sodium Bisulfate	4,000 ²	60,000		
Wrought Aluminum Alloy, Aluminum 92%	500 ¹	1,000		Building Product

**TABLE 4.11-1
Hazardous Materials Inventory**

Hazardous Material	Max amount at one time	Total yearly amount	Explosive	Use
Sodium Carbonate, 3%, Fullsan	55 ²	110		Germicide Surfactant
Bispenal A Diglycidyl Ether Resin, Stacrete Epoxi-18 R-Flex	150 ²	120		Epoxy
Calcium Salt-Portland Cement, Red-E-Crete	800 ¹	2,000		Cement
Urea, 20%, Apex 13-5-8	500 ¹	400		Inorganic fertilizer
Assorted Polyurethanes	250 ²	200		
Epichlorohydrin Bisphenol A Resin, STA Crete Resin-two part epoxy	150 ²	300		Epoxy
Silicone Emulsion, Pro-Tex-All	60 ²	110		Sealant
Aluminum Silicate, Magic Sorb	1,250 ¹	3,000		
Assorted Latex Paint	700 ²	300		Paint
Assorted Motor Oils	455 ²	1,500		Various equipment
Solid Carbon Dioxide	700 ¹	700		Dry ice
Charcoal	2,605 ¹	5,000		
Dodecylbenzene Sulfonic Acid, 10-12%	65 ²	110		SUD Z High foam detergent
Sodium Carbonate, 24%, Metal Fussion	945 ¹	945		
Sodium Hydroxide, 30%	60 ²	60		Ecolab Detergent
Lead/Lead Oxide/Lead Sulfate	18,000 ¹	30,000		Assorted industrial batteries

Source: SeaWorld, 2000

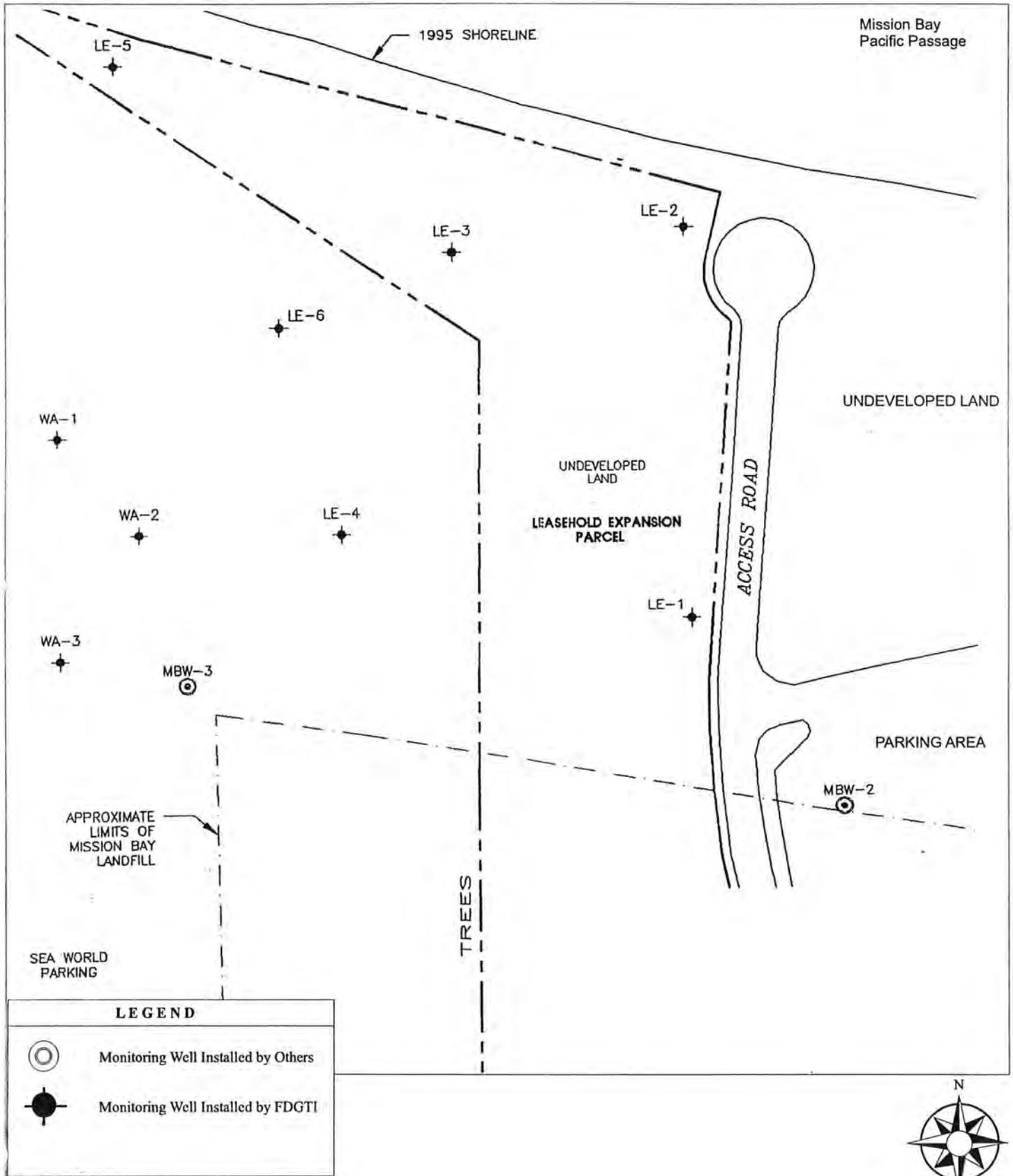
- ¹ Pounds
- ² Gallons
- ³ Tons
- ⁴ Millimeters
- ⁵ Milligrams
- ⁶ Cubic Feet

1985) established periodic sampling of groundwater within the landfill plus surface water and sediment sampling of Mission Bay and the San Diego River between 1985 and 1991.

A Site Inspection Prioritization (SIP) for the landfill site was completed by Bechtel in 1993 for the EPA. The SIP noted that the DTSC concluded that the landfill was not likely to become a source of contamination and that County of San Diego Environmental Health Department records showed no violations of gaseous emission standards during their quarterly site inspections. The SIP also noted that the APCD concluded that the landfill site did not pose hazards to humans or the environment and did not require future monitoring.

In December 1996 and January 1997, Fluor Daniel GTI, Inc. conducted a Phase I and Phase II investigation on the undeveloped parcel located east of the SeaWorld property boundary. (Assessment Report for the SeaWorld Lease Expansion, Appendix A-1, Volume II, Appendices to the Final EIR Response to Comments). The study included drilling six wells (LE-1 through LE-6) on the northeast part of SeaWorld's leasehold (Figure 4.11-2). Results from this Phase I and Phase II site assessment report indicate that low levels of contamination were encountered in several of the soil borings and monitoring wells. A summary of the study results is as follows.

1. Landfill debris was not encountered during drilling.
2. Hydrocarbons such as hydraulic, motor and natural oils were detected in soil from well LE-1 at 10 feet below grade (79 mg/kg). Hydrocarbons such as diesel-weight fuels and solvents were detected in both samples from well LE-4 (200 mg/kg at 10 feet, 380 mg/kg at 15 feet below grade).
3. Acetone in soil was detected 15 feet below grade in wells LE-3, LE-4, LE-5, and LE-6 at 26 µg/kg, (ppb) 220 ppb, 21 ppb, and 14 ppb respectively. In well LE-4, 2-butanone (MEK) was detected 15 feet below grade at 36 ppb. Acetone and 2-butanone are solvents typically used in the aerospace industries. Their detection is most likely the result of aerospace manufacturing-waste disposal in the former landfill. Metals analyses generally showed detectable arsenic, barium, total chromium, cadmium, cobalt, copper, lead, molybdenum, nickel, vanadium and zinc. Concentrations were below levels discussed in the 1983 Woodward Clyde Consultants Site Assessment Report on the Mission bay Landfill, and below Total Threshold Limit Concentration (TTLC) levels. The report indicated that some of the metals concentrations likely represent natural background concentrations. Both acetone and 2-butanone are not listed as constituents of concern in the Regional Water Quality Control Board's Basin Plan guidelines.



Source: Fluor Daniel GTI, 2/1997



Not to Scale

Exploratory Well Location Map _____ Figure 4.11-2

4. 1,1,1-trichloroethane was found in groundwater samples from every well except LE-3 at concentrations from 2.4 ppb in well LE-4 and LE-6 to 7.2 ppb in LE-2. The Basin Plan MCL concentration for 1,1,1-trichloroethane is 200 ppb. Therefore, the detected levels were considerably lower than the Basin Plan MCL limits. No other organic compounds listed in the Basin Plan as contaminants of concern were detected in this investigation.
5. Detectable concentrations of barium, silver, selenium and zinc were measured in groundwater samples. Applicable Basin Plan groundwater quality goals are not listed for these constituents. Chromium, cobalt, copper and other metals detected in the 1983 Woodward Clyde Consultants Sub Assessment Report wells were not detected in the "LE" series wells.

This report indicates that there is no significant contamination of the leasehold near and outside the documented landfill perimeter provided by the City of San Diego. Hence the inactive landfill does not pose a threat to human health or the environment.

Article 7.8, Title 14, California Code of Regulations (14CCR) establishes standards and minimum requirements for proper closure, post closure maintenance, and ultimate reuse of solid waste disposal sites to assure that public health and safety and the environment are protected from pollution due to the disposal of solid waste. Any proposed development on the landfill site must comply with the City's *Post Closure Land Use Plan for South Shores*.

According to the *Post Closure Land Use Plan for Mission Bay South Shores*, although Mission Bay Landfill did receive industrial wastes during its operating life, no significant levels of hazardous waste have been found. At the time operations ceased, approximately three feet of cover soil existed over buried trash. During Mission Bay South Shores Phase II construction activities, excavated soil was placed over the landfill resulting in a final depth cover of at least 8 feet. Therefore, landfill material would not likely be encountered during future South Shores development projects.

The City of San Diego Solid Waste Local Enforcement Agency (LEA) is responsible for inspecting Mission Bay Landfill and monitors for surface gaseous emissions, leachate generation, and differential settlement on a quarterly basis. Inspection reports indicate that surface methane emissions have not exceeded background levels, accumulated in onsite structures, or migrated beyond the site boundaries. In addition, prior field measurements of landfill gas emissions (methane and hydrogen sulfide) during construction activities in the project area found no instances when these gases exceeded background levels. The LEA also monitors surface conditions to determine whether waste is adequately covered to prevent public health and environmental hazards. LEA inspection reports indicate that landfill gas emissions have not exceeded background levels. A number of five-foot deep geotechnical test pits were dug into the landfill cover and evaluated for the presence of landfill gases with field instruments. As discussed earlier, approximately eight feet of fill has been placed over the landfill. LEA reports concur that waste is adequately covered and the integrity of the final cover has not been compromised. There are no known documented instances of a major hazardous release from this

landfill. Information regarding potential contamination of Mission Bay is found in Section 4.5, Water Quality.

LEA inspection reports indicate that landfill gas emissions have not exceeded background levels. In addition, field measurements of landfill gas emissions were conducted during previous construction activities in the project area and found no instances when these gases exceeded background levels. A number of five-foot deep geotechnical test pits were dug into the landfill cover and evaluated for the presence of landfill gases with field instruments.

Sediments In Mission Bay

A study, *Chemistry, Toxicity and Benthic Community Conditions in Sediments of the San Diego Bay Region*, was completed in 1996. The report was a multi-year study of three estuaries in San Diego: San Diego Bay, Mission Bay and the Tijuana Estuary. The report's goal was to characterize the general state of sediments in the areas studied and to locate toxic hotspots where future investigation and remediation would be a priority.

Sampling was done at 350 stations over a 19-month period. Based on the data collected, sampling stations with a repeat toxicity and elevated chemistry and/or degraded benthic community were assigned a moderate or high priority, stations with a single toxicity hit were considered moderate or high priority when associated with elevated chemistry and/or a degraded benthic community, and stations with a single or repeat toxicity but lacking elevated chemistry or a degraded benthic community were assigned low priority.

There were two sampling stations located near the Sea World leasehold. Both were in the Southern Pacific Passage with one located north of the northeast leasehold corner and the other located north of the 4D Theater on the SeaWorld leasehold. The sampling station near the northeast leasehold corner was below the Threshold Effects Level (TEL) for polycyclic aromatic hydrocarbons (crude and refined petroleum products), polychlorinated biphenyls (PCBs), and chlordane (a common pesticide). In addition, both sampling stations did indicate a nontoxic concentration for Rhepoxynius (amphipod). Neither sampling station near the SeaWorld leasehold was listed as degraded/transitional nor was either sampling station placed on the priority list for future investigation.

4.11.2 Significance Criteria

Based on City and/or CEQA thresholds, public safety impacts would be significant if the proposed project:

1. Exposes persons, through handling, storage and/or treatment, to dangerous hazardous materials;
2. Would be located on or near a known contamination site;

3. Exposes persons to naturally-occurring health risks (e.g. disease carrying vectors or contaminated water); or
4. Exposes life and property to wildfires.

4.11.3 Impact

Issue 1: Would the proposal result in the exposure of people to potential health hazards?

Tier 1 Projects

Site A-1: Splashdown Ride

The proposed site of the Splashdown Ride is located in the northeastern corner of Area 1. Existing uses of the site include a landscape nursery and associated storage areas, trash compactor, and recycling facilities, all of which would be relocated. The eastern portions of the site are undeveloped and often used as a staging area. Although the site is not directly over the inactive landfill, it is in close proximity and excavation activities may encounter hazardous materials during construction of this facility. However, it is highly unlikely any landfill gases and/or landfill materials would be encountered during excavations associated with the construction of the Splashdown Ride because it is not located directly above the inactive landfill. Any potential hazardous materials/wastes encountered in the soils or groundwater would be remediated during construction in conformance with local, state and federal regulations.

Site B-1: Educational Facility

Potential hazardous materials that may be encountered during construction excavation are expected to be minimal given the approximately 2,000-foot distance between the proposed Educational Facility and the inactive landfill. However, in the event that any hazardous materials/wastes are encountered in the soils or groundwater during construction activities, remediation would occur during construction in conformance with local, state and federal regulations.

Operation of the Educational Facility would not involve the use of hazardous materials and therefore no significant impact to occupants of the building would occur. However, the proposed Educational Facility would be located near Area 3, which contains many of the support facilities needed for the operation of the park including cogeneration, water treatment, and storage facilities. This area also includes several existing hazardous chemical storage areas. Nonetheless, the storage and use of hazardous materials in this area would not represent a significant impact to future occupants of the Educational Facility, because the hazardous materials safety storage and use protocols are observed in Area 3.

Site C-1: Front Gate Renovation

Renovation of the front gate and entrance area may require demolition and clearance of existing structures. The potential to encounter hazardous materials during such activities is possible,

however, unlikely. If these materials are encountered they will be removed and disposed of in conformance with local, state and federal regulations. In addition, a water element is proposed as part of the Front Gate Renovation that would require excavation of earth materials. Although unlikely, excavation operations associated with construction of the water element could potentially encounter hazardous wastes/materials in the soil or groundwater. Any hazardous wastes/materials encountered would be remediated during construction in conformance with local, state and federal regulations.

Site D-1: Special Events Center Expansion

As with the Splashdown Ride, the Special Events Center Expansion project site is located near the inactive landfill. Although the site is not directly over the inactive landfill, it is in close proximity and excavation activities may encounter hazardous materials during construction of this facility. However, it is highly unlikely any landfill gases and/or landfill materials would be encountered during excavations associated with the construction of the Special Events Center Expansion because it is not located directly above the inactive landfill. Any potential hazardous materials/wastes encountered in the soils or groundwater would be remediated during construction in conformance with local, state and federal regulations.

Tier 2 Projects

Tier 2 projects may include but are not limited to aquariums, special effects theaters, land based adventure rides, pelagic fish exhibits, water play attractions, themed track or water rides, special format projection attractions, playgrounds, wildlife performance venues, and wildlife exhibits. In some cases, an existing attraction may be renovated or expanded.

~~The southeast corner of Tier 2 project site I-2 is located over~~lays on the eastern boundary of the park adjacent to the approximate boundary for the inactive landfill. Presently, the land is unimproved and is used as a guest parking overflow lot. Due to its close proximity to the inactive landfill, potential impacts to development may occur if hazardous materials are encountered during project excavation. However, monitoring will be conducted prior to and during construction, and any hazardous materials/wastes in the soils or groundwater would be remediated during site preparation in conformance with local, state and federal regulations.

Special Projects

Parking Garage

A four-level parking garage is proposed on the west side of the existing parking lot in Area 2. As mentioned previously, a portion of the east side of the guest parking area of the leasehold property ~~contains over~~lays the inactive Mission Bay Landfill. Although considerably west of ~~Due to its proximity to the~~ inactive landfill, potential impacts to development may occur if hazardous materials are encountered during project excavation. However, monitoring during construction will ensure that any hazardous materials/wastes detected in the soils or groundwater would be remediated during site preparation in conformance with local, state and federal regulations. In addition, the *Postclosure Land Use Plan for Mission Bay South Shores, Phase III,*

which covers the part of the landfill that is on the SeaWorld leasehold, includes recommendations for the use of the former Mission Bay Landfill prohibiting excavation exceeding five feet in depth, requiring parking area trees to be placed in planters set above the surface and treated to prevent root penetration, requiring grading and surfacing of the parking lot to prevent ponding of water and requiring a regularly inspected irrigation system to ensure that the drought tolerant species are established.

Future Marina Expansion Site

SeaWorld proposes to expand the existing marina by extending the three existing docks and adding a fourth dock to the west. The marina expansion would add 115 slips to the existing 200 slips, totaling 315 slips. No health hazard/hazardous materials impacts would occur as a result of the expansion of the Marina because excavation is not a part of this project and this project would not require the use of hazardous materials. However, some disruption of sediments may occur during construction. The RWQCB and other agencies will regulate and monitor the sediment levels through their permitting process.

Future Hotel Site

The 1985 Master Plan hotel entitlement would be expanded from 300 to 650 rooms. A small landing dock serving hotel guests would be built on the Perez Cove shoreline directly behind the hotel. Potential impacts to development may occur if hazardous materials are encountered during project excavation. However, any hazardous materials/wastes in the soils or groundwater would be remediated during site preparation in conformance with local, state and federal regulations.

4.11.4 Significance of Impact

As long as the purchase, use, storage, generation, and disposal of hazardous materials/wastes acquire and comply with all the appropriate permits from the San Diego County of Environmental Health (DEH), the San Diego Air Pollution Control District (APCD), and the Regional Water Quality Control Board (RWQCB), and/or any other authorities required by law to issue any permits or other approvals required in connection with the removal and/or remedy of soil and/or water and/or building contamination, in connection with the construction and development on the project site, exposure of people to health hazards would be less than significant.

4.11.5 Mitigation, Monitoring, and Reporting

Compliance with the SeaWorld/City of San Diego lease prohibits SeaWorld from disturbing the inactive Mission Bay Landfill. Implementation of required local, state and federal regulations for the remediation of contaminated soils and groundwater, as well as the regulatory procedures for the storage and use of hazardous materials, would result in a less than significant impact with respect to the exposure of people to health hazards.

4.11.6 Impact

Issue 2: Would the proposal result in a risk of an explosion or release of hazardous substances (including, but not limited to gas, oil, pesticides, chemicals, or explosives)?

Tier 1 Projects

Tier 1 projects including the Splashdown Ride, the Educational Facility, the Front Gate Renovation, and Special Events Center Expansion may involve the use and storage of hazardous materials/wastes. Existing operations of SeaWorld involve the use and storage of chemicals, some of which are volatile (See Table 4.11-1).

Site A-1: Splashdown Ride

The proposed site of the Splashdown Ride currently contains the landscape nursery, which houses hazardous chemicals. Also, the Penguin Encounter and Cogeneration Plant #2 are immediately adjacent to the Splashdown Ride site. However, the potential for explosions or release of hazardous chemicals would be minimal. The current operation of SeaWorld requires compliance with the regulations of the permitting agencies for the purchase, use, storage, generation, and disposal of any hazardous materials/wastes. Therefore no significant impact associated with explosion risk or hazardous materials release would occur.

Site B-1: Educational Facility

The proposed Educational Facility building site is also located near several chemical storage areas and cogeneration structures, which contain volatile and hazardous chemicals. The Educational Facility would contain classroom and lab facilities, which may involve the use, storage, and disposal of hazardous wastes/materials. However, as with the existing operations of SeaWorld, any use, storage, disposal, or generation of hazardous wastes/materials would be permitted and regulated accordingly.

Site C-1: Front Gate Renovation

The Photo Key Chain structure near the front gate contains the hazardous chemical, sodium thiosulfate, a photographic finishing agent. This operation would likely continue after the entrance area is renovated. The use, storage, and disposal of this hazardous chemical currently do not result in a high risk of explosion or release of hazardous substances, and future operations also would not pose such a risk. SeaWorld would be subject to local, state and federal regulations of the permitting agencies for the purchase, use, storage, generation, and disposal of any hazardous materials/wastes.

Site D-1: Special Events Center Expansion

The Special Events Center currently does not contain any hazardous chemicals. The expansion of this facility would not result in the future risk of explosions or the release of hazardous substances.

Tier 2 Projects

The identified Tier 2 project sites currently do not involve the use, storage, disposal, or generation of hazardous chemicals. All exhibits, rides, or shows planned for these sites would require compliance with local, state and federal regulations with respect to the remediation of any contaminated soils and groundwater that may be discovered during project excavation. Also operation of either an exhibit, ride or show developed in a Tier 2 project site would required compliance with appropriate permitting agencies for the purchase, use, storage, generation, and disposal of any hazardous substances and therefore no significant impact would occur from the implementation of future Tier 2 projects.

Special Projects

Parking Garage

As discussed above under Issue 1 Impacts, the construction of the four-level Parking Garage would not result in an unauthorized release of hazardous materials. Furthermore, the operation of the Parking Garage would not involve the use of hazardous materials, other than those, which are within the vehicles parked in the garage. Therefore, no significant impact resulting from the risk of explosion or hazardous materials release would occur from the Parking Garage project.

Future Marina Expansion Site

No health hazard impacts are likely to occur as a result of the expansion of the Marina, because the use, storage, and disposal of hazardous chemicals would be conducted in conformance with local, state and federal regulations.

Future Hotel Site

The operation of a hotel would likely involve the use, storage, and disposal of hazardous chemicals. Conformance with the regulations associated with the required regulations for the use, storage, and disposal of hazardous chemicals would reduce the impact to below a level of significance.

4.11.7 Significance of Impact

Compliance with the condition of required permits would protect workers and the general public from potential risk of exposure. The rules and regulations associated with the permits would also provide measures to reduce the potential risk of unauthorized releases of hazardous wastes/materials to the environment. Therefore no significant impact would occur for Tier 2 projects, Special Projects and Tier 1 projects.

4.11.8 Mitigation, Monitoring, and Reporting

Because no significant impact is identified no mitigation measures are recommended.

4.12 Energy

4.12.1 Existing Conditions

Energy Consumption

Existing operations at SeaWorld involve the use of various equipment facilities, and vehicles which require fuels, natural gas, and electricity.

Gasoline/Diesel

Current operations at SeaWorld involve the use of gasoline and diesel fuels for various equipment and approximately 70 motor vehicles. Gasoline and diesel fuel usage from 1996 to present is listed in Table 4.12-1. The table shows a general decreasing trend of fuel usage for SeaWorld operations over the past four years.

TABLE 4.12-1
Annual Gasoline and Diesel Fuel Usage,
1996 to Present (gallons)

	1996		1997		1998		1999		2000 ¹	
	Gas	Diesel	Gas	Diesel	Gas	Diesel	Gas	Diesel	Gas	Diesel
Yearly Total	53,245.4	9,181.2	53,840.5	11,405.5	45,986.2	9,647.3	44,519.7	8,235.7	21,229.0	5,514.7

Source: SeaWorld, 2000.

¹ Year 2000 figures are six-month totals.

Natural Gas

Natural gas is also used for a variety of equipment within the facility. Table 4.12-2 shows the annual consumption figures from 1995 to mid 2000, with the 2nd half of 2000 determined through an extrapolation of historical figures to determine the annual 2000 total. The totals indicate that since 1995, natural gas consumption has generally decreased and remained fairly consistent.

Electricity

Electrical energy is by far the most used form of energy at SeaWorld. As shown in Table 4.1-3, annual electricity consumption increased considerably from 1995 to 1997, but has since increased slightly every year. The current electrical demand is approximately 6.5 megawatts (MW) per day.

TABLE 4.12-2
Annual Natural Gas Consumption,
1995-2000 (million therms)

	1995	1996	1997	1998	1999	2000 ¹
Yearly Total	1.72	1.42	1.163	1.433	1.467	1.411

Source: SeaWorld, 2000.

¹ Year 2000 was calculated from historical figures.

TABLE 4.12-3
Annual Electric Power Consumption,
1995-2000 (million kWh)

	1995	1996	1997	1998	1999	2000 ¹
Yearly Total	18.593	21.879	31.444	30.307	31.413	32.207

Source: SeaWorld, 2000.

¹ Year 2000 was calculated from historical figures.

Energy Generation

Supplemental electrical power is generated at SeaWorld via four cogeneration engine generator modules at three separate locations within SeaWorld. Each unit incorporates heat recovery and chilled water absorption units. Currently, one unit is not operating due to a failure of its absorption chiller that prohibits adequate use of recovered thermal energy. Two engines utilize natural gas-fired generator sets that are ebullient cooled, and equipped with steam generators. These units are used during the peak months to maximize energy efficiencies. The remaining cogeneration engine utilizes a single natural gas-fired engine generator set equipped with a heat recovery boiler to fire a 250-ton absorption chiller and operates continuously year round. The use of these cogeneration engines maximizes electricity directly off the power grid.

Energy Conservation Programs

SeaWorld currently employs a number of state-of-the art energy conservation programs in an effort to reduce energy consumption within the park.

Lighting Retrofit Program

SeaWorld regularly works with the San Diego Gas and Electric Energy Conservation Group in an effort to develop and implement energy conservation programs aimed at reducing energy

consumption. Consequently, SeaWorld underwent a major park wide lighting retrofit beginning in 1994, replacing nearly 4,500 lighting fixtures. Installation of T-8 fluorescent lamps and electronic ballasts, compact fluorescent lamps, energy-efficient exit signs, and metal halide lamps was undertaken in display buildings, support structures, and the parking lot. The lighting retrofit program reduces energy consumption by 1.2 million kilowatt hours (kWh) year, reduces maintenance costs, as fluorescent lights last longer than the former incandescent lamps, and decreases air conditioning usage due to cooler operation.

Variable Speed Motor Drive Program

SeaWorld installed a number of variable speed drive (VSD) motors on the water filter pumps at the Shamu Filtration Plant. These water filter pumps move approximately 5.65 million gallons of seawater through the Shamu Stadium and the Rocky Point Preserve filter systems every three hours. Prior to the installation of the VSDs, pumps continuously operated at maximum speed. VSD motors control the speed of the pumps by controlling the input frequency and voltage to the pump motor. As a result, energy consumption is reduced by approximately one million kWh/year.

HVAC Replacement Program

SeaWorld implemented a program to replace 31 HVAC units within the facility. The newer units reduce energy consumption by 0.59 million kWhr/year.

Chilled Water Loop Program

SeaWorld currently has three chilled water production plants that supply chilled water to the air-conditioned buildings and the pools that require chilling. The chilling capacity is generated via absorption chillers and utilize distribution pump systems to carry load where needed. Through the use of this system, SeaWorld is able to take advantage of the energy efficiencies that are inherent in the process and save tens of thousands of kilowatt hours of electrical consumption.

4.12.2 Significance Criteria

For the purposes of this EIR, impacts related to energy would be significant if the project would:

1. Result in an excessive increase in energy consumption.

4.12.3 Impact

Issue 1: Would the proposal result in the use of excessive amounts of fuel or energy?

Electric Power Consumption

As shown in Table 4.12-4, the current electrical demand for the daily operations of SeaWorld is 6.5 megawatts (MW) per day. The average daily electrical demand would increase incrementally every year as SeaWorld approaches build out conditions (2020). Annual increases in electrical consumption can be explained by the phased implementation of planned Tier 1, Tier 2, and Special Projects. At build out conditions (2020), the projected average daily electrical demand would reach 12 MW per day. Although the proposed Tier 1, Tier 2, and Special Projects would result in increases in energy consumption, SeaWorld would continue to develop, exercise, and implement energy conservation programs to minimize energy consumption. SeaWorld would also continue its partnership with San Diego Gas and Electric Energy Conservation Group in developing ways to reduce energy consumption associated with the operation of new attractions. Consequently, the proposed project would not result in the use of excessive amounts of energy.

TABLE 4.12-4
Average Daily Electrical Demand
(megawatt per day)

2000	2005	2010	2015	2020
6.5	8.0	10.0	11.0	12.0

Source: SeaWorld, 2000.

Fuel Consumption

Maintenance and operation of the proposed Tier 1, Tier 2, and Special Projects would periodically require the use of SeaWorld's vehicular fleet. SeaWorld's fleet of approximately 70 vehicles is tailored to the specific use to minimize fuel consumption. In addition, the fleet undergoes scheduled, regular maintenance and evaluations, and is upgraded when deemed appropriate. Thus, the proposed project would not result in the use of excessive amounts of fuel.

4.12.4 Significance of Impact

SeaWorld employs state-of-the-art energy conservation programs as discussed above. Continuance of these programs and implementation of future programs would ensure that no significant impacts associated with energy would result from the proposed project.

4.12.5 Mitigation, Monitoring, and Reporting

Because no significant impacts are identified, no mitigation is required. However, in an effort to continually develop programs to increase energy efficiency, SeaWorld would implement the following measures.

Mitigation Measure 4.12-1: Prior to operation of any new attraction, SeaWorld shall apply its existing energy conservation programs and shall consider implementation of project-specific energy conservation programs to minimize electrical fuel, and/or natural gas consumption associated with the new attraction.

4.13 Water Conservation

4.13.1 Existing Conditions

Water Consumption

SeaWorld's thematic emphasis of marine animal entertainment, education, research, and conservation entails the use of large volumes of both fresh and salt water. Existing attractions using salt water include Shamu Stadium, the Sea Otter Exhibit, the Beached Animal Exhibit, Dolphin Stadium, the Shark Encounter, the Penguin Encounter, the Arctic Exhibit, various aquariums and pelagic fish tanks, and onsite water features. Saltwater for these uses comes from Mission Bay, is treated, and then returned to Mission Bay after its use in the Theme Park. In addition to saltwater, the daily operation of SeaWorld involves large quantities of potable water. Current uses of potable water include irrigation, cooling water, production process evaporation and product inclusion, sanitary wastewater discharges including restrooms, kitchens, and cafeterias, and miscellaneous consumption and use.

Table 4.13-1 lists the total annual potable water consumption from 1995 to present. The totals suggest that although annual consumption fluctuates from year to year, consumption is relatively constant. The six-month total for 2000 indicates that water consumption is somewhat lower than in previous years. However, based on the current average daily consumption of 745 hundred cubic feet (HCF) per day, the year-end total would reach approximately 271,925 HCF, which is comparable to previous consumption levels.

TABLE 4.13-1
Annual Water Consumption
1995-2000 (HCF)

	1995	1996	1997	1998	1999	2000 ¹
Yearly Total	263,025	240,965	272,984	282,361	269,634	45,646

Source: SeaWorld, 2000.

¹ Year 2000 figure includes total from January through June.

Water Conservation

In an effort to maximize water conservation, SeaWorld employs the use of an extensive water conservation program.

Landscape Water Conservation Program

The Landscape Water Conservation Program involves state-of-the-art irrigation systems that reduce water consumption. The highest amount of water loss occurs as a result of broken heads and lateral lines in irrigation systems. Therefore, all 37 computerized irrigation controllers have separate backflow preventers with flow sensors and master valves which automatically shut off water in the event of broken heads, lateral lines, or mainline breaks. To prevent over watering during cool seasons, two onsite evapotranspiration gauges automatically adjust irrigation controllers to weather conditions. Two rain gauges are also wired to the irrigation controllers which automatically shut off valves when measurable rainwater is detected. In addition, irrigation programs use plant coefficients on a valve-to-valve basis to establish specific water requirements for differing hydrozones. Water audits are regularly performed and the irrigation team utilizes systems evaluations to upgrade and improve the efficiency of irrigation systems throughout SeaWorld.

Finally, drought tolerant planting in selected areas and low water-use planters have also been established within the park and parking lot areas to reduce water consumption.

SeaWorld Water Conservation Program

The SeaWorld Water Conservation Program has been implemented and upgraded at SeaWorld over the past ten years. Many incremental improvements have been implemented to achieve significant water savings. The following measures have been implemented to reduce potable water consumption:

1. Flow restrictors, automatic turnoff mechanisms, and flushometers have been installed in public restrooms and employee areas to reduce consumption;
2. A conversion program was implemented to use seawater as filter backwash water in lieu of potable water;
3. Several wastewater treatment facilities have been converted to use seawater;
4. Park area wash-down is accomplished with high pressure washers to minimize overall water consumption. This technique allows for the use of water pressure rather than water volume to accomplish pathway cleaning;
5. A number of reflection ponds have been eliminated or converted to saltwater use; and
6. An extensive employee education and conservation program was implemented to encourage water conservation.

4.13.2 Significance Criteria

For the purposes of this EIR, impacts related to water conservation would be significant if the project would:

1. Result in an excessive increase in water consumption.

4.13.3 Impact

Issue 1: Would the proposal result in the use of excessive amounts of water?

Water Consumption

According to Table 4.13-2, operations at SeaWorld currently require 745 HCF per day. The average daily water consumption value would increase annually as SeaWorld approaches buildout conditions (2020). Annual increases in water consumption would occur as part of the phased implementation of planned Tier 1, Tier 2, and Special Projects. At build out conditions (2020), the projected average daily water consumption would reach 910 HCF per day. Although the proposed Tier 1, Tier 2, and Special Projects would result in increases in water consumption, SeaWorld would continue to develop, exercise, and implement water conservation programs. Consequently, the proposed project would not result in the use of excessive amounts of water.

**TABLE 4.13-2
Average Daily Water Consumption
(HCF)**

2000	2005	2010	2015	2020
745	780	825	870	910

Source: SeaWorld, 2000.

Tier 1 Projects

The proposed Splashdown Ride is a water flume and tracked ride attraction and includes two splash pools. The splash pools would be approximately four feet deep and would hold approximately 600,000 total gallons of potable water within a closed system. Insignificant amounts of water loss would occur as a result of evapotranspiration. Moreover, maintenance may require periodic drainage of the splash pools. However, due to the closed system of the splash pools, water usage would not be excessive. The volume of water associated with the Splashdown Ride would incrementally increase the daily as well as annual water consumption levels at the time Splashdown Ride is implemented, but would not result in the use of excessive amounts of water.

The proposed Front Gate Renovation may contain a water feature such as a pond or pool. The possible water element would consist of potable water within a closed system. Potential water loss may occur as a result of evapotranspiration or drainage for occasional maintenance. As with the Splashdown Ride, implementation of this proposed project would incrementally increase water consumption at the time of implementation, but would not result in the use of excessive amounts of water.

The Educational Facility and Special Events Center Expansion would also use nominal amount of water for sanitary purposes.

Tier 2 Projects

Tier 2 projects are long-range potential development or redevelopment projects that may occur in any of the eight sites identified in Area 1. Among various types of attractions Tier 2 projects may include aquariums, pelagic fish exhibits, water play attractions, water rides, boat rides, or other projects involving water components. However, implementation of any Tier 2 project would not result in the use of excessive amounts of water. The projected average daily water consumption value at buildout conditions (2020) assumes all Tier 1, Tier 2, and Special Projects would be developed at maximum capacity; and therefore, accounts for future Tier 2 projects involving water components.

Special Projects

Special projects including the hotel, marina, and parking garage would also result in an increase in water consumption. However, the amount of water consumption associated with the Special Projects would not result in the use of excessive amounts of water given the nature of these land uses.

4.13.4 Significance of Impact

SeaWorld implements state-of-the-art water conservation programs which reduce park-wide water consumption. Continuance of these programs and implementation of future programs would ensure that no significant impacts associated with water conservation would result from the proposed project.

4.13.5 Mitigation, Monitoring, and Reporting

Because no significant impacts are identified, no mitigation is required. However, in an effort to continually decrease water consumption, SeaWorld would implement the following measures.

Mitigation Measure 4.13-1: Prior to operation of any new attraction or facility, SeaWorld shall apply its existing water conservation programs and shall consider implementation of project-specific water conservation programs to minimize water consumption associated with the new attraction or facility.

4.13.6 Impact

Issue 2: Would landscaping be primarily drought tolerant?

Landscape Design Guidelines

The Mission Bay Park Master Plan Update landscape design guidelines identify two objectives: to use the landscape to define Mission Bay Park as a special recreation source and to reduce the consumption of water for irrigation by emphasizing the use of drought tolerant plants. The Mission Bay Master Plan design guidelines identify the area encompassing SeaWorld as a Mediterranean landscape consisting predominantly of native plants and drought tolerant species endemic to the world's Mediterranean climate. The SeaWorld Master Plan Update design guidelines also emphasize the use of drought tolerant plant species, particularly in perimeter landscapes.

The proposed project would adhere to these design guidelines concerning landscaping associated with new attractions.

4.13.7 Significance of Impact

Because the proposed landscaping would conform with the SeaWorld Master Plan Update Design Guidelines, no significant water conservation impacts associated with landscaping would result from the proposed project.

4.13.8 Mitigation, Monitoring, and Reporting

Because no significant impacts were identified, no mitigation measures are recommended.

CHAPTER 5.0

CUMULATIVE IMPACTS

Section 15130 of CEQA requires that an EIR address cumulative impacts of a project when the project's incremental effect would be cumulatively considerable. Cumulatively considerable means that the incremental effects of an individual project would be considerable when viewed in connection with the effects of past, current or probable projects. A cumulative effect is not considered considerable if the effect would be essentially the same whether the proposed project is implemented or not. Section 15130 (a) (4) of the CEQA Guidelines indicates that "An EIR may determine that a project's contribution to a significant cumulative impact is de minimus and thus is not significant. A de minimus contribution means that the environmental conditions would essentially be the same whether or not the proposed project is implemented."

Probable future projects maybe limited to those which: (1) have an application on file at the time the Notice of Preparation is released, (2) are included in an adopted capital improvement program, general plan, regional transportation plan, or similar plan, (3) are included in a summary of projections of projects (or development areas designated) in a general plan or similar plan, (4) are anticipated as later phases of approved projects, or (5) are included in money budgeted by public agencies.

The basis for the analysis of cumulative impacts is dependent on the nature of the issue. According to Section 15130 of the CEQA Guidelines, the discussion of cumulative effects "...need not provide as great a detail as is provided for the affects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness." The evaluation of cumulative impacts will be based on "a list of past, present, and probable future projects producing related or cumulative impacts, including those projects outside of the control of the agency." For the purposes of this cumulative analysis, past projects are defined as built projects that were included in the analysis of the proposed project for each issue topic and therefore are not addressed here. Present and probable projects are addressed in this cumulative analysis. This analysis includes projects that require agency approval for an application, which has been received by the reviewing agency at the time of this Draft EIR, but does not include information that became known or available after the completion of the Draft EIR.

In addition, reasonable mitigation measures for cumulatively significant impacts should be discussed; however, CEQA acknowledges that "with some projects, the only feasible mitigation

for cumulative impacts may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis."

5.1 Cumulative Projects

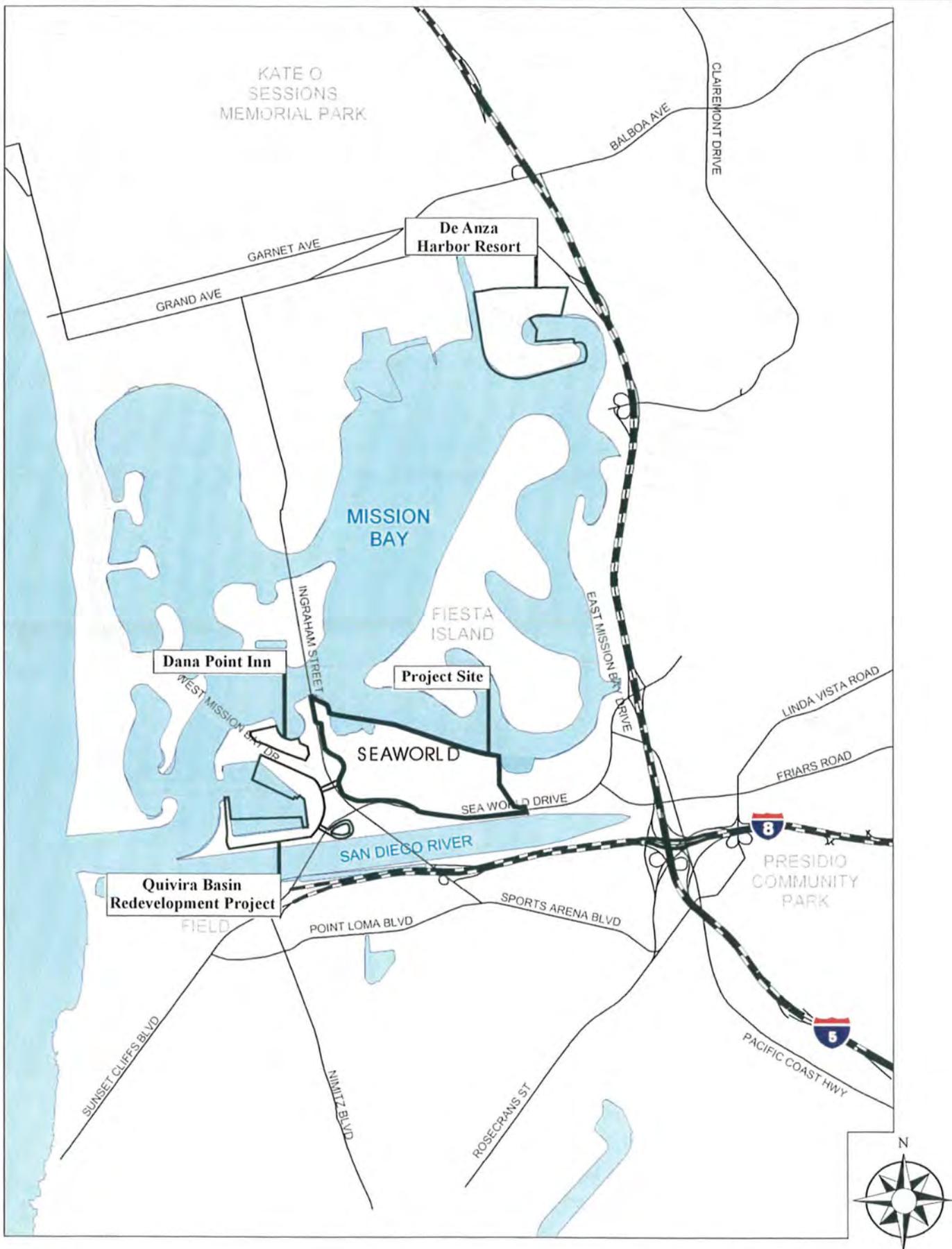
The following analysis is based on a comprehensive review of present and probable projects that, when considered with the proposed SeaWorld Master Plan Update, could result in environmental impacts that are cumulatively considerable. The inventory of cumulative projects for analysis with the proposed Plan includes three projects in the Mission Bay area. The location, and a brief description of the cumulative projects considered in this analysis, is shown on Figure 5.1-1 and Table 5.1-1, respectively. A more detailed description of the cumulative projects and their status follows.

5.1.1 Quivira Basin Redevelopment Project

This project consists of approximately 35.4 acres of water area and 38.5 acres of land area in Quivira Basin, located in the southwest corner of Mission Bay Park (See Figure 5.1-1). The project site is located north of the San Diego River Flood Control Channel, west of SeaWorld, south of West Mission Bay Drive, and adjacent to the Pacific Ocean. The five existing City of San Diego leaseholds within the proposed redevelopment area include Seaforth Sportfishing, Sportsmen's Seafood fish processing site, Marina Village, the 750-slip Mission Bay Marina, and Driscoll Mission Bay LLC boat yard. There are a number of restaurants and retail shop structures in Marina Village; however, no restaurants or retail shops are currently operating onsite.

The proposed Quivira Basin project includes redevelopment of four of the six leaseholds within Quivira Basin. The Hyatt Islandia facilities and the Bait Barge are not included in the redevelopment project. The four leaseholds proposed for redevelopment would be reconfigured into seven new leaseholds. The seven new leaseholds would include the Sportsmen's Seafood facility, the Seaforth Sportfishing facility, the Driscoll Boat Yard and Storage facility, a commercial retail and entertainment facility including a 0.5-acre beach area, a 500-room conference hotel, a 750-slip marina, and a suite hotel with 350 suites. The new buildings would not exceed 30 feet in height. Redevelopment would include demolition of all but one structure, an 11,000 square foot restaurant and meeting space facility. As part of the project a number of both on- and offsite infrastructure improvements are planned. These improvements would provide better access and circulation for vehicles, pedestrians and bicycles. Among the improvements are a connecting ramp from northbound Sunset Cliffs Boulevard and SeaWorld Drive to provide direct access to the Quivira Basin Redevelopment Project.

Currently, Quivira Basin houses City Lifeguards, the San Diego Police Department Harbor Unit, and the City Park and Recreation Department Mission Bay Park Headquarters at Hospitality Point facilities. The plan provides for elimination of office trailers and expansion of these existing public service and safety facilities, including expansion of existing boat docks.



Source: ProjectDesign Consultants, 2000

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**TABLE 5.1-1
List of Cumulative Projects**

Name	Location	Description	Status
Quivira Basin Redevelopment Project	Southwest corner of Mission Bay Park, north of the San Diego River, west of SeaWorld, south of West Mission Bay Drive, and east of Mission Beach.	A commercial retail and entertainment facility including a 0.5-acre beach area, a 500-room conference hotel, a 750-slip marina, and a suite hotel with 350 suites on 35.4 acres of water and 38.5 acres of land.	Final EIR has been prepared with certification scheduled in March 2001.
Dana Point Inn Land Hotel Expansion	In the south-central part of Mission Bay park immediately southeast of Sunset Point between Ingraham Drive and Mission Boulevard.	A 2.5-acre expansion consisting of 80 guest rooms, a 5,000-square-foot lobby, a 6,000-square-foot meeting/banquet room and the addition of 145 parking spaces.	Mitigated Negative Declaration has been certified and the project has been approved.
De Anza Harbor Resort	Northeast part of Mission Bay Park, south of North Mission Bay Drive, east of the Rose Creek Channel and west of Mission Bay Drive.	Replacing existing uses with a 600-room hotel; visitor-serving commercial uses; a ten-acre public park; and a system of walking, jogging and biking paths along the perimeter of the project; as well as reconfiguration of the existing golf course and an expansion and upgrade or relocation of the Mission Bay Boat and Ski Clubhouse.	Notice of Preparation distributed on May 12, 2000.

Implementation of this cumulative project would require amendments to the Mission Bay Park Master Plan Update (MBPMPU), the Mission Bay Park Natural Resource Management Plan (MBPNRMP), and the City's Transportation Element. These amendments would accommodate special features of the proposed project such as drystack boat storage, a pedestrian bridge, boatyard relocation, and vehicular circulation changes.

Other local discretionary actions include an overall Redevelopment Plan, a Lease Agreement, a State Coastal Development Permit and General Construction Activity Stormwater Permit. The applicant has also applied for a Section 404 Permit in accordance with Section 404 of the federal Clean Water Act (CWA). Section 401 of the CWA also requires that the ACOE receive a water quality certification or waiver from the RWQCB prior to issuance of a permit pursuant to Section 404. An application for a Streambed Alteration Agreement has also been filed with the California Department of Fish and Game (CDFG). A letter of consistency from the State Lands Commission with the tidelands grant would be requested.

An EIR (LDR 98-0767, January 9, 2000) has been prepared for this project, which addressed the following issues.

1. Land Use;
2. Noise;
3. Biological Resources;
4. Air Quality;
5. Traffic Circulation;
6. Aesthetics/Visual Resources;
7. Hydrology/Water Quality;
8. Geology/Soils;
9. Recreational Resources; and
10. Human Health/Public Safety.

The EIR concluded that the project would result in significant and mitigable impacts to land use, noise, biological resources, water quality, geology/soils and human health/public safety. The project would result in a significant and unmitigated impact to traffic.

5.1.2 Dana Point Inn Landing Hotel Expansion

The Dana Inn and Marina Expansion is located at the Dana Landing immediately southeast of Sunset Point along Mission Bay at 1710 West Mission Bay Drive, between Ingraham Drive and

Mission Boulevard, in the Mission Beach Community Planning Area (See Figure 5.1-1). The Dana Inn and Marina Expansion consists of a 2.5-acre expansion of the existing 10.4-acre leasehold at the Dana Inn and Marina on Mission Bay. The expansion includes the addition of 80 guest rooms (approximately 32,000 square feet) to the existing 196-room Dana Inn for a total of 276 guest rooms; the addition of a new 5,000-square-foot lobby including gift shop and lounge, and a new 6,000-square-foot meeting/banquet room; and the addition of 145 parking spaces to the existing 265 spaces for a total of 410 parking spaces. In addition, the project includes the conversion of the existing lobby into a concierge/business center facility, and the renovation and architectural improvement of all existing guest rooms, buildings and landscaping. No modifications are proposed to the 2.43-acre, 141-slip boat marina.

A Mitigated Negative Declaration (MND) (LDR 40-0048, September 27, 2000) has been prepared for the Dana Point Inn project. This document identified water quality, as a significant and mitigated impact. All other issue impacts were considered not significant.

5.1.3 DeAnza Harbor Resort

This project is located in the northeast part of Mission Bay, south of North Mission Bay Drive, east of the Rose Creek Channel and west of Mission Bay Drive (See Figure 5.1-1). The project site is a City of San Diego leasehold, 124.6 acres in size, which currently includes the Mission Bay Boat and Ski Club and associated small marina, recreational vehicle spaces and a mobile home park. The proposed project consists of replacing the existing uses with a 600-room hotel; visitor-serving commercial uses; a ten-acre public park; and a system of walking, jogging and biking paths along the perimeter of the project; as well as reconfiguration of the existing golf course and an expansion and upgrade or relocation of the Mission Bay Boat and Ski Clubhouse. In addition to expanding the golf course into the De Anza Harbor Resort property, the golf course reconfiguration contemplates extending the Golf Course into what is now the Mission Bay Boat and Ski Club leasehold area and converting it to athletic fields at an equal number of acres in the northwest corner of the existing golf course, adjacent to the existing athletic fields and Grand Avenue. This project includes an amendment to the Mission Bay Park Master Plan and Local Coastal Program, option agreement, lease agreement, and street vacation. A draft EIR (LDR 40-0256) is currently under preparation for this project. A Notice of Preparation was distributed for this draft EIR on May 12, 2000.

5.2 Cumulative Impact Analysis

This section addresses the potentially significant cumulative impacts for each of the thirteen types of direct impacts addressed for the proposed project. The three projects were divided into two groups to correlate those projects with the environmental topics to which they would potentially contribute to cumulative impacts. The two nearby projects (Quivira Basin Redevelopment, and Dana Inn and Marina Expansion) were included in the first group and were considered for analysis for all thirteen topics. The second group includes the DeAnza Resort project which was included in the transportation/circulation, land use, noise, geology and soils,

air quality, recreational resources, human health/public safety, energy, and water conservation cumulative impact analysis.

The cumulative impact analysis also considers effects that would be local in nature or regional. For instance air quality impacts from non-point sources, such as vehicles, are considered to be regional impacts since the air emissions of each vehicle are negligible. However, when added to the San Diego Air Basin they could be considerable. This would also be the case for energy and water conservation. In addition, the addressment of water quality falls into both categories, with the list of cumulative projects potentially resulting in an impact and from a regional watershed perspective there is a potential cumulative impact. The remaining environmental topics addressed in this EIR are considered to have local (Mission Bay Park area) potential cumulative effects.

5.2.1 Land Use

The Dana Inn Landing project is, for the most part, an expansion of the existing hotel project and would be consistent with the 30-foot height limit in effect in Mission Bay Park. This project is, therefore, an expansion of an existing use that is allowed in the Mission Bay Park Master Plan Update. In addition, given the mitigation measures incorporated into the project, no residual land use compatibility or land use policy impacts would occur that would combine with the SeaWorld project and result in a significant cumulative impact. The Quivira Basin Redevelopment project consists of land uses that are consistent with the Mission Bay Park Master Plan Update. This project also incorporates mitigation measures and design features that would not result in any significant unmitigable land use impacts. The DeAnza Harbor Resort project would consist of redevelopment of an existing mobile home park and other uses, with a hotel, visitor-serving commercial, public park uses in an area of Mission Bay Park that is approximately two miles from the proposed project. This proposed cumulative project entails new uses in an area that is designated as a Special Study Area of the Mission Bay Park Master Plan Update. However, the uses proposed do not involve exceeding the 30-foot height limit in Mission Bay Park, which is the major feature of the SeaWorld Master Plan Update. Therefore, the DeAnza Harbor Resort project would not contribute to a considerable land use effect and no significant cumulative land use impact would occur.

5.2.2 Neighborhood Character/Aesthetics

For the analysis of neighborhood character/aesthetics only Quivira Basin Redevelopment and Dana Inn Expansion were considered since they were nearby and could potentially contribute to a cumulative visual quality impact. DeAnza Harbor Resort is more than two miles northeasterly of the proposed project. At this distance it is beyond SeaWorld's viewshed, where it could contribute to a cumulative visual quality impact.

Both Quivira Basin Redevelopment and Dana Inn Expansion are proposed in conformance with the 30-foot height limitation imposed in Mission Bay Park. In addition, both of these projects, which are located to the west of SeaWorld, are visually isolated from SeaWorld by existing trees, and the West Mission Bay Drive/Ingraham Street and the West Mission Bay Drive/Sea World

Drive intersection bridges. The existing trees are typically either eucalyptus or torrey pines and range from 40 to 60 feet in height. In addition, the two separated-grade intersections with bridges are contributing elements to the visual barrier between the Quivira Basin Redevelopment project and SeaWorld. The visual characteristics of this area are more thoroughly described in Section 4.2, Neighborhood Character/Aesthetics in this EIR.

Because both the cumulative projects do not exceed 30 feet in height, are visually separated from SeaWorld, and are either redevelopment or expansions of existing land uses, they would not contribute to a significant cumulative neighborhood character/aesthetics impact.

5.2.3 Light, Glare and Shading

For the analysis of light, glare and shading only the Quivira Basin Redevelopment and Dana Inn Expansion projects were considered since they are located nearby and could potentially contribute to a cumulative impact. DeAnza Harbor Resort is more than two miles northeasterly of the proposed project and at this distance is beyond SeaWorld's viewshed where this project could contribute to a cumulative light, glare or shading impact. Also, potential cumulative shading impacts to biological resources are addressed under Section 5.2.6.

The lighting proposed as part of the Quivira Basin Redevelopment would, for the most part, be consistent with the existing lighting in this area and the City of San Diego lighting ordinance. It would, therefore, not represent a noticeable contribution to lighting impacts in the area. The same is true of the Dana Inn Expansion project. Furthermore, the visual barrier created by trees located between SeaWorld and these two projects described above in Section 5.2.2, limits the amount of light that would contribute to a cumulative lighting impact. Therefore, no significant cumulative lighting impact would occur.

Glare and shading effects are similar to the lighting effect in that the Quivira Basin Redevelopment and Dana Inn Expansion projects are visually separated from SeaWorld. For this reason any glare or shading effects associated with these projects would not combine with SeaWorld's impacts to result in a cumulative significant impact.

5.2.4 Transportation/Circulation

Section 4.4, Transportation/Circulation addresses both near term (2005) and buildout (2020) traffic scenarios. The near term analysis takes into account the cumulative projects identified above and assumes that they would be constructed by 2005. The traffic analysis also analyzed future traffic conditions for the year 2020, which took into account the cumulative projects and regional growth. The results of these analyses are briefly restated here since they also address cumulative traffic impacts.

Significant Impacts

Roadway Segments

Based on the City's threshold criteria for significance of impact, the proposed project contribution to traffic on roadway segments would exceed the acceptable V/C threshold of significance on three segments under the near term (2005) condition and eight segments under the buildout (2020) condition with the proposed project. The proposed project would have a significant impact on the following roadway segments under the near term (2005) condition:

1. Sea World Drive (4 lanes), between Pacific Highway and I-5;
2. Sea World Drive (4 lanes), between Friars Road and Pacific Highway; and
3. Sea World Drive (4 lanes), between Sea World Way and Friars Road.

The proposed project would have a significant impact on the following roadway segments in the buildout (2020) condition:

1. Sea World Drive (4 lanes), between Pacific Highway and I-5;
2. Sea World Drive (4 lanes), between Friars Road and Pacific Highway;
3. Sea World Drive (4 lanes), between Sea World Way and Friars Road;
4. Sea World Drive (6 lanes), between Sea World Way and Friars Road;
5. West Mission Bay Drive, between Sea World Drive and Ingraham Street;
6. West Mission Bay Drive, between I-8 and Sea World Drive;
7. Ingraham Street, between Perez Cove Way and Vacation Road; and
8. Ingraham Street, between Perez Cove Way and West Mission Bay Drive.

Key Intersections

The project will not generate a significant direct impact on intersections under the near term (2005) condition.

The project would have a significant impact on the following intersection under the buildout (2020) condition:

1. Sea World Drive and I-5 northbound ramps (AM and PM peak hours);
2. Sea World Drive and Pacific Highway (PM peak hour);
3. Ingraham Street and Perez Cove Way (PM peak hour); and

4. West Mission Bay Drive and I-8 westbound offramp (PM peak hour).

Freeway Ramps

The project will not generate a significant direct impact on freeway ramps under the near term (2005) condition. However, under the buildout (2020) condition, project traffic would result in a significant cumulative impact at three freeway ramps already expected to experience delays in excess of 15 minutes, which include:

1. Sea World Drive and northbound I-5 (AM peak hour);
2. Sea World Drive and southbound I-5 (AM and PM peak hours); and
3. West Mission Bay Drive and westbound I-8 (PM peak hour).

Congestion Management Program (CMP)

CMP Arterials

The contribution of traffic from the proposed project would not exceed the significance thresholds on CMP arterials. Thus, no significant project impacts would occur.

CMP Freeway Segments

The project would have a significant impact on the following freeway segments under the near term (2005) condition:

1. Northbound I-5, north of Sea World Drive; and
2. Southbound I-5, north of Sea World Drive.

The project would have a significant impact on the following freeway segments under the buildout (2020) condition:

1. Northbound I-5, north of Sea World Drive; and
2. Southbound I-5, north of Sea World Drive.

Weekend Significant Impacts

Significant busy weekend day intersection calculated impacts occur at the Sea World Drive/I-5 NB Ramp. In addition, busy weekend day significant impacts occur at the SeaWorld entrance.

Mitigation Measures

Mitigation measures identified for significant traffic circulation impacts are described in detail in Section 4.4.5, Mitigation, Monitoring and Reporting. Generally, the mitigation measures involve

a monitoring program to determine whether SeaWorlds traffic generation will increase in the future and by how much. At certain levels of traffic generation increase, SeaWorld will implement various mitigation measures.

Unmitigated Impacts

Project impacts on the mainline freeway segment of I-5 north and south of Sea World Drive would be unmitigable due to the significant costs to widen I-5.

Project impacts to West Mission Bay Drive between Sea World Drive and I-8, the I-8 eastbound onramp and westbound offramp at West Mission Bay Drive, Sea World Drive between Sea World Way and I-5, and the Sea World Drive/I-5 interchange may be unmitigated if funds are not available to be combined with SeaWorld's fair share contribution to construct the improvements necessary to handle future traffic including additional traffic from SeaWorld.

5.2.5 Water Quality

All three cumulative projects could contribute to surface water quality impacts to Mission Bay. Both Quivira Basin Redevelopment and the Dana Inn Expansion projects are proposed to mitigate this potential impact through the implementation of Best Management Practices (BMP). Furthermore, these two projects as part of their redevelopment expansion will improve surface water quality runoff by implementing BMPs for their entire site where they do not currently exist. Therefore, it is anticipated that the surface water quality runoff from these two projects would be improved over existing conditions. The DeAnza Harbor Resort project is also a redevelopment project, which would be required to comply with the City's Stormwater and Urban Runoff Management Program and therefore, the implementation of this proposed project would also be expected to improve surface runoff quality as compared to existing conditions. Therefore, these three projects would not contribute to a significant cumulative water quality impact. However, due to the current degree of water quality problems in Mission Bay, the additional surface water pollutants generated by SeaWorld's redevelopment activities would result in a significant cumulative regional water quality impact on Mission Bay. SeaWorld's cumulative impact would be mitigated to below a level of significance through the mitigation measures identified in Section 4.5, Water Quality.

5.2.6 Biological Resources

All three cumulative projects are located adjacent to Mission Bay, which is used as foraging habitat for the endangered California least tern. The Dana Inn Expansion project would not create any impacts to the California least tern based on the analysis provided in the Mitigated Negative Declaration (MND) for the project. As indicated in the MND, this project would not involve any in-water construction that would result in a significant impact to foraging of the least tern. Quivira Basin Redevelopment also would not result in a significant unmitigated impact to least tern foraging as indicated in the EIR for that project. The DeAnza Harbor project is proposed such that it also would not result in a direct or indirect cumulative impact to least tern foraging in Mission Bay. Finally, the SeaWorld Master Plan Update would not result in a

significant unmitigable impact to least terns. In addition, the cumulative projects would not create any eelgrass impacts and, therefore, would not contribute to the significant eelgrass impact identified for the SeaWorld project. Based on the foregoing, no significant cumulative biological impacts would occur.

5.2.7 Noise

The cumulative noise impact analysis focuses on noise associated with the operation of SeaWorld, which includes vehicular traffic noise, as well as noise associated with exhibit, ride and show attractions. The cumulative vehicular traffic noise impact from the three cumulative projects described above and the proposed project was analyzed in Section 4.7, Noise. This analysis concluded that the cumulative projects along with the proposed project's future project-generated traffic would not result in a significant noise impact. In addition, noise associated with operation of SeaWorld would not combine with other existing noise sources, i.e., aircraft from Lindbergh Field, traffic and shows, to result in a significant cumulative noise impact. This is based on the current ambient noise measurements described in Section 4.7, Noise.

5.2.8 Geology/Soils

The three cumulative projects along with the proposed SeaWorld Master Plan Update, would attract a substantial number of additional visitors, tourists, and employees to the area. This cumulative increase in population, concentrated in one area, has the potential to create a public safety hazard if seismic activity were to occur. As discussed in Section 4.8, Geology/Soils, the design of future structures would be required to comply with all applicable public health and safety, and building design codes and regulations (including the Uniform Building Code and Alquist-Priolo Earthquake Fault Zoning Act) to reduce seismic/geologic hazards to an acceptable level. Because all applicable codes and regulations would be met, impacts associated with geology/soils are not considered to be cumulatively significant.

5.2.9 Air Quality

In addressing the cumulative effects of air quality a geographic scope of the area was determined which is the San Diego Air Basin (SDAB), which is coterminous with the boundaries for San Diego County. Therefore, other projects evaluated as contributing to the cumulative impacts to air quality would include all projects region-wide. The basis for the determination of the region-wide geographic scope is that pollutants are widely dispersed in the air and are, therefore, not confined to the immediate area. As a result, one must consider any pollutants produced by the project as cumulative to the overall air quality for the entire region.

As demonstrated in Section 4.9, Air Quality, the largest impact to air quality from the project at buildout is from vehicle emissions. In this section it was determined that the project's contribution to air pollutants from this source in 2020 would be 325 pounds/day for ROG, 394 pounds/day for NOx, 1819 pounds/day for CO, and 465 pounds/day for PM-10. For purposes of comparison to the SDAB, these figures have been converted to tons/day as follows; 0.163 tons/day of ROG, 0.197 tons/day of NOx, 0.910 tons/day of CO, and 0.233 tons/day of PM-10.

The projected figures for the SDAB for year 2020 are 188 tons/day of ROG, 152 tons/day of NOx, 895 tons/day of CO, and 143 tons/day of PM-10. These projections take into account future improvements in vehicle emissions efficiency which will generally offset the impacts of the predicted increases in traffic. As a result, these numbers represent an overall decrease in all air pollutant categories, except for a slight increase in PM-10, as compared to current levels.

As calculated as a percentage of the cumulative impacts to the SDAB air quality, these figures show the project's contribution at buildout to be 0.087% for ROG, 0.130% for NOx, 0.102% for CO, and 0.163% for PM-10. Data from 2000 shows the project's percentage contribution to SDAB air pollutants to be 0.149% for ROG, 0.131% for NOx, 0.111% for CO, and 0.149% for PM-10. Based on a comparison of the above figures, the project's impacts have been found to be de minimus. A de minimus contribution means that the environmental conditions would essentially be the same whether or not the proposed project is implemented.

~~Vehicular emissions are the primary source of regional air pollution. The air quality analysis in Section 4.9, Air Quality, determined that at buildout conditions, which included the three cumulative projects and the SeaWorld Master Plan Update, future vehicular priority emission levels would be less than current levels. The cumulative projects would however contribute marginally to non-attainment of clean air standards. Consequently, increased emissions from mobile sources would not significantly degrade existing air quality in the local area. However, the project would contribute to the basin-wide non-attainment status for criteria pollutants. On a cumulative basis, SeaWorld in combination with the other proposed developments in Mission Bay Park would not result in a change in the air quality within the San Diego Air Basin which would be cumulatively considerable. Air quality within Air Basin would be essentially the same whether or not these projects are implemented. Therefore, in accordance with Section 15130 (a)(4) of the CEQA Guidelines, the cumulative impact on air quality would not be significant.~~

5.2.10 Recreational Resources

The focus of the recreational resources discussion pertains to whether cumulative projects along with the proposed project could impede access to other existing recreational facilities in the area of the proposed project. This analysis pertains to both vehicular and pedestrian access in the area where cumulative projects and SeaWorld's traffic would affect the circulation system. The traffic circulation and access analysis provided in Section 4.4, Transportation/Circulation took into account the three cumulative projects. This analysis concluded that traffic circulation impacts would be mitigated in the SeaWorld area, where potential pedestrian/bicycle impacts could occur. Therefore, the cumulative impact to recreational resource access would be less than significant. Furthermore, the DeAnza Resort and Quivira Basin Redevelopment cumulative projects would include pedestrian access enhancements as described above, which would improve pedestrian access to Mission Bay recreational resources. Additional information regarding this issue can be found in Section 4.10, Recreational Resources. Based on the foregoing information no cumulative significant recreational resource impact would occur.

5.2.11 Human Health/Public Safety

Each of the cumulative projects may encounter contaminated soils as part of excavation for building foundations. No significant cumulative impacts were identified, with respect to contaminated soils, because compliance with the conditions of required permits would protect workers and the general public from potential exposure risks. Furthermore, local, state and federal regulations associated with the permits would also provide measures to mitigate the potential risk of unauthorized releases of hazardous materials/wastes into the environment. Should hazardous material/wastes be discovered during construction, those material/wastes would be remediated in compliance with County of San Diego Department of Environmental Health standards. Therefore, because of regulatory requirements no cumulative significant human health/public safety impact would occur.

5.2.12 Energy

Energy usage combined with cumulative projects would not result in a significant increase over the existing energy usage since it would be a very small fraction of the regional energy supply. From a regional perspective regional energy supplies have recently been constrained during peak periods and therefore any increased demand in energy requirements could represent a cumulative significant impact. SeaWorld has mitigated this potential impact through the numerous energy conservation programs that they have instituted as well as those that would be considered as mitigation measures to further reduce energy demand in the future. More information concerning SeaWorld's energy conservation programs can be found in Section 4.12, Energy.

5.2.13 Water Conservation

The proposed project, along with cumulative projects, would not result in a significant use of water as compared to the existing developed uses on these project sites, because the cumulative projects are mostly redevelopment of existing uses and therefore future water demand would only be a very small increase over existing demand. Furthermore, the cumulative impact to water supply is not considered significant given the existing extensive water conservation program which SeaWorld has implemented.

CHAPTER 6.0

GROWTH INDUCEMENT

Section 15126.2(d) of the CEQA Guidelines requires that an EIR address the growth-inducing impacts of a proposed project. The discussion should include ways in which the project could foster economic or population growth, the construction of additional housing, or remove obstacles to population growth, either directly or indirectly.

Direct growth-inducing impacts are commonly associated with the provision of public services, utilities, and roads to a previously undeveloped area. The provision of infrastructure and services to a site can foster growth by reducing development constraints for nearby areas, thereby inducing other landowners in the area to convert their property to other uses. Direct impacts can also result from population growth taxing existing public services, or a particular development increasing the pace or density of existing surrounding developments. Indirect growth-inducing impacts include the additional demand for housing, commodities, and services that new development causes or attracts by increasing population in an area.

The proposed SeaWorld Master Plan Update is expected to contribute to the economy of the San Diego region in terms of jobs, personal income, and tax revenues. However, it is expected that most of the jobs created by implementation of the proposed Master Plan Update would be filled by locally unemployed and under-employed persons. Therefore, the project is not expected to cause an influx of new permanent residents into San Diego County.

The SeaWorld Master Plan Update is located in the Mission Bay Park area of San Diego that is already urbanized. Consequently, the proposed project would not remove any known obstacles to growth in the region by placing infrastructure or services in a previously undeveloped area. Moreover, as indicated in Chapter 7.0, Effects Found Not to be Significant, police and fire protection and existing infrastructure are adequate to serve the Plan area.

While tourism, in general, may expose visitors from outside the region to features of San Diego which may influence visitors to relocate to San Diego, the individual influence related to expanded facilities at SeaWorld would not represent a significant influence on the decision of visitors to relocate to San Diego.

CHAPTER 7.0

EFFECTS FOUND NOT TO BE SIGNIFICANT

Based on the Initial Study completed for the proposed project, it was determined that the project would not have a significant environmental impact in the following areas: cultural resources, agriculture, and population/housing. The reasons for the non-significant impact conclusion are provided below.

7.1 Cultural Resources

Historically, Mission Bay Park was a little used, unnavigable backwater made up of tidal basins, sand dunes, salt marshes, swamps, and salt flats which were shaped into the current series of basins and coves, as well as uplands through extensive dredging and filling operations between 1948 and 1961. Mission Bay was converted from an open coastal estuary with extensive salt marsh and mud flats, to a small boat harbor and public recreational resource. The project site is fully developed, and no record of cultural resources discovered or identified as being associated with the project site were available. With the extensive dredge and fill operations that occurred on the project site, along with site development, any cultural resources within the project site would have been covered or removed. Therefore, implementation of the proposed project would not impact cultural resources.

7.2 Agriculture

The project site does not contain land that is designated as prime agricultural soils by the Soil Conservation Service, nor does it contain prime farmlands designated by the California Department of Conservation. Furthermore, the site is not subject to, nor is it near a Williamson Act contract pursuant to Section 51201 of the California Government Code. Additionally, there are no farming operations in the project vicinity. Therefore, implementation of the proposed project would not impact agricultural resources.

7.3 Population/Housing

With the exception of the change in development height, the proposed project is consistent with the Mission Bay Park Master Plan Update. Implementation of the proposed project would not significantly alter the population distribution, location, and densities, nor would it significantly affect population growth rate or housing demands. While the proposed project could create new jobs in the area, it is anticipated that the existing labor pool in the County would fill the positions created by attendance growth at SeaWorld. Additionally, the persons required to fill those new positions would not require special licenses which would bring in a higher level of skilled workers.

7.4 Public Services

7.4.1 Police Protection

Police protection in the vicinity of the proposed project is currently provided by the Northern Division of the San Diego Police Department (SDPD). The SDPD Northern Division is located in University City at 4275 Eastgate Mall and serves the area from Mission Bay to the northern City limits at Via de la Valle and west of Interstate 805.

The Northern Division is staffed with approximately 200 officers. The Northern Division also operates four community relations storefront offices located at 3840 Carmel Valley Centre Drive in Carmel Valley, 4731 Clairemont Drive in Clairemont, 615 Prospect Street in La Jolla, and 4434 Ingraham Drive in Pacific Beach. The storefront offices handle public relations and crime prevention, and act as liaisons between the police command and the public.

The City-wide average response time is 6.9 minutes for emergency calls and 11.6 minutes for Priority 1 calls. For the Service Area specific to SeaWorld, Northern Division's response time for emergency calls is 6.3 minutes and 10.5 minutes for Priority 1 calls which is below the City-wide average. The goal established by the SDPD is 7.0 minutes for Emergency Calls and 11.0 minutes for Priority 1 Calls.

In addition, law enforcement on the water and the parking lots adjacent to the water as well as the recreation areas in and around Mission Bay are the priority of the San Diego Police Department Harbor Unit. The officers assigned to the Harbor Unit are responsible for patrolling Mission Bay Park and for investigating accidents on Mission Bay. Harbor Unit services are generally provided on weekends, Friday through Monday.

7.4.2 Fire Protection

The City of San Diego Fire Department provides fire protection services to the proposed project area. Four stations, No. 20, 21, 15, and 25 respond to calls at SeaWorld. Station No. 20 is located south of Mission Bay Park at 3305 Kemper Street. Equipment at this station includes

one service area ladder truck, and one triple combination pumper fire engine. The ladder truck consists of a 100-foot aerial ladder tower, and is manned by four fire fighters. The pumper fire engine supplies 500 gallons of water, 1,250 feet of fire hose, and is manned by four fire fighters.

Station No. 21 is located north of Mission Bay Park at 750 Grand Avenue. This station is equipped with the same fire fighting equipment and fire-fighter manpower as Station No. 20. The Battalion Chief who manages the fire response onsite is located at Station No. 25 which is east of Mission Bay Park at 1972 Chicago Street. Additional fire fighter support would be provided by Station No. 15 located south of Mission Bay Park at 4711 Voltaire Street.

The City's standard response time is 6.0 minutes for fire apparatus (e.g., fire engines and trucks) and 8.0 minutes for paramedic ambulances and additional fire support apparatus. Station No. 20 engine and truck companies would be the first to respond to SeaWorld with a current response time of 5.5 minutes. The current response time for Station No. 15 Engine Company is 5.8 minutes. Current response times for support from Engine Company 21 and the Battalion Chief at Station No. 15 are 7.1 minutes and 8.3 minutes, respectively. Each engine company has a paramedic on-staff (Medan, 1999). All primary and support fire equipment response times are within the City standard for fire protection services.

CHAPTER 8.0

UNAVOIDABLE AND IRREVERSIBLE SIGNIFICANT ENVIRONMENTAL EFFECTS

Section 15126.2 (b) and (c) of the CEQA Guidelines requires that an EIR address any significant environmental effects which cannot be avoided, and any irreversible changes to the environment that may result from implementation of the proposed project, respectively. This discussion shall include significant impacts that can be mitigated, but not below a level of significance.

Significant environmental impacts for 13 issue areas have been identified in Section 4.0, Environmental Analysis, of this EIR. Most of the significant impacts associated with the proposed SeaWorld Master Plan Update can be mitigated to below a level of significance. The following issues have been identified as environmental effects, which cannot be avoided; irreversible significant environmental effects; or, significant effects, which cannot be mitigated to below a level of significance.

Significant unmitigable CMP traffic impacts to SeaWorld/I-5 interchange on-ramps would occur, as well as significant unmitigable CMP traffic impacts to two segments of Interstate 5 and one segment of Interstate 8. Significant unmitigable visual impacts are also anticipated as a result of the increased height of future development on the SeaWorld leasehold. Other irreversible effects pertain to the use of energy and water, which are nonrenewable resources, since once future development projects are built their demand for these resources would essentially be irreversible. The remaining issues would not result in significant irreversible environmental changes.

CHAPTER 9.0

ALTERNATIVES

The State CEQA Guidelines indicate that EIRs are required to evaluate a "...range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the project" (Section 15126.6(a) State CEQA Guidelines). The discussion of alternatives should focus on "...alternatives capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives could impede to some degree the attainment of the project objectives or would be more costly" (Section 15126.6(b) State CEQA Guidelines). The overall objective of the proposed project is to implement Proposition D with an increase in the development height limit from 30 feet to 160 feet on the SeaWorld leasehold. The SeaWorld Master Plan Update achieves this objective by establishing a plan, which focuses most of the increased height allocation in the theme park area within selected development envelopes. The SeaWorld Master Plan Update also provides Design Guidelines to ensure that the visual effects of future development to Mission Bay Park are reduced to the extent feasible. A detailed list of project objectives for the SeaWorld Master Plan Update is provided in Section 3.2, Project Objectives.

CEQA further directs that "... the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed" (Section 15126.6(d) State CEQA Guidelines). The project alternatives that are addressed in this EIR to avoid or reduce significant project impacts include the following: No Project; More Regulated Alternative; Enhanced Public Access Alternative; No Hotel Alternative; Underground Parking Garage Alternative; No Parking Structure or Hotel Over 30 Feet Tall; Less Visually Intrusive Alternative and the Combination Alternative. The environmentally superior alternative is the Combination Alternative. A summary of the environmental impacts of these alternatives relative to the proposed project is presented in Table S-2 in the Executive Summary.

The following project alternatives have been compared to the proposed project and the ways in which they would lessen or eliminate significant impacts. The alternatives discussion also addresses the feasibility of each alternative and the extent to which it meets the project objectives. The project objectives are restated here for the convenience of the reader.

The SeaWorld Master Plan Update project objectives are:

1. To implement the SeaWorld Initiative, Proposition D, approved by the electorate of the City in November 1998. The SeaWorld Initiative allows development up to a maximum height of 160 feet on the entire SeaWorld leasehold;
2. Provide for an updated comprehensive Master Plan that addresses the entire SeaWorld leasehold;
3. Continue to operate and improve on an economically-feasible, high quality theme park environment;
4. Provide attractions which appeal to a broader range of family members;
5. Renovate older areas of the park;
6. Increase revenues to the City of San Diego;
7. Continue to create permanent and part-time, local employment opportunities;
8. Provide an updated Master Plan that reflects the policies of Chapter 3 of the California Coastal Act and the Mission Bay Park Master Plan;
9. Remain competitive with other theme parks.
10. Eliminate the inconsistency between the Land Development Code and the Mission Bay Park Master Plan caused by the passage of the SeaWorld Initiative.
11. Allow renovation of existing buildings over 30 feet in height.

9.1 No Project Alternative

CEQA requires the No Project Alternative to be addressed in an EIR. Typically, the No Project Alternative implies no development at the site, which means that project-related impacts are eliminated because the site would be retained in its present condition. However, CEQA also requires that the No Project Alternative discuss any development that is reasonably expected to occur in the foreseeable future based on current plans and other development proposals if the proposed project is not approved (Section 15126.6, State CEQA Guidelines).

In the case of the proposed SeaWorld Master Plan Update, the No Project Alternative could result in development that is currently allowed under the existing adopted Master Plan. Development allowed under the existing adopted Master Plan includes the unbuilt 300-room hotel and 200-slip marina expansion. Furthermore, redevelopment could continue on the project site in conformance with the existing 30-foot height limit. This alternative assumes that attendance levels would remain relatively unchanged as they have over the past ten years.

This alternative would avoid the significant unmitigable neighborhood character/aesthetics impact related to the future development that would be up to 160 feet in height. Significant impacts associated with transportation/circulation may be lessened. Although the theme park attendance would not increase, under the current SeaWorld Master Plan a hotel and marina expansion could be developed. These facilities would generate traffic that would increase traffic congestion in the project area. However this alternative would generate less traffic than the proposed project.

The significant, mitigable impacts to land use; light, glare and shading; water quality; biology; as it pertains to potential perching opportunities, and noise would also be avoided. Other issue impacts are either not significant or could occur under the existing SeaWorld Master Plan.

This alternative would not meet any of the project objectives listed above.

9.2 More Regulated Alternative

This alternative would preclude the rental of PWCs powered by two-cycle engines. Therefore, instead of six PWC's, two boat mooring slips would be provided. This alternative would also limit development of three Tier 2 development areas to 160 feet high and three for shows and two for exhibits. Fireworks would remain the same at existing levels. The intent of this alternative is to reduce water quality, visual, and fireworks noise impacts. However, no significant impacts were identified for the proposed fireworks displays, hence this issue is not discussed further. Water quality impacts associated with the marina operations were identified as significant and mitigable. Through the elimination of potential PWC rental operation at the SeaWorld Marina, water quality impacts would be lessened. However, PWC users will be able to rent personal watercraft elsewhere in the Mission Bay area and therefore the water quality impact that would be lessened at the SeaWorld Marina would probably occur elsewhere in Mission Bay. Through the reduction of Tier 2 160-foot high development areas from four to three, the visual impact would be lessened, but not reduced to a level below significance.

Furthermore, this alternative would compromise a number of project objectives. These are listed below along with an explanation.

1. To implement the SeaWorld Initiative, Proposition D, approved by the electorate of the City in November 1998. The SeaWorld Initiative allows development up to a maximum height of 160 feet on the entire SeaWorld leasehold;

This alternative would compromise the voter-approved Proposition D as it pertains to height limitations on the leasehold.

2. Continue to operate and improve on an economically feasible, high quality theme park environment.

This alternative would constrain SeaWorld's flexibility in the development and redevelopment of new attractions that would in turn affect the economic viability of SeaWorld.

3. Provide attractions which appeal to a broader range of family members.

This alternative would constrain SeaWorld's flexibility in the development and redevelopment of new attractions that would in turn affect their ability to develop attractions, which appeal to a broad range of family members.

4. Increase revenues to the City of San Diego

This alternative would constrain SeaWorld's flexibility in the development and redevelopment of new attractions that could in turn affect the economic viability of SeaWorld. SeaWorld's limited economic viability could also negatively affect revenues to SeaWorld.

9.3 Enhanced Public Access Alternative

The enhanced public access alternative would entail a revised site plan that would accommodate pedestrian and or bicycle traffic along the entire water frontage of the leasehold. The Mission Bay Park Master Plan calls for a 50-foot-wide public access corridor along the waters edge. However, in cases where waterfront access is limited, such as the SeaWorld leasehold, the minimum allowed by the plan is a 17-foot-wide paved boardwalk that would accommodate both pedestrians and bicycles with a one-foot separation between them. Given the existing SeaWorld facilities located adjacent to the waters edge, this alternative is based on the minimum 17-foot wide paved boardwalk.

This alternative would require extensive modification of existing SeaWorld facilities in many locations in order to accomplish an enhanced waterfront access. Beginning at the northeastern corner of the leasehold this access for approximately 375 feet of the waterfront could be accommodated since this area is undeveloped. However, the planned Splashdown Ride, which is to be located in this area, would require extensive modification of the site plan to allow for this public accessway. There are a couple of issues associated with development of waterfront access in this location. The first involves infringement on the ride safety envelope, where employee and guest access are not allowed. The second involves relocation of the existing access along the present SeaWorld boundary to allow for extending park pathways to the Splashdown ride. To accommodate a coastal pedestrian access would require re-routing of this access road to the extreme east side of 16.5 acre expansion area and along the Bay to re-join existing road at Arctic Back-Wash Basin.

West of the Splashdown ride, access could be accomplished through the abandonment of an existing service vehicle access road. However this service access road is necessary for the operation of SeaWorld and to provide emergency access. A list of the types of service activities and their frequency is provided below:

1. Water Quality
 - a. Chemical Delivery
 - 1) Sodium Hypochlorite three times per week
 - 2) Sodium Bissulfate one time per week
 - 3) Almax Vacuum Truck on time per week
2. Maintenance
 - a. Maintenance Contractors - Daily access
 - 1) HVAC
 - 2) Plumbing
 - 3) Almax Vacuum Trucks
 - 4) General Contractors
 - b. In-House Maintenance Crews - Daily Access
 - 1) Landscape Department
 - 2) Electrical Department
 - 3) Mechanical Department
 - 4) Carpenter Department
 - 5) Water Quality Department
 - 6) Paint Department
 - c. Access for Maintenance Equipment - Daily
 - 1) Cranes, forklifts, etc.
 - 2) Landscape Equipment - Backhoes, mowers, dump and flatbed trucks etc
 - d. New Construction daily during construction projects
 - 1) Construction contractors / subcontractors
 - 2) Construction Equipment
 - 3) Construction Material Deliveries
3. Operations Department / Food Service Department / Merchandise Department
 - a. Removal of trash via trainable dumpsters (long line of dumpsters connect in train fashion pulled by a tow motor.
 - b. Deliveries of food and supplies to food service facilities - panel trucks / flatbed trucks
 - c. Delivery of merchandise to shops - panel trucks / flat bed trucks
 - d. Access for street sweeper equipment etc for park clean-up
4. Life Safety - as required
 - a. Access for paramedics
 - b. Access for fire department (Ladder Truck)
 - c. Part of disaster reaction plan access routes agreed on with City of San Diego Fire Department
5. Animal Care Departments - Daily access
 - a. Emergency access for animal care issues.
 - b. Animal Moves (planned and emergency)
 - 1) Cranes
 - 2) Flatbed trucks
 - 3) Move equipment (slings, rigging, etc.
 - c. Animal food deliveries - flatbed trucks

Relocation of this access road further south would require the modification of the access road for the Penguin Encounter and Nautilus Picnic Pavilion, as well as other support facilities. From the Shark Encounter westward there are a number of buildings and emergency pedestrian accessways that would require modification (i.e. partial demolition and reconstruction) to accomplish the 17-foot wide access. Examples include the Shark Encounter and associated nearby water treatment facilities, Mango Joes restaurant, the Freshwater Aquarium, the 4D Theater and Harborside Café. Finally, in order to accomplish a complete waterfront pedestrian access, the existing Waterfront Stadium, western water treatment plant and marina structures would require extensive modification. Modification of the Waterfront Stadium and water treatment plant are particularly onerous because these facilities are built up next to the water's edge.

In conclusion, this project alternative would severely compromise service and emergency access required for the safe operation of the existing SeaWorld facility. It would also require extensive modification of existing structures and water treatment infrastructure. As a result, the extensive cost to implement this alternative and the major compromise it would pose to the success of the SeaWorld operation, would make this project alternative infeasible.

This alternative would compromise some of the project objectives. These are listed below along with an explanation.

1. Continue to operate and improve on an economically-feasible, high quality theme park environment.

This alternative would severely compromise the ability to maintain the attractions that are already constructed near the shoreline and therefore would affect the ability of SeaWorld to maintain yet alone improve on an economically-feasible, high quality theme park.

2. Renovate older areas of the park.

If SeaWorld's resources were diverted to enhancing waterfront access, these resources would not be available to renovate older areas of the park.

9.4 No Hotel and Marina Alternative

The No Hotel and Marina Alternative assumes that the proposed 650-room hotel and marina expansion would not occur as part of the project. This alternative would address the significant unmitigated visual impacts associated with the hotel expansion; the significant unmitigable traffic; and the significant mitigable impacts from marina expansion to eelgrass beds in Perez Cove.

9.4.1 Transportation/Circulation

This alternative would result in a considerable (48 percent, 7,300 ADT) reduction in trip generation. As a result significant impacts that were identified for the 2020 scenario, which are listed below would be lessened, but not to a level below significance. Significant and mitigable traffic impacts that would be lessened include:

Street Segments

1. Sea World Drive (4 lanes), between Pacific Highway and I-5;
2. Sea World Drive (4 lanes), between Friars Road and Pacific Highway;
3. Sea World Drive (4 lanes), between Sea World Way and Friars Road;
4. Sea World Drive (6 lanes), between Sea World Way and Friars Road;
5. West Mission Bay Drive, between Sea World Drive and Ingraham Street;
6. West Mission Bay Drive, between I-8 and Sea World Drive;
7. Ingraham Street, between Perez Cove Way and Vacation Road; and
8. Ingraham Street, between Perez Cove Way and West Mission Bay Drive.

Key Intersections

1. Sea World Drive and I-5 northbound ramps (AM and PM peak hours);
2. Sea World Drive and Pacific Highway (PM peak hour);
3. Ingraham Street and Perez Cove Way (PM peak hour); and
4. West Mission Bay Drive and I-8 westbound offramp (AM and PM peak hours).

Freeway Ramps

1. Sea World Drive and northbound I-5 (AM and PM peak hours);
2. Sea World Drive and southbound I-5 (AM and PM peak hours); and
3. West Mission Bay Drive and westbound I-8 (AM and PM peak hours).

This alternative would also lessen the significant and unmitigated impacts to CMP I-5 freeway segments: Northbound I-5, north of Sea World Drive; and Southbound I-5, north of Sea World Drive. Although these impacts would be lessened they would still remain significant.

9.4.2 Neighborhood Character/Aesthetics

This alternative would lessen the significant unmitigable visual impact associated with the 90-foot high hotel. By eliminating the hotel structure the visual impact associated with the SeaWorld Master Plan Update would be reduced. However, other Tier 1 and future Tier 2 projects (four of which could be 160-foot high) would contribute to the significant unmitigable visual impact associated with the project. Therefore, although lessened, the neighborhood character/aesthetics would remain significant and unmitigable.

9.4.3 Biological Resources

This alternative would eliminate the significant and mitigable impact to eelgrass beds from the marina in Perez Cove, since the Marina would not expand over existing eelgrass beds, a sensitive biological resources.

This alternative would compromise some of the project objectives. These are listed below along with an explanation.

1. To implement the SeaWorld Initiative, Proposition D, approved by the electorate of the City in November 1998. The SeaWorld Initiative allows development up to a maximum height of 160 feet on the entire SeaWorld leasehold.

This alternative would not allow SeaWorld to comply with the voter approved Proposition D with respect to allowing development up to 160 feet for the hotel site.

2. Increase revenues to the City of San Diego.

This alternative would result in a loss in potential hotel and marina related revenue to the City of San Diego. This includes leasehold revenue and Transit Occupancy Tax (TOT).

3. Continue to create permanent and part-time, local employment opportunities.

The loss of the future hotel and marina would result in a reduction in the number of permanent and part-time construction and operation employment opportunities that would be created by the project.

4. Provide an updated Master Plan that reflects the policies of Chapter 3 of the California Coastal Act and the Mission Bay Park Master Plan Update.

Both the hotel and marina are high-priority uses in the California Coastal Act. The hotel is a visitor serving use and the marina expansion is a water dependent use with limited locations available along the coast. The loss of these two project components would therefore not comply with the goals of the Coastal Act.

9.5 Underground Parking Garage Alternative

This alternative is examined in order to address potential visual impacts associated with this facility. However, the neighborhood character/visual aesthetics analysis found that this facility would not contribute to the significant unmitigated visual impact of the project due to its limited visibility from offsite locations. Nonetheless, to underground the parking garage would encounter significant design engineering constraints because of the high ground water table on the project site (See Section 4.8, Geology/Soils). With groundwater varying between seven and seventeen feet below the ground surface, undergrounding the parking garage would require permanent dewatering and discharge to Mission Bay. Discharge of groundwater directly into Mission Bay is prohibited by the Regional Water Quality Control Board, unless a discharge permit is approved by the Board, which would require treatment of the groundwater effluent. In addition, to the groundwater discharge constraint, an additional engineering constraint involves the hydrostatic pressure on an underground parking structure that would push the structure out of the ground. To overcome this pressure the parking garage would require an extensive system of subsurface piles. These major engineering, regulatory constraints to undergrounding the parking garage would either make this facility unbuildable or pose a major cost to the applicant. Furthermore, this alternative would not lessen any identified significant environmental impact and would result in significant water quality impacts. Therefore, this alternative is considered infeasible. Finally, this alternative would not meet several of the project objectives. These are listed below along with an explanation.

1. Continue to operate and improve on an economically-feasible, high quality theme park environment.

The cost of undergrounding the parking garage would compromise the economic viability of SeaWorld.

2. Increase revenues to the City of San Diego.

The cost of undergrounding the parking garage would compromise the economic viability of SeaWorld and hence would decrease the likelihood of increased revenues to the City.

9.6 No Parking Structure or Hotel Over 30 Feet High Alternative

This alternative is primarily designed to address potential visual impacts associated with a future hotel, which the SeaWorld Master Plan Update allows up to a 90 feet height. In addition, this alternative would limit the parking structure height to 30 feet. Since the existing SeaWorld Master Plan allows for a hotel with 300 rooms with a 30-foot height limit, this alternative assumes a maximum of 300 hotel rooms. The reduction in height of the parking garage from 45 to 30 feet assumes that the garage footprint would remain the same, and therefore the number of parking spaces would be reduced by about one-third of that which is proposed.

Limiting the height of the parking structure would not noticeably reduce the visual impact of this facility. As discussed in Section 4.2, Neighborhood Character/Aesthetics section, only a small part of the upper portion of the parking garage would be visible outside the SeaWorld leasehold and would, therefore, would not contribute to the significant unmitigable visual impact identified for the project. Therefore, this alternative component would not result in the lessening of a significant visual impact. Furthermore, reducing the height of the parking structure would reduce the parking supply, which could result in a significant parking supply impact because the parking structure is designed to accommodate increases in attendance over the next 20 years. As a result this alternative component is infeasible and provides no lessening of significant impacts.

Reducing the height of the future hotel from up to 90 feet to 30 feet would lessen the visual impact of the SeaWorld Master Plan Update. The hotel component of the project would contribute to the significant visual impact of the proposed project and therefore reducing the height of this plan component would result in a lessening of this impact because it would reduce its visibility from locations outside the leasehold. From nearly all locations outside the leasehold, existing trees and park improvements would screen a hotel 30 feet in height. However, although this impact would be lessened, it is still considered significant because other components of the Master Plan proposed in Area 1, Theme Park would result in a significant visual impact.

This alternative would compromise some of the project objectives. These are listed below along with an explanation.

1. To implement the SeaWorld Initiative, Proposition D, approved by the electorate of the City in November 1998. The SeaWorld Initiative allows development up to a maximum height of 160 feet on the entire SeaWorld leasehold;

This alternative would compromise the voter-approved Proposition D as it pertains to height limitations on two parts of the leasehold.

2. Continue to operate and improve on an economically-feasible, high quality theme park environment;

The reduction in the height of the parking garage would limit attendance and the corresponding revenue, reducing the economic viability of SeaWorld.

3. Increase revenues to the City of San Diego;

The reduction in the height of the hotel would reduce the potential TOT tax the could be generated for the City.

4. Continue to create permanent and part-time, local employment opportunities

The reduction in the size of the parking structure and hotel would ultimately reduce both short-term construction, and long-term employment opportunities for the SeaWorld leasehold.

5. Provide an updated Master Plan that reflects the policies of Chapter 3 of the California Coastal Act and the Mission Bay Park Master Plan;

The reduction in the size of the hotel reduces the number of rooms and the corresponding number of people who could be accommodated adjacent to the coast. This would compromise this Coastal Act priority visitor serving use.

9.7 Less Visually Intrusive Alternative

The less visually intrusive alternative is designed to lessen the significant unmitigable visual impact associated with the proposed project through more restrictive design guidelines that focus on maximum bulk for various heights of future structures and, restrictions on the maximum heights of future structures from visually sensitive areas. The elements of this alternative include future structures are required to be 75 percent transparent above 60 feet. It also would limit the height of structures at the eastern end of the theme park to 100 feet since views to this part of the park from the east are openly visible. This alternative would reduce the visibility of future Tier 2 projects by making the upper parts of future attractions more transparent such that they tend to “blend” better with the visual background. In addition, by limiting the height of future Tier 2 projects along the eastern project boundary to 100 feet, these future attractions would be less visible in an area where future development will be openly visible from some areas to the east of the project site. This alternative would lessen, but not fully mitigate the significant visual impact associated with the project. Furthermore, it would compromise a number of project objectives. These are listed below along with an explanation.

1. To implement the SeaWorld Initiative, Proposition D, approved by the electorate of the City in November 1998. The SeaWorld Initiative allows development up to a maximum height of 160 feet on the entire SeaWorld leasehold;

This alternative would compromise the voter-approved Proposition D as it pertains to height limitations on two parts of the leasehold.

2. Continue to operate and improve on an economically-feasible, high quality theme park environment.

This alternative would severely constrain SeaWorld’s flexibility in the development and redevelopment of new attractions that would in turn affect the economic viability of SeaWorld.

3. Provide attractions which appeal to a broader range of family members.

This alternative would severely constrain SeaWorld’s flexibility in the development and redevelopment of new attractions that would in turn affect their ability to develop attractions which appeal to a broad range of family members.

4. Increase revenues to the City of San Diego

This alternative would severely constrain SeaWorld's flexibility in the development and redevelopment of new attractions that would in turn affect the economic viability of SeaWorld. SeaWorld's limited economic viability would also negatively affect revenues to SeaWorld.

9.8 Combination Alternative

This alternative is based on some elements of the foregoing alternatives to address a variety of environmental issues raised by commentors on the Notice of Preparation. This alternative would limit future structures to no more than 30 feet in height. No new amusement type rides or hotel would be part of the Master Plan Update. The Plan Update would include enhanced public access along the waterfront and that SeaWorld would focus future attraction development on marine education and conservation.

Elements of this alternative are addressed above in other project alternatives. No future structures that would be higher than 30 feet is addressed in the No Project Alternative and the No Parking Structure or Hotel Over 30 Feet Alternative. No hotel as part of the Master Plan is addressed in the No Hotel and Marina Alternative. Enhanced public access along the waterfront is addressed in the Enhanced Public Access Alternative. Finally, the focus of future attraction development on marine education does not address any particular environmental issue associated with the project and therefore is not discussed. The significant unmitigable neighborhood character/aesthetics impact would be avoided with this alternative. Significant impacts associated with transportation/circulation would be lessened since under this alternative less traffic would be generated as compared to the proposed project.

The neighborhood character/aesthetics significant unmitigable impact that would be avoided is the visual impacts related to the future development that would be up to 160 feet in height.

The significant, mitigable impacts to land use; traffic circulation; light, glare and shading; water quality; biology; as it pertains to potential perching opportunities, and noise would also be avoided. Other issue impacts are either not significant or could occur under the existing SeaWorld Master Plan.

This alternative would not meet any of the project objectives listed below.

1. To implement the SeaWorld Initiative, Proposition D, approved by the electorate of the City in November 1998. The SeaWorld Initiative allows development up to a maximum height of 160 feet on the entire SeaWorld leasehold;
2. Provide for an updated comprehensive Master Plan that addresses the entire SeaWorld leasehold;
3. Continue to operate and improve on an economically-feasible, high quality theme park environment;
4. Provide attractions which appeal to a broader range of family members;

5. Renovate older areas of the park;
6. Increase revenues to the City of San Diego;
7. Continue to create permanent and part-time, local employment opportunities;
8. Provide an updated Master Plan that reflects the policies of Chapter 3 of the California Coastal Act and the Mission Bay Park Master Plan;
9. Remain competitive with other theme parks.
10. Eliminate the inconsistency between the Land Development Code and the Mission Bay Park Master Plan caused by the passage of the SeaWorld Initiative.
11. Allow renovation of existing buildings over 30 feet in height.

CHAPTER 10.0

REFERENCES

California, State of, Air Resources Board

State Implementation Plan, dated 1996.

San Diego, City of

City of San Diego, Post Closure Land Use Plan for Mission Bay South Shores Phase III, dated October 1995.

City of San Diego Solid Waste Local Enforcement Agency, various quarterly inspection reports.

City of San Diego, Initial Study LDR No. 96-7987, SeaWorld Leasehold/Parking Lot Expansion

Letter from John H. Robertus, Executive Officer, SDWQCB regarding Mission Bay Landfill, dated April 11, 2000.

SeaWorld, Hazardous Materials Business Plan and Emergency Contingency Plan, dated November 16, 1999.

Woodward-Clyde

Water Quality / Best Management Practices Program for Sea World of California – San Diego. Woodward – Clyde Project No. 9853032N-1000, Prepared for Sea World of California, dated 1998.

CHAPTER 11.0

PERSONS AND ORGANIZATIONS CONTACTED

Jim Ayala, City of San Diego Development Services Department

Martha Blake, City of San Diego Development Services Department

Linda Fierro, City of San Diego Real Estate Assets Department

Craig Gibson, City of San Diego Real Estate Assets Department

Howard Greenstein, ASLA, City of San Diego Department of Parks and Recreation

Ellen Lirley, California Coastal Commission

Anne Lowry, City of San Diego Development Services Department

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Deborah Sharp, City of San Diego Parks and Recreation Department

Gary Stromberg, City of San Diego Parks and Recreation Department

Mike Westlake, City of San Diego Development Services Department

Chris Zirkle, City of San Diego Development Services Department

CHAPTER 12.0

CERTIFICATION PAGE

This Environmental Impact Report was prepared by the Environmental Analysis Section of the City of San Diego Land Development Review Division. The following professional staff participated in its preparation:

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NOTICE OF PREPARATION AND RESPONSES

APPENDIX A

City of San Diego
Planning and Development Review Department
LAND DEVELOPMENT REVIEW DIVISION
1222 First Avenue
Mail Station 501
San Diego, CA 92101
(619) 446-5460

Date: July 12, 2000

NOTICE OF PREPARATION OF A DRAFT
ENVIRONMENTAL IMPACT REPORT

THE CITY OF SAN DIEGO will be the Lead Agency and will prepare a draft Environmental Impact Report (EIR) for the following project:

PROJECT: SeaWorld Master Plan Update. AMENDMENTS to the MISSION BAY PARK PLAN/LOCAL COASTAL PROGRAM LAND USE PLAN and the SEAWORLD MASTER PLAN to revise the height limit at SeaWorld from 30 feet to a maximum of 160 feet. The revised SeaWorld Master Plan shows locations within the theme park where taller structures could be developed; one of which is specified for development as a "splash-down" ride. The other locations could be developed with exhibits, rides or shows. Renovation of the front gate is also proposed. Other structures within the leasehold but outside the theme park exceeding 30 feet in height would include a hotel, an Educational Facility, Special Events Center and a parking structure. The project also includes expansion of the Perez Cove marina and would allow for additional future redevelopment throughout the leasehold via two different decision-making processes. The 189.4 acre site is located on SeaWorld Drive at the southern edge of Mission Bay Park. Applicant: SeaWorld, Inc.

LDR NO.: 99-0618

Based on an Initial Study, it appears that the project may result in significant environmental impacts in the following areas: Land Use, Geology/Soils, Air Quality, Water Quality, Biological Resources, Noise, Light/Glare/Shading, Recreational Resources, Transportation/Circulation, Energy, Water Conservation, Neighborhood Character/Aesthetics and Human Health/Public Safety.

For more information, or to provide comments on the scope and content of the draft EIR, contact the following person at the address above: Chris Zirkle, Senior Planner, (619) 446-5348.

Written comments on the scope and content of the draft EIR must be sent to the above address by no later than 30 days after receipt of this notice.

Responsible agencies are requested to indicate their statutory responsibilities in connection with this project when responding.

Attachments: Scope of Work for an EIR

Distribution:

Federal Government

National Marine Fisheries Service
U.S. Army Corps of Engineers
U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service

State of California

State Clearinghouse
California Coastal Commission
California Department of Boating and Waterways
California Department of Fish and Game
California Department of Water Resources
California Environmental Protection Agency
California State Coastal Conservancy
CALTRANS, District 11
Regional Water Quality Control Board, Region 9
State Lands Commission
Resources Agency
Park and Recreation Department
Water Resources Control Board
Air Resources Board

County/City Agencies

County of San Diego
Air Pollution Control Board
City of San Diego
Mayor Golding
Councilmember Byron Wear, District 2
Engineering and Capital Projects Department
Park and Recreation Department
Planning and Development Review Department
Real Estate Assets Department
Wetland Advisory Board
Central Library
Clairemont Mesa Library
Pacific Beach Library
Park and Recreation Board

San Diego Association of Governments (SANDAG)
California Native Plant Society
Endangered Habitats League
San Diego Audubon Society
San Diego Regulatory Alert
San Diego State University, Stuart Hurlbert
Sierra Club
Southwest Center for Biodiversity
Citizens' Coordinate for Century III
Environmental Health Coalition
Clairemont Mesa Community Planning Group
Mission Beach Community Planning Group
Mission Beach Town Council
Mission Bay Park Committee
Pacific Beach Community Planning Group
Pacific Beach Town Council

San Diego Convention and Visitors Bureau
Mission Bay Lessees
Jim Peugh
Carmel Mountain Conservancy, Isabelle Kay
Carolyn Chase
San Diego Baykeeper
Surfers Tired of Pollution
League of Conservation Voters
Citizens Coordinate for Century 3
Pat Gallagher
Surfriders



THE CITY OF SAN DIEGO

July 12, 2000

Greg Konar
Letteiri-McIntyre and Associates
1551 Fourth Avenue, Suite 430
San Diego, CA 92101-3152

Dear Mr. Konar:

Subject: Sea World Master Plan Update (LDR No. 99-0618)

The Environmental Analysis Section (EAS) of the Land Development Review Division has conducted an Initial Study for the SeaWorld Master Plan Update project. The project proposes to amend the Mission Bay Master Plan to accommodate increased height limits and to amend the SeaWorld Master Plan (a portion of a City lease) to allow future improvements within the leasehold.

Based upon the results of the Initial Study, it has been determined that the proposed project may have a significant effect on the environment. The preparation of a draft Environmental Impact Report (EIR), therefore, is required. This scoping letter is based on the April 14th Master Plan and subsequent documentation received by the City. Future changes to the plan, prior to release of the draft EIR, may affect the need to address the issues identified in this letter.

The purpose of this letter is to identify the issues to be specifically addressed in the EIR. The EIR should be prepared in accordance with the City's "Environmental Impact Report Guidelines". The issues to be addressed are discussed below. A Notice of Preparation will be distributed to Responsible Agencies and others who may have an interest in the project. Consequently, changes or additions to this scope of work may be required as a result of input received in response to the Notice of Preparation.

1. ENVIRONMENTAL SETTING

Describe the natural and manmade environment surrounding the SeaWorld leasehold. Briefly describe future improvements envisioned by the Mission Bay Park Master Plan. Provide an overview of land use regulatory authority in the Park. In particular, determine in consultation with the Project Management Division and describe in this section whether the site is subject to City-wide development regulations (e.g., the Landscape Technical Manual requirements for parking lot landscaping, signs, Fire Department access, engineering standards). If the site is subject to these regulations but they are not included in the plan, a Land Use (and perhaps Public Services) impact would result and should be discussed in the Land Use section.



2. PROJECT DESCRIPTION

Discuss the goals and objectives of the project. Project objectives will be critical in determining appropriate alternatives for the project which would reduce significant impacts. The objectives should reflect SeaWorld's goals in terms of the City's goals for the site. List all governmental agencies with jurisdiction over the project proposals and their roles. Summarize the permitting history at SeaWorld. Describe all discretionary actions involved in the project (plan amendments, lease, Master Plan), types of subsequent approvals (including subsequent environmental review), the thresholds for the need to obtain subsequent approvals and the nature of the approvals (i.e., ministerial or discretionary per CEQA). Specifically describe whether moving the locations of facilities of different heights more than 100 feet from where they are shown would necessitate a subsequent plan amendment or other approval. List all permits required from other federal, state and local agencies.

Describe major project features including limitations on the types of uses. Describe the existing facilities and note which are expected to remain. Describe implementation of the plan, including public review of subsequent projects and anticipated future uses of this EIR (e.g., a review by EAS staff to determine if future projects are adequately addressed).

The "Revised Draft SeaWorld Master Plan Update" (April 14, 2000) specifies the location of Tier 2, Area 1 improvements to within 100 feet but does not include physical descriptions of what could be built (although the types of uses, "Exhibit/Ride/Show", are specified). Therefore, the Project Description should describe the provisions in Section 15064 of the CEQA guidelines which require the EIR analysis to address reasonably foreseeable impacts based on substantial evidence, including reasonable assumptions predicated upon facts. Due to the lack of specificity in the plan with respect to Tier 2, Area 1 improvements, the EIR should assume that these sites would be developed with thrill rides built to the maximum height and bulk permitted by the plan. Additional assumptions regarding construction details (such as lighting, colors, etc.) which should be used as the basis for analysis are provided in individual Environmental Issue areas below.

EAS understands that site plans are to be prepared for all Tier 1 proposals. If site plans, elevations and square footages are not available prior to the release of the draft EIR, contact EAS for direction on how to analyze these improvements in keeping with the "reasonable assumption" methodology (and Transportation Development with respect to trip generation). For any Tier 1 proposal which does not include a maximum bulk or height by the time the draft EIR is to be released for public review, the EIR should assume that a structure up to 160 feet tall would be built.

The EIR should also describe the typical, temporary construction for seasonal events (such as ski ramps) and include an analysis of these events.

3. ENVIRONMENTAL ISSUES

Identify a reasonable range of mitigation measures and/or alternatives, whether proposed or not, for each identified significant effect. Where the plan does not address the issue, analyze impacts in terms of reasonably foreseeable "worst case" scenarios. Additional plan language and/or acceptance of mitigation measures may change the need to use this type of analysis. Also, in each issue area, describe the mitigation measures and permit conditions to which the site is currently subject and indicate whether the mitigation measure/condition would remain. If the extent of a potential impact would be limited by existing regulation, describe the regulation.

Significance determinations made in the EIR should reflect the fact that CEQA does not permit deferral of the establishment of mitigation measures and that an impact should be considered significant if it cannot be demonstrated with certainty that if it is not (i.e., if a significant impact "may" result). Reference the City's most recent (1999) significance thresholds in making significance determinations.

A. Land Use

Would the project result in a conflict with the goals, objectives and recommendations of the community plan in which it is located?

Would the project conflict with adopted environmental plans for the area?

The project is located within the Mission Bay Park Master Plan which is administered by the Park and Recreation Department and functions as the community plan for the Park. The project proposes an amendment to the plan; however, an amendment does not necessarily mean that the project conflicts with the goals, objectives or recommendations of the plan. The Park Master Plan does include a number of goals, objectives and recommendations that pertain to SeaWorld. The project is also located adjacent to the Multiple Habitat Preserve Area (Stony Point) and is within the jurisdiction of the California Coastal Commission for Local Coastal Planning and Coastal Development Permitting. Systematically identify all of the relevant goals, objectives and recommendations in these plans and analyze whether reasonable foreseeable implementation of the project would be consistent with the plans (the discussion may be cross-referenced to other sections). Specifically note the consistency of the project with the shoreline access requirements of the Mission Bay Park Master Plan and the California Coastal Act.

B. Geology/Soils

What is the nature of earthwork that would be required to adequately support proposed structures from the ground?

Would the proposal result in any increase in wind or water erosion of soils either on or off the site?

The leasehold is underlain by undocumented fill and potentially liquefiable sediments. The proposed Master Plan specifies no structures other than a parking structure and a hotel. While site plans are available for Tier 1 proposals, no construction concept is provided for Tier 2 improvements. However, some of the Tier 2 proposals are adjacent to the boundary of the leasehold and/or Mission Bay.

Summarize the nature of earthwork that has been required for the existing improvements. While it is anticipated that the exposure of people to hazards associated with development in geologically unfavorable areas would be mitigated with review of building permits, it is not clear whether remedial grading would be required to provide such mitigation. Prepare and submit a geological reconnaissance which describes the potential need to excavate areas outside of footprint of the proposed structures (including a potential underground parking garage).

Assume that all of the Tier 2, Area 1 development sites would be developed with thrill rides at the maximum proposed bulk and height. Unless the geotechnical report indicates conclusively that this and any other proposed construction, including infrastructure improvements, would not require grading in wetlands, assume that such grading would be required.

Describe how construction of facilities would proceed. Provide maximum areas of disturbance and standard erosion control practices which would minimize erosion during construction. Indicate whether there are any ongoing erosion problems along SeaWorld's shoreline. The geotechnical report should describe the existing condition, what is proposed to alleviate it, or what is expected to happen if no action is proposed.

C. Air Quality

Would the proposal result in air emissions which would substantially deteriorate ambient air quality, including the exposure of sensitive receptors to substantial pollutant concentrations?

Would the proposal result in the creation of objectionable odors?

This section should focus on a) the potential use of internal combustion engines (including diesel engines operated for electricity) or gas-fired water heaters within the park boundaries and any possible use of engines in boats and b) the generation of emissions from vehicles entering and exiting the leasehold. Evaluate carbon monoxide hot spots if they would result from poor traffic flow. See the following section for assumptions to use for boat engines for the basis for a reasonably foreseeable scenario. Translate these emissions into parts per million and/or pounds per day to determine if the City's significance thresholds are met with regard to air quality impacts. Describe the existing Air Pollution Control District permits in effect at the site.

D. Water Quality

Would the proposal result in a discharge into surface or ground waters or in any alteration of surface or groundwater quality, including, but not limited to temperature, dissolved oxygen, turbidity, pesticides, herbicides, fertilizers, gas, oil or other noxious chemicals?

Using existing data that have been collected in Mission Bay (including data from SeaWorld's storm water and aquaria outfalls) provide a report prepared by a water quality expert which profiles existing Mission Bay water quality. Conduct water and sediment quality sampling in the area of the marina and its expansion area and incorporate this data into the report. The report must determine whether maintaining/expanding the marina, continuing existing uses and introducing new uses (in-the-water shows/events or recreational vehicle rental) have the potential to result in significant water quality impacts.

Describe and quantify how saltwater is cycled through SeaWorld aquaria and characterize the quality of the water. Describe the fate of the discharged water and any associated contaminants? Describe the existing stormwater treatment and drainage facilities in terms of their locations, processes and whether or not they intercept first-flush stormwater runoff for all land areas within the leasehold. In general, runoff from parking lots over 20 spaces in size can be assumed to significantly impact water quality. Describe the water quality/best management practices program that was developed in response to the Coastal Commission's January 14, 1998 Notice of Intent to Issue Permit. Describe the existing Regional Water Quality Board Discharge Permit, list the types of contaminants that are regulated and describe SeaWorld's compliance record with the permit.

The SeaWorld leasehold includes a recreational boat marina. Describe the water quality impact from operation of the marina. The current lease allows SeaWorld to operate watercraft within Mission Bay and to embark and disembark passengers from the leasehold. The EIR should assume that SeaWorld would operate continuous in-the-water exhibits/shows (using ski boats with large outboard engines), offer continuous, new boat ride attractions (using larger vessels with diesel and/or automotive inboard engines) and operate personal watercraft rental concessions with activity levels comparable to existing rental agencies (current rental activity must be studied). Analyze the water quality impacts from these activities. This analysis may be refined if the plan is modified to include language which limits or prohibits these activities.

E. Biological Resources

Would the proposal result in a reduction in the number of any unique, rare, endangered, sensitive or fully protected species of plants or animals?

The potential exists for the project to result in indirect impacts to nearby, offsite resources. A survey of offsite resources is not required unless the applicant desires to refine previously-published data. In lieu of a survey, the applicant may rely on the survey completed for the Natural Resources Management Plan in the Mission

Bay Park Master Plan Update. A site-specific biological resources survey is required where direct impacts could occur: where a boat dock or other structure could be constructed and in the area of the marina expansion. An impacts analysis, prepared by a qualified biologist, will be required to assess indirect impacts. The analysis should include light, noise and shading impacts to eelgrass, least terns and other sensitive waterfowl. The report should also describe potential impacts from adding raptor perching sites and should identify appropriate buffering and/or mitigation that could be used to reduce indirect impacts to below significance.

For purposes of the analysis, assume that all of the Area 1 development sites would be developed with thrill rides at the maximum proposed bulk and height and that the project would construct a dock/terminal separate from the marina of a size and nature to allow passengers on and off SeaWorld boats for rides in Mission Bay. Describe the Landscaping Guidelines proposed as part of the Master Plan and the potential for exotic plant stock to escape and infest nearby areas.

Reference past biological mitigation measures that have been required by the Coastal Commission (eelgrass restoration, least tern mitigation) for past approvals. Indicate whether these measures would be proposed in conjunction with future projects.

F. Noise

Would the proposal result in a significant increase in the existing ambient noise levels?

Would the proposal result in the exposure of people to current or future transportation noise levels which exceed standards established in the Transportation Element of the General Plan?

Describe the existing noise environment at the periphery of the leasehold. The plan notes only that the project would be consistent with the City's Noise Ordinance; however, the Noise Ordinance is based on an averaged noise level over a one-hour period (Leq). This standard may not be appropriate to characterize the project because of the potential for the project to generate single event noises which, when averaged over a one hour period, would not exceed the thresholds in the Noise Ordinance (e.g., the fireworks show and thrill rides with horns, buzzers and screaming riders). Moreover, neither the Noise Ordinance nor any Fire Department regulations regulate the display of fireworks currently used at SeaWorld (Fire Department regulations address only storage of fireworks); rather, the fireworks are regulated by City Council Policy 500.6.

Describe the types of fireworks used at SeaWorld and City Council Policy 500.6. Describe the range of other noises that would result from the project. Analyze the potential impacts of doubling the frequency and intensity of the fireworks shows and assume that all of the Area 1 development sites would be developed with thrill rides at the maximum proposed bulk and height and operated at maximum frequency. Provide a table showing a variety of single event noise levels, their

frequency and the resulting average noise levels. Define the frequency of the expected noise that would need to occur in order to exceed Noise Ordinance standards.

The noise study should also address whether traffic generation would result in noise impacts along nearby roads. The proposal includes a hotel near Ingraham Street. Analyze the potential for traffic-generated noise to impact hotel guests. Factor in noise levels from aircraft departing Lindbergh Field.

G. Light, Glare and Shading

Would the proposal result in substantial light, glare or shading?

The proposed master plan update does not provide standards for new lighting or the types of materials that would be used to construct the proposed improvements. However, it is reasonable to assume that improvements would be designed to attract public attention. For the analysis of this issue, assume that all structures over thirty feet tall are illuminated, assume that all of the Area 1 development sites would be developed with thrill rides at the maximum proposed bulk and height, that all building materials would be at least semi-reflective and that there would be no transparency within the development site below 100 feet (assume 50% transparency above 100 feet per plan requirements). The plan indicates that low level lighting "may" be used to highlight the splashdown ride, however, "low level" is not defined and the term "may" provides no certainty. It is reasonable to assume that high intensity lights may be used on this and the Tier 2 development sites.

Describe what the City's Light Pollution Ordinance regulates. For the lighting analysis, assume that the project complies with the Light Pollution Ordinance but describe at least three different arrays of lights (varying the number, type and intensity of the lights) on all Area 1 development areas. One of the three arrays should represent lighting similar to that currently on the SeaWorld tower. Provide a photosimulation of site with the lights at night after consultation with EAS staff regarding an appropriate viewpoint. Existing and reasonably foreseeable light intensity should be quantified as well.

Submittal of specific lighting criteria to which new development would be subject could change the nature of the required analysis.

Prepare a shading analysis to analyze shading over the bay throughout the year and discuss the impacts to biological resources in that section. Describe shading over land areas adjacent to the leasehold such South Shores. Describe whether the proposed bulk plane setback would affect the degree of shading, including at the areas where it would not apply (i.e., where existing structures are located). Describe whether drivers on nearby roads, including freeways, would be impacted by glare from the project.

H. Recreational Resources

Would the proposal result in an impact upon the quality or quantity of existing recreational opportunities?

This section should summarize the project's automobile and pedestrian impacts from the Transportation/Circulation section below and analyze them in the context of whether the project would impede access to other recreational facilities in the area. Describe existing and proposed public shoreline access.

I. Transportation/Circulation

Would the proposal result in traffic generation in excess of specific/community plan allocation?

Would the proposal result in an increase in projected traffic which is substantial in relation to the capacity of the street system?

Would the proposal result in an increased demand for off-site parking?

Would the proposal result in substantial impact upon existing or planned transportation systems?

Would the proposal result in alterations to present circulation movements including effects on existing public access to beaches, parks, or other open space areas?

Would the proposal result in an increase in hazards to motor vehicles, bicyclists or pedestrians?

Although not specifically mentioned in the proposed plan, it is assumed that the applicant has a target (increased) attendance figure that would make SeaWorld successful into the future and that the attendance figure was used to size the [possible] parking garage and surface parking requirements. A traffic study, based on this attendance or a reasonably foreseeable larger figure, must be conducted in accordance with a scope of work determined by the Transportation Development Section. The need for the study to comply with the State's Congestion Management Program will also be determined in conjunction with Transportation Development. This section of the EIR should also summarize past studies and describe traffic-related mitigation measures/permit conditions that have previously been applied to the site.

A reasonably foreseeable scenario will need to be refined by Transportation Development, EAS staff and the consultant, but it should assume that the hotel contains the maximum number of rooms within the acreage shown on the plan. The rationale for the number of rooms should appear in the EIR. The applicant has committed to accommodating a trolley station if desired by MTDB. For purposes of determining whether adequate parking would be provided on site,

assume that the parking garage would not be built or agree to maintain a specific number of spaces to be phased/adjusted with attendance.

J. Energy

Would the proposal result in the use of excessive amounts of fuel or energy?

Describe existing energy usage at SeaWorld and estimate the increase that would result from the project. Include on-site energy generation.

K. Water Conservation

Would the proposal result in use of excessive amounts of water?

Would landscaping be primarily drought tolerant?

Describe existing fresh and salt water usage at SeaWorld and estimate the increase that would result from the project. The proposal includes no landscaping guidelines. Unless such a plan is received prior to distribution of the DEIR for public review, assume that no new landscaping would be drought tolerant, that it would be non-native and potentially invasive. The potential impact of invasive plants escaping from SeaWorld should be addressed in the Biological Resources section above.

L. Neighborhood Character/Aesthetics

Would the proposal result in the obstruction of any vista or scenic view from a public viewing area?

Would the proposal result in the creation of a negative aesthetic site or project?

Would the project include bulk, scale, materials or style which would be incompatible with surrounding development?

Would the project result in substantial alteration to the existing character of the area?

Due to the acreage of the leasehold and the height of some of the existing improvements (sky tower, aerial tramway), SeaWorld is currently very visible in views of and across Mission Bay from some public vantage points. The project would allow 47.5 acres of the site to contain structures over thirty feet tall. These additions would make SeaWorld more visible. The appearances of the improvements are unknown but it can be assumed that one of the goals of the design would be high visibility for purposes of attracting visitors. Therefore, the EIR should assume that all structures over thirty feet tall would be illuminated, that all of the Area 1 development sites would be developed with thrill rides at the maximum proposed bulk and height, that all building materials would be at least semi-reflective and that the design of the thrill rides includes solid/opaque

structures below 100 feet above the ground (assume 50% transparency above 100 feet per the plan's development criteria).

The plan refers to the Mission Bay Park Plan Update for limitations on the color of structures, but the Park Plan recommends light but not white colors but includes no enforceable criteria; it recommends development of project-specific guidelines. The EIR should assume that colors would be bright and would stand out from the viewshed background in order to attract attention. The analysis should be consistent with the limitations on viewshed encroachment described in the proposed plan.

The EIR should provide photosimulations of the above-referenced scenario from the view corridors/viewsheds listed in the Mission Bay Park Master Plan. Additional photosimulations, with vantage points to be determined in conjunction with EAS staff, should be provided to demonstrate visual quality impacts from the north and west. The analysis of visual quality impacts in the EIR cannot be limited to the views and view corridors identified in the proposed plan; rather the EIR must investigate and analyze a reasonable range of potentially significant visual quality impacts from various public vantage points. For example, it may be appropriate to provide a photosimulation of the parking garage from the perspective of passersby on Ingraham Street.

Existing views of the parking lot must be documented. Views of the parking garage must be addressed. The plan relies on trees planted along the perimeter of the parking lot to mitigate visual impacts. The EIR should describe how the project would impact views of the site from the north. Describe the short-term impact that would occur between the time the trees are planted and the time they reach the height at which it is assumed they would mitigate visual quality impact.

The Mission Bay Park Master Plan Update calls for a view corridor south of the Hubbs research building. However, the SeaWorld plan indicates a parking structure and hotel in this area. Describe whether the specified view corridor would be provided and provide a cross reference to this discussion in the Land Use section.

M. Human Health/Public Safety

Would the proposal result in exposure of people to potential health hazards?

Would the proposal result in a future risk of an explosion or the release of hazardous substances (including, but not limited to gas, oil, pesticides, chemicals or explosives)?

Provide background on the inactive landfill located east of the expansion area. How well is the western boundary of the landfill documented? What is the likelihood of solid waste being encountered during excavation of footings for improvements? Are emissions currently being released from the landfill?

List and quantify all chemicals and explosives kept on site. Describe their uses, existing and proposed containment systems and safety procedures required by law.

At this point, the City has determined that the following issues are not potentially significant and do not require analysis in the EIR: Natural Resources, Population, Housing, Public Services (possibly), Utilities, Historical Resources and Paleontological Resources.

However, if these or other potentially significant issue areas arise during detailed environmental investigation of the project, consultation with this division is required to determine if these other areas need to be addressed in the EIR. Additionally, as supplementary information is submitted, the EIR may need to be expanded to include additional issue areas. A separate section of the EIR should include a brief discussion of why certain areas were not considered to be potentially significant.

Mitigation measures should be clearly identified and discussed and their effectiveness assessed in each issue section of the EIR even if the measures are not proposed by the applicant. In addition, a monitoring and reporting program for each mitigation measure must be included. At a minimum, this program should identify: 1) the department responsible for the monitoring; 2) the monitoring and reporting schedule; and 3) the completion requirements. Mitigation measures and the monitoring and reporting program for each impact should also be contained (verbatim) in a separate section, which will not be attached to the DEIR.

I. MANDATORY DISCUSSION AREAS

In accordance with CEQA Section 15127, the EIR must include a discussion of the following issue area:

- A. Any significant irreversible environmental changes which would be involved in the proposed action should it be implemented.

II. CUMULATIVE EFFECTS

When this project is considered with other projects in Mission Bay Park, implementation could result in significant environmental changes which are individually limited but cumulatively considerable. Therefore, in accordance with Section 15130 of the CEQA Guidelines, potential cumulative impacts should be discussed in a separate section of the DEIR. This section should include all existing and pending leases in the park, including those undergoing preliminary review by the Real Estate Assets Department. Contact Linda Fiero in the Real Estate Assets Department for a complete listing and details on these projects.

III. ALTERNATIVES

The EIR should place major attention on reasonable alternatives which avoid or mitigate the project's significant impacts. These alternatives should be identified and discussed in detail, and the discussion should address all significant impacts.

The alternatives analysis should be conducted in sufficient graphic and narrative detail to clearly assess the relative level of impacts and feasibility. Preceding the detailed alternatives analysis should be a section entitled "Alternatives considered but rejected." This section should include a discussion of preliminary alternatives that were considered but not analyzed in detail. The reason for rejection should be explained.

Based on the current plan, the following alternatives should be considered. If the plan is revised to eliminate potentially significant impacts prior to release of the draft EIR, or if the EIR analysis indicates that certain impacts are not significant, analysis of some of these alternatives may not be required.

A. No Project

This alternative should analyze the impacts of keeping the existing Master Plan in place and not increasing the height limit.

B. More Regulated Alternative

Describe a project that would preclude modification of the shoreline and rental of vessels powered by two-cycle engines. The plan under this alternative would also preclude a certain range of colors (notably bright or fluorescent) to be used on structures over thirty feet tall, would include a maximum reflectivity coefficient for all structures over 30 feet tall and would limit lighting to below an as-yet unspecified level. This alternative should designate a total of three of the 160-foot development areas for rides, three for shows and three for exhibits. Describe how shows and exhibits would utilize structures of this height. This alternative would limit fireworks displays to their existing levels; contact the Fire Department for their recent noise survey results. This alternative should also include a plant palette to limit the species that could be planted.

C. Enhanced Public Access Alternative

Provide a revised site plan that would accommodate pedestrian and/or bicycle traffic along the entire water frontage of the leasehold.

D. No Hotel

If the project would result in significant direct or cumulative traffic impacts, this alternative should try to reduce traffic generation at the leasehold by removing the hotel proposal

E. Underground Parking Garage

If the geotechnical report indicates that it would be feasible to build the parking structure at least partially below grade, this alternative should propose to construct the parking garage underground in order to reduce visual impacts.

F. No Parking Structures or Hotels over 30 feet Tall

It is anticipated that these structures, being bulky by their nature, would contribute substantially to significant visual quality impacts. Therefore, this alternative should reduce this impact by limiting the height of these structures.

G. Less Visually Intrusive Alternative

This alternative should include a proposed plan which is accompanied by more restrictive design guidelines than those included in the current submittal. For example, the guidelines should specify minimum and maximum bulk for various heights and should restrict maximum heights from visually sensitive areas other than those identified in the Mission Bay Park Master Plan.

EAS recommends a meeting to discuss this scope in detail. Until a screencheck EIR is submitted which addresses all of the above issues is received, the processing timeline for this project will be put on hold. If you have any questions about this letter, please contact Senior Planner Chris Zirkle at (619) 446-5348.

Sincerely,

Lawrence C. Monserrate
Environmental Review Manager

cz

cc: Mike Westlake, Development Project Manager
Ann Gonsalves, Transportation Development
Linda Fiero, Real Estate Assets Department
Chris Zirkle, Senior Planner, Land Development Review
EAS Seniors



STATE OF CALIFORNIA

Governor's Office of Planning and Research
State Clearinghouse



Gray Davis
GOVERNOR

Steve Nissen
ACTING DIRECTOR

Notice of Preparation

July 18, 2000

To: Reviewing Agencies
Re: Sea World Master Plan
SCH# 1984030708

Attached for your review and comment is the Notice of Preparation (NOP) for the Sea World Master Plan draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Chris Zirkle
City of San Diego
1222 First Avenue
MS-501
San Diego, CA 92101

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Project Analyst, State Clearinghouse

Attachments
cc: Lead Agency

**Document Details Report
State Clearinghouse Data Base**

SCH# 1984030708
Project Title Sea World Master Plan
Lead Agency San Diego, City of

Type NOP Notice of Preparation

Description Amendments to the Mission Bay Park Plan/Local Coastal Program Land Use Plan and the SeaWorld Master Plan to revise the height limit at SeaWorld from 30 to a maximum of 160 feet. The revised SeaWorld Master Plan shows locations within the theme park where taller structures could be developed; one of which is specified for development as a "splash-down" ride. The other locations could be developed with exhibit, rides or shows. Renovation of the front gate is also proposed. Other structures within the leasehold but outside the theme park exceeding 30 feet in height would include a hotel, an Educational Facility, Special Events Center and a parking structure. The project also includes expansion of the Perez Cove marina and would allow for additional future redevelopment throughout the leasehold via two different decision-making processes. The 189.4 acre site is located on SeaWorld Drive at the southern edge of Mission Bay Park.

Lead Agency Contact

Name Chris Zirkle
Agency City of San Diego
Phone 619/446-5348 **Fax**
email
Address 1222 First Avenue
 MS-501
City San Diego **State** CA **Zip** 92101

Project Location

County San Diego
City Mission Beach, Pacific Beach
Region
Cross Streets Ingraham Street/Sea World Drive

Parcel No.

Township	Range	Section	Base

Proximity to:

Highways I-5/I-8
Airports
Railways SD/AE
Waterways San Diego River
Schools
Land Use Theme Park/Unzoned/Regional Park

Project Issues Aesthetic/Visual; Air Quality; Coastal Zone; Drainage/Absorption; Geologic/Seismic; Noise; Recreation/Parks; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Wetland/Riparian; Wildlife; Landuse

Reviewing Agencies Resources Agency; Department of Boating and Waterways; California Coastal Commission; Department of Conservation; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Game, Region 5; Department of Fish and Game, Marine Region; Native American Heritage Commission; State Lands Commission; Caltrans, District 11; Caltrans, Division of Aeronautics; California Highway Patrol; Regional Water Quality Control Board, Region 9

Date Received 07/17/2000 **Start of Review** 07/18/2000 **End of Review** 08/16/2000

NOP Distribution List

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916/358-2898 Fax 916/358-2912
 - Robert Floerke (Region 3)**
Department of Fish and Game
7329 Silverado Trail
Napa, CA 94558
707/944-5517 Fax 707/944-5563
 - William Laudermilk (Region 4)**
Department of Fish and Game
1234 East Shaw Avenue
Fresno, CA 93710
559/243-4005 Fax 559/243-4022
 - Sandy Peterson (Region 5)**
Department of Fish and Game
Habitat Conservation Program
4949 Viewridge Avenue
San Diego, CA 92123
858/467-4234 Fax 858/467-4299
 - Gabrina Gatchel (Region 6)**
Department of Fish and Game
Habitat Conservation Program
4775 Bird Farm Road
Chino Hills, CA 91709
909/597-9823 Fax 909/597-0067
 - Tammy Allen (Region 6, Inyo/Mono)**
Department of Fish and Game
Habitat Conservation Program
407 West Line Street, Room 8
Bishop, CA 93514
760/872-1461 Fax 760/872-1284
 - DeWayne Johnston (Marine Region)**
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20 Lower Ragsdale Drive, Suite 100
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831/649-2870 Fax 831/649-2894

Independent Commissions/Agencies

- Greg Newhouse**
California Energy Commission
1516 Ninth Street, MS-15
Sacramento, CA 95814
916/654-3000 Fax 916/654-3882
- Debbie Treadway**
Native American Heritage Comm.
915 Capitol Mall, Room 364
Sacramento, CA 95814
916/653-4082 Fax 916/657-5390
- Andrew Barnsdale**
Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
415/703-3231 Fax 415/703-1184
- Betty Silva**
State Lands Commission
100 Howe Avenue, Suite 100-S
Sacramento, CA 95825
916/574-1872 Fax 916/574-1885

Department of Transportation District Contacts

- ICR/Planning**
Caltrans, District 1
1656 Union Street
P.O. Box 3700
Eureka, CA 95502-3700
707/441-5812 Fax 707/441-5869
- Vicki Roe**
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Caltrans, District 2
P.O. Box 496073
Redding, CA 96049-6073
530/225-3089 Fax 530/225-3271
- Jeff Pulverman**
Caltrans, District 3
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- Mike Sim**
Caltrans, District 8
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San Bernardino, CA 92401-1400
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- Chris Sayre**
Caltrans, District 10
P.O. Box 2048
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209/948-7142 Fax 209/948-7906
- Lou Salazar**
Caltrans, District 11
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2827 Juan Street
San Diego, CA 92186-5406
619/688-3140 Fax 619/688-4299
- Aileen Kennedy**
Caltrans, District 12
3347 Michelson Drive, Suite 100
Irvine, CA 92612-0661
949/724-2239 Fax 949/724-2592

Business, Transportation, & Housing

- Cathy Creswell**
Housing & Community Development
Housing Policy Division
1800 Third Street, Room 430
Sacramento, CA 95814
916/323-3176 Fax 916/327-2643
- Sandy Hesnard**
Caltrans - Division of Aeronautics
P.O. Box 942874 MS-40
Sacramento, CA 94274-0001
916/654-5314 Fax 916/653-9531
- Lt. Dennis Brunette**
California Highway Patrol
Office of Special Projects
2555 1st Ave.
Sacramento, CA 95818
916/657-7222 Fax 916/452-3151
- Ron Helgeson**
Caltrans - Planning
P.O. Box 942874
Sacramento, CA 94274-0001
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State and Consumer Services

- Robert Sleppy**
Dep. of General Services
Environmental Services Section
1102 Q Street, #5100
Sacramento, CA 95814-6511
916/324-0214 Fax 916/445-3556

California Environmental Protection Agency

- Air Resources Board**
2020 L Street (PO Box 2815)
Sacramento, CA 95814 (95814-2815)
916/327-5783 Fax 916/322-3646
- Rob Rogen**
(airport projects)
- Ann Geraghty**
(transportation projects)
- Mike Tollstrup**
(industrial projects)
- Sue O'Leary**
Integrated Waste Management Board
8800 Cal Center Drive MS 24
Sacramento, CA 95826
916/255-0663 Fax 916/366-2428
- Diane Edwards**
State Water Resources Control Board
Division of Clean Water Programs
P.O. Box 944212
Sacramento, CA 94244-2120
916/227-4572 Fax 916/227-4349

SCH#

- Phil Zentner**
State Water Resources Control Board
Division of Water Quality
P.O. Box 944213
Sacramento, CA 94244-2130
916/657-0912 Fax 916/657-2388
- Mike Falkenstein**
State Water Resources Control Board
Division of Water Rights
901 P Street, 3rd Floor
Sacramento, CA 95814
916/657-1377 Fax 916/657-1485
- Dept. of Toxic Substances Control**
CEQA Tracking Center
400 P Street, Fourth Floor
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Sacramento, CA 95812-0806
916/324-3119 Fax 916/324-1788
- Regional Water Quality Control Board**
- North Coast Region (1)**
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- San Francisco Bay Region (2)**
Environmental Document Coordinator
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- Central Coast Region (3)**
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- Los Angeles Region (4)**
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- Central Valley Region (5)**
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916/255-3000 Fax 916/255-3015
- Fresno Branch Office**
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559/445-5116 Fax 559/445-5910
- Redding Branch Office**
415 Knollcrest Drive
Redding, CA 96002
530/224-4845 Fax 530/224-4857
- Lahontan Region (6)**
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150
530/542-5400 Fax 530/544-2271
- Victorville Branch Office**
15428 Civic Drive, Suite 100
Victorville, CA 92392-2359
760/241-6583 Fax 760/241-7308
- Colorado River Basin Region (7)**
73720 Fred Waring Drive, #100
Palm Desert, CA 92260-2564
760/346-7491 Fax 760/341-6820
- Santa Ana Region (8)**
3737 Main Street, Suite 500
Riverside, CA 92501-3339
909/782-4130 Fax 909/781-6288
- San Diego Region (9)**
9771 Clairemont Mesa Blvd., Suite A
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619/467-2057 Fax 619/451-6079

DEPARTMENT OF FISH AND GAME

South Coast Region
4949 Viewridge Avenue
San Diego, California 92123
(858) 467-4201
FAX (858) 467-4235



July 27, 2000

Chris Zirkle
City of San Diego
1222 First Avenue
MS 501
San Diego CA 92101

**Notice of Preparation of a Draft Environmental Impact Report for the
Sea World Master Plan
City of San Diego, San Diego County
(SCH#19844030708)**

Dear Mr. Teasley:

The California Department of Fish and Game (Department) has reviewed the above referenced document in the City of San Diego, County of San Diego. The City of San Diego has an approved Subarea Plan and Implementing Agreement under the Natural Community Conservation Planning (NCCP) program. In preparing the environmental documentation for the proposed project, the Draft Environmental Impact Report must ensure and verify that all requirements and conditions of the Subarea Plan and Implementing Agreement are met. Biological issues that are not addressed in the Subarea Plan and Implementing Agreement, such as specific impacts to and mitigation requirements for wetlands or sensitive species and habitats that are not covered by the Subarea Plan and Implementing Agreement, also will need to be addressed.

Issue areas in the environmental report that may be influenced by the Subarea Plan and Implementing Agreement include "Land Use," "Landform Alteration/Visual Quality," "Traffic/Circulation," "Biological Resources," "Drainage/Urban Runoff/Water Quality," "Noise," and "Cumulative Effects." In addition, the environmental document should describe why the proposed project, irrespective of other alternatives to the project, is consistent with and appropriate in the context of the Subarea Plan.

Thank you for the opportunity to comment. Please contact Erinn Wilson at (858)636-3167 if you need to discuss this response.

Chris Zirkle
July 27, 2000
Page 2

Sincerely,

William E. Tippets
Habitat Conservation Supervisor

cc: Department of Fish and Game
Files
San Diego

U.S. Fish and Wildlife Service
Nancy Gilbert
Carlsbad

State Clearinghouse
Sacramento

File: Chron
file: NCCP/Sea World Master planNOP.wpd

California Regional Water Quality Control Board

San Diego Region

Internet Address: <http://www.swrcb.ca.gov/~rwqcb9/>
9771 Clairemont Mesa Boulevard, Suite A, San Diego, California 92124-1324
Phone (858) 467-2952 • FAX (858) 571-6972

July 20, 2000

City of San Diego
Land Development Review Division
1222 First Avenue, MS 501
San Diego, Ca 92101

Attention: Chris Zirkle

Subject: Sea World Master Update

Dear Mr. Zirkle,

We have received the subject documents and offer the following comments. We are also providing some additional information regarding the possible regulatory requirements for the subject project since this information has not been selected to be project-specific. Some of the information might not apply to this project.

We would like to see the following questions/concerns addressed in your Environmental Impact Report regarding the subject project:

- a) Would the proposed project create a potentially significant adverse environmental impact to drainage patterns or the rate, or quantity of surface water and runoff?
- b) Would the proposed project result in discharges into surface waters during or following construction, or in any way lead to a significant alteration of surface water quality including, but not limited to temperature, dissolved oxygen, turbidity or other typical urban storm water pollutants (e.g., metals, pathogens, synthetics, organics, sediment, nutrients, oxygen demanding substances.)?
- c) Would the proposed project have a potentially significant adverse impact to groundwater flow through the alteration of pressure head (water table level) within the aquifer or through the interception of groundwater flow via cuts or excavation?
- d) Would the proposed project result in the loss or degradation of any beneficial uses that have been designated for the water bodies that will be directly or indirectly affected by the project?
- e) What mitigation measures are being proposed to eliminate or compensate for the adverse effects identified in (a) through (d) above?

California Environmental Protection Agency

Recycled Paper



Permits

There are six potential permits or approvals that might be needed from the Regional Quality Control Board during the life of a project. Additional information on these permits is provided to assist you in determining the permits that may be required for the proposed project; as well as to encourage project design modifications that may assist in obtaining all needed permits from the RWQCB or SWRCB.

During the construction and development phases of a project, the project could be subject to any one or more of four types of RWQCB permits or approvals. These include; (1) the Statewide National Pollutant Discharge Elimination System (NPDES) General Construction Activity Storm Water Permit, (2) the Clean Water Act 401 water quality Certification, (3) General Dewatering Permit, and (4) Dredging Permit. Upon completion of construction, and throughout the project's operational life, the project may be also subject to one or both of the following two types of RWQCB permits: (1) NPDES permit for any point source discharge of wastes to surface waters; and (2) State Waste Discharge Requirements (WDRs) for any waste discharge to land. Examples of discharges to land requiring WDRs include landfills, reclaimed water discharges from sewage treatment plants for irrigation purposes, sand and gravel operations, and animal confinement facilities.

Water quality degradation is regulated by the Federal National Pollutant Discharge Elimination System (NPDES) Program, established by the Clean Water Act, which controls and reduces pollutants to water bodies from point and non-point discharges. In California, the program is administered by the California Regional Water Quality Control Boards. The Regional Board issues NPDES permits for discharges to water bodies in the San Diego area, including Municipal (area- or county-wide) Storm Water Discharge Permits.

Construction SWPPP

Projects disturbing more than five acres of land during construction must be covered under the State NPDES General Permit for Discharges of Storm Water Associated with Construction Activity. This can be accomplished by filing a Notice of Intent (NOI). The project sponsor must propose and implement control measures that are consistent with this State Construction Storm Water General Permit, and with recommendations and policies of the local agency and the RWQCB.

Industrial SWPPP

Projects that include facilities with discharges of Storm Water Associated with Industrial Activity must be covered under the State NPDES General Permit for Discharges of Storm Water Associated with Industrial Activity. This may be accomplished by filing a Notice of Intent. The project sponsor must propose control measures that are consistent with this, and with recommendations and policies of the local agency and the RWQCB. In a few cases, the project sponsor may apply for (or the RWQCB may require) issuance of an individual (industry- or facility-specific) permit.

Municipal SWPPP

The RWQCB's San Diego Urban Runoff Municipal Permit requires San Diego area municipalities to develop and implement Storm Water Management Plans (SWMPs). The SWMPs must include a program for implementing new development and construction site storm water quality controls. The objective of this component is to ensure that appropriate measures to control pollutants from new development are: considered during the planning phase, before construction begins; implemented during the construction phase; and maintained after construction, throughout the life of the project.

Water Quality Certification

The RWQCB must certify that any permit issued by the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act (covering, dredging, or filling of wetlands) complies with state water quality standards. Section 401 Water Quality Certification, or waiver, is necessary for all 404 Nationwide Permits, reporting and non-reporting, as well as individual permits.

Wetlands enhance water quality through such natural functions as flood and erosion control, stream bank stabilization, and filtration and purification of contaminants. Wetlands also provide critical habitats for hundreds of species of fish, birds, and other wildlife; offer open space; and provide many recreational opportunities. Adverse Water quality impacts can occur in wetlands from construction of structures in waterways, dredging, filling, and, otherwise altering the drainage to wetlands.

All projects must be evaluated for the presence of jurisdictional wetlands. Destruction or impact to wetlands should be avoided. Water quality certification may be denied based on significant adverse impacts to "Waters of the State." The goals of the California Wetlands Conservation Policy, include ensuring "no overall net loss and achieving a long-term net gain in the quantity, quality, and permanence of wetlands acreage and values." In the event wetland loss is unavoidable, mitigation will be preferably in-kind and on-site, with no net destruction of habitat value. Mitigation will preferably be completed prior to, or at least simultaneous to, the filling or other loss of existing wetlands.

Successful mitigation projects are complex tasks and difficult to achieve. This issue will be strongly considered during agency review of any proposed wetland fill. Wetland features or ponds created as mitigation for the loss of existing "jurisdictional wetlands" or "waters of the United States" cannot be used as storm water treatment controls.

CEQA requires monitoring of all mitigation efforts as a condition of project approval. Although monitoring programs are not required to be included in environmental documents, it is helpful to know what sort of mitigation monitoring the applicant intends to implement, and who will be accountable for seeing that any proposed mitigation's are successfully executed.

Project/ Site Planning

Evidence of filing for a NOI and development of a SWPPP should be a condition of development plan approval by all municipalities. Implementation of the SWPPP should be enforced during construction via appropriate options such as citations, stop work orders, or withholding occupancy permits. Impacts identified should be avoided and minimized by developing and implementing the following.

The project should minimize impacts from project development by incorporating appropriate site planning concepts. This should be accomplished by designing and proposing site planning options as early in the project planning phases as possible. Appropriate site planning concepts to include, but are not limited to the following:

- Phase construction to limit areas and periods of impact.
- Minimize directly connected impervious areas.
- Preserve natural topography, existing drainage courses and existing vegetation.
- Locate construction and structures as far as possible from streams, wetlands, drainage areas, etc.
- Reduce paved area through cluster development, narrower streets, use of porous pavement and/or retaining natural surfaces.
- Minimize the use of gutters and curbs that concentrate and direct runoff to impermeable surfaces.
- Use existing vegetation and create new vegetated areas to promote infiltration.
- Design and lay out communities to reduce reliance on cars.
- Include green areas for people to, walk their pets, thereby reducing build-up of bacteria, worms, viruses, nutrients, etc. in impermeable areas, or institute ordinances requiring owners to collect pets' excrement.
- Incorporate low-maintenance landscaping.
- Design and lay out streets and storm drain systems to facilitate easy maintenance and cleaning.
- Consider the need for runoff collection and treatment systems.
- Label storm drains to discourage dumping of pollutants into them.

Construction- Phase Management

Erosion Prevention

The project should minimize erosion and control sediment during and after construction. This should be done by developing and implementing an erosion control plan, or equivalent plan. This plan should be included in the SWPPP. The plan should specify all control measures that will be used or which are anticipated to be used, including, but not limited to, the following:

- Limit access routes and stabilize access points.
- Stabilize denuded areas as soon as possible with seeding, mulching, or other effective methods.
- Protect adjacent properties with vegetative buffer strips, sediment barriers, or other effective methods.
- Delineate clearing limits, easements, setbacks, sensitive areas, vegetation and drainage courses by marking them in the field.
- Stabilize and prevent erosion from temporary conveyance channels and outlets.
- Use sediment controls and filtration to remove sediment from water generated by dewatering or collected on-site during construction. For large sites, stormwater settling basins will often be necessary.
- Schedule grading for the dry season (May-Sept.)

Chemical and Waste Management

The project should minimize impacts from chemicals and wastes used or generated during construction. This should be done by developing and implementing a plan or set of control measures. The plan or control measures should be included in the Storm Water Pollution Prevention Plan. The plan should specify all control measures that will be used or which are anticipated to be used, including, but not limited to, the following:

- Designate specific areas of the site, away from streams or storm drain inlets, for storage, preparation, and disposal of building materials, chemical products, and wastes.
- Store stockpiled materials and wastes under a roof or plastic sheeting.
- Store containers of paint, chemicals, solvents, and other hazardous materials stored in containers under cover during rainy periods.
- Berm around storage areas to prevent contact with runoff.
- Cover open Dumpsters securely with plastic sheeting, a tarp, or other cover during rainy periods.

- Designate specific areas of the site, away from streams or storm drain inlets, for auto and equipment parking and for routine vehicle and equipment maintenance.
- Routinely maintain all vehicles and heavy equipment to avoid leaks.
- Perform major maintenance, repair, and vehicle and equipment washing off-site, or in designated and controlled areas on-site.
- Collect used motor oil, radiator coolant or other fluids with drip pans or drop cloths. Store and label spent fluids carefully prior to recycling or proper disposal.
- Sweep up spilled dry materials (cement, mortar, fertilizers, etc.) immediately—do not use water to wash them away.
- Clean up liquid spills on paved or impermeable surfaces using "dry" cleanup methods (e.g., absorbent materials, cat litter, rags) and dispose of cleanup materials properly.
- Clean up spills on dirt areas by digging up and properly disposing of the soil.
- Keep paint removal wastes, fresh concrete, cement mortars, cleared vegetation, and demolition wastes out of gutters, streams, and storm drains by using proper containment and disposal.

We appreciate the opportunity to comment on the subject environmental document and look forward to your response. If you have any questions regarding our concerns or questions, please do not hesitate to contact me at (858) 467-3278 or at carim@rb9.swrcb.ca.gov.

Sincerely,



Melisa I. Caric



SIERRA
CLUB
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San Diego Chapter

Serving the Environment in San Diego and Imperial Counties

August 9, 2000

City of San Diego
Planning and Development Review Department
Land Development Review Division
1222 First Avenue
Mail Station 501
San Diego, CA 92101
Attention: Chris Zirkle, Senior Planner

Subject: Notice of Preparation of a Draft Environmental Impact Report for
Sea World Master Plan Update (LDR No. 99-0618) with attachment Scope of
Work for an EIR

Dear Mr. Zirkle:

The Sierra Club, San Diego Chapter has reviewed the Sea World Master Plan Update dated April 14, 2000. We concur that the proposed changes to Sea World requires an environmental impact report (EIR) .

In addition to the issues raised in the attachment of the subject Notice of Preparation (NOP) we submit the following issues that must be addressed in the EIR:

Project Description The Sea World Master Plan does not adequately describe the proposed project. Resorting to "reasonable assumptions" where details are lacking can mislead the public in assessing the impacts of the project. These assumptions followed by mitigation measures on these assumptions only compounds the issue. We are also concerned using the "worst case scenario" methodology to assess the impacts of the project. While worse case scenarios can be useful in the engineering designs there are many issues raised by this project that require clearly defined visualizations. Many of the issues relate to character of the project in relation to the neighborhood character/aesthetics, matters which are highly subjective.

Environmental Issues

- A. Geology and Soils The project should address any issues pertaining to groundwater intrusion into the structures planned during and post construction. If groundwater pumping is required, describe measures to test for water quality and means of disposal. We note that the hazardous waste landfill is adjacent to Sea World. Testing of the groundwater for presence of toxins prior to construction should be required.
- B. Water Quality
 1. The EIR should the quantify the sewage flows into the Metro Wastewater sewer lines. Determine if the plan will require additional flow capacity in the Metro

3820 Ray Street, San Diego, CA 92104-3623
www.sierraclub.org



trunkline accepting the sewage and the impacts if this is required. Describe if any toxic and or hazardous materials are present in the wastewater generated at the facility. If so, describe the pretreatment required.

2. Describe, in detail, the water treatment system used in the stormwater and aquaria outfalls. Quantify the amount of runoff to be treated by this system. The Master Plan states Sea World is committed to treating nearly 100% of the runoff. This statement should be clarified. Describe the total rainfall amount to be treated from a storm event. Describe the best management practices to reduce pollutants in the runoff prior to discharging the runoff into the City storm drain
3. Describe the water quality impacts on Mission Bay from the fireworks.
4. List and quantify the pesticides, herbicides, and other toxic matter that enter into the wastewater discharged into the bay outfalls.

C. Water Demand and Conservation

1. Quantify the total current and projected fresh water use by Sea World. Provide a breakdown by use, including; landscaping, exhibits and amusement, sanitary facilities. Describe if water metering according is used for demand management. Determine if water service lines to Sea World must be expanded and the consequent environmental impacts to construct new lines.
2. Describe the water conservation practices used including best management practices for both irrigation and non-irrigation requirements. State whether or not native plant will be used to conserve water.

D. Solid Waste Management

1. Describe the measures used to control litter from the Sea World facility including the parking lots and within the park. Litter if not strictly collected can enter Mission Bay, be scattered to surrounding area posing serious environmental hazards not to mention the aesthetic impacts.
2. Quantify the amount of solid waste generated, current and projected, that will be sent to landfills. Quantify the amounts of recycled material being used and the amounts being collected to be recycled. Describe the practices to reduce the waste matter generated including composting.

F. Biological Resources

1. Determine if native and migratory birds are attracted to the facility. If so, describe means that are used to protect them from cross species transfer of diseases from the avian exhibits.
2. Describe the means to prevent non-indigenous biological species, macro and micro, from the exotic animal exhibits from entering the local environment.
3. Describe the plant species to be used in the landscaping and their impacts on the environment.

G. Noise

1. Single noise level study should include not only that resulting from the fireworks but also that from accompanying acoustic levels from public address systems and music.

H. Light, glare and Shading

1. Sea World proposes "icons" for the various attractions within the park. The bulk size, height, and light levels have not been adequately described. The term

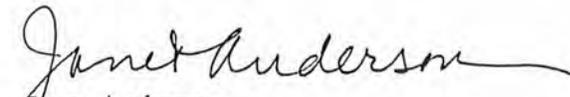
“transparency” used in the Master Plan appears to apply during the daylight hours. Transparency at night when these icons are illuminated takes on a different meaning. Here glare can significantly reduce the transparency, dependent on the lighting levels and atmospheric conditions. The EIR should provide data based on tests on actual prototypes of these icons.

I. Energy

1. Quantify the energy demands according to type: electrical, natural gas, diesel, gasoline.
2. Describe the energy conservation methods used.
3. Describe plans to curtail electrical energy demand during shortages to avoid brownouts

Thank you for this opportunity to comment on the subject Notice of Preparation.

Sincerely,


Janet Anderson
Chair, Conservation Committee

S.T.O.P.
Surfers Tired of Pollution
1161 Cushman Avenue, Suite A
San Diego, CA 92110
(619) 688-9886

August 18, 2000

Martha Blake
Land Development Review Division
1222 First Avenue
San Diego, CA 92101

RE: LDR NO. 99-0618, SeaWorld Master Plan Update, Notice of Preparation of a Draft Environmental Impact Report

Via: Facsimile

Dear Ms. Blake,

Surfers Tired of Pollution appreciates the opportunity to comment on the Notice of Preparation of the Draft Environmental Impact Report (DEIR) for the SeaWorld Master Plan Update. We have numerous concerns and have tried to address them as early in the process as possible.

1. ENVIRONMENTAL SETTING

It would be helpful to include a map and brief overview of the eelgrass/ underwater habitat in the surrounding area, particularly near the two SeaWorld outfalls and in the area near the marina. This should also include an overview/survey of the existing fish and bird populations.

2. PROJECT DESCRIPTION

Because SeaWorld is located on public parkland, it is necessary that meaningful public input and public participation occur. The review process proposed in the April 14, 2000 Revised Draft of SeaWorld Master Plan Update (Update) does not include the participation of the San Diego Planning Commission for either level of review. In addition, the NOP does not include the Planning Commission on the distribution list. The Planning Commission has been involved in this process and should continue to be noticed and included. The inclusion of the Planning Commission will also allow for more public review and participation on a local level.

The proposed Update's review process is currently structured to limit local public participation. For example, most of the new development will be reviewed under a Level

1 process. The only opportunity for public input and comment for a Level 1 review is at the California Coastal Commission.

A review of the Update also shows that projects in Area 1 (where approximately 21 acres of the over-height development is being proposed) generally would not include any opportunity for public comment on specific projects until the project went before the Coastal Commission. There is also a concern that the Real Estate Assets Department could make a determination of consistency for projects that are proposed to be reviewed as a Level 2 in Table III-1 in the Update, but in reality end up being reviewed at a Level 1. This could further exclude local public review. There needs to be some level of assurance that the process being analyzed for reviewing projects in the Update will actually be followed.

There also must be some discussion about projects proposed in Areas 2 through 5. No real specifics are provided, except to note that this is where approximately half of the over-height development is being proposed, which includes a hotel. Also a discussion should be included as to whether projects on the water will exceed 30 feet, or extend over and into the water area. If projects over 30 feet are proposed for development in the water portion of the lease, would they be included as part of the 25 percent proposed limit for projects exceeding 30 feet? An analysis of water projects must be included in the DEIR.

On page II-9 of the Update, does the proposed height distribution limit include existing structures such as the sky tower in the park and sky ride that extends over the water? How is the distribution of structures measured as it relates to visual impacts? For example, according to Figure II-4 in the Update the existing sky tower and sky ride account for less than one percent of overall leasehold over 30 feet. However, the visual impacts are quite stunning. The DEIR should include the possibility of 47 acres of similar structures and analyze the impacts. The analysis should not be limited to Area 1, Tier 1 and Tier 2 proposals, and should include the entire leasehold.

In order to understand the level of review and the process of review, the DEIR should include some analysis of a "typical" project review. This analysis should discuss the public noticing requirements for the Mission Bay Park Committee, the Design Review Committee of the Park and Recreation Board and the Park and Recreation Board. Also, the analysis should discuss the review process in relation to the City of San Diego's Land Development Code (LDC), and whether there are processes/exemptions in the LDC that would change the review process or height distribution proposed in the Update.

3. ENVIRONMENTAL ISSUES

A. Land Use

While it is true that an amendment to the Mission Bay Park Master Plan does not necessarily mean that the project conflicts with the goals and objectives of the Plan, this is not the case for the Update. For example, the Mission Bay Park Master Plan (Master Plan) cautions against, "extreme or exaggerated thematic designs" and supports a "park in

which views to the water and/or aquatic environments are maximized." In addition, the Master Plan reminds us that Mission Bay is "not a place for Disneyland." The intent of these goals and objectives is in direct conflict with "themed track rides and rail attractions" and "dark rides", which by their very nature are overly thematic. Please include in the discussion the number of amusement type rides being proposed and how the overly thematic Journey to Atlantis will meet the goals and objectives of the Master Plan.

B. Geology/Soils

Some discussion of the landfill soils should be included in this analysis. Also include a map of any underground storage tanks in the leasehold, and an analysis of existing and proposed storage tanks.

B. Air Quality

Please include some discussion of the potential impacts to air quality from the use of chlorine and other chemicals from the water treatment facilities.

D. Water Quality

An analysis of the sediment directly in front of and near the two intakes and outfalls for levels of bacteria and other pathogens should be included as part of the sediment sampling. Also include an analysis of existing/proposed pump out facilities and fueling facilities. There should also be an analysis of the potential impacts to water quality from automobiles, buses and trucks. The DEIR should include an analysis of potential impacts to water quality from the nightly fireworks displays, and how the paper debris from the fireworks is retrieved after dropping into the water. Please ensure that a Stormwater Pollution Prevention Plan is provided to address impacts from construction as part of the DEIR.

Also provide an analysis of the existing sewer services, industrial discharges (if any) to the sewer and any potential impacts from the proposed project. For example, discuss the increase in discharges from the hotel, conference facility and special events center.

J. Energy

Given the current energy crisis in Southern California, provide an analysis of current and expected electricity use. This should include a worst case scenario where rolling brown outs could occur. What safety measures are in place or being proposed to protect the marine mammals during energy shortages? This analysis also should include the amount of electrical energy required to operate the park during peak summer usage and the estimated increase in usage if the Update is implemented. Include safety measures currently in place and proposed to protect park goers from being stranded on rides.

This should also be included in a cumulative impacts analysis based on all the proposed projects in the park.

III. ALTERNATIVES

The range of alternatives should include an alternative (H) titled Public Comment Alternative. This would include no structures over 30 feet, no amusement type rides or hotels, enhanced public access along the water and a focus on marine education and conservation.

Thank you for providing us an opportunity to comment on this NOP. Please include us on an interested parties list for all notices and meetings related to this project and other Mission Bay projects. We look forward to working with you. Please do not hesitate to call with any questions.

Sincerely,

Donna Frye
Donna Frye
Founder, S.T.O.P.



SAN DIEGO AUDUBON SOCIETY

2321 Morena Boulevard, Suite D • San Diego CA 92110 • 619/275-0557

August 17, 2000
Replaces the August 15 version

VIA FACSIMILE: 619-446-5499

Ms. Martha Blake
City of San Diego
Land Development Review Division
1222 First Avenue MS 501
San Diego, California 92101

Dear Ms. Blake:

SUBJECT: NOP for Sea World Master Plan Update

The San Diego Audubon Society is concerned with the potential environmental impacts of the proposed Update. We agree that this project may have significant impacts. The attached Statement of Work, SOW, for the EIR is well thought out and incorporates many of our concerns. We urge that all of the issues mentioned in the SOW be addressed. We urge that the following issues or facets of issues discussed in the SOW also be addressed.

LAND USE

Sea World and the proposed expansion are on public property at the expense of public parkland. As such Sea World should provide a positive value to the community beyond its monetary impact. The EIR should assess its value as a public benefit vs. simply an amusement park. The thrill-ride orientation of this update mentioned in the SOW suggests that these attractions should be sited at a facility on non-park land. We urge that the EIR evaluate the issue that the thrill rides as well as the hotel and dormitory elements will be usurping land that could better be used for recreation, open space, and habitat in a city that is facing ever increasing park demands, especially in Mission Bay Park.

The Mission Bay Master Plan Update, MBMPU, recommends that the 300 feet adjacent to the water be used for water dependent activity. Oceanarium features would probably satisfy this recommendation. The thrill rides could just as well be located far inland and are clearly not water dependent. The water that these features use is typically tap water, not bay water. We urge the EIR to assess the adherence of the proposed features, that are not bay dependent, to the MBMPU's intent.

The MBMPU as well as the California Coastal Act emphasizes the importance of access for the public to the water's edge. Sea World's facilities typically do not take advantage of access to or views of the Bay. Sea World visitors are typically walled off from the Bay. The Sea World facilities exclude the public from seeing or walking and bicycling along the edge of the Bay. We urge that the EIR address Sea World's obstruction of the public's access to the Bay and means to mitigate it such as constructing a public walkway between the Bay and Sea World facilities that would connect to the public pathways along the Bay to the east and to the west of Sea World's facilities. We hope that the Enhanced Public Access Alternative will thoroughly address this issue.

AIR QUALITY

The Sea World expansion will cause a large increase in the automobile traffic in Mission Bay. This will have an incremental impact on air quality. We urge that the expansion incorporate visitor oriented mass transit measures to keep the air pollution impacts of visitors to and employees of Sea World to today's levels or better.

We were disappointed to read that the expansion will involve rental of personal watercraft and boats. We urge that Sea World and its tenants only rent out personal watercraft and boats with four cycle engines to minimize air and water pollution.

WATER QUALITY

We urge that the EIR include an estimate of the pollution that will be caused by the construction related vehicles, vehicles operated by Sea World, vehicles of Sea World staff, and the vehicles of Sea World visitors to the park. This estimate should include the pollution these vehicles will discharge when on the Sea World site and the pollution that is discharged within Mission Bay Park while getting to Sea World. The Sea World expansion will induce additional traffic outside of the footprint of the Sea World site. This additional traffic will cause water pollution. We urge that Sea World identify measures to eliminate, minimize, and where impacts are unavoidable implement water quality measures to totally offset these impacts. These measures could include a combination of:

- featuring, facilitating, and subsidizing mass transit to Sea World from hotels, other visitor features, park and ride lots, etc;
- providing structural stormwater BMPs on and roads inside and outside Sea World;
- provide structural BMPs for all parking lots and work areas within Sea World;
- using non-polluting vehicles for Sea World equipment (both boat and land vehicles);
- providing only non-polluting rental boats and personal watercraft (four cycle only),
- improving bike lanes into and within Mission Bay Park, etc.

BIOLOGICAL RESOURCES

The proposed projects will have high structures that will obstruct bird flights. Many large birds that fly through this site, such as egrets, herons, cormorants, and pelicans do not easily maneuver around obstacles or gain altitude. Their mobility and their safety will be threatened by these high structures. Many of these high structures are "icons", structures to attract attention to a particular facility. They have no essential function other than to act as sort of a sign. We urge that the EIR address the increased risk of bird strikes and reductions of bird mobility due to additional high structures and propose alternatives that would avoid this problem, like lowering or eliminating the non-essential structures. We hope that the "Less Visually Intrusive Alternative" will also incorporate these wildlife benefits.

NOISE

The fireworks used at Sea World probably have impacts on the wildlife of the Bay. It is very unlikely that the Stony Point least tern nesting area will be productive while Sea World launches fireworks nearby. It is possible that the heavy loss of tern chicks on FAA Island to avian predators could be related to the fireworks. The expansion is likely to induce more and more frequent fireworks. We urge that the EIR investigate wildlife impacts and suggest alternatives to the fireworks or mitigation measures to offset the impacts.

LIGHTS

Night lighting discourages some species of birds from using lighted areas. It is thought that the lighting makes them feel more vulnerable to night time avian predators such as owls. Birds that do use areas that are lighted at night are thought to be more vulnerable to attacks by owls. We urge that the EIR consider both these impacts. To mitigate both of these impacts, we urge

that lighting near the Bay edge be at low elevations, at low intensity, and very well blocked from the water area.

It is reported that the navigational processes of some species of birds are confused by brightly lighted high objects at night, such as lighted towers. We urge that this impact be addressed with respect to the planned attractions. We suggest that impacts be minimized by minimizing the heights of structures, requiring that high structures not be lighted at night, or if they must be lighted the lights should be at very low intensity.

TRANSPORTATION/CIRCULATION

The expansion of Sea World will increase traffic along Sea World Drive. There have been suggestions that this increase will be resolved by widening Sea World Drive. This widening will displace a considerable amount of open space park land. This land has considerable wildlife support value and recreational value. This loss of parkland as a result of likely road expansion should be addressed in the EIR.

NEIGHBORHOOD CHARACTER/AESTHETICS

Sea World started out in San Diego as a widely appreciated oceanarium. We still need a popular place for the general public to learn about our marine environment and our impacts on it. It has been stated that the hydrofoil rides of the early days were precedents for thrill rides. The hydrofoils were engineering marvels and were at the time thought to be a demonstration of our future. They were far more educational than thrilling and also had research value.

Many local residents are no longer proud of Sea World as a local attraction. The thrill ride orientation of the expansion will further minimize the educational value of Sea World. The token environmental segments in some of the glitzy shows seem like a phony disconnection in the story lines. The educational exhibits are more and more likely to be ignored among the new adrenaline based attractions. We urge that Sea World refocus on the community serving orientation from which it started. We urge that Sea World consider an alternative upgrade plan that would feature such a shift in direction.

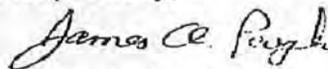
CUMULATIVE IMPACTS

The subject expansion will have considerable cumulative impacts on wildlife, park users, traffic, water quality, etc. We urge that the EIR consider an alternative that will improve the public benefits of Sea World attractions and not just expand and intensify Sea World. The current project may degrade Mission Bay Park as it intensifies Sea World, a losing plan for the public.

GENERAL

The SOW suggests that the EIR will be a thoughtful document. We hope that it will honestly assess the full impacts of the proposed expansion and include a range of real alternatives that will enrich the decision process, not just token alternatives to justify the proposed alternative. For questions or follow-up discussions I can be reached at 619-224-4591 or peugh@home.com.

Respectfully,



James A. Peugh
Coastal and Wetlands Conservation Chair

July 29, 2000

Chris Zirkle, Sr.Planner, Land Development Review
City of San Diego
Planning and Development Review Department
Land Development Review Division
1222 First Avenue
Mail Station 501
San Diego, California 92101

Dear Mr. Zirkle:

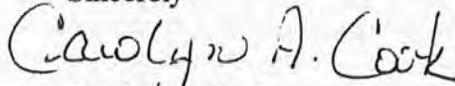
When preparing your environmental impact report (E.I.R.), please don't forget the Ocean Beach homeowners who are neighbors of Seaworld and the impact of the sometimes daily and nightly noise pollution that I fear will only get worse if we let it. I am greatly disturbed by the increasing noise. So much that with each incidence, I have felt the need to call and complain to Kevin Cook of the entertainment dept. of Seaworld.

Specifically I can hear the AMPLIFIED announcing, music and drums beating at various times during the week and on weekends about noon and always about the last 1 1/2 to three hours of the last outdoor show, just prior to the earth shaking fireworks. My house front faces south, my back yard and house face Seaworld. I live on a hill and the noise carries across the S.D. river channel and up the hill to be heard from my back patio and inside my home.

I feel that noise is a major social intrusion, it produces stress and undermines our health and quality of life. We go to great effort and expense to protect our environment from pollutants... Please don't forget the "NOISE POLLUTION" from Seaworld amusement park which in this case is sacrificing environment for revenue at our expense.

I would be interested in seeing any future copies of Seaworld E.I.R. drafts if at all possible.

Sincerely



Carolyn A. Cook

Carolyn A. Cook
4454 Long Branch Avenue
San Diego, California 92107
(619) 224-5842

CITY OF SAN DIEGO
M E M O R A N D U M

DATE: July 27, 2000

TO: Chris Zirkle, Senior Planner, Environmental Analysis Section

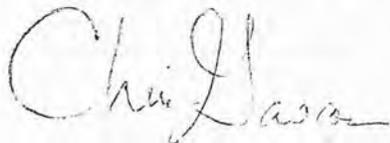
FROM: Chris Gascon, Associate Civil Engineer, Water Review Section

SUBJECT: SeaWorld Master Plan Update - Notice of Preparation of a Draft
Environmental Impact Report, LDR No. 99-0618

We have completed our review of the subject Notice of Preparation of a Draft Environmental Impact Report dated July 12, 2000. The project proposes amendments to the Mission Bay Park Plan and the Local Coastal Program Land Use Plan to accommodate increased height limits from 30 feet to a maximum of 160 feet and to amend the SeaWorld Master Plan to allow future improvements within the leasehold.

The Water Review Section looks forward to reviewing the Draft Environmental Impact Report.

If you have any questions or require further information, please call me at 533-7417.



Chris Gascon, P.E.

cc: Shahin Moshref, Senior Civil Engineer, Planning and Development Review

00-138-21.029

From: Bobbi Salvini
To: Zirkle, Christopher
Date: Thu, Jul 20, 2000 4:52 PM
Subject: EIR for Sea World Master Plan

Chris: The proposed project will impact the sewer facilities serving the park. We would like to review the EIR when it comes out. Thanks Bobbi, Wastewater Section.

CC Master Log 2000-145-31.029

**MITIGATION, MONITORING AND REPORTING PROGRAM
FOR THE
SEAWORLD MASTER PLAN UPDATE
(LDR NO. 99-0618, SCH NO. 1984030708)**

This Mitigation Monitoring and Reporting Program (MMRP) was prepared for the SeaWorld Master Plan Update to comply with the mitigation monitoring statute (Public Resources Code Section 21081.6). This statute, entitled "*Public agency shall adopt monitoring program of mitigation measures and insure their enforceability*," requires public agencies to "adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment." This program shall be made a requirement of project approval. Certain changes or alterations (mitigations measures) are required for the SeaWorld Master Plan Update, as identified in the Environmental Impact Report (EIR) (LDR No. 98-0467, SCH# 99-041004), to reduce significant environmental effects. For each required mitigation measure, a monitoring and/or reporting element is identified below.

As Lead Agency for the project under CEQA, the City of San Diego will administer the MMRP for the SeaWorld Master Plan Update. Information contained within the following MMRP provides a summary of significant project impacts, and identifies the mitigation measures, the entity responsible for ensuring compliance, conditions required to verify compliance, and the monitoring schedule. Tables and figures referred to in this MMRP are found in the EIR.

1.0 Neighborhood Character/Aesthetics

Impact 1.1

Tier 1 Visual Impact: The Splashdown Ride, a Tier 1 Project, would result in a significant visual impact due to the height and combined visual mass of the three towers.

Mitigation 1.1

Mitigation Measure 1.1.1 (DEIR Mitigation Measure 4.2-1): Prior to development the applicant will prepare and implement a site plan for the project, which complies with the Master Plan Update landscape buffer and bulk/plane setbacks. The site plan will also adhere to the Master Plan Update Design Guidelines that pertain to landscaping, lighting, signs, and architectural guidelines.

Impact 1.2

SeaWorld Master Plan Update Visual Impacts: The proposed Master Plan Update, Tier 1, Tier 2, and Special projects would result in a significant visual quality impact because of the potential for extensive visibility of maximum potential building mass above 60 feet in height in Mission Bay Park

Mitigation 1.2

Mitigation Measure 1.2.1 (DEIR Mitigation Measure 4.2-2): Prior to each future development the applicant will prepare and implement a site plan for the project, which complies with the Master Plan Update landscape buffer and bulk/plane setbacks. The site plan will also adhere to the Master Plan Update Design Guidelines that pertain to landscaping, lighting, signs, and architectural guidelines.

2.0 Transportation and Circulation

Timing for project related roadway mitigation measures would be tied to a monitoring program due to the relative uncertainty of future SeaWorld visitors based on the previous ten-year flat attendance record. The monitoring program will commence one year after approval of the Sea World Master Plan Update approval by the California Coastal Commission. SeaWorld Adventure Park agrees to a Roadway and Parking MMRP as outlined below. The monitoring program would involve the following major elements.

1. SeaWorld will conduct annual 24-hour tube counts (ADT's) at all SeaWorld leasehold access points to determine whether there has been an increase in traffic generation. The counts would be done on a Tuesday, Wednesday, and Thursday for two separate non-holiday summer weeks in July or August. The six days of counts should then be averaged to provide documentation of the daily variation and the average peak hour segment and daily volumes. This traffic generation level would be compared to 2000 counts to determine whether there had been an increase in traffic. If no increase in traffic generation has occurred then no mitigation measures would be implemented. Conversely, if a traffic generation increase has occurred then intersection counts would be conducted for key intersections identified in the following measure and the appropriate level of mitigation would be implemented.
2. SeaWorld will conduct 24-hour tube counts (ADT's) on Sea World Drive at two locations (between I-5 and Pacific Highway and between Friars Road and Sea World Way). The counts would be done on a Tuesday, Wednesday, and Thursday for two separate non-holiday summer weeks in July or August. The six days of counts should then be averaged to provide documentation of the daily variation and the average peak hour segment and daily volumes.
3. SeaWorld will conduct peak hour intersection counts at Ingraham Street/Perez Cove Way, Sea World Drive/I-5 NB Ramp, Sea World Drive/I-5 SB Ramp, Sea World Drive/Pacific Highway, and at Sea World Drive/Friars Road. The counts should be done for one day on a Tuesday, Wednesday, or Thursday in July or August, during the period that the tube counts are conducted. These volumes should be used for analysis purposes.
4. Intersections as identified in 3. above, which are operating at LOS E or LOS F will be analyzed to determine if a significant impact is caused by SeaWorld traffic based on the City of San Diego criteria (delay increase of 2.0 seconds or more at LOS E or F). If the analysis determines that SeaWorld traffic causes a significant impact, SeaWorld will be responsible for mitigating such significant impact. Since improvements should be completed

concurrently with impacts, SeaWorld will construct the improvements under a City public improvement permit with bond within one year of identification of the impact unless they are a part of a City of San Diego Capital Improvement Program (CIP).

All analyses in 1. through 4. above must be completed and turned into the City's Transportation Development Section by September 1 of each year. A list of mitigation measures that would achieve a reduction in impact is listed below.

Impact 2.1

2005 Roadway Segments (Weekday): The proposed project would have significant impact on the following roadway segments:

1. Sea World Drive (4 lanes), between Pacific Highway and I-5;
2. Sea World Drive (4 lanes), between Friars Road and Pacific Highway; and
3. Sea World Drive (4 lanes), between Sea World Way and West Mission Bay Drive.

Mitigation 2.1

Mitigation Measure 2.1.1 (DEIR Mitigation Measure 4.4-1): At the time the monitoring program indicates that it is necessary, one of the following measures shall be undertaken by SeaWorld.

1. SeaWorld shall widen Sea World Drive to six lanes between West Mission Bay Drive and Friars Road. SeaWorld shall bear the initial cost of this work but shall be reimbursed by future development based on the City's standard fair-share contribution formula, or
2. If the City has formed a CIP for the combined improvements to Sea World Drive and its interchange with I-5, SeaWorld shall contribute to the CIP an amount which is equivalent to 44 % of the estimated cost of widening Sea World Drive to six lanes between West Mission Bay Drive and Friars Road.

Impact 2.2

2005 Offsite Circulation (Weekday): Lack of signal coordination between signals on Sea World Drive between Friars Road and I-5 northbound ramps.

Non-optimized queue and lane utilization at Sea World Drive/I-5 southbound ramps.

Mitigation 2.2

Mitigation Measure 2.2.1 (DEIR Mitigation Measure 4.4-2): Install signal coordination on Sea World Drive from Friars Road to I-5 Northbound Ramp and construct a 400-foot extension of

the eastbound right-turn lane on Sea World Drive at the I-5 Southbound onramp. SeaWorld's cost participation shall be 100%.

Impact 2.3

2020 Roadway Segments (Weekday): The proposed project would have a significant impact on the following roadway segments:

1. Sea World Drive (6 lanes) between Sea World Way and Friars Road;
2. West Mission Bay Drive, between Sea World Drive and Ingraham Street;
3. West Mission Bay Drive, between Sea World Drive and I-8; and
4. Ingraham Street, between Vacation Road and West Mission Bay Drive.

Mitigation 2.3

Mitigation Measure 2.3.1 (DEIR Mitigation Measure 4.4-7): At the time the monitoring program indicates that it is necessary, widen the West Mission Bay Drive bridge to six lanes and widen southbound West Mission Bay Drive to three lanes between the bridge and the eastbound I-8 onramp. These improvements would be included in the City's CIP No. 52-643. SeaWorld's fair share contribution to the cost of widening the bridge and creating three southbound lanes between the bridge and the eastbound onramp to I-8 shall be 47 percent of the City's cost of these improvements. The City's cost is 20 percent of the total cost.

No mitigation is required for Sea World Drive, if option 1 of Mitigation Measure 2.1-1 described above is implemented, or CIP improvements are made pursuant to option 2.

Intersection improvements included in Mitigation Measure 2.4.1 described below would relieve impacts on Ingraham Street.

Impact 2.4

2020 Key Intersections (Weekday): The project would have a significant impact on the following intersections under the buildout (2020) condition:

1. Ingraham Street and Perez Cove Way (PM peak hours);
2. Sea World Drive and I-5 northbound ramps (AM and PM peak hours);
3. Sea World Drive and Pacific Highway (PM peak hours); and
4. West Mission Bay Drive and I-8 westbound offramp (AM and PM peak hours).

Mitigation 2.4

Mitigation Measure 2.4.1 (DEIR Mitigation Measure 4.4-3): At the time the monitoring program indicates that it is necessary, SeaWorld will reconfigure the Ingraham Street/Perez Cove Way intersection to remove the split east/west signal phasing, by combining the westbound thru movement with the right-turn movement to create dual left-turn lanes and a shared thru/right-turn lane. The only pedestrian crossing across Ingraham Street should remain on the north leg (north side of the intersection). SeaWorld's fair share for this improvement is 100 percent.

Mitigation Measure 2.4.2 (DEIR Mitigation Measure 4.4-4): At the time the monitoring program indicates that it is necessary, SeaWorld shall make fair share contributions for the following interchange improvements at the specified percentages.

Intersection

1. Dual northbound to westbound left-turn lanes on the northbound I-5 offramp and widen the westbound approach to the northbound onramp to provide a separate right-turn lane (29 percent).

Mitigation Measure 2.4.3 (DEIR Mitigation Measure 4.4-5): At the time the monitoring program indicates that it is necessary, reconstruct the Sea World Drive/Pacific Highway intersection to provide six lanes of thru traffic on Sea World Drive. The southbound right-turn movement from Sea World Drive to East Mission Bay Drive (Pacific Highway) would be shared with the thru lane by converting the existing southbound right-turn lane on Sea World Drive to provide three southbound thru lanes and one southbound right turn lane. Sea World Drive south of Pacific Highway shall be widened for about 300 feet plus a 600-foot taper. SeaWorld's fair share of the cost of these improvements shall be 36 percent.

The northbound lane addition shall be carried through the intersection to the Sea World Drive/I-5 SB onramp intersection by widening Sea World Drive to provide a third northbound (eastbound) lane that starts about 300 foot south of (west of) Pacific Highway and traps (ends) as a right-turn lane at the southbound I-5 onramps. Both curb lanes on Sea World Drive at Pacific Highway shall be 20 feet wide to accommodate right-turn sneakers. This measure is 100 percent SeaWorld's responsibility.

Mitigation Measure 2.4.4 (DEIR Mitigation Measure 4.4-6): At the time the monitoring program indicates that it is necessary, a third, westbound right-turn lane shall be added to the westbound I-8 offramp to West Mission Bay Drive intersection to create a configuration which will consist of dual, westbound left-turn and triple, westbound right-turn lanes. SeaWorld's fair share estimate shall be 28 percent. This improvement will only be required in the event the West Mission Bay Drive bridge is widened to six lanes.

Impact 2.5

2020 Freeway Ramps (Weekday): Under buildout condition, project traffic would result in a significant cumulative impact at three freeway ramps already expected to experience delays in excess of 15 minutes:

1. Sea World Drive northbound I-5 (AM peak hours);
2. Sea World Drive southbound I-5 (AM and PM peak hours); and
3. West Mission Bay Drive eastbound I-8 onramp (AM and PM peak hours).

Mitigation 2.5

Mitigation Measure 2.5.1 (DEIR Mitigation Measure 4.4-4): At the time the monitoring program indicates that it is necessary, SeaWorld shall make fair share contributions for the following interchange improvements at the specified percentages.

Ramps

1. Separate right-turn lane on westbound SeaWorld Drive to the northbound I-5 onramp (50 percent),
2. Additional storage lane on southbound I-5 onramp (27 percent).

Ramp improvements included in Mitigation Measure 2.3.1 described above would relieve impacts to the West Mission Bay Drive eastbound I-8 onramp.

Impact 2.6

2005 Key Intersections (Weekend): Significant busy weekend day intersection calculated impacts occur at the Sea World Drive/I-5 Northbound ramp. In addition, busy weekend day significant impacts occur at the SeaWorld entrance.

Mitigation 2.6

Mitigation Measure 2.6.1 (DEIR Mitigation Measure 4.4-8): Provide traffic officers at the I-5/Sea World Drive interchange during busy days to override the traffic signals and respond to traffic conditions, if the City of San Diego and Caltrans concur.

Mitigation Measure 2.6.2 (DEIR Mitigation Measure 4.4-9): Improve lane management at the entrance gates to maximize vehicle storage as well as help visitors waiting in line to determine which lanes are open or shorter.

Mitigation Measure 2.6.3 (DEIR Mitigation Measure 4.4-10): Distribute promotional material to employees and repeat patrons that would promote I-8 or Ingraham Street as alternative routes to SeaWorld.

Impact 2.7

Parking: The supply of existing parking may be exceeded by the year 2010 depending on the attendance patterns.

Mitigation 2.7

Timing for project-related parking mitigation measures would be tied to a monitoring program due to the relative uncertainty of future SeaWorld visitors based on the previous ten-year flat attendance record. The monitoring program will commence one year after project approval by the California Coastal Commission. The monitoring program would involve the following major elements.

1. Generate an annual summer parking demand report using SeaWorld's vehicular toll booth and patron data. The report should include the overall, peak, and overflow parking demands;
2. Identify the encroachment impacts of all planned park attractions upon the existing parking supply. The timing for each planned attraction has not been identified at this time; therefore, the timing will be determined by the parking monitoring program;
3. Identify the parking-design-day when the demand for the available 8,000 parking spaces (paved and unpaved) is exceeded during most summer weekends;
4. Identify the parking structure supply;
5. Identify the parking demand thresholds to trigger the paving of the adjacent overflow lot, provision of alternative/satellite parking, and/or the construction of the parking structure;
6. Explore and implement alternative/satellite parking locations and shuttle/MTDB transit operations as appropriate to meet the parking demand; and
7. Building permits may be withheld if it has been established that additional parking must be provided, and SeaWorld has not provided the needed parking.

Mitigation Measure 2.7.1 (DEIR Mitigation Measure 4.4-11): At the time the monitoring program determines that it is necessary, complete one or more of the following improvements, as dictated by the monitoring program: (1) pave the existing unpaved guest overflow parking area located in the southwest corner of SeaWorld Master Plan Update Area 2; (2) implement offsite parking or shuttle/MTDB transit options; and/or (3) construct the planned parking structure.

3.0 Water Quality

Impact 3.1

Future Expansion: SeaWorld Marina Expansion operational impacts associated with the expanded marina would be the same types as under the current operation and would include the potential release of the following pollutants: fuel, oil, and grease (from boats and fueling); heavy metals, particularly copper (from boat antifouling paints); and litter.

Mitigation 3.1

Mitigation Measure 3.1.1 (DEIR Mitigation Measure 4.5-1): Future expansion activities at SeaWorld Marina shall include the following:

1. Install automatic shutoff on the fuel pump;
2. Regular inspection of the sanitary pumpout on a routine basis; and
3. Prohibit boat hull paint removal and repainting in the marina area.

Impact 3.2

Future Expansion: Future Exhibits projects main sources of water quality impacts would include aquarium water, hose down of animal areas, landscaping, and pedestrian traffic. The incorporation of future exhibits into the existing aquaria water treatment program and the existing ongoing water quality control best management practices (BMP) program would result in a less than significant impact.

Mitigation 3.2

Mitigation Measure 3.2.1 (DEIR Mitigation Measure 4.5-2): Within two years of the approval of the Master Plan Update by the Coastal Commission, install catch basin inserts such as a Fossil Filter, or equivalent, to capture oil and grease in runoff at the point where it enters the storm drain system from parking lots and fueling areas.

Impact 3.3

Future Expansion: Short-term construction impacts could result in the transport of sediment into Mission Bay during High periods of rainfall during grading operations. Rainfall coming into contact with construction materials could also adversely impact Mission Bay.

Mitigation 3.3

Mitigation Measure 3.3.1 (DEIR Mitigation Measure 4.5-3): A Master Stormwater Pollution Prevention Plan (SWPP) shall be prepared and approved by the City Engineer and Regional Water Quality Control Board. This Master SWPP shall include general as well as specific measures which will be implemented to control water pollution related to construction. At a minimum, the Master SWPP shall include the following provisions or their equivalent.

Erosion and Sediment Controls

1. Surface runoff shall be directed to the SeaWorld surface runoff treatment collection system except during times of high rainfall;

2. Perimeter and shoreline controls (e.g., straw bales, silt fences) shall be used;
3. Street sweeping and dry cleanup shall be completed daily;
4. Stockpiles shall be covered;
5. Gravel construction entrances and/or tire washes shall be used; and
6. Temporary landscaping shall be used when prolonged exposure may occur.

Oil, Grease, and Lubricants

1. Conduct maintenance, fueling, and washing offsite;
2. Properly maintain vehicles and equipment;
3. Repair leaks promptly;
4. Place drip pans under vehicles or equipment that is parked or stored for long periods;
5. Have spill control kits on the site; and
6. Store fuels, oils, and lubricants in contained storage areas.

Concrete

1. Wash out concrete trucks into earthen pits and remove/dispose of the hardened material;
2. Fill concrete trucks with water and wash them offsite; and
3. Dry and dispose of concrete saw-cut slurry as solid waste.

4.0 Biology

Impact 4.1

Shading of eelgrass beds: While a significant negative impact on eelgrass beds is not anticipated from future development in Area 1 and the future hotel, the potential for an adverse impact cannot be eliminated. It is possible that the projected shading effects in conjunction with the dormant period would have a negative impact on eelgrass growth and productivity resulting in a significant impact. A significant eelgrass impact has been identified for expansion of the SeaWorld Marina. No significant shadow impacts would occur from Tier 1 projects.

Mitigation 4.1

Mitigation Measure 4.1.1 (DEIR Mitigation Measure 4.6-1): Prior to Coastal Permit application the project proponent shall prepare a project-specific shadow analysis for Tier 2 projects located in future development areas F-2, E-2, G-2, and K-2; and the Future Hotel Special Project to determine the extent of shadow impacts on eelgrass on Pacific Passage, Perez

Cove and the Waterfront Stadium lagoon. The shadow analysis shall be performed for the time periods described in Section 4.3 Light, Glare, and Shading, in the EIR. ~~Furthermore, the shadow impact shall exceed a three-hour period between 10:00 AM to 4:00 PM in order to require mitigation.~~ If no shadow impact would occur in these areas as a result of the project specific analysis, no further mitigation would be required. If a shadow impact would occur during this timeframe it would only occur during the eelgrass dormant period as described in the impact analysis in this EIR. For shadow impacts that would occur during the eelgrass dormant period, a project specific monitoring program shall be undertaken that includes the provisions described below under eelgrass monitoring program.

Eelgrass Monitoring Program

Once construction is completed at one of the potentially shade impacted sites, three years of eelgrass monitoring shall be conducted, specifically in the early spring (April) and early fall (October) of the three years. These two times of the year would best track the initial growing phase of the eelgrass, in the spring and the post summer peak, and in the early fall, before the dormant period begins. The area to be monitored would be along the shore and out far enough into the water to cover the area where a shadow would be cast during the majority of the daylight hours in December. The monitoring program would be initiated once development is completed at each of the sites, and the monitoring schedule at each site would be independent of the other. If the monitoring indicates a reduction in the eelgrass bed coverage, then an eelgrass revegetation program shall be implemented in conformance with the Southern California Eelgrass Mitigation Policy as described below in Mitigation Measure 4.1-2.

Mitigation Measure 4.1.2 (DEIR Mitigation Measure 4.6-2): Prior to application for development of the Future Hotel project landing dock and the Marina Expansion project, a project-specific shadow analysis shall be conducted as described above in Mitigation Measure 4.6-1 to determine the exact area of impact resulting from docks and boats. For these impacts eelgrass shall be replaced at a 1.2:1 ratio, which is in conformance with the eelgrass replacement ratios outlined in the Southern California Eelgrass Mitigation Policy. Furthermore, a pre- and post-construction eelgrass survey shall be undertaken to determine the area of eelgrass habitat that would be impacted by the shadows. The proposed projects could require the creation of approximately 1.12 to 1.20 acres of eelgrass. This scenario assumes that all of the shading impacts would occur under the pier, dock, and permanent boat placement.

Eelgrass mitigation sites do not appear to be readily available within the water area of the SeaWorld leasehold. Further exploration of options and alternatives for eelgrass transplant in the amount needed to offset the impacts would have to be conducted under an eelgrass mitigation plan study, which would be determined when the marina expansion or landing dock would be developed. The eelgrass mitigation plan study and implementation would be conducted in conformance with the Southern California Eelgrass Mitigation Policy.

Impact 4.2

Least Terns (foraging): No significant impact to least tern foraging behavior within or near the SeaWorld leasehold would occur from the proposed SeaWorld Master Plan Update. However a significant impact to least tern nesting activity may occur to the nearby currently uncolonized Stony Point Least Tern Preserve should it be recolonized.

Mitigation 4.2

Mitigation Measure 4.2.1 (DEIR Mitigation Measure 4.6-3): Prior to construction of a new development project on the SeaWorld leasehold a determination shall be made as to whether the Stony Point Preserve has been recolonized by the California least tern. If it has not been recolonized then implementation of the following mitigation measure would not be required. Should the Preserve be recolonized, a determination shall be made as to whether the new development project would provide a clear line-of-sight from perching opportunities on the proposed structure to the Stony Point Preserve. If it would not provide a clear line-of-sight then no mitigation would be necessary. Should a clear line-of-sight be available from perching locations on the new structure, then the structure would be required to include appropriate design features to eliminate the perching opportunity.

5.0 Noise

Impact 5.1

Future Tier 2 Rides and Shows: Future rides and shows may result in insignificant noise impacts.

Mitigation 5.1

Mitigation Measure 5.1.1 (DEIR Mitigation Measure 4.7-1): Prior to issuance of a Coastal Development Permit, a project-specific noise study prepared by a qualified acoustician shall be required for any new ride attraction or performance show and must demonstrate that sensitive receptors would not be exposed to noise levels in excess of applicable standards.

Impact 5.2

Traffic Noise: The future hotel project would be subject to exterior traffic noise levels that may result in a significant noise impact to hotel patrons, depending on the design of the hotel.

Mitigation 5.2

Mitigation Measure 5.2.1 (DEIR Mitigation Measure 4.7-2): Prior to issuance of building permits for the future hotel, verification that guest room interiors will meet the 45 dB CNEL interior standard shall be required through the preparation of an interior noise study by a qualified acoustician. The measures recommended in this study shall be implemented to meet the required 45 dB CNEL interior standard.

6.0 Geology/Soils

Impact 6.1

Liquefaction: The subject site is located in specific Geologic Hazard category Zone 31 and the site is underlain by fill soils and bay deposits that are characterized as relatively loose and cohesionless. Therefore, the impacts associated with liquefaction are considered significant.

Mitigation 6.1

Mitigation Measure 6.1.1 (DEIR Mitigation Measure 4.8-1): Prior to issuance of a Grading Permit for each portion of the redevelopment, a soils investigation shall be approved by the City Engineer. Appropriate remedial measures shall be incorporated into the grading plans. These measures shall include, but not be limited to the following: 1) monitoring of differential settlement during construction; 2) proper compaction of surficial soils; and 3) installation of a well-compacted structural fill mat (with possible inclusion of geotextile reinforcing fabrics) above the water table in building areas, and/or continuous foundation systems for the buildings.

Impact 6.2

Erosion/Slumping: The proposed project would have potentially significant impact associated with soil erosion during construction and shoreline riprap slumping.

Mitigation 6.2

Mitigation Measure 6.2.1 (DEIR Mitigation Measure 4.8-2): Prior to issuance of the grading permits, the applicant shall prepare site-specific erosion control plans for the project in conformance with the City's Grading Ordinance to the satisfaction of the City Engineer. The erosion control plans should be in substantial conformance with the Conceptual Landscape Plan and the Design Guidelines for the Mission Bay Park Master Plan Update and should include temporary and permanent erosion/siltation control measures and/or devices that would be installed both during and after site grading and construction, including, but not limited to, interim and post-development landscaping/hydro-seeding; jute netting (or other approved geotextile material) on manufactured slopes; sandbags, brow ditches, energy dissipaters and desilting detention basins; and any other methods to control short-term and long-term surficial runoff and erosion.

Prior to approval of grading permits, the applicant shall retain a soils engineer to monitor the grading, construction, and installation of runoff control devices and revegetation of the project site. The soils engineer shall submit in writing to the City Engineer and the Environmental Review Manager of the Development Services Department certification that the project has complied with the required notes on the grading plan addressing erosion controls.

Impact 6.3

Unstable geologic or soil conditions: Constraints on development of the site are potentially significant due to potentially poor soil conditions.

Mitigation 6.3

Mitigation Measure 6.3.1 (DEIR Mitigation Measure 4.8-3): Prior to approval of grading permits, a complete subsurface geotechnical investigation shall be performed to evaluate the thickness and/or the in situ condition of the compacted and hydraulic fill materials and the bay deposits. The geotechnical investigation would also provide site-specific remedial grading recommendations, foundation design criteria, and recommendations for the design of surficial improvements. The recommendations shall be implemented as part of project construction.

Mitigation Measure 6.3.2 (DEIR Mitigation Measure 4.8-4): Prior to issuance of a grading permit for the implementation of projects associated with Master Plan Update the disposal of any anticipated construction-related dewatering effluent shall be permitted by either the City of San Diego or the RWQCB. The effluent could either be directed to the Mission Bay or the San Diego sewer system. If the effluent is discharged to Mission Bay, then the discharge shall meet the effluent limits specified by the RWQCB (Order No. 95-25) and Federal National Pollution Discharge Elimination System (NPDES) requirement. Effluent discharged to the City of San Diego sewer system shall meet the City's standards.

7.0 Air Quality

Impact 7.1

Ambient Air Quality: No potentially significant air quality impacts were identified. The following mitigation would reduce adverse but less than significant air quality impacts.

Mitigation 7.1

Mitigation Measure 7.1.1 (DEIR Mitigation Measure 4.9-1): As a condition of any grading or building permit, construction management procedures shall be implemented to clean up dirt and debris spillage from public roads, and route construction traffic through the least sensitive areas. Use of transportation control measures to encourage carpooling among construction workers and to schedule deliveries to non-peak traffic hours is recommended to reduce adverse, but less than significant impacts from construction-related exhaust emissions.

8.0 Energy

Impact 8.1

Energy Conservation: No significant impacts are identified. However, in an effort to continually develop programs to increase energy efficiency, SeaWorld would implement an energy conservation mitigation measure.

Mitigation 8.1

Mitigation Measure 8.1.1 (DEIR Mitigation Measure 4.12-1): Prior to operation of any new attraction, SeaWorld shall apply its existing energy conservation programs and shall consider implementation of project-specific energy conservation programs to minimize electrical fuel, and/or natural gas consumption associated with the new attraction.

9.0 Water Conservation

Impact 9.1

Water consumption: No significant impacts are identified. However, in an effort to continually decrease water consumption, SeaWorld would implement the following mitigation measure.

Mitigation 9.1

Mitigation Measure 9.1.1 (DEIR Mitigation Measure 4.13-1): Prior to operation of any new attraction or facility, SeaWorld shall apply its existing water conservation programs and shall consider implementation of project-specific water conservation programs to minimize water consumption associated with the new attraction or facility.

**DRAFT CANDIDATE FINDINGS
REGARDING THE ENVIRONMENTAL
IMPACT REPORT FOR THE PROPOSED
SEAWORLD MASTER PLAN UPDATE
(LDR NO. 99-0618)**

I. INTRODUCTION

The following Draft Candidate Findings are made for the Final Environmental Impact Report (the "FEIR") for the proposed SeaWorld Master Plan Update (the "Project"). The FEIR (LDR No. 99-0618/SCH No. 1984030708), which is incorporated by reference herein, analyzes the significant and potentially significant environmental impacts which may occur as a result of the proposed Project.

The California Environmental Quality Act ("CEQA") (California Public Resources Code §§21000 *et seq.*) and the State CEQA Guidelines ("CEQA Guidelines") (Title 14, California Code of Regulations, §§15000 *et seq.*) require that no public agency shall approve or carry out a project which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:

- (1) Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant environmental effects on the environment;
- (2) Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can or should be, adopted by that other agency; or
- (3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the FEIR.

(CEQA, §21081(a); CEQA Guidelines, §15091(a).)

CEQA and the CEQA Guidelines further require that, where the decision of the public agency allows the occurrence of significant effects which are identified in the FEIR, but are not at least substantially mitigated, the agency shall state in writing the specific reasons to support its action based on the FEIR and/or other information in the record. (CEQA Guidelines, §15093(b).)

The following Findings and Statement of Overriding Considerations ("SOC") have been submitted by the Project applicant as candidate Findings and SOC to be made by the decision-making body. The Development Services Department (DSD), does not recommend that the discretionary body either adopt or reject these findings. They are attached to allow readers of

this report an opportunity to review potential reasons for approving the Project despite the significant unmitigated effects identified in the FEIR.

II. PROJECT DESCRIPTION AND PURPOSE

The SeaWorld leasehold consists of approximately 17 acres of water and 172.4 acres of land located on the southern perimeter of Mission Bay Park approximately halfway between Interstate 5 (“I-5”) and the Pacific Ocean. More specifically, the SeaWorld leasehold is located north of SeaWorld Drive, east of Ingraham Street and West Mission Bay Drive, south of Pacific Passage in the Bay, and west of the South Shores area of Mission Bay Park in the City of San Diego.

The Project consists of the following:

1. Update to the existing SeaWorld Master Plan;
2. Amendment to the Mission Bay Park Master Plan Update/Local Coastal Program Land Use Plan;
3. Amendment to the Progress Guide and General Plan; and
4. Project approvals for the Tier 1 projects (see below);

The SeaWorld Master Plan Update consists of the following:

Conceptual Development Program

The conceptual development program sets forth the anticipated development and redevelopment needs for the entire SeaWorld leasehold and is divided into three categories:

1. **Tier 1** identifies sites and projects where new development or park renovations will be processed concurrently with the SeaWorld Master Plan Update or are likely to be initiated shortly after its adoption. The Tier 1 projects consist of a Splashdown Ride (95 feet high), Educational Facility (45 feet high), Front Gate Renovation (up to 90-foot high lighthouse), and Special Events Center Expansion (30 feet high with 60-foot high icon structure).
2. **Tier 2** identifies eight conceptual development sites that are candidates for future redevelopment, renovation, or park expansion. Each site retains the potential to have structures exceeding 30 feet in height up to a maximum height of 160 feet, although only four of the Tier 2 sites may have structures that exceed 100 feet in height. The FEIR analyzes the potential impacts of Tier 2 development, but no specific projects are proposed for the immediate future.
3. **Special Projects** are long-term conceptual development proposals that have been specifically identified. The Special Projects include an up to 90-foot tall, 650-room hotel, a 115 slip expansion of the existing SeaWorld Marina, and a 4-level, 45-foot-high parking garage.

Development Criteria

The Development Criteria contained in the SeaWorld Master Plan Update set forth the development parameters applicable to the entire SeaWorld leasehold or specific leasehold areas identified in the SeaWorld Master Plan Update. Among other controls, the development criteria establish the height limits within the SeaWorld Master Plan Update area. The height limits also help define the maximum building envelopes for the Tier 2 conceptual development sites.

Design Guidelines

The Design Guidelines contained in the SeaWorld Master Plan Update would be used as standards to evaluate proposed new projects or proposed modifications to existing development. The primary focus of the design guidelines is to assure aesthetically pleasing public views of SeaWorld from outside its leasehold. The guidelines therefore address landscaping, lighting, signs, and architecture.

Amendment to the Mission Bay Park Master Plan Update/Local Coast Program (“LCP”)

In addition to updating the SeaWorld Master Plan, the Project includes an amendment to the Mission Bay Park Master Plan Update/LCP to bring the plan into conformity with the 1998 voter approved SeaWorld Initiative, Proposition D, an ordinance to amend the City of San Diego Municipal Code to allow development up to a maximum height of 160 feet on the SeaWorld leasehold. The SeaWorld Master Plan Update will become a part of the Mission Bay Park Master Plan Update by reference.

III. ISSUES ADDRESSED IN FEIR

The FEIR contains an environmental analysis of the potential impacts associated with implementing the Project. The environmental issues addressed in the FEIR were determined to be significant or potentially significant based on the Initial Study prepared for the Project by the City of San Diego. The following issues were determined to be significant or potentially significant: land use; neighborhood character/aesthetics; light, glare and shading; transportation and circulation; water quality; biological resources; noise; geology/soils; air quality; energy; and water conservation.

IV. FINDINGS REGARDING INSIGNIFICANT IMPACTS

The City finds, based on substantial evidence appearing in the FEIR, its supporting technical reports, and the administrative record that the following impacts or potential impacts are less than significant:

A. Light, Glare and Shading (Partial)

Implementation of the Design Guidelines contained in the SeaWorld Master Plan Update and the Mission Bay Park Master Plan Update Design Guidelines as well as the Light Pollution Law

codified in the San Diego Municipal Code (Sections 101.1300-101.1309) would result in less than significant impacts resulting from lighting and glare.

Because the FEIR does not identify any significant light or glare impacts no mitigation measures were recommended.

A shadow analysis of Tier 1 projects concluded that shadows associated with the Tier 1 developments (only the Splashdown Ride) would not extend onto Mission Bay or South Shores Park.

Because the FEIR does not identify any significant shading impacts from Tier 1 projects, no mitigation measures were recommended. Significant shading impacts from Tier 2 projects and Special Projects are addressed in Subsection B of Section VI below.

B. Transportation and Circulation (Partial)

Roadway Segments: Based on the City's threshold criteria for significance of impact, the proposed Project would not have a significant impact on the following roadway segments under the near term (2005) condition:

1. West Mission Bay Drive between Ingraham Street and Dana Landing Road;
2. West Mission Bay Drive between Sea World Drive and Ingraham Street;
3. West Mission Bay Drive between I-8 and Sea World Drive;
4. Ingraham Street from Vacation Road to Crown Point Drive;
5. Ingraham Street from Perez Cove Way and Vacation Road;
6. Ingraham Street between Perez Cove Way and West Mission Bay Drive;
7. Sunset Cliffs Boulevard between I-8 and West Mission Bay Drive; and
8. Sunset Cliffs Boulevard between Nimitz Boulevard and I-8.

Key Intersections: Based on the criteria that a delay of 2 or more seconds at an intersection which is operating at LOS D, E or F results in a significant impact, the proposed Project will not generate a significant direct impact on intersections under the near term (2005) condition. Figure 4.4-6 in the FEIR illustrates 2005 key intersection traffic volumes with the Project.

Freeway Ramps: Based on the criteria that a wait time of 2 minutes at a freeway ramp which is already experiencing delays in excess of 15 minutes results in a significant impact, the proposed Project will not have a significant direct impact on freeway ramps under the near term (2005) condition. The proposed Project would only increase delays by one minute at each ramp.

CMP Arterials: A decrease in speed (mph) by more than 1 mph for CMP arterials operating at LOS D, E or F, or by more than 2 mph at LOS C, or by more than 3 mph at LOS B, results in a significant traffic impact. The contribution of traffic from the Project would not exceed the foregoing significance thresholds on CMP arterials. Thus, no significant Project-related impacts would occur.

C. Biology

No significant impact was identified to least tern productivity rates in the Mission Bay area as a result of existing or expanded SeaWorld fireworks displays. Supporting studies prepared by experts on least terns, found in Appendix D, Biological Resources Reports, of the FEIR, show little difference between the productivity rates at the sites near SeaWorld in comparison to overall San Diego County statistics. Also, no significant impact to least tern foraging behavior within or near the SeaWorld leasehold would occur from the proposed Project.

Further, none of the Tier 1 projects within Area 1 are expected to have any impacts to eelgrass or aquatic resources located within Pacific Passage to the north of the Project site. The only Tier 1 located near the water is Site A-1, Splashdown Ride. A shadow analysis conducted for the Splashdown Ride did not indicate that any shadow would be cast over the water during December until as late as 4:00 P.M. Thus, no significant shadow impacts would occur from Tier 1 projects.

Because the FEIR does not identify any significant biology impacts with respect to least tern productivity and shadow impacts from Tier 1 projects on eelgrass beds or aquatic resources, no mitigation measures were recommended.

D. Noise (Partial)

The Project would not result in a significant traffic noise impact. Project generated traffic would result in minimal long-term increases to the ambient traffic noise levels. The Project generated noise levels for 2020 traffic volumes would not conflict with any of the existing or proposed land uses and the General Plan Land Use Compatibility guidelines.

The Splashdown Ride would not create a significant noise impact. The proposed Splashdown Ride may periodically increase noise levels by 3 decibels (dBA). Noise generated by the Splashdown Ride may be audible out to 7,000 feet from the theme park. However, ambient noise levels would not substantially increase. Other future rides may result in similar impacts. In addition, the Splashdown Ride would exceed the General Plan park standard of 65 dBA, as a portion of South Shores Park falls within the 65 dBA and 70 dBA noise level contours. However, this portion of South Shores Park consists of a parking lot and boat launch, where park visitors are not considered noise sensitive receptors because of the noise levels associated with the nearby active recreational boat launching, parking lot and "jet ski" activities associated with this area of the park.

Because the FEIR does not identify any significant traffic noise impacts or noise impacts from the Splashdown Ride, no mitigation measures were recommended.

E. Air Quality (Partial)

The proposed Project would conform with state and federal air quality standards that govern the operations at SeaWorld. Such compliance would ensure that the proposed Project would not generate objectionable odors, thereby resulting in no significant air quality odor impacts.

Because the FEIR does not identify any significant air quality odor impacts, no mitigation measures were recommended.

F. Recreational Resources

The proposed Project would not result in adverse traffic conditions that would be a substantial impediment to vehicular access to, or pedestrian/bicycle usage of, recreational facilities in Mission Bay Park or the Mission Beach area. Therefore, the Project would not result in significant recreational facilities access impacts.

Because the FEIR does not identify any significant recreational resources impacts, no mitigation measures were recommended.

G. Human Health/Public Safety

The existing operation of SeaWorld involves the use and storage of a variety of chemicals. Additionally, a portion of the SeaWorld leasehold overlies the inactive Mission Bay landfill.

SeaWorld will be required to obtain permits or approvals from the San Diego County Department of Environmental Health, the San Diego Air Pollution Control District, the Regional Water Quality Control Board, and/or other authorities as required by law, for the purchase, use, storage, generation, and disposal of hazardous material/waste, and to comply with local, state and federal regulations with respect to the remediation of any contaminated soils and groundwater that may be discovered during project excavation. The impact of these permits and the impact of required local, state, and federal regulations for the remediation of contaminated soils and groundwater will result in a less than significant impact with respect to the exposure of people to health hazards.

With respect to the portion of the SeaWorld leasehold that overlies the Mission Bay Landfill, the Project does not involve any development that would disturb soils in the area of the closed landfill. The lease between the City of San Diego and SeaWorld prohibits SeaWorld from disturbing the Mission Bay Landfill. An analysis in an environmental impact report of the potential impacts of preexisting conditions to human health and the environment is not required under CEQA. CEQA requires environmental analysis of a project possibly affected by preexisting conditions only when the project may adversely change those conditions or otherwise have a significant effect on the environment. *Baird v. County of Contra Costa* (1995) 32 Cal. App. 4th 1464, 1466. Otherwise, an analysis of the adverse effects of preexisting physical conditions on a proposed project extends beyond the scope of CEQA and the environmental impact report requirements. *Id.* at 1468. That is, CEQA is not intended to protect

a proposed project from the existing environment, but intended to protect the environment from the impacts of a proposed project. *Id.*

Notwithstanding the foregoing, the City of San Diego Solid Waste Local Enforcement Agency reports state that the waste in the landfill is adequately covered and the integrity of the final cover has not been compromised. Prior measurements of a variety of toxic constituents also show that such constituents have not exceeded background levels. Furthermore, SeaWorld has conducted a soil and groundwater investigation in the area outside of the approximate landfill boundary. Results from the Phase I and Phase II assessment report indicate that low levels of contamination were encountered in several of the soil borings and monitoring wells, and that no landfill debris was encountered. The assessment report indicates that there is no significant contamination of the SeaWorld leasehold near or outside the documented landfill perimeter. Hence, the inactive landfill does not pose a threat to human health or the environment. With regard to other parts of the leasehold, SeaWorld has conducted a variety of construction projects that involved construction activities. During these construction projects, no hazardous materials were discovered on the Project site that would pose a risk to human health or the environment.

Therefore, compliance with the conditions of required permits would protect workers and the general public from potential risk of exposure to hazardous material/waste. The rules and regulations associated with the various local, state, and federal permits would also provide measures to reduce the potential risk of an explosion or the unauthorized release of hazardous material/waste into the environment. Therefore, no significant impact would occur for Tier 1 or Tier 2 projects, or Special Projects.

Because the FEIR does not identify any significant human health/public safety impacts, no mitigation measures were recommended.

H. Energy

SeaWorld currently employs a number of state-of-the-art energy conservation programs, including, but not limited to, lighting retrofits, use of energy efficient lighting, variable speed drive motors on water filter pumps, the HVAC replacement program, and chilled water loops for cooling buildings and pools. Continuance of these programs and implementation of future programs would ensure that no significant impacts associated with energy would result from the proposed Project. The light retrofit program and use of energy efficient lighting reduce energy consumption by 1.2 million kilowatt hours (kWh) per year, reduce maintenance costs, as energy-efficient fluorescent lights last longer than the former incandescent lamps, and decrease air conditioning usage due to cooler operation. The use of variable speed drive motors reduces energy consumption by approximately one million kWh per year. The HVAC replacement program, which replaced older HVAC units with newer ones, reduces energy consumption by 0.59 million kWh per year. Also, by use of the chilled water loop program, SeaWorld is able to take advantage of the energy efficiencies that are inherent in the process and save tens of thousands of kilowatt hours of electrical consumption.

Because the DEIR does not identify any significant energy impacts, no mitigation measures were required. However, Mitigation Measure 1 of Section 4.12 of the FEIR has been incorporated into the Project to continually develop programs to increase energy efficiency.

I. Water Conservation

Continual development, exercise and implementation of state-of-the-art water conservation programs and conformance with the Design Guidelines contained in the SeaWorld Master Plan Update that emphasize the use of drought tolerant plant species would ensure that no significant impacts associated with excessive water consumption would result.

Because the FEIR does not identify any significant water conservation impacts, no mitigation measures were required. However, Mitigation Measure 1 of Section 4.13 of the FEIR has been incorporated into the Project to ensure the application of SeaWorld's existing water conservation programs and consideration of project-specific water conservation programs for new attractions or facilities.

Because the FEIR does not identify any significant water conservation impacts with regard to landscaping, no mitigation measures were recommended.

J. Cultural Resources

Historically, Mission Bay Park was a little used, unnavigable backwater made up of tidal basins, sand dunes, salt marshes, swamps, and salt flats which were shaped into the current series of basins and coves, as well as uplands through extensive dredging and filling operations between 1948 and 1961. Mission Bay was converted from an open coastal estuary with extensive salt marsh and mud flats, to a small boat harbor and public recreational resource. The project site is fully developed, and no record of cultural resources discovered or identified as being associated with the project site were available. With the extensive dredge and fill operations that occurred on the project site, along with site development, any cultural resources within the project site would have been covered or removed. Therefore, implementation of the proposed Project would not impact cultural resources.

Because the FEIR does not identify any significant cultural resources impacts, no mitigation measures were recommended.

K. Agriculture

The Project site does not contain land that is designated as prime agricultural soils by the Soil Conservation Service, nor does it contain prime farmlands designated by the California Department of Conservation. Furthermore, the site is not subject to, nor is it near a Williamson Act contract pursuant to Section 51201 of the California Government Code. Additionally, there are no farming operations in the project vicinity. Therefore, implementation of the proposed Project would not impact agricultural resources.

Because the FEIR does not identify any significant agriculture impacts, no mitigation measures were recommended.

L. Population/Housing

Implementation of the proposed Project would not significantly alter the population distribution, location, and densities, nor would it significantly affect population growth rate or housing demands. While the proposed Project could create new jobs in the area, it is anticipated that the existing labor pool in the County would fill the positions created by attendance growth at SeaWorld. Additionally, the persons required to fill those new positions would not require special licenses which would bring in a higher level of skilled workers.

Because the FEIR does not identify any significant population/housing impacts, no mitigation measures were recommended.

M. Public Services

Based on the Initial Study completed for the proposed Project, it was determined that the Project would not have a significant impact on the provision of public services. Specifically, police protection provided by the Northern Division of the San Diego Police Department and fire protection provided by the City of San Diego Fire Department would not be significantly impacted by the proposed Project.

Because the FEIR does not identify any significant public services impacts, no mitigation measures were recommended.

V. FINDINGS REGARDING IMPACTS DETERMINED TO BE INSIGNIFICANT DURING THE INITIAL STUDY

A. Sewer and Water Facilities

Implementation of the SeaWorld Master Plan Update will not result in a significant impact on sewer and water facilities. Although SeaWorld's water consumption and sewage generation will increase over time, this growth already was contemplated and approved in the 1985 Sea World Master Plan and Environmental Impact Report, RQD No. 84-0160, SCH #84030708, dated February 1985 (1985 Master Plan). That 1985 Master Plan projected that SeaWorld ultimately would serve 4 million visitors. Any increased water consumption or sewage generation contemplated by the 1985 Master Plan would not be a significant impact caused by the SeaWorld Master Plan Update. Full build out of the 1985 Master Plan is the baseline for determining whether the SeaWorld Master Plan Update would have significant impacts. *Benton v. Board of Supervisors* (1991) 226 Cal.App.3d 1467. The FEIR projects SeaWorld's attendance would reach 4.4 million. There is no evidence to indicate this difference from the 1985 Master Plan would have a significant impact on sewer and water facilities other than what was contemplated in the 1985 Master Plan.

In addition, the City of San Diego Water Design Guidelines and City of San Diego Sewer Design Guidelines contain policies for construction of increased water and sewer facilities to accommodate growth. The policies in the water and sewer design guidelines are implemented as part of every development project in the City to insure that no project causes significant water and sewer impacts. Sewer and water fees are structured so that the users pay both the operating expenses and capital improvements necessary to provide the water and sewer services. (See page 28 of the report titled "The Economic and Fiscal Impacts of Tourism on the City of San Diego and The San Diego Regional Economy," dated March 26, 1999, prepared by CIC Research, Inc. for The San Diego County Taxpayers Association.)

To insure adequate water facilities, SeaWorld is required to prepare a Water Study in conformance with the City Water Design Guidelines. This study will evaluate whether the existing city distribution water mains that serve SeaWorld are of sufficient size to provide the necessary volume of water for future development. After this study is approved by the City, SeaWorld would be required to construct any facilities to serve its property in conformance with the Water Study. Subsequent to implementation of any water supply facilities, SeaWorld would pay for and obtain water meters for the new development.

To insure adequate sewer facilities, SeaWorld is required to prepare a Sewer Study in conformance with the City Sewer Design Guidelines. This study will evaluate the existing sewer system from the SeaWorld leasehold to the nearest trunk sewer line (18 inches or larger) to determine whether the existing facilities have sufficient capacity to accommodate new sewage generated by SeaWorld's development. After this study is approved, SeaWorld would be required to construct any facilities to serve its property in conformance with the Sewer Study. Subsequent to implementation of any sewer facilities, SeaWorld would pay for and obtain sewer connections for the new development.

Because the FEIR does not identify any significant sewer and water impacts, no mitigation measures were recommended,

B. Solid Waste

Implementation of the SeaWorld Master Plan Update will not result in a significant impact on waste and landfill facilities. Although SeaWorld's waste generation will increase over time, this growth already was contemplated and approved in the 1985 Master Plan. That 1985 Master Plan projected that SeaWorld ultimately would serve 4 million visitors. Any increased waste generation contemplated by the 1985 Master Plan would not be a significant impact caused by the SeaWorld Master Plan Update. Full build out of the 1985 Master Plan is the baseline for determining whether the SeaWorld Master Plan Update would have significant impacts. *Benton v. Board of Supervisors* (1991) 226 Cal. App. 3d 1467. The FEIR projects SeaWorld's attendance would reach 4.4 million. There is no evidence to indicate this difference from the 1985 Master Plan would have a significant impact on waste and landfill facilities than what was contemplated in the 1985 Master Plan.

Furthermore, SeaWorld has an award-winning recycling program that has been recognized by the City on seven occasions, of the past eight years, as the Recycler of the Year recipient. This award is given to a select few organizations that maintain notable recycling programs that significantly reduce the amount of waste sent to city landfills. Also, SeaWorld has been recognized as the State of California Waste Reduction Awards Programs (WRAP) recipient as one of the top recyclers in the state on six occasions. Since the inception of SeaWorld's current recycling program in 1992, SeaWorld has recycled over 15.25 million pounds of recyclables through the end of 2000. This is equivalent to the preservation of over 25,160 cubic yards of landfill space at the local landfill. A major component of SeaWorld's award-winning recycling program is its commitment to purchase products with significant recycled content. SeaWorld has a Recycled Products Procurement policy that encourages and promotes the purchase of recycled materials whenever feasible. The procurement policy allows a five percent price preference for purchase of products with a specified post consumer content. The program is also extended to SeaWorld's contractors and vendors. In 2000 alone, SeaWorld purchased over \$590,000 worth of products manufactured with recycled content materials. In the past seven years, SeaWorld has purchased millions of dollars worth of products manufactured with post consumer and recycled content.

Because the FEIR does not identify any significant landfill impacts, no mitigation measures were recommended.

VI. FINDINGS REGARDING IMPACTS THAT CAN BE MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE (CALIFORNIA PUBLIC RESOURCES CODE §21081(A)(1))

The City, having reviewed and considered the information contained in the FEIR, the appendices to the FEIR, and the administrative record, finds, pursuant to California Public Resources Code §21081(a)(1) and CEQA Guidelines §15091(a)(1), that changes or alterations have been required in, or incorporated into, the proposed Project which would mitigate, avoid, or substantially lessen to below a level of significance the following potentially significant environmental effects identified in the FEIR in the following categories: water quality, biological resources (including shading), noise, geology/soils, transportation/circulation, land use and air quality.

In order to provide funding for the City to monitor the implementation of these mitigation measures, the Project will be conditioned as follows: Prior to the first building permit subsequent to the SeaWorld Master Plan Update, the applicant shall deposit \$3,200 with DSD to ensure implementation of the Mitigation, Monitoring and Reporting Program ("MMRP").

A. Water Quality (Cumulative)

Potential Impacts

SeaWorld Marina Expansion: Construction in Mission Bay could have a significant impact on water quality by producing increased sedimentation and turbidity because of disturbance to bottom sediments during construction. Operational impacts associated with the expanded marina would be of the same nature as under the current operation and would include the potential release of the following pollutants: fuel, oil, and grease (from boats and fueling); bacteria (from

sanitary waste discharges/spills); heavy metals, particularly copper (from boat antifouling paints); and litter.

Tier 1, Tier 2 and Special Projects: The main sources of water quality impacts from Tier 1 and Tier 2 projects and Special Projects would include aquarium water, hose down of animal areas, landscaping, and pedestrian traffic. These activities could potentially lead to bacteria or viruses being introduced by animal contact with the water in the aquarium, or by washing activities in animal areas. Other activities related to Tier 1 and Tier 2 projects and Special Projects may potentially introduce oil, grease, and organic compounds, thus significantly impacting water quality. The incorporation of Tier 1 and Tier 2 projects and Special Projects into the existing aquaria water treatment program and the existing ongoing water quality control Storm Water Pollution Prevention Plan ("SWPPP")/Best Management Practices ("BMP") program and adherence to National Pollution Discharge Elimination System ("NPDES") requirements would result in a less than significant impact.

Short Term Construction: High periods of rainfall during grading operations could lead to excessive erosion and sedimentation and could result in the transport of sediment into Mission Bay. As a result, marine organisms would be affected by increasing levels of turbidity and total dissolved solids. Rainfall coming into contact with construction materials could also adversely impact Mission Bay. Construction materials contained in storm water runoff could have a potential significant impact on marine organisms.

Facts in Support of Finding: The proposed Project will consist primarily of uses similar to the existing uses and, therefore, the proposed Project would not result in significant direct impacts on water quality. However, because Mission Bay currently has substantial water quality problems, the additional water pollutants generated by the Project would potentially have the effect of creating significant cumulative impacts on Mission Bay. Application of the ongoing water quality programs currently being implemented by SeaWorld would reduce the operational impacts associated with Project. Currently, SeaWorld has a comprehensive and ongoing water quality control program for controlling potential sources of water pollution. These programs include: (1) aquaria water treatment to ensure compliance with the facilities NPDES discharge permit; (2) theme park surface runoff collection and treatment; (3) oil and chemical spill prevention and control; and (4) parking area sweeping.

Additionally, Mitigation Measures 1 through 3 of Section 4.5 of the FEIR would substantially lessen cumulative impacts on water quality to below a level of significance. Specifically, implementation of the following mitigation measures would reduce water quality impacts to below a level of significance:

(a) **SeaWorld Marina Expansion:** (1) install an automatic shutoff on fuel pumps; (2) regularly inspect sanitary pumpout on a routine basis; (3) prohibit boat hull paint removal and repainting in the marina area; and (4) prohibit in-water hull scraping to remove marine growth, and collect and properly dispose of any marine material removed from hulls.

(b) **Tier 2 and Special Projects:** Within two years of the approval of the Master Plan Update by the Coastal Commission, install catch basin inserts such as a Fossil

Filter, or equivalent, to capture oil and grease in runoff at the point where it enters the storm drain system from parking lots and fueling areas.

(c) **Short Term Construction:** A Master SWPPP shall be prepared and approved by the City Engineer and Regional Water Quality Control Board. This Master SWPPP shall include general as well as specific measures which will be implemented to control water pollution related to construction and post-construction BMPs. At a minimum, the Master SWPPP shall include the provisions, or their equivalent, as identified in Mitigation Measure 3 of Section 4.5 of the FEIR.

Mitigation Measures 1 through 3 of Section 4.5 of the FEIR are feasible and are made binding by the conditions of approval for the Project and the MMRP and are incorporated by reference as if fully set forth herein.

B. Biological Resources (Direct)

Potential Impacts

Shading of eelgrass beds: A significant negative impact on eelgrass beds is not anticipated from either the future development of Tier 2 projects. A significant impact on eelgrass includes long term and permanent loss of eelgrass, an eelgrass bed, or a portion thereof. However, shadow analysis conducted during the Initial Study shows that the potential for an adverse impact cannot be eliminated. It is possible that the projected shading effects during periods when the sun angle is relatively lower in the sky (generally November to February), in conjunction with the eelgrass's dormant period, would have a substantial impact on eelgrass growth and productivity resulting in a significant impact on biological resources. Additionally, significant eelgrass impact has been identified with respect to the SeaWorld Marina expansion because future docks and moored boats would cast shadows onto eelgrass beds. No significant shadow impacts would occur from Tier 1 projects.

Construction Erosion of Eelgrass: The Project could potentially cause significant direct effects on the eelgrass because uncontrolled erosion during construction of the Project could result in deposition of sediment in nearby eelgrass beds.

Least Terns (foraging and nesting): No significant impact to least tern foraging behavior within or near the SeaWorld leasehold would occur from the proposed SeaWorld Master Plan Update. However, a significant impact to least tern nesting activity may occur to the nearby currently uncolonized Stony Point Least Tern Preserve should it be recolonized because new structures created as part of the Project could potentially create perching opportunities for least tern predators, from which the predators could have a vantage point to prey upon least tern chicks.

Facts in Support of Finding: Implementation of Mitigation Measures 1 through 3 of Section 4.6 of the FEIR would substantially lessen potentially significant biological resources impacts to below a level of significance. Furthermore, implementation of erosion control Mitigation Measure 3 of Section 4.5 of the FEIR would reduce sedimentation impacts on eelgrass beds to below a level of significance.

Specifically, implementation of the following mitigation measures would substantially lessen biological resources impacts to below a level of significance:

(a) **Shading of eelgrass beds:** Prior to Coastal Permit application the project proponent shall prepare a project-specific shadow analysis for Tier 2 projects located in future development areas F-2, E-2, G-2 and K-2; and the Future Hotel Special Project to determine the extent of shadow impacts on eelgrass in Pacific Passage, Perez Cove and the Waterfront Stadium lagoon. The shadow analysis shall be performed for the time periods described in Section 4.3, Light, Glare and Shading, in the FEIR. If no shadow impact would occur in these areas as a result of the project specific analysis, no further mitigation would be required. If a shadow impact would occur during this timeframe it would only occur during the eelgrass dormant period as described in the impact analysis above. For shadow impacts that would occur during the eelgrass dormant period, a project specific monitoring program shall be undertaken that includes the provisions described below under eelgrass monitoring program.

Eelgrass Monitoring Program: Once construction is completed at one of the potentially shade impacted sites, three years of eelgrass monitoring shall be conducted, specifically in the early spring (April) and early fall (October) of the three years. These two times of the year would best track the initial growing phase of the eelgrass, in the spring and the post summer peak, and in the early fall, before the dormant period begins. The area to be monitored would be along the shore and out far enough into the water to cover the area where a shadow would be cast during the majority of the daylight hours in December. The monitoring program would be initiated once development is completed at each of the sites, and the monitoring schedule at each site would be independent of the other. If the monitoring indicates a reduction in the eelgrass bed coverage, then an eelgrass revegetation program shall be implemented in conformance with the Southern California Eelgrass Mitigation Policy as described below.

Prior to application for development of the Future Hotel project landing dock and the Marina Expansion project, a project-specific shadow analysis shall be conducted as described in the above mitigation measure to determine the exact area of impact resulting from docks and boats. For these impacts eelgrass shall be replaced at a 1.2:1 ratio, which is in conformance with the eelgrass replacement ratios outlined in the Southern California Eelgrass Mitigation Policy. Furthermore, a pre- and post-construction eelgrass survey shall be undertaken to determine the area of eelgrass habitat that would be impacted by the shadows. The proposed projects could require the creation of approximately 1.12 to 1.20 acres of eelgrass. This scenario assumes that all of the shading impacts would occur under the pier, dock, and permanent boat placement.

Eelgrass mitigation sites do not appear to be readily available within the water area of the SeaWorld leasehold. Further exploration of options and alternatives for eelgrass transplant in the amount needed to offset the impacts would have to be conducted under an eelgrass mitigation plan study, which would be determined when the marina expansion or landing dock would be developed. The eelgrass mitigation plan study and implementation would be conducted in conformance with the Southern California Eelgrass Mitigation Policy.

(b) **Construction Erosion of Eelgrass:** A Master SWPPP shall be prepared and approved by the City Engineer and Regional Water Quality Control Board. This

Master SWPPP shall include general as well as specific measures which will be implemented to control water pollution related to construction and post-construction BMPs. At a minimum, the Master SWPPP shall include the provisions, or their equivalent, as identified in Mitigation Measure 3 of Section 4.5 of the FEIR.

(c) **Least Terns (foraging and nesting):** Prior to construction of a new development project on the SeaWorld leasehold a determination shall be made as to whether the Stony Point Preserve has been recolonized by the California least tern. If it has not been recolonized then implementation of the following mitigation measure would not be required. Should the Preserve be recolonized, a determination shall be made as to whether the new development project would provide a clear line-of-sight from perching opportunities on the proposed structure to the Stony Point Preserve. If it would not provide a clear line-of-sight then no mitigation would be necessary. Should a clear line-of-sight be available from perching locations on the new structure, then the structure would be required to include appropriate design features to eliminate the perching opportunity.

Mitigation Measures 1 through 3 of Section 4.6 of the FEIR and Mitigation Measure 3 of Section 4.5 of the FEIR are feasible and are made binding through the Project conditions of approval and the MMRP, and are incorporated by reference as if fully set forth herein.

C. Noise (Direct)

Potential Impacts

Tier 2 Projects: The proposed rides and shows within the Tier 2 projects may either individually or collectively result in potentially significant noise impacts because these attractions could potentially exceed the City's Land Use Compatibility Criteria. Tier 2 projects may include, but are not limited to aquariums, special effects theaters, land-based adventure rides, pelagic fish exhibits, water play attractions, themed track or water rides, special format projection attractions, playgrounds, wildlife performance venues, boat rides, historic reenactment presentations, research facilities, live performance venues, and wildlife exhibits. It is possible that several similar rides may operate simultaneously, which may result in increased noise levels.

Impact of Traffic and Theme Park Noise on Future Hotel: The future hotel project would be potentially subject to exterior traffic and theme park noise levels that may result in a significant noise impact to hotel patrons in excess of the 45 dBA CNEL interior standard, depending on the design of the hotel.

Facts in Support of Finding: Implementation of Mitigation Measures 1 and 2 of Section 4.7 of the FEIR would substantially lessen noise impacts to below a level of significance. Specifically, the following mitigation measures are feasible to reduce noise impacts:

(a) **Tier 2 Projects:** Prior to issuance of a Coastal Development Permit, a project-specific noise study prepared by a qualified acoustician shall be required for any new ride attraction or performance show and must demonstrate that sensitive receptors would not be exposed to noise levels in excess of applicable standards.

(b) Impact of Traffic and Theme Park Noise on Future Hotel:

Prior to issuance of building permits for the future hotel, verification that guest room interiors will meet the 45 dB CNEL interior standard shall be required through the preparation of an interior noise study by a qualified acoustician. The measures recommended in this study shall be implemented to meet the required 45 dB CNEL interior standard.

Mitigation Measures 1 and 2 of Section 4.7 of the FEIR are feasible and are made binding through the Project conditions of approval and the MMRP, and are incorporated by reference as if fully set forth herein.

D. Geology/Soils (Direct)

Potential Impacts

Liquefaction: Seismic events could potentially cause significant impacts as a result of groundshaking and liquefaction because the Project site is located within Geographic Hazard Category 31 and the site is underlain by fill soils and bay deposits that are characterized as relatively loose and cohesionless. Therefore, the impacts associated with liquefaction are considered significant.

Erosion/Slumping: The Project would have potentially significant geology/soils impacts associated with soil erosion during construction and shoreline rip rap slumping because a number of onsite surficial deposits may be subject to erosion hazards in association with the construction of future projects. Specifically, project-related activities such as demolition and grading for site preparation, would involve the removal of both stabilizing vegetation and surface pavement and the construction of manufactured slopes. These conditions could accelerate erosion rates due to the generally loose and unconsolidated nature of graded areas and fill materials. Slumping of the rip rap rock shoreline protection system at the Northern limits of the SeaWorld leasehold has already occurred. While repairs have been made intermittently beginning in the late 1980s, there is the potential for additional slumping of the rip rap in the future and, therefore, this constitutes a significant impact.

Unstable Geologic or Soil Conditions: Current soil or geologic conditions and shallow groundwater table levels would have potentially significant impacts on future development. The surficial soil may not be considered suitable for structural loads without adherence to project-specific recommendations from a qualified geotechnical engineer. Constraints on Project development are potentially significant but mitigable provided the recommendations of a qualified geotechnical engineer are followed for site preparation, building, and pool foundations.

Facts in Support of Finding: Implementation of Mitigation Measures 1 through 4 of Section 4.8 of the FEIR would substantially lessen geology/soils impacts to below a level of significance. Specifically, the following mitigation measures are feasible to reduce geology/soils impacts:

(a) Liquefaction: Prior to issuance of a Grading Permit for each portion of the redevelopment, a soils investigation shall be approved by the City Engineer. Appropriate remedial measures shall be incorporated into the grading plans. These remedial measures can be found in Appendix F of the FEIR and are incorporated by this reference. These

measures shall include, but not be limited to monitoring of differential settlement during construction, proper compaction of surficial soils, and installation of a well-compacted structural fill mat (with possible inclusion of geotextile reinforcing fabrics) above the water table in building areas, and/or continuous foundation systems for the buildings.

(b) Erosion/Slumping: Prior to issuance of the grading permits, the applicant shall prepare site-specific erosion control plans for the project in conformance with the City's Grading Ordinance to the satisfaction of the City Engineer. The erosion control plans should be in substantial conformance with the Conceptual Landscape Plan and the Design Guidelines for the Mission Bay Park Master Plan Update, and should include temporary and permanent erosion/siltation control measures and/or devices that would be installed both during and after site grading and construction, including, but not limited to, interim and post-development landscaping/hydro-seeding; jute netting (or other approved geotextile material) on manufactured slopes; sandbags, brow ditches, energy dissipaters and desilting detention basins; and any other methods to control short-term and long-term surficial runoff and erosion.

Prior to approval of grading permits, the applicant shall retain a soils engineer to monitor the grading, construction, and installation of runoff control devices and revegetation of the project site. The soils engineer shall submit in writing to the City Engineer and the Environmental Review Manager of the Planning and Development Review Department certification that the project complies with the required notes on the grading plan addressing erosion controls.

(c) Unstable Geologic or Soil Conditions: Prior to approval of grading permits, a complete subsurface geotechnical investigation of the proposed development area shall be performed to evaluate the thickness and/or the in situ condition of the compacted and hydraulic fill materials and the bay deposits. The geotechnical investigation would also provide site-specific remedial grading recommendations, foundation design criteria, and recommendations for the design of surficial improvements. The recommendations shall be implemented as part of project construction.

Prior to issuance of a grading permit for the implementation of projects associated with Master Plan Update the disposal of any anticipated construction-related dewatering effluent shall be permitted by either the City of San Diego or the RWQCB. The effluent could either be directed to the Mission Bay or the San Diego sewer system. If the effluent is discharged to Mission Bay, then the discharge shall meet the effluent limits specified by the RWQCB (Order No. 95-25) and Federal National Pollution Discharge Elimination System (NPDES) requirement. Effluent discharged to the City of San Diego sewer system shall meet the City's standards.

Mitigation Measures 1 through 4 of Section 4.8 of the FEIR are feasible and are made binding through the Project conditions of approval and the MMRP, and are incorporated by reference as if fully set forth herein.

E. Land Use

Potential Impacts

Biological Resources: The Initial Study and FEIR identified eelgrass beds in Perez Cove and in the vicinity of the SeaWorld Marina expansion, as well as all along the SeaWorld shoreline of the Pacific Passage. The proposed marina expansion would result in a potentially significant loss of eelgrass habitat in Perez Cove as a result of shading. Additionally, while a significant negative impact on eelgrass beds is not anticipated from future development of Tier 2 projects or Special Projects, shadow analysis conducted during the Initial Study shows that the potential for an adverse impact cannot be eliminated because shadowing from these structures could potentially result in loss of eelgrass habitat. Finally, the FEIR identified a potentially significant impact to least tern nesting activity at the nearby uncolonized Stony Point Least Tern Preserve should it be recolonized because new structures created as part of the Project could potentially create perching opportunities for least tern predators, from which the predators could have a vantage point to prey upon least tern chicks.

Facts in Support of Finding: Implementation of Mitigation Measures 1 through 3 of Section 4.6 of the FEIR would substantially lessen biological resources impacts on eelgrass and least tern nesting activity to below a level of significance. Furthermore, implementation of erosion control Mitigation Measure 3 of Section 4.5 of the FEIR would substantially lessen sedimentation impacts on eelgrass beds to below a level of significance. These mitigation measures are discussed in greater specificity above in Subsection B of this Section 3 (“Biological Resources”).

Mitigation Measures 1 through 3 of Section 4.6 and Mitigation Measure 3 of Section 4.5 of the FEIR are feasible and are made binding through the Project conditions of approval and the MMRP, and are incorporated by reference as if fully set forth herein.

F. Transportation and Circulation

Potential Impacts

2005 Offsite Circulation (Weekday): There is a lack of traffic signal coordination between traffic signals on Sea World Drive between Friars Road and the I-5 northbound ramps. Additionally, the queue and lane utilization at the Sea World Drive and I-5 southbound ramps is not optimal. This results in a significant traffic impact.

2020 Key Intersections (Ingraham Street and Perez Cove Way): The Project would have a significant traffic and circulation impact on the Ingraham Street and Perez Cove Way intersection under the 2020 buildout condition because the change in the LOS (measured by calculating the change in LOS between a “With Project” scenario and a 2020 buildout “Without Project” scenario) exceeds the City’s thresholds for significance. The proposed Project would also have a significant impact on the following key intersections under the 2020 buildout condition:

1. Sea World Drive and I-5 northbound ramps;
2. Sea World Drive and Pacific Highway; and
3. West Mission Bay Drive and I-8 westbound offramp.

Parking: For the year 2005, the minimum parking requirements for SeaWorld are forecast at approximately 7,600 spaces. There is a current usable supply of approximately 8,000 spaces. Therefore, there are no significant impacts for the 2005 near term aspects of the Project. Year 2020 buildout projections forecast a minimum parking requirement of 9,200 spaces. This exceeds the current supply of parking spaces. The usable supply of parking spaces is expected to reach capacity in the year 2010. Therefore, a potentially significant traffic and circulation impact exists because the number of parking spaces that the planned parking structure will provide is unknown.

Facts in Support of Finding: Implementation of Mitigation Measures 2, 3, and 8-11 of Section 4.4 of the FEIR would substantially lessen traffic and circulation impacts to below a level of significance. Specifically, the following mitigation measures are feasible to substantially lessen traffic and circulation impacts to below a level of significance:

(a) **2005 Offsite Circulation (Weekday):** Mitigation Measure 2 of Section 4.4 of the FEIR requires that SeaWorld install signal coordination on Sea World Drive from Friars Road to I-5 northbound ramp and the construction of a 400-foot extension of the eastbound right-turn lane on Sea World Drive at the southbound I-5 on-ramp. This measure would substantially lessen the traffic and circulation impacts to less than a significant level. SeaWorld's cost participation for this measure is 100 %.

(b) **2020 Key Intersection (Ingraham Street and Perez Cove Way):** Mitigation Measure 3 of Section 4.4 of the FEIR requires that SeaWorld reconfigure the Ingraham Street/Perez Cove Way intersection to remove the split east/west signal phasing at the time the MMRP indicates that it is necessary to do so. SeaWorld's fair share of this improvement is 100 %.

(c) **2005 Key Intersections (Weekend):** In the summer following approval of the SeaWorld Master Plan Update by the California Coastal Commission, Mitigation Measures 8 through 10 of Section 4.4 of the FEIR would be implemented. Traffic event officers would be provided at the Sea World Drive/I-5 interchange during busy days if California Department of Transportation concurs. This would permit the override of traffic signals, thus permitting better traffic circulation in response to traffic conditions. Lane management at the SeaWorld entrance gate would be improved to maximize vehicle storage. Finally, employees and repeat patrons would be provided with materials promoting I-8 or Ingraham Street as alternative routes to SeaWorld.

(d) **Parking:** Implementation of Mitigation Measure 11 of Section 4.4 of the FEIR would substantially lessen parking impacts to below a level of significance. Specifically, the completion of one or more of the following improvements, when the MMRP indicates it is necessary, will reduce parking impacts to below a level of significance: (1) paving

the unpaved guest overflow parking area located in the southwest corner of Area 2, (2) implement offsite parking or shuttle/MTDB transit options, and/or (3) construct the planned parking structure.

Mitigation Measures 2, 3, and 8 through 11 of Section 4.4 of the FEIR are feasible and are made binding through the Project conditions of approval and the MMRP, and are incorporated by reference as if fully set forth herein.

G. Air Quality (Partial)

Potential Impacts

Ambient Air Quality: Atmospheric conditions in the San Diego Air Basin limit the ability of the atmosphere to disperse air pollution generated by the large regional population. The Mission Bay Area rarely experiences unhealthy air quality and pollution levels exceeding state standards are infrequent. However, the cumulative impact of Project-related construction can lead to regionally degraded ambient air quality and may potentially constitute a significant air quality impact. Construction related to the Project could potentially cause significant air quality impacts because dust, fumes, equipment, and other contaminants would be released during various phases of Project construction. The Project-related construction activities would occur in close proximity to both large numbers of visitors and pollution sensitive marine species, which could potentially lead to significant air quality impacts. There is no adopted standard of impact significance for fugitive construction dust. The non-attainment status of the air basin for particulates suggests, however that Particulate Matter 10 emissions rates during construction should be minimized. Dust can be minimized by utilizing enhanced dust control measures. Mobile construction sources will release exhaust. These impacts are less than negligible. Finally, construction activities may result in significant spillover impacts into surrounding communities. "Spillover" occurs when dirt is tracked onto public streets or when construction detours and lane closures create congestion on public streets. Construction of the future hotel is most likely to result in potential spillover impacts.

Facts in Support of Finding: The ambient air quality impacts resulting from Project-related construction may be potentially significant and, therefore, adverse to air quality standards. However, Mitigation Measure 1 of Section 4.9 of the FEIR would reduce ambient air quality impacts to below a level of significance. Mitigation Measure 1 requires that as a condition of any grading permit, construction management procedures shall be implemented to clean up dirt and debris spillage from public roads. Construction traffic would be routed through the least sensitive areas. Use of transportation control measures would be used to encourage carpooling among construction workers and to schedule deliveries to non-peak traffic hours. These measures would reduce the potentially significant impacts from construction related exhaust emissions.

Mitigation Measure 1 of Section 4.9 of the FEIR is feasible and is made binding by the conditions of approval for the Project and the MMRP and are incorporated by reference as if fully set forth herein.

VII. FINDINGS REGARDING IMPACTS WHOSE MITIGATION IS WITHIN THE RESPONSIBILITY AND JURISDICTION OF ANOTHER AGENCY (CALIFORNIA PUBLIC RESOURCES CODE §21081(A)(2))

The City, having reviewed and considered the information contained in the FEIR, the appendices to the FEIR, and the administrative record, finds, pursuant to California Public Resources Code §21081(a)(2) and CEQA Guidelines §15091(a)(2), that there are significant impacts for which mitigation measures can and should be adopted by another public agency in the following category: traffic and circulation.

A. Traffic and Circulation

Potential Impacts

2020 Congestion Management Program (“CMP”) Freeway Segments: The Project would cause potentially significant impacts because the Project would increase the volume to capacity ratio by more than 0.02 at the mainline freeway segment on Interstate 5 (“I-5”) in both directions north of Sea World Drive.

Facts in Support of Finding: This impact is within the jurisdiction and responsibility of the California Department of Transportation (“CalTrans”) because the only possible mitigation measure available to substantially lessen the potential traffic and circulation impact to the I-5 freeway segments is widening I-5. Additionally, even without the proposed Project, I-5 would operate at an unacceptable Level of Service (“LOS”) of either “E” or “F” (on a scale of A through F, “A” being the best operating conditions and “F” being the worst).

VIII. FINDINGS REGARDING INFEASIBLE ALTERNATIVES AND MITIGATION MEASURES (CALIFORNIA PUBLIC RESOURCES CODE §21081(A)(3))

The City, having reviewed and considered the information contained in the FEIR, the appendices to the FEIR, and the administrative record, finds, pursuant to California Public Resources Code §21081(a)(3) and CEQA Guidelines §15091(a)(3), that (i) the FEIR considers a reasonable range of Project alternatives and mitigation measures, and (ii) specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the alternatives or mitigation measures identified in the FEIR and, therefore, the Project will cause significant unavoidable impacts in the categories of land use, traffic circulation and neighborhood character/aesthetics.

A. Infeasibility of Mitigation Measures for Significant Unmitigated Impacts

1. Land Use

Potential Impacts

Traffic and Circulation: The proposed Tier 1 and Tier 2 projects and Special Projects are part of an ongoing program to update the SeaWorld theme park through renovation and new

attractions. The Project and its individual components are anticipated to result in a gradual increase in visitor attendance. The additional traffic associated with the attendance increase would have potentially significant impacts on road segments, key intersections, and freeway ramps because traffic would increase in these areas, thus leading to delays and volume to capacity ratios in excess of the City's identified significance thresholds. Subsection A.2. of this Section VII more specifically evaluates the significant traffic and circulation impacts under both the near term (2005) condition and the buildout (2020) condition.

Neighborhood Characteristics/Aesthetics: The proposed height and scale of the Splashdown Ride, future hotel project, and all Tier 2 future projects would have potentially significant visual impacts on the character of Mission Bay Park and, therefore, would significantly impact vistas from the South Shores entry roadways identified in the Mission Bay Master Plan Update. Additionally, these projects represent an inconsistency with the Mission Bay Park Master Plan Update Design Guidelines for building height and massing. The proposed amendment to the Mission Bay Master Plan Update would resolve the height inconsistency. The potential significant land use impacts related to neighborhood characteristics/aesthetics are more specifically discussed in Subsection A.3 of this Section VIII.

Facts in Support of Finding:

(a) **Traffic and Circulation:** Mitigation Measures 1 and 4 through 7 of Section 4.4 of the FEIR would substantially lessen impacts associated with increased traffic by requiring SeaWorld to make fair share contributions to road and freeway improvement projects. (See Subsection A.2 of this Section VIII for a more specific discussion of traffic impact mitigation measures.) However, these mitigation measures can only be implemented if the necessary Capital Improvement Projects ("CIP") are fully funded and implemented. Therefore, traffic and circulation impacts to the roadway segments, key intersections, and freeway ramps would be potentially significant unmitigated impacts because it is possible that the CIP funding and implementation necessary to accomplish the improvements to which SeaWorld will be required to make a fair share contribution may not be provided. Furthermore, mitigating the impact at the mainline freeway segment of I-5 northbound and southbound, north of Sea World Drive by widening I-5 to accommodate the increase in traffic impacts is infeasible because the cost of such mitigation is excessive for only one project.

(b) **Neighborhood Character/Aesthetics:** Mitigation Measures 1 and 2 of Section 4.2 of the FEIR require SeaWorld to prepare and implement a site plan for the Project in compliance with the Master Plan Update landscape buffer and bulk/plane setbacks. The site plan will also adhere to the Master Plan Update Design Guidelines that pertain to landscaping, lighting, signs, and architectural guidelines. These mitigation measures, if fully implemented, would lessen but not fully mitigate the visual quality impacts associated with the Splashdown Ride, Tier 2 future projects, and the future hotel because these Project components would still constitute a significant visual impact.

2. Traffic and Circulation

Potential Impacts

Roadway Segments: Based on the City's threshold criteria for significance of impacts, the proposed Project's contribution to traffic on roadway segments would potentially exceed the acceptable volume to capacity ratio ("V/C") threshold of significance on three segments under the near term (2005) condition and three segments under the buildout (2020) condition. The significance thresholds are identified in Table 4.4-7 of the FEIR and are specifically analyzed with respect to the Project's traffic and circulation impacts in Table 4.4-8 of the FEIR. Therefore, these traffic and circulation impacts are considered potentially significant because the change of the V/C for these roadway segments exceeds the significance thresholds defined in the City of San Diego Traffic Impact Study Manual.

The proposed Project would have a potentially significant impact on the following roadway segments under the near term (2005) condition: Sea World Drive, between Pacific Highway and I-5; Sea World Drive, between Friars Road and Pacific Highway; and Sea World Drive, between Sea World Way and Friars Road.

Using the City of San Diego Series 9 Traffic Model, the proposed Project would have a potentially significant impact on the following roadway segments in the buildout (2020) condition: Sea World Drive, between Sea World Way and I-5 (Friars Road); West Mission Bay Drive, between Sea World Drive and Ingraham Street; and West Mission Bay Drive, between Sea World Drive and Interstate 8 ("I-8").

Key Intersections: The Project may potentially have a significant unmitigated traffic and circulation impact on the following intersections under the 2020 buildout condition: Sea World Drive and I-5 northbound ramps (AM and PM peak hours), Sea World Drive and Pacific Highway (PM peak hours), West Mission Bay Drive and I-8 westbound off ramp (PM peak hours), and Ingraham Street and Perez Cove Way (PM peak hours). The impacts are significant because the change in the LOS (measured by calculating the change in LOS between a "With Project" scenario and a 2020 buildout "Without Project" scenario) exceeds the City's thresholds for significance.

Freeway Ramp Meters (Weekday 2020 Buildout): The FEIR identified potentially significant cumulative traffic impacts at the following freeway ramps: Sea World Drive and northbound I-5 (AM peak hours), Sea World Drive and southbound I-5 (AM and PM peak hours), and West Mission Bay Drive and eastbound I-8 (AM and PM peak hours). The traffic impacts from the Project under the 2020 buildout consideration are considered potentially significant impacts because Project's projected traffic volume would add to delays at locations already experiencing delays in excess of 15 minutes. Therefore, projected Project traffic volume would result in a significant 2020 buildout impact at these ramps.

2020 Congestion Management Program ("CMP") Freeway Segments: The Project would cause potentially significant impacts because the Project would increase the volume to capacity

ratio by more than 0.02 at the mainline freeway segment on Interstate 5 ("I-5") in both directions north of Sea World Drive.

Facts in Support of Finding: There will potentially be significant unmitigated impacts if the CIPs necessary for the success of the mitigation measures discussed herein are not fully implemented or funded. Although SeaWorld will pay its fair share costs of the improvements, it is economically infeasible for SeaWorld to pay all the costs. By Year 2020, the Project is expected to generate an additional 4,240 ADT on I-5 north of Sea World Drive. This is compared to an expected 224,700 ADT on the freeway. Therefore, SeaWorld represents 1.9 percent of the I-5 traffic. On a peak hour basis, SeaWorld represents a volume to capacity ratio of 0.027. The significance criteria state that a ratio over 0.02 is significant. To mitigate this impact, an additional lane would be needed on I-5 between Sea World Drive and SR 52. The total cost for this land is estimated at \$36 million. It would be economically infeasible for one project to pay for this entire cost. CEQA Guideline Section 15126.4(a)(4)(B) states a mitigation measure must be "roughly proportional" to the impacts of the Project. *Dolan v. City of Tigard*, 512 U.S. 374 (1994). To the extent that CIPs are not fully funded and implemented, the following mitigation measures would not be roughly proportional to the significant impacts of the Project because SeaWorld cannot be expected to fund the entire mitigation measure in excess of its fair share costs. Furthermore, without the proposed Project, the FEIR indicates that roadway segments, key intersections, freeway ramp meters and CMP freeway segments identified as having significant impacts would nonetheless operate at unacceptable LOS levels. (FEIR 4.4-32 through 4.4-33.) Thus, while Project generated traffic would add to the impact, it is not roughly proportional for SeaWorld to pay the entire cost of the mitigation measures because the FEIR indicates non-Project generated traffic would still be unacceptable.

Therefore, implementation of the following additional mitigation measures is economically infeasible:

(a) **Roadway Segments:** Impacts to the roadway segments requiring fair share contributions from SeaWorld pursuant to CIPs are considered potentially unmitigated because inadequate assurances exist that the necessary CIP would be approved by the City and/or sufficiently funded to complete the needed improvements. Specifically, the following reasons may render the significant impacts unmitigable:

(i) **2005 Near Term Roadway Segments:** Mitigation Measure 1 of Section 4.4 of the FEIR indicates that one of two alternative measures shall be undertaken by SeaWorld. First, Sea World Drive could be widened from four to six lanes between I-5 and Sea World Way. Second, if the City has formed a CIP for the combined improvements to Sea World Drive and its interchange with I-5, Sea World shall contribute to the CIP an amount which is equivalent to 44% of the estimated cost of the widening of Sea World Drive to six lanes. In the event the second alternative form of mitigation is selected, the short term traffic and circulation impacts of the Project on Sea World Drive may not be fully mitigated because full funding for the CIP may be delayed or never achieved. The first alternative would not be roughly proportional to the Project's impact on roadway segments if the CIP is not fully implemented because SeaWorld cannot be expected to fund the entire mitigation measure.

Therefore, selecting the second alternative measure would cause the traffic and circulation impacts from the 2005 roadway segment (weekday) to remain a potentially unmitigated significant impact.

(ii) 2020 Buildout Roadway Segments: Mitigation Measure 1 of Section 4.4 of the FEIR may potentially mitigate the traffic and circulation impacts of the Project on Sea World Drive between Sea World Way and Friars Road. Selection of the first alternative would widen Sea World Drive to six lanes and mitigate the traffic and circulation impacts to below a level of significance. However, if the first alternative in Mitigation Measure 1 is not selected or CIP improvements are not made pursuant to the second alternative, then this significant impact will remain unmitigated. Mitigation Measure 7 of Section 4.4 of the FEIR would substantially lessen the impacts for 2020 roadway segments to below a level of significance by widening Mission Bay Drive to six lanes. However, there is the possibility that the impacts will potentially remain unmitigated because widening Mission Bay Drive requires that CIP No. 52-463 be fully implemented and funded. SeaWorld's fair share contribution of widening Mission Bay Drive is 47% of the City's cost of the improvements. In light of the fact that this CIP may not be sufficiently funded or implemented coincident with SeaWorld's needs, SeaWorld's long term impact on West Mission Bay Drive between Sea World Drive and I-8 would be unmitigated. Mitigation Measures 1 and 7 would not be roughly proportional to the Project's impact on these roadway segments if the CIPs are not fully implemented because SeaWorld cannot be expected to fund the mitigation measures in their entirety. Therefore, the significant roadway segment traffic impacts associated with the 2020 buildout will be a potentially significant unmitigated impacts.

(b) Key Intersections: Mitigation Measures 3 through 6 of Section 4.4 of the FEIR require SeaWorld to (i) make fair share contributions to highway ramp and interchange improvements for I-5 and I-8 and (ii) make fair share contributions to the Sea World Drive and Pacific Highway intersection reconstruction projects. Impacts to the key intersections which require fair share contributions from SeaWorld pursuant to CIP are considered potentially unmitigated because inadequate assurances exist that the necessary CIP would be approved by the City and/or sufficiently funded to complete the needed improvements. Furthermore, significant impacts resulting from the Project's effect on key intersections would be unmitigable if CIP 52-463 or any other necessary CIP is not implemented by the City. These mitigation measures address significant impacts that will exist both with the Project and without the Project. The mitigation measures would not be roughly proportional to the Project's impact on these key intersections if the CIPs are not fully implemented because SeaWorld cannot be expected to fund the mitigation measures in their entirety.

(c) Freeway Ramp Meters (Weekday 2020 Buildout): Mitigation Measures 4 and 7 of Section 4.4 of the FEIR require that SeaWorld make fair share contributions to freeway ramp improvements to alleviate potentially significant traffic impacts to the identified freeway ramps. However, significant delays at freeway ramps are projected to exist without the impacts associated with the Project. Impacts to the freeway ramps which require fair share contributions from SeaWorld pursuant to CIPs are considered potentially unmitigated because inadequate assurances exist that the necessary CIP would be approved by the City and/or

sufficiently funded to complete the needed improvements. Furthermore, significant impacts resulting from the Project's effect on freeway ramps would be unmitigable if CIP 52-463 or any other necessary CIP is not implemented by the City. The mitigation measures would not be roughly proportional to the Project's impact on these freeway ramps if the CIP is not fully implemented because SeaWorld cannot be expected to fund the mitigation measures in their entirety.

3. Neighborhood Characteristics

Potential Impacts

Tier 1 Visual Impacts: The Splashdown Ride will consist of three towers, ranging in height from 83 to 95 feet and ranging in diameter from 24 to 50 feet. The Splashdown ride would be one-third the height of the existing SeaWorld Tower. Construction of the Splashdown Ride would result in a new visual element being added within Mission Bay Park. Photosimulation shows that the Splashdown Ride will be a noticeable visual element from outside the SeaWorld leasehold. Because of the Splashdown Ride's prominence from many vantage points outside the SeaWorld leasehold, the FEIR determined that this component of the Project constitutes a significant visual quality impact.

SeaWorld Master Plan Update Visual Impacts: The FEIR analyzed the visual quality impacts resulting from the SeaWorld Master Plan Update, including Tier 1 and Tier 2 projects and Special Projects. The 2020 buildout scenario of the Master Plan Update will result in the Project constituting a substantial alteration of the existing visual character of the southern part of Mission Bay Park, thus resulting in a significant visual quality impact. Tier 2 projects and the future hotel would result in a major change in the visual character in the landscape and thus would constitute a significant impact on visual quality.

Facts in Support of Finding: There will potentially be significant unmitigated impacts because Mitigation Measures 1 and 2 of Section 4.2 of the FEIR do not reduce the significant visual quality impacts to a level below significance.

Tier 1 Visual Impacts: Mitigation Measure 1 of Section 4.2 of the FEIR requires SeaWorld to prepare and implement a site plan for the Project, which complies with the Master Plan Update landscape buffer and bulk/plane setbacks. The site plan will also adhere to the Master Plan Update Design Guidelines. This mitigation measure, if fully implemented, would lessen but not fully mitigate the visual quality impact associated with the Splashdown Ride because the Splashdown Ride would still constitute a significant visual impact. Thus, the visual impact of the Splashdown Ride will remain a significant unmitigated visual impact.

SeaWorld Master Plan Update Visual Impacts: Mitigation Measure 2 of Section 4.2 of the FEIR requires SeaWorld to prepare and implement a site plan for the Project in compliance with the Master Plan Update landscape buffer and bulk/plane setbacks. The site plan will also adhere to the Master Plan Update Design Guidelines. This mitigation measure, if fully implemented, would lessen but not fully mitigate the visual impacts associated with the buildout of the Master

Plan. Thus, the visual impact of the SeaWorld Master Plan Update will remain a significant unmitigated impact.

B. Infeasibility of Project Alternatives to Reduce or Avoid Significant Impacts.

The City, having reviewed and considered the information contained in the FEIR, the appendices to the FEIR, and the administrative record, pursuant to California Public Resources Code § 21081(a)(3) and CEQA Guidelines § 15091(a)(3), finds that specific economic, legal, social, technical, or other conditions, including provision of employment opportunities for highly trained workers, make infeasible the alternatives as follows:

1. No Project Alternative. In the case of the proposed SeaWorld Master Plan Update, the No Project Alternative would permit development that is currently allowed under the existing adopted 1985 Master Plan. Development allowed under the 1985 SeaWorld Master Plan includes the unbuilt 300-room hotel and 200-slip marina expansion. Furthermore, redevelopment could continue on the project site in conformance with the existing 30-foot height limit. This alternative assumes that attendance levels would remain relatively unchanged, as they have over the past ten years.

This alternative would avoid the significant unmitigable neighborhood character/aesthetics impact related to the future development that would be up to 160 feet in height. Significant impacts associated with transportation/circulation may be lessened. However, FEIR Section 4.4.3 indicates that even without the Project substantial traffic delays are projected for the future. Although the theme park attendance would not increase, under the current SeaWorld Master Plan a hotel and marina expansion could be developed. These facilities would generate traffic that would increase traffic congestion in the project area. This alternative would generate less traffic than the proposed project.

The neighborhood character/aesthetics significant unmitigable impact that would be avoided is the visual impacts related to the future development that would be up to 160 feet in height.

Facts in Support of Finding: The significant, mitigable impacts to land use, traffic circulation, light, glare and shading, water quality, biology, as it pertains to potential perching opportunities, and noise would be avoided. Without the Project there would still be significant traffic impacts and delays in excess of City standards. Additionally, without the Project SeaWorld would not provide any fair share mitigation proportionate to its share of the traffic congestion. Impacts from light, glare and shading, water quality, and biology are mitigable as discussed in Section VI above. This alternative would also eliminate the increased educational resources available to the region from the Project. Other issue impacts are either not significant or could occur under the existing SeaWorld Master Plan.

Further, the No Project Alternative is not considered feasible because the following SeaWorld Master Plan Update Project objectives would not be met:

(a) Implementing the SeaWorld Initiative, Proposition D, approved by the electorate of the City in November 1998. The SeaWorld Initiative allows development up to a maximum height of 160 feet on the entire SeaWorld leasehold;

(b) Providing for an updated comprehensive Master Plan that addresses the entire SeaWorld leasehold;

(c) Continuing to operate and improve on an economically-feasible, high quality theme park environment;

(d) Providing attractions which appeal to a broader range of family members;

(e) Renovating older areas of the park;

(f) Increasing revenues to the City of San Diego (including TOT revenue);

(g) Continuing to create permanent and part-time, local employment opportunities;

(h) Providing an updated Master Plan that reflects the policies of Chapter 3 of the California Coastal Act and the Mission Bay Park Master Plan;

(i) Remaining competitive with other theme parks; and

(j) Allowing renovation of existing buildings over 30 feet in height.

2. **More Regulated Alternative.** This alternative would preclude the rental of personal water crafts (PWCs) powered by two-cycle engines. Therefore, instead of six PWC's, two boat mooring slips would be provided. Fireworks would remain at existing levels. This alternative would reduce the number of Tier 2 160-foot high sites from four to three. This alternative would also prohibit more than three Tier 2 sites to be for shows and more than two Tier 2 sites to be for exhibits.

Facts in Support of Finding: The intent of this alternative is to reduce water quality, visual, and fireworks noise impacts. However, no significant impacts were identified for the proposed fireworks displays, hence this issue need not be addressed because no significant impact has been found. Water quality impacts associated with the marina operations were identified as significant and mitigable in Subsection A of Section VI above. Through the elimination of potential PWC rental operation at the SeaWorld Marina, water quality impacts would be lessened. However, PWC users will be able to rent personal watercraft elsewhere in the Mission Bay area. Therefore, the water quality impact lessened at the SeaWorld Marina would probably

occur elsewhere in Mission Bay. Visual impacts would be lessened but not to below a level of significance because the alternative would only reduce the number of Tier 2 160 foot high development areas from four to three. This alternative is economically infeasible because it would constrain SeaWorld's flexibility in the development and redevelopment of new attractions that would in turn affect the economic viability of SeaWorld and would reduce the appeal to a broader range of family members. This alternative is economically infeasible because this alternative would potentially reduce the City's tax revenue because SeaWorld's ability to develop new attractions would be constrained.

Further, the More Regulated Alternative is not considered feasible because it would not fully meet the following Project objectives:

- (a) Continuing to operate and improve on an economically-feasible, high quality theme park environment;
- (b) Providing attractions which appeal to a broader range of family members;
- (c) Increasing revenues to the City of San Diego (including TOT revenue); and
- (d) Continuing to create permanent and part-time, local employment opportunities; and
- (e) Remaining competitive with other theme parks.

3. Enhanced Public Access Alternative

The enhanced public access alternative would entail a revised site plan that would accommodate pedestrian and or bicycle traffic along the entire water frontage of the leasehold. The Mission Bay Park Master Plan calls for a 50-foot-wide public access corridor along the waters edge. However, in cases where waterfront access is limited, such as the SeaWorld leasehold, the minimum allowed by the Master Plan is a 17-foot-wide paved boardwalk that would accommodate both pedestrians and bicycles with a one foot separation between them. Given the existing SeaWorld facilities located adjacent to the waters edge, this alternative is based on the minimum 17-foot-wide paved boardwalk.

Facts in Support of Finding: This alternative would require extensive modification of existing SeaWorld facilities in many locations to accomplish an enhanced waterfront accessway. Thus, this alternative is infeasible because it is inconsistent with the 1985 SeaWorld Master Plan, which permits the existing facilities, and furthermore would result in excessive costs due to relocating existing facilities. Beginning at the northeastern corner of the leasehold this public access alternative could be accommodated for approximately 375 feet of the waterfront because this area is undeveloped. However, the planned Splashdown Ride, which is to be located in this area, would require extensive modification of the site plan to allow for this public accessway.

This alternative is infeasible for public safety reasons. Public access would infringe on the ride safety envelope comprising of approximately 50 feet, where employee and guest access are not allowed. Additionally, relocation of the existing access road along the present SeaWorld boundary would be necessary to allow for extending park pathways to the Splashdown Ride. Accommodating coastal pedestrian access would require re-routing of this access road to the extreme east side of 16.5 acre expansion area and along the Bay to re-join existing road at Arctic Back-Wash Basin.

West of the Splashdown Ride, access could be accomplished through the abandonment of an existing service vehicle access road. However this service access road is necessary for the operation of SeaWorld and to provide emergency access. This alternative is infeasible because abandoning the existing vehicle access road would severely compromise service and emergency access required for the safe operation of the existing SeaWorld facility. The following list identifies the types of service that the access road supports, and identifies the frequency of such services:

1. Water Quality
 - a. Chemical Delivery
 - 1) Sodium Hypochlorite three times per week
 - 2) Sodium Bissulfate one time per week
 - 3) Almax Vacuum Truck on time per week
2. Maintenance
 - a. Maintenance Contractors - Daily access
 - 1) HVAC
 - 2) Plumbing
 - 3) Almax Vacuum Trucks
 - 4) General Contractors
 - b. In-House Maintenance Crews - Daily Access
 - 1) Landscape Department
 - 2) Electrical Department
 - 3) Mechanical Department
 - 4) Carpenter Department
 - 5) Water Quality Department
 - 6) Paint Department
 - c. Access for Maintenance Equipment - Daily
 - 1) Cranes, forklifts, etc.
 - 2) Landscape Equipment - Backhoes, mowers, dump and flatbed trucks etc
 - d. New Construction daily during construction projects
 - 1) Construction contractors / subcontractors
 - 2) Construction Equipment
 - 3) Construction Material Deliveries

3. Operations Department / Food Service Department / Merchandise Department
 - a. Removal of trash via trainable dumpsters (long line of dumpsters connect in train fashion pulled by a tow motor).
 - b. Deliveries of food and supplies to food service facilities - panel trucks / flatbed trucks
 - c. Delivery of merchandise to shops - panel trucks / flat bed trucks
 - d. Access for street sweeper equipment etc for park clean-up

4. Life Safety - as required
 - a. Access for paramedics
 - b. Access for fire department (Ladder Truck)
 - c. Part of disaster reaction plan access routes agreed on with City of San Diego Fire Department

5. Animal Care Departments - Daily access
 - a. Emergency access for animal care issues.
 - b. Animal Moves (planned and emergency)
 - 1) Cranes
 - 2) Flatbed trucks
 - 3) Move equipment (slings, rigging, etc.
 - c. Animal food deliveries - flatbed trucks

Relocation of this access road further south would require the modification of the access road for the Penguin Encounter and Nautilus Picnic Pavilion, as well as other support facilities. From the Shark Encounter westward, there are a number of buildings and emergency pedestrian accessways that would require modification (i.e. partial demolition and reconstruction) to accomplish the 17-foot-wide public access. Examples include the Shark Encounter and associated nearby water treatment facilities, Mango Joes restaurant, the Freshwater Aquarium, the 4D Theater and Harborside Café. Thus, this alternative would be inconsistent with the facilities that are currently allowed on the SeaWorld Leasehold under the 1985 SeaWorld Master Plan and the alternative would require significant alterations or relocation of SeaWorld's current facilities. Additionally, relocating and/or demolishing the current facilities would be economically infeasible because shutting down these areas of the park would lead to a significant economic loss to SeaWorld and the City.

In order to accomplish a complete waterfront pedestrian access, the existing Waterfront Stadium, western water treatment plant and marina structures would require extensive modification. Modification of the Waterfront Stadium and water treatment plant are particularly onerous because these facilities are built up next to the water's edge. Modification of the western water treatment plant could lead to reduced water quality and/or increased costs in treating water during the time such modification was occurring. This alternative is economically infeasible because it would require extensive modification of existing structures and water treatment infrastructure. As a result, the extensive cost to implement this alternative would compromise

the success and economic viability of the SeaWorld operation. The costs would reduce rent payments and income to the City of San Diego.

Further, the Enhanced Public Access Alternative is not considered feasible because it does not fully meet the following objectives:

- (a) Providing for an updated comprehensive Master Plan that addresses the entire SeaWorld leasehold;
- (b) Continuing to operate and improve on an economically-feasible, high quality theme park environment;
- (c) Renovating older areas of the park;
- (d) Increasing revenues to the City of San Diego;
- (e) Continuing to create permanent and part-time, local employment opportunities; and
- (f) Remaining competitive with other theme parks.

4. No Hotel and Marina Alternative

The No Hotel and Marina Alternative assumes that the proposed 650-room hotel and marina expansion would not occur as part of the project. The existing Master Plan, however, allows a 300 room hotel and boat landing pier. This alternative would address the significant unmitigated visual impacts associated with the hotel expansion; the significant unmitigable traffic and circulation impacts; and the significant mitigable impacts from marina expansion to eelgrass beds in Perez Cove.

Facts in Support of Finding: This alternative would result in a considerable reduction in trip generation (48 percent or 7,300 ADT). As a result, significant impacts identified for the 2020 scenario, which are listed below, would be lessened. Significant and mitigable traffic impacts that would be lessened include the following:

Street Segments

1. Sea World Drive (4 lanes), between Pacific Highway and I-5;
2. Sea World Drive (4 lanes), between Friars Road and Pacific Highway;
3. Sea World Drive (4 lanes), between Sea World Way and Friars Road;
4. Sea World Drive (6 lanes), between Sea World Way and Friars Road; and
5. West Mission Bay Drive, between I-8 and Sea World Drive.

Key Intersections

1. Sea World Drive and I-5 northbound ramps (AM and PM peak hours);
2. Sea World Drive and Pacific Highway (PM peak hour);
3. Ingraham Street and Perez Cove Way (PM peak hour); and

4. West Mission Bay Drive and I-8 westbound off ramp (AM and PM peak hours).

Freeway Ramps

1. Sea World Drive and northbound I-5 (AM and PM peak hours);
2. Sea World Drive and southbound I-5 (AM and PM peak hours); and
3. West Mission Bay Drive and westbound I-8 (AM and PM peak hours).

However, the impact would not be lessened to a level below significance because the existing Master Plan already permits a 300-room hotel on the site. This alternative would also lessen the significant and unmitigated impacts to CMP I-5 freeway segments: Northbound I-5, north of Sea World Drive and Southbound I-5, north of Sea World Drive. Additionally, FEIR Section 4.4 indicates that projected traffic levels will be unacceptable regardless of whether or not the Project is allowed to move forward.

This alternative would lessen the significant unmitigable visual impact associated with the 90-foot-high hotel. By eliminating the hotel structure, the visual impact associated with the SeaWorld Master Plan Update would be reduced. However, other Tier 1 and future Tier 2 projects (four of which could be 160-feet high) would contribute to the significant unmitigable visual impact associated with the project. Therefore, although lessened, the neighborhood character/aesthetics would remain significant and unmitigable under this alternative.

This alternative would eliminate the significant and mitigable impact to eelgrass beds from the marina in Perez Cove, because the Marina would not expand over existing eelgrass beds, a sensitive biological resource. Subsection B of Section VI discusses the mitigation of impacts to eelgrass beds.

Further, the No Hotel and Marina Alternative is not considered feasible because the following Project objectives would not be met:

- (a) Continuing to operate and improve on an economically-feasible, high quality theme park environment;
- (b) Increasing revenues to the City of San Diego (including TOT revenue);
- (c) Renovating older areas of the park;
- (d) Continuing to create permanent and part-time, local employment opportunities; and
- (e) Providing an updated Master Plan that reflects the policies of Chapter 3 of the California Coastal Act and the Mission Bay Park Master Plan.

5. Underground Parking Garage Alternative

The Underground Parking Garage Alternative assumes that the proposed parking facility will be located below ground to address potential visual impacts associated with the Project's proposed above-ground parking garage.

Facts in Support of Finding: The Underground Parking Garage Alternative does not significantly reduce the potential visual impacts of the Project's proposed above-ground parking garage. The neighborhood character/aesthetics analysis of Section 4.2 of the FEIR determined that the above-ground parking garage would not contribute to the significant unmitigated visual impacts of the Project. Figure 4.2-32 in the FEIR provides a visual representation of the worst-case development envelope for the parking garage allowed by the SeaWorld Master Plan Update. The representation illustrates a 45-foot above-ground parking garage. The above-ground parking garage, however, would be obscured by existing landscape, which would consequently limit the structure's visibility from offsite locations to only the very upper portions of the structure.

Furthermore, placing the parking garage underground would create significant design engineering constraints because of the high ground water table underlying the Project site. The geology/soils analysis of Section 4.8 of the FEIR states that groundwater was encountered in previous exploratory borings at depths ranging from approximately seven to seventeen feet below site grades. Groundwater depths must be taken into account when establishing the site development plan for an underground parking garage. Consequently, constructing the parking garage underground would require permanent dewatering and discharge into Mission Bay. Discharge of groundwater directly into Mission Bay, however, is prohibited by the Regional Water Quality Control Board, unless a discharge permit is approved by the Board. A discharge permit would require treatment of the groundwater effluent. This alternative could result in new significant water quality impacts.

An additional engineering constraint involves the hydrostatic pressure on an underground parking structure. This pressure would push the underground parking structure out of the ground. To overcome this pressure, the parking garage would require an extensive system of subsurface piles.

These major engineering and technical design issues and regulatory constraints to constructing the parking garage underground would make this facility technologically infeasible and unbuildable. Assuming that the underground parking garage is possible from a design perspective, the construction of such a structure would alternatively pose a major and prohibitive cost to the applicant relative to the costs of constructing the above-ground parking garage. Furthermore, with the exception of potential visual impacts, this alternative would not lessen any identified significant environmental impacts.

Further, the Underground Parking Garage Alternative is not considered feasible because it would not fully meet the following Project objectives:

- (a) Continuing to operate and improve on an economically-feasible, high quality theme park environment; and
- (b) Increasing revenue to the City of San Diego.

6. No Parking Structure or Hotel Over 30 Feet High Alternative

This alternative is primarily designed to address potential visual impacts associated with the proposed 45-foot parking garage and 90-foot hotel, by limiting the height of such structures to 30 feet. The reduction in height of the parking garage from 45 to 30 feet assumes that the garage footprint would remain the same. The number of parking spaces, therefore, would be reduced by about one-third of that which is proposed under the Project. Because the existing SeaWorld Master Plan allows for a hotel with 300 rooms within the 30-foot height limit, this alternative assumes a maximum of 300 hotel rooms.

Facts in Support of Finding: The No Parking Structure or Hotel Over 30 Feet Alternative would not result in a noticeable lessening of the visual impacts of the Project's proposed 45-foot parking garage. The neighborhood character/aesthetics analysis of Section 4.2 of the FEIR determined that a 45-foot parking garage would not contribute to the significant unmitigated visual impacts of the Project. Figure 4.2-32 in the FEIR provides a visual representation of the worst-case development envelope for the parking garage allowed by the SeaWorld Master Plan Update. The representation illustrates a 45-foot parking garage. The parking garage, however, would be obscured by existing landscape, which would consequently limit the structure's visibility from outside the SeaWorld leasehold to only a small part of the very upper portions of the structure. Furthermore, reducing the height of the parking structure would significantly reduce the parking supply. As a result, this alternative is economically infeasible because it would compromise the economic viability of SeaWorld. By failing to provide sufficient parking for future SeaWorld guests, this alternative in effect would limit the number of guests who can be accommodated at SeaWorld and thereby reduce the associated revenue of the increased number of guests. Also, this alternative is not feasible because the reduction in parking could result in a significant parking supply impact. Unlike this alternative, the Project's proposed parking structure is designed to accommodate expected increases in attendance over the next 20 years.

Reducing the height of the future hotel from up to 90 feet to 30 feet would lessen the visual impact of the SeaWorld Master Plan Update. The hotel component of the Project would contribute to the significant visual impact of the proposed Project. Therefore, reducing the height of this Project component would result in a lessening of visual impacts as such reduction would reduce the structure's visibility outside the SeaWorld leasehold. From nearly all locations outside the leasehold, existing trees and park improvements would screen a hotel 30 feet in height. However, although this impact would be lessened, it is still considered significant because other components of the Master Plan proposed in Area 1 of the Theme Park would result

in a significant visual impact. Furthermore, this alternative is not economically feasible because it would reduce the size of the proposed hotel, thus reducing the economic viability of SeaWorld. Because of the resulting reduction of the number of rooms arising from the reduction of the hotel height, the potential TOT revenue generated for the City's benefit would also be reduced. Also, such a reduction would cause a corresponding reduction in the number of people who could be accommodated adjacent to the coast, thereby compromising the California Coastal Act's priority on visitor-serving uses.

Also, the reduction in the height of the parking garage and hotel would ultimately reduce both short-term construction, and long-term employment opportunities for the SeaWorld leasehold.

Further, this alternative is not considered feasible because it would compromise the following Project objectives, as follows:

- (a) Continuing to operate and improve on an economically-feasible, high quality theme park environment;
- (b) Increasing revenue to the City of San Diego (including TOT revenue);
- (c) Continuing to create permanent and part-time, local employment opportunities; and
- (d) Providing an updated Master Plan that reflects the policies of Chapter 3 of the California Coastal Act and the Mission Bay Park Master Plan Update; and
- (e) Remaining competitive with other theme parks.

7. Less Visually Intrusive Alternative

The Less Visually Intrusive Alternative is designed to lessen the significant unmitigable visual impact associated with the proposed Project by imposing (i) more restrictive design guidelines that focus on maximum bulk for various heights of future structures and (ii) restrictions on the maximum heights of future structures from visually sensitive areas. This alternative assumes that future structures would be 75 percent transparent above 60 feet. It also assumes that the height of structures at the eastern end of the theme park would be limited to 100 feet because views to this part of the park from the east are openly visible. This alternative would reduce the visibility of future Tier 2 projects by making the upper parts of future attractions more transparent such that they tend to "blend" better with the visual background. In addition, by limiting the height of future Tier 2 projects along the eastern project boundary to 100 feet, these future attractions would be less visible in an area where future development will be openly visible from some areas to the east of the Project site.

Facts in Support of Finding: The Less Visually Intrusive Alternative would lessen, but not fully mitigate, the significant visual impact associated with the Project. This alternative would

be economically infeasible because it would compromise SeaWorld's ability to remain economically viable by severely limiting design flexibility to build future attractions that would enhance theme park attendance and associated revenue. Such restrictions on SeaWorld's capability of effectively responding to sharp market demands would adversely affect SeaWorld's competitiveness in a market driven by hard development cycles.

Moreover, this alternative is not considered feasible because it would compromise the following Project objectives, as follows:

- (a) Continuing to operate and improve on an economically-feasible, high quality theme park environment;
- (b) Providing attractions which appeal to a broader range of family members;
- (c) Increasing revenues to the City of San Diego;
- (d) Continuing to create permanent and part-time, local employment opportunities; and
- (e) Remaining competitive with other theme parks.

8. Combination Alternative

The Combination Alternative includes elements of the foregoing alternatives to address a variety of environmental issues raised by commentors to the Notice of Preparation. This alternative assumes that all future structures would be limited to 30 feet in height. This alternative also assumes that no new amusement type rides or hotel would be part of the SeaWorld Master Plan Update. Instead, this alternative assumes that the SeaWorld Master Plan would focus future attraction development on marine education and conservation. Also, this alternative requires the SeaWorld Master Plan Update to include enhanced public access along the waterfront.

The foregoing elements of the Combination Alternative are addressed above in the infeasibility analysis of the other project alternatives. Limiting future structures to 30 feet in height is addressed in the No Project Alternative and the No Parking Structure or Hotel Over 30 Feet Alternative. Removing the future hotel from the Master Plan is addressed in the No Hotel and Marina Alternative. Enhanced public access along the waterfront is addressed in the Enhanced Public Access Alternative. Focusing future attraction development on marine education does not address any environmental issue associated with the Project.

Significant impacts associated with transportation and circulation would be lessened because under this alternative less traffic would be generated as compared to the proposed Project. This alternative, however, would not significantly lessen the transportation and circulation impacts to below a level of significance. The neighborhood character/aesthetics impacts determined to be

significant unmitigable impacts in Subsection A.3 of this Section VIII would be avoided because no building or structure would be allowed in excess of 30 feet.

The significant mitigable impacts to land use, light, glare and shading, transportation and circulation, water quality, biological resources, as it pertains to potential perching opportunities, noise and air quality under the proposed Project would also be avoided under this alternative.

Facts in Support of Finding: The Combination Alternative would be economically infeasible because it would compromise SeaWorld's ability to remain economically viable by severely limiting design flexibility to build future attractions that would enhance theme park attendance and associated revenue. Such restrictions on SeaWorld's capability of effectively responding to sharp market demands would adversely affect SeaWorld's competitiveness in a market driven by hard development cycles. Also, this alternative would be economically infeasible because it would compromise SeaWorld's ability to remain economically viable by prohibiting the development of a hotel, thereby preventing the City from benefiting from associated TOT and other SeaWorld revenue. The high costs of relocating structures and water treatment infrastructure to provide continuous bayside access would be economically infeasible.

This alternative is further considered infeasible because the following Project objectives would not be fully met:

- (a) Implementing the SeaWorld Initiative, Proposition D, approved by the electorate of the City in November 1998. The SeaWorld Initiative allows development up to a maximum height of 160 feet on the entire SeaWorld leasehold;
- (b) Providing for an updated comprehensive Master Plan that addresses the entire SeaWorld leasehold;
- (c) Continuing to operate and improve on an economically-feasible, high quality theme park;
- (d) Providing attractions which appeal to a broader range of family members;
- (e) Renovating older areas of the park;
- (f) Increasing revenues to the City of San Diego;
- (g) Continuing to create permanent and part-time, local employment opportunities;
- (h) Providing an updated Master Plan that reflects the policies of Chapter 3 of the California Coastal Act and the Mission Bay Park Master Plan Update;
- (i) Remaining competitive with other theme parks;

(j) Eliminating the inconsistency with the Mission Bay Park Master Plan Update caused by the passage of the SeaWorld Initiative; and

(k) Allowing renovation of existing buildings over 30 feet in height.

**DRAFT CANDIDATE
STATEMENT OF OVERRIDING CONSIDERATIONS FOR
SEAWORLD MASTER PLAN UPDATE (LDR NO. 99-0618)
CEQA GUIDELINES FOR SECTION 21081(B),
CEQA GUIDELINES SECTION 15093**

The Final EIR for the SeaWorld Master Plan Update (the "FEIR"), Amendment to the Mission Bay Park Master Plan Update and Progress Guide and General Plan, and project approvals for the Tier 1 projects (the "Project") identifies significant environmental effects which would not be mitigated to below a level of significance and which would be allowed to occur as a result of the approval of the Project. Although potential Project impacts have been avoided or substantially mitigated as described in the FEIR and the Findings, the FEIR states that the project would have a significant, unavoidable impact on: land use; neighborhood characteristics/aesthetics; and transportation and circulation. The City of San Diego, after balancing the specific economic, legal, social, technological or other benefits of the Project, including considerations for the provision of employment opportunities for highly trained workers, determines that the unavoidable adverse environmental effects may be considered "acceptable" due to the following specific considerations, each of which independently is sufficient to outweigh the unavoidable adverse environmental impacts of the Project.

SeaWorld is projected to host approximately 3,400,000 visitors in 2001. (FEIR, Table 3.4-3.) Average annual attendance for the last ten years is 3,722,061. (FEIR at p. 3-12.) With the Project, it is predicted annual attendance will increase to approximately 3,600,000 visitors by 2005 (assuming a 1.3% annual growth rate). This attendance increase will create an estimated total economic impact (direct and indirect) of \$1.35 billion. (FEIR Section 3.4.4; Economic and Fiscal Impacts of SeaWorld on the San Diego Regional Economy, prepared January 21, 1998, Table A-5 (the "SeaWorld Economic Impact Report").) By the year 2005, the proposed Project would enhance the following benefits currently provided to the San Diego community by SeaWorld:

1. Employment

- a) SeaWorld is one of the top five employers of youth in San Diego County. The largest percentage of employees are part-time, and many of these are students at area high schools and colleges who finance their education by working at SeaWorld during weekend and holiday periods.
- b) Since 1996, SeaWorld, partnering with Episcopal Community Services' Job Start program, actively has placed over 300 welfare recipients in training programs for positions of employment at SeaWorld.
- c) 40 percent of the jobs generated by SeaWorld are generated in professional, managerial, and technical positions. (SeaWorld Economic Impact Report at p. 9.) The Project will result in increased jobs, for both part-time and full-time workers, and will result in the provision of highly trained employment opportunities.

- d) County-wide, a total of 110,000 jobs are supported directly and indirectly by visitor spending on all sources of tourism. (The Economic and Fiscal Impacts of Tourism on the City of San Diego and the San Diego Regional Economy, dated March 26, 1999, at p. 21 (the "Tourism Impact Report").) In 1997, SeaWorld employed a total of 9,751 individuals. (SeaWorld Economic Impact Report at p. 9.) This accounts for nearly 9% of all tourism related personnel. With the additional benefits of the Project, SeaWorld employment is expected to significantly increase from approximately 9,751 employees to approximately 11,900 employees by the year 2005. (Sea World Economic Impact Report at p. 13.)
- e) SeaWorld's annual payroll currently exceeds \$50 million. The proposed Project is estimated to increase annual payroll to \$63 million by the year 2005.

2. Economic

- a) The annual difference in total economic impact generated by the Project in the year 2005 with and without the Project is forecast at \$165 million. (SeaWorld Economic Impact Report at p. 13.) With the Project, San Diego household incomes in the year 2005 will be \$44 million higher and 1,250 more jobs will be generated. (SeaWorld Economic Impacts Report at p. 18, Appendix Table A-3.)
- b) As a result of the initial impact of spending by SeaWorld visitors, there is additional indirect economic activity generated as the effects of the spending circulate through the regional economy. (Tourism Impact Report at p. 16.) Each additional visitor to San Diego attracted by SeaWorld results in a beneficial annual economic impact of nearly \$300 to the region. This annual amount from each individual visitor includes indirect impacts of almost \$79 in wages and salaries for San Diego residents and approximately \$9 in local government revenue. (SeaWorld Economic Impact Report at p. ii.)
- c) Construction of new Project facilities will generate substantial revenue to the local economy and will provide numerous jobs. Spending on capital improvements by SeaWorld in the year 2005 will be \$8 million higher with the Project than without the Project. (SeaWorld Economic Impact Report, Table 5.) It is projected that SeaWorld Project Capital Spending will be \$21 million in the period between 2002 to 2005.
- d) SeaWorld relies primarily on local non-residential contractors (at a value of \$46 million in 1997) and suppliers (\$50.2 million in 1997), and millions of capital dollars have been infused into the San Diego community. (San Diego Economic Impact Report at p. 9.)

3. Fiscal

- a) Annual rent payment for the SeaWorld leasehold to the City of San Diego is now approximately \$6.5 million. (SeaWorld Economic Impact Report, Table A-4.) The

proposed Project is estimated to further increase annual rent to \$8.5 million. (SeaWorld Economic Impact Report, Table A-4.)

- b) In 1997, SeaWorld directly and indirectly generated \$35.1 million in state and local tax revenue. (San Diego Economic Impact Report at p. 11.) Of this amount, \$19.1 million is local tax revenue. (San Diego Economic Impact Report at p. 11.) By the year 2005, with the development of the Project, tax revenue generated by SeaWorld will further increase to approximately \$52 million, \$28 million of which will be local tax revenue. (San Diego Economic Impact Report at pp. 13-14.)
- c) SeaWorld is projected to pay property taxes to the County of San Diego in the amount of \$3.1 million if the proposed Project is approved. (SeaWorld Economic Impact Report, Table A-4.) Currently, SeaWorld is one of the top 10 property taxpayers in San Diego County. (SeaWorld's Regional Benefits Fact Sheet.)
- d) Annual rent, property taxes and business license taxes are projected to be nearly \$1 million a year higher with the Project than without the Project. (SeaWorld Economic Impact Report, Table A-4.)
- e) The City of San Diego can optimize the fiscal impact from visitor spending by promoting growth in leisure visitors who stay overnight in hotels. (Tourism Impact Report at p. ix.) The proposed Project will accommodate this goal because the future hotel will increase transient occupancy tax (TOT) revenue, which is the largest single source of visitor revenue. (Tourism Impact Report at p. ii.)

4. Tourism

- a) Tourism generated employment accounts for approximately 7.4% of the region's jobs and approximately 5.3% of total regional sales, and the City of San Diego captures a large share of visitor industry sales in the region because of the large concentration of visitor infrastructure within the City. (Tourism Impact Report at p. 21-22.)
- b) Thirty-five percent of visitors to San Diego come to the City to primarily go to SeaWorld. (SeaWorld Economic Impact Report at p. 2; SeaWorld's Regional Benefits Fact Sheet.) This accounts for 3.3 million visitor days. In 1997, the number of visitors to San Diego coming to the city primarily to go to SeaWorld had a total economic impact of \$589 million, accounting for nearly seven percent of all visitor spending related to tourism. (SeaWorld Economic Impact Report at p. 10, Tourism Impact Report at p. 21.)
- c) The number of visitors ranking SeaWorld as their primary reason for visiting San Diego will likely rise, and, therefore, so will revenues derived therefrom, because attendance is projected to rise at a rate of 1.3% annually as a result of the Project. (SeaWorld Economic Impacts Report at p. ii.)

- d) SeaWorld's gross sales from the resale of food and merchandise purchased from vendors in 1997 was \$58.2 million. (SeaWorld Economic Impact Report at p. 6.) Gross sales with the Project are expected to reach \$200 million by the year 2005. It is estimated that dollars spent at SeaWorld "turnover" seven times in the community, with a potential economic impact of \$1.35 billion. (SeaWorld Economic Impact Report, Table A-5.) About 70% of SeaWorld's nearly 3.6 million annual guests come from outside the San Diego area, spending approximately \$53.6 million for lodging and approximately \$63.6 million on meals and beverages. The proposed expansion would proportionately increase these figures.
- e) It is predicted that the future hotel element of the Project will generate approximately \$1.5 million annually in TOT revenue. Directly and indirectly the proposed Project is forecast to generate a total TOT revenue of \$8.4 million in 2005. (SeaWorld Economic Impact Report, Table A-4). TOT revenue accounts for the single largest source of City revenue from visitor spending and accounts for \$79.5 million dollars of revenue in 1998. (Tourism Impact Report at p. ii.)

5. Education

- a) SeaWorld's education program is endorsed by the San Diego school system. In 2000, SeaWorld's Education Department served more than 350,000 San Diego area students (from pre-school through college levels). SeaWorld also participates in the school system's Partners-In-Education program. SeaWorld has been partners with Clairemont High School since 1981 and runs continuous cooperative programs with the school, including donations of usable equipment and special career education programs. In 2000, SeaWorld also formed partnerships with Crown Point and Barnard Elementary Schools.
- b) Since SeaWorld's opening in 1972, 6.4 million students have participated in SeaWorld education programs. Over 2 million students have participated in the student outreach program, and 2.8 million students participated in formal in-park field trip programs.
- c) Additionally, SeaWorld's Education Department has cooperative agreements with San Diego State University and University of California, San Diego. Pursuant to these agreements, SeaWorld staff teach university level education and biology courses for students planning to be elementary or high school teachers. SeaWorld is currently developing programs to help schools and teachers meet new state requirements for elementary science education. SeaWorld also partners with UCSD to sponsor a summer program on marine science for high school students entering the University of California system. These educational benefits would be continued and expanded upon adoption of the SeaWorld Master Plan.
- d) The SeaWorld/Barnard partnership will include an emphasis on environmental education with a specific focus on Famosa Slough. Crown Point Elementary School and SeaWorld plan to establish The Nature School program on-site.

- e) SeaWorld provides extensive environmental/conservation education programs. In 2000, SeaWorld Educators visited 130 schools with an environmental program. One mission of SeaWorld Educators is to help individuals develop a lifelong appreciation, understanding and stewardship for our environment.
- f) SeaWorld hosts an educational Internet site (www.SeaWorld.org) which provides valuable educational tools for teachers, students and the general public by providing on-line access to colorful SeaWorld photographs, animal information and current marine life research.
- g) SeaWorld provides a toll-free telephone service to answer students' questions about marine animals. This service is staffed 7 days a week and takes calls between the hours of 9:00 AM and 4:30 PM Pacific Time.
- h) SeaWorld sponsors, funds and participates in research projects all over the world.

6. Community Service

- a) More than 3,000 complimentary admissions are given each year to be used as fund raisers by local non-profit groups, a value of nearly \$40,000.
- b) SeaWorld and SeaWorld personnel are active in support of a myriad of community groups and events such as: Junior Achievement, Hire-a-Youth, United Way, March of Dimes, Welfare-to-Work, Mama's Kitchen, Partnership With Industries, Department of Rehabilitation, Center for Blind, Sharp Healthcare Rehabilitation System, United Negro College Fund, and many more. More than \$2,000 a year in coins collected from SeaWorld's ponds are donated to various charities.
- c) SeaWorld provides monetary and in-kind contributions to numerous local charitable and environmental organizations. For instance, every San Diego County library has a complete set of SeaWorld books.

6. Recreation

As a theme park, SeaWorld provides significant recreational benefits to millions of visitors annually. The recreational opportunities for local citizens and tourists would be expanded by up to 33 percent with the full implementation of the proposed SeaWorld Master Plan Update.

7. Legal

Proposition D, an ordinance approved by the voters of the City of San Diego in November 1998, would amend the City of San Diego Municipal Code to allow development up to a maximum height of 160 feet on the SeaWorld leasehold in Mission Bay Park. Passage of Proposition D and amendment of the Municipal Code would create an inconsistency between the Municipal Code and the Mission Bay Master Plan Update.

The Project would eliminate this inconsistency by amending the Mission Bay Park Master Plan Update and the Progress Guide and General Plan.

8. Environmental

- a) In the last 20 years, SeaWorld has removed thousands of stranded dolphins, whales and pinnipeds from San Diego beaches and treated them medically. As many as 300-400 animals may be treated in a given year. All costs, including costly medications, are borne by SeaWorld.
- b) SeaWorld Animal Rescue and Rehabilitation Program: With an average 200 rescues per year, nearly 65 percent of the animals rescued are successfully rehabilitated and returned to the wild. (SeaWorld's Commitment to Conservation and the Environment Fact Sheet at p. 3.) Marine species treated by the SeaWorld San Diego team include sea turtles, seabirds, whales, dolphins, seals, sea lions and sea otters. (SeaWorld's Commitment to Conservation and the Environment Fact Sheet at p. 3.) SeaWorld works closely with the California Marine Mammal Stranding Network and the U.S. National Marine Fisheries Service to rescue stranded animals. Through this program, SeaWorld San Diego's animal care and aviculture specialists have rescued, treated, sheltered, rehabilitated and released thousands of ill, injured and stranded animals. The largest and best-known animal ever rescued and rehabilitated by SeaWorld was J.J. the gray whale. (SeaWorld's Commitment to Conservation and the Environment Fact Sheet at p. 2.) Comatose and near death when she arrived at SeaWorld in January 1997, J.J. made an amazing recovery. On March 31, 1998, J.J. was returned to the Pacific Ocean.
- c) SeaWorld is a seven-time recipient of the prestigious State of California Waste Reduction Awards Program (WRAP) recycling award. SeaWorld recycles asphalt, tires, scrap metal, PVC pipe, cooking oil, Clydesdale manure, landscaping green waste, batteries and concrete in addition to more traditional recyclable materials. The City of San Diego has honored SeaWorld with its *Recycler of the Year* award five consecutive years since 1996. (Seaworld's Commitment to Conservation and the Environment Fact Sheet at p. 1.)
- d) The Hubbs-SeaWorld Research Institute ("H-SWRI"): Established in 1963, this private, nonprofit research foundation studies and researches the world's living creatures and natural resources. Its mission encompasses bioacoustics, aquaculture, physiology, conservation and ecology studies with an emphasis on marine and coastal ecosystems. (Seaworld's Commitment to Conservation and the Environment Fact Sheet at p. 1.) Partnering with SeaWorld, H-SWRI provides environmental management decisions, conservation programs and research data to further understand and protect the ocean and its resources. In late 2000, SeaWorld and H-SWRI teamed to return three loggerhead sea turtles to the ocean. (Seaworld's Commitment to Conservation and the Environment Fact Sheet at p. 2.) H-SWRI attached satellite monitoring equipment to the turtles in an effort to learn more about

the turtles' migration back to their native Japan. The vital information gathered will help determine the species' migratory routes, travel speed and habitat preferences.

- e) SeaWorld's Oiled Wildlife Care Center opened in July 2000. (SeaWorld's Commitment to Conservation and the Environment Fact Sheet at p. 2.) The facility is operated by the adventure park's animal care and aviculture teams, along with the statewide Oiled Wildlife Care Network. The SeaWorld Oiled Wildlife Care Center serves as an excellent example of a private and public partnership dedicated to environmental stewardship. This facility is a testament to the lessons learned from past oil spills and improvements in wildlife rescue, care and rehabilitation. When not used for oil spill response, the 800,000-square-foot state-of-the-art complex houses ill or injured animals in SeaWorld's Animal Rescue and Rehabilitation Program. (SeaWorld's Commitment to Conservation and the Environment Fact Sheet at p. 2.)
- f) Since 1993, Anheuser-Busch's commitment to wildlife conservation, animal care, education and research has earned the company more than 100 environmental awards for waste reduction, conservation, conservation education, recycling, and animal protection. (SeaWorld's Commitment to Conservation and the Environment Fact Sheet at p. 3.)
- g) The Anheuser-Busch Adventure Parks are an official sponsor of National Wildlife Federation's "Keep the Wild Alive" campaign. Through this campaign, park guests learn about some of the world's most critically endangered species and discover ways they can help protect wildlife and habitat in their own backyards. (SeaWorld's Commitment to Conservation and the Environment Fact Sheet at p. 3.)
- h) SeaWorld supports Conservation International's work in Brazil's Cerrado and Pantanal regions. Home to a variety of rare mammals and birds, these rain forest ecosystems are under increasing threat from development. (SeaWorld's Commitment to Conservation and the Environment Fact Sheet at p. 3.)
- i) SeaWorld participates in The Nature Conservancy's "Rescue Reef," a conservation program designed to protect and preserve coral reefs in the Caribbean and Florida Keys. (SeaWorld's Commitment to Conservation and the Environment Fact Sheet at p. 3.) In addition, SeaWorld supports The Nature Conservancy's programs nationwide.

The City of San Diego finds that substantial evidence of benefits in employment, economic effects, fiscal effects, tourism, education, community service and recreation would directly result from approval and implementation of the Project. The City of San Diego finds that the need for these benefits specifically overrides the impacts of the project on land use; neighborhood character/aesthetics; and transportation and circulation.