Slope Categories
Kearny Mesa Community Plan
19 FIGURE

CONSERVATION & OPEN SPACE ELEMENT

PRIMARY GOAL

Preserve open and environmentally sensitive areas for the aesthetic, psychological, and recreational benefits they provide to the community.

EXISTING CONDITIONS

Although Kearny Mesa is largely urbanized, portions of the community are constrained by environmental conditions that require special management. These environmental constraints include canyon and hillside systems, geologic hazards, noise and safety impacts from aviation uses, unique biotic communities, and sand and gravel resources.

Kearny Mesa is incised by two major canyon systems (see **Figure 19**). The most prominent canyon, Murphy Canyon, parallels I-15 along the entire eastern boundary of the Plan area. The second canyon is a tributary of the San Clemente Canyon. It protrudes into the northwest corner of the Plan area between I-805 and SR-52. Both systems are major scenic features in the community with high freeway visibility. The San Clemente Canyon tributary is the sole, undisturbed major canyon in Kearny Mesa. Murphy Canyon is largely developed, however, its steep hillsides remain in a natural state. A minor canyon of six acres is located south of Aero Drive, west of North Light Avenue.

Development of the majority of the mesa has limited once widespread vernal pool habitat to properties located to the south of SR-52 and west of SR-163, and to Montgomery Field.

Faults and Geologic Hazard

The majority of the community is located on mesa topography and contains limited geologic hazards. Areas of potential hazard have been noted within the Plan boundaries especially in areas of poor slope stability. Slope stability is affected directly by the physical nature of the layered rocks and natural and man-made erosion. Areas of particular concern are along Murphy Canyon where the Friars Formation is exposed. This formation is susceptible to landslide, especially where the rock structure includes weak claystone beds or seams. The low-lying areas along Murphy Canyon are designated as low to moderate risk because of liquefaction resulting from high ground water levels.

A fault trace has also been mapped in Murphy Canyon (**Figure 20**). While it is not known whether the fault would affect the community, the Plan area is within the influence zones of the active Rose Canyon and La Nacion fault system.

Fault Zones **20** FIGURE

Kearny Mesa Community Plan

Hydrology

Kearny Mesa is largely located within the 400-square-mile San Diego River Hydrologic Unit. There are no major water bodies within the Plan area. Drainage flows southward into the San Diego River system in Mission Valley, except in the extreme northwest portion of the Plan area where flow is into the San Clemente Canyon system.

Natural Resource Extraction

The StoneCrest Specific Plan details the reuse and reclamation of the sand and gravel quarry in Murphy Canyon. The quarry was operated continuously on this site for over 60 years. The use of the former quarry site will be as a mixed residential, commercial-industrial development.

Biological Resources

Vernal Pools

Vernal pools are depressions in the soil that fill with water during the winter rainy season. These vernal pools create a unique habitat that contains several rare and endangered plant species including the San Diego mesa mint (*Pogogyne abramsii*).

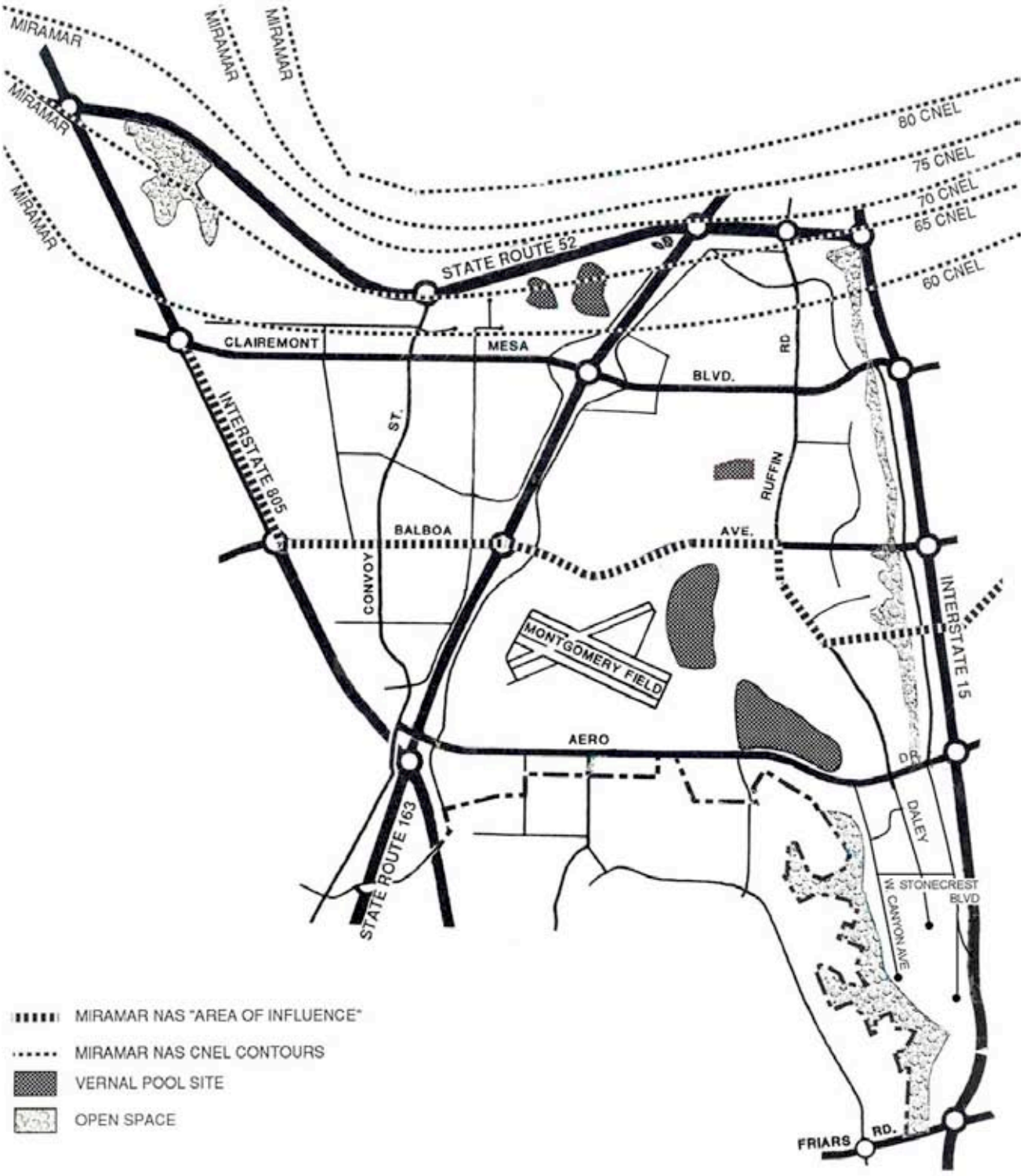
Vernal pools within Kearny Mesa are confined to Montgomery Field, a City-owned property and Navy lands located on the north of Clairemont Mesa Boulevard, westerly of SR-163 and south of SR-52 (**Figure 21**) and an approximate four+ acre area located on the southeastern corner of the General Dynamics property near Ruffin Road. The City-owned property and Navy lands are part of a larger open space system to the north of SR-52, but have been isolated from it with the construction of the freeway.

Vernal pools on Montgomery Field are protected through agreements reached with the federal government in the City's Vernal Pool Protection Program and the Montgomery Field Airport Master Plan.

The City-owned parcel is former Navy property that was obtained as part of the proposed SANDER "trash-to-energy" project. The City has purchased this off-site vernal pool habitat to mitigate future development impacts on the site. Any proposed development will require environmental review and a Section 404 permit from the U.S. Army Corps of Engineers to address vernal pool impacts.

The Navy lands, located to the east of the City-owned parcel, will require federal environmental review in addition to federal permits prior to development.

The General Dynamics vernal pools are included within a City-approved conservation bank.



Conservation and Open Space Issues

Kearny Mesa Community Plan

21 FIGURE

Air Quality

Kearny Mesa is located in the San Diego Air Basin/San Diego County which has been classified as a nonattainment area for the pollutants of ozone and particulates. The county is an attainment area for nitrogen dioxide, carbon monoxide and sulfur dioxide. The most significant source of air pollution is automobile emissions.

Noise

Air and ground transportation are the major noise sources in Kearny Mesa. Traffic volumes on most existing surface streets and freeways generate average noise levels of 65 decibels and greater on adjacent properties. Aircraft produced noise is generated by Montgomery Field and NAS Miramar.

Miramar Naval Air Station (NAS Miramar)

Although NAS Miramar is not located in the Kearny Mesa planning area, a portion of the community is impacted by the aircraft noise from the Naval Air Station. SANDAG, as the region's Airport Land Use Commission, has derived noise contours (**Figure 21**) and a compatibility matrix for aircraft produced noise impacts (**Figures 25** and **26**). Noise levels from NAS Miramar exceeding 65 decibels CNEL (Community Noise Equivalent Level) impact the northern portions of the Kearny Mesa community. The most severe noise levels impact the land located in the northeastern portion of the community between Convoy Street and I-15, north of Clairemont Mesa Boulevard. Existing land uses that are incompatible with the SANDAG noise study are the hotel uses located at the northwest interchange of Clairemont Mesa Boulevard and SR-163.

Montgomery Field

The noise issues related to Montgomery Field are discussed in the **Airport Element-Montgomery Field** of this Plan. The compatibility matrix for aircraft produced noise impacts is used to determine appropriate land uses in proximity to the airport.

ISSUES

The issues addressed in this element are the protection of the natural resources in the Plan area, implementation of the Comprehensive Land Use Plan (CLUP) for NAS Miramar, and the provision of adequate open space areas. The scarcity of natural resources in Kearny Mesa heightens the value of the natural systems that do exist in the community and demands their preservation.

POLICIES

- In order to conserve natural resources, prevent incompatible uses from locating a constrained land.
- Sites designated as open space in this Plan shall be preserved with non-building or negative open space easements determined on a case-by-case evaluation.
- Developments should comply with the Noise Compatibility and Land Use Matrix.
- Vernal pool habitat on Montgomery Field shall be preserved in accordance with the preservation policies described in the adopted Montgomery Field Master Plan. Vernal pool habitat on Navy lands located south of SR-52 will require federal environmental review and/or Army Corps of Engineers 404 permits prior to development.
- Vernal pool habitat on the General Dynamics property shall be preserved as a vernal pool conservation bank in accordance with the preservation policies prescribed in the New Century Center Master Plan and final Environmental Impact Report.

RECOMMENDATIONS

- Provide open areas within developments that provide visual relief and temporary respite from the work place.
- Require a geologic reconnaissance study prior to project approval to identify development constraints when geologic hazards are known or suspected. This requirement would supplement the need for a full geotechnical report, which may be required at a later time in the permit process.
- Maintain the natural drainage system and minimize the use of impervious surfaces. Concentrations of runoff should be adequately controlled to prevent an increase in downstream erosion. Irrigation systems should be properly designed to avoid overwatering.
- Retain native vegetation where possible. Graded slopes that are adjacent to natural hillsides and canyons should be revegetated with native or drought-tolerant species to restore pre-development drainage conditions.
- Developments within the Miramar NAS “airport influence area” should be reviewed for consistency with the Miramar NAS Comprehensive Land Use Plan, including the Airport Noise/Land Use Compatibility Matrix (**Figures 25** and **26**).
- Preserve and maintain vernal pools on Montgomery Field in accordance with the City's Vernal Pool Preservation Program and the Montgomery Field Master Plan.
- Design projects adjacent to vernal pool habitat to prevent runoff during the dry season, the invasion of exotic plants, and leaf litter from impacting vernal pool habitat.
- Preserve the mature riparian woodland as open space on the City-owned parcel west of I-l5.