
5.16 UTILITIES AND SERVICE SYSTEMS

This section evaluates the effects on utilities and service systems related to implementation of the Plan's proposed improvements. Utilities and service systems discussed in this section include electricity, natural gas, wastewater, storm water drainage, water supply, and solid waste (see Section 5.10, *Hydrology, Drainage, and Water Quality*, for a more detailed discussion of drainage issues associated with the proposed Plan).

5.16.1 Setting

Electricity

The Plan area is within the service area of Southern California Edison Company (SCE). SCE provides electrical service to the City of Malibu and the unincorporated Las Virgenes area of Los Angeles County through a system of SCE distribution substations and a series of transmission lines. Service to most areas within the City is provided via overhead lines, including Ramirez Canyon Park, Escondido Canyon Park, the Latigo Trailhead property, Corral Canyon Park, and Malibu Bluffs. Service to the Plan area is available from the Zuma and Latigo substations located in the western portion of the City of Malibu and the Tapia Substation located in the Civic Center of Malibu. The Zuma Substation provides electricity to the Ramirez Canyon area through the Marina 4,000 volt overhead transmission line; with Escondido Canyon, Latigo Trailhead, and Corral Canyon, served by the Latigo Substation via the Cuthbert and Merlin 16,000 volt overhead transmission lines; the Malibu Bluffs area is served by the Tapia Substation through the Nicholas 16,000-volt overhead transmission line (Torres, 2009). According to Allan Moreno with SCE, there are no known system deficiencies within the service areas of these substations (Moreno, 2009).

Natural Gas

The Plan area is within the service area of the Southern California Gas Company (The Gas Company). The Gas Company provides natural gas service to the City of Malibu through a series of gas mains located under the streets. An 8-inch and 2-inch main are located under Pacific Coast Highway, with 2-inch mains running under most of the Plan area roadways. Ramirez Canyon Park is currently served by a 2-inch main located under Ramirez Canyon Road, with Corral Canyon Park and Malibu Bluffs served by a 2-inch main located under Pacific Coast Highway. Escondido Canyon Park is served via a 3-inch main located under Winding Way and a 4-inch main located under Latigo Canyon Road is available to serve the Latigo Trailhead (Brock, 2009).

The availability of natural gas is based upon present conditions of gas supply and regulatory policies. As a public utility company, the Gas Company is under the jurisdiction of the California Public Utilities Commission, but can also be affected by actions of federal regulatory agencies. The conditions and availability of gas supply and services are, therefore, dependent on the regulatory actions of these agencies.

Water Supply

The Los Angeles County Water Works District No. 29 (the District) currently supplies water to the City of Malibu and the unincorporated portion of Los Angeles County within the Topanga Canyon area. The District has served the Malibu area since 1973 and obtains its water from the West Basin Municipal Water District (WBMWD). WBMWD receives its water from the Metropolitan Water District (MWD). MWD's sources of water include the Sacramento River/San Joaquin Delta via the State Water Project and the Colorado River Aqueduct beginning at Lake Havasu. A 35-mile transmission water main along Pacific Coast Highway conveys water from the interconnection with WBMWD to the western boundary of the District. The water is pumped from the transmission water main into various gravity storage tanks in Malibu and Topanga. The District also has four emergency interconnections; two with Los Angeles Department of Water and Power (LADWP) and two with Las Virgenes Municipal Water District (LVMWD); to purchase additional water if needed (LA County Waterworks District 29 - 2007 Annual Water Quality Report).

According to the County of Los Angeles Department of Public Works, Waterworks Division (Trinh, 2010), in 2009, the District had 10,506 acre-feet of available water supply for purchase from WBMWD. The District purchased 9,370 acre-feet of water from WBMWD during 2009 and sold 8,700 acre-feet to its customers. The District accounts for the approximate 10% loss of wholesale water use [$100\% - (8,700/9,370)\%$] due to the aging condition of the District's distribution system.

The District's major system facilities include approximately 200 miles of water mains, 32 pump stations and 52 tanks with a storage capacity of approximately 20 million gallons, which would supply water to the District for three days. The District's original water system facilities were acquired from various small mutual water companies. The 30-inch diameter transmission water main was built during the 1960s. According to the 2005 UWMP, the aging condition of many of the smaller water delivery lines (16-inch, 12-inch, 8-inch, and 6-inch diameter) coupled with the unique topography of the area has resulted in repetitive system failures requiring the District to continually divert funds for repairs rather than capital improvements.

However, the District has been making progress in replacing many of the aging water lines. The District currently has a number of projects underway and recently completed the replacement of many of the existing water mains and pipelines within the City of Malibu and Topanga area. Projects include the recently completed replacement of an existing 8-inch water main along Ramirez Canyon Road with a new 8-inch water main, the installation of 1,500 lineal feet of a new 8-inch water main that connects Zumirez Drive and Ramirez Canyon Road to replace an existing line, the replacement of an existing 10-inch water main with a new 12-inch water main along Topanga Canyon Blvd., the installation of a new 12-inch main line along Busch Drive, and the recently completed installation of a new 12-inch water main, replacing the existing 6-inch water main, along Broad Beach Road (LA County DPW, 2005/ LA County DPW, 2007/ Bakhoun, 2009).

Ramirez Canyon Park is served by an 8-inch water line that runs along Ramirez Canyon Road. Escondido Canyon Park would receive water via an 8-inch water line located along Winding Way. Latigo Trailhead would receive water via an 8-inch water line located along Latigo Canyon Road, with Corral Canyon Park and Malibu Bluffs receiving water via an 8-inch water line off of Pacific Coast Highway.

As of June 2009, the Los Angeles County Waterworks District No. 29 (District), serving Malibu, Topanga Canyon, and Marina Del Ray, announced a Phase II Water Shortage in the District requiring water conservation measures due to the ongoing drought from record breaking low levels of rainfall in 2007 and 2008. The District is requiring customers to cut water usage by 15% below an average or pay substantial surcharges. The cutback requires customers to use no more than 85% of the average amount of water used in the District during the 2004 to 2006 base period established by WBMWD or face surcharges. According to the District, the charges are two times the normal rate on water used that exceed the target amount by up to 15%, and three times the normal rate for any water used beyond that. If the water situation worsens, the District could advance to a Phase III shortage, which would require customers to reduce consumption by 20%.

Recycled Water

The production and use of recycled water is limited in the District due to commercial and residential uses relying primarily on individual septic systems. A portion of the wastewater generated in the area is collected and treated by small private and publicly owned package wastewater treatment plants serving individual developments. The County of Los Angeles Department of Public Works (DPW) operates and maintains the collection and treatment systems at the three publicly owned treatment plants: Malibu Mesa Water Reclamation Plant, Malibu Water Pollution Control Plant, and Trancas Water Pollution Control Plant. Of

these plants, only the Malibu Mesa plant generates recycled water for irrigation use (LA County DPW, 2005).

The Malibu Mesa plant treats wastewater for an estimated population of 3,360 persons at Pepperdine University and the Malibu Country Estates. The treated wastewater is used by Pepperdine University for landscape irrigation of approximately 126 acres at the campus and approximately 1.6 acres of landscape at the plant site. The amount of recycled water generated varies depending on the volume of wastewater produced. In 2004, nearly 100% of the 45.5 million gallons of wastewater treated at the Malibu Mesa plant was used for landscape irrigation purposes. The DPW does not anticipate the use of recycled water to increase in the future since significant growth is not projected for the plant's service area, which would require the need for plant expansion (LA County DPW, 2005).

The WBMWD has expanded its recycled water program within its jurisdiction, but the District's remote location has prevented it from participating in that program. However, the District does benefit indirectly from the program, since the more WBMWD uses recycled water for irrigation and process water, the more potable water will be available for the District (LA County DPW, 2005).

The Ramirez Canyon Park Onsite Wastewater Treatment System (OWTS) treats wastewater for the Park and includes a treated effluent discharge component that is used for irrigation of a small landscaped area.

Groundwater

The geology of the area limits the amount of groundwater available that would be capable of producing an adequate supply to be used by the District. As a result, groundwater resources are not utilized as a source for future water supply within the District. Additional information relating to groundwater can be found in Section 5.10, *Hydrology, Drainage, and Water Quality*.

Wastewater

The City of Malibu is not served by a city-wide wastewater treatment facility, but relies upon a decentralized private wastewater management system, whereby wastewater is collected, treated, and dispersed/discharged at or near the point of wastewater generation. All property in the City of Malibu is served either by private On-site Wastewater Treatment Systems (OWTS) that include individual, shared on-site, cluster, or small community sanitation systems designed to treat small quantities of wastewater from

individual homes, businesses or small groupings of homes or businesses or from one of the five small treatment plants (Malibu Mesa Water Reclamation Plan, Malibu Water Pollution Control Plant, Trancas Water Pollution Control Plan, Marblehead-Point Dume Trailer Park and Latigo Shores Condominium) located within the City. According to staff with the City of Malibu Environmental Health and Building Division, each of the five treatment plants is at capacity. All new development is required to use OWTS. However, the City will consider new small treatment plants to serve large subdivisions subject to strict guidelines and policies contained in the City's Local Coast Plan and Local Implementation Plan (Sheldon, 2009).

The unincorporated coastal areas of Los Angeles County located within the Santa Monica Mountains are not served by a County of Los Angeles wastewater treatment facility. These areas rely upon a decentralized private wastewater management system, whereby wastewater is collected, treated, and dispersed/discharged at or near the point of wastewater generation.

Ramirez Canyon Park includes a state-of-the-art wastewater treatment and recycled water disposal system that serves Barwood House, Peach House, and the Barn. The system provides secondary treatment, filtering and disposal of the effluent for reuse in subsurface landscape irrigation. The highly treated effluent is pumped to a terraced orchard area onsite for subsurface irrigation. The updated septic disposal system for the Barwood, Peach and Barn facilities can effectively receive and treat the effluent that would be generated by a 200-person event (the maximum proposed event size at Ramirez Canyon Park). The Art Deco House and Caretaker's residence are both served by independent septic systems that are designed to treat effluent generated by a single family residence. The Art Deco House is not used to house any staff; and therefore, the septic system is rarely used (Tamasi, 2009). See Section 5.10, *Hydrology, Drainage, and Water Quality*, for a more detailed discussion of wastewater treatment and septic facilities located at Ramirez Canyon Park.

Corral Canyon Park contains one self-contained portable restroom located at the parking lot adjacent to Pacific Coast Highway. This restroom can hold up to 40 gallons of effluent and typically generates 6 – 8 gallons of waste in a week. The restroom is serviced by Andy Gump Temporary Site Services once a week by an F-550 truck that can hold 650 gallons of waste and 300 gallons of water. The clean portable restroom is provided with 5 – 6 gallons of fresh water to start the week (Ruiz, 2009). The pumped waste is transported and disposed of at the City of Los Angeles Septage Facility located at the 96-acre Donald C. Tillman Water Reclamation Plant in Van Nuys where it is eventually placed in the 96-inch East Valley Interceptor Sewer line and transported to the City of Los Angeles Hyperion Treatment Plant located in Playa Del Rey for final treatment. According to staff at the City

of Los Angeles Department of Public Works, the Septage Facility and Hyperion Treatment Plant have adequate capacity to meet projected future demand of wastewater to be generated from implementation of the Plan (Yohnnes, 2009).

There are no restrooms and/or wastewater treatment facilities located at Escondido Canyon Park, Latigo Trailhead, or Malibu Bluffs.

The Los Angeles Regional Water Quality Control Board (LARWQCB) regulates water quality in southern California in accordance with the State Water Resources Control Board Water Quality Control Plan or "Basin Plan". The Basin Plan presents the beneficial uses that the LARWQCB has designated for local aquifers, streams, marshes, rivers, and bays, as well as the water quality objectives and criteria that must be met to protect these uses. The LARWQCB has jurisdiction over public and private sewage disposal systems and is the permitting authority to protect and preserve water quality in the area. LARWQCB delegates its permitting authority to the City of Malibu for residential and small commercial projects that generate less than 2,000 gallons per day. MRCA/ Conservancy properties, as state facilities, fall under LARWQCB permitting authority.

In 2000, when MRCA submitted plans to update the existing septic system at Ramirez Canyon Park, the California Coastal Commission (CCC) had jurisdiction over all projects located within the City of Malibu, since the city had not yet adopted their Local Coastal Plan. As a result, CCC staff issued Coastal Development Permit #4-98-334 subject to the following special condition for the MRCA proposed updated septic disposal system at Ramirez Canyon Park.

Coastal Development Permit No. 4-98-334, Special Condition 8.

Prior to the issuance of Coastal Development Permit 4-98-334, the applicant shall submit a final Plan that shall include the components set forth below, for the review and approval of the Executive Director. The Executive Director shall review the final Plan in consultation with the City of Malibu Environmental Health Department, the County of Los Angeles Environmental Health Department, or a qualified registered environmental sanitarian of the Executive Director's choice. The work identified in (a) (b) (c) and (d) shall be done within sixty (60) days of permit issuance. The final Plan shall:

- (a) Incorporate all recommendations set forth in the Septic System Analysis prepared by Penfield & Smith, dated March 9, 2000;*

- (b) *Provide for the permanent abandonment of the idle septic system and leachfields located beneath the tennis court, of the leachfield presently serving Barwood, and of the leachfields and/or pits and septic tanks presently serving Barn and Peach buildings. All abandonment plans shall conform with the standards of the Uniform Plumbing Code;*
- (c) *Provide for the installation of a new, on site wastewater treatment system and recycled water reuse program, including a landscape/orchard planting and management plan designed to maintain sufficient evapotranspiration capacity to provide for the maximum effluent production of the site during all potential seasonal conditions, as proposed in the Septic System Analysis and Recommendations prepared by Penfield and Smith and dated March 9, 2000;*
- (d) *Provide for the installation and maintenance on site of such emergency power generators and fuel supply necessary to maintain the wastewater treatment system (in addition to emergency lighting) continuously for at least twelve (12) hours during an interruption of conventional power supplies;*
- (e) *Provide for the quarterly analysis of water samples drawn immediately up- and down-stream of the subject site for a minimum of four quarters of available streamflow (streamflow in Ramirez Canyon Creek is intermittent). The testing schedule shall commence with the first quarter of available streamflow following the installation of the new wastewater treatment system. The samples shall be analyzed to determine fecal coliform concentration, and the results shall be submitted quarterly to the Executive Director. If the results of the one year analysis are adverse or inconclusive, the Executive Director shall require that additional water quality analyses be performed and that the following measures be implemented:*
 - (1) *Within thirty (30) days following a second water test that shows downgradient bacterial counts to be elevated above the upgradient baseline samples tested, the applicant shall submit a plan, including a timeline for implementation, for the further evaluation of the performance of the septic disposal systems associated with the ranger residence and the Art Deco building, for the review and approval of the Executive Director;*
 - (2) *If the results of the approved septic review plan fail to rule out the subject septic systems as a potential source of elevated fecal coliform counts downstream of Ramirez Canyon Park, the applicant shall within thirty (30) days following the completion of the review according to the approved timeline, submit a complete permit application to abandon these systems and further upgrade the new*

wastewater treatment system to accept and treat the effluent from the ranger residence and/or the Art Deco building, as indicated.

MRCA has implemented each of the requirements under Special Condition 8 above. MRCA contracted with Questa Engineering Corp. to prepare a final septic disposal plan that was reviewed and approved by CCC staff, including a contract with BioSolutions Inc. to provide quarterly sampling and reporting per Special Condition 8 (e) requirements. The system has been installed; water quality surveys conducted by BioSolutions have not identified down-gradient septic contamination in Ramirez Creek. As a result, the Art Deco House and Caretaker's Residence have been allowed to remain on individual septic systems (Judi Tamasi, MRCA, November 2009).

Solid Waste

The County of Los Angeles Sanitation District provides solid waste management, including collection and disposal services and landfill operations to an area that covers approximately 800 square miles, encompassing 78 cities and the unincorporated areas of the County. This system includes sanitary landfills, recycle centers, materials recovery/transfer facilities, and energy recovery facilities. Local jurisdictions are responsible to make adequate provisions for solid waste handling, both within their respective jurisdictions and in response to regional needs (CIWMB, 2009). The City of Malibu operates on a permit basis and not on a franchise agreement with solid waste haulers. The City currently has 13 permitted trash haulers, of which two, G.I. Industries, a subsidiary of Waste Management, and Universal Waste System through a contract with the County of Los Angeles, provide solid waste collection and recycling service to residences and businesses within the City. The remaining trash haulers are permitted to provide roll-off and temporary bins within the City. As of July 1, 2008, Universal Waste System provides its solid waste service to the eastern portion of the City, while G.I. Industries serves the western portion of the City. Solid waste collected in Malibu is taken to either the Simi Valley Landfill or Calabasas Landfill (Nelson, 2009).

Ramirez Canyon Park receives trash service from G.I. Industries. Ramirez Canyon Park has two (2) 6-cubic yard containers, one for trash and the other for greenwaste. The containers are emptied once a week by G.I. Industries.

Escondido Canyon Park has one 55-gallon trash can at the parking lot adjacent to Pacific Coast Highway and three additional 55-gallon trash cans located at the bottom of the park. MRCA staff collects the trash four days per week during summer and twice per week during the winter. The collected trash is transported via standard pickup truck to the large

trash bins at MRCA's Upper Las Virgenes Canyon Open Space Preserve (ULV), where the bins are emptied by the local trash hauler and taken to the Simi Valley Landfill.

There is no trash service at the undeveloped Latigo Trailhead property.

Corral Canyon Park has two 55-gallon and five 30-gallon trash containers located at the existing parking lot/trailhead adjacent to Pacific Coast Highway. The trash is collected 5 days a week year-round by MRCA staff. The collected trash is transported via a standard pickup truck to the large trash bins at MRCA's Upper Las Virgenes Canyon Open Space Preserve (ULV), where the bins are emptied by the local trash hauler and taken to the Simi Valley Landfill.

Malibu Bluffs has one 55-gallon trash can at the trailhead adjacent to the City's Malibu Bluffs Park and two 55-gallon trash cans at the trailhead on Malibu Road. MRCA staff collects the trash four days per week during summer and two days per week during the winter. The collected trash is transported via standard pickup truck to the large trash bins at MRCA's Upper Las Virgenes Canyon Open Space Preserve (ULV), where the bins are emptied by the local trash hauler and taken to the Simi Valley Landfill.

No formal programs exist at any of the existing parks currently to recycle non-vegetative materials (i.e., cans, bottles, paper, plastic, etc.).

The Simi Valley Landfill is located at 2801 Madera Road in Simi Valley. The landfill is owned and operated by Waste Management of California. The Simi Valley Landfill has a maximum permitted throughput of 3,000 tons per day and a maximum permitted capacity of 43,500,000 cubic yards. The most recent inspection of the landfill conducted in 2001 estimated the remaining capacity to be 9,473,131 cubic yards. The California Integrated Waste Management Board (CIWMB) estimated the landfill has a projected operating life through 2034 (Nilssen, 2009).

The Simi Valley Landfill is located in the unincorporated area of Los Angeles County at 2801 Madera Road within the boundaries of the Santa Monica Mountains National Recreation Area. The landfill is operated pursuant to a Joint Powers Agreement between the County sanitation districts and the County of Los Angeles, owner of the property. A Special Use Permit, issued by the National Park Service (NPS) in November 1998, and renewed in November 2003, allows for the continued operation of the landfill within park boundaries. The landfill has a maximum permitted throughput of 3,500 tons of solid waste per day and a maximum permitted capacity of 69,700,000 cubic yards of solid waste. The CIWMB estimated that the Simi Valley Landfill has a projected operating life through 2022,

based on recent average disposal quantities (LACSD, 2009 / Nilssen, 2009).

The California Integrated Waste Management Act of 1989 (State Assembly Bill 939) required all cities and counties to develop a Source Reduction and Recycling Element (SRRE) for diverting 50% of their solid waste (based on 1990 levels) from landfills by the year 2000. The City of Malibu Public Works Department contracts with Solid Waste Solutions to manage the City's Waste Reduction and Education programs, which are designed to achieve the State-mandated goal of diverting at least 50% of solid waste generated from landfills. Waste diversion programs include both residential and business recycling programs, tailored to meet the needs of individual customers. As of 2008, the City had achieved a 55.4% diversion rate, which is above the mandated standard. It should be noted that the diversion rate is calculated based on zip codes and not city boundaries. The city occupies 27 square miles, while the zip codes cover approximately 70 square miles. This difference in land area, coupled with the fact that diversion rate calculations do not take into account tourism-generated (City of Malibu has over 9 million visitors annually) solid waste has the potential to influence the actual diversion rates within City limits (Nilssen, 2009).

The City of Malibu has implemented a Construction and Demolition (C&D) debris recycling program that requires projects recycle or reuse 50% of the waste generated. Its purpose is to increase the diversion of C&D debris from landfills and will further assist in the City meeting the State's 50% waste reduction mandate per AB 939. The City requires that all new construction and all demolition complete a Waste Reduction and Recycling Plan (WRRP) that estimates the total quantity of discarded materials by type and provides an explanation on how waste materials will be handled at the project site to ensure salvage/reuse or recycling.

Storm Water Drainage

The City of Malibu utilizes the existing natural drainage systems to carry storm flows to the ocean. At locations where these natural systems cross the State Highway (Pacific Coast Highway) or a local street, the drainage is collected and channeled into a culvert under the roads. According to the City of Malibu Public Works Department, the drainage along PCH is conveyed via City, County, and/or Caltrans owned drainage systems (Kiepke, 2008).

Stormwater runoff from Ramirez Canyon Park and surrounding development along Ramirez Canyon Road is conveyed and collected into the City's storm drainage system located under/along the roadway and directed down to various outlets into Ramirez Creek and eventually to the Ramirez Creek Disinfection Facility located at Paradise Cove. At

Escondido Canyon Park, stormwater runoff from the surrounding area is conveyed along Winding Way road and collected into the City's storm drainage system located under the roadway and directed down to various outlets into Escondido Creek. Drainage in the Latigo Trailhead area generally flows into Latigo Creek which parallels Latigo Canyon Road and then into the Pacific Ocean. The natural drainage system within the undeveloped Corral Canyon Park area captures and directs all stormwater runoff into the local natural drainages, which is then collected and channeled via a culvert under Pacific Coast Highway to the ocean (Kiepke, 2008). Malibu Bluffs stormwater runoff is conveyed via local natural drainages within the park and collected and directed under Malibu Road to the ocean (Duboux, 2009).

The City of Malibu Local Coastal Plan Land Use Plan (LUP) contains policies that require that the water quality objectives established in the California Water Quality Control Plan, the Basin Plan, and the policies established by LARWQCB in the Los Angeles County municipal stormwater permit and the Standard Urban Storm Water Mitigation Plan (SUSMP) for Los Angeles County and the Cities in Los Angeles County be incorporated into planning and implementation of new development. See Section 5.4, *Hydrology, Drainage, and Water Quality*, for a more detailed discussion of drainage issues associated with the proposed Plan.

Regulatory Setting

Federal Regulations

The Clean Water Act (CWA) regulates the discharge of pollutants to waters of the United States from any point source, enacted in 1972. In 1987, amendments to the CWA added Section 402(p), which establishes a framework for regulating non-point source storm water discharges under the National Pollutant Discharge Elimination System (NPDES). The NPDES storm water program is described in detail in Section 5.4, *Hydrology, Drainage, and Water Quality*.

State Regulations

California Coastal Act

The State of California Legislature adopted the California Coastal Act in 1976 to implement the federal Coastal Zone Management Act of 1972. The California Coastal Act is the foundation of the California Coastal Management Program (CCMP), which includes the

basic policies for managing and balancing the use of resources for state and national interests in the California Coastal Zone. The enforceable policies of the CCMP are the Chapter 3 policies of the California Coastal Act. These policies address critical coastal resource issues including public coastline access, coastal and inland recreation, low-cost visitor activities, protection and enhancement of sensitive habitat and species, water quality, agricultural and visual resources, and natural hazards.

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates privately-owned and operated electric, natural gas, communication, transportation, and water companies. The CPUC grants operating authority, regulates service standards, sets rates, and monitors utility operations for safety, environmental stewardship, and public interest.

California State Water Resources Control Board

The California State Water Resources Control Board (State Board) and the nine Regional Water Quality Control Boards (Regional Board or RWQCB) have the authority in California to protect and enhance water quality, both through their designation as the lead agencies in implementing the Section 319 non-point source program of the federal Clean Water Act, and through the state's primary water pollution control legislation, the Porter-Cologne Act.

The Los Angeles (Region 4) office of the Regional Board guides and regulates water quality in streams and aquifers throughout the southern California area through designation of beneficial uses, establishment of water quality objectives, and administration of the NPDES permit program for storm water and construction site runoff. The LARWQCB is also responsible for Section 401 water quality certification where development results in fill of jurisdictional wetlands or waters of the U.S. under Section 404 of the CWA.

Los Angeles Region Water Quality Control Plan (Basin Plan)

The Los Angeles RWQCB (LARWQCB) regulates water quality in the southern California in accordance with the Water Quality Control Plan or "Basin Plan" (Water Quality Control Board, Los Angeles Region, 1994), and amended in 2007. This Basin Plan gives direction on the beneficial uses of the state waters within Region 4, describes the water quality that must be maintained to support such uses, and provides programs, projects, and other

actions necessary to achieve the standards established in the Basin Plan. In addition, the revised Water Quality Control Plan for Ocean Waters of California (Ocean Plan) was adopted by the SWRCB in 2005 and approved by the USEPA in 2006. The Ocean Plan contains water quality objectives and effluent limits that apply to all discharges to the coastal waters of California. Waste management systems that discharge to the ocean must be designed and operated in a manner to maintain a healthy marine ecosystem and not adversely impact the health of recreational users.

Assembly Bill 885

Assembly Bill 885 (AB 885) was approved on September 27, 2000. AB 885 requires the Regional Water Quality Control Board in consultation with the State Department of Health Services, California Coastal Commission, the County of Los Angeles Department of Health Services, and departments of other counties and cities, to adopt specified regulations or standards for the permitting and operation of prescribed onsite sewage treatment systems that meet certain requirements. Individual disposal systems that use subsurface disposal are all included under AB 885. The RWQCB regulations specifically address effluent quality, siting, maintenance requirements of septic systems. The LARWQCB has jurisdiction over public and private sewage disposal systems in its region and is the permitting authority to protect and preserve water quality in the Malibu area. LARWQCB delegates its permitting authority to the City of Malibu for residential and small commercial projects that generate less than 2,000 gallons per day.

Local Regulations

City of Malibu Local Coastal Program

The City of Malibu's Local Coastal Program contains goals, policies, and implementation measures related to water quality and on-site wastewater disposal systems that are applicable to the proposed Malibu Parks Public Access Enhancement Plan. In particular, Section 18 of the City's Local Implementation Plan contains specific regulations pertaining to septic systems that require ongoing monitoring and maintenance activities to ensure proper operation and adequate capacity of the septic system. Section 5.10, *Hydrology, Drainage, and Water Quality*, provides a more detailed discussion of water quality issues generally, and requirements associated with the onsite wastewater septic systems at Ramirez Canyon Park.

Non-Regulatory Reference Planning Documents

City of Malibu On-Site Wastewater Treatment Systems Ordinance

The City of Malibu Municipal Code contains Title 15.40 which is the City's On-Site Wastewater Treatment Systems (OWTS) Ordinance. The purpose of the on-site wastewater treatment system inspection and permitting scheme is to assist property owners to manage their OWTS by establishing consistent requirements for assuring appropriate operation and maintenance of these systems to protect public health and safety, the environment, and water quality.

City of Malibu Storm Water Management and Discharge Control Ordinance

The City of Malibu in 1996 adopted Title 13.04 of the City's Municipal Code, known as, the City of Malibu's Storm Water Management and Discharge Control Ordinance to mitigate flooding and surface drainage hazards. This ordinance contains specific requirements to ensure the future health, safety and general welfare of the citizens of the city and the water quality of the receiving waters of the Santa Monica Bay.

5.16.2 Impact Analysis

Methodology and Thresholds of Significance

The Plan's impacts would be considered significant if implementation of the Plan would adversely affect the ability of service agencies to provide adequate service to the Plan site or other existing service areas.

The City of Malibu General Plan EIR considers impacts as being potentially significant if implementation of a project would result in:

- Activities which use large amounts of energy or which use energy in a wasteful manner, or an increased demand for utilities which exceeds either the existing supply or capacity of the infrastructure (or financially feasible infrastructure that could be developed) required to service additional demand and/or equipment (treatment facilities, electric lines and substations, natural gas lines, etc.)

In addition to use of the above threshold, and in accordance with Appendix G of the CEQA Guidelines, the proposed Plan would also have a significant environmental impact if it

would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- Require or result in the construction of new water or wastewater treatment facilities plants or expansion of existing facilities, the construction of which could cause significant environmental impacts.
- 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.
- Not have sufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements needed.
- Result in a determination by the wastewater treatment provider that serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- Be served by a landfill that does not have sufficient permitted capacity to accommodate the project's solid waste disposal needs.
- Not comply with federal, state, and local statutes and regulations related to solid waste.

For purposes of full disclosure of potential environmental impacts associated with utilities and service systems, the Plan's impacts associated with Ramirez Canyon Park have been analyzed using the following two baseline scenarios (see Section 3.0, *Environmental Setting* for additional information):

- 1) Recreation/ Administration: The environmental setting assumes an environmental baseline of existing recreation and administrative uses and related improvements associated with Ramirez Canyon Park as of the date of the Notice of Preparation.
- 2) Vacant Residential: The environmental setting assumes an environmental baseline of vacant residential uses and improvements historically associated with the Ramirez Canyon Park site prior to acquisition by the Conservancy/ MRCA.

Project Impacts

Impact analysis of individual utility/ service systems is identified below.

Electricity/Natural Gas

Impact US-1: Implementation of the proposed Plan's improvements would increase the demand for electricity and natural gas services. However, the increase in demand would not require the construction of new energy facilities; impacts would be less than significant.

The proposed Plan park, trail, and program improvements are minor in nature. Electrical and gas service demand would be primarily associated with existing and proposed uses at Ramirez Canyon Park; demand at other park sites would be limited to camp host utility hook-ups and as-needed lighting for safety purposes. Development of the proposed improvements would increase the demand for energy through an increase in park use and visitation within the Plan site. However, this increase in energy consumption would be minimal. Southern California Edison indicates that additional demand within the Plan area could be accommodated with existing circuits and sub-stations (Torres, September 2009); construction of new energy facilities would not be required. Impacts, therefore, to energy consumption would be *less than significant*.

Under the Ramirez Canyon Park Recreation/Administration baseline, impacts from Plan implementation on energy consumption would likely create an indirect increase in the demand for energy through an increase in park visitation at Ramirez Canyon Park. The increase in average daily visitation at Ramirez Canyon Park under this baseline would be from 27 persons per days to 131 persons per day; the projected increase includes consideration of the proposed 150 to 200-person special events, which would be limited to 32 events per year. This indirect increase in energy consumption from increased average daily visitation at Ramirez Canyon Park would not require construction of new energy facilities. As a result, impacts to energy consumption under the Ramirez Canyon Park Recreation/Administration baseline would be considered *less than significant*.

Under the Vacant Residential Use baseline for Ramirez Canyon Park, an increase in energy consumption would be anticipated due to an increase in visitation above the vacant residential use baseline. The Plan's projected average daily visitation at Ramirez Canyon Park would increase from 0 to 131 persons per day, the projected increase includes consideration of the proposed 150 to 200-person special events, which would be limited to

32 events per year. This increase in energy consumption would be minimal and would not require construction of new energy facilities; therefore impacts to energy consumption under the Ramirez Canyon Park residential use baseline would be considered *less than significant*.

Mitigation Measures

As impacts on energy consumption would not be significant, no mitigation measures are required.

Residual Impacts

Impacts on energy would be *less than significant (Class III)*.

Wastewater

Impact US-2: Implementation of the proposed Plan's improvements would not increase the demand for public wastewater service or require the expansion or construction of new public wastewater facilities; impacts would be less than significant.

As mentioned above, the City of Malibu and the unincorporated Las Virgenes area of Los Angeles County are not served by a public wastewater treatment facility, but rely upon a decentralized private wastewater management system, whereby wastewater is collected, treated, and dispersed/discharged at or near the point of wastewater generation. All property in the City of Malibu is served by either:

- Private On-site Wastewater Treatment Systems (OWTS) that include individual, shared on-site, cluster, or small community sanitation systems designed to treat small quantities of wastewater from individual homes, businesses or small groupings of homes of businesses; or,
- One of the five small treatment plants (Malibu Mesa Water Reclamation Plan, Malibu Water Pollution Control Plant, Trancas Water Pollution Control Plan, Marblehead-Point Dume Treatment Plant and Latigo Bay Shores Treatment Plant) located within the City.

Three of the small treatment plants (Malibu Mesa Water Reclamation Plant, Malibu Water Pollution Control Plant, Trancas Water Pollution Control Plant) are operated and maintained by the County of Los Angeles, while the remaining two treatment plants (Marblehead-Point Dume Treatment Plant and Latigo Bay Shores) are operated and maintained by the private developments they serve. Each of the five small treatment plants are operating at full capacity. Of these plants, only the Malibu Mesa Treatment Plant, serving Pepperdine University and adjacent residences, generates recycled water for irrigation.

No new septic systems are proposed as part of the Plan. All new restrooms proposed as part of the Plan would be self-contained chemical restrooms, with the exception of three proposed restrooms at Ramirez Canyon Park. These three restrooms would be connected to an existing state-of-the-art alternative wastewater treatment and recycled water system currently serving the Ramirez Canyon Park uses. The existing wastewater treatment system at Ramirez Canyon Park can effectively receive and treat the effluent that would be generated by a 200-person event (the maximum proposed event size) (Questa, 2000), and would be supplemented by portable self-contained restrooms when necessary. Existing septic systems at the Art Deco House and Caretaker's residence, proposed for small group gatherings/ tours use and on-site employee (& family) residential use, respectively, are currently performing adequately; no increase in maintenance or service is anticipated. Therefore, irrespective of which baseline is used for Ramirez Canyon Park, the Plan's wastewater generation would be effectively handled.

Each self-contained restroom would include a holding tank; sizes would range from 750 to 1,500 gallons of holding capacity. Average demand is approximately one gallon capacity per 18 restroom uses (Tamasi, 2009). The smallest 750-gallon tank size can accommodate 14,000 uses before needing to be pumped. As indicated in Table 5.13-4, the highest average daily demand at parks proposed for self-contained restrooms would be Malibu Bluffs at 102 persons per day. Although the Malibu Bluffs park site would be developed with several self-contained restroom facilities, if these same 102 persons were to utilize any one facility on a daily basis over the course of one month, total capacity utilized would be less than 4,100 gallons. The Plan includes a comprehensive maintenance plan for the proposed park and trail facility improvements (see Section 2.3.5, *Project Description*). Under the Plan's maintenance plan, the tanks are proposed to be pumped at least once per month (and the restrooms would be inspected during maintenance and cleaning; maintenance 5-7 times per week and cleaning 3 times per month), restroom overflow due to capacity concerns would be unlikely.

Assuming every visitor utilized a Park site restroom an average of once per visit per day, the projected amount of total effluent to be generated from implementation of the

proposed Plan's self-contained restrooms (i.e., all non-Ramirez Canyon sites) on an annual basis would be approximately 3,800 gallons [(187 persons/ day x 365 days/ years) / x 1 gallon/ 18 persons). The pumped waste would be transported and disposed of at the City of Los Angeles Septage Facility located at the 96-acre Donald C. Tillman Water Reclamation Plant in Van Nuys where it is then subsequently placed in the 96-inch East Valley Interceptor Sewer line and transported to the City of Los Angeles Hyperion Treatment Plant located in Playa Del Rey for final treatment. According to City of Los Angeles Department of Public Works staff, the Septage and Hyperion facilities have adequate capacity to meet future generated wastewater from implementation of the Plan (Yohnnes, November 2009). Therefore, impacts on public sewer facilities would be *less than significant*.

Mitigation Measures

As impacts on public sewer facilities would be less than significant, no mitigation measures are required.

Residual Impacts

Impacts on public sewer facilities would be ***less than significant (Class III)***.

Impact US-3: Implementation of the proposed Plan's improvements would potentially increase the intensity of demand for existing private wastewater service within Ramirez Canyon Park; impacts would be potentially significant.

Although the addition of the three new restrooms connected to the existing alternative sewage disposal system at Ramirez Canyon Park, as well as the intensification of use of existing septic systems at the Art Deco House and Caretaker's residence (under both the Recreation/ Administration and Vacant Residential Baselines) are not anticipated to require new advanced septic treatment or conventional septic systems; an increase in the intensity of use/ demand of the existing systems would be associated with Plan implementation. Section 18.4 (a) of the City of Malibu's LCP Local Implementation Plan requires that an intensity of use of existing sewage disposal systems be consistent with requirements of the LARWQCB, which require all tertiary treatment facilities to prepare and submit annual monitoring/maintenance reports. Therefore, LARWQCB review and approval would be necessary to ensure compliance with LARWQCB wastewater discharge requirements for the Ramirez Canyon Park sewage treatment and disposal systems.

Although the proposed Plan would not increase the demand for public wastewater services or require the construction of new public wastewater facilities, all on-site private sewage treatment within Ramirez Canyon Park should be reviewed to ensure full compliance with respect to LARWQCB requirements. Although such requirements are standard operating procedure, in an abundance of caution, this impact has been classified as *potentially significant* absent the following mitigation measure.

Mitigation Measures

The following mitigation measure is required to ensure compliance with LARWQCB waste discharge requirements for the Ramirez Canyon Park on-site sewage treatment facilities.

MM US-3: To address LARWQCB Waste Discharge Requirements, MRCA staff shall prepare and submit the required waste discharge requirement form(s) to LARWQCB for review and approval.

Plan Requirement and Timing: MRCA shall submit the required waste discharge form(s) to LARWQCB for review and approval prior to construction activity.

Monitoring: Prior to construction activity at Ramirez Canyon Park, LARWQCB staff shall review and approve the waste discharge requirement form(s) for the Ramirez Canyon Park wastewater system(s).

Residual Impacts

With implementation of Mitigation Measure US-3, impacts on private wastewater services with respect to compliance with RWQB requirements, would be ***less than significant (Class II)***.

Storm Water Drainage

Impact US-4: Implementation of the proposed Plan's improvements would not require or result in the construction of new or expansion of storm water drainage facilities; impacts would be less than significant.

During construction of the Plan's improvements, Plan activities must comply with the National Pollutant Discharge Elimination System (NPDES) Phase II requirements administered by the LARWQCB, and prepare and submit a comprehensive Storm Water Pollution Prevention Plan (SWPPP) to the LARWQCB prior to the issuance of grading or construction permits. The SWPPP would require the selection of appropriate BMPs (best management practices) from a number of options which would specifically address potential pollutant risks during construction. See Section 5.10, *Hydrology, Drainage, and Water Quality*, for a more detailed discussion of the Plan's compliance with these requirements. Construction impacts, therefore, on storm water drainage facilities would be *less than significant*.

As discussed above, the City of Malibu utilizes existing natural drainage systems to carry storm flows to the ocean. At locations where these natural systems cross the State Highway (Pacific Coast Highway) or a local street, the drainage is collected and channeled into a culvert under the roads. The drainage along Pacific Coast Highway (PCH) is conveyed via City, County, and/or Caltrans owned drainage systems. For those portions of the proposed Plan located within the County of Los Angeles, the County similarly uses the natural drainage systems of the canyons to carry storm water flows southward to the ocean, utilizing culverts under roadways to channel water to the ocean.

The proposed Plan improvements include substantial park and trail improvements that would have relatively minor effects on storm water drainage infrastructure due to their limited development footprints as well as the Plan's general preservation of soil permeability. There would be some limited storm water runoff associated with the creation of impervious surfaces related to the proposed limited road improvements and proposed improvements at each of the proposed parking areas. Each of the proposed parking areas has, however, been designed to not concentrate water at unprotected outfall locations. See Section 5.4, *Hydrology, Drainage, and Water Quality*, for a more detailed discussion of conceptual plans of each proposed parking area (concept plans may be reviewed within Appendix D-1).

In addition, the Plan includes Water Quality Policy 1, Water Quality Implementation Measures 1, 2, 3, and 4, (see Section 5.10, *Hydrology, Drainage, and Water Quality*) and Hazard Implementation Measure 3 (see Section 5.9, *Hazardous Materials*) that are designed to minimize storm water runoff through preparation of an Erosion Control Plan and installation of drainage and erosion control facilities to convey site drainage in a non-erosive manner, reducing the need for expanded drainage systems. As a result, irrespective of which baseline is used for Ramirez Canyon Park, the project engineer's concept plans (see *Appendix D-1*) address storm water drainage adequately and would be further refined in

consultation with RWQCB; additional and/or expanded storm water drainage facilities, beyond the improvements identified within the concept plans would not be anticipated. Therefore, associated impacts to storm water drainage facilities would be *less than significant*.

Mitigation Measures

As impacts on storm water drainage facilities would be less than significant, no mitigation measures are required.

Residual Impacts

Impacts on storm water drainage facilities would be ***less than significant (Class III)***.

Water Supply

Impact US-5: Implementation of the proposed Plan's improvements would incrementally increase the demand for water; however, the District has adequate water supplies to serve the Plan site and serving the Plan would not require the construction of new water supply facilities; impacts would be less than significant.

Although the Plan does not include any new structural development that would significantly affect water demand and fire flow requirements at any of the five Plan park areas, the proposed Plan does include installation of fourteen (14) new self-contained restrooms equipped with hand washing stations, five (5) 10,000-gallon water tanks, nineteen (19) designated "Drainage Sump" areas adjacent to camping and parking areas that would provide fresh water for camp uses including drinking water, hand washing and dish washing, and six (6) camp host water hook-up connections. In addition, three (3) new restroom facilities with hand washing stations are proposed at Ramirez Canyon Park that would be connected to the existing onsite wastewater treatment system. Each restroom facility, water tank, designated drinking/wash area, and camp host water hook-up would require a connection to an existing water supply. In addition, water may be utilized on a temporary basis to establish native plant materials associated with project habitat restoration activities, for dust control, and/or for limited landscape/ vegetative screening improvements.

According to Los Angeles County Waterworks District No. 29, the long-term increase in water demand generated by new restroom-hand washing stations, water tanks, designated

wash/drinking areas, and camp host sites would be significantly less than a typical park that includes large turf and landscaped areas requiring substantial irrigation (1,500 gallons per acre per day) (Rydman, 2009). A highly conservative water demand estimate for the proposed park facilities would range from 7,275 gallons per day (8.1 acre-feet per year) to 7,950 gallons per day (8.9 acre-feet per year), respectively, under the Recreation/Administration Baseline and the Vacant Residential Baseline. This estimate is based on a conservative estimate of 25 gallons per day per person¹ with a projected daily average of 291 persons visiting the park areas ($25 \times 291 = 7,275$) under the Recreation/Administration Baseline, and 318 persons visiting the park areas ($25 \times 318 = 7,950$) under the Vacant Residential Baseline.

The amount of water demand estimated to be generated from implementation of the proposed Plan would not exceed any water demand thresholds, since both the City of Malibu and the County of Los Angeles do not have established water demand thresholds. Furthermore, according to Dave Rydman with Los Angeles County Waterworks District No. 29, this water demand estimate for the proposed Plan would be highly conservative, and with proper maintenance of the water delivery facilities (e.g., pipes, faucets) to reduce the potential for leaks, the water demand estimate would likely be much lower (Rydman, 2009). In addition, the proposed restrooms at Ramirez Canyon Park would be connected to an existing OWTS that includes a recycled water reuse system, which would be used to irrigate existing landscaped areas within Ramirez Canyon Park, thereby further reducing water demand in Ramirez Canyon Park.

Based on information from the local water district, the District receives 100 percent of its water supply from WBMWD and has emergency connections with Las Virgenes Metropolitan Water District (LVMWD) and Los Angeles Department of Water and Power (LADWP) (Bakhoun, 2009) (LA County DPW, 2005). The County of Los Angeles Department of Public Works Waterworks District No. 29 2005 Urban Water Management Plan projects 100% reliable supply of water for all users served by WBMWD for the next 25 years. This assumption is assured through the Metropolitan Water District's Water Surplus and Drought Management Plan and WBMWD's recent changes in the region's water supply mix over the years, which decreases WBMWD dependence on imported water. WBMWD has increased its supply from locally-produced water primarily through investments in conservation, education, and recycled water. As much as 14% of the region's dependence on imported water has been shifted to recycled water and conservation, which further protect WBMWD's service area from dry-year conditions.

¹ The 25 gallons per day per person is derived from information contained in the March 9, 2000 Penfield & Smith, Septic System Analysis for Ramirez Canyon Park, which used an average sewage flow of 20 gallons per day per person, which requires 25 gallons of water per person per day (Foster, 2009).

5.16 Utilities/ Service Systems

Furthermore, by 2020, WBMWD plans to expand their existing water supply mix and add a new supply to the region, with an ocean-water desalination project. Through the expanded water supply mix and the addition of desalination, WBMWD expects to reduce the need for imported water by as much as 22% by 2020, which according to WBMWD, increases the districts' ability to ensure reliability now and into the future (Paludi, 2009).

Even though the District is in a Phase II Water Shortage, the District would be able to meet the Plan's incremental increased water demand without the need to require the construction or expansion of new facilities (Paludi, 2009 and Rydman, 2009). As indicated in Section 5.16.1 Setting above, WBMWD has 10,506 acre-feet per year (AFY) available for purchase and purchased in 2009, 9,370 AFY. The Plan would have a demand of 8.1 to 8.9 AFY, which represents 0.084% of the total available supply or 0.10% increase from current (2009) annual demand. It should also be noted that the proposed Plan would be subject to any District-required water conservation measures, thereby further reducing water demand.

Therefore, irrespective of which baseline is used for Ramirez Canyon Park, the Plan's proposed improvements would have a minimal effect (less than one-tenth of one percent) on water supply from implementation of the proposed Plan. Although an increase in water demand would be generated above either baseline, the Plan's incremental increase in water demand would not require the construction or expansion of new water supply facilities. As a result, impacts to the supply of water under either Ramirez Canyon Park baseline would be *less than significant*

Mitigation Measures

As impacts on the supply of water would not be significant, no mitigation measures are required.

Residual Impacts

Impacts on water supply would ***less than significant (Class III)***.

Solid Waste

Impact US-6: Implementation of the proposed Plan's improvements would result in the creation of additional solid waste, but would not create an incremental demand substantially affecting the permitted capacity of an associated landfill; impacts would be less than significant.

The proposed Plan improvements include park and trail improvements that are minor in nature and would not generate substantial amounts of solid waste, either from a project construction or operational standpoint.

During project construction, installation of utilities within existing roadways would result in either the recycling or disposal into the landfill of saw-cut asphalt and rubble. The proposed demolition of an existing tennis court and creek channelization located at Ramirez Canyon Park would also generate concrete debris for potential recycling or disposal into the landfill. Campsite and trail construction activities would create limited quantities of solid waste debris, although the associated vegetative clearance of these areas would generate a fair amount of green waste for either composting or disposal into the landfill. These construction impacts would be considered potentially significant if the materials were not recycled/composted and diverted from area landfills.

Operation of the Plan park and trail areas would generate some solid waste, including green waste. MRCA would provide trash cans with secure lids at Plan site trailheads, parking lots, and campsites, but not along trails. Trash cans would be checked and emptied (if necessary) four to seven days per week (depending on use, season, etc.) Trash would be taken by staff to King Gillette Ranch, located at 28500 Mulholland Highway, where trash service currently is provided.

Although the MRCA Ordinance No. 1-2005 includes Section 3.5 under General Rules and Regulations that no person shall litter or leave any trash, garbage or refuse of any kind in any parkland, the ordinance does not address trash and recycling collection and proper disposal or signage encouraging park users to properly dispose of their trash. Signage will be posted at all trailheads and camp areas encouraging users to properly dispose of their trash. The Plan, also, identifies that MRCA staff will be responsible for picking up trash at trailheads, within campsites, and along trails (during patrols or maintenance/monitoring), either by hand or by hand tool. [

The Santa Monica Mountains Conservancy (SMMC) and Mountains Recreation Conservation Authority (MRCA) does have an existing standard practice of recycling green waste onsite generated from routine landscape and trail maintenance activities at each park. SMMC and MRCA staff utilize chippers when feasible or by hand to mince vegetative trimmings, leaving the chipped/ minced material at or near the source location. According to MRCA staff, if leaving greenwaste material in place is not feasible, the material is placed in a greenwaste bin and hauled off-site to a greenwaste recycling center (Edelman, 2009). The National Park Service (NPS) and United States Forest Service (USFS) utilize similar procedures for disposing of green waste from routine landscape and trail maintenance (Wilson, NPS, 2009 / Kellogg, USFS, 2009). Ramirez Canyon Park is the only park that operates official compost piles; however, these compost piles account for less than a fifth of the cuttings generated.

Beyond the above-described green waste efforts, there is no other official recycling program or containers at Ramirez Canyon Park, Corral Canyon Park, Escondido Canyon, Latigo Canyon, or Malibu Bluffs.

As mentioned in the setting discussion above, non-recyclable waste materials generated from within the City of Malibu are transported directly to either the Simi Valley Landfill or Calabasas Landfill. Recyclable materials are transported to sorting facilities prior to being transported to various recycling facilities. The Simi Valley Landfill has a maximum permitted throughput of 3,000 tons per day and a maximum permitted capacity of 43,500,000 cubic yards. The most recent inspection of the landfill conducted in 2001 estimated the remaining capacity to be 9,473,131 cubic yards. The CIWMB estimated the landfill has a projected operating life through 2034. The Calabasas Landfill permits a maximum of 3,500 tons of solid waste per day and has a remaining capacity of approximately 16.9 million cubic yards, and is scheduled to close in 2022.

Although the Simi Valley Landfill and Calabasas Landfill have capacity to accommodate solid waste generated by the proposed Plan and the proposed Plan would be subject to applicable state goals for minimizing waste sent to landfills to ensure that a substantial portion of the project solid waste generated is diverted away from local landfills and recycled, the absence of an established trash and recycling program at each park facility could result in *potentially significant* solid waste impacts from increased solid waste sent to area landfills.

Furthermore, irrespective of which baseline is used for Ramirez Canyon Park, the Plan's proposed improvements would have a *potentially significant* solid waste impact from increased solid waste sent to area landfills due to implementation of the proposed Plan.

Mitigation Measures

Even though the proposed Plan would be subject to applicable state goals for minimizing waste sent to landfills, the following mitigation measures are recommended to ensure solid waste generated from implementation of the proposed Plan is reduced and recycled.

MM US-6.1: To address construction & demolition (C&D) solid waste impacts, a C&D Waste Reduction Recycling Plan (WRRP) should be prepared to ensure that C&D materials (e.g., asphalt, concrete, and green waste) are recycled and/or reused to the maximum extent feasible, in order to divert a minimum of 50% of the C&D debris from disposal at the local landfill.

Plan Requirement and Timing: The project contractor(s) should submit a WRRP to MRCA for review and approval prior to construction activity.

Monitoring: Prior to construction activity, MRCA staff should review and approve the WRRP. During C&D efforts and prior to project sign-off, MRCA staff should verify implementation of the WRRP.

MM US-6.2: To address operational solid waste impacts, MRCA should develop and implement a Trash & Recycling Program at each park area. The trash/recycling program should identify the location and type of each non-recyclable and recyclable container, the frequency and method of trash/recycling pick-up at each park, and include signage to encourage park visitors to dispose of their trash properly.

Plan Requirement and Timing: A Trash & Recycling Program (TRP) should be prepared by MRCA and integrated into the final project construction plans prior to construction activity. Implementation of the TRP should be an on-going obligation of the project.

Monitoring: Prior to construction activity, MRCA staff should review and approve the TRP. During C&D efforts and prior to project sign-off, MRCA staff should verify implementation of applicable portions of the TRP. During operation of the project,

MRCA management should spot-check that implementation of the TRP is being done faithfully and should adjust the plan as necessary to ensure continued solid waste diversion success.

MM US-6.3:

MRCA should implement a greenwaste recycling program at each park. The Greenwaste Recycling Program should require that greenwaste be recycled onsite, whenever feasible. Park staff should cut and mince greenwaste and leave in place as part of routine park and trail maintenance.

Plan Requirement and Timing: A Greenwaste Recycling Program (GRP) should be prepared by MRCA and integrated into the final project construction plans, as applicable, prior to construction activity. Implementation of the GRP should be an on-going obligation of the project.

Monitoring: Prior to construction activity, MRCA staff should review and approve the GRP. During C&D efforts and prior to project sign-off, MRCA staff should verify implementation of applicable portions of the GRP. During operation of the project, MRCA management should spot-check that implementation of the GRP is being done faithfully and should adjust the plan as necessary to achieve to ensure continued solid waste diversion success.

Residual Impacts

Although not required to reduce solid waste impacts to area landfills, implementation of recycling programs, including greenwaste recycling, at each park would reduce the amount of non-recyclable waste generated by the proposed Plan and disposed of at area landfills. With or without the above recommended mitigation, impacts related to solid waste generation would be ***less than significant (Class III)***.

Analysis of Impacts Post-Mitigation

Impact US-7: Implementation of mitigation measures intended to reduce impacts associated with the proposed Plan's improvements would not result in substantial demands for new utility

services or infrastructure. Therefore, impacts related to utilities would be considered less than significant.

In addition to analysis of the project (as proposed), CEQA requires that an EIR discuss the environmental impacts associated with the implementation of any required mitigation. This section, therefore, evaluates how mitigation measures required in other sections of this EIR would affect utilities and service systems related to implementation of the Plan's proposed improvements.

The mitigation measures identified in the following environmental impact analysis sections would have a less than significant impact on utilities, as no additional utility service demand would be associated with implementation of the mitigations:

- Aesthetic/Visual Resources
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Fire Hazards
- Geology, Soils, and Seismic Hazards
- Global Climate Change
- Hazardous Materials
- Hydrology, Drainage, and Water Quality
- Land Use and Planning
- Noise
- Public Services
- Recreation
- Transportation, Circulation, and Parking
- Utilities/Service Systems

Mitigations related to Biological Resources would, however, require off-site land resources in order to accommodate the required 3:1 biological mitigation. Figure 5.2-3 identifies the proposed biological mitigation sites in relation to the MRCA Park sites.

With respect to electricity and natural gas, the biological mitigation/ restoration area would require little, if any, energy. Some energy demand could be required associated with timer and controllers associated with any temporary irrigation, although this could also be accomplished with battery-powered equipment. Based upon the discussion within the main

text above with respect to electricity, there would be no need to upgrade public facilities/ infrastructure as a result of this short-term and limited energy demand.

Wastewater demand would be limited to that associated with biological mitigation/ restoration area construction activity. Based upon the discussion within the main text above with respect to wastewater, there would be no need to upgrade public facilities/ infrastructure as a result of this short-term and limited demand. Temporary, portable chemical toilets would accommodate this demand without placing any significant service demands upon public wastewater services or infrastructure.

Water demand associated with mitigation implementation would be temporary and would only be utilized to establish native seeded/ planted areas, which would be drought tolerant. In addition, irrigation would be adjusted such that it only supplements that which does not occur by natural precipitation. Given the short-term nature of the water demand and the excess availability of water identified within the main text, the additional water demand associated with mitigation site irrigation would not have a significant impact on public water resources or water infrastructure.

Solid waste demand associated with mitigation implementation would primarily be associated with removal of non-native, exotic vegetation. These materials would either be mulched on-site, taken to Ramirez Canyon Park to be composted, or sent to the local landfill. Generation of vegetative material would be greatest during the first year of biological mitigation/ restoration activity, and would progressively be reduced as native vegetation supplanted non-native vegetation during the anticipated five-year maintenance effort. Given the short-term nature of the solid-waste demand and the excess availability of landfill capacity identified within the main text, the additional solid waste demand associated with mitigation site implementation and maintenance would not have a significant impact on solid waste infrastructure or services.

With respect to storm water drainage, many of the biological mitigation/ restoration sites are completely or partially denuded of vegetation. Current off-site soil transport, therefore, during all but the lightest of rain events is likely to be significant. The proposed biological mitigation/ restoration would re-establish native plants on these sites and would increase water up-take, stabilize soils, and limit off-site soil transport. Implementation, therefore, of the mitigation would have a beneficial impact with respect to storm water drainage.

For all of these reasons, implementation of the proposed mitigations would have a *less than significant* impact on utilities.

Residual Impacts

Implementation of mitigation measures intended to reduce impacts associated with the proposed Plan's improvements would not result in substantial demands for new utility services or infrastructure. Therefore, associated impacts to utilities would be ***less than significant (Class III)***.

5.16.3 Cumulative Impacts

Cumulative projects are shown in Table 3.1 of Section 3.6, *Projects Considered for Cumulative Analysis*. The Plan site's contribution to cumulative utilities and service systems impacts are evaluated below. The *Area of Influence*, or geographic region for the respective environmental resource for which cumulative projects are assessed, is identified below and forms the basis of the cumulative impact analysis for this section.

Electricity/Natural Gas

Area of Influence: The proposed Plan area receives its electricity from Southern California Edison (SCE) through the Zuma and Latigo substations located in the western portion of the City of Malibu and natural gas from Southern California Gas Company (Gas Company). SCE and the Gas Company provide electricity and natural gas to the Plan area, which include the City of Malibu and the unincorporated Las Virgenes area of Los Angeles County. The Area of Influence for considering cumulative impacts on electricity and natural gas extends throughout the City of Malibu and unincorporated Las Virgenes area of Los Angeles County.

Impact US-8: **Implementation of the proposed Plan's improvements would not create a cumulatively considerable demand for energy such that the construction of new or expansion of existing energy facilities would be required; impacts would be less than significant.**

Cumulative development within the Area of Influence includes the development of 38 single-family dwellings, 2 condominiums, 216,793 square feet of commercial development, and 146 hotel rooms, along with development of parks, trails, and open space at Trancas

Canyon Park, Legacy Park, Lechuza Beach, and King Gillette Ranch (see *Appendices* for additional cumulative project information). SCE and the Southern California Gas Company continue to service the Area of Influence. The Plan would not contribute to any cumulative impacts on electricity and natural gas, and therefore its impact would be *less than significant*.

Mitigation Measures

As no significant cumulative impacts relating to energy demand are identified, no mitigation measures are required.

Residual Impacts

The proposed Plan's contribution to cumulative impacts on energy utilities and service systems would be ***less than significant (Class III)***.

Wastewater

Area of Influence: The City of Malibu and the unincorporated areas near Malibu are not served by a citywide or countywide wastewater treatment facility, but rely upon a decentralized private wastewater management system, whereby wastewater is collected, treated, and dispersed/discharged at or near the point of wastewater generation. All property in the City of Malibu is served either by private On-site Wastewater Treatment Systems (OWTS) or by one of the five small treatment plants (Malibu Mesa Water Reclamation Plant, Malibu Water Pollution Control Plant, Trancas Water Pollution Control Plant, Marblehead-Point Dume Trailer Park and Latigo Shores Condominium) located within the city, with most property in the unincorporated areas of the Malibu / Santa Monica Mountains area served by private OWTS. Although the City and the adjoining unincorporated area are not served by a citywide or countywide wastewater treatment facility, the Area of Influence for considering cumulative impacts on wastewater treatment facilities is the City of Malibu and the unincorporated Las Virgenes area of Los Angeles County.

Impact US-9: **Implementation of the proposed Plan's improvements would not create a cumulatively considerable demand for wastewater services such that expansion or construction of new wastewater facilities would be required; impacts would be less than significant.**

Cumulative development within the Area of Influence includes the development of 38

single-family dwellings, 2 condominiums, 216,793 square feet of commercial development, and 146 hotel rooms, along with development of parks, trails, and open space at Trancas Canyon Park, Legacy Park, Lechuza Beach, and King Gillette Ranch. Cumulative development within the City and unincorporated Las Virgenes area would be required to be served by OWTS. The five existing treatment plants within the City of Malibu are at capacity and serve specific developments within the City and Pepperdine University located within an unincorporated area of Los Angeles County. The proposed Plan does not include new septic systems. The Plan does include three new restrooms that would be connected to the existing OWTS at Ramirez Canyon Park; the OWTS has been sized to accommodate the proposed project demand at Ramirez. In addition, the effluent generated by the proposed self-contained units would be minimal, and the incremental increase in demand would not result in cumulatively considerable impacts to off-site wastewater purveyors such that it would not create a significant increase in incremental demand to off-site wastewater purveyors. As a result, cumulative impacts associated with the proposed Plan's incremental increase in generation of wastewater would be *less than significant*.

Mitigation Measures

As no significant cumulative impacts relating to wastewater services are identified, no mitigation measures are required.

Residual Impacts

The proposed Plan's contribution to cumulative impacts on wastewater services would be ***less than significant (Class III)***.

Storm Water Drainage

Area of Influence: With the exception of select trail corridors, the proposed Plan park improvements are located within the City of Malibu. The City of Malibu utilizes the existing natural drainage systems to carry storm flows to the ocean. At locations where these natural systems cross the State Highway (Pacific Coast Highway) or a local street, the drainage is collected and channeled into a culvert under the roads to the ocean. Therefore, the Area of Influence for considering cumulative impacts on storm water facilities is the City of Malibu.

Impact US-10: Implementation of the proposed Plan's improvements would not create a cumulatively considerable demand for storm drainage facilities such that the expansion or construction of new storm drainage facilities would be required; impacts would be less than significant.

Cumulative development within the Area of Influence includes the development of 38 single-family dwellings, 2 condominiums, 216,793 square feet of commercial development, and 146 hotel rooms, along with development of parks, trails, and open space at Trancas Canyon Park, Legacy Park, Lechuza Beach, and King Gillette Ranch (see *Appendices*). Cumulative development within the City of Malibu is subject to the City's Stormwater Management Ordinance to ensure that existing storm water drainage facilities are not impacted from new development; the proposed Plan will comply with LARWQCB municipal stormwater permit requirements (see Section 5.4, *Hydrology, Drainage and Water Quality* for a full discussion.) Cumulative impacts associated the proposed Plan's incremental increase in demand for storm water drainage facilities would result in *less than significant* impacts to storm water facilities.

Mitigation Measures

As no significant cumulative impacts relating to storm water drainage systems are identified, no mitigation measures are required.

Residual Impacts

The proposed Plan's contribution to cumulative impacts on storm water drainage systems would be *less than significant (Class III)*.

Water Supply

Area of Influence: The proposed Plan would receive its water from the Los Angeles County Water Works District No. 29 (the District), which currently supplies water to the City of Malibu and the unincorporated Topanga Canyon area of the County of Los Angeles. Therefore, the Area of Influence for considering cumulative impacts on water supply extends throughout the District's service area.

Impact US-11: Implementation of the proposed Plan's improvements would not create a cumulatively considerable demand for water such that new water supplies would need to be secured to serve the Plan site nor would the construction of

new water supply facility be required; impacts would be less than significant.

Cumulative development within the Area of Influence includes the development of 38 single-family dwellings, 2 condominiums, 216,793 square feet of commercial development, and 146 hotel rooms, along with development of parks, trails, and open space at Trancas Canyon Park, Lechuza Beach, and King Gillette Ranch (see Appendix). Development within the unincorporated Topanga Canyon area of Los Angeles County is anticipated to grow at an approximate 2 percent annual rate. Examples of this type of development would include mostly low-density residential development. According to WBWMD's 2005 UWMP, there is an adequate supply of water to meet the projected increase in water demand for the next 25 years from cumulative development. Future development would be subject to any existing and/or future imposed water conservation measures to ensure long-term water supply reliability. Moreover, the Plan's water demand is minimal. As a result, cumulative impacts associated with the proposed Plan's incremental increase in water demand would be *less than significant*.

Mitigation Measures

As no significant cumulative impacts relating to water supply systems are identified, no mitigation measures are required.

Residual Impacts

The proposed Plan's contribution to cumulative impacts on to water supply systems would be ***less than significant (Class III)***.

Solid Waste

Area of Influence: The County of Los Angeles Sanitation District provides solid waste management, including collection and disposal services and landfill operations to an area that covers approximately 800 square miles, encompassing 78 cities and unincorporated areas of the County. Therefore, the Area of Influence for assessing cumulative impacts on solid waste generation considered related development within the project area and the unincorporated Las Virgenes area of Los Angeles County that would be served by either the Simi Valley or Calabasas Landfill.

Impact US-12: Implementation of the proposed Plan's improvements would not create a cumulatively considerable demand for solid waste services such that expansion or construction of new solid waste facilities would be required; impacts would be less than significant.

Cumulative development within the City of Malibu and the unincorporated area of Las Virgenes includes the development of 38 single-family dwellings, 2 condominiums, 216,793 square feet of commercial development, and 146 hotel rooms, along with development of parks, trails, and open space at Trancas Canyon Park, Legacy Park, Lechuza Beach, and King Gillette Ranch (see *Appendices*). Cumulative development would be subject to AB 939 that requires diverting 50% of solid waste generation from area landfills. The expected lifespan of the Simi Valley Landfill is 2034 and Calabasas landfill is 2022. Moreover, the Plan will generate a minimal amount of solid waste. As a result, cumulative impacts associated with the proposed Plan's incremental increase in solid waste generation would be *less than significant*.

Mitigation Measures

As no significant cumulative impacts relating to solid waste are identified, no mitigation measures are required.

Residual Impacts

The proposed Plan's contribution to cumulative solid waste impacts would be ***less than significant (Class III)***.