

THE CITY OF SAN DIEGO

February 3, 2006

Hand Delivery

John H. Robertus Executive Officer Attn: Christina Arias and Julie Chan California Regional Water Quality Control Board San Diego Region 9174 Sky Park Court, Suite 100 San Diego, California 92123

Subject: Comments on the Total Maximum Daily Load for Indicator Bacteria, Project I -Beaches and Creeks in the San Diego Region

Dear Mr. Robertus:

The City of San Diego is pleased to provide the Regional Water Quality Control Board with the following comments regarding the Total Maximum Daily Load for Indicator Bacteria, Project I - Beaches and Creeks in the San Diego Region. The City of San Diego has been an active Stakeholders Advisory Group (SAG) participant since it began in March 2004. We are providing with both the SAG consensus comments and the City's comments in this letter. Please note that this letter also constitutes comments on the Regional Board's CEQA compliance for this project.

The City of San Diego requests that the Regional Board provide written responses to all comments. We believe it is important that a written record is kept on comments and the Regional Board's conclusions regarding those submitted comments. This record will benefit everyone involved as we move forward through the approval process.

#### SAG Consensus Comments

- 1. Expressing the waste load allocations as number of bacteria of colonies per year (billion
- MPN/yr) is not a useful metric to measure for compliance with the TMDL. We
  understand the need to define a load allocation in a concentration per time unit; however,
  the current allocations set a target that we will never be certain we are meeting.
  Additionally, deferring the determination of the measurement metric until the revision of
  the NPDES permits is inappropriate and leaves much uncertainty for the regulated
  entities. The waste load allocations in the TMDL should be expressed in a metric that is
  clearly measurable and reportable.



## Storm Water Pollution Prevention Program 1970 8 Street, NS 27A • San Diego, CA 92102

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- 2. The TMDL needs to develop load and waste load allocations for all identified sources of bacteria for both dry and wet weather. Only wet weather loadings have been developed for CalTrans and non-point sources from open recreation, open space and confined animal feeding operations based on the assumption that loading will only occur during rain events and that rain water is the only source of water for creeks. This assumption erroneously ignores irrigation practices by CalTrans and on open space and agricultural areas during dry weather and documented base flow in perennial creeks in the watersheds. Since irrigation is seen as the cause of the majority of loading from urban areas, this reasoning should be applied equally to CalTrans, managed open space and agricultural/animal feeding operation lands where irrigation also occurs. Additionally, a load allocation should be developed to reflect the natural level of bacteria in creek base flows during dry weather.
- 3. The text needs to define what will constitute "maintaining" Water Quality Objectives (WQOs). For how long will WQOs need to be met before the water body is considered "maintaining" the objective? Additionally, the text should state that the monitoring plans will likely need to be revised once WQOs are attained. Verification of WQO compliance will most likely be accomplished through a reduced level of monitoring than that necessary to monitor the gradual attainment of WQOs through the implementation of BMPs.
- 4. The text needs to clarify the entities which will provide the monitoring results to be used to identify if small MS4s and discharges from nonpoint sources (owners or operators of agriculture, nursery or animal feeding operations) that may contribute to the impairments at the beaches and creeks. The text should include a commitment from the Regional Board to either conduct or require monitoring by third parties to assess the quality discharges from these entities in the vicinity of the impaired waterbodies to identify potential sources of bacteria. Data that confirms bacterial water quality impairments should be used to enroll other participants in the TMDL.
- 5. The discussion of special studies needs to address the weaknesses in the model used to develop the TMDL (lack of water quality data, lack of representation of actual bacteria life-cycle processes (die-off, regrowth), lack of flow data, etc. –) and outline a series of studies to collect the necessary data to strengthen and verify the model. The Implementation Plan should include a re-evaluation of the TMDL in conjunction with the NDPES permit renewal. The plan should commit to a recalibration and validation of the model using new data collected during program monitoring and special studies and any new information regarding bacteria fate and transport, indicator/pathogen correlations and epidemiological studies. The re-evaluation should include the TMDL targets, load and waste load allocations. Achieving the WQOs for bacteria will be an expensive and long-term project for the named responsible parties. Accurate targets based on specific data from each watershed are essential for the achievement of the TMDL in a timely and cost-effective manner.

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6. The economic analysis for TMDL project implementation costs is inadequate. The analysis does not take into account the urbanized nature of the majority of watersheds in the TMDL and the need to purchase land for BMP installation. Project implementation costs need to include land acquisition costs. Additionally, the analysis should include the bacteria-reduction effectiveness of the proposed BMPs. Without this information it is impossible to judge the potential effect on water quality the BMP will have for the cost listed.

The City of San Diego has the following individual municipality comments and recommendations regarding the Draft Implementation Plan:

- TMDLs for impaired saltwater beaches should be expressed separately from TMDLs for impaired Freshwater creeks for both wet and dry weather. Specifically, Interim Beach TMDLs should be defined in terms of allowable exceedance days along the beaches, which have already been calculated for wet weather (Table 8-2), so little additional effort is needed to make this change in the text. Separation of saltwater and freshwater TMDLs is supported by the lack of established linkage between creek loads and beach exceedances in the reference data. The wet-exceedance allowances in the TMDL Report were based on studies only at reference pristine saltwater beaches - with no data available within the creeks discharging to those beaches. In some cases, sand berms had formed naturally at the creek mouth, so that beach exceedances sometimes occurred despite no creek discharge at all. For both wet and dry weather, the "critical point" of the model is located in freshwater upstream of many factors (salt vs. fresh; dilution/assimilation; beach bacteria sources such as sea birds and wrack line; singlesample vs. geomean criteria; natural exceedance allowance, etc.) that confound the creek/beach relationship. This has contributed to questionable model results: at Aliso, for example, the daily maximum load of fecal coliform bacteria on one of the 15 allowable wet-weather exceedance days is 56 times higher than the daily allowable load of bacteria on any of the 296 dry-weather days. Separation of the beach and creek TMDLs would be a simple and practical way to rectify these modeling discrepancies now without requiring significant supplemental staff time. Better research data from ongoing reference-beach and creek-natural-loading studies will soon be available to better inform our understanding of actual beach/creek bacteria-load relationships, but the report already makes provision for future updating and correcting of the TMDLs as these findings are developed.
- 2. SHELL Total Coliform numeric targets should not be selectively forced onto the impaired freshwater creeks. SHELL Total Coliform Water Quality Objectives apply to marine salt waters, not to inland surface freshwaters. Tables 4-3 and 4-6 explicitly and wrongly place Total Coliform numeric targets on fresh waters in Aliso Creek and the San Diego River. The excuse is given that this is necessary for officially-impaired creeks in order to protect the impaired downstream beach. But Total Coliform TMDLs (Tables 9-3 and 9-4) are calculated for every creek mouth and storm drain outfall to all the impaired

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beaches, regardless of whether the creeks or storm drains are specifically 303(d) listed as impaired. The implicit effect of singling out Aliso Creek and the San Diego River in Tables 4-3 and 4-6 is to force Total Coliform WQOs onto the two freshwater creeks' entire waterbodies, not just the mouths. This is inappropriate and improper.

- 3. Table 1 -2 Compliance Schedule The timeframe of 5 to 7 years for a 50% waste load reduction is not realistic for wet weather flows. The control of wet weather flows is a substantial undertaking. Five to seven years allows inadequate time to determine the optimal location of BMPs, identify sources, develop plans, develop memorandum of understanding with stakeholders, secure funding, acquire land, pursue permits, bid contracts, and construct BMPs. This process normally takes the City of San Diego six to eight years for a single facility when funds are available.
- 4. The Executive Summary discussed "third party agreements" where the Regional Board could conditionally waive regulation of bacteria sources based on the existence of a adequate pollution control program that adequately addresses the sources. The Technical Report does not provide the criteria to be used to determine when such waivers are appropriate. When municipalities are being asked to achieve 100% compliance, and other sources have the ability to opt out of the program, this process should be outlined for all stakeholders to review. We recommend that these sources be required to perform both dry and wet weather monitoring and meet the same Ocean Plan or Basin Plan bacteria standards as the municipalities.
- 5. The Executive Summary, Section 1.8 last paragraph states that there would be no additional beach water quality monitoring costs incurred by the discharges because it is required by the California Health & Safety Code. This is an incorrect statement. The County of San Diego Department of Environmental Health performs monitoring of beach water quality and is reimbursed by the State Board for those sites that meet AB411 criteria. The coastal San Diego MS4 copermittees perform monitoring at some of those beaches biweekly April through October and monthly the remaining time of the year. The proposed monitoring for the TMDL is a minimum of three times greater than the current monitoring costs.
- 6. The compliance schedule in Table 1-2 appears to combine both wet and dry weather TMDLs. In the City of San Diego approximately 296 days of the year are dry weather days, and most recreational activities occur in dry weather. It will be counterproductive to combine the relatively small, but important, dry weather loads with the large, but infrequently occurring and difficult to control, wet weather loads. Other regions (e.g., Santa Monica) have separate bacteria TMDLs for dry and a wet weather, and have applied different compliance schedules, as the control of wet weather loads is a considerable technical challenge that will take additional time and resources to achieve. As stated in our June 20, 2006 letter, we recommend a phasing of the wet- weather compliance schedule such that for Priority 1 locations the reduction target is 25% in year

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5, 50% in year 10, and 75% in year 15 and 100% final TMDL compliance in year 20. The Priority 2 and 3 schedules should be adjusted accordingly.

- 7. Table 1-2 indicate that beaches and creeks included in this TMDL project are to meet more rigorous requirements than beaches that are not listed as impaired. Beaches must exceed standards more than 4% of the time to be listed as impaired; whereas, listed beaches will be allowed "no" exceedances. What is the rationale for this difference?
- Section 9.1.2, Tables 9-1 through 9-5 Overspray from the irrigation of roadside landscapes contributes to dry weather flows. CalTrans should be allocated a dry weather flow load to reflect this contribution.
- 9. Section 9.1.2, Summary of Dry Weather TMDLs- Dry weather flow included a contribution of groundwater seepage into the stream bed. This baseflow may be affected by bacteria from natural sources such as bird and other wildlife feces. If the upcoming reference creek watershed study will consider these sources, the City of San Diego requests that the reference creek watershed approach be used to modify the bacteria dry weather loads in this TMDL.
- Table 9-4 Final TMDLs for Total Coliform The total coliform load assigned to Chollas Creek appears to reflect the SHELL fecal coliform water quality objective standard instead of the REC 1 water quality objective. This is inconsistent with the statement in Section 4.2.1 that SHELL beneficial use would not be assigned to Chollas Creek and other creeks. Please modify Table 9-4.
- Table 11-2 Responsible Municipalities and Lead Jurisdictions –As stated in our June 20, 2006 letter, we suggest that Table 11-2 lead agencies be organized the same as the current MS4 NPDES permits watershed lead agencies. This will be beneficial since watershed plans needed for MS4 NPDES compliance have already been developed and stakeholder group established.
- 12. Section 11.5 discussed Water Quality Based Effluent Limitations (WQBELs). The first paragraph of this section states "WQBELs for municipal storm water discharges can be either numeric or non-numeric. Non-numeric WQBELs typically are a program of expanded or better tailored BMPs. The USEPA expects that most WQBELs for NPDES-regulated municipal discharges will be in the form of BMPs, and that numeric limitations will be only used in rare instances. WQBELs cam be incorporated into NPDES requirements for MS4 dischargers by reissuing or revising these requirements." The Technical Report does not explain why the Bacteria 1 TMDL needs to be the exception, i.e., a numeric limit. This appears to be more stringent than the MEP requirement of the federal Clean Water Act.
- Section 11.5.4 The City of San Diego is requesting a time line regarding when the Regional Board will contact the Phase II MS4 permittees for inclusion into this TMDL

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Program. Currently, University of California, San Diego has not been included in this progress. UCSD is located adjacent to the Scripps Areas of Special Biological Significance and should be notified of their requirement to participate, along with other Phase II MS4s that contribute bacteria into these impaired waterbody segments.

- 14. Section 11.5.7 This section states that "Measurements during the 2004-2005 winter season showed that in four reference systems (two in Los Angeles County, one in Orange County and one in San Diego County), 27 percent of all samples collected within 24 hours of rainfall exceeded water quality thresholds for at least one indicator. This is higher that the 22 percent found at Arroyo Sequit watershed in Los Angeles, which was used to calculate interim TMDLs discussed in section 4.1. The Arroyo Sequit watershed is one of the four reference watersheds included in this study." The City of San Diego and other responsible participated in the reference beach study. The 27% exceedance rate should be used in the calculation for interim allowable exceedance rate.
- 15. Section 13 The Economic Analysis for TMDL project implementation costs is inadequate. Table 13-1 uses capital costs in uninflated dollars. The analysis does not take into account the urbanized nature of the majority of watersheds in the TMDL and the need to purchase land for BMP installation. Project implementation costs need to include land acquisition costs. Table 13-3 is misleading by only calculating the potential costs for 10% of the watershed. If 100% compliance is required, 100% of the costs should be shown. Additionally, the analysis should include the bacteria-reduction effectiveness of the proposed BMPs. Without this information it is impossible to judge the potential effect on water quality the BMP will have for the cost listed. Please identify the source used for these estimates and correct, if appropriate, noted in the attached letter regarding the Chollas Creek Metals TMDL.

The diversion BMP noted in the Regional Board's economic impact vastly underestimates the cost of this BMP by estimating only a \$1 million cost associated with building a diversion structure. Other costs that would be required to implement this BMP would be upsizing of sewer pipe capacity between the diversion and the Point Loma Wastewater Treatment Plant because existing pipes are not large enough to convey storm water flows (and the TMDL for San Diego specifically addresses storm water flows). Given that sewers are generally not over-sized so that they can be "self-cleaning", a parallel conveyance system would be required. At the end of this conveyance, the Point Loma plant itself would need to be expanded to handle storm water flows. Region 9's CEQA analysis includes as mitigation a requirement to reintroduce water to drainages to avoid "drying out existing wetlands. A reintroduction of treated water to the headwaters of Waters of the US/state would also require construction of a new reclaimed or potable water distribution system. If reclaimed, rather than potable water were to be used, t is unknown whether. Total Dissolved Solids levels in reclaimed water would adversely affect the beneficial uses in the receiving waters. Page 7 of 16 Mr. John Robertus February 2, 2006

16. The Regional Board should notify all potential responsible parties if the "Tributary Rule" is going to be applied to the installation of structural BMPs because additional land acquisition costs will need to be included in the economic analysis.

# CEQA Compliance

The City submits the following comments because the Bacteria TMDL presents a situation where there are significant collateral environmental consequences that result from activities designed to otherwise improve the environment. Thus, while the City is committed to improving water quality in and around the City, achieving that goal in an urbanized area requires the City to balance those efforts against the need to ensure adequate housing exists, particularly for lowincome residents; that historical and other cultural resources are protected; that the aesthetic values are preserved; and that development occurs in a manner that is consistent with the land use plans developed by the City.

As will be shown in detail below, in the case of the Bacteria TMDL the fact that water quality would compete with these other important resources is obscured because the draft environmental analysis contained no discussion of the impacts attendant to constructing pollution controls, despite an unambiguous obligation to do so.

The City notes that the relationship between the State Board and the Regional Board with respect to the finality of environmental determinations is not well-defined. Water Code section 13245 states that Basin Plan amendments (such as TMDLs) do not have the force and effect of law until the State Board approves the amendment. Under CEQA and the State Board/Regional Board's CEQA regulations, a notice of decision regarding the environmental determination is to be filed with the Secretary of Resources. CEQA Guidelines § 15252(b); 23 CCR § 3720. At what point is such a document to be filed with the Secretary of Resources regarding the Bacteria TMDL?

#### A. Inadequacies in The Environmental Analysis

# 1. An Inadequate Project Description and Examination of Compliance Alternatives Set the Stage for Failure

A critical component of an EIR is the environmental setting. In San Diego County watersheds, many of the tributaries: (1) are surrounded by developed areas within which storm water is conveyed by storm drains to outfalls at canyon rims; (2) lie within canyons and contain "waters" which originate at the end of the storm drains; and (3) are ephemeral and dominated by urban runoff during all but infrequent precipitation. However, the Initial Study (page R-1 of the draft Technical Report) describes the environmental setting of much of the affected areas in one paragraph and is incorrect by characterizing the Miramar, Scripps, and Chollas Creek watersheds as having "inland areas [that] primarily consist of open space with some agricultural/livestock uses".

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The project description is also a critical component of an adequate environmental document. See Santiago County Water District v. County of Orange, 118 Cal.App.3d 818 (1981) (EIR inadequate because of failure to discuss construction of water delivery facilities in project description). The project description in this case is influenced by Public Resources Code section 21159, which provides the *minimum* requirements for an environmental analysis of a rule or regulation that requires the installation of pollution controls.<sup>1</sup> That statute requires certain state agencies to analyze the following:

(1) An analysis of the reasonably foreseeable environmental impacts of the methods of compliance.

(2) An analysis of reasonably foreseeable feasible mitigation measures.

(3) An analysis of reasonably foreseeable alternative means of compliance with the rule or regulation.

Public Resources Code section 21159(a)

Thus, the methods of compliance are part of the project description because the impacts, mitigation measures, and alternatives to the methods of compliance must be analyzed.

The project description in this case contained only a cursory discussion of the methods of compliance. The Technical Report for the TMDL states that the required reduction in pollutants may be achieved by education, street sweeping, storm drain cleaning, BMP inspection and maintenance, manure fertilizer management plans, buffer strips and vegetated swales, bioretention, infiltration trenches, sand filters, diversion systems, animal exclusion, and waste treatment lagoons (for manure storage). The City is aware of no data that suggests that the pollutant reductions required by the TMDL can be achieved by anything other than: (1) diversion or (2) detention and infiltration. Given the experience in Aliso Creek where the City of Laguna Niguel and Orange County installed a treatment system that reduced bacteria levels by 99% but found bacterial levels several hundred feet downstream from the plant again exceeded the WQO, MS4 operators must be conservative in spending tax dollars to construct treatment systems. The only reason diversion is a possible solution is because the TMDL does not apply to ocean outfalls. Bacteria in the Point Loma Wastewater Treatment Plant effluent exceeds the TMDL standard by several magnitudes even after advanced primary treatment.

Having identified the types of facilities that could be constructed to achieve compliance (diversion and detention/infiltration), a lead agency can make some general assumptions regarding where these works will be located. It is reasonably foreseeable that detention basins

<sup>&</sup>lt;sup>1</sup> The statute clearly states that these topics are the minimum requirements for an adequate environmental analysis; other impacts must be identified if the impacts are a direct result or a reasonably foreseeable indirect result of the project.

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will be built immediately prior to the receiving waters because various other factors further restrict the location of such BMPs, including:

a. The "tributary rule," which subjects all receiving waters within the affected watersheds to the TMDL;

**Question:** For purposes of the TMDL and subsequent NPDES permit, what is the upper extent of the "tributary" that must meet the WQP in the TMDL? Is it coterminous with Waters of the U.S.? Does it include flows within storm drains?

Topography, which prevents BMP works from being built on canyon walls below storm drain outfalls but above receiving waters that are subject to the WQO in the TMDL;

c. The structural BMPs need to capture and treat a very high percentage of storm water due to the large level of loading reduction required by the TMDL; i.e., it is not reasonable to expect that works located far from the storm drain outfalls would, by themselves, meet the TMDL because significant amounts of storm water run into the conveyance system immediately above the outfalls.

d. Locating works some distance from the receiving waters would be infeasible because it would be necessary to construct a new, separate conveyance system to prevent the treated water from mixing with untreated water.

The project description in the CEQA analysis is devoid of any discussion or analysis of these issues, and thus is inadequate because the failure to include this information prevented a meaningful analysis of the impacts of compliance.

Having determined the reasonably foreseeable means of compliance and the limitations on the location of the necessary treatment works, the other missing component of an adequate project description is the number of control devices that may be required to achieve compliance. Because the TMDL defines the maximum loads of bacteria that may flow into receiving waters without regard to the size of a rain event, loading must be controlled in all storm events. Accordingly, certain assumptions must be made with respect to the size of the storm in order to design structural BMPs that will provide adequate contaminant reduction. Lacking a "design storm," or information on soil infiltration rates, the City suggests that the Regional Board's CEQA analysis include assumptions regarding a design storm size and the acreage of detention/infiltration facilities that would be needed (including any manufactured slopes). The City can make available to the Board certain information regarding infiltration rates of soils within the City. For purposes of revising the CEQA analysis, the Board could use the following estimates of the number of storm drain outfalls within the areas affected by the TMDL:

 the Chollas Creek watershed has approximately 816 storm drain outfalls within the City of San Diego, Page 10 of 16 Mr. John Robertus February 2, 2006

- there are approximately 1,315 outfalls within the City of San Diego within the San Diego River watershed, and
- there are approximately 61 outfalls within 300 feet of the beaches identified in the TMDL.

As indicated in our letter on the Chollas Creek Metals TMDL, it is reasonably foreseeable that the TMDL implementation could require the City to build a large number of relatively smaller sized works in areas immediately behind a geologically-safe setback above all existing storm drain outfalls which have receiving waters immediately below them. In the Chollas Creek watershed, these works could occupy 1,387 acres – almost 10 percent of the 16,273 total acres in the watershed.

# 2. Environmental Analysis Does Not Analyze the All Impacts Associated With Construction of Structural BMPs

Only when a meaningful discussion of the environmental setting is set forth and a thorough project description has been prepared can an adequate analysis of impacts and mitigation measures be prepared. *County of Inyo v. City of Los Angeles*, 71 Cal.App.3d 185 (1977).

The City notes, as it did in its previous comment letter to the Regional Board, that lead agencies cannot hide behind an inadequate analysis and leave it to the public to produce the necessary substantial evidence regarding adverse impacts. *Gentry v. City of Murietta*, 36 Cal.App.4<sup>th</sup> 1359, 1379 (1995).

The Regional Board's contention that the environmental analysis constitutes the first level "tier" of environmental documents that will be prepared to implement the TMDL does not change the expectation that analysis will be performed and impacts discussed. "Tiering does not excuse the lead agency from adequately analyzing the reasonably foreseeable significant environmental effects of the project and does not justify deferring such analysis to a later tier EIR or negative declaration." 14 C.C.R. Section 15152(b).

The Regional Board has also stated that some analysis was not conducted because the lead agency need not speculate. As the City noted in its earlier comment letter, to claim that an impact is speculative and terminate a discussion requires analysis – it does not excuse a failure to investigate and analyze. See 14 C.C.R. Section 15145. The record does not support a finding that the Regional Board has conducted this investigation.

Here, while the Regional Board's environmental analysis foresees the need to construct works, because no analysis was done on the required number or location of treatment works, the analysis does not discuss the need for the City to acquire and demolish hundreds of acres of developed land uses in order to construct the works. This is inconsistent with the only listed impact in the draft environmental analysis, where Regional Board staff discusses the impacts Page 11 of 16 Mr. John Robertus February 2, 2006

from operating a works that detains water – the works has to be constructed before it can be operated. Because the Regional Board did not properly analyze this impact, the Regional Board's analysis incorrectly concludes that the impacts will be less than significant or that they can be mitigated to below the level of significance. This conclusion is incorrect because it does not consider the following:

## a. Aesthetics -

The Regional Board's description of BMPs indicates that: "BMPs should be designed when feasible to maintain or create habitat, recreational areas and green spaces". Given the reasonably foreseeable size and location of the BMPs described above, the works would be too small and subject to too many edge effects to create sustainable habitat. Moreover, regular maintenance would require periodic removal of plant growth and sediments. Topographically, it is reasonable to assume that basins associated with the works will need to be excavated and that significant portions of the basins would consist of manufactured slopes, limiting recreational opportunities. Thus, the conclusion that the listed mitigation measures would reduce aesthetic impacts to below a level of significance is not supported by substantial evidence.

## b. Biological Resources -

Given the experience in Aliso Creek noted above, it is reasonable to assume that upland impacts may occur as a result of the need to intercept sheet flow runoff from canyon walls for treatment before these flows enter receiving waters. These interceptors would logically be located near and above the receiving waters - in areas where many canyons support native, upland vegetation and sensitive species. Impacts would result not only from construction of the diversions, but also from construction of treatment works and the associated pumps that would be necessary to put the treated water back into the receiving waters at a location near its diversion point. As the Regional Board's analysis is inadequate because it does not analyze all impacts, and because the listed mitigation measures do not reduce all impacts below a level of significance, the environmental analysis is inadequate.

c. Cultural Resources -

The affected watersheds are located in parts of San Diego that are designated as "Urbanized" or "Urbanizing" by the City's Progress Guide and General Plan because they are fully developed or in the process of being developed. Many structures within the watersheds were built prior to 1960, making them at least 45 years old and thus potentially significant historic resources under the criteria in 14 C.C.R. section 15064.5(a)(3)(C). Thus, with regard to checklist item V(a), the loss of an undetermined number of significant historic structures (located above storm drain outfalls/tributaries) should be considered a potentially significant effect.

With regard to checklist item V(b), it is generally accepted by land use agencies that because many older structures were built prior to or without the benefit of heavy earth-moving equipment, the soils underneath older structures have the potential to contain potentially

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significant archaeological resources. Therefore, the excavation of soils under potentially significant historic resources should be considered to have a potentially significant effect on archaeological resources.

Similarly, many formational materials within the watersheds are fossiliferous (Kennedy, 1977). Therefore, given that excavation of detention works could penetrate through surficial soils and into ungraded formational materials, the response to checklist item V(c) should indicate that this impact is potentially significant.<sup>2</sup> Because the environmental analysis does not discuss impacts to these resources or propose mitigation measures, the environmental analysis is inadequate.

d. Geology and Soils -

Excavating infiltration works in the vicinity of canyon rims has the potential to make canyon walls unstable (only basins serving an equalization purpose could be lined). Increasing infiltration increases instability even if the slope in question is already engineered. For slopes that aren't engineered (and this is the case in older neighborhoods – see above), this instability can lead to failure. Increasing the integrity of slopes downhill of detention works could also result in increased impacts to biological resources or, if retaining walls are used, aesthetic impacts. Therefore, as a result of the project change, checklist item V(c) should indicate that the geology impact from the project is potentially significant.

For purposes of revising the CEQA analysis, we suggest that the Board consider that works which involve any level of infiltration be setback from a canyon rim such that a 45 degree line drawn from the bottom of the basin nearest the canyon rim does not intersect the canyon wall.

e. Land Use and Planning -

Checklist Item IX(b) indicates that the project would not conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project adopted for purposes of avoiding or mitigating and environmental effect." This conclusion is not supported by substantial evidence; substantial evidence supports the opposite conclusion. The following examples are taken from the Chollas Creek watershed; a similar analysis should be made of all watersheds.

<sup>&</sup>lt;sup>2</sup> The "Kennedy Maps" are maps of geologic formations that may contain specific paleontological resources, and are specifically used by planning and land use agencies to identify the potential for significant paleontolgical resources. Such resources occur within the City of San Diego, and therefore could occur within the Chollas Creek watershed. *See* Geology of the La Jolla, Del Mar, La Mesa, Poway, Point Loma, and Southwest Quarter of the Escondido Quadrangles, San Diego County, California, by Michael P. Kennedy, 1975; and Geology of National City, Imperial Beach, and Otay Mesa Quadrangles, Southern San Diego Metropolitan Area, California, by Michael P. Kennedy and Siang S. Tan, 1977.

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#### Housing

The Housing Element of the City's adopted General Plan and the position taken by the City Council when declaring a "Housing State of Emergency" both have as a basic objective an increase in the housing supply. According to Appendix E of the Technical Report, low and high density residential uses account for almost 64% of the land uses within the Chollas Creek Watershed. On average, this means that 64% of the 480-1400 acres if land that would be occupied by treatment works (307 to 896 acres) is currently developed with homes. Assuming an average of 10 dwelling units per acre (4,000 square foot lots are common in the watershed), this equates to the loss of 3,070 to 8,960 units. Removal of this number existing dwelling units would decrease the housing supply and is thus in conflict with adopted City policy.

## Industrial Land

The Industrial Element of the City's adopted General Plan states that there is a serious shortage of large parcels suitable for industrial development exists in the City. Related goals and recommendations include:

"Insure that industrial land needs as required for a balanced economy and balanced land use are met consistent with environmental considerations" (p.286)

""Protect a reserve of manufacturing lands from encroachment by non-manufacturing uses." (p. 286)

"As mentioned earlier, in allocating additional land for industrial use it is imperative that sufficient acreage be designated to meet projected needs so that the existing market can operate effectively." (p.287)

The general theme of the existing Industrial element is precisely this shortage of industrial land, high industrial and prices, etc. and how the economy is negatively affected by the non-industrial use of industrial land. The supply increased only slightly since 1979 and has not increased since. In fact it is now at crisis level proportions.

According to Appendix E of Region 9's Technical Report, low and high density residential uses account for 3.12% of the land uses within the Chollas Creek Watershed. On average, this means that 3.12% of the 480-1400 acres of land that would be occupied by treatment works (15 to 43.7 acres) is currently developed with industrial uses.

The removal of housing and industrial acreage from the City's stock in order to build storm water treatment works required to comply with the TMDL would conflict with the City's General Plan and its declared Housing State of Emergency. Therefore, as a result of the project change, checklist item IX(b) should indicate that the Land Use and Planning impact

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from the project is potentially significant with respect to the loss of residential and industrial lands. The environmental analysis in inadequate because it failed to analyze this impact.

Given that none of the City's land use plans identify storm water treatment works and the nature of detention/infiltration works, the City believes that land use impacts would be significant and suggests that the Regional Board evaluate the City's plans to determine where and the extent to which inconsistencies would result.

f. Population and Housing -

Checklist item XII(c) indicates that there would be no displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere. Within the Chollas Creek watershed alone, the number of dwellings that would be lost as a result of the project change (3,070 to 8,960) should be considered substantial. According to U.S. Census Data, the average dwelling unit in San Diego houses 2.6 people. The loss of 3,070 to 8,960 dwelling units would therefore result in the displacement of 7,982 to 23,296 people. This number of dwellings that would be lost as a result of the project change should be considered substantial. Therefore, as a result of the project change, checklist items XII (b) and XII (c) should indicate that the Population and Housing impact from the project is potentially significant.

The City believes that this is in and of itself a significant impact and suggests that the Regional Board conduct a similar impact evaluation in all of the watersheds that would be subject to the TMDL.

g. Utilities and Service Systems -

Checklist item XVI (c) indicates that the project will not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. This is directly contradicted by the Technical Report, and given that the project change causes the additional significant impacts cited above, there is even more reason why this item should indicate that the Utilities and Service Systems impact from the project is potentially significant.

Given that the project change will result in previously undisclosed significant effects, CEQA compliance to date has deprived interested parties the opportunity to provide meaningful comment. In particular, we suggest that opportunity to comment be provided to historic preservationists, housing advocates, industrial developers, and those interested in public policy as it pertains to preservation of San Diego's shrinking supply of industrial lands.

h. Other Considerations

Cumulative Impacts

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CEQA requires that cumulative impacts be assessed as part of determining whether a project may have a significant effect on the environment (CEQA Guidelines Section 15064(h)(1). A Lead Agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan (CEQA Guidelines Section 15064(h)(3). However, Section 15064(h)(3) also requires preparation of an EIR (meaning a finding that the cumulative impact is significant) if there is substantial evidence that the possible effects of a particular project are still cumulatively considerable, notwithstanding that he project complies with the specified plan.

The initial study checklist indicates that cumulative impacts from the project will not occur, but no rationale is provided for that conclusion. CEQA Guidelines Section 15130(b) describes alternative lists of projects and projections that an agency is required to consider when evaluating significant impacts. Given that the Regional Board has a mandate to adopt TMDLs for receiving waters on the 303(d) list, the checklist should, at a minimum, consider the impacts of this project in the context of impacts that would result from reasonably foreseeable means of compliance with other TMDLs, such as the recently adopted TMDL for metals in Chollas Creek (see the attached letter from Deputy City Attorney Tim Miller to the State Water Resources Control Board regarding the Chollas Creek Metals TMDL for the impacts expected to occur from that project). Moreover, the analysis should include the impacts from TMDLs that are in various stages of consideration, adoption, or implementation throughout all the affected watersheds.

#### **CEQA** Alternatives

Given that the above-noted significant effects appear to be unmitigable, CEQA requires the evaluation of alternatives that would lessen the impacts. One such alternative should be provided to set the TMDL to a higher level. Such an alternative may still result in Basin Plan compliance; however, the reduced need for BMP acreage would preserve more existing land uses, effectively mitigating (partially) the significant impacts to existing land uses. Alternatively, the environmental analysis should describe why such an alternative will not achieve the basic purposes of the project.

## B. Modifications to Storm Water Conveyance Systems To Reduce Erosion

The determination that works are prohibited in "receiving waters" may also have one other consequence. Representatives of the environmental community in San Diego are concerned that the outfalls of existing storm drains at the top of canyon walls has led to erosion on canyon walls and at the base of the canyon walls. To address these concerns, in some situations the City may wish, in conjunction with constructing storm drain improvements including detention basins, to extend the storm drains to the canyon floors in order to minimize this erosion. While it could be expected that, in general, erosion on these canyon walls would decrease because of to-be-constructed upstream detention works, a prohibition on works in waters of the US/State would preclude the City from addressing this community concern.

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We hope these comments and recommendations are taken into consideration by the Regional Board. We reserve the right to submit additional technical comments before the February 8, 2006 hearing and we reserve the right to submit additional CEQA-related comments prior to the final hearing on the project as allowed by Public Resources Code Section 21177. If you have any questions or require more information, please contact Storm Water Specialist Ruth Kolb at (619) 525-8636.

Sincerely,

Chris Zirkle

Deputy Director

CZ\rk

cc: Scott Tulloch, Director, Metropolitan Wastewater Department Bob Ferrier, Assistant Director, Metropolitan Wastewater Department Tim Miller, Deputy City Attorney Ruth Kolb, Storm Water Specialist File