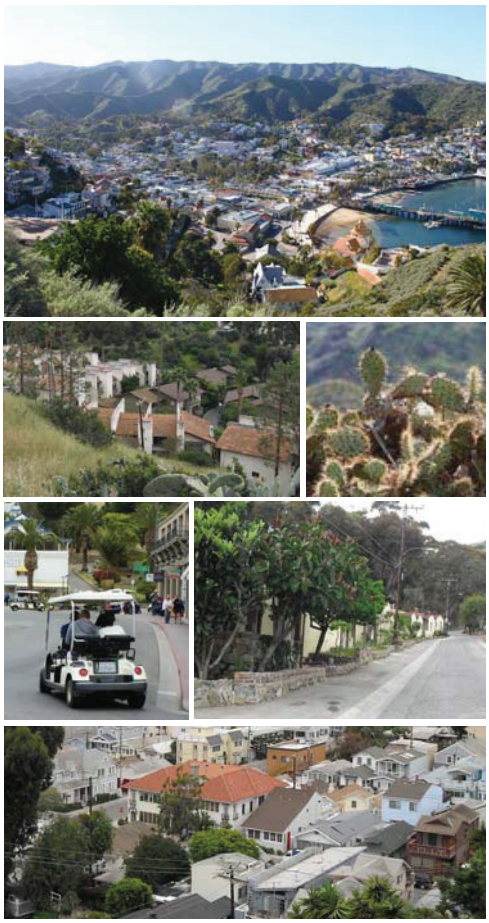
CITY *of* AVALON
2030 GENERAL PLAN/LOCAL COASTAL PLAN
Final Environmental Impact Report (EIR)
SCH #2011091042



Prepared by:

City of Avalon

Avalon Community Improvement Agency

May 2013

2030 General Plan/ Local Coastal Plan

Final
Environmental Impact Report

SCH #2011091042

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City of Avalon
2030 General Plan/Local Coastal Plan

Environmental Impact Report

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EXECUTIVE SUMMARY

This section summarizes the characteristics of the final 2030 General Plan/Local Coastal Plan, project alternatives, and the project's environmental impacts.

PROJECT SYNOPSIS

Project Proponent

City of Avalon
410 Avalon Canyon Road, P.O. Box 707
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General Plan Synopsis

The proposed project is an update of the City of Avalon 2030 General Plan/Local Coastal Plan (hereinafter referred to as the "2030 GP/LCP" or simply "GP/LCP"). The 2030 GP/LCP, which updates the 1978 General Plan, establishes the community's vision for the development of Avalon through the year 2030 and will serve as the fundamental land use policy document for the City.

The 2030 GP/LCP is intended to function as a policy document to guide land use decisions within Avalon's planning area through the year 2030. The GP/LCP includes input from the Planning Commission, City Council, and community received over the course of the development of the Plan. Based on the vision statements and input from the community and Planning Commission, the 2030 GP/LCP includes the following keys to maintaining the desirability of Avalon for residents and for visitors:

- Maintain a population size (residents and visitors) that is consistent with the natural resources, public services, and other factors, while continuing to attract, accommodate and satisfy tourists upon which the local economy is dependent;
- Maintain and enhance Avalon's unique ecology and environmental features for the long term enjoyment of residents and visitors;
- Exemplify environmental awareness and stewardship through use of new technologies, conduct practices that are energy efficient, reduce pollution and waste, conserve water, and protect the environment, natural features, and open spaces of the City and the island as a whole; and
- Provide services to all types of visitors and maintain the sense of place that is part of the draw for tourists and residents alike.

There are several key differences between the land use designations in the 2030 GP/LCP and those contained in the current General Plan. These changes include: (1) a new Light Industrial zone intended for areas vital to moderate industrial services; (2) new Specific Plan Overlay Districts for Lover's Cove and Pebbly Beach; (3) the previous Resort Recreational designation was split into two designations – a Resort Recreational High Density (RR-HD) designation which accommodates uses associated with the resort character of Avalon and a Resort Recreational Low Density (RR-LD) designation which accommodates resort type uses as well as single family housing units; (4) a new Open Space designation for lands whose primary purpose is the

provision of active and/or passive recreation, the protection of public health and safety, preservation of sensitive environmental resources, or resource management; and (5) renaming of the Low/Moderate Income Housing designation to High Density Residential – Community, which only accommodates residential development.

With regard to land use goals and policies, the 2030 GP/LCP promotes land development practices that reduce energy and water consumption, air and water pollution, greenhouse gas emissions, and waste. In the City Center, the development of higher-density, mixed-use infill development is facilitated where appropriate. Infill development is required to incorporate design elements with buffers and transitions in density, scale, and mass to assure compatibility with adjacent uses.

The land use map specifies land uses for all areas of the City. In the middle canyon, the 2030 GP/LCP expands the Resort Recreational zone. Adjacent to current City limits, the GP/LCP identifies three potential "annexation areas":

- **Expansion Area No. 1** – This area is located in a landfill and quarry area south of Pebbly Beach. Within this area, light industrial uses are planned, with the potential to transition over time to more visitor-serving uses as part of a Pebbly Beach Specific Plan Overlay District.

- **Expansion Area No. 2** – This area consists of various parcels between Hamilton Cove and the Divide Road. This area would facilitate Resort/Recreational land uses.

- **Expansion Area No. 3** – This area is located between the City limits separating Pebbly Beach and the eastern boundary of Avalon Canyon. More open uses within City limits would occur here.

ALTERNATIVES

As required by CEQA, this section evaluates a range of alternatives to the proposed project. Alternatives analyzed in Section 6.0 include the following:

- *Alternative 1: No Project (No Further Development)*
- *Alternative 2: No Project (1978 General Plan Buildout)*
- *Alternative 3: No Annexation Alternative*
- *Alternative 4: Increased Open Space Alternative*

Each of the alternatives discussed in Section 6.0 has certain advantages and disadvantages as compared to the 2030 GP/LCP, as summarized below.

- *The **No Project (no further development)** alternative could be considered environmentally superior because it would result in no increase in traffic, air pollution or noise, and no increase in demand for utilities or services. Furthermore, it would result in no physical impacts. On the other hand, this alternative would not achieve many of the 2030 General Plan objectives.*
- *The **No Project (1978 General Plan)** alternative would allow roughly the same amount of development to occur as would be allowed under the proposed 2030 General Plan. However, this alternative would eliminate development within the three proposed expansion areas. In addition, this alternative does not include the Pebbly Beach Specific Plan Area, the Lover's Cove Specific Plan Area, and a number of other land use designations. This alternative would reduce impacts in the identified expansion areas and reduce the potential for land use compatibility impacts. However, some of the*

benefits associated with infrastructure construction would not occur. The most notable being: (1) the construction of a landfill (possibly within the Pebbly Beach Specific Plan area) to replace the existing Pebbly Beach Landfill scheduled to close in 2020; (2) the construction of various circulation improvements within the City Center area that would create safe routes to school, improve intersection functionality, improve parking availability, improve pedestrian access, and create transportation operating systems to expand transportation choices; and (3) the deployment of environmentally responsible waste-to-energy projects. Because the population forecasts for buildout under this alternative and the proposed project are anticipated to be similar, population-dependent impacts to infrastructure/utilities (such as water, wastewater, transportation and solid waste disposal) would be increased under this alternative when compared to the proposed 2030 General Plan.

- *The **No Annexation** alternative would eliminate development in the three identified expansion areas and would therefore reduce direct ground disturbance impacts in this area (including biological resources, cultural resources, geology and hydrology). Per-capita based impacts (including air quality, population growth, public services, recreation, transportation and utilities) would not change, as the growth attributed to the expansion areas would be concentrated within the City's existing boundaries. Impacts related to aesthetics, hazards, and land use compatibility would be incrementally reduced. Overall environmental impacts would be incrementally reduced when compared the proposed 2030 GP/LCP.*
- *The **Increased Open Space** alternative would eliminate the southernmost portions of the low-density residential land use designation in favor of the open space land use designation. All other land use designations proposed as part of the 2030 GP/LCP would remain unchanged and the growth associated with conversion of the low-density residential would be concentrated in other more urbanized areas or the remaining low-density residential land use designations. Direct ground disturbance impacts (including biological resources, cultural resources, geology, and hydrology) would be incrementally reduced. Per-capita based impacts (including air quality, population growth, public services, recreational, transportation, and utilities) would not change, as the growth attributed to conversion of the low-density residential would be concentrated in other areas of the City. Overall environmental impacts would be similar when compared to the proposed 2030 GP/LCP.*

AREAS OF KNOWN CONTROVERSY

There are no areas of known widespread controversy with respect to the 2030 GP/LCP.

ISSUES TO BE RESOLVED

As noted above, there are no areas of known widespread controversy with respect to the 2030 GP/LCP. Based on citizen, Planning Commission, and City Council input during the preparation of the final General Plan, the primary issue to be resolved is how to designate/re-designate land uses on the proposed land use map.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table ES-1 includes a brief description of the environmental issues relative to the proposed project, the identified environmental impacts, proposed mitigation measures, and residual

impacts. Impacts are categorized by classes. Class I impacts are defined as significant, unavoidable adverse impacts which require a statement of overriding considerations to be issued per Section 15093 of the *State CEQA Guidelines* if the project is approved. Class II impacts are significant adverse impacts that can be feasibly mitigated to less than significant levels and which require findings to be made under Section 15091 of the *State CEQA Guidelines*. Class III impacts are considered less than significant impacts, and Class IV impacts are beneficial or neutral.

Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
AESTHETICS		
Impact AES-1 Development in conformance with the 2030 GP/LCP would not substantially damage scenic resources, have a substantial adverse effect on a scenic vista, or substantially degrade the existing visual character or quality of the City or its surroundings. Adherence to the policies included in the 2030 GP/LCP would minimize potential impacts to scenic resources. Therefore, potential impacts would be Class III, *less than significant*.	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact AES-2 Development that could be facilitated by the 2030 GP/LCP would introduce new sources of light and glare and shadows. However, adherence to policies contained within the City's 2030 General Plan/Local Coastal Plan and development standards included in the City's Municipal Code would minimize light and glare and shadow impacts. Therefore, the potential impacts would be Class III, *less than significant.*	None required as existing regulations and the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
AIR QUALITY		
Impact AQ-1 Implementation of the 2030 GP/LCP would be consistent with the 2007 AQMP growth forecast and air quality control measures. Impacts would be Class III, *less than significant.*	None required as growth within Avalon is anticipated to be within regional growth parameters upon which the Air Quality Management Plan is based.	Less than significant without mitigation.
Impact AQ-2 Development facilitated by the 2030 GP/LCP would result in an incremental increase in air pollutant emissions within Avalon and the South Coast Air Basin. However, GP/LCP policies aimed at limiting vehicle use and energy consumption would limit emissions to levels consistent with regional forecasts. Impacts would therefore be Class III, *less than significant.*	None required as existing regulations and 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact AQ-3 Individual development projects facilitated by the 2030 GP/LCP would generate construction-related emissions. Such emissions may result in temporary adverse impacts to local air quality. However, these emissions can be	None required as existing regulations and 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.

Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
mitigated on a specific development basis and impacts would be Class III, *less than significant.*		
Impact AQ-4 Though buildout of the 2030 GP/LCP may incrementally increase air pollution, it would not expose sensitive receptors to substantial pollutant concentrations. Impacts would be Class III, *less than significant*.	None required as existing regulations and 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact AQ-5 Implementation of the proposed 2030 GP/LCP would facilitate development of projects that have the potential to cause odor impacts, but would not create objectionable odors that would affect a substantial number of people. Impacts would be Class III, *less than significant.*	None required as existing regulations and 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
BIOLOGICAL RESOURCES		
Impact BIO-1 Development facilitated by the 2030 GP/LCP would largely avoid impacts to special-status plant and animal species by emphasizing intensification/reuse of already urbanized areas rather than developing native habitats. Potential impacts could occur in certain locations, but would be addressed through implementation of GP/LCP policies. Implementation of GP/LCP policies and actions that aim to protect sensitive plants and animals would reduce potential impacts to a Class III, *less than significant*, level.	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact BIO-2 Development facilitated by the 2030 GP/LCP land use plan generally avoids direct impacts to riparian, wetland, and open water habitats. Development could adversely affect the quality of riparian and wetland habitat in certain areas. However, implementation of GP/LCP policies would reduce potential impacts to a Class III, *less than significant*, level.	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact BIO-3 Development facilitated by the 2030 GP/LCP would largely avoid impacts to wildlife movement corridors by emphasizing intensification/ reuse of existing urbanized areas. GP/LCP policies require preservation and strengthening of connections between urban and open space areas. Therefore, impacts to wildlife movement would be Class III, *less than significant.*	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact BIO-4 The proposed 2030 GP/LP would not pose and conflicts with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. There would be no impact in this regard.	None required.	No impact would occur.

Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
Impact BIO-5 The 2030 GP/LCP would not conflict with the provisions of an adopted Habitat Preservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No impact would occur in this regard.	None required.	No impact would occur.
CULTURAL RESOURCES		
Impact CR-1 Development facilitated by the 2030 GP/LCP could adversely affect identified and previously unidentified pre-historic archaeological resources. This is a Class II, *significant but mitigable*, impact.	**CR-1 Add the following Implementation Actions to Section IV.H of the 2030 GP/LCP Conservation Element**: • Require excavation for any project located within a potential sensitive area to be monitored by a qualified archaeologist and/or Native American Representative. • Require any proposed excavation or modification to areas on the four historic archeologically sensitive areas defined in Figure 4 of the Preliminary Cultural Resource Management Plan to require prior consultation with the planning department and a qualified archaeologist regarding the implementation of acceptable mitigation strategies.	Less than significant with mitigation implemented.
Impact CR-2 Existing historic resources within Avalon are unlikely to be affected by future development. However, additional measures are needed to ensure protection of these resources. Impacts to historic resources are therefore Class II, *significant but mitigable.*	**CR-2 Add the following Implementation Actions to Section IV.H of the 2030 GP/LCP Conservation Element:** • Require projects involving modification or rehabilitation of structures that may be of historical value to incorporate the Secretary of the Interior's Standards for Rehabilitation and Guidelines for	Less than significant with mitigation implemented.

Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
	Rehabilitating Historic Buildings. • Require projects involving demolition of an existing structure that may be of historical value to consult with local museums or cultural societies and incorporate mitigation, such as photodocumentation, collection of oral histories, and physical or digital model, as necessary.	
GEOLOGY		
Impact GEO-1 Future seismic events could produce ground shaking within the Avalon plan area that could damage structures and/or create adverse health and safety effects. However, with the implementation of 2030 GP/LCP policies and required building codes, impacts would be Class III, less than significant.	None required as existing Code requirements and 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact GEO-2 Development facilitated by the 2030 GP/LCP could occur in areas with geologic or soil instability that have the potential to present hazards (expansive soils, liquefaction, lateral spreading, or subsidence) to structures and roadways. However, compliance of future development projects with the CBC and 2030 GP/LCP policies would ensure impacts related to geologic or soil instability would be Class III, *less than significant*.	None required as existing Code requirements and 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact GEO-3 The Avalon plan area contains numerous steep slopes, which present a moderate to severe slope stability hazard. Landsliding has the potential to damage and destroy structures and roadways. Compliance with the CBC would generally address landslide hazards. However, because the 2030 GP/LCP does not include specific requirements to address landslide hazards, impacts would be Class II, *significant but mitigable*.	**GEO-3 Add the following policies to the 2030 GP/LCP Safety Element:** • Reduce landslide hazards to acceptable levels for development within hillsides. • Prior to approval of development projects on slopes over 20%, require applicants to prepare site-specific landslide studies and mitigation.	Less than significant with mitigation implemented.
Impact GEO-4 Development facilitated by the	None required as existing	Less than significant

Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
2030 GP/LCP has the potential to be located on erosive soils, causing loss of soil or topsoil and creating potential hazards to structures. Compliance with the CBC and 2030 GP/LCP policies would generally address erosion impacts. Impacts would be Class III, *less than significant.*	Code requirements and 2030 GP/LCP policies would address potential impacts.	without mitigation.
GREENHOUSE GAS EMISSIONS/CLIMATE CHANGE		
Impact GHG-1 Development facilitated by the 2030 GP/LCP would generate GHG emissions. However, policies contained in the 2030 GP/LCP aimed at limiting vehicle use and energy consumption would also limit GHG emissions. Impacts would therefore be Class III, *less than significant*.	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact GHG-2 Implementation of the proposed 2030 GP/LCP would be consistent the goals and strategies contained in the SCAG 2012-2035 RTP/SCS to reduce per capita GHG emissions. Impacts would be Class III, *less than significant*.	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact GHG-3 Sea level rise caused by global climate change may cause coastal flooding and erosion and expose people and structures to hazards. The 2030 GP/LCP includes policies to intensify development in the City Center and other portions of the plan area that may be subject to sea level rise. Impacts are Class II, *significant but mitigable.*	**GHG-3 Add the following Implementation Action to Section IV.C in the Conservation Element:** • Collaborate with climate science experts to identify areas that may be exposed to risks due to sea level rise, such as flooding or erosion.	Less than significant with mitigation implemented.
HAZARDS AND HAZARDOUS MATERIALS		
Impact HAZ-1 The use and transport of hazardous materials within the City is limited to household hazardous wastes, small commercial/industrial uses, and liquid propane. Land use changes facilitated by the 2030 GP/LCP would relocate industrial uses to the Avalon Canyon area and could increase the use and transport of hazardous materials to the existing industrial area in Pebbly Beach. However, compliance with existing regulatory requirements, as well as 2030 GP/LCP policies, would reduce impacts to a Class III, *less than significant*, level.	None required as adherence to existing regulatory requirements would address potential impacts.	Less than significant without mitigation.
Impact HAZ-2 Potential new development facilitated by the 2030 GP/LCP would not be located within ¼ mile of a school. Intensification of existing development would not result in the	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.

Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
emission or handling of hazardous materials within a ¼ mile of a school beyond typical household and small-scale commercial uses. Impacts would be Class III, *less than significant*.		
Impact HAZ-3 Potential new development facilitated by the 2030 GP/LCP would not be located on any sites that have been listed as a hazardous material site, pursuant to State Government Code Section 65962.5. Impacts would be Class III, *less than significant*.	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact HAZ-4 Development facilitated by the 2030 GP/LCP, notably the intensification of uses, may require the demolition or renovation of existing residential and/or commercial structures that could contain asbestos or lead based paints. The release of these materials has the potential to adversely affect human health and safety. However, existing regulations pertaining asbestos and lead-based materials would reduce these impacts to a Class III, *less than significant level.*	None required as existing regulations would address potential impacts.	Less than significant without mitigation.
Impact HAZ-5 Potential new development or the intensification of uses facilitated by the 2030 GP/LCP would comply with all City evacuation and emergency plans. In addition, new development would be required to comply with City Fire Code standards regarding emergency access. Impacts to emergency response or evacuation plans would be Class III, *less than significant.*	None required as existing regulations would address potential impacts.	Less than significant without mitigation.
HYDROLOGY/WATER QUALITY		
Impact HWQ-1 Development under the 2030 GP/LCP could result in an increase in pollutants in stormwater and wastewater, although water quality standards and waste discharge requirements would not be violated. Therefore, impacts to water quality would be Class III, *less than significant*.	None required as existing regulations would address potential impacts.	Less than significant without mitigation.
Impact HWQ-2 Development of the 2030 GP/LCP could create additional impervious surfaces, which could interfere with groundwater recharge. Development could potentially deplete groundwater supplies or interfere substantially with groundwater recharge. However, with implementation of GP/LCP policies, impacts related to the increase in impervious surfaces would be Class III, *less than significant*.	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact HWQ-3 Development under the 2030 GP/LCP could alter the existing drainage pattern of the plan area and potentially result in erosion	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.

Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
and siltation. However, with implementation of proposed GP/LCP policies, impacts related to drainage pattern alteration would be Class III, *less than significant.*		
Impact HWQ-4 Development under the 2030 GP/LCP could alter the existing drainage pattern of the plan area and potentially result in increased downstream flooding through the addition of impervious surfaces, exceeding the capacity of existing or planned stormwater drainage systems. However, with implementation of proposed GP/LCP policies, impacts related to downstream flooding would be Class III, less than significant.	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact HWQ-5 Increases in stormwater runoff could require expansion of existing or construction of new storm drain facilities, the construction of which could result in significant environmental effects. However, with implementation of General Plan policies, impacts would be Class III, *less than significant.*	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact HWQ-6 Development under the 2030 GP/LCP could result in the degradation of groundwater quality. However, with implementation of General Plan policies, impacts would be Class III, *less than significant.*	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact HWQ-7 Development under the proposed GP/LCP could place housing, structures and people within a 100-year flood zone. However, with implementation of General Plan policies and FEMA requirements, impacts related to flooding would be Class III, *less than significant*.	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact HWQ-8 Development facilitated by the 2030 GP/LCP could result in inundation be seiche, tsunami, or mudflow. However, with implementation of GP/LCP policies, impacts would be Class III, *less than significant.*	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
LAND USE AND PLANNING		
Impact LU-1 The 2030 GP/LCP includes three potential annexation areas that the City may consider annexing. Because any conflicts with LAFCo policies would need to be resolved prior to LAFCo approval of any boundary adjustment, impacts would be reduced to a Class III, *less than significant*, level.	None required as compliance with applicable LAFCo policies would address potential impacts.	Less than significant without mitigation.
Impact LU-2 The 2030 GP/LCP could be found to be consistent with SCAG Regional Comprehensive Plan (RCP) Land Use and Housing, Open Space	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.

Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
and Habitat, and Energy policies. Impacts would be Class III, *less than significant*.		
Impact LU-3 The 2030 GP/LCP could be found to be consistent with the Southern California Association of Governments' Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Impacts would be Class III, *less than significant*.	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact LU-4 The 2030 GP/LCP could be found to be consistent with the Southern California Association of Governments' Growth Vision Report. Impacts would be Class III, *less than significant*.	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact LU-5 The 2030 GP/LCP could be found to be consistent with the Santa Catalina Island Local Coastal Plan (LCP). Impacts would be Class III, *less than significant.*	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
NOISE		
Impact N-1 Construction of individual projects facilitated by the 2030 GP/LCP could produce noise levels ranging from 76 to 89 dBA at 50 feet from the source potentially affecting adjacent land uses. Such noise could cause temporary disturbance to nearby receptors, but GP/LCP policies would address potential impacts related to construction. Therefore, this would be a Class III, *less than significant*, impact.	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact N-2 Development facilitated by the 2030 GP/LCP could incrementally increase traffic and associated noise levels along City roadways, thus exposing existing and future noise-sensitive land uses to increased noise levels. However, implementation of GP/LCP policies would reduce impacts to a Class III, less than significant, level.	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact N-3 New development facilitated by the 2030 GP/LCP could result in exposure of future residences and other noise-sensitive land uses to noise levels exceeding the "normally acceptable" range. However, implementation of 2030 GP/LCP policies would reduce impacts to a Class III, *less than significant, level.*	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact N-4 Noise generated by private and recreational aircraft could result in exposure of future residences and other noise-sensitive land uses to noise levels exceeding the "normally acceptable" range. However, implementation of 2030 GP/LCP policies would reduce impacts to a	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.

Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
Class III, *less than significant, level.*		
POPULATION AND HOUSING		
Impact PH-1 Implementation of the 2030 GP/LCP would not result in the displacement of substantial numbers of people or housing. To the contrary, the GP/LCP would facilitate the development of new housing in accordance with state and local housing requirements. Impacts would be Class III, *less than significant.*	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact PH-2 Proposed 2030 GP/LCP policies implement most SCAG policies related to growth, and the expected growth in Avalon would not exceed SCAG population forecasts. Impacts would be Class III, less than significant.	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
PUBLIC SERVICES		
Impact PS-1 Development facilitated by the 2030 GP/LCP would increase the City's population and development and would be located in areas designated as a very high fire hazard zone. This would increase demand for fire and emergency medical services and potentially create the need for new fire service facilities. However, compliance with GP/LCP policies and other City programs would reduce impacts related to fire protection services to a Class III, *less than significant, level.*	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact PS-2 Development facilitated by the 2030 GP/LCP would increase demand for police protection service, but would not result in the need to construct new or expanded police facilities. Impacts would be Class III, *less than significant*.	None Required.	Less than significant without mitigation.
Impact PS-3 Development facilitated by the 2030 GP/LCP would increase enrollment at Avalon School. However, Avalon Schools has additional capacity to serve the majority of future growth, and payment of State-mandated school impact fees would further reduce impacts to schools. Therefore, impacts to schools would be Class III, *less than significant.*	None required as collection of state-mandated school impact fees would address potential impacts under CEQA pursuant to state law.	Less than significant without mitigation.
Impact PS-4 Development facilitated by the 2030 GP/LCP would increase demand for park services, which could result in the need for new facilities, such as ball fields and picnic areas. However, the GP/LCP would include the addition of dedicated open space areas, as well as policies and implementation measures to increase park	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.

Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
services. Impacts to park services would be Class III, *less than significant*.		
Impact PS-5 Development facilitated by the 2030 GP/LCP would increase demand for harbor services, which could result in the need for new facilities, such as new docks. However, because harbor services are ancillary services, the construction of new harbor facilities would not be required. Furthermore, any new or expanded facilities would be subject to individual project review. Impacts to harbor services would be Class III, *less than significant*.	None Required.	Less than significant without mitigation.
TRANSPORTATION AND CIRCULATION		
Impact TC-1 Development facilitated by the 2030 GP/LCP could add to traffic and road congestion. However, the 2030 GP/LCP includes physical and operational improvements and policies that would reduce traffic impacts. Further, existing City policies restrict vehicle use. Therefore, impacts would be Class III, *less than significant.*	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact TC-2 The 2030 GP/LCP would involve intensification of existing uses that may expose pedestrians and bicyclists to roadway hazards. However, implementation of proposed policies related to traffic calming and improving walkability would reduce such impacts to a Class III, *less than significant, level.*	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.
Impact TC-3 Implementation of the 2030 GP/LCP would be expected to generally enhance the use of alternative transportation modes, including transit, bicycling, and walking. Impacts related to alternative transportation are considered Class IV, beneficial.	None required as the 2030 GP/LCP policies would address potential impacts.	Beneficial without mitigation.
Impact TC-4 The 2030 GP/LCP would facilitate development into hillside areas with limited access. However, implementation of the proposed GP/LCP would be required to meet applicable requirements and standards regarding emergency access. Impacts would be Class III, less than significant.	None required as existing regulations would address potential impacts.	Less than significant without mitigation.
Impact TC-5 Implementation of the proposed 2030 GP/LCP may increase demand for regional transportation between Avalon and the California mainland. However, the GP/LCP includes policies to facilitate and enhance regional transport. Any development or enhancement of regional transportation facilities would be required to	None required as the 2030 GP/LCP policies would address potential impacts.	Less than significant without mitigation.

Table ES-1
Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance After Mitigation
adhere to existing regulations. Impacts would be Class III, *less than significant.*		
UTILITIES AND SERVICE SYSTEMS		
Impact U-1 Maximum development facilitated by the 2030 GP/LCP would generate a net increase in water demand estimated at 102 AFY. The existing freshwater and saltwater supply would be adequate to serve potential growth. Therefore, water supply impacts would be Class III, *less than significant*.	None required.	Less than significant without mitigation.
Impact U-2 Development facilitated by the 2030 GP/LCP would increase wastewater generation above existing conditions. Maximum potential population growth would generate an estimated increase of approximately 0.25 mgd at the Avalon Wastewater Treatment Facility (AWTF). The AWTF currently has 0.76 mgd of excess capacity. Therefore, wastewater impacts would be Class III, *less than significant*.	None required.	Less than significant without mitigation.
Impact U-3 Increased population and development that may occur under the GP/LCP would generate an additional 1.96 tons/day of solid waste. The anticipated closure date of the Pebbly Beach Disposal Site is the year ~~2020~~ 2033. Solid waste generated by population growth w~~c~~ould not exceed the capacity of the landfill ~~by the year 2020~~. Therefore, the increase in solid waste generated by new population and development under the 2030 GP/LCP would be a Class III, *less than significant ~~and unavoidable~~ impact.*	None required. ~~**U-3 Additional Conservation Element Policy.** The following policy and implementation measure shall be added to the Conservation Element:~~ ~~IV.F Solid Waste Management~~ ~~Policy~~ ~~IV-35 Identify a new or expanded site to accommodate future landfill needs.~~ ~~Implementation Action:~~ ~~Perform a study to determine a viable option or options for a new or expanded landfill facility.~~	Less than significant without mitigation. ~~Mitigation Measure U-3 would help reduce impacts to solid waste disposal capacity. However, the Pebbly Beach Landfill is projected to close in 2020 and no alternative disposal site has been identified. As such, impacts would remain significant and unavoidable.~~

1.0 INTRODUCTION

This document is an Environmental Impact Report (EIR) that evaluates the potential environmental effects associated with implementation of the final City of Avalon 2030 General Plan/Local Coastal Plan (GP/LCP). The 2030 GP/LCP includes goals, policies and implementation actions that will guide the development of Avalon through 2030.

This section: (1) provides an overview of the background behind the 2030 GP/LCP; (2) summarizes the process involved in developing the 2030 GP/LCP; (3) describes the purpose of and legal authority of the document; (4) summarizes the scope and content of the EIR; (5) lists lead, responsible, and trustee agencies for the EIR; (6) describes the intended uses of the EIR; and (7) provides a synopsis of the environmental review process required under CEQA.

The contents of other EIR sections are as follows:

- *Section 2.0, Project Description, provides a detailed discussion of the 2030 GP/LCP.*
- *Section 3.0, Environmental Setting, describes the general environmental setting for Avalon.*
- *Section 4.0, Environmental Impact Analysis, describes the potential environmental effects associated with development facilitated by the 2030 GP/LCP.*
- *Section 5.0, Other CEQA Requirements, discusses issues such as growth inducement and significant irreversible environmental effects.*
- *Section 6.0, Alternatives, discusses alternatives to the GP/LCP, including the CEQA-required "no project" alternative.*
- *Section 7.0, References and Preparers, lists informational sources for the EIR and persons involved in the preparation of the document.*

1.1 OVERVIEW OF THE GENERAL PLAN/LOCAL COASTAL PLAN

The City of Avalon has undertaken a comprehensive update of its General Plan and Local Coastal Plan. The 2030 GP/LCP has been organized to include the seven elements required by state law (Land Use, Open Space, Conservation, Housing, Circulation, Safety, and Noise).

The 2030 GP/LCP guides future development within the existing City limits as well as within areas adjacent to the City that may be considered for future annexation. The "study area" evaluated in this EIR consists of areas within current City Limits and these potential annexation areas.

State law (Government Code Section 65300) requires that each city and county adopt a comprehensive general plan. The proposed 2030 GP/LCP fulfills this requirement by updating the current Avalon General Plan, which was last comprehensively updated in1978, and updating the Local Coastal Plan, which was last updated in 1981. The General Plan defines the framework by which the City's physical and economic resources are to be managed and used in the future. The GP/LCP's planning horizon is the year 2030. City decision-makers will use the plan as a blueprint for:

- *Choices about the use of land*
- *Protection of environmental resources*
- *Conservation and development of housing*
- *Provision of supporting infrastructure and public and human services*

- *Protection of people and property from natural and man-made hazards*
- *Possible future expansion of City boundaries*

The 2030 GP/LCP clarifies and articulates the City's intentions with respect to the rights and expectations of the community, including residents, property owners, and businesses. Through the GP/LCP, the City informs these groups of its goals, policies, and standards, thereby communicating expectations of the public and private sectors for meeting community objectives.

Any decision by a city regarding future land use and development must be consistent with the GP/LCP. An action, program, or project would be considered consistent with the GP/LCP if, considering all of its aspects, it will further the goals and policies of the GP/LCP or not obstruct their attainment.

Each of the GP/LCP Elements contains goals and policies to implement the City's overarching objectives. Goals are statements that provide direction and state the desired end condition. Policies are specific statements that guide decision-making. They indicate a clear commitment by the City and generally serve as mandatory criteria.

The 2030 GP/LCP also satisfies State requirements for the City's Local Coastal Program in accordance with the California Coastal Act (Public Resources Code § 30000 et seq.). Actions in the GP/LCP that affect coastal resources are intended to become part of the Land Use Plan of the Local Coastal Program. The California Coastal Commission oversees all Local Coastal Programs.

1.2 2030 GENERAL PLAN/LOCAL COASTAL PLAN PROCESS

Development of the draft 2030 GP/LCP that is the subject of this EIR entailed an approximately 24-month process involving the Avalon City Council and Planning Commission, key community stakeholders, City and consultant staff, and the public at large. The public involvement process used to develop the 2030 GP/LCP included:

- *A series of meetings with City staff, members of the public, and key stakeholders to discuss a range of issues relevant to the GP/LCP*
- *Five public workshops with Planning Commission and City Council to gather input from the community on the direction of the plan*

1.3 LEGAL AUTHORITY

This EIR has been prepared in accordance with the California Environmental Quality Act (CEQA) and the *State CEQA Guidelines*. In accordance with Section 15121 (a) of the *State CEQA Guidelines* (California Code of Regulations, Title 14, Division 6, Chapter 3), the purpose of an EIR is to:

> *Inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.*

This EIR fulfills the requirements for a Program EIR. Although the legally required contents of a Program EIR are the same as those of a Project EIR, Program EIRs are typically more conceptual and may contain a more general discussion of impacts, alternatives, and mitigation measures than a Project EIR. As provided in Section 15168 of the *CEQA Guidelines*, a Program EIR may be prepared on a series of actions that may be characterized as one large project. Use of a Program EIR provides the City (as Lead Agency) with the opportunity to consider broad policy alternatives and program-wide mitigation measures and provides the City with greater flexibility to address

environmental issues and/or cumulative impacts on a comprehensive basis. Agencies generally prepare Program EIRs for programs or a series of related actions that are linked geographically; are logical parts of a chain of contemplated events, rules, regulations, or plans that govern the conduct of a continuing program; or are individual activities carried out under the same authority and having generally similar environmental effects that can be mitigated in similar ways. By its nature, a Program EIR considers the "macro" effects associated with implementing a program (such as a general plan) and does not, and is not intended to, examine the specific environmental effects associated with individual actions that may be undertaken under the guise of the larger program.

Once a Program EIR has been prepared, subsequent activities within the program must be evaluated to determine what, if any, additional CEQA documentation needs to be prepared. If the Program EIR addresses the program's effects as specifically and comprehensively as possible, many subsequent activities could be found to be within the Program EIR scope and additional environmental documents may not be required (*CEQA Guidelines* Section 15168(c)). When a Program EIR is relied on for a subsequent activity, the Lead Agency must incorporate feasible mitigation measures and alternatives developed in the Program EIR into the subsequent activities (*CEQA Guidelines* Section 15168(c)(3)). If a subsequent activity would have effects not addressed in the Program EIR, the Lead Agency must prepare a new Initial Study leading to either a Negative Declaration (ND), Mitigated Negative Declaration (MND), or a project level EIR. In this case, the Program EIR still serves a valuable purpose as the first-tier environmental analysis. The *CEQA Guidelines* (Section 15168(h)) encourage the use of Program EIRs, citing five advantages:

1. *Provision of a more exhaustive consideration of impacts and alternatives than would be practical in an individual EIR*
2. *Focus on cumulative impacts that might be slighted in a case-by-case analysis*
3. *Avoidance of continual reconsideration of recurring policy issues*
4. *Consideration of broad policy alternatives and programmatic mitigation measures at an early stage when the agency has greater flexibility to deal with them*
5. *Reduction of paperwork by encouraging the reuse of data (through tiering)*

As a "macro" level environmental document, the 2030 GP/LCP EIR uses macro level thresholds as compared to the project-level thresholds that might be used for an EIR on a specific development project. It should not be assumed that impacts determined not to be significant at a macro level would not be significant at a project level. In other words, determination that implementation of the 2030 GP/LCP as a "program" would not have a significant environmental effect does not necessarily mean that an individual project undertaken under the guise of the GP/LCP would not have significant effects based on project-level CEQA thresholds, even if the project is consistent with the GP/LCP.

1.4 SCOPE AND CONTENT OF THE EIR

In accordance with the *CEQA Guidelines*, a Notice of Preparation (NOP) of a Draft EIR was circulated to potentially interested parties on September 12, 2011. The NOP, included in Appendix A, indicated that all issues on the City's environmental checklist would be discussed in the EIR. These include:

- *Aesthetics*
- *Agriculture/Forest Resources*
- *Air Quality*
- *Biological Resources*
- *Cultural Resources*
- *Geology*
- *Greenhouse Gases*
- *Hazards/Hazardous Materials*
- *Hydrology/Water Quality*
- *Land Use and Planning*
- *Mineral Resources*
- *Noise*
- *Population and Housing*
- *Public Services*
- *Transportation/Traffic*
- *Utilities/Service Systems*

This EIR evaluates potential impacts in each of these areas.

The focus of this EIR is to:

- *Provide information about the 2030 GP/LCP for consideration by the Avalon Planning Commission and City Council in their review of the proejct;*
- *Review and evaluate the potentially significant environmental impacts that could occur as a result of the growth and development envisioned in the 2030 GP/LCP;*
- *Identify feasible mitigation measures that may be incorporated into the project in order to reduce or eliminate potentially significant effects;*
- *Disclose any potential growth-inducing and/or cumulative impacts associated with the 2030 GP/LCP; and*
- *Examine a reasonable range of alternative scenarios that could feasibly attain the basic "project" objectives, while eliminating and/or reducing some or all of the potentially significant adverse environmental effects of the proposed 2030 GP/LCP.*

The City received five written responses to the NOP. The responses, included in Appendix A, are addressed, as appropriate, in the analysis contained in the various subsections of Section 4.0, *Environmental Impact Analysis*. The City also held an EIR scoping meeting on September 21, 2011 at Avalon City Hall as part of a joint City Council/Planning Commission public workshop.

1.5 LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES

The City of Avalon is the lead agency under CEQA for this EIR because it has primary discretionary authority to determine whether or how to approve the 2030 GP/LCP.

"Responsible Agencies," are other agencies that are responsible for carrying out/implementing a specific component of the 2030 GP/LCP or for approving a project (such as an annexation) that implements the goals and policies of the GP/LCP. Section 15381 of the *State CEQA Guidelines* defines a "responsible agency" as:

> *A public agency which proposes to carry out or approve a project, for which a lead agency is preparing or has prepared an EIR or Negative Declaration. For purposes of CEQA, responsible agencies include all public agencies other than the lead agency that have discretionary approval authority over the project.*

The California Coastal Commission has responsibility for the use of land and water in the coastal zone and is thus responsible for reviewing and approving the City's LCP to ensure that it is consistent with the Coastal Act of 1976. Thus, the Coastal Commission is a responsible agency for the 2030 GP/LCP.

The **California Department of Housing and Community Development (HCD)** is also a responsible agency for the 2030 GP/LCP. HCD is responsible for the review and certification of the Housing Element.

Although not responsible agencies under CEQA, several other agencies have review authority over aspects of the 2030 GP/LCP or approval authority over projects that could potentially be implemented in accordance with various 2030 GP/LCP objectives and policies. These agencies and their roles are listed below.

- *The **State Geologist** is responsible for the review of the City's program for minimizing exposure to geologic hazards and for regulating surface mining activities.*
- *The **Local Agency Formation Commission (LAFCO)** of the County of Los Angeles Annexation has responsibility for approving any annexations to the City that might occur over the life of the GP/LCP.*
- ***California Department of Fish and Game (CDFG)** has responsibility for issuing take permits and streambed alteration agreements for any projects with the potential to affect plant or animal species listed by the State of California as rare, threatened, or endangered or that would disturb waters of the state.*

Trustee agencies have jurisdiction over certain resources held in trust for the people of California but do not have a legal authority over approving or carrying out the project. *CEQA Guidelines* Section 15386 designates four agencies as trustee agencies: the California Department of Fish and Game with regards to fish and wildlife, native plants designated as rare or endangered, game refuges, and ecological reserves; the State Lands Commission, with regard to state-owned "sovereign" lands, such as the beds of navigable waters and state school lands; the California Department of Parks and Recreation, with regard to units of the state park system; and, the University of California, with regard to sites within the Natural Land and Water Reserves System. The CDFG and the California Coastal Commission are the only trustee agencies for the 2030 GP/LCP EIR.

1.6 INTENDED USES OF THE EIR

This EIR is as an informational document for use in the City's review and consideration of the Avalon 2030 GP/LCP. It is to be used to facilitate creation of a GP/LCP that incorporates environmental considerations and planning principles into a cohesive policy document. The 2030 GP/LCP will guide subsequent actions taken by the City in its review of new development projects and its establishment of new and/or revised citywide programs.

This EIR discloses the possible environmental consequences associated with the Avalon 2030 GP/LCP. The information and analysis in this EIR will be used by the Avalon Planning Commission and City Council, responsible and trustee agencies, and the general public.

1.7 EIR PROCESS

The environmental review process, as required under CEQA, is summarized below and illustrated generally on Figure 1-1.

1. **Notice of Preparation (NOP).** After deciding that an EIR is required, the lead agency must file an NOP soliciting input on the EIR scope to the State Clearinghouse, other concerned agencies, and parties previously requesting notice in writing (*CEQA Guidelines* Section 15082; Public Resources Code Section 21092.2). The NOP must be posted in the County Clerk's office for 30 days. For projects of regional significance, the lead agency holds a scoping meeting during the 30-day NOP review period.
2. **Draft EIR.** The Draft EIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) discussion of significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts); f) a discussion of alternatives; g) mitigation measures; and h) discussion of irreversible changes.

3. **Notice of Completion.** Upon completion of a Draft EIR, the lead agency must file a Notice of Completion with the State Clearinghouse and prepare a Public Notice of Availability of a Draft EIR. The lead agency must place the Notice in the County Clerk's office for 30 days (Public Resources Code Section 21092) and send a copy of the Notice to anyone requesting it (*CEQA Guidelines* Section 15087). In addition, public notice of the availability of the Draft EIR must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off of the project site; or c) direct mailing to owners and occupants of contiguous properties and others who have requested such notification. The lead agency must solicit comments from the public and respond in writing to all written comments received (Public Resources Code Sections 21104 and 21253). The minimum public review period for a Draft EIR is 30 days. When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be 45 days (Public Resources Code Section 21091).

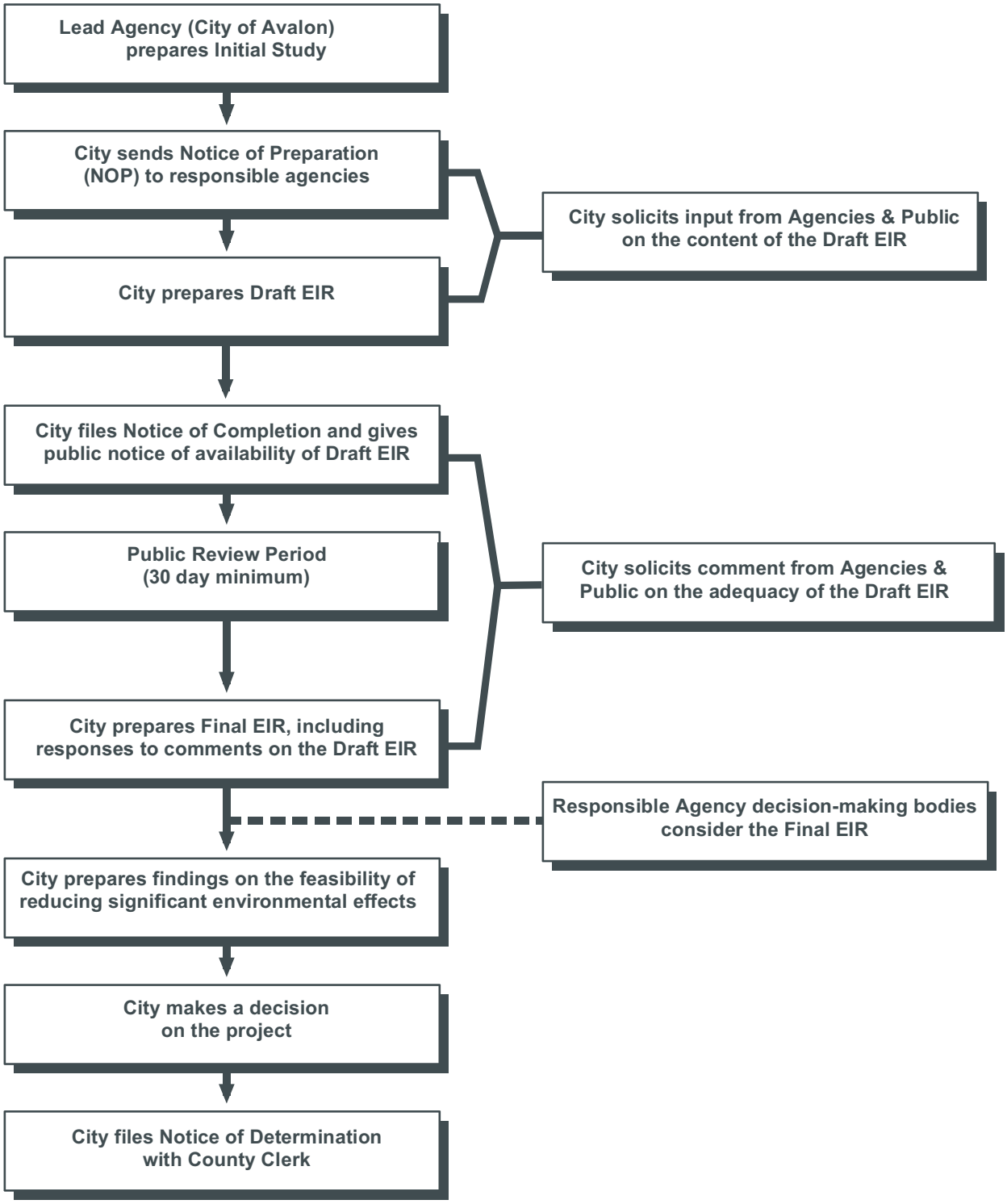
4. **Final EIR.** Following the close of the Draft EIR review period, a Final EIR is prepared. The Final EIR must include: a) the Draft EIR; b) copies of comments received during public review; c) a list of persons and entities commenting; and d) responses to comments.

   Final EIR Certification. Prior to making a decision on a proposed project, the lead agency must certify that: a) the Final EIR has been completed in compliance with CEQA; b) the Final EIR was presented to the decision-making body of the lead agency; and c) the decision-making body reviewed and considered the information in the Final EIR prior to approving the project (*CEQA Guidelines* Section 15090).

5. **Lead Agency Project Decision.** Upon certification of an EIR, the lead agency makes a decision on the project analyzed in the EIR. A lead agency may: a) disapprove a project because of its significant environmental effects; b) require changes to a project to reduce or avoid significant environmental effects; or c) approve a project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (*CEQA Guidelines* Sections 15042 and 15043).

6. **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead or responsible agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible *(CEQA Guidelines* Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision and explaining why the project's benefits outweigh the significant environmental effects.

7. **Mitigation Monitoring/Reporting Program.** When an agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.



Environmental Review Process

Figure 1-1

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2.0 PROJECT DESCRIPTION

The proposed project is an update of the City of Avalon 2030 General Plan/Local Coastal Plan (hereinafter referred to as the "2030 GP/LCP" or simply "GP/LCP"). The 2030 GP/LCP, which updates the 1978 General Plan, establishes the community's vision for the development of Avalon through the year 2030 and will serve as the fundamental land use policy document for the City.

This section of the EIR describes the key characteristics of the 2030 GP/LCP, including the project proponent, the geographic extent of the plan, project objectives, required approvals, and development forecasted for the plan area. This section also summarizes the key policy statements from the various GP/LCP elements that have the potential to result in physical environmental effects.

2.1 PROJECT PROPONENT

City of Avalon
410 Avalon Canyon Road
Avalon, CA 90704

2.2 GEOGRAPHIC EXTENT OF THE PLAN AREA

Avalon is located on the southeast portion of Santa Catalina Island, approximately 25 miles off the coast of the Southern California mainland (see Figure 2-1). The key plan boundaries for the community – city boundary and plan area boundary – are illustrated on Figure 2-2 and described below.

The plan area for the 2030 GP/LCP encompasses all areas within and outside the City's boundaries that bear a relation to the City's planning as contemplated by State Government Code Section 65300. Avalon's corporate boundaries encompass approximately 2.81 square miles, or 1,798 acres of land. In addition to the areas within the Avalon corporate boundaries, the GP/LCP addresses three areas of unincorporated Los Angeles County that lie adjacent to the City and may be considered for future annexation. These unincorporated areas (known in this document as the proposed "Expansion Areas") total about 2,727 acres and include a landfill and quarry area as well as open space.

Basemap Source: ESRI Data, 2004, and CDFG, 2002.

N

Project Location

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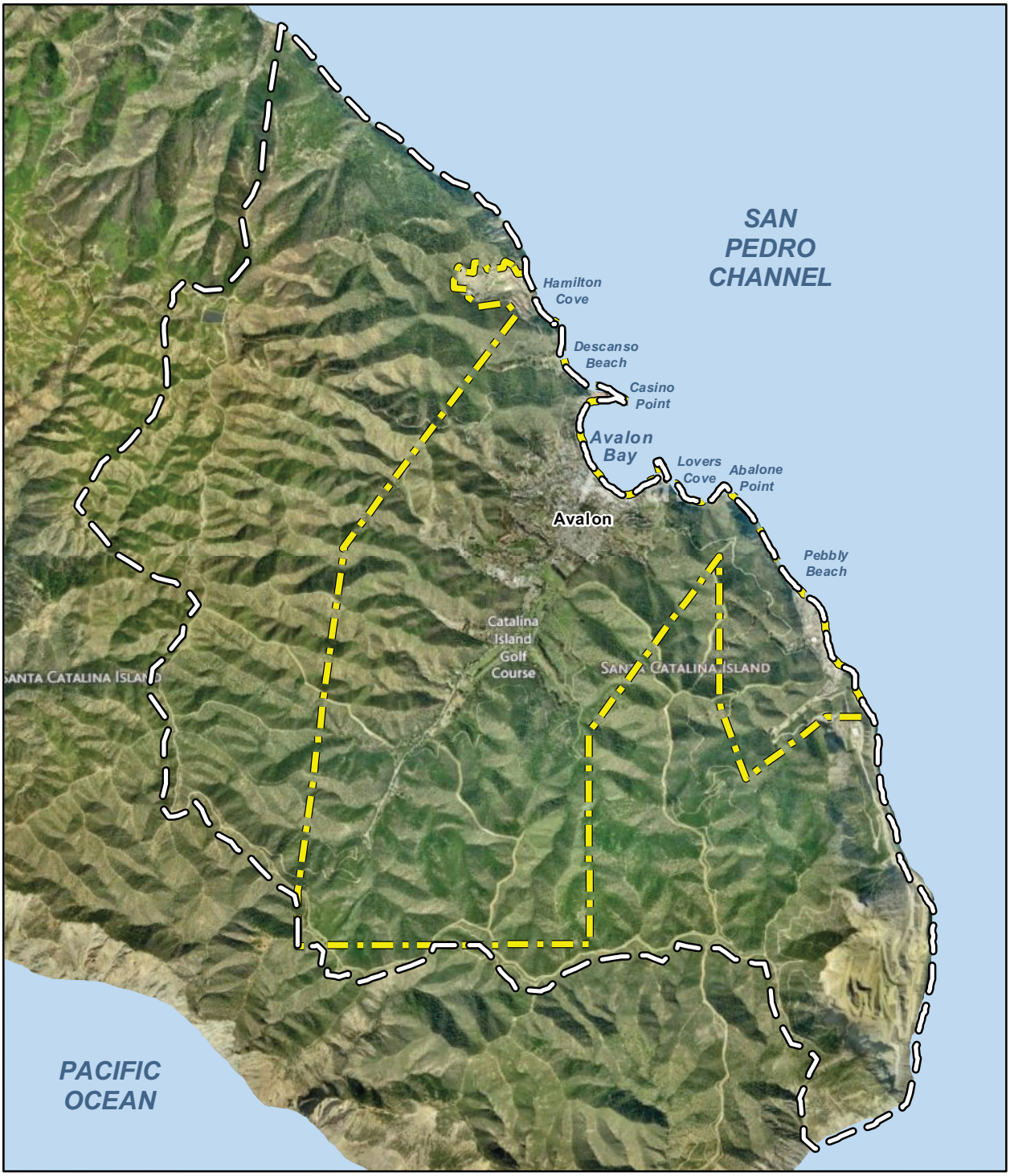
Regional Location Map

Figure 2- 1



Imagery provided by Microsoft's Bing, ESRI and its licensors © 2012. Additional layer source: ©2009 Los Angeles County Department of Regional Planning.

Avalon City Limits

Sphere of Influence Boundary

0 1,600 3,200
Feet

N

Plan Boundaries

Figure 2- 2

2.3 CURRENT GENERAL PLAN/LOCAL COASTAL PLAN

The City Council adopted the current General Plan in 1978. That document has since served as a policy document that guides land use decisions in the City and has been updated periodically.

The current Avalon General Plan contains seven individual elements -- Conservation-Open Space, Housing, Land Use, Noise, Public Safety and Seismic, and Scenic Highway -- that establish goals, objectives, policies, and programs for public and private entities. These elements were all mandatory at the time of the General Plan's adoption. However, the list of required elements under State planning guidelines has since changed. The seismic and safety elements have been merged, while the scenic highways element is no longer a general plan requirement.

The current land use plan specifies eight individual land use designations as shown on Figure 2-3. The area within the current City limits is designated for a mix of residential, commercial, and public space.

In compliance with the California Coastal Act of 1976, the 1978 General Plan also served as an initial step toward the development of a Local Coastal Plan. With the adoption of a land use plan in the 1978 General Plan and subsequent zoning ordinances and maps adopted in conformity with the plan, the City developed a Local Coastal Plan that met State guidelines. The City's Local Coastal Program was certified by the California Coastal Commission on May 21, 1981, and the City assumed coastal permit-issuing authority on August 24, 1981.

2.4 2030 GENERAL PLAN/LOCAL COASTAL PLAN

The EIR analysis focuses on two primary components of the 2030 GP/LCP: (1) physical development potential; and (2) goals and policies with the potential to result in physical environmental effects. The potential physical development of the City is reviewed and evaluated for each of the areas of environmental impact. As appropriate, the environmental effects of the goals, policies, and actions included in the 2030 GP/LCP are also reviewed and evaluated for each area of potential impact. Because many of the goals, policies, and actions are specifically intended to mitigate the environmental effects associated with future growth in the City, they are discussed as part of an overall mitigation strategy, where applicable, for a given issue.

2.4.1 General Plan/Local Coastal Plan Goals

The 2030 GP/LCP is intended to function as a policy document to guide land use decisions within Avalon's planning area through the year 2030. The GP/LCP includes input from the Planning Commission, City Council, and community received over the course of the development of the Plan.

Based on the vision statements and input from the community and Planning Commission, the 2030 GP/LCP includes the following keys to maintaining the desirability of Avalon for residents and for visitors:

- Maintain a population size (residents and visitors) that is consistent with the natural resources, public services, and other factors, while continuing to attract, accommodate and satisfy tourists upon which the local economy is dependent;
- Maintain and enhance Avalon's unique ecology and environmental features for the long term enjoyment of residents and visitors;

- Exemplify environmental awareness and stewardship through use of new technologies, conduct practices that are energy efficient, reduce pollution and waste, conserve water, and protect the environment, natural features, and open spaces of the City and the island as a whole; and
- Provide services to all types of visitors and maintain the sense of place that is part of the draw for tourists and residents alike.

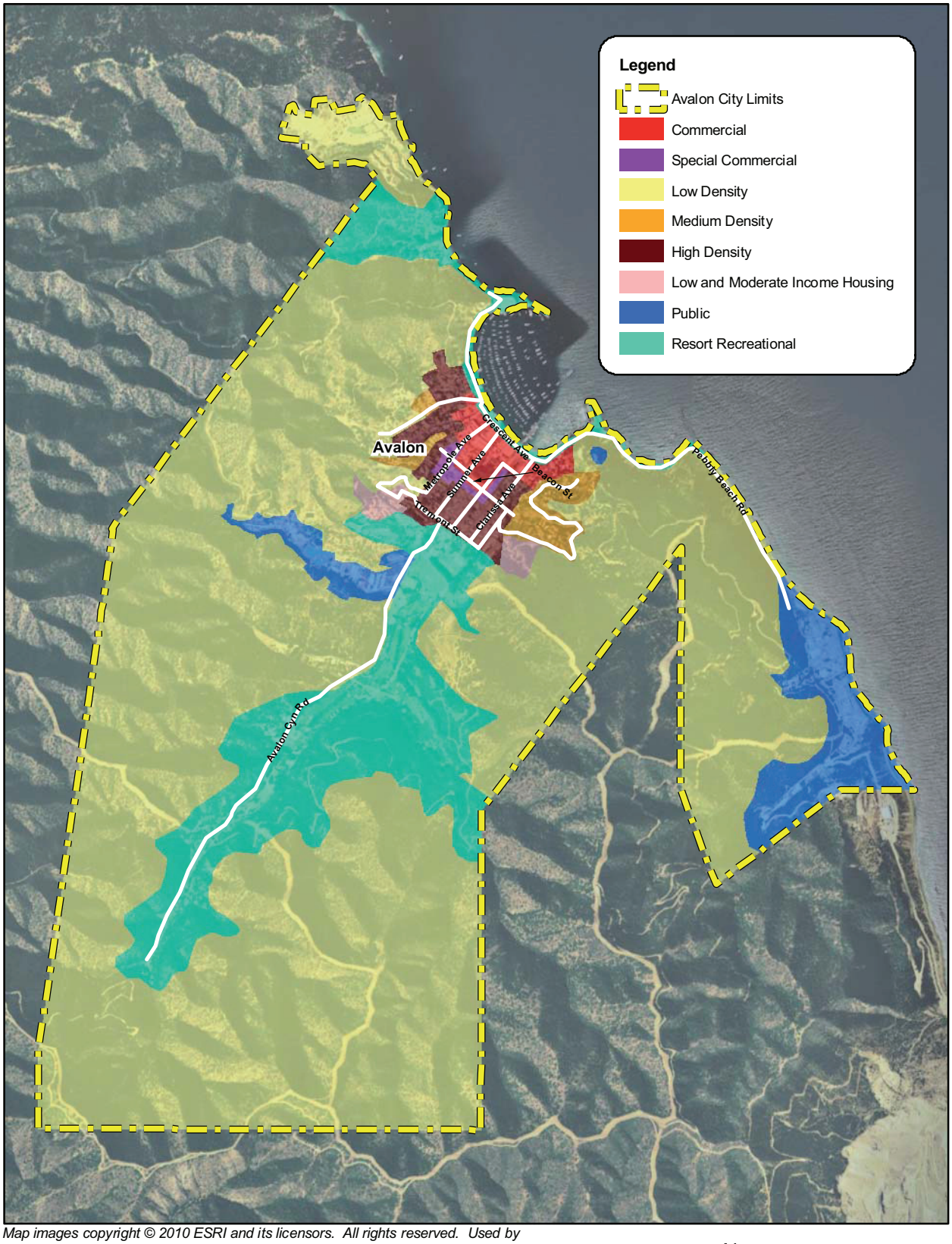
2.4.2 GP/LCP Organization

The 2030 GP/LCP is organized into eight chapters, which include the introduction as well as all seven elements required by California General Plan law. An appendix describing policy terms used in the Plan is also included, as is a glossary and a Housing Element Technical Appendix. The GP/LCP provides a long-term action agenda to follow in achieving the vision of Avalon residents. The elements are listed in Table 2-1. The table also lists the types of topics covered in each chapter.

Table 2-1
2030 General Plan/Local Coastal Plan Elements

2030 GP/LCP Elements	Examples of Topics Covered
Land Use	Land use designations
Open Space	Preservation of open space, hillside management
Conservation	Biotic resources, energy resources, air quality, solid waste management, water resources, mineral resources, soil conservation and preservation
Housing	Development patterns, neighborhoods, visual character, urban design, demographics, housing needs, affordability, constraints on production
Circulation	Traffic, street network, parking, transit services, bike routes
Safety	Development in hazardous areas, hazardous waste management, seismicity, flood control, water quality, Brownfields, public facilities, utilities
Noise	Noise contours, noise standards

Each of the GP/LCP elements listed in Table 2-1 includes specific policies and action items intended to meet the overall goals discussed under subsection 2.4.1, *General Plan/Local Coastal Plan Goals,* above. Most of the policies either do not involve physical environmental changes or are intended to reduce the potential environmental changes associated with future development within the City. For example, Chapter VIII, *Noise*, includes policies and actions intended to minimize potential conflicts relating to noise. Consequently, the policies themselves generally would not create significant environmental impacts and, therefore, are not listed in this project description. The complete 2030 GP/LCP is available for review at Avalon City Hall and on the City's website (www.cityofavalon.com). Individual policies and actions with the potential to either create or address physical environmental impacts are discussed as appropriate in the individual impact discussions in Section 4.0, *Environmental Impact Analysis*.



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Current Land Use Map

Figure 2-3

2.4.3 2030 General Plan/Local Coastal Plan Land Use Map

The purpose of the 2030 GP/LCP land use map, shown on Figure 2-4, is to guide the general distribution, location, and extent of the various types of land uses in Avalon. The 2030 GP/LCP establishes 13 land use designations in five categories, as shown in Table 2-2. Specific land use regulations for parcel development will continue to be defined in the Development Code, which will be updated following adoption of the 2030 GP/LCP. Figure 2-5 shows the proposed land use map within the City Center area.

There are several key differences between the land use designations in the 2030 GP/LCP and those contained in the current General Plan. These changes include: (1) a new Light Industrial zone intended for areas vital to moderate industrial services; (2) new Specific Plan Overlay Districts for Lover's Cove and Pebbly Beach; (3) the previous Resort Recreational designation was split into two designations – a Resort Recreational High Density (RR-HD) designation which accommodates uses associated with the resort character of Avalon and a Resort Recreational Low Density (RR-LD) designation which accommodates resort type uses as well as single family housing units; (4) a new Open Space designation for lands whose primary purpose is the provision of active and/or passive recreation, the protection of public health and safety, preservation of sensitive environmental resources, or resource management; and (5) renaming of the Low/Moderate Income Housing designation to High Density Residential – Community, which only accommodates residential development.

With regard to land use goals and policies, the 2030 GP/LCP promotes land development practices that reduce energy and water consumption, air and water pollution, greenhouse gas emissions, and waste. In the City Center, the development of higher-density, mixed-use infill development is facilitated where appropriate. Infill development is required to incorporate design elements with buffers and transitions in density, scale, and mass to assure compatibility with adjacent uses.

The land use map specifies land uses for all areas of the City. In the middle canyon, the 2030 GP/LCP expands the Resort Recreational zone. Adjacent to current City limits, the GP/LCP identifies three potential "annexation areas":

- **Expansion Area No. 1** – This area is located in a landfill and quarry area south of Pebbly Beach. Within this area, light industrial uses are planned, with the potential to transition over time to more visitor-serving uses as part of a Pebbly Beach Specific Plan Overlay District.

- **Expansion Area No. 2** – This area consists of various parcels between Hamilton Cove and the Divide Road. This area would facilitate Resort/Recreational land uses.

- **Expansion Area No. 3** – This area is located between the City limits separating Pebbly Beach and the eastern boundary of Avalon Canyon. More open uses within City limits would occur here.

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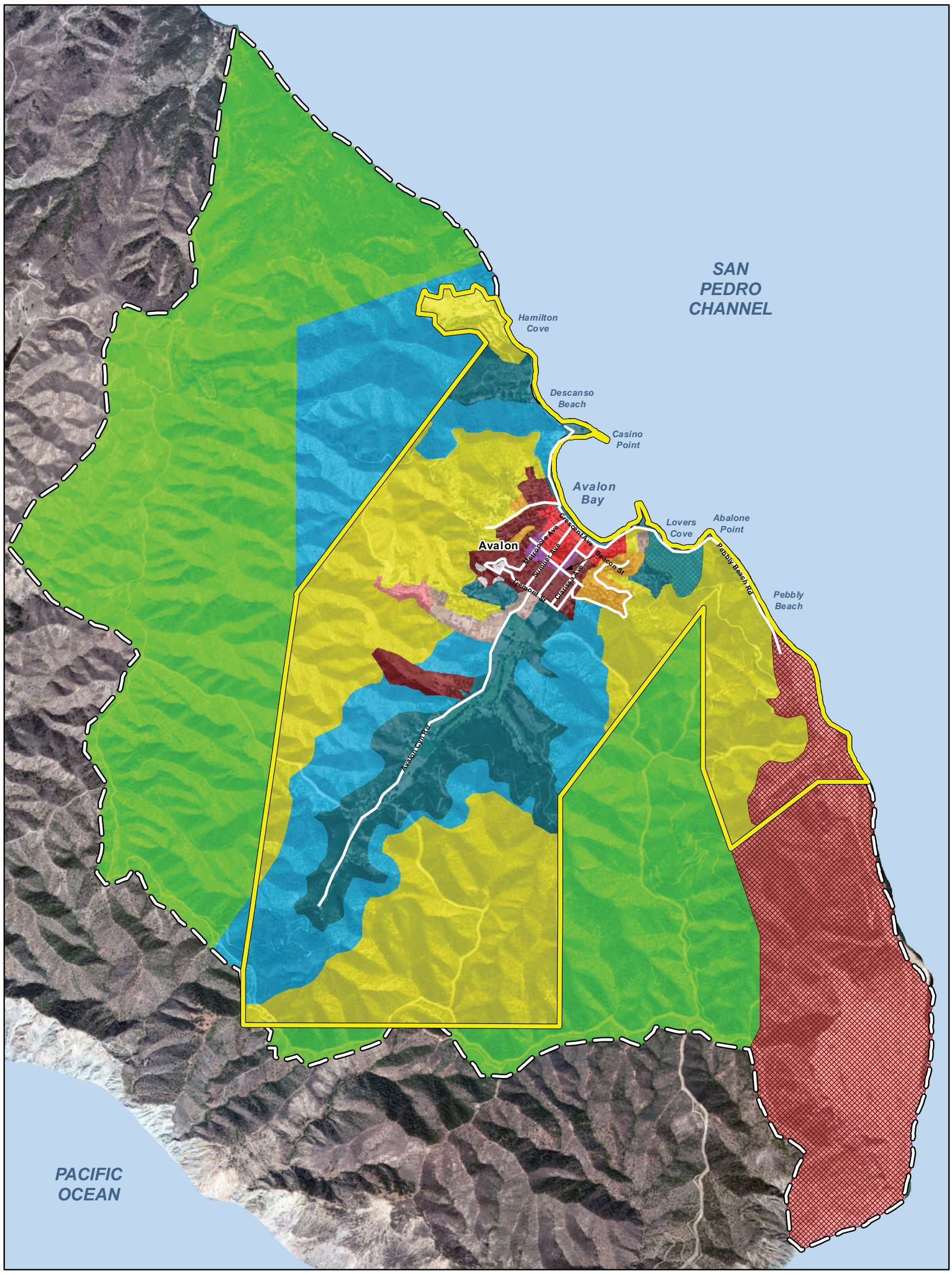

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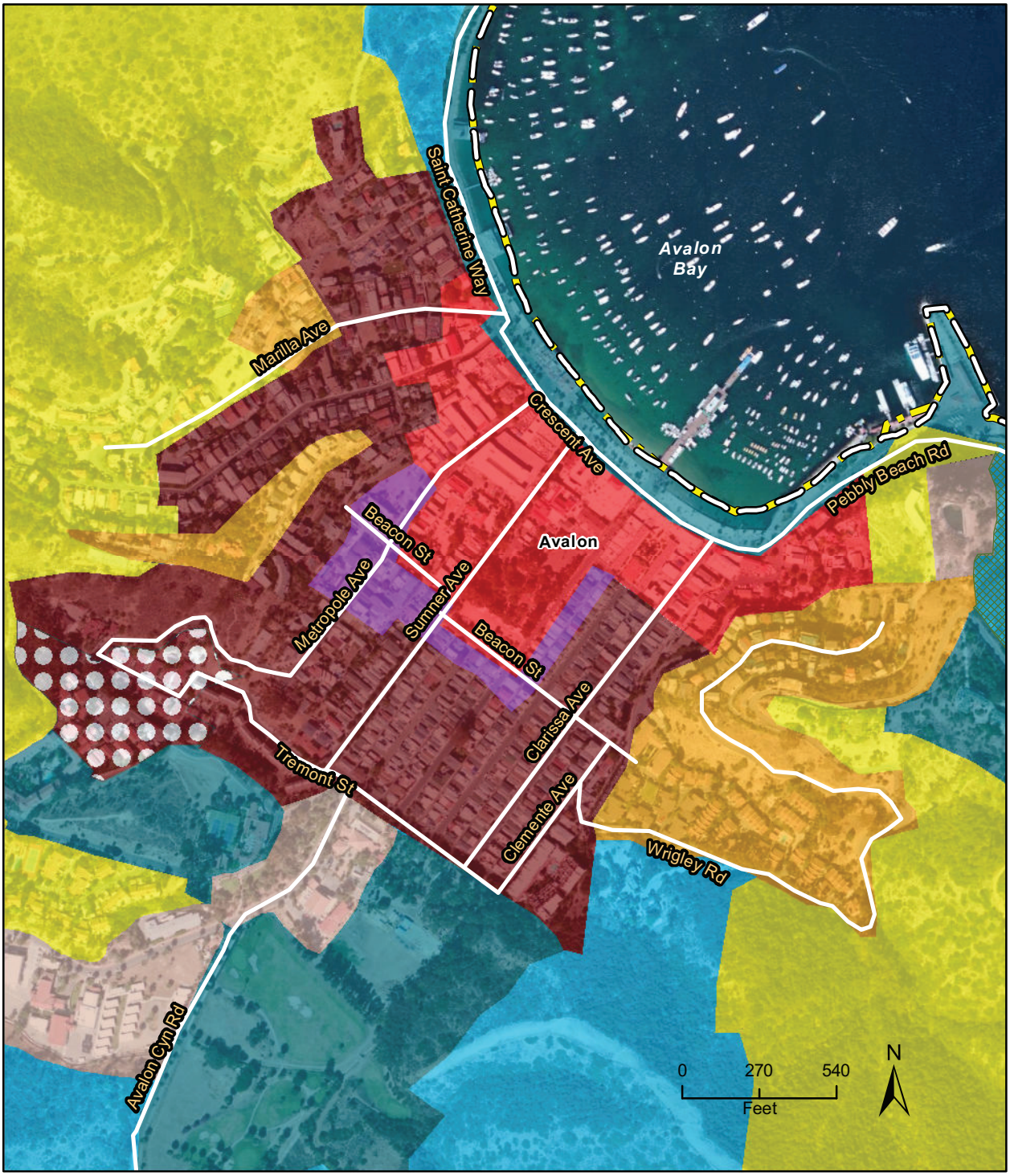
- Avalon City Limits
- Sphere of Influence Boundary
- Lover's Cove Specific Plan Area
- Pebbly Beach Specific Plan Area
- Public
- Light Industrial
- Commercial
- Special Commercial
- Resort Recreational - Low Density
- Resort Recreational - High Density
- Open Space
- Low Density Residential
- Medium Density Residential
- High Density Residential
- High Density Residential - Community Housing

Proposed Land Use Map

Figure 2-4



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- Avalon City Limits
- Sphere of Influence Boundary
- Lover's Cove Specific Plan Area
- Public
- Light Industrial
- Commercial
- Special Commercial
- Resort Recreational - Low Density
- Resort Recreational - High Density
- Open Space
- Low Density Residential
- Medium Density Residential
- High Density Residential
- High Density Residential - Community Housing

City Center Land Use

Figure 2-5

Table 2-2
General Plan/Local Coastal Plan Land Use Districts

Residential	
LD-R Low Density Residential	The LD-R designation accommodates detached single family detached housing.
MD-R Medium Density Residential	The MD-R designation accommodates detached single-family housing units and two dwelling units per lot or parcel.
HD-R High Density Residential	The HD-R designation accommodates multi family dwelling units and single family dwelling units.
HD-R-CH High Density Residential - Community Housing	The HD-R-CH designation accommodates only residential development, including multi family dwelling units and single family dwelling units.
Commercial	
C Commercial	The C designation accommodates general retail and commercial services and offices.
SC Special Commercial	The SC designation accommodates small scale residential uses, neighborhood retail and services, as well as structures which contain commercial uses on the ground floor and residential uses above. Appropriate uses include retail sales (excluding food and beverage), and personal and professional sales.
Public	
P Public	The P designation is intended for areas vital to public services. Principal uses allowed include schools, hospitals, parks, libraries, parking lots and support housing.
Industrial	
LI **Light Industrial**	The LI designation is intended for areas vital to moderate industrial services. Principal uses allowed include infrastructure, light manufacturing, assembly, fabrication, warehouses, and corporate yards.
PB-SP Pebbly Beach Specific Plan Overlay District	The PB-SP overlay identifies the Pebbly Beach area for eventual development of a specific plan. The area is currently utilized for light industrial purposes. In the near term, the area will continue to be used for industrial uses. However, if it is determined that such uses are no longer necessary or viable, a specific plan is to be developed to guide the possible eventual transition to other uses that take advantage of this area's coastal location. It is anticipated that new lands uses may include visitor-serving facilities such as a new public dock/ferry terminal, commercial retail, restaurants, hotels/motels, and/or recreational facilities that serve both residents and visitors.
LC-SP Lover's Cove-Specific Plan Overlay District	The LC-SP overlay identifies the area above Lover's Cove and surrounding area for eventual development of a specific plan. This area is currently undeveloped. However, if development is anticipated in the future, a specific plan is to be developed to guide the possible eventual transition to

Table 2-2
General Plan/Local Coastal Plan Land Use Districts

	other uses that take advantage of this area's views and proximity to visitor services. It is anticipated that the area may be utilized for visitor serving facilities such as a hotel, spa, or social and educational facility.
Recreational / Open Space	
RR-HD Resort Recreational High Density	The RR-HD designation accommodates a variety of uses associated with the resort character of Avalon. Appropriate land uses include hotels, inns and lodges, as well as parks and mobile home parks.
RR-LD Resort Recreational Low Density	The RR-LD designation accommodates a variety of uses associated with the resort character of Avalon and also accommodates single family housing units. Allowed uses include single family detached housing, hotels, inns and lodges, as well as parks and mobile home parks.
OS Open Space	The OS designation applies to lands under public or private ownership whose primary purpose is the provision of active and/or passive recreation, the protection of public health and safety, preservation of sensitive environmental resources, or resource management.

The 2030 GP/LCP land use map is designed to accommodate Avalon's future growth, as shown below in Table 2-3. Growth is measured in terms of permanent population and permanent housing units. As the population increases, a roughly proportionate increase is forecasted in the numbers of permanent housing units. This EIR also considers visitor populations in its impact analysis as daily and overnight visitors can triple the population of the City.

Table 2-3
General Plan/Local Coastal Plan Growth Forecast

Type	Existing*	Year 2030**	Net Change	Net Change (%)
Population (Permanent Residents)	3,780	4,821	1,041	22%
Permanent Housing Units	2,289	2,920	631	22%

** California Department of Finance, 2012.*
***Estimated number in the year 2030 based on predicted growth for the year 3030 based on the SCAG 2012-2035 RTP/SCS Growth Forecast for Avalon, adopted April 2012.*

2.4.4 Circulation Element

The Circulation Element addresses the City's vehicular circulation, bicycle and pedestrian circulation, and public transit. It covers existing circulation conditions as well as projected conditions that can be expected as a result of development facilitated by the Land Use Element of the proposed GP/LCP.

The baseline conditions of Avalon's transportation system are unique. The City is compact, encompassing about three square miles of land area with a compact urban form and no traffic signals. In addition, circulation within the City is comprised of multiple modes with a particular emphasis on pedestrian and bicycle travel. The predominant vehicle type is the autoette, which is smaller and travels at lower speeds than traditional automobiles.

Potential physical improvements to this unique transportation system are listed on Table 2-4.

Table 2-4
Potential Physical Improvements to Circulation

Circulation Aspect	Potential Improvements
Safe Routes to Schools Project	This project, which has a completed conceptual plan, would include roadway and pedestrian improvements along Tremont Street between Clarissa Avenue and Avalon Canyon Road. Using both the existing roadway and nearby channel, a combination concrete deck and wood deck would provide continuous sidewalk along Tremont Street. In addition, ADA compatible ramps would be constructed to provide pedestrian linkages between Eucalyptus Avenue, Catalina Avenue, Descanso Avenue, and Clarissa Avenue with Tremont Street. Given the close proximity of the project site to Avalon School, a reduction in school trips by automobile is likely when the project is completed.
Five Points Intersection Improvements	This project, which has a completed design, will enhance the five-legged intersection consisting of Avalon Canyon Road, Country Club Drive, Sumner Avenue, and Tremont Street (east/west). The project includes traffic calming, a roundabout, landscaping, lighting, decorative pedestrian walkways, sidewalks, and irrigation controls. This project would clean up misaligned roadways, enhance circulation, and increase the likelihood that students will walk or bike to school instead utilizing motor vehicles.
One-way street designations	Metropole Avenue narrows south of Beacon Street. Consider the merits of designating a segment of the street as one-way, to better facilitate mobility.
Parking	Avalon has only a limited number of joint parking facilities (e.g. parking lots). Significant parking takes place on-street, which creates friction (particularly on narrower streets) with cyclists and pedestriansComplementary wayfinding and signage, would direct autoette traffic to key locations from which pedestrians could access multiple places of interest. This would reduce traffic on popular streets.
Thru-traffic closure	Following the success of the Eucalyptus Street partial closure, examine closure of Descanso Avenue to thru traffic. The concept would limit access between Tremont Street and Beacon Street, and between Beacon Street and 3rd Avenue. Descanso Avenue has only limited purpose for through traffic, and this proposed strategy would enhance the residential character of the street.
One-way pairs	Explore designation of streets as one-way pairs, thereby reducing the friction between various modes and enhancing mobility and access
Pedestrian Controls	Explore the use of pedestrian controls at congested intersections in order to provide safe pedestrian access and in order to alleviate congestion.

2.4.5 Housing Element

The Housing Element describes a variety of policies and programs intended to conserve the existing supply of housing in Avalon, including affordable housing, as well as to provide capacity for the development of new housing in accordance with the City's Regional Housing Needs Assessment (RHNA) allocation. Avalon's RHNA allocation for the 2008-2014 period, per the Southern California Association of Governments, is 148 new units. This total includes 43 units in the "very low" and "low" income categories. According to Department of Housing and Community Development (HCD) policy, capacity for these very low and low income units can be met by allowing for densities of 20 units per acre. The proposed land use map provides for ample capacity to develop residential units in the "very low", "low", moderate" and "above moderate" categories based on the number of remaining vacant lots in the City.

An important goal of the Housing Element is to ensure that the City of Avalon continues to grow and develop as a clean and safe town where residents have access to adequate, dignified, and affordable housing without overcrowding, where population density is in balance with resources, and where land use planning, zoning, and building code enforcement carry out this expressed vision.

2.4.6 Open Space Element

The Open Space Element describes a variety of policies and programs intended to guide the comprehensive and long-range preservation and conservation of open space land within Avalon. The Element also discusses the potential for the expansion of future open space and/or recreation opportunities on lands which serve to link larger open space areas in and adjacent to the community and give form and identity to the City. Expansion of the uses allowed in the Resort/Recreational High Density and Resort Recreational Low Density designations will also provide opportunities to accommodate active and passive recreation uses such as parks, trails, gondolas, zip lines or other recreation facilities. These recreational facilities may result in some physical effects compared to existing conditions. An important objective of the Open Space Element is to enhance recreation facilities in a manner that balances resident and visitor needs, and protects the natural environment.

2.5 REQUIRED DISCRETIONARY ACTIONS

With recommendations from the Planning Commission, the City of Avalon City Council will need to take the following discretionary actions in conjunction with the 2030 GP/LCP:

- *Certification of the Final EIR on the 2030 GP/LCP*
- *Approval of the proposed 2030 GP/LCP*

Subsequent to City approval of the 2030 GP/LCP, the LCP component of the plan will require certification by the California Coastal Commission.

The Housing Element has been submitted to the California Department of Housing and Community Development (HCD) for review and comment. The City received certification of the Housing Element from the HCD in November 2012.

The California Department of Conservation, Division of Mines and Geology, has no discretionary authority over the 2030 GP/LCP, but will review the plans and policies relating to seismic safety for compliance with state regulations.

The 2030 GP/LCP identifies three areas adjacent to the current City limits that the City may consider annexing at some point in the future. Although annexation is not currently being proposed, any future annexations would require Los Angeles Local Agency Formation Commission (LAFCO) approval.

The Local Coastal Plan has been submitted to the California Coastal Commission for review and comment. The City will seek certification of the Local Coastal Plan by the California Coastal Commission.

3.0 ENVIRONMENTAL SETTING

This section describes the general environmental conditions in and around Avalon. More detailed setting information is included within the impact analysis for each issue area.

3.1 REGIONAL OVERVIEW

Avalon is located in the southeast portion of Santa Catalina Island (Catalina), an island in the eight-island archipelago of the Channel Islands. Catalina is located approximately 25 miles off the coast of mainland Southern California. Avalon has a population of 3,780 in 2012 (California Department of Finance, 2012).

3.2 PHYSICAL SETTING

3.2.1 General Geographic Setting

Avalon is located on the southeast portion of Santa Catalina Island, approximately 25 miles off the coast of mainland Southern California in Los Angeles County. Avalon's corporate boundaries encompass approximately 2.81 square miles, or 1,798 acres of land. In addition to the areas within the Avalon corporate boundaries, the 2030 General Plan/Local Coastal Plan addresses unincorporated areas surrounding the City that may be considered for future annexation. These unincorporated areas total about 2,727 acres and include a landfill and quarry area as well as open space.

3.2.2 Topography and Drainage

Avalon's character and the surrounding areas of Catalina are characterized by a collection of natural landscapes intermixed with built environments. Within Avalon and the surrounding unincorporated areas, the dominant natural landforms are steep, dissected mountains and hills. The highest mountain elevations are the summit of Mount Orizaba, which rises 2,125 feet from the ocean and the summit of Silver Peak, which reaches an elevation of 1,805 feet. More level terrain is limited to the floors of a few large coastal canyons, including Avalon, Pebbly Beach, White's Landing, Middle Ranch, Two Harbors, and Emerald Bay. Avalon Canyon's level terrain contains the majority of urban development within the project area. The lands outside of the valley and/or canyon floors have experienced very little development.

The primary hydrologic features of the plan area are the Santa Catalina Island – Frontal San Pedro Channel Watershed and Santa Catalina Island – Frontal Pacific Ocean Watershed. The City's plan area is almost entirely encompassed by the Santa Catalina Island – Frontal San Pedro Watershed, which flows toward the heart of the City into Avalon Bay. Middle Ranch Watershed flows west into Middle Ranch Reservoir. Several intermittent streams and ephemeral drainages within the watershed in Upper Avalon Canyon occur along the canyon bottoms where flow is concentrated toward the valley floor, which comprises the downtown area of the City and then toward Avalon Bay.

3.2.3 Climate

Avalon has a Mediterranean climate characterized by warm, dry summers and cool, most winters. The semi-permanent high-pressure system west of the Pacific coast strongly influences Avalon

and California's weather. It creates sunny skies throughout the summer and influences the pathway and occurrence of low-pressure weather systems that bring rainfall to the area from October through April. As a result, wintertime temperatures in Avalon are generally mild, while summers are warm and dry. The predominant wind direction is from the northwest.

3.3 CUMULATIVE PROJECTS SETTING

CEQA defines cumulative impacts as two or more individual actions that, when considered together, are considerable or will compound other environmental impacts. Cumulative impacts are the changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, traffic impacts of two nearby projects may be insignificant when analyzed separately, but could have a significant impact when analyzed together. Cumulative impact analysis allows the Program EIR to provide a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

Although CEQA analysis typically lists development projects in the vicinity of a project site, this document analyzes the environmental impacts associated with the proposed GP/LCP which would include all land uses within Avalon through the year 2030. Thus, in this case, project and cumulative impacts are the same since the GP/LCP is the project and there are no adjacent communities on Catalina Island. Project and cumulative impacts are discussed within each impact discussion in this EIR.

4.0 ENVIRONMENTAL IMPACT ANALYSIS

This section discusses the possible environmental effects of the proposed project for the specific issue areas that were identified as having the potential to experience significant impacts.

"Significant effect" is defined by *CEQA Guidelines* §15382 as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant."

The assessment of each issue area begins with an italicized introduction that summarizes the environmental effects considered for that issue area. This is followed by the setting and impact analysis. Within the impact analysis, the first subsection identifies the methodologies used and the "significance thresholds", which are those criteria adopted by the City, other agencies, universally recognized, or developed specifically for this analysis to determine whether potential effects are significant. The next subsection describes each impact of the proposed project, mitigation measures for significant impacts, and the level of significance after mitigation. Each effect under consideration for an issue area is separately listed in bold text, with the discussion of the effect and its significance following. Each bolded impact listing also contains a statement of the significance determination for the environmental impact as follows:

> ***Class I – Unavoidably Significant:*** *An impact that cannot be reduced to below the significance threshold level with implementation of reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the State CEQA Guidelines.*
>
> ***Class II – Significant but Mitigable:*** *An impact that can be reduced to below the significance threshold level with implementation of reasonably available and feasible mitigation measures. Such an impact requires findings to be made under §15091 of the State CEQA Guidelines.*
>
> ***Class III – Not Significant:*** *An impact that may be adverse, but does not exceed the significance threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.*
>
> ***Class IV – No Impact or Beneficial:*** *No impact would occur or the project would have a beneficial effect.*

Following each environmental effect discussion is a listing of recommended mitigation measures (if required) and the residual effects or level of significance remaining after the implementation of the measures. In those cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed as a residual effect. The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed project in conjunction with other future development in the area.

Please refer to the Executive Summary for this EIR, which clearly summarizes all impacts and mitigation measures that apply to the project.

Because the proposed project is a General Plan update, cumulative impacts are treated somewhat differently than would be the case for a project-specific development. Section 15130 of the *CEQA Guidelines* provides the following direction relative to cumulative impact analysis:

> *Impacts should be based on a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact…*

By its nature, a general plan considers cumulative impacts insofar as it considers cumulative development that could occur within a city's plan area. Therefore, the analysis of project impacts also constitutes the cumulative analysis and this EIR does not contain a separate analysis of cumulative impacts.

4.1 AESTHETICS

This section analyzes the potential impacts on aesthetics and visual resources resulting from implementation of the 2030 GP/LCP.

4.1.1 Setting

a. Definitions. "Aesthetic value" is primarily determined by the area's perceived natural beauty as well as the perceived value of the elements that contribute to or enhance the area's visual quality. Although aesthetic value is subjective, it is utilized as a criterion for evaluating potential impacts on visual resources.

Most communities identify scenic resources as important assets that form community identity. Although the perception of what is considered "scenic" may vary according to the environmental setting, scenic resources typically include natural open spaces, unique topographic formations, and natural landscapes. Scenic resources can also include urban open spaces, cultivated landscapes, and other aspects of the built environment such as parks, trails, cultural resources, and architecturally significant buildings.

Viewsheds also contribute to aesthetic value, as they establish the context in which scenic resources may be observed. They are typically defined by physical features that frame one or more scenic resources. For example, an area's topography can contribute to aesthetic value through the creation of view corridors and/or scenic vistas consisting of ridgelines and mountains, which can form a community's visual backdrop. Viewsheds can also include a range of resources (including natural and/or man-made elements) and thus natural and man-made environments can be considered important scenic resources worthy of preservation.

b. Existing Conditions. Avalon is located in the southeastern portion of Santa Catalina Island (Catalina), approximately 25 miles off the coast of mainland Southern California. The visual character of Avalon and the surrounding areas of Catalina are characterized by a collection of natural landscapes intermixed with a variety of built environments. With the exception of Avalon's valley floor, the majority of the land within Avalon's incorporated boundary and the surrounding unincorporated areas is characterized by natural landforms, which primarily include steep, dissected mountains and hills. The highest mountain elevations on Catalina are the summit of Mount Orizaba, which rises 2,125 feet from the ocean and the summit of Silver Peak, which reaches an elevation of 1,805 feet. The highest mountains and ridgelines within the City of Avalon are located near the southern boundary, with elevations ranging from approximately 1,000 feet to 1,500 feet. The most level terrain is limited to the canyon floor, including the areas of Avalon Canyon, Pebbly Beach, Descanso Beach, and Hamilton Cove. . The majority of Avalon's urban development is concentrated in these areas. The areas outside of the valley and/or canyon floors have experienced much less development. As a result, they consist primarily of natural habitats and are considered some of Avalon's more unique open space and recreational resources. Figure 4.1-1(a-c) shows photographs of Avalon's most existing scenic environments and key vantage points. The most significant scenic resources include: Avalon Bay and its beaches, Lover's Cove, Descanso Bay, Hamilton Beach, Avalon Casino at Casino Point, the Zane Grey Residence, the Wrigley Home, and the surrounding hillsides and ridgelines.

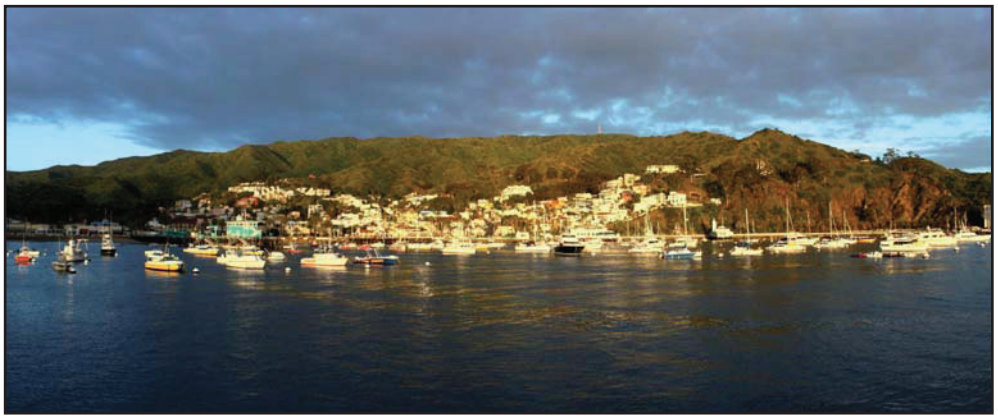


Photo 1 - View southwest from Avalon harbor entrance.

Photo 2 - View west from Upper Terrace Road.

Photo 3 - View north accross harbor entrance.

Existing Conditions

Figure 4.1-1a

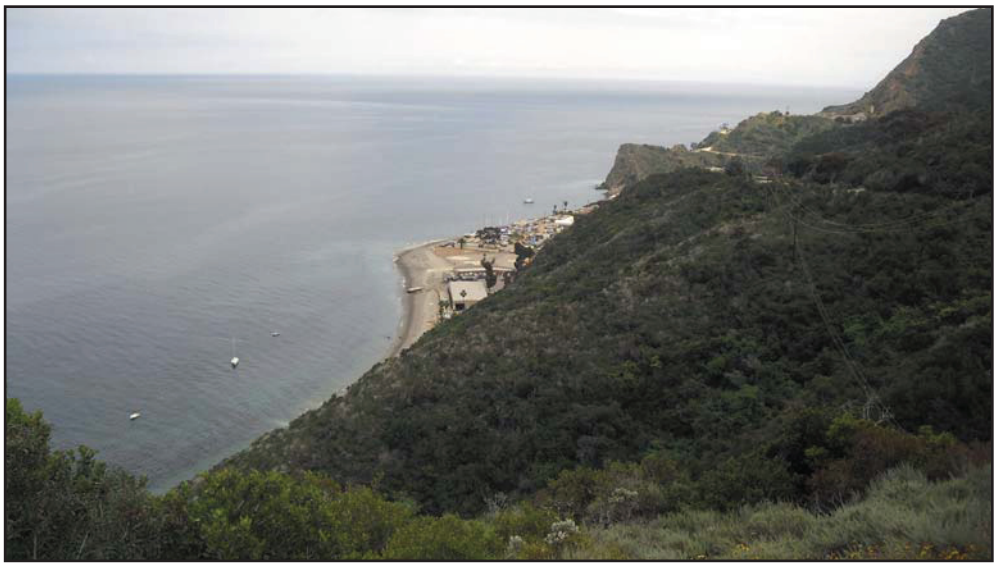


Photo 4 - View southeast toward Pebbly Beach.

Photo 5 - View of pedestrian walkway.

Photo 6 - View northeast from Mountains above Avalon.

Existing Conditions

Figure 4.1-1b

Photo 7 - View west toward Avalon Casino.

Photo 8 - View east from above Hamilton Cove.

Existing Conditions

Figure 4.1-1c

The Avalon waterfront draws both residents and visitors and is a focal point for recreational activity. It also is a major part of the City's appeal as an international tourist destination. Views of the Pacific Ocean, the harbor, and coastline, are available from the waterfront pathways (Pebbly Beach Road, Crescent Avenue, Casino Way, and St. Catherin Way), which extend south from the primary ferry or ship landing point and east to west from Lover's Cove to Descanso Beach. Most waterfront structures are located south of Crescent Avenue; however, notable exceptions include historic recreational facilities, such as historic Avalon Casino, wharf buildings on Avalon Pier, and other waterfront restaurants. As a result, largely unimpeded ocean views are available from Crescent Avenue and Casino Way.

Many City neighborhoods and public streets enjoy sweeping views of the downtown (City Center) and the waterfront. Hillside development has been historically limited to preserve these views from the natural hillside open space. Views from the City Center and surrounding areas are characterized by foreground views of the urban setting, including buildings, roads, sidewalks, landscaping and parking areas. Views for both motorists and pedestrians are primarily focused towards the Pacific Ocean to the north or the surrounding mountains to the south. The mix of uses, relatively narrow streets, and sidewalks promote pedestrian use, and residents and visitors alike experience these views while walking.

Ridgelines present throughout Avalon and the surrounding areas play a major role in defining the visual character, as they provide a picturesque California landscape covered with trees and native vegetation, while also providing habitat for wildlife. The City has designated a number of major ridgelines as significant aesthetic resources. Locations of the significant ridgelines present within the City limits are located on Figure 4.1-2. In addition to the ridgelines, a number of creeks and canyons traverse Avalon and its surrounding areas. Avalon has also recognized the aesthetic value of its creeks and drainages by protecting them as open space. Figure 4.1-3 shows some of Avalon's more notable scenic view locations.

c. Scenic Corridors and Roads. Scenic corridors can often provide an opportunity for the public to take advantage of the natural environment's aesthetic value. No formal scenic corridors have been designated within Avalon or the surrounding areas. However, major circulation corridors provide opportunities to view scenic resources within Avalon. The major circulation corridors include:

- Pebbly Beach Road East (Cabrillo Mole to Pebbly Beach) – As the route connecting the Cabrillo Mole boat landing with the center of the City, Pebbly Beach Road East is used by vehicles transporting both people and freight to and from the light industrial zone in Pebbly Beach. The roadway is 24 feet wide.

- Pebbly Beach Road West (Cabrillo Mole to Clarissa Avenue) – Pebbly Beach Road West provides vehicle access to passenger and cruise ships. The roadway is 30 feet wide.

- Clarissa Avenue – Provides the eastern portion of the truck route outside the pedestrian center of the City. The roadway is 30 feet wide.

- Beacon Street – Borders the central commercial pedestrian area of Avalon. The roadway is 25 feet wide.

- Sumner Avenue – Provides access from City Center south of Crescent Avenue to the Five Points Intersection, which provides access to Avalon Canyon Road. The roadway has a typical width of 25 feet, but expands to 30 feet between Beacon Street and the Five Points Intersection.

- Avalon Canyon Road – The single roadway into the interior island areas. The roadway is 30 feet wide.

- Metropole Avenue – Part of the loop of roads circling the central commercial pedestrian area of the City. The roadway has a typical width 40 feet wide between Crescent Avenue and Beacon Street, but narrows to 20 feet between Beacon Street and Tremont Street.

- St. Catherine Way – Primarily serves the Casino, Hamilton Cove, and Descanso Beach. These facilities are typically 24 feet wide.

d. Light and Glare. Due to the limited intensity/density of development within Avalon and the surrounding areas, the extent of ambient light and glare is less prevalent when compared to other cities throughout Los Angeles County. However, the City Center and surrounding neighborhoods are spread throughout the canyon floor and surrounding hillsides in an urbanized pattern. As a result, outdoor lighting is prevalent, especially within the areas developed with commercial, visitor serving, and residential uses. Potential sources of light and glare include building facades, streetlights, parking lot lighting, security and way finding lighting, and automobile headlights. The highest levels of existing light and glare are present in Avalon's City center, which contains the largest amount of commercial and residential development. Outside of the City center, light and glare levels quickly recede and thus provide greater views of the night sky.

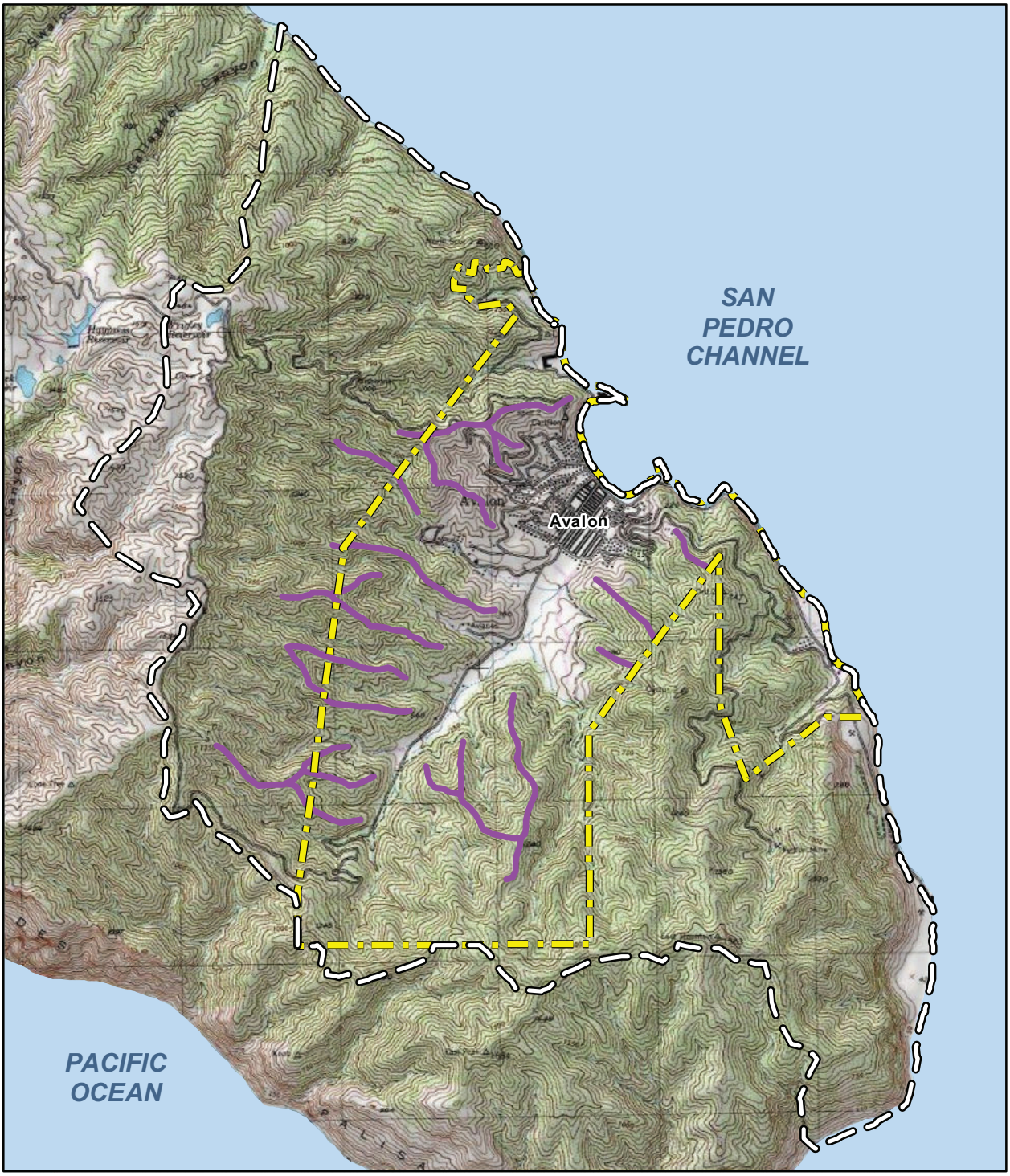
e. Regulatory Setting. The City's existing General Plan, Local Coastal Plan, and Municipal Code provide the framework for evaluating potential aesthetic impacts and preserving its visual resources. From a policy perspective, the existing 1978 General Plan and the existing Local Coastal Plan contain goals and policies to protect and enhance visual resources.

1978 General Plan. The City has implemented a number of policies and recommendations that address aesthetic resources. These policies have been largely influenced by the Local Coastal Plan and the applicable provisions of the Coastal Act, which specifically address coastal visual resources and special communities. The existing overarching policies that have protected visual resources include:

- The scenic visual qualities of coastal areas shall be considered and protected as a resource of public importance.
- New development shall be sited and designed to protect views to and along the ocean and scenic coastal areas.
- Special communities and neighborhoods with unique characteristics shall be protected.

Using these policies to help guide urban development and open space preservation within Avalon has contributed to the charm and peaceful village atmosphere experienced today. Policies that have maintained Avalon's scenic viewsheds over time include:

1. Establish pedestrian walkways to scenic vista points along with aesthetically pleasing identification.
2. Continue to preserve the scale and charm of existing development through the adoption of design criteria and height and bulk restrictions.
3. Allow no development along the shoreline which in any way restricts the view of the water from the adjacent roadway and pedestrian walk.
4. Plant trees and landscape long roadways to enhance visual appeal and mitigate the transition from pavement to dwellings.
5. Identify scenic roadways for preservation of landscapes.



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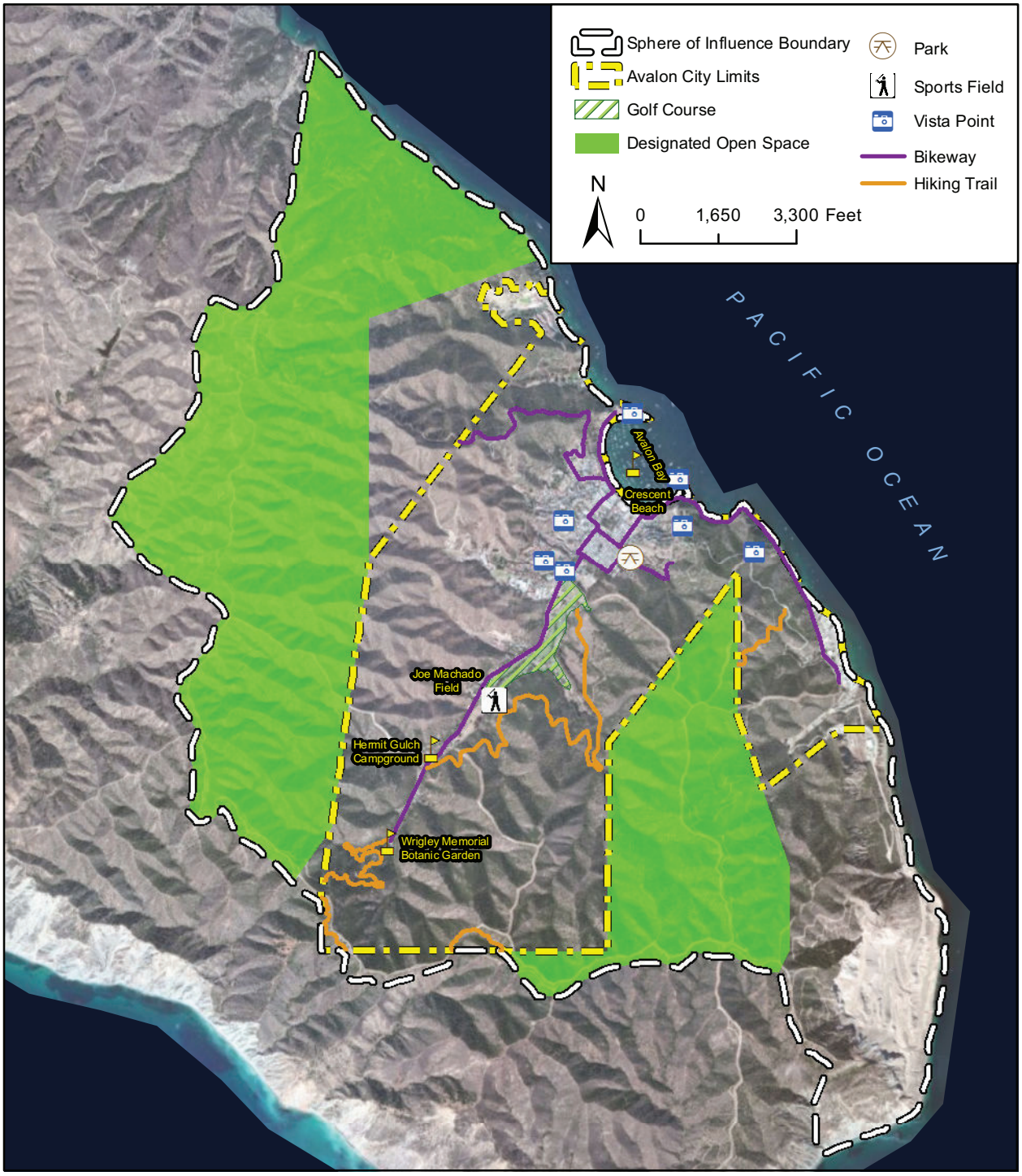
Avalon City Limits
Sphere of Influence Boundary
Significant Ridgeline

0 1,600 3,200
Feet

N

Significant Ridgelines

Figure 4.1- 2



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Notable Scenic View Locations

Figure 4.1- 3

California Coastal Act/Local Coastal Plan. The Avalon Local Coastal Plan and the Santa Catalina Island Local Coastal Plan were adopted pursuant to the California Coastal Act. These documents contain policies that promote the preservation of scenic resources.

The Avalon Local Coastal Plan requires the siting and design of new development to preserve and protect scenic resources. In addition, the plan identifies a number of policies related to the preservation of visual resources. The most notable include:

1. Visual Resource Policy 3: Continue to preserve the scale and charm of existing development through adoption of design criteria and height and bulk restrictions.
2. Visual Resource Policy 4: Allow no development along the shoreline which in any way restricts the view of the water from the adjacent pedestrian walk.

The Santa Catalina Island LCP also identifies a priority list of resources that should be considered for viewshed protection. These resources include:

1. Land/water interface, including promontories, coastal caves, offshore islets and rocks, headlands, and sea mammal rookeries
2. Views of ridgelines from water
3. Distinctive geologic features
4. Native trees and vegetation
5. Native and introduced wildlife, especially bison
6. Island Streams and riparian habitat

Development Code. Title 8 of the Avalon Municipal Code contains building regulations, while Titles 9 and 10 make up the City's Zoning Ordinance. The primary purpose of the building regulations is to establish the standards for building construction and maintenance in the City. The primary purpose of the Zoning Ordinance is to "encourage, classify, designate, regulate, restrict, and segregate the highest and best location and use of buildings, structures, and land to serve the needs of residences, commerce, industry, and other purposes in appropriate places."

4.1.2 Impact Analysis

a. Methodology and Significance Thresholds. The assessment of aesthetic impacts involves qualitative analysis that is inherently subjective in nature. Different viewers react to viewsheds and aesthetic conditions differently. Nevertheless, this evaluation measures the existing visual environment against the proposed action and determines the nature and extent of the anticipated change. The existing Avalon General Plan (approved in 1978), the proposed 2030 GP/LCP, photographs of the project area, and topographic information were reviewed to complete this analysis.

An impact is considered significant if physical changes that could be facilitated by the 2030 GP/LCP would:

- *Have a substantial adverse effect on a scenic vista?*
- *Substantially damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*
- *Substantially degrade the existing visual character or quality of the site and its surroundings?*

- *Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area or create shadows that would adversely affect shadow sensitive uses (such as coastal resources)?*

As this is a Program level EIR, the following analysis is intended to be used as a regulatory tool. Site specific aesthetic analysis was not conducted, as specific development proposals are not identified in the 2030 GP/LCP. As specific development projects are proposed in the future, analysis of aesthetic impacts will be completed on a case-by-case basis.

b. Project Impacts and Mitigation Measures.

Impact AES-1 Development in conformance with the 2030 GP/LCP would not substantially damage scenic resources, have a substantial adverse effect on a scenic vista, or substantially degrade the existing visual character or quality of the City or its surroundings. Adherence to the policies included in the 2030 GP/LCP would minimize potential impacts to scenic resources. Therefore, potential impacts would be Class III, *less than significant*.

Currently, there are no officially designated scenic highways in the City of Avalon or the immediately surrounding unincorporated areas within Avalon's identified Sphere of Influence. Therefore, no impacts to scenic highways would occur.

The urban fabric of Avalon is relatively compact, with approximately 80-90 acres of existing development already located within the valley floor and the immediately surrounding hillsides, with just over 700 additional acres surrounding the built environment as open space. This existing land use pattern is well established and therefore it is not anticipated to change drastically over time. Avalon's vision for managed growth under the proposed 2030 GP/LCP is centered primarily upon an infill development strategy, which would focus more intense and compact development within the already urbanized City Center in lieu of allowing significant expansion of development opportunities outward into Avalon's hillsides, natural areas and open spaces. The 2030 GP/LCP Land Use Element reinforces this objective by establishing the following overall goals and policies:

<u>Land Use Element Goals</u>

- Facilitate well-designed, mixed-use "infill" development within the City Center and the surrounding uses.
- Maintain the City Center as the original commercial hub of Avalon that provides a variety of services for both residents and visitors, including daytime/waterfront oriented activities and evening amenities.
- Establish diverse housing options that are affordable for residents and located in close proximity to jobs and services.

<u>Land Use Element Policies</u>

- Concentrate high intensity commercial and "mixed-use" type development in the City Center as a means to encourage revitalization while also avoiding more intense development at the City's edge.
- Encourage the clustering of development with Low Density Residential and/or Resort Recreational uses as a means of preserving significant environmental features.

The potential future development opportunities envisioned within the 2030 GP/LCP and the land uses proposed as part of the 2030 GP/LCP Land Use Element have the potential to impact Avalon's scenic resources and overall visual quality (see Figure 2-4 in Section 2.0, *Project Description*).

Although it is Avalon's desire to promote an infill development strategy as part of the 2030 GP/LCP, this strategy could potentially allow increases in building height to accommodate mixed-use development types. The mixture of commercial and visitor serving uses on the ground floor with residential uses above along with potential increases in building heights have the potential to impact views of the waterfront from Avalon Bay and the City Center, views from the pedestrian/vehicle circulation routes, and views of the surrounding ridgelines from the City Center. Increased building heights could also impact views of the Pacific Ocean from the surrounding residential properties, and from vista points surrounding resort/recreational uses. To help reduce potential impacts, the 2030 GP/LCP envisions only minor increases in building heights and increased building heights only in areas set back substantially from the waterfront. The increased setbacks would help retain the current site lines to the beachfront, intermediate ridges, and the island divide ridges. The 2030 Land Use Element also envisions concentrating more intense mixed use development along "corridors of intensity", including Clarissa, Catalina, Sumner, and Metropole (Land Use Policy NO. II-15). This would help to preserve views into and out of the City Center. Therefore, impacts would be Class III, less than significant.

The 2030 GP/LCP proposes to change the existing land use designations within Avalon's existing incorporated boundaries and within three expansion areas. These changes would potentially impact scenic resources and Avalon's overall visual character. The changes include:

1. The creation of a Resort Recreational Low-Density (RR-LD) designation in the areas surrounding the Resort Recreational High-Density (RR-HD) designation.
2. The creation of the Pebbly Beach Specific Plan Area (PB-SP) designation within and adjacent to the southeast portion of the City (Annexation Area 1 and 3).
3. The creation of a RR-LD designation in Annexation Area No. 2.
4. The creation of the Lover's Cove Specific Plan Overlay District (LC-SP) designation in the northern portion of the City just east of Avalon harbor

The proposed LD-R and RR-LD/RR-HD land use designations envision low density residential and resort/visitor serving development types in the hillside areas above the valley floor. The hillside areas are highly visible and predominantly comprised of steep slopes with limited areas to flat, unconstrained building areas. Therefore, project development would likely require substantial site grading, slope stabilization, road construction, fire clearance, and other infrastructure development, which could alter topography, scar the hillsides, and remove natural biological resources. Therefore, future development envisioned in the 2030 GP/LCP has the potential to adversely affect the visual character of the hillsides and ridgelines. To offset this potential impact, the 2030 GP/LCP Land Use Element requires new development to comply with a cluster development policy (Policy II-19). This policy encourages development projects to avoid:

- Developing on steep slopes, hilltops, and ridges where development would be highly visible;
  Developing environmentally sensitive habitats, ridgelines,

Therefore, future residential and resort recreational development that is designed in conformance with Land Use Element Policy II-19 and the additional General Plan policies listed below would not adversely affect scenic resources or the Avalon's visual character. Impacts would be Class III, less than significant.

The 2030 GP/LCP proposes annexation of three specific areas adjacent to Avalon's existing city limits. Figure 2-4 in Section 2.0, *Project Description*, identifies the location of each proposed annexation area. These areas merit inclusion into the City because they represent a logical extension of city boundaries given the existing pattern of development and/or the need to expand public services. In addition, annexation would allow Avalon to protect the scenic viewsheds, protect water quality, expand tourism and coastal access, and develop a more distributed array of infrastructure. Annexation Area No.1 would primarily include the coastal ridgelines areas. The proposed land use designation for the area is Pebbly Beach Specific Plan, but the area currently includes the City dump and the quarry. Over time, development within this area would help meet infrastructure expansion needs and would also permit the gradual conversion of undeveloped land to visitor serving and commercial uses. Annexation Area No. 2 would include the coastal and interior ridgeline areas northwest of Avalon's northern boundary. Annexation Area No. 2 would include Resort Recreational – Low Density (RR-LD) and Open Space (OS) land use designations. The RR-LD designation would permit the gradual expansion of the Hamilton Cove and Descanso Beach areas and it would provide expanded access to Hamilton cove. The proposed OS designation would preserve some of Avalon's most significant scenic vista points. Annexation Area No. 3 is proposed directly adjacent to Annexation Area No. 1 and would include interior ridgeline areas designated as Open Space. Annexation of this area would preserve natural watershed areas and prominent ridgelines.

Avalon's scenic character is defined largely by striking views of the natural hillsides within proposed annexation areas. Therefore, potential future development within the Pebbly Beach Specific Plan (Annexation Area No.1) and the RR-LD land use designation (Annexation No. 2) have the potential to adversely impact Avalon's scenic resources and its visual character. Potentially significant impacts would result from future development activities consisting of grading and vegetation clearance to establish suitable building pads, access roads, and other infrastructure. To offset potential impacts cause by potential future development in these areas, the 2030 GP/LCP Land Use Element proposes the following implementation measures:

- Undertake studies (such as a Municipal Service Review) to determine the feasibility of expanding the City's Sphere of Influence. The Sphere of Influence expansion plan shall be driven by viewshed, watershed protection, and infrastructure expansion opportunities.
- Collaborate with the Santa Catalina Island Company regarding the annexation of Expansion Area No. 1. The majority of this area is owned by the Santa Catalina Island Company and would also incorporate the City dump and quarry for future infrastructure opportunities. The appropriate land use designation for this area would be Light Industrial with the potential to transition over time to more visitor-serving uses as part as part of a Pebbly Beach Specific Plan Overlay District.
- Collaborate with the Santa Catalina Island Company regarding the annexation of Expansion Area No. 2. This area contains some of Avalon's most significant viewsheds. The lower lying areas (Descanso Beach and Hamilton Cover) also could provide additional opportunities for resort/recreational uses. The appropriate land use designation for this area would be Resort Recreational-Low Density.
- Collaborate with the Catalina Island Conservancy regarding the annexation of Expansion Area. No. 3. This area contains undisturbed open space. Incorporation of this area into the City would allow greater coordination with respect to watershed protection, trail development and sustainable infrastructure development. The appropriate land use designation for this area would be Open Space.

Conformance with the implementation measures listed above would help ensure that future development within the proposed annexation areas would not adversely affect scenic resources or Avalon's visual character. Therefore, impacts would be Class III, less than significant.

Mitigation Measures. None required as implementation of 2030 GP/LCP policies would address possible impacts to scenic resources.

Significance After Mitigation. Impacts would be Class III, *less than significant*, with implementation of proposed goals and policies of the 2030 GP/LCP.

In addition, the specific policies listed below have been included within the Land Use, Open Space, and Conservation Elements of the 2030 GP/LCP and would further ensure that impacts on Avalon's scenic resources and its visual character would be Class III, *less than significant*.

Land Use Element Policies

Policy II-2: *Preserve and strengthen the visual and physical connections between the waterfront, City Center, and neighborhoods surrounding the City Center, middle canyon, upper canyon and open spaces.*

Policy II-5: *Require buildings to be oriented toward and actively engage the public realm through such features as location, incorporation of windows, avoidance of blank walls, and articulated building elevations fronting sidewalks and public spaces. Parking policy should encourage use of alternate forms of transportation other than personal vehicles.*

Policy II-6 *Encourage the retention of existing structures and promote their adaptive reuse with "green" building technologies in accordance with a green building standard, such as Leadership in Energy and Environmental Design (LEED™), or other equivalent.*

Policy II-9 *Encourage infill of the City Center area and where appropriate, increase the intensity of development on vacant and underutilized properties, in lieu of expanded development outward into Avalon's hillsides, natural areas and open space.*

Policy II-10 *Concentrate high intensity commercial and "mixed-use" type development in the City Center as a means to encourage revitalization while also avoiding more intense development at the City's edge.*

Policy II-12 *Require infill development to incorporate design elements with buffers and transitions in density, scale, and mass to assure compatibility with adjacent uses.*

Policy II-18 *Wherever possible, preserve vistas of the community for public use areas.*

Policy II-19 *Encourage the clustering of development with Low Density Residential and/or Resort Recreational uses as a means of preserving significant environmental features. Clustered development must meet the following criteria:*

- *The overall density of the project area shall not exceed the maximum specified in **Table II-1**, calculated as if there were no clustering;*
- *The resulting project will not require a greater level of public services and facilities than an equivalent non-clustered project would require;*
- *The result of clustering development will yield a more desirable and environmentally sensitive development plan, define usable open space areas for the enjoyment of Avalon residents and visitors, and preserve significant environmental features; and*
- *The resulting development after clustering will be compatible with the development's natural setting and adjacent residential neighborhoods, if any.*

Policy II-26 *Pursue annexation of key areas surrounding the current City limits in order to facilitate local planning objectives, including the preservation of natural resources and expansion of recreational opportunities and infrastructure. Specific annexations to be considered include:*

- *The landfill and quarry area (Parcel # 7480-045-033) south of the Pebbly Beach area. Within this area (Expansion Area No. 1) to facilitate light industrial uses with the potential to transition over time to more visitor-serving uses as part as part of a Pebbly Beach Specific Plan Overlay District*
- *Catalina Island Company land (various parcels) between Hamilton Cove and the Divide Road (Expansion Area No. 2) to facilitate Resort/Recreational land uses*
- *Catalina Island Conservancy land (Parcels #7480-045-013 and #7480-045-014) located between the City limits separating Pebbly Beach and the eastern boundary of Avalon Canyon (Expansion Area No. 3) for more open space uses within the City limits*

Policy II-27 *Require annexation proposals to demonstrate a positive relationship between City facility and service costs and the revenues that will be generated subsequent to annexation with the exception of areas to be annexed for the purpose of parks, schools, open space, and other public facilities.*

Open Space Element Policies

Policy III-1 *Protect open space and other properties that contain or protect significant sensitive resources, such as special-status plant and wildlife species know to occur in or near the City, natural habitats, and habitat linkages.*

Policy III-2 *Maintain the natural topographic characteristics of hillside areas, ocean cliffs, canyons, beaches, and major rock outcroppings.*

Policy III-3 *Protect open space that contains significant historic, cultural and archaeological resources.*

Policy III-10 *Protect coastal areas suited for water-oriented recreational activities as necessary.*

Policy III-11 *Preserve open space areas needed to provide cultural, historical, and educational opportunities for the City's and Santa Catalina Island's residents and visitors.*

Policy III-12 *All beach areas should be preserved as a scenic and recreational asset.*

Policy III-15 *Preserve sensitive lands, including permanent bodies of water, floodways, beaches/shorelines and slopes over 35 percent as open space.*

Policy III-16 *The undevelopable lands around Avalon should be retained in their natural beauty as an open space buffer zone.*

Policy III-20 *Preserve views of 18 prominent ridgelines in Upper Avalon Canyon ~~by restricting development within 200 horizontal feet of the ridgelines~~, as depicted on Figure III-2 of the 2030 General Plan/Local Coastal Plan.*

Conservation Element Policies

Policy IV-1 *Ensure that new developments, including roads, maintain the biotic habitat value of riparian areas, oak woodlands, habitat linkages, and other sensitive biological habitats.*

Policy IV-3 *Preserve the integrity of the riparian habitat areas, creek corridors, and other drainages that support biological resources and contribute to the overall health of the watershed areas through the preservation and restoration of native plants and the removal of invasive, exotic, and nonnative species.*

Policy IV-4 *Preserve existing mature indigenous trees, unless they are detrimental to public health and safety.*

Policy IV-5 *Promote the planting of additional trees in developed locations. Plantings should include replacement of trees that are, or have been, removed and new trees in locations where none are currently present.*

Policy IV-10 *Protect marine resources (shorelines, lagoons, bays, harbors, sea cliffs, etc.) that have scenic, recreational, educational, or ecological value.*

Policy IV-38 *Prevent the loss or compromise of significant archaeological, historical, and other cultural resources and landmarks located within the City.*

Policy IV-40 *Encourage the rehabilitation and upkeep of structures identified as valuable to the City's significant architectural, historical, and cultural buildings and listed in the City's historic register.*

Impact AES-2 **Development that could be facilitated by the 2030 GP/LCP would introduce new sources of light and glare and shadows. However, adherence to policies contained within the City's 2030 General Plan/Local Coastal Plan and development standards included in the City's Municipal Code would minimize light and glare and shadow impacts. Therefore, the potential impacts would be Class III, *less than significant*.**

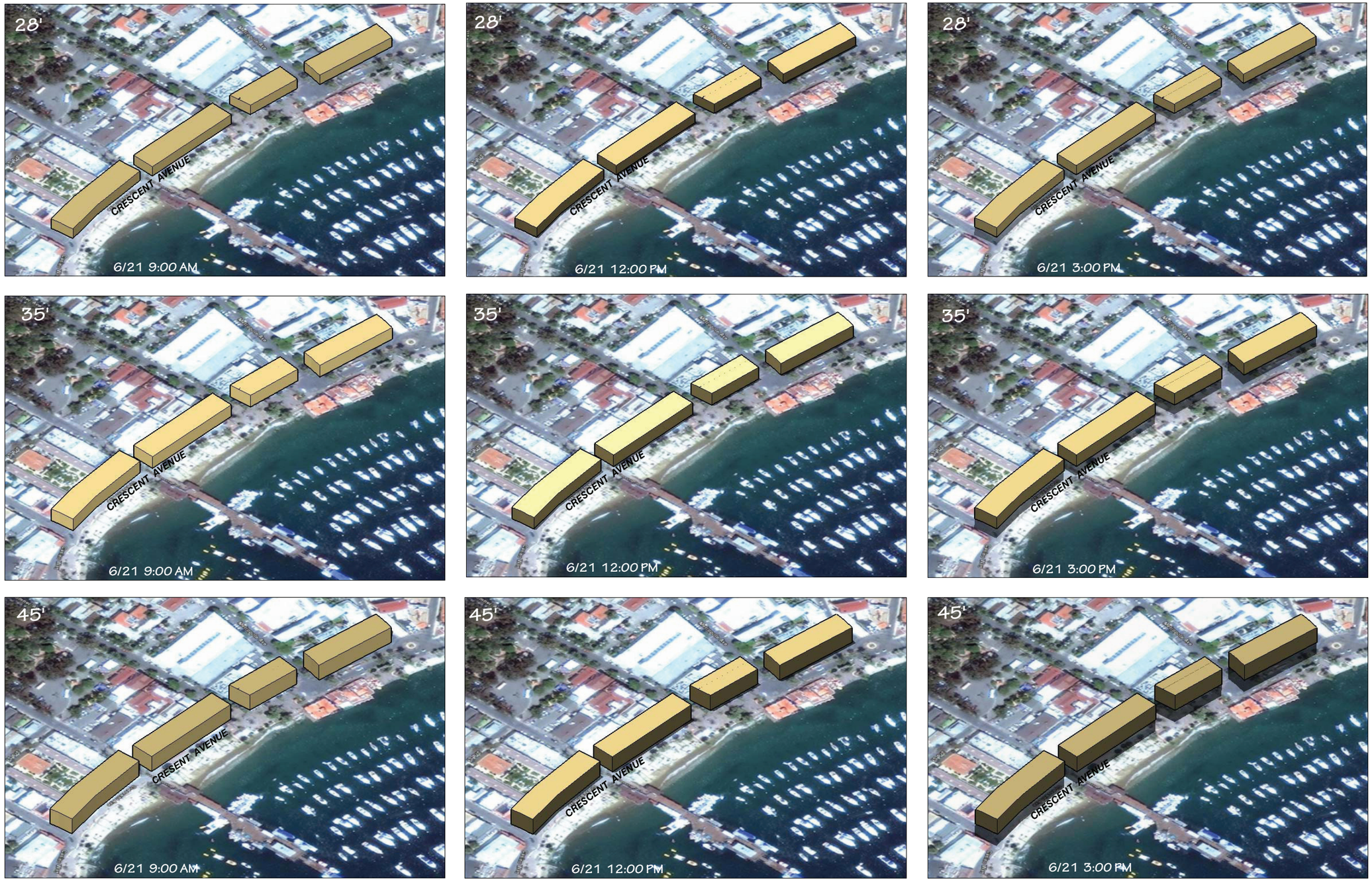
The potential future development of new or expanded structures and public facilities facilitated by the 2030 GP/LCP could increase glare and increase the ambient nighttime lighting throughout the City. Increased glare could come from new development incorporating reflective exterior building materials, roofing materials, solar panels, and windows reflecting sunlight. Increased lighting could come from streetlights, parking lot/parking structure lights, and signage on business establishments. Within the City Center, the light and/or glare associated

with new development would be less perceptible, as this area contains the most intense development and therefore light and glare is already part of the area's visual character. Nevertheless, potential future mixed-use development envisioned within the City Center could create new sources of light and glare, especially on the upper stories of new buildings or in developments that include new parking lots/structures or illuminated signage. Excessive outdoor lighting could also impact the darker portions of Avalon, including the waterfront and the surrounding hillsides, which could impact the public enjoyment of the night sky. However, the City would continue to implement the applicable provisions of the municipal code (e.g. Section 9-7.607 – Development of Parking Facilities, Sec. 9-7.724 – Direct Lighting, and Article 7 – Signs) as part of future development proposals. Where necessary, site specific photometric studies would be undertaken as part of future development proposals to determine the extent of light and glare impacts on neighboring uses. In addition, the 2030 GP/LCP also includes policies that promote the reduction of impacts from light and glare (Policies II-12 and II-15). Therefore, impacts would be Class III, less than significant.

The waterfront area of Avalon is one of the City's primary tourist attractions and is also one of the City's most scenic environments. Therefore, it is imperative that future multi-story development envisioned in the 2030 GP/LCP is designed in way that avoids the creation of excessive shadows that could impact the public enjoyment and visual character of the waterfront. Figures 4.1-4(a) and 4.1-4(b) show the results of shadow modeling completed for multi-story buildings located near the waterfront. The modeling confirms that only incremental increases in shadows would be experienced if building heights were expanded from 28 feet to 35. The modeling also confirmed that building heights up to 45 feet would only have incremental increases in waterfront shadows. However, the analysis assumed that 45 foot tall building elevations would be set back approximately 150 feet from the high tide line and therefore maintaining adequate setbacks for multi-story development projects is considered essential to preserve the public enjoyment of the waterfront and to minimize shadow impacts. As discussed above, the 2030 GP/LCP Land Use Element proposes implementation measures and policies designed to help maintain Avalon's island lifestyle and increase access and visitor serving uses near the coastline. In addition, it requires new development to include design elements with buffers and transitions in density, scale, and mass to assure compatibility with adjacent uses. Therefore, shadow impacts would be Class III, less than significant.

Mitigation Measures. None required as implementation of 2030 GP/LCP policies and existing municipal code regulations would address possible light and glare impacts and shadow impacts.

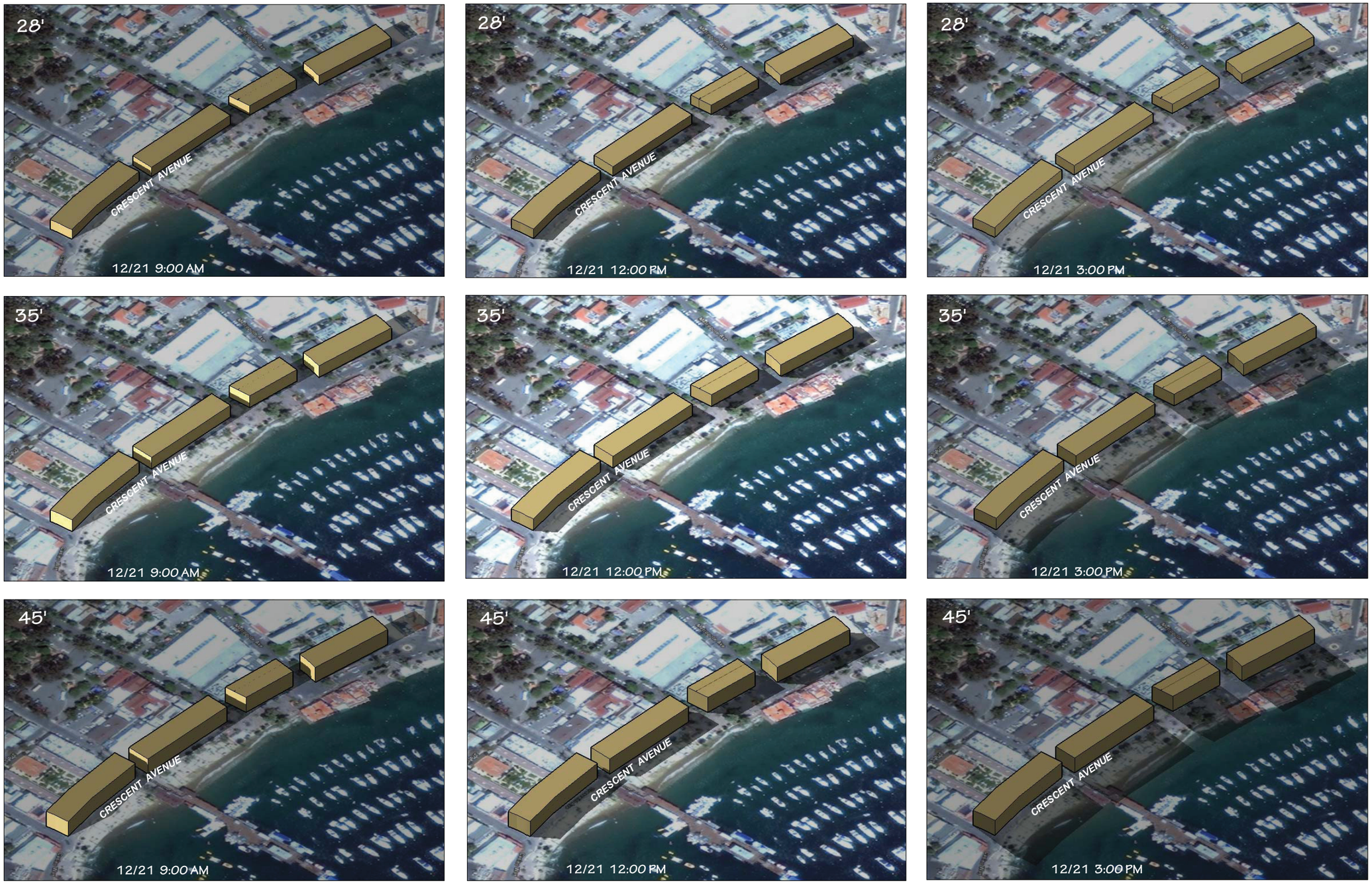
Significance After Mitigation. Impacts would be less than significant without mitigation.



Not to Scale N

Summer Shadow Impacts along Crescent Avenue

Figure 4.1-4a



Not to Scale N

Winter Shadow Impacts Along Crescent Avenue

Figure 4.1-4b

4.2 AIR QUALITY

This section analyzes impacts to local and regional air quality. Impacts to air quality associated with population growth and associated growth in vehicle traffic and energy consumption are discussed. Greenhouse gases and global climate change are discussed in Section 4.6, *Greenhouse Gas Emissions/Climate Change*.

4.2.1 Setting

a. Local Climate and Meteorology. The Avalon plan area is part of the South Coast Air Basin (SCAB) which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties and all of Orange County. Avalon has a Mediterranean climate characterized by warm, dry summers and cool, most winters. The semi-permanent high-pressure system west of the Pacific coast strongly influences Avalon and California's weather. It creates sunny skies throughout the summer and influences the pathway and occurrence of low-pressure weather systems that bring rainfall to the area during October through April. As a result, wintertime temperatures in Avalon are generally mild, while summers are warm and dry. The predominant wind direction is from northwest. These predominant wind patterns are occasionally broken during the winter by storms coming from the north and northwest and by episodic Santa Ana winds, which are strong northerly to northeasterly winds that originate from high-pressure areas centered over the desert of the Great Basin. These winds are usually warm, very dry, and often full of dust. They are particularly strong over the Pacific Ocean and can cause large waves and strong winds around Santa Catalina Island.

Summer high temperatures in Avalon average from the high 60s to low 70s and low temperatures average in the high 50s to low 60s. Winter high temperatures average in the low 60s and average low temperatures are in the high 40s. Average annual rainfall in Avalon averages approximately 12 inches, nearly all of which occurs between October and April.

b. Local Regulatory Framework. The federal and state governments have been empowered by the federal and state Clean Air Acts to regulate the emission of airborne pollutants and have established ambient air quality standards for the protection of public health. The United States Environmental Protection Agency (USEPA) is the federal agency designated to administer air quality regulation, while the Air Resources Board (ARB) is the state equivalent in the California Environmental Protection Agency. Local control in air quality management is provided by the ARB through multi-county and county-level Air Pollution Control Districts (APCDs). The ARB establishes statewide air quality standards and is responsible for the control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. The ARB has established 15 air basins statewide. As noted above, Avalon is located in the SCAB, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD), a multi-county APCD.

Federal and state standards have been established for ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulates less than 10 and 2.5 microns in diameter (PM_{10} and $PM_{2.5}$), and lead (Pb) (refer to Table 4.2-1). The local air quality management agency is required to monitor air pollutant levels to assure that air quality standards are met and, in the event they are not, to develop strategies to meet these standards. Depending on whether the standards are met or exceeded, the local air basin is classified as in "attainment" or "nonattainment." The SCAB is a non-attainment area for the federal and state standards for ozone, PM_{10}, and $PM_{2.5}$. Table 4.2-1 illustrates the current Federal and State Ambient Air Quality Standards.

Table 4.2-1
Current Federal and State Ambient Air Quality Standards

Pollutant	Federal Standard	California Standard
Ozone	0.075 ppm (8-hr avg)	0.07 ppm (8-hr avg) 0.09 ppm (1-hr avg)
Carbon Monoxide	9 ppm (8-hr avg) 35 ppm (1-hr avg)	9 ppm (8-hr avg) 20 ppm (1-hr avg)
Nitrogen Dioxide	0.053 ppm (annual avg) 100 ppb (1-hr avg)	0.03 ppm (annual avg) 0.18 ppm (1-hr avg)
Sulfur Dioxide	75 ppb (1-hr avg)	0.25 ppm (1-hr avg) 0.04 ppm (24-hr avg)
Lead	0.15 $\mu g/m^3$ (3-month avg)	1.5 $\mu g/m^3$ (30-day avg)
Particulate Matter (PM_{10})	150 $\mu g/m^3$ (24-hr avg)	50 $\mu g/m^3$ (24-hr avg) 20 $\mu g/m^3$ (annual avg)
Particulate Matter ($PM_{2.5}$)	15 $\mu g/m^3$ (annual avg) 35 $\mu g/m^3$ (24-hr avg)	12 $\mu g/m^3$ (annual avg)

ppm= parts per million, ppb=parts per billion
$\mu g/m^3$ = micrograms per cubic meter
Source: Air Resources Board, http://www.arb.ca.gov/research/aaqs/aaqs2.pdf, June 2012.

Non-attainment status within the SCAB is a result of several factors, primarily the naturally adverse meteorological conditions that limit the dispersion and diffusion of pollutants (surface and subsidence inversions), the limited capacity of the local airshed to eliminate pollutants from the air, and the number, type, and density of emission sources within the SCAB. The potential health effects of pollutants for which the SCAB is in nonattainment are described below.

Ozone. Ozone is produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NO_x) and reactive organic gases (ROG). Nitrogen oxides are formed during the combustion of fuels, while reactive organic gases are formed during combustion and evaporation of organic solvents. Because ozone requires sunlight to form, it mostly occurs in serious concentrations between the months of May and October. Ozone is pungent, colorless toxic gases with direct health effects on humans including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to ozone include children, the elderly, persons with respiratory disorders, and people who exercise strenuously outdoors.

Suspended Particulates. PM_{10} is small particulate matter measuring no more than 10 microns in diameter, while $PM_{2.5}$ is fine particulate matter measuring no more than 2.5 microns in diameter. Both PM_{10} and $PM_{2.5}$ are comprised mostly of dust particles, nitrates and sulfates. The characteristics, sources, and potential health effects associated with the small particulates (those between 2.5 and 10 microns in diameter) and fine particulates ($PM_{2.5}$) can be very different. The small particulates generally come from windblown dust and dust kicked up from mobile sources. The fine particulates are generally associated with combustion processes as well as being formed in the atmosphere as a secondary pollutant through chemical reactions. PM_{10} is a by-product of fuel combustion and wind erosion of soil and unpaved roads, and is directly emitted into the atmosphere through these processes. PM_{10} is also created in the atmosphere through chemical reactions. Fine particulate matter poses a serious health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. More than half of the fine particulate matter that is inhaled into the lungs remains there, which can cause permanent lung damage. These materials can damage health by interfering with the

body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

An important fraction of the particulate matter emission inventory is that formed by diesel engine fuel combustion. Particulates in diesel emissions are very small and readily respirable. The particles have hundreds of chemicals adsorbed onto their surfaces, including many known or suspected mutagens or carcinogens. Compared to other air toxics the ARB had identified and controlled, diesel PM emissions are estimated to be responsible for about 70% of the total ambient air toxics risk. In addition to these general risks, diesel PM can also be responsible for elevated localized or near-source exposures ("hot spots"). Depending on the activity and nearness to receptors, these potential risks can range from small to 1,500 per million or more (ARB, October 2000). Risk characterization scenarios have been conducted by the ARB staff to determine the potential excess cancer risks involved due to the location of individuals near to various sources of diesel engine emissions, ranging from school buses to high volume freeways.

c. Ambient Air Quality in Avalon. The SCAQMD monitors air pollutant levels to assure that the air quality standards are met, and if they are not met, to also develop strategies to meet the standards. Depending on whether or not the standards are met or exceeded, the air basin is classified as being in "attainment" or as "nonattainment." As noted above, the SCAB is a non-attainment area for both the federal and state standards for ozone, PM_{10}, and $PM_{2.5}$.

Air quality in Avalon is generally good. The City regulates the number of vehicles permitted within the City limits and most residents drive small vehicles or autoettes. Common generators of pollutants, such as vehicle emissions, construction, and industrial operations, are limited within the City and the island as a whole. Therefore, activities that exceed SCAQMD thresholds are relatively infrequent. The SCAQMD does not operate an air quality monitoring station in or near Avalon.

d. Air Quality Management. Under state law, the SCAQMD is required to prepare an overall plan for air quality improvement for the South Coast Air Basin, known as the Air Quality Management Plan (AQMP). AQMPs are required to be updated every three years. Each iteration of the plan is an update of the previous plan and has a 20-year horizon. The AQMP was updated in 2007 from its previous update in 2003. The 2007 AQMP was adopted by the SCAQMD on June 1, 2007. SCAQMD is in the process of developing a 2012 AQMP (a Draft version was released in November 2012 but has not yet been adopted by the SCAQMD).

The 2007 AQMP was prepared to ensure continued progress towards clean air and comply with state and federal requirements. This AQMP builds upon the approaches taken in the 2003 AQMP for the South Coast Air Basin for the attainment of the federal ozone air quality standard. This Plan highlights the significant amount of reductions needed and the urgent need to identify additional strategies, especially in the area of mobile sources, to meet all federal criteria pollutant standards within the timeframes allowed under the Clean Air Act. New standards allow for a longer compliance schedule for federal fine particulates and 8-hour ozone but with more stringent PM10 and 1-hour ozone standards. The 2007 AQMP is aimed at attainment demonstration of the federal PM2.5 standards through a more focused control of sulfur oxides (SOx), directly-emitted PM2.5, and nitrogen oxides (NOx) supplemented with volatile organic compounds (VOC) by 2015. The 8-hour ozone control strategy builds upon the PM2.5 strategy, augmented with additional NOx and VOC reductions to meet the standard by 2024 assuming a bump-up is obtained. Further, the 2007 AQMP aims to reduce mobile source emissions by discussing measures that would address the remaining air quality standard exceedances in the region.

e. Sensitive Receptors. Ambient air quality standards have been established to represent the levels of air quality considered sufficient, with an adequate margin of safety, to protect public health and welfare. They are designed to protect that segment of the public most susceptible to respiratory distress, such as children under 14; the elderly over 65; persons engaged in strenuous work or exercise; and people with cardiovascular and chronic respiratory diseases. The majority of sensitive receptor locations are therefore schools and hospitals. The Catalina Island Medical Center is located at 100 Falls Canyon Road. Avalon Schools (K-12) is located at 200 Falls Canyon Road.

4.2.2 Impact Analysis

a. Methodology and Significance Thresholds. The analysis of the 2030 GP/LCP's air quality impacts follows the guidance and methodologies recommended in the SCAQMD *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning* (2005) as well as Appendix G of the State CEQA Guidelines.

The SCAQMD has adopted numeric significance thresholds for individual development projects. However, use of these thresholds would not be appropriate for a General Plan since they are for individual projects while this EIR considers the cumulative effect of all individual projects within the City. Therefore, the criteria used to determine the significance of impacts are taken from the checklist contained in Appendix G of the State CEQA Guidelines. According to the CEQA Guidelines, General Plan implementation would result in a significant impact to air quality if it would:

- *Conflict with or obstruct implementation of the applicable air quality plan*
- *Violate any air quality standard or contribute substantially to an existing or project air quality violation*
- *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed qualitative thresholds for ozone precursors)*
- *Expose sensitive receptors to substantial pollutant concentrations*
- *Create objectionable odors affecting a substantial number of people*

Per the SCAQMD *CEQA Air Quality Handbook* (1993), the following indicators address the 2030 GP/LCP's consistency with the 2007 AQMP:

- *Whether the project would result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the 2007 AQMP.*
- *Whether the project would exceed the 2007 AQMP's assumptions for 2030 or yearly increments based on the year of the project buildout.*

b. Project Impacts and Mitigation Measures.

Impact AQ-1 Implementation of the 2030 GP/LCP would be consistent with the 2007 AQMP growth forecast and air quality control measures. Impacts would be Class III, *less than significant.*

The discussions that follow address consistency of the 2030 GP/LCP with the growth and emissions forecasts upon which the AQMP is based and with applicable AQMP control measures.

Consistency with AQMP Growth Forecast. Vehicle use, energy consumption, and associated air pollutant emissions are directly related to population growth. A project may be inconsistent with the AQMP if it would generate population, housing or employment growth exceeding the forecasts used in the development of the AQMP. According to Southern California Association of Governments growth forecasts, the City of Avalon will have a resident population of 5,100 in 2035. Development facilitated by the 2030 GP/LCP would add an estimated 1,041 new permanent residents, bringing the citywide resident population from 3,780 to 4,821 by the year 2030. This growth projection for the year 2030 would not exceed SCAG's forecast population of 5,100 for the year 2035. (see Section 4.11, *Population and Housing,* for further detail). Therefore the 2030 GP/LCP is consistent with SCAG projections.

Consistency with AQMP Control Measures. Consistency with the 2007 AQMP is also a function of consistency with applicable AQMP control measures. The AQMP includes specific control measures to reduce air pollutant emissions in order meet Federal and State air quality standards. One of the most important methods the AQMP relies on to achieve its goals is the use of Transportation Control Measures (TCM). TCMs are defined in the 2007 AQMP as being "any control measure to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions." The 2007 AQMP includes 31 stationary and 30 mobile source measures to be implemented by the SCAQMD, California Air Resource Board (CARB), the EPA, and SCAG. Table 4.2-2 lists applicable TCMs and the 2030 GP/LCP policies that support each TCM.

Table 4.2-2
2030 GP/LCP Consistency
with SCAQMD Transportation Control Measures

Transportation Control Measure	2030 GP/LCP Policy
MCS-01: Facility Modernization MCS-02: Urban Heat Island MCS-03: Energy Efficiency and Conservation	Conservation Element **Objective**: Achieve local energy independence through conservation, efficient community design, reduced consumption, and efficient production and development of energy supplies that are diverse, efficient, environmentally sound, sustainable and reliable. **Policy IV-24**: Encourage new construction to go beyond minimum energy efficiency standards established in the California Green Building Code by meeting Tier I or Tier II levels. **Policy IV-25**: Encourage new development to reduce the consumption of non-renewable energy sources. **Policy IV-26**: Support and encourage the installation of solar photovoltaic panels, solar hot water heaters, and other forms of renewable energy production. **Policy IV-27**: Minimize the amount of energy consumed by City operations by taking a leadership role in the application of new technologies at City facilities. As feasible, cooperate with Southern California Edison and the South Coast Air Quality Management District to set up energy conservation demonstration projects, and to serve as a laboratory for testing new energy conservation techniques. **Policy IV-28**: Use small, decentralized,

Table 4.2-2
2030 GP/LCP Consistency with SCAQMD Transportation Control Measures

Transportation Control Measure	2030 GP/LCP Policy
	aesthetically-designed, and appropriately-sited energy efficient power generation facilities to the extent feasible. **Policy IV-30**: Reduce the "heat island effect" (especially within the center city area) by promoting such features as white roofs, light colored hardscape paving, construction of shade structures, installation of mature trees, and by reducing the extent of unshaded parking lots. **Housing Element** **Policy V-12**: Encourage energy-efficient building methods and promote energy conservation measures. **Policy V-13:** Offer housing rehabilitation assistance for lower and moderate income households for home repairs and energy conservation measures.
MCS-04: Emissions Reductions from Green Waste Composting	**Conservation Element** **Policy IV-29**: Maintain and promote water conservation and waste diversion programs to conserve energy. **Policy IV-34:** Promote organic waste reuse to produce compost and/or biofuel from the maximum amount of organic waste generated within the City as possible.
BCM-02: PM Emission Hot Spots - Localized Control Program	**Circulation Element** **Goal:** Provide for safe and efficient travel on City of Avalon streets and pathways. **Policy VI-1:** Redesignate appropriate street segments for one-way operation. **Policy VI-2:** Redesignate appropriate street segments for closure to through traffic. **Policy VI-3:** Address the physical, social, health and safety, and economic aspects of all proposed physical and operational transportation efforts. **Policy VI-4:** Use traffic calming measures to discourage commercial traffic in residential zones. **Policy VI-5:** Minimize the number and location of streets utilized for commercial deliveries. **Policy VI-6:** Require all new development to fully mitigate the impacts of additional vehicle trips, through physical and operational improvements as appropriate.
EGM-01: Emission Reductions from New or Redevelopment Projects	**Land Use Element** **Policy II-4:** Promote land development practices that reduce energy and water consumption, air and water pollution, greenhouse gas emissions, and waste, incorporating such techniques as: • Concentration of uses and design of development to promote walking and use of transit in lieu of the automobile • Capture and re-use of stormwater on-site for irrigation • Orientation of buildings to maximize

Table 4.2-2
2030 GP/LCP Consistency with SCAQMD Transportation Control Measures

Transportation Control Measure	2030 GP/LCP Policy
	opportunities for solar energy use, daylighting, and ventilation • Use of permeable paving materials • Shading of surface parking, walkways, and plazas • Convert waste to energy • Upgrade wastewater disposal system to allow for recycled water use **Policy II-6:** Encourage the retention of existing structures and promote their adaptive reuse with "green" building technologies in accordance with a green building standard, such as Leadership in Energy and Environmental Design (LEEDTM), or other equivalent. **Conservation Element** **Policy IV-24:** Encourage new construction to go beyond minimum energy efficiency standards established in the California Green Building Code by meeting Tier I or Tier II levels. **Policy IV-25:** Encourage new development to reduce the consumption of non-renewable energy sources. **Policy IV-26:** Support and encourage the installation of solar photovoltaic panels, solar hot water heaters, and other forms of renewable energy production.
MOB-07: Concurrent Reductions from Global Warming Strategies	**Conservation Element** **Goal**: Reduce greenhouse gas emissions from community activities and municipal facilities and operations within the City boundaries to support the State's efforts under Assembly Bill 32, Senate Bill 375, and other state and federal mandates. **Policy IV-7:** Reduce community-wide emissions of greenhouse gases by at least 15% from 2005 levels as stipulated in AB 32. **Policy IV-8:** Evaluate and disclose the contribution of development projects on climate change and require mitigation measures as appropriate. **Policy IV-9:** Minimize emissions of air pollutants, including greenhouse gases, generated by electricity and natural gas consumption, waste disposal, and vehicles through implementation of the energy conservation policies and actions listed in subchapter IV.E, the solid waste recycling policies listed in subchapter IV.F, and the alternative transportation policies in the Circulation Element.
TCM-B: Transit and Systems Management	**Circulation Element** **Goal:** Balance the needs of all travel modes within the City. **Goal:** Reduce the amount that people drive by increasing opportunities for walking, bicycling and transit. **Policy VI-7:** Ensure that residents and visitors can walk, bicycle, or use transit to access key Avalon attractions, businesses, and places. **Policy VI-8:** Include alternative mode

Table 4.2-2
2030 GP/LCP Consistency
with SCAQMD Transportation Control Measures

Transportation Control Measure	2030 GP/LCP Policy
	accommodation in transportation capital improvement projects and programs. **Policy VI-9:** Enhance the pedestrian environment by providing a continuous network of pedestrian facilities and minimizing conflicts between pedestrians and vehicles. **Policy VI-10:** Enhance bicycle facilities serving both residents and tourists to provide safe bicycle access throughout the community. **Policy VI-11:** Enhance wayfinding for pedestrians, bicyclists, and transit users.

Source: South Coast Air Quality Management District, 2007 Air Quality Management Plan, 2007.

The 2030 GP/LCP includes specific policies that would implement applicable transportation control measures contained in the 2007 AQMP. In addition, as noted above, development facilitated by the 2030 GP/LCP would not exceed growth forecasts upon which the AQMP is based. Therefore, the 2030 GP/LCP would be consistent with the AQMP.

Mitigation Measures. Impacts would be less than significant; therefore, mitigation beyond adherence to applicable General Plan policies and SCAQMD rules is not required.

Significance after Mitigation. Impacts would be less than significant without mitigation.

Impact AQ-2 Development facilitated by the 2030 GP/LCP would result in an incremental increase in air pollutant emissions within Avalon and the South Coast Air Basin. However, GP/LCP policies aimed at limiting vehicle use and energy consumption would limit emissions to levels consistent with regional forecasts. Impacts would therefore be Class III, l*ess than significant*.

Long-term emissions associated with future development in Avalon in accordance with the 2030 GP/LCP are those associated with vehicle trips and stationary sources (electricity and natural gas). Emissions associated with individual projects, depending on project type and size, could exceed project-specific thresholds established by the SCAQMD. However, such projects would be required to undergo independent project-level CEQA review and to include mitigation measures to address potentially significant project-level impacts. As discussed under Impact AQ-1, overall growth within Avalon would be within SCAG regional growth forecasts upon which regional air quality planning is based.

A goal of the 2030 GP/LCP is to "maintain air quality that meets state and federal standards." The GP/LCP contains specific policies to preserve Avalon's good air quality. In addition, it promotes infill development in the City Center and places an emphasis on pedestrian and bicycle travel. The City also strictly regulates vehicle use through a permitting system and land use parking approval process. The proposed GP/LCP and existing City vehicle policies will reduce vehicle use and vehicle miles traveled and result in a reduction in fuel consumption and resulting in air pollutant emissions.

The following policies included in Land Use, Conservation, and Circulation Elements of the 2030 GP/LCP target reductions in air pollutant emissions through circulation and

land use design factors. Adherence to these policies would reduce impacts to a less than significant level.

Land Use Element Policies

II-4 *Promote land development practices that reduce energy and water consumption, air and water pollution, greenhouse gas emissions, and waste, incorporating such techniques as:*

- *Concentration of uses and design of development to promote walking and use of transit in lieu of the automobile*
- *Capture and re-use of stormwater on-site for irrigation*
- *Orientation of buildings to maximize opportunities for solar energy use, daylighting, and ventilation*
- *Use of permeable paving materials*
- *Shading of surface parking, walkways, and plazas*
- *Convert waste to energy*
- *Upgrade wastewater disposal system to allow for recycled water use*

II-8 *Enhance the pedestrian character and pedestrian linkages between the waterfront, City Center, neighborhoods surrounding the City Center, middle canyon, upper canyon and open spaces.*

II-9 *Encourage infill of the City Center area and where appropriate, increase the intensity of development on vacant and underutilized properties, in lieu of expanded development outward into Avalon's hillsides, natural areas and open space.*

II-10 *Concentrate high intensity commercial and "mixed-use" type development in the City Center as a means to encourage revitalization while also avoiding more intense development at the City's edge.*

II-11 *Encourage the revitalization of commercial areas through mixed-use developments to promote a range of business and visitor serving activities. The commercial uses as part of the mixed use developments shall create vitality, revenue, and employment opportunities and shall be compatible with Avalon's small town island lifestyle.*

II-12 *Require infill development to incorporate design elements with buffers and transitions in density, scale, and mass to assure compatibility with adjacent uses.*

II-13 *Promote the balanced mixture of retail and service needs within the City Center area for the benefit of citizens and tourists.*

II-15 *Encourage and regulate the development of mixed use buildings along "corridors of intensity," including Crescent, Claressa, Catalina, Sumner, and Metropole.*

Conservation Element Policies

IV-6 *Facilitate compliance by local employers and businesses with regional air quality regulation through education, outreach, involvement, and policies that assist them in meeting regulations, while cultivating and supporting a positive business climate.*

IV-9 *Minimize emissions of air pollutants, including greenhouse gases, generated by electricity and natural gas consumption, waste disposal, and vehicles through implementation of the energy conservation policies and actions listed in*

subchapter IV.E, the solid waste recycling policies listed in subchapter IV.F, and the alternative transportation policies in the Circulation Element.

IV-24 *Encourage new construction to go beyond minimum energy efficiency standards established in the California Green Building Code by meeting Tier I or Tier II levels.*

IV-25 *Encourage new development to reduce the consumption of non-renewable energy sources.*

IV-26 *Support and encourage the installation of solar photovoltaic panels, solar hot water heaters, and other forms of renewable energy production.*

IV-27 *Minimize the amount of energy consumed by City operations by taking a leadership role in the application of new technologies at City facilities. As feasible, cooperate with Southern California Edison and the South Coast Air Quality Management District to set up energy conservation demonstration projects, and to serve as a laboratory for testing new energy conservation techniques.*

IV-28 *Use small, decentralized, aesthetically-designed, and appropriately-sited energy efficient power generation facilities to the extent feasible.*

IV-29 *Maintain and promote water conservation and waste diversion programs to conserve energy.*

IV-30 *Reduce the "heat island effect" (especially within the center city area) by promoting such features as white roofs, light colored hardscape paving, construction of shade structures, installation of mature trees, and by reducing the extent of unshaded parking lots.*

Circulation Element Policies

VI-6 *Require all new development to fully mitigate the impacts of additional vehicle trips, through physical and operational improvements as appropriate.*

VI-7 *Ensure that residents and visitors can walk, bicycle, or use transit to access key Avalon attractions, businesses, and places.*

VI-8 *Include alternative mode accommodation in transportation capital improvement projects and programs.*

VI-9 *Enhance the pedestrian environment by providing a continuous network of pedestrian facilities and minimizing conflicts between pedestrians and vehicles.*

VI-10 *Enhance bicycle facilities serving both residents and tourists to provide safe bicycle access throughout the community.*

VI-11 *Enhance wayfinding for pedestrians, bicyclists, and transit users.*

Mitigation Measures. Development accommodated by the 2030 GP/LCP would result in the incremental increase in emissions. However, individual development projects that could occur would be required to undergo CEQA review and would be subject to the APCD thresholds and policies contained in the 2030 GP/LCP to reduce air quality impacts. No mitigation measures outside of adherence to the adopted policies in the 2030 GP/LCP would be required.

Significance after Mitigation. Impacts would be less than significant without mitigation.

Impact AQ-3 Individual development projects facilitated by the 2030 GP/LCP would generate construction-related emissions. Such emissions may result in temporary adverse impacts to local air quality. However, these emissions can be mitigated on a specific development basis and impacts would be Class III, *less than significant*.

Construction activity that would be facilitated by the 2030 GP/LCP would cause temporary emissions of various air pollutants. Ozone precursors NO_x and CO would be emitted by the operation of construction equipment, while fugitive dust (PM_{10}) would be emitted by activities that disturb the soil, such as grading and excavation, road construction and building construction. As previously stated, the Los Angeles County portion of the SCAB is designated non-attainment for ozone (State and Federal standards) and PM_{10} (State and Federal standards). Additionally, the potential release of asbestos may occur during building demolition. Information regarding specific development projects, soil types, and the locations of receptors would be needed in order to quantify the level of impact associated with individual construction projects.

Construction activity that could be facilitated by the 2030 GP/LCP could occur throughout Avalon. However, it is anticipated that the areas where the highest amount of construction activity would occur are within the City Center, up Avalon Canyon in the Resort Recreation – Low Density areas, and in Expansion Areas No. 1 and 2. Individual developments in these and other areas of the City would be subject to independent environmental review under CEQA. Depending upon the development type and size, maximum daily emissions associated with individual projects could potentially exceed SCAQMD significance thresholds.

Future construction activity within Avalon would be subject to the following 2030 GP/LCP policies.

Conservation Element Policies

IV- 2 *Regulate construction activities to eliminate potentially destructive practices that adversely affect environmentally sensitive areas.*

IV-20 *Require the use of best management practices (BMPs) during site grading and construction to control temporary erosion and offsite deposition of soils.*

The above mentioned policies would reduce air quality impacts related to construction. In addition, the SCAQMD has established rules 402 and 403, which require that air pollutant emissions not be a nuisance off-site and reduce the ambient entrainment of fugitive dust. Rule 403 includes best available control measures for all construction activity, contingency control measures for large operations, and conservation management practices for confined animal facilities. Major categories addressed by Rule 403 to reduce fugitive dust includes earth moving, disturbed surface areas, unpaved roads, open storage piles, demolition, and other various construction activities. During construction, individual property owners, developers, or contractors would be required to comply with applicable SCAQMD rules, which reduce temporary construction-related air pollutant emissions. Further, if required, individual projects that could occur during the lifetime of the 2030 GP/LCP would be required to implement additional mitigation if site-specific analysis identifies the potential to exceed applicable thresholds. Adherence to applicable GP/LCP policies and SCAQMD rules would reduce potential construction-related impacts to a less than significant level.

Mitigation Measures. Impacts would be less than significant; therefore, mitigation beyond adherence to applicable General Plan policies and SCAQMD rules is not required.

Significance after Mitigation. Impacts would be less than significant without mitigation.

Impact AQ-4 Though buildout of the 2030 GP/LCP may incrementally increase air pollution, it would not expose sensitive receptors to substantial pollutant concentrations. Impacts would be Class III, *less than significant.*

The SCAQMD defines typical sensitive receptors as residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. When evaluating potential long-term air quality impacts to sensitive receptors, the SCAQMD is primarily concerned with high localized concentrations of CO. Motor vehicles, and traffic-congested roadways and intersections are the primary source of high localized CO concentrations. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed CO "hotspots."

Implementation of the proposed 2030 GP/LCP would not expose existing or future sensitive uses within the city to substantial CO concentrations. The South Coast Air Basin is in attainment of state and federal CO standards and has been for several years. Background levels of carbon monoxide are generally low. The highest recorded 8-hour average concentration of CO in the basin in 2011 was 4.67 ppm, which is well below the state and federal 8-hour standard of 9 ppm. Although CO is not expected to be a major air quality concern in Los Angeles County over the planning horizon, elevated CO levels can occur at or near intersections that experience severe traffic congestion. The 2030 GP/LCP would not result in traffic congestion at intersections such that an exceedance of CO standards would occur.

Mitigation Measures. Impacts would be less than significant; therefore, mitigation measures are not required.

Significance after Mitigation. Impacts would be less than significant without mitigation.

Impact AQ-5 Implementation of the proposed 2030 GP/LCP would facilitate development of projects that have the potential to cause odor impacts, but would not create objectionable odors that would affect a substantial number of people. Impacts would be Class III, *less than significant.*

The proposed 2030 GP/LCP would facilitate development within the City Limits and into expansion areas. Some commercial and industrial uses developed under the 2030 GP/LCP may generate odor nuisance effects to the public. Examples of commercial uses that have the potential to cause odor impacts include fast food restaurants, photographic studios, and laundry facilities. Industrial uses may also generate odors. However, odors from new commercial and industrial uses would be similar to the existing uses throughout the City and confined to the immediate vicinity of new buildings. As such, significant odor impacts are not anticipated.

Construction activity would also generate temporary airborne odors associated with the operation of construction vehicles (i.e., diesel exhaust) and the application of architectural coatings. However, these odors are not generally considered to be especially offensive. Emissions would be temporary and would be confined to the immediate vicinity of the construction site and activity. As discussed under Impact AQ-3, required emission controls

would be applied to all new development in the City. With appropriate controls, significant odor impacts would not be anticipated.

Mitigation Measures. Impacts would be less than significant; therefore, mitigation measures are not required.

Significance after Mitigation. Impacts would be less than significant without mitigation.

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4.3 BIOLOGICAL RESOURCES

Direct and indirect impacts to the following special-status biological resources are discussed below: regulated waterways and wetlands; sensitive habitats and mature native trees; sensitive plants and animals; and wildlife movement corridors.

4.3.1 Setting

a. Plan Area Habitat Types. Avalon is located in the Santa Catalina Island – Frontal San Pedro Channel and Frontal Pacific Ocean Watersheds, where intermittent streams flow into Avalon Bay. The drainages, rugged canyons, sea bluffs, and steep hillsides within the Avalon plan area contain a variety of important habitats and species of concern. Figure 4.3-1 shows the vegetation communities within the city limits, while Figures 4.3-2a and 4.3-2b show the locations of potential sensitive species in the plan area. The plan area contains five sensitive ecological areas and contains other areas with sensitive biological resources include the beaches, intertidal zone, and Avalon Bay. The following paragraphs describe habitats in and around the plan area that contain significant biological resources.

Southern Beach and Dune. This habitat is severely limited to sandy beaches with very small dune areas that are heavily trampled by human traffic. Characteristic species within this habitat on Santa Catalina include red sand verbena (*Abronia maritima*), silver beach bur (*Ambrosia chamissonis*), beach saltbush (*Atriplex leucophylla*), sea rocket (*Cakile maritima*), alkali weed (*Cressa truxillensis*), salt grass (*Distichlis spicata*), and coast goldenbush (*Isocoma menziesii*).

Riparian Woodland. This habitat has a high value for wildlife as it provides water, thermal cover, serves as a migration corridor, and provides diverse nesting and feeding opportunities. This habitat type is found along the few permanent streams of Catalina Island, especially in Middle Ranch and Cottonwood Canyons. Species such as black cottonwood (*Populus balsamifera* var. *trichocarpa*), the introduced California sycamore (*Platanus racemosa*), and willows (*Salix* spp.) dominate. Other components include elderberry (*Sambucus mexicana*), Fremont cottonwood (*Populus fremontii*), and shrubs and vines such as mule fat (*Baccharis salicifolia*), California wild rose (*Rosa californica*), California blackberry (*Rubus ursinus*), snowberry (*Symphoricarpos mollis*), poison oak (*Toxicodendron diversilobum*), virgin's bower (*Clematis ligusticifolia*), and honeysuckle (*Lonicera* spp.). Herbaceous species typical of riparian communities include Western ragweed (*Ambrosia psilostachya*), mugwort (*Artemisia douglasiana*), rye (*Elymus* spp.), yerba buena (*Satureja douglasii*), hoary nettle (*Urtica dioica* ssp. *holosericea*), vervain (*Verbena lasiostachys*), and cocklebur (*Xanthium* spp.)

Coastal Sage Scrub. Coastal sage scrub is a lower elevation plant community, generally occurring on dry slopes lower in elevation than chaparral. It is composed of subshrubs or shrubs that are deciduous and not as stiff branched as chaparral plants tend to be. Coastal sage scrub is named for several fragrant species with the common name of "sage," which are often present. This community is highly variable in appearance and composition depending upon the conditions of the area in which it is established. The insular version of coastal sage scrub differs from that of the mainland by the typical presence of coastal prickly pear cactus (*Opuntia littoralis*); this may be a partial result of the many years of grazing by feral animals, to which cactus are more resistant. Other dominant and common plants in this community on Catalina Island include California sagebrush (*Artemisia californica*), lemonadeberry (*Rhus integrifolia*), black sage (*Salvia mellifera*), white sage (*Salvia apiana*), bush sunflower (*Encelia californica*), St. Catherine's lace (*Eriogonum giganteum* var. *giganteum*), bedstraw (*Galium* spp.), silver lotus (*Acmispon argophyllus* var. *argenteus*), island deerweed (*Acmispon dendroideus*), red bush monkeyflower (*Mimulus aurantiacus*), and laurel sumac (*Malosma laurina*).

This habitat hosts a variety of animals, most of which are permanent residents. Amphibians such as the garden slender salamander (*Batrachoseps major*) and the pacific treefrog (*Hyla regilla*) are found in moist canyon areas. Reptiles such as the side-blotched lizard (*Uta stansburiana*), gopher snake (*Pituophis catenifer*), California kingsnake (*Lampropeltis getula californiae*), and Southern Pacific rattlesnake (*Crotalus viridis helleri*) among others also occupy this habitat. Resident bird species include the Allen's hummingbird (*Selasphorus sasin sedentarius*), San Clemente Spotted Towhee (*Pipilo maculatus clementae*), Bewick's Wren (*Thryomanes bewickii catalinae*), Rock Wren (*Salpintes obsoletus*), and Catalina California Quail (*Callipepla californica catalinensis*). Coastal sage scrub provides the primary year-round hunting ground for many raptors, such as the American Kestrel (*Falco sparverius*) and Red-Tailed Hawk (*Buteo jamaicensis*), which forage in the adjacent grasslands during the spring. This plant community also provides the shelter necessary for nesting of many wildlife species. Typical mammals found in this habitat include Catalina California ground squirrel (*Spermophilus beecheyi nesioticus*), Santa Catalina Island fox (*Urocyon littoralis catalinae*), Santa Catalina Island harvest mouse (*Reithrodontomys megalotis catalinae*), Santa Catalina Island deer mouse (*Peromyscus maniculatus catalinae*), and mule deer (*Odocoileus hemionus californicus*).

Maritime Succulent Scrub. Maritime succulent scrub occurs on precipitous faces of the ocean bluffs and headlands and is considered a sensitive plant community by the California Native Plant Society (CNPS 2012). It is a low, open scrub of soft-leaved shrubs and herbs with a rich admixture of stem and leaf succulents occurring on steep coastal slopes. Characteristic plants of this community include shrubs and succulents such as velvet cactus (*Bergerocactus emoryi*), coastal cholla (*Opuntia prolifera*), coastal prickly pear, California boxthorn (*Lycium californicum*), California sagebrush, bush sunflower, cliff spurge (*Euphorbia misera*), and lemonadeberry, along with herbaceous species such as coast weed (*Amblyopappus pusillus*), aphanisma (*Aphanisma blitoides*), coast goldenbush, Emory's rock daisy (*Perityle emoryi*), saltbush (*Atriplex* spp.), liveforever (*Dudleya* spp.), and wishbone bush (*Mirabilis californica*) Some of the best sea-bluffs and rocky headlands are found along Pebbly Beach Drive and at Avalon.

Grasslands. Grasslands form on deep soils, usually on fairly level terrain. The soil moisture can range from moist to almost saturated. Many of the grasslands on the Island are badly degraded and have turned into bare, eroded clayey slopes or sparse grassland of Mediterranean annual grasses and other weeds. Most concentrations of native California grasslands, whether they are perennial or annual, are considered important by CDFW. In particular, valley needlegrass grassland, a perennial grassland dominated by purple needlegrass (*Stipa pulchra*), is likely found in the plan area within annual grassland areas (Figure 4.3-1). The range of this native habitat is shrinking around California as disturbance (development, agriculture, etc.) causes annual grasses to replace them.

Catalina Island still has significant remnants of native grasslands throughout the island, often forming a mosaic with coastal sage scrub and island chaparral communities. Common dominants of this native community include grasses such as needlegrass, one-sided bluegrass (*Poa secunda*), leafy bentgrass (*Agrostis pallens*), and chaparral melic (*Melica imperfecta*). Exotic annual-dominated grasslands predominate on the island, however, which are commonly composed of ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), red brome (*Bromus madritensis*), false brome (*Brachypodium distachyon*), barley (*Hordeum* spp.), fescue (*Vulpia* spp.), and wild oats (*Avena* spp.). Native wildflowers such as fiddlenecks (*Amsinckia menziesii*), lilies (*Calochortus* spp.), Indian paintbrush (*Castilleja* spp.), clarkia (*Clarkia* spp.), popcorn flower (*Cryptantha* spp., *Plagiobothrys* spp.), sanicle (*Sanicula arguta*), poppies (*Eschscholzia* spp.), gilia (*Gilia* spp.), lotus (*Lotus* spp.), lupines (*Lupinus* spp.), clover (*Trifolium* spp.), golden stars (*Bloomeria crocea*), island shooting stars (*Dodecatheon clevelandii* ssp. *insulare*), and blue dicks (*Dichelostemma capitatum*) are common in Catalina grasslands.

The grassland areas provide habitat for grazers and seed eaters. Rodents present in this area include the Catalina California ground squirrel, and two species of native mice among other introduced rodent species. Many reptiles occupy this habitat, especially where exposed rock or barren soil surfaces are present. Carnivores, including the Santa Catalina Island fox and raptors, such as Red-tailed Hawk and American Kestrel, play an important role in controlling rodent populations. Seed-eating bird species are also common constituents of grasslands. Grasslands are also the primary foraging grounds for several species of birds and bats.

Island Oak Woodland. This is a unique California oak woodland because of the numerous relict island endemics and remarkable degree of endemism among the oaks that characterize this community. These oak woodlands occur in the moist valleys and protected canyons on deep, rich alluvial soils. Typical species include scattered groves of Island oak (*Quercus tomentella*), Santa Catalina Island ironwood (*Lyonothamnus floribundus* ssp. *floribundus*), Island scrub oak (*Quercus pacifica*), toyon (*Heteromeles arbutifolia*), and Catalina cherry (*Prunus ilicifolia* ssp. *lyonii*). The shaded canyons have an understory of rich herbaceous native flora and introduced annuals, ferns, and a few perennials.

Island Chaparral. Chaparral is composed of hardy, woody evergreen shrubs that can form a dense, nearly impenetrable scrub. This community is generally found at higher elevations than coastal sage scrub, and usually on deeper, heavier soils with moderate moisture content. However, chaparral vegetation at lower elevations can be found on dry ridges with gravelly, shallow soils.

Chaparral is a fire-adapted community, which means that the plant species that form the community have evolved mechanisms for coping with fire and heat. These mechanisms include stump-sprouting and seeds with durable coats. Stump-sprouting species have a large stump or burl that is not killed by burning. In these species, when a fire burns the shrub back to the stump, the plant sprouts new growth from tissue on the burned stump.

Island chaparral is also a unique relict island endemic. The combination of absence of fire and heavy browsing has turned this community into open sclerophyllous (hard-leaved) woodland. Typically occurs on north and east-facing slopes draining toward the channel or in protected arroyos and canyons of the Pacific slope, such as upper Avalon Canyon and Pebbly Beach. It is often mixed with grassland, coastal sage scrub, and non-native scrub and woodlands. Much of the chaparral community on Catalina Island tends to vary from its mainland counterpart by often having a lower density, predominantly open understory, and arborescent species forms (often surpassing four meters in height) which resemble a dwarf woodland. Despite these characters, which may be attributable to island gigantism, browsing history, or infrequent fire, it also often takes the dense, lower growing form seen on the mainland and is composed of typical chaparral species such as island scrub oak, toyon, island redberry (*Rhamnus pirifolia*), ceanothus (*Ceanothus* spp.), chamise (*Adenostoma fasciculatum*), Catalina manzanita (*Arctostaphylos catalinae*), and island mountain mahogany (*Cercocarpus betuloides* var. *blancheae*). The tall scrub oak dominated habitats so prevelant on Catalina are more accurately classified as chaparral than as woodland.

Areas of botanical significance include areas that possess special botanical importance because of their permanent streams, deep soils, slopes, or exposures that allow a concentration of island endemics or other rare plants. One of these includes the many branches of Pebbly Beach Canyon, which are especially rich in relict island endemics with oak woodland, island chaparral and maritime sage scrub. Another area includes Avalon Canyon above the Memorial Arboretum, which has a good representation of island endemics in maritime sage scrub and island chaparral.

b. Special-Status Resources. Five species of land mammals, three species of invertebrates, and three species of birds are endemic to Santa Catalina Island. Five introduced bird species and seven introduced mammal species, including a herd of 150 bison and a substantial population of mule deer, live on the island as well. Fourteen species of reptiles and amphibians, including two introduced species, and more than 400 plant species, including six endemic species and 200 non-native species, are found on the island.

Information regarding the occurrences of special-status species in the vicinity of the GP/LCP Area was obtained from searching the California Department of Fish and Wildlife's (CDFW) Natural Diversity Data Base (CNDDB, November 2012) and California Native Plant Society's Electronic Inventory (CNPS November 2012) for the USGS Santa Catalina East 7.5-minute quadrangle. These databases contain records of reported occurrences of federal- or state-listed endangered, threatened, rare, or proposed endangered or threatened species, federal species of concern, state species of special concern, or otherwise sensitive species or habitat that may occur within or in the immediate vicinity of the GP/LCP Area. Lists from the U.S. Fish and Wildlife Service (USFWS) and CDFW were also reviewed, and lists of common and sensitive wildlife and plant species potentially occurring within the Planning Area were created. This search range encompasses a sufficient distance to accommodate for regional habitat diversity and to overcome the limitations of the CNDDB. The CNDDB is based on reports of actual occurrences and does not constitute an exhaustive inventory of every resource.

The term special-status biological resources includes those plants, animals, vegetation communities, jurisdictional drainages and other sensitive biological resources that are governed under federal, state, and local laws and regulations.

Listed Species. Federal, State, and local authorities under a variety of legislative acts share regulatory authority over biological resources. The CDFW has direct jurisdiction under law for biological resources through the state Fish and Game Code and under the California Endangered Species Act. The federal Endangered Species Act also provides direct regulatory authority over specially designated organisms and their habitats to the U.S. Fish and Wildlife Service (USFWS). These acts specifically regulate listed and candidate endangered and threatened species, which are defined as:

- ***Endangered Species:*** *any species that is in danger of extinction throughout all or a significant portion of its range.*
- ***Threatened Species:*** *any species that is likely to become an endangered species within the foreseeable future throughout all or a significant part of its range.*

Special-Status Animals. A number of invertebrate, amphibian, fish, reptile, bird, and mammal species of concern are known or possibly found in the plan area, based on the California Natural Diversity Database (CNDDB). Table 4.3-1 identifies 31 animal species that are known to occur within the GP/LCP area, two of which have a state or federal listing status: Santa Catalina Island fox (*Urocyon littoralis catalinae*), State Threatened, and bald eagle (*Haliaeetus leucocephalus*), Federal Threatened, State Endangered. Figure 4.3-2a identifies the general locations of seven sensitive species identified by the CNDDB (November 2012). State or federally listed species are accorded the highest protection status.

Table 4.3-1
Animals Known to Occur in the Avalon GP/LCP Area

Common Name	Scientific Name	Agency Status (Federal/State/Other)	Habitat
Invertebrates			
Sandy beach tiger beetle[1,2]	*Cicindela hirticollis gravida*	--/--/Rare	PRESENT. Found in moist sand near the ocean, in swales behind dunes or upper beaches beyond normal high tides.
Santa Catalina lancetooth[1,2]	*Haplotrema catalinense*	--/--/E/Rare	PRESENT. A terrestrial snail possibly extirpated from the Channel Islands. Under rocks, oak and grass leaf litter, and cactus; in leaf mold and near creeks.
Shepard's snail [Island tightcoil][1,2]	*Pristiloma shepardae*	--/--/Rare	PRESENT. A terrestrial snail possibly extirpated from the Channel Islands. Habitat preferences unknown.
Catalina mountainsnail[1,2]	*Radiocentrum avalonense*	--/--/E/Rare	PRESENT. A terrestrial snail possibly extirpated from the Channel Islands. Habitat preferences unknown.
San Clemente Island blunt-top snail [bird-drop snail][2]	*Sterkia clementina*	--/--/E/Rare	POTENTIAL. A terrestrial snail possibly extirpated from the Channel Islands. Habitat preferences unknown.
Amphibians			
Arboreal salmander[1]	*Aneides lugubris*	--/--/Rare	POSSIBLE/UNLIKELY. A subterrestrial species, not dependent upon water. It inhabits coastal live-oak woodlands; yellow pine and black oak forests in the foothills. Found on ground under leaf litter, rocks, logs, etc.; also climbs trees. Retreats to tree cavities, rodent burrows, caves, and mine shafts in summer. Lays eggs in hollow trees or logs and in cavities in the earth.
Reptiles			
California mountain kingsnake[1]	*Lampropeltis zonata*	--/--/Rare	POTENTIAL. Typical habitat of this species consists of moist open coniferous forests, oak woodlands, riparian woodland, chaparral, coastal sage scrub, and openly wooded areas where there are rocks or rotting logs.
Santa Catalina garter snake[1,2]	*Thamnophis hammondii ssp.*	--/CSC/--	POTENTIAL. Found within or near permanent fresh water, typically adjacent to streams with rocky beds lined with willows and other riparian vegetation.
Birds			
Allen's Hummingbird[1]	*Selaphorus sasin sedentarius*	--/--/IE	PRESENT. Brushy woods, gardens and meadows of coastal California.
Bald Eagle[1]	*Haliaeetus leucocephalus*	DL/**SE**/--	POTENTIAL. Inhabits lakes, rivers, marshes, and seacoasts.
Bewick's Wren[1]	*Thryomanes bewickii catalinae*	--/--/E	PRESENT. Thickets, brush piles and hedgerows, open woodlands and

Table 4.3-1
Animals Known to Occur in the Avalon GP/LCP Area

Common Name	Scientific Name	Agency Status (Federal/State/Other)	Habitat
			scrubby areas, often near streams
Brown Pelican[1]	*Pelecanus occidentalis californicus*	DL/CFP/--	PRESENT. Bay/sounds, lagoons, river mouth/tidal river, scrub-shrub wetland; and terrestrial habitats such as bare rock/talus/scree, cliffs, sand/dune.
Burrowing Owl[1]	*Athene cunicularia*	--/CSC/--	POTENTIAL. Burrows in open, well drained terrain with short, sparse vegetation. Inhabits grasslands, deserts, sagebrush scrub, agricultural areas, earthen levees and berms, and coastal uplands
California quail[1]	*Callipepla californica catalinensis*	--/CSC/E	PRESENT. Open area of coastal sage scrub, chaparral, oak woodlands along canyon bottoms, and shady north-facing slopes.
Dusky Orange-crowned Warbler[1]	*Oreothlypis celata sordida*	--/--/IE	PRESENT. Coastal sage scrub.
Horned Lark[1]	*Eremophila alpestris insularis*	--/--/IE	POTENTIAL. Grassland, tundra, sandy regions, areas with scattered low shrubs, desert playas, grazed pastures, stubble fields, open cultivated areas, and rarely open areas in forest
House Finch[1]	*Carpodacus mexicanus clementis*	--/--/IE	PRESENT. Arid scrub and brush, thornbush, oak-juniper, pine-oak association, chaparral, open woodland, towns, cultivated lands, savanna.
Hutton's Vireo[1]	*Vireo huttoni unitti*	--/CSC/E	PRESENT. Pine-oak association, oak woodland, and riparian woodland, primarily in low trees and scrub.
Island Loggerhead Shrike[1]	*Lanius ludovicianus anthonyi*	--/CSC/IE	PRESENT. Utilize dry, open habitats with sparse vegetation, including grasslands, pastures, agricultural fields, and orchards
Pacific-slope Flycatcher[1]	*Empidonax difficilis insulicola*	--/--/IE	PRESENT. Woodland streamsides. Breeding migrant.
Spotted Towhee[1]	*Pipilo maculatus clementae*	--/CSC/IE	PRESENT. Shrubland/chaparral, conifer woodland, hardwood woodland, mixed woodland, and riparian.
Mammals			
Pallid bat[1]	*Antrozous pallidus*	--/CSC/--	POTENTIAL. Rocky canyons, open farmland, scattered desert scrub, grassland, shrubland, woodland, and mixed conifer forest
Towsend's big-eared bat[1]	*Corynorhinus townsendii*	--/CSC/--	POTENTIAL. Limestone caves, mines, lava tubes, buildings and tunnels within desert scrub, mixed conifer, pinyon-juniper, and pine forest communities
Santa Catalina	*Urocyon littoralis*	**FE**/**ST**/E	PRESENT. Inhabits all habitat types

Table 4.3-1
Animals Known to Occur in the Avalon GP/LCP Area

Common Name	Scientific Name	Agency Status (Federal/State/Other)	Habitat
Island fox[1,2]	*catalinae*		found on Santa Catalina Island, but is most abundant in woodland and chaparral.
Catalina Beechey ground squirrel[1]	*Spermophilus beecheyi nesioticus*	--/--/E	PRESENT. Open and disturbed sites.
Santa Catalina Island harvest mouse[1]	*Reithrodontomys megalotis catalinae*	--/--/E	PRESENT. Old fields, meadows, weedy roadsides, agricultural areas, grassy situations within pine-oak forest, and riparian borders, shrubland, chaparral, and woodlands. Prefers dense vegetative cover.
Santa Catalina Island deer mouse[1]	*Peromyscus maniculatus catalinae*	--/--/E	PRESENT. Abundant in virtually all habitat types.
Santa Catalina Island shrew[1,2]	*Sorex ornatus willetti*	--/CSC/E/Rare	PRESENT. Inhabits riparian areas.
California sea lion[1]	*Zalophus californianus*	--/--/MMPA	PRESENT. Bay/sound, tidal flat/shore, coastal waters, bare rock/talus/scree, sand/dune. Hauls out on rocky and sandy beaches, primarily on islands.
Harbor seal[1]	*Phoca vitulina*	--/--/MMPA	PRESENT. Coastal waters to about 10 miles offshore, bays, harbors, coastal rivers, lakes. Most common in protected areas such as bays or inlets.
Northern elephant seal[1]	*Mirounga angustirostris*	--/--/MMPA	POTENTIAL. Tidal flat/shore, bare rock/talus/scree, sand/dune, use beaches for breeding and molting.

Sources: CDFW, Special Animals List (1/2011); 1=Catalina Island Conservancy (1/2013)
2=California Natural Diversity Database (CNDDB), October 2012.

KEY:
FE=Federally Endangered
FC=Federal Candidate
DL=Federal Delisted
SE=State Endangered
ST=State Threatened
CFP=California Fully Protected
CSC=California Species cf Concern
E=Santa Catalina Island Endemic
IE=Channel Island Endemic
Rare = Rare species, State ranking as rare
MMPA=Marine Mammal Protection Act

Special-status Plants. Special-status plant species are either listed as endangered or threatened under the federal or California Endangered Species Acts, or rare under the California Native Plant Protection Act, or considered to be rare (but not formally listed) by resource agencies and the scientific community. CDFW and local governmental agencies may also recognize special listings developed by focal groups (i.e. Audubon Society Blue List; California Native Plant Society (CNPS) Rare and Endangered Plants; U.S. Forest Service regional lists). Table 4.3-2 shows 29 special-status plant species that may occur within the plan area, three of which have state or federal listing status, including: beach spectaclepod (*Dithyrea maritima*), California Threatened; Santa Cruz Island winged-rockcress (*Sibara filifolia*) Federal Endangered; and island rush-rose (*Helianthemum greenei*), Federal Threatened. Figure 4.3-2b illustrates the general locations of special-status species documented within the plan area by the CNDDB (November 2012).

Table 4.3-2
Special-Status Plants in the Avalon Plan Area

Common Name	Scientific Name	Agency Status (Federal/State/ CRPR/Other)	Habitat
Aphanisma	*Aphanisma blitoides*	--/--/1B.2	PRESENT. Coastal bluff scrub, coastal dunes, coastal scrub-sandy soils.
Beach spectaclepod	*Dithyrea maritima*	--/**ST**/1B.1	POSSIBLE/UNCONFIRMED. Coastal dunes, coastal scrub-sandy soils.
Bright green dudleya	*Dudleya virens ssp. virens*	--/--/1B.2	PRESENT. Coastal bluff scrub-rocky.
California box-thorn	*Lycium californicum*	--/--/4.2	POSSIBLE. Coastal bluffs, coastal-sage scrub; < 150 m. Mainly occurs on windward side of island.
California dissanthelium	*Dissanthelium californicum*	--/--/1B.2	PRESENT. Coastal sage scrub.
Catalina crossosoma	*Crossosoma californicum*	--/--/1B.2	PRESENT. Chaparral, coastal scrub-rocky.
Catalina Island dudleya	*Dudleya virens ssp. hassei*	--/--/1B.2/E	PRESENT. Coastal bluff scrub-rocky.
Catalina Island mountain mahogany	*Cercocarpus traskiae*	**FE**/**SE**/1B.1/E	POSSIBLE. Dry, rocky soils. 100-250m. Known from one small population not within Avalon GP/LCP area.
Catalina mariposa lily	*Calochortus catalinae*	--/--/4.2	PRESENT. Heavy soil, open grassland or shrubland; <700m.
Chaparral ragwort	*Senecio aphanactis*	--/--/2.2	PRESENT. Chaparral, cismontane woodland, coastal scrub.
Chaparral rein orchid	*Piperia cooperi*	--/--/4.2	PRESENT. Generally dry sites, scrub, woodland, forest; < 1500 m.
Cliff spurge	*Euphorbia misera*	--/--/2.2	POSSIBLE. Rocky slopes, coastal bluffs; < 500 m. Known from one population on Catalina, on the Windward side of the Island
Coast woolly-heads	*Nemacaulis denudata var. denudata*	--/--/1B.2	POSSIBLE. Coastal dunes.
Coulter's saltbush	*Atriplex coulteri*	--/--/1B.2	PRESENT. Coastal bluff, coastal dunes, coastal scrub, valley and foothill grasslands.
Davidson's saltscale	*Atriplex serenana var. davidsonii*	--/--/1B.2	PRESENT. Coastal bluff scrub, coastal scrub; alkaline soils.
Decumbent goldenbush	*Isocoma menziesii var. decumbens*	--/--/1B.2	PRESENT. Sandy soil, chaparral, coastal scrub, leeward side of dunes, hillsides, arroyos; < 200 m.
Engelmann oak	*Quercus engelmannii*	--/--/4.2	PRESENT. Slopes, foothills, woodland; < 1300 m.
Fragrant pitcher sage	*Lepechinia fragrans*	--/--/4.2	PRESENT. Chaparral; < 1100 m.

Table 4.3-2
Special-Status Plants in the Avalon Plan Area

Common Name	Scientific Name	Agency Status (Federal/State/ CRPR/Other)	Habitat
Greene's dudleya	*Dudleya greenei*	--/--/4.2	POSSIBLE. Coastal cliffs, rocky outcrops; < 200 m. Only collected once on Catalina, in 1950
Island buckwheat	*Eriogonum grande var. grande*	--/--/4.2	PRESENT. Sand; < 300 m.
Island ceanothus	*Ceanothus megacarpus* var. *insularis*	--/--/4.3	PRESENT. Dry, shrubby slopes, canyons near coast; <600m.
Island deerweed	*Acmispon* (*Lotus*) *dendroideus* var. *dendroideus*	--/--/4.2	PRESENT. Bluffs, inland canyons, open sites near ocean; < 350 m.
Island green dudleya	*Dudleya virens ssp. insularis*	--/--/1B.2	PRESENT. Coastal bluff scrub, coastal scrub-rocky.
Island jepsonia	*Jepsonia malvifolia*	--/--/4.2	PRESENT. Rocky outcrops, clay slopes; < 1000 m.
Island mountain-mahogany	*Cercocarpus betuloides var. blancheae*	--/--/4.3	PRESENT. Chaparral; <600m.
Island oak	*Quercus tomentella*	--/--/4.2	PRESENT. Canyons, slopes, woodland; < 600 m.
Island poppy	*Eschscholzia ramosa*	--/--/4.3	PRESENT. Open places, especially chaparral; 0-300m.
Island redberry	*Rhamnus pirifolia*	--/--/4.2	PRESENT. Coastal-sage scrub, chaparral.
Island rush-rose	*Helianthemum greenei*	**FT**/--/1B.2	PRESENT. Chaparral, open ridges and slopes with dry rocky slopes.
Island scrub oak	*Quercus pacifica*	--/--/4.2	PRESENT. Slopes, ridges, canyons, chaparral, coastal scrub, oak woodland, pine forest; < 610 m.
Island tarplant	*Deinandra clementina*	--/--/4.3	PRESENT. Dry slopes, bluffs, rocky areas; <200m.
Lyon's pentachaeta	*Pentachaeta lyonii*	**FE** / **SE** / 1B.1	POSSIBLE. Coastal habitats; ± 150 m.
Nevin's woolly sunflower	*Constancea nevinii*	--/--/1B.3	PRESENT. Coastal bluff, coastal scrub.
Nevin's gilia	*Gilia nevinii*	--/--/4.3	PRESENT. Rocky, grassy slopes, coastal canyons; 20-400 m.
Nuttall's island bedstraw	*Galium nuttallii ssp. Insulare*	--/--/4.3	PRESENT. Chaparral, groves of pine or *Lyonothamnus*; 300-400 m.
Palmer's grapplinghook	*Harpagonella palmeri*	--/--/4.2	PRESENT. Dry sites in chaparral, coastal scrub, grassland; < 450 m.
Red sand-verbena	*Abronia maritima*	--/--/4.2	POSSIBLE. Coastal dunes; <100m. Only known from windward shore between Ben Weston Beach and Little Harbor.

Table 4.3-2
Special-Status Plants in the Avalon Plan Area

Common Name	Scientific Name	Agency Status (Federal/State/ CRPR/Other)	Habitat
Robinson's pepper-grass	*Lepidium virginicum var. robinsonii*	--/--/1B.2	PRESENT. Dry soils, scrub; < 500 m.
Round-leaved filaree	*California macrophylla*	--/--/1B.1	PRESENT. Cismontane woodland, valley and foothill grassland.
Santa Barbara honeysuckle	*Lonicera subspicata var.subspicata*	--/--/1B.2	PRESENT. Chaparral.
Santa Catalina figwort	*Scrophularia villosa*	--/--/1B.2	PRESENT. Chaparral, coastal scrub.
Santa Catalina Island bedstraw	*Galium catalinense ssp. catalinense*	--/--/1B.2/E	PRESENT. Chaparral, coastal scrub.
Santa Catalina Island buckwheat	*Eriogonum giganteum var. giganteum*	--/--/4.3/E	PRESENT. Gravel; < 450 m.
Santa Catalina Island currant	*Ribes viburnifolium*	--/--/1B.2	PRESENT. Chaparral, cismontane woodland.
Santa Catalina Island desert-thorn	*Lycium brevipes var. hassei*	--/--/1B.1	PRESUMED EXTERPATED. Coastal bluff scrub, coastal scrub.
Santa Catalina Island ironwood	*Lyonothamnus floribundus ssp. floribundus*	--/--/1B.2/E	PRESENT. Broadleaf upland forest, chaparral, cismontane woodland.
Santa Catalina Island manzanita	*Arctostaphylos catalinae*	--/--/1B.2/E	POSSIBLE. Chaparral (volcanic).
Santa Catalina Island monkeyflower	*Mimulus traskiae*	--/--/1A	PRESENT in 1901 near Avalon. Presumed extinct. Coastal scrub.
Santa Cruz Island winged rockcress	*Sibara filifolia*	**FE**/--/1B.2	NOT PRESENT/POSSIBLE. Coastal scrub-rocky, volcanic.
Seaside calandrinia	*Cistanthe maritima*	--/--/4.2	POSSIBLE. Sandy soil, sea bluffs; <300m.
Short-lobed broomrape	*Orobanche parishii ssp. Brachyloba*	--/--/4.2	POSSIBLE. Sandy soil near ocean, on shrubs such as *Isocoma menziesii* ; < 300 m.
Showy island snapdragon	*Gambelia [Galvezia] speciosa*	--/--/1B.2	PRESENT. Coastal scrub-rocky.
Small-flowered smicroseris	*Microseris douglasii var. platycarpha*	--/--/4.2	POSSIBLE. Inland clay soils, grassland, often near vernal pools or serpentine outcrops; < 1000 m.
Small-flowered morning glory	*Convolvulus simulans*	--/--/4.2	POSSIBLE. Wet clay, serpentine ridges; 30-700m.
South coast saltscale	*Atriplex pacifica*	--/--/1B.2	PRESENT. Coastal bluff scrub, coastal dunes, coastal scrub, playas.

Table 4.3-2
Special-Status Plants in the Avalon Plan Area

Common Name	Scientific Name	Agency Status (Federal/State/ CRPR/Other)	Habitat
South island bush-poppy	*Dendromecon harfordii var. rhamnoides*	--/--/1B.2	PRESENT. Chaparral, cismontane woodland, coastal scrub.
Southern island clover	*Trifolium palmeri*	--/--/4.2	POSSIBLE. Grassy areas near ocean; < 15 m.
Southern island mallow	*Malva assurgentiflora ssp. glabra*	--/--/1B.1	NOT PRESENT/POSSIBLE. Coastal bluff scrub. Only known from two offshore islets.
Southern tarplant	*Centromadia parryi ssp. australis*	--/--/1B.1	POSSIBLE/UNCONFIRMED. Marshes and swamps, valley and foothill grassland, vernal pools.
Velvet cactus	*Bergerocactus emoryi*	--/--/2.2	POSSIBLE. Sandy soils, dry hills along coast; <100m.
Vernal barley	*Hordeum intercedens*	--/--/3.2	POSSIBLE. Vernal pools, dry, saline streambeds, alkaline flats; < 1000 m.
Wallace's nightshade	*Solanum wallacei*	--/--/1B.1	PRESENT. Chaparral, cismontane woodland.
Western dichondra	*Dichondra occidentalis*	--/--/4.2	POSSIBLE. Slopes, headlands, generally under shrubs; 50-500m.
Wooly seablite	*Suaeda taxifolia*	--/--/4.2	POSSIBLE. Coastal bluffs, margins of salt marshes; < 15 m.

Sources: CDFW, Special Vascular Plants, Bryophytes, and Lichens List (7/2012); Catalina Island Conservancy (10/2012); California Natural Diversity Database (CNDDB), October 2012.

KEY:
FE=Federally Endangered
FT=Federal Threatened
SE=State Endangered
ST=State Threatened
E=Santa Catalina Island Endemic

California Native Plant Society (CNPS):
1A: Plants presumed extinct in California
1B: Plants rare, threatened, or endangered in California and elsewhere
2: Plants rare, threatened, or endangered in California,, but more common elsewhere.
3: Plants about which we need more information.
4: Plants of limited distribution, a watch list.

California Rare Plant Rank (CRPR):
0.1 - Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2 - Fairly endangered in California (20-80% occurrences threatened)
0.3 - Not very endangered in California (<20% of occurrences threatened or no current threats known)

c. Wildlife Corridors. Wildlife corridors are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as between foraging and denning areas, or they may be regional in nature allowing movement across the landscape. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return.

Concentrated movement corridors or areas that bottleneck are uncommon on the Island due to the abundance of uninterrupted open space and the lack of disturbed areas. In general, movement takes place in large drainages, along ridgelines, and along dirt roads. Wildlife movement occurs throughout the proposed Santa Catalina Island Significant Ecological Areas.

The key wildlife corridor in the plan area occurs south of the City in the upper reaches of Avalon Canyon. Other important corridors include areas under current designation by the County of Los Angeles as a Significant Ecological Area (SEA).

Significant Ecological Areas. Significant Ecological Areas (SEAs) are ecologically important areas that are designated by the County of Los Angeles as having valuable plant or animal communities. SEAs can either be land or aquatic habitat, and are offered certain protections by this designation. The SEAs play a critical role by providing an opportunity to connect habitat linkages and wildlife corridor areas with similar areas of biological importance via a network of core open space areas. Habitat linkages are areas which possess sufficient cover, food, water or other essential elements to serve as a movement pathway, or between two or more larger areas of habitat. The County of Los Angeles is currently in the process of updating the SEA designations and policies as part of the County GP/LCP Update.

The County of Los Angeles has identified five SEAs that occur within or extend into the City of Avalon plan area. These include Haypress Area, Upper Descanso Canyon, Avalon Canyon, Renton Mine Road, and Pebbly Beach Canyon (Figure 4.3-3). These SEAs other than Haypress Area are located entirely within the plan area.

d. Special-Status Communities/Areas. Special-status communities and areas are those that are considered sensitive by federal, state, and local agencies due to their rarity or value in providing habitat for vegetation, fish, and wildlife. These communities include maritime succulent scrub, southern coastal bluff scrub, island chaparral, island cherry woodland, island ironwood forest, island oak woodland, and native grassland. These communities, or closely related designations, are considered highest-inventory priority by CDFW, indicating that they are experiencing a decline throughout their range.

Identified special-status communities/areas present within the plan area include the following:

- *Maritime succulent scrub*
- *Drainages, wetlands and associated riparian vegetation under the jurisdiction of CDFW as waters of the State or USACE as waters of the U.S*
- *Los Angeles County Significant Ecological Areas*
- *Wildlife Linkages and Corridors*

e. Regulatory Setting. The following is a summary of the regulatory context under which biological resources are managed at the federal, state, and local level. Agencies with responsibility for protection of biological resources within the plan area include:

- *U.S. Fish and Wildlife Service (USFWS; federally listed species and migratory birds)*
- *California Department Fish and Wildlife (CDFW; waters of the State, state listed and fully-protected species, and other sensitive plants and wildlife)*
- *U.S. Army Corps of Engineers (USACE; wetlands and other waters of the United States)*
- *Los Angeles Regional Water Quality Control Board (LARWQCB; waters of the State)*
- *County of Los Angeles (Open Space Easement Agreement)*
- *City of Avalon (GP/LCP Goals, Policies, and Actions, Municipal Code)*

The following discussion provides a summary of those laws that are most relevant to biological resources in the vicinity of the plan area.

U.S. Fish and Wildlife Service. The U.S. Fish and Wildlife Service (USFWS) implements the Migratory Bird Treaty Act (16 USC Section 703-711) and the Bald and Golden Eagle Protection Act (16 United States Code (USC) Section 668). USFWS and the National Oceanic and Atmospheric Administration (also called NOAA Fisheries) share responsibility for implementing the Federal Endangered Species Act (FESA; 16 USC § 153 *et seq)*. USFWS generally implements the FESA for land and freshwater species, while NOAA Fisheries implements the FESA for marine and anadramous species. Projects that would result in take of any federally listed threatened or endangered species are required to obtain permits from the USFWS or NOAA Fisheries through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan) of FESA, depending on the involvement by the federal government in permitting or funding the project. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what mitigation measures would be required to avoid jeopardizing the species.

Take under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Proposed or candidate species do not have the full protection of FESA; however, the USFWS and NOAA Fisheries advise project applicants that they could be elevated to listed status at any time.

The *Migratory Bird Treaty Act of 1918* (MBTA), as amended in 1972, protects nesting migratory birds by making it unlawful to "take" (kill, harm, harass, etc.) any migratory bird listed in 50 CFR 10, including their nests, eggs, or products. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, and many other species. It is possible that other state or federal sensitive or special-status avian species may also be adversely affected by new development in the City.

The federal *Endangered Species Act* (FESA), which is administered and enforced by the USFWS and the National Marine Fisheries Service, would also prohibit any activity that kills or injures fish or wildlife and emphasizes that such activities may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.

California Department of Fish and Wildlife. The CDFW derives its authority from the Fish and Game Code of California Species listed under the California Endangered Species Act (CESA; Fish and Game Code Section 2050 *et seq,*), which prohibits take of listed threatened or endangered species. Take under CESA is restricted to direct killing of a listed species and does not prohibit indirect harm by way of habitat modification.

Fish and Game Code Sections 3503, 3503.5, and 3511 describe unlawful take, possession, or needless destruction of birds, nests, and eggs. Fully protected birds (Section 3511) may not be taken or possessed except under specific permit. Section 3503.5 of the Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs.

Species of Special Concern (CSC) is a category used by CDFW for those species which are considered to be indicators of regional habitat changes or are considered to be potential future protected species. Species of Special Concern do not have any special legal status except that afforded by the Fish and Game Code. The CSC category is intended by the CDFW for use as a management tool to include these species into special consideration when decisions are made concerning the development of natural lands.

CDFW also has authority to administer the Native Plant Protection Act (Fish and Game Code Section 1900 *et seq*). The Act requires CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Under Section 1913(c) of the Act,

the owner of land where a rare or endangered native plant is growing is required to notify the department at least 10 days in advance of changing the land use to allow for salvage of plant.

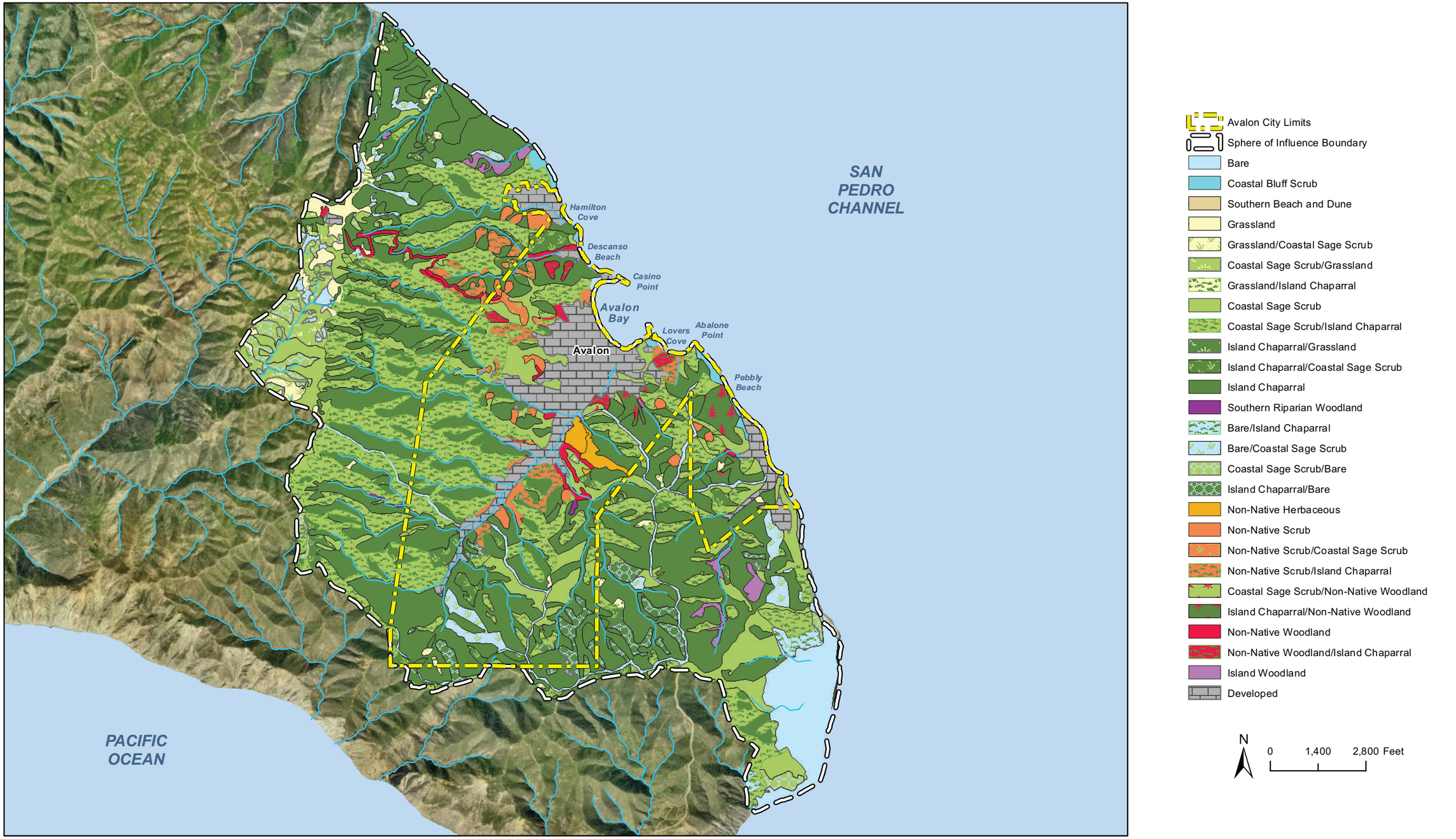
Perennial and intermittent streams also fall under the jurisdiction of CDFW. Sections 1600 et. seq. of the Fish and Game Code (Streambed Alteration Agreements) gives CDFW regulatory authority over work within the stream zone (which could extend to the 100-year flood plain) consisting of, but not limited to, the diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream or lake.

U.S. Army Corps of Engineers. Under Section 404 of the Clean Water Act and section 10 of the Rivers and Harbors Act, the USACE has authority to regulate activity that could discharge fill or dredge material or otherwise adversely modify wetlands or other waters of the United States. Perennial and intermittent creeks and adjacent wetlands are considered waters of the United States and are within the regulatory jurisdiction of the USACE. The USACE implements the federal policy embodied in Executive Order 11990, which, when implemented, is intended to result in no net loss of wetland values or acres. In achieving the goals of the Clean Water Act, the Corps seeks to avoid adverse impacts and to offset unavoidable adverse impacts on existing aquatic resources. Any fill or adverse modification of waters of the U.S., wetlands would require a permit from the Corps prior to the start of work. Typically, permits issued by the Corps are a condition of a project as mitigation to offset unavoidable impacts on wetlands and other waters of the U.S. in a manner that achieves the goal of no net loss of wetland acres or values.

Regional Water Quality Control Board. The protection of water quality in the watercourses of the City of Avalon is under the jurisdiction of the Los Angeles Regional Water Quality Control Board (LARWQCB). The Board establishes requirements prescribing discharge limits and establishes water quality objectives through the Los Angeles County Municipal Storm Water National Pollutant Discharge Elimination System (NPDES) Permit. The Standard Urban Storm Water Mitigation Plan (SUSMP), which is part of the NPDES Permit, addresses specific storm water pollution requirements for new developments such as the proposed project. As co-permittee, the City of Avalon is responsible for assuring that new developments are in compliance with the SUSMP.

Los Angeles County. In 1974, a 50-year Open Space Easement Agreement was signed between the County of Los Angeles and the Santa Catalina Island Company. This agreement calls for preservation of the natural character of the Island and improvement of the Island's access and recreational opportunities. Shortly thereafter, the Santa Catalina Island Conservancy was established to manage, in perpetuity, the Island's biotic resources.

Los Angeles County Oak Tree Ordinance. In 1982, the Los Angeles County Oak Tree Ordinance was established through an amendment to the Los Angeles County Code Title 22 Planning and Zoning to recognize oak trees as significant historical, aesthetic, and ecological resources. The goal of the permit was to create favorable conditions for the preservation and propagation of this unique and threatened plant. The Los Angeles County Oak Tree Ordinance



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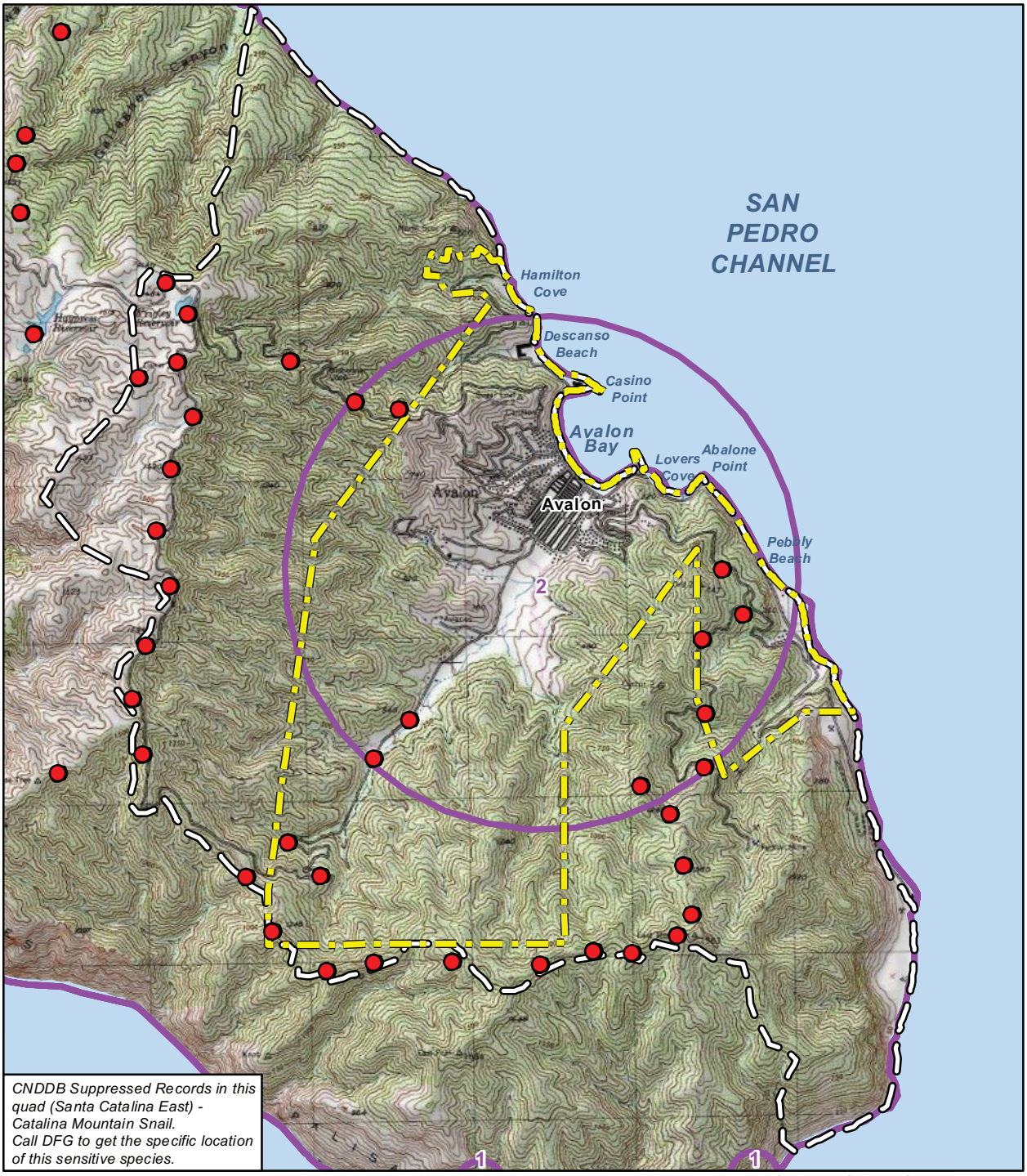
Vegetation Communities

Figure 4.3- 1



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Avalon City Limits

Sphere of Influence Boundary

Island Fox Capture Location

Animals

1 - bald eagle
2 - Santa Catalina shrew
* 3 - Santa Catalina Island fox
* 4 - sandy beach tiger beetle
* 5 - Santa Catalina lancetooth
* 6 - Shepard's snail
* 7 - Catalina mountainsnail

** Species located throughout plan area*

0 1,600 3,200
Feet

N

California Natural Diversity Database
Reported Animal Species

Figure 4.3- 2a

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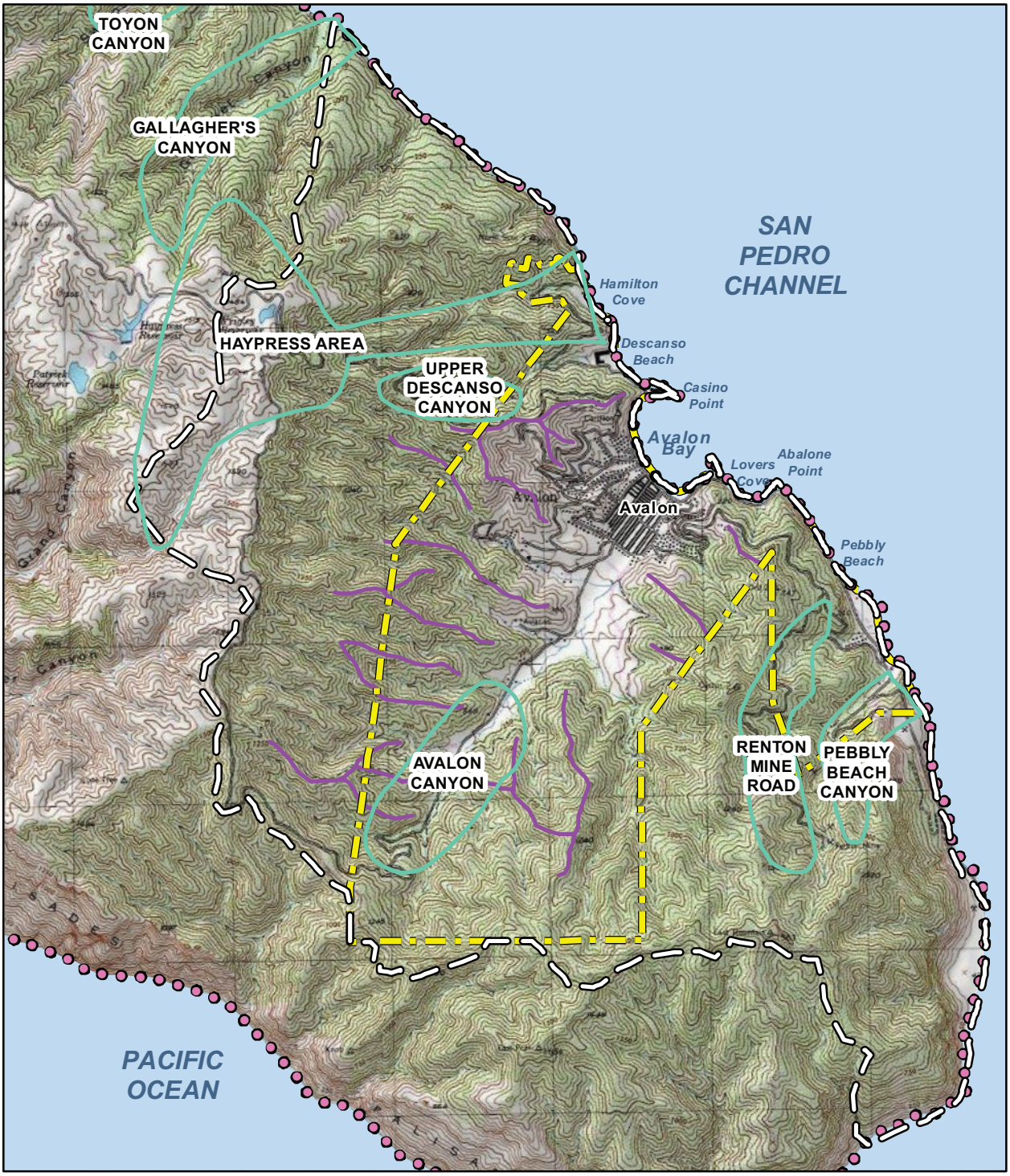
Avalon City Limits
Sphere of Influence Boundary
Plant Species 8-17
Plant Species 18-27
Plant Species 28-36

8 - Nevin's woolly sunflower
9 - southern tarplant
10 - chaparral ragwort
11 - beach spectaclepod
12 - Santa Cruz Island winged-rockcress
13 - aphanisma
14 - Coulter's saltbush
15 - south coast saltscale
16 - Davidson's saltscale
17 - island rush-rose
18 - Santa Barbara honeysuckle
19 - Catalina Island dudleya
20 - island green dudleya
21 - bright green dudleya
22 - Catalina crossosoma
23 - Santa Catalina Island manzanita
24 - round-leaved filaree
25 - Santa Catalina Island currant
26 - southern island mallow
27 - south island bush-poppy
28 - coast woolly-heads
29 - Santa Catalina Island ironwood
30 - Santa Catalina Island bedstraw
31 - Santa Catalina Island monkeyflower
32 - Santa Catalina figwort
33 - showy island snapdragon
34 - Santa Catalina Island desert-thorn
35 - Wallace's nightshade
36 - California dissanthelium

N
0 1,300 2,600 Feet



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Avalon City Limits
Sphere of Influence Boundary
Significant Ecological Area
Coastal Resource Area
Significant Ridgeline

0 1,600 3,200
Feet

N

Significant Ecological Areas

Figure 4.3- 3

applies to all unincorporated areas of the County. A person shall not cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone of any tree of the oak tree genus, which is eight or more inches in diameter four and one-half feet above mean natural grade, or in the case of oaks with multiple trunks, without first obtaining a permit. Historically, the policy of Los Angeles County has been to consider impacts to oak trees as a biological impact under CEQA and to require mitigation to offset losses to oak habitat in addition to the requirement of individual tree replacement mandated by the Oak Tree Ordinance. Under these guidelines, a "permit to alter" or a "permit to remove" shall be obtained if impacts to oak trees are expected outside the City limits. This ordinance applies to areas currently outside of the city boundaries, including the identified expansion areas

City of Avalon. The City's Conservation and Land Use Elements include numerous goals, policies, and actions to preserve biotic and scenic resources including open space, sensitive species, and habitat. The City of Avalon Municipal Code, Planning and Zoning also attempts to preserve open space within and surrounding the City by minimizing density and requiring open space in new development plans.

4.3.2 Impact Analysis

a. Methodology and Significance Thresholds. The impact analysis is based on available literature regarding the existing biological resources within the plan area, aerial photography. Environmental impacts relative to biological resources may be assessed using impact significance criteria from federal, state, and local regulations. Project impacts to flora and fauna may be determined to be significant even if they do not directly affect rare, threatened, or endangered species.

CEQA, Chapter 1, Section 21001 (c) states that it is the policy of the State of California to "prevent the elimination of fish and wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities." Environmental impacts relative to biological resources may be assessed using impact significance criteria encompassing CEQA guidelines and federal, state and local plans, regulations, and ordinances. The *CEQA Guidelines* Appendix G provides the following general statements to determine that significant impacts to biological resources could occur if a project action would:

- *Have a substantial adverse effect (i.e. significantly reduce species population, reduce species habitat, restrict reproductive capacity), either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, regulations, or by CDFW or USFWS;*
- *Have a substantial adverse effect (i.e. direct/indirect reduction) on any riparian habitat or other sensitive natural community identified in local or regional plans, policies regulations, or by the CDFW or USFWS;*
- *Have a substantial adverse effect (i.e. direct/indirect reduction) on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to, marsh vernal pool, coastal, etc.) through direct removal, filling, or hydrological interruption, or other means;*
- *Interfere substantially (i.e. direct/indirect reduction) with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;*
- *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and*

- *Conflict with the provisions of an adopted Habitat Preservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

b. Project Impacts and Mitigation Measures.

Impact BIO-1 Development facilitated by the 2030 GP/LCP would largely avoid impacts to special-status plant and animal species by emphasizing intensification/reuse of already urbanized areas rather than developing native habitats. Potential impacts could occur in certain locations, but would be addressed through implementation of GP/LCP policies. Implementation of GP/LCP policies and actions that aim to protect sensitive plants and animals would reduce potential impacts to a Class III, *less than significant*, level.

The 2030 GP/LCP (Figure 2-5 in Section 2.0, *Project Description*) would primarily facilitate intensification of existing developed areas rather than development within undisturbed areas with the potential for special-status plant or animal species. Nevertheless, some areas that that may contain sensitive plants and/or wildlife could potentially experience some development.

Implementation of the 2030 GP/LCP could introduce new development on land within the City that may encroach into areas that contain sensitive natural communities such as up Avalon Canyon and the surrounding hillsides, in the hillsides near Lover's Cove Specific Plan Area, and in the hillsides in Expansion Areas No. 1 (Pebbly Beach Specific Plan Area), and No. 2 (above Hamilton Cove and on Conservancy Property southwest of the existing city limits). This could lead to the direct loss of this habitat and the wildlife that rely on it. It could also lead to the degradation of adjacent areas that were not directly disturbed, but would be subject to increased indirect impacts by being in close proximity to urban development uses.

As described above, a variety of plant and animal species are present within the plan area, especially within the ESAs. Some of the sensitive wildlife species that have been observed within the plan area include, but are not limited to, Santa Catalina Island fox and bald eagle.

Development under the proposed 2030 GP/LCP could also result in the removal of mature trees that may serve as perching or nesting sites for migratory birds and raptors in both developed and undeveloped areas. It is anticipated that any migratory birds or raptors using mature trees as perching or nesting sites could vacate the site or nest during construction activities due to the increase in noise and activity. Several federal and state regulations, including the Migratory Bird Treaty Act (MBTA), Federal Endangered Species Act (FESA), and California Endangered Species Act (CESA), restrict activities that may result in the "take" (kill, harm, harass, etc.) of certain species, including active nests. During the project-level analysis of development proposed under the GP/LCP, project-specific mitigation, such as pre-construction surveys, may be necessary to ensure that development under the proposed 2030 GP/LCP date does not result in the "take" of such species as a result of vegetation removal. The proposed GP/LCP's Conservation, Open Space, and Land Use Elements, specifically IV.A Biotic Resources and IV.D Water Resources including Policies II-4, 9, III-1, 2, 4, 15, 16, 20, IV-1 through IV-5, IV-10, and associated implementation actions, delineate the types and manner of mitigation measures that may be necessary during project-specific analysis and development.

The 2030 GP/LCP has identified goals that would aid in: (1) the preservation of critical biotic resources and enhance habitat value and biotic resource diversity within the Avalon area; (2) maintenance of the integrity of beaches, coves, harbor, and bays; (3) maintenance and enhance of Avalon's unique ecology and environmental features for the long term enjoyment of residents

and visitors; (4) providing a high quality and functional mix of active and passive open spaces that are interconnected with coastal resources and the iconic hillsides. Specifically, Policies IV-1 through IV-5 protect plant and wildlife species and habitat in the Planning Area by requiring: (1) new developments, including roads, maintain the biotic habitat value of riparian areas, oak woodlands, habitat linkages, and other sensitive biological habitats; (2) regulation of construction activities to eliminate potentially destructive practices that adversely affect environmentally sensitive areas; (3) preservation of the integrity of the riparian habitat areas, creek corridors, and other drainages that support biological resources and contribute to the overall health of the watershed areas through the preservation and restoration of native plants and the removal of invasive, exotic, and nonnative species; (4) preservation of existing mature indigenous trees, unless they are detrimental to public health and safety; and (5) the promotion of the planting of additional trees in developed locations. Plantings should include replacement of trees that are, or have been, removed and new trees in locations where none are currently present.

These policies providing protection to habitats containing candidate, and special status plant and wildlife species and would increase the level of protection of these plant and wildlife species within the City's regulatory framework.

Compliance with FESA, CESA, and CEQA, as well as implementation of 2030 GP/LCP goals and policies discussed above, would reduce potential impacts on sensitive plant and wildlife species within the GP/LCP Area. In addition, compliance with federal and state regulations and their respective permitting processes would ensure protection of sensitive natural communities, such that impacts would be less than significant and no additional mitigation is required.

Proposed 2030 GP/LCP Update Policies and Implementation Measures That Provide Mitigation. The following proposed GP/LCP policies and implementation measures would assist in avoiding or minimizing impacts to special-status species:

Policies

II-4 *Promote land development practices that reduce energy and water consumption, air and water pollution, greenhouse gas emissions, and waste, incorporating such techniques as:*

- *Concentration of uses and design of development to promote walking and use of transit in lieu of the automobile*
- *Capture and re-use of storm water on-site for irrigation*
- *Orientation of buildings to maximize opportunities for solar energy use, day lighting, and ventilation*
- *Use of permeable paving materials*
- *Shading of surface parking, walkways, and plazas*
- *Convert waste to energy*
- *Upgrade wastewater disposal system to allow for recycled water use*

II-9 *Encourage infill of the City Center area and where appropriate, increase the intensity of development on vacant and underutilized properties, in lieu of expanded development outward into Avalon's hillsides, natural areas and open spaces.*

III-1 *Protect open space and other properties that contain or protect significant sensitive resources, such as special-status plant and wildlife species known to occur in or near the City, natural habitats, and habitat linkages.*

III-2 *Maintain the natural topographic characteristics of hillside areas, ocean cliffs, canyons, beaches, and major rock outcroppings.*

III-4 *Preserve and increase the amount of open space and native trees and vegetation within the City to help mitigate greenhouse gas emissions.*

III-15 *Preserve sensitive lands, including permanent bodies of water, floodways, beaches/shorelines and slopes over 35 percent as open space.*

III-16 *The undevelopable lands around Avalon should be retained in their natural beauty as an open space buffer zone.*

III-20 *Preserve view of 18 prominent ridgelines in Upper Avalon Canyon by restricting development within 200 horizontal feet of the ridgeline, as depicted on Figure III-2 [of the 2030 GP/LCP].*

IV-1 *Ensure that new developments, including roads, maintain the biotic habitat value of riparian areas, oak woodlands, habitat linkages, and other sensitive biological habitats.*

IV-2 *Regulate construction activities to eliminate potentially destructive practices that adversely affect environmentally sensitive areas.*

IV-3 *Preserve the integrity of the riparian habitat areas, creek corridors, and other drainages that support biological resources and contribute to the overall health of the watershed areas through the preservation and restoration of native plants and the removal of invasive, exotic, and nonnative species.*

IV-4 *Preserve existing mature indigenous trees, unless they are detrimental to public health and safety.*

IV-5 *Promote the planting of additional trees in developed locations. Plantings should include replacement of trees that are, or have been, removed and new trees in locations where none are currently present.*

IV-10 *Protect marine resources (shorelines, lagoons, bays, harbors, sea cliffs, etc.) that have scenic, recreational, educational, or ecological value.*

Implementation Measures

- *Within areas having significant biotic values, develop criteria and procedures for assessing the environmental impact of public and private projects.*

- *Enforce state and federal conservation and avoidance regulations, through the development review process, for all new development projects on private property that may potentially impact affect natural vegetation communities or biological resources.*
- *Continue to require development proposed in areas identified or expected to contain sensitive vegetation and wildlife communities to consult with wildlife agencies (i.e., United States Fish and Wildlife Service [USFWS] and the California Department of Fish and Wildlife) early in the development review process regarding special status plant and wildlife species; conduct biological assessments, as appropriate; and develop and implement project-specific mitigation measures to mitigate impacts on threatened and endangered species.*

- *Collaborate with the Santa Catalina Island Company and the Catalina Island Conservancy to determine ways in which the City can support the formation of an interconnected network of open spaces and recreation amenities.*
- *Continue to regulate all development within the Low Density Residential and Resort Recreational Zones to avoid adverse impacts to sensitive natural resources.*
- *Expand the Open Space designation as necessary to encompass areas that have important open space values, such as biologically/ecologically sensitive areas.*
- *Within areas having significant open space values, establish criteria and procedures for assessing the environmental impact of public and private projects.*

Mitigation Measures. Implementation of 2030 GP/LCP policies and implementation actions listed above would protect sensitive species and buffer such species from urban uses. Additional mitigation with respect to GP/LCP implementation is not needed.

Significance After Mitigation. Implementation of 2030 GP/LCP policies would reduce impacts to special-status plant and animal species to a less than significant level. Individual future developments within biologically sensitive areas will be subject to further environmental review and, as appropriate, project-specific mitigation.

Impact BIO-2 Development facilitated by the 2030 GP/LCP land use plan generally avoids direct impacts to riparian, wetland, and open water habitats. Development could adversely affect the quality of riparian and wetland habitat in certain areas. However, implementation of GP/LCP policies would reduce potential impacts to a Class III, *less than significant*, level.

The 2030 GP/LCP land use map (Figure 2-5 in Section 2.0, *Project Description*) focuses mainly on intensification and reuse of already developed areas and would facilitate only limited development in undeveloped areas. Infill development would generally avoid direct impacts to riparian, wetland, and open water habitats. However, the intensification of use of habitats along riparian corridors has the potential to be cumulatively significant and will require inspection on a project-by-project basis to ensure protection of these resources. For example, development in the Avalon Canyon and Upper Descanso Canyon areas is planned for low density resort recreational use. There are a number of potential jurisdictional features within these areas. Future development in these and other locations that abut riparian corridors could potentially disturb riparian resources unless sufficient buffers and other mitigation actions are incorporated into these future projects. The type and magnitude of impacts would depend on what is actually proposed and, therefore, must be assessed on a case-by-case basis.

The CDFW, under Section 1600 of the Fish and Game Code of California, regulates impacts to lakes, streams, and associated riparian (streamside or lakeside) vegetation through the issuance of a Lake or Streambed Alteration Agreement (SAA). A stream is defined as a body of water that flows at least periodically or intermittently through a bed or channel with banks and supports fish or other aquatic life. This includes watercourses having a surface or sub-surface flow that supports, or has supported, riparian vegetation. CDFW jurisdiction typically extends from the stream bed to the edge of the riparian canopy, and any modification to the stream or its banks that would impact it or riparian vegetation would require a SAA. As many riparian communities (e.g., southern riparian scrub, southern willow scrub, and southern cottonwood) are listed as "rare" by the CDFW and California Native Plant Society (CNPS), additional protection is extended to some riparian communities by the CDFW under Section 15380 of the CEQA Guidelines. These guidelines independently define "endangered" species of plants or animals as those whose survival and reproduction in the wild are in immediate jeopardy and "rare" species as those who are in such low numbers that they could become endangered if their environment worsens.

Therefore, a project normally will have a potentially significant effect on the environment if it will substantially affect a rare or endangered species of animal or plant or the habitat of the species.

In addition to the applicable state and federal regulations, the 2030 GP/LCP has identified as goals: (1) Preserve critical biotic resources and enhance habitat value and biotic resource diversity within the Avalon area, and; (2) Maintain the integrity of beaches, coves, harbor, and bays. Implementation of proposed GP/LCP Policies IV-1, 2, 3, and 10 would reduce or avoid impacts to riparian areas by ensuring cooperation with resource protection agencies, organizations, and conservation plans, and limiting or placing constraints on future development within identified SEAs (Upper Descanso Canyon, Haypress Area, Pebbly Beach Canyon Sensitive Ecological Areas) or areas containing significant or rare biological resources.

The 2030 GP/LCP proposes Resort Recreational - Low Density land use north of the current City limits. This designation would facilitate development potential within the Upper Descanso Canyon and Haypress SEAs. The policies listed above provide protection to habitats containing candidate, and special status plant and wildlife species, which would in turn provide protections of the SEAs.

An indirect impact to riparian habitat could result from the future development of existing vacant lands. The placement of development next to riparian habitats would disturb wildlife that rely on these areas for shelter and food and could also result in the degradation of these areas through the introduction of feral animals and contaminants that are typical of urban uses. Because federal regulations do not specifically address protection of riparian vegetation under the Section 404 permitting process, and the fact that the CDFW Section 1600 SAA is a negotiated agreement, some unmitigated loss of riparian resources may occur. Therefore these regulations would not serve to fully protect and manage riparian habitat under future development However, the aforementioned proposed GP/LCP policies would serve to regulate indirect impacts future development could have on riparian habitats. Therefore, the impacts associated with riparian habitats within the plan area would be less than significant.

The Conservation Element of the 2030 GP/LCP includes the following policies aimed at the protection of riparian areas from the impacts of future development:

Policies

III-15 *Preserve sensitive lands, including permanent bodies of water, floodways, beaches/shorelines and slopes over 35 percent as open space.*

IV-1 *Ensure that new developments, including roads, maintain the biotic habitat value of riparian areas, oak woodlands, habitat linkages, and other sensitive biological habitats.*

IV-3 *Preserve the integrity of the riparian habitat areas, creek corridors, and other drainages that support biological resources and contribute to the overall health of the watershed areas through the preservation and restoration of native plants and the removal of invasive, exotic, and nonnative species.*

Implementation Actions

- *Within areas having significant biotic values, develop criteria and procedures for assessing the environmental impact of public and private projects.*
- *Enforce state and federal conservation and avoidance regulations, through the development review process, for all new development projects on private property that may potentially impact affect natural vegetation communities or biological resources.*

- *Continue to require development proposed in areas identified or expected to contain sensitive vegetation and wildlife communities to consult with wildlife agencies (i.e., United States Fish and Wildlife Service [USFWS] and the California Department of Fish and Wildlife) early in the development review process regarding special status plant and wildlife species; conduct biological assessments, as appropriate; and develop and implement project-specific mitigation measures to mitigate impacts on threatened and endangered species.*
- *Require separation of construction activities from sensitive biological resources through the use of buffers, setbacks, and temporary protective fencing.*
  Develop specific requirements for planting and replacement of trees for incorporation into the Development Code.

Mitigation Measures. Implementation of 2030 GP/LCP policies and implementation actions listed above would ensure that appropriate buffers and other protections for riparian resources and Sensitive Ecological Areas are implemented for individual projects. Additional mitigation with respect to GP/LCP implementation is not needed

Significance After Mitigation. Implementation of 2030 GP/LCP policies would reduce impacts to riparian, wetland, or open waters to a less than significant level

Impact BIO-3 Development facilitated by the 2030 GP/LCP would largely avoid impacts to wildlife movement corridors by emphasizing intensification/ reuse of existing urbanized areas. GP/LCP policies require preservation and strengthening of connections between urban and open space areas. Therefore, impacts to wildlife movement would be Class III, *less than significant*.

As stated above, concentrated wildlife movement through movement corridors or bottlenecks are uncommon on the Island due to the abundance of uninterrupted open space and the lack of disturbed areas. In general, movement takes place in large drainages, along ridgelines, and along dirt roads. Human encroachment is one leading cause of restricted wildlife movement. Movement restriction can result in isolation of some animal populations resulting in a reduction of genetic diversity. The designation of open space within the Expansion Area 2 helps preserve the majority of movement areas from the northern portion of the island to the south. Therefore, the impacts associated with wildlife movement within the Planning Area would be less than significant.

The GP/LCP policies and implementation actions listed below require preservation of open space linkages and corridors throughout the plan area.

Policies

II-2 *Preserve and strengthen the visual and physical connection between the waterfront, City Center, and neighborhoods surrounding the City Center, middle canyon, upper canyon and open spaces.*

III-5 *Provide an open space and recreation facilities system with an appropriate balance of facilities suitable for intensive use (beaches, playgrounds, sports fields) and those suitable for low intensity use (hiking, camping, gold) that meets the needs of residents and visitors.*

III-7 *Create and maintain a linked system of open spaces to provide opportunities for long distance hiking, horseback riding, and biking.*

III-8 *Improve public access to designated open space areas and recreation facilities.*

III-14 *Promote the protection of open space on public and privately owned property for the protection of health and safety through continued application of the Open Space and Resort/Recreation land use designation, as appropriate.*

III-16 *The undevelopable lands around Avalon should be retained in their natural beauty as an open space buffer zone.*

IV-1 *Ensure that new developments, including roads, maintain the biotic habitat value of riparian areas, oak woodlands, habitat linkages, and other sensitive biological habitats.*

Implementation Actions

- *Enforce state and federal conservation and avoidance regulations, through the development review process, for all new development projects on private property that may potentially impact affect natural vegetation communities or biological resources.*

- *Continue to require development proposed in areas identified or expected to contain sensitive vegetation and wildlife communities to consult with wildlife agencies (i.e., United States Fish and Wildlife Service [USFWS] and the California Department of Fish and Wildlife) early in the development review process regarding special status plant and wildlife species; conduct biological assessments, as appropriate; and develop and implement project-specific mitigation measures to mitigate impacts on threatened and endangered species.*

Mitigation Measures. Implementation of 2030 GP/LCP policies and implementation actions listed above would ensure that wildlife movement would not be impacted by individual projects. Additional mitigation with respect to GP/LCP implementation is not needed.

Significance After Mitigation. Impacts to wildlife corridors would be less than significant without mitigation.

Impact BIO-4 The proposed 2030 GP/LP would not pose and conflicts with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. There would be *no impact* in this regard.

Implementation of the proposed 2030 GP/LCP would be subject to all applicable federal, state, and local policies and regulations related to the protection of biological resources. As discussed above, the Los Angeles County Oak Tree Ordinance recognizes oak trees on unincorporated areas as significant historical, aesthetic, and ecological resources. Oak trees are located throughout the GP/LCP plan area. Requirements under the Oak Tree Ordinance prohibits the cutting, destruction, removal, relocation, infliction of damage, or encroachment into the protected zone of any tree of the oak tree genus, which is eight or more inches in diameter without first obtaining a permit. If significant oak trees are to be removed or cut, a "permit to alter" or a "permit to remove" shall be obtained if impacts to oak trees are expected outside the City limits.

GP/LCP Policies III-4, IV-1, 4, and 5 and associated implementation actions provide protection to trees and sensitive habitat while developing the 2030 GP/LCP. As the proposed 2030 GP/LCP includes policies to ensure that future development within the plan area would not conflict with any local policies or ordinances protecting biological resources, there would be no impact.

Policies

III-4 *Preserve and increase the amount of open space and native trees and vegetation within the City to help mitigate greenhouse gas emissions.*

IV-1 *Ensure that new developments, including roads, maintain the biotic habitat value of riparian areas, oak woodlands, habitat linkages, and other sensitive biological habitats.*

IV-4 *Preserve existing mature indigenous trees, unless they are detrimental to public health and safety.*

IV-5 *Promote the planting of additional trees in developed locations. Plantings should include replacement of trees that are, or have been, removed and new trees in locations where none are currently present.*

Implementation Actions

- *Enforce state and federal conservation and avoidance regulations, through the development review process, for all new development projects on private property that may potentially impact affect natural vegetation communities or biological resources.*
- *Develop specific requirements for planting and replacement of trees for incorporation into the Development Code.*
- *Expand the Open Space designation as necessary to encompass areas that have important open space values, such as biologically/ecologically sensitive areas.*
- *Within areas having significant open space values, establish criteria and procedures for assessing the environmental impact of public and private projects.*

Mitigation Measures. Implementation of the 2030 GP/LCP policies and implementation actions listed above would achieve compliance with local policies and ordinances pertaining to biological resource protection. Additional mitigation with respect to GP/LCP implementation is not needed.

Significance After Mitigation. No impact would occur with respect to local policies or ordinances without mitigation.

Impact BIO-5 The 2030 GP/LCP would not conflict with the provisions of an adopted Habitat Preservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. *No impact* would occur in this regard.

The City of Avalon is not located in a habitat preservation or conservation plan area and therefore would not conflict with this threshold and as such there would be no impact relative to such plans.

Mitigation Measures. Avalon is not subject to an adopted Habitat Preservation Plan or Natural Community Conservation Plan; therefore, mitigation is not needed

Significance After Mitigation. No impact would occur with respect to Habitat Preservation Plans or Natural Community Conservation Plans without mitigation.

4.4 CULTURAL RESOURCES

This section analyzes the potential impacts of the 2030 GP/LCP on cultural resources. Impacts to both pre-historic archaeological resources and historic resources are addressed. This analysis is based in part upon the Preliminary Cultural Resource Management Plan for the City of Avalon General Plan Update and EIR prepared by the Historic Environmental Archaeological Research Team (HEART) (see Appendix B).

4.4.1 Setting

Cultural resources include prehistoric resources, historic resources, and Native American resources. Prehistoric resources represent the remains of human occupation prior to European settlement. Historic resources represent remains after European settlement and may be part of a "built environment," including man-made structures used for habitation, work, recreation, education and religious worship, and may also be represented by houses, factories, office buildings, schools, churches, museums, hospitals, bridges and other structural remains. Native American resources include ethnographic elements pertaining to Native American issues and values.

a. Prehistoric and Historical Background. ~~Catalina has a rich history of inhabitation, dating back to 3,000-4,000 BC. The Gabrielino/ Tongva inhabited the island during the time of the Spanish, although it is thought that the Chumash were likely predecessors. When the Spanish arrived in the early 16th century, the major population centers were in present day Avalon, Two Harbors, Toyon, Johnson's Landing, Little Harbor, and Whites Landing. With the Europeans came disease and epidemics, which devastated the native population. Spanish control of the island was relinquished when Mexico proclaimed independence in 1821, and the title to the land was transferred many times to private owners. During the 1800s, there was also a brief mining boom on the island. When Catalina fell under the ownership of George Shatto and Charles Sumner in 1887, they began to construct a city, which would soon be named Avalon. The cost of building Avalon became too great and the deed to the island once again began exchanging hands. The William Banning Family took over Catalina and in 1894 the Bannings formed the Santa Catalina Island Company as a family corporation. By 1909, the permanent population was estimated to be about 500. In 1913, the summer population was estimated to be as high as 10,000. On June 26, 1913, Avalon became incorporated as a city. In 1919, the Bannings lost their majority interest in the island to the William Wrigley, Jr. family. In December 1941, the island was restricted to the public and became part of the war effort. The Office of Strategic Services, the Coast Guard, and the Signal Corps all had a presence on the island. In 1975, the Wrigley family gifted 42,135 acres of land to the Santa Catalina Island Conservancy through the Santa Catalina Island Company.~~

Earliest dated evidence of occupation on the island comes from Little Harbor at approximately 7800 B.P. (or between 5,000-6,000 BC). However, San Clemente and San Nicolas have dates reaching back 10,000 years ago. The four Southern Channel Islands (San Clemente, Santa Catalina, San Nicolas, and Santa Barbara) were inhabited by the Gabrielino/Tongva people, while the northern Channel Islands are identified as being Chumash. Over thousands of years people from the island s utilized the rich land and marine resources, as well as visited and traded with each other and the mainland. Fish, sea mammals, and soapstone were some of the items traded for chipping stone, deer, and other mainland items. When the Spanish arrived in 1542 under Juan Rodriguez Cabrillo, he reported rich, thriving villages eager to trade. He mentions visiting villages at Avalon Bay, Nájquqar (Two Harbors), and likely White's or Empire Landing. The island was called Pimugna. Even though Cabrillo named the island San Salvador in the name of the Spanish crown, it was renamed Santa Catalina when General Sebastian Viscaino visited on the eve of Saint Catherine's Day in 1602.

Visits to the island continued sporadically including Russian fur traders, adventure seekers, privateers, and miners. The island moved from Spanish to Mexican hands with Mexican Independence and Thomas Robbins received a grant to Catalina in 1846 from Governor Pio Pico. Many cattle and sheep were pastured on the island both in town and within the many coves as squatters. Title was clarified and consolidated by James Lick with the assistance of the US union soldiers that resided in Two Harbors during the Civil War. While Lick was unable to make owning the island profitable, George Shatto made a valiant attempt with his purchase of the island in 1887. He ordered the construction of the Hotel Metropole and sold lots on the flats near the hotel. It was Shatto's sister, Etta Whitney, who suggested Avalon as a better name than Shatto City with its romantic and mysterious tones.

While the start of Avalon was realized, Shatto could not make a meet his mortgage payments and the island reverted back to the James Lick trustees, who then sold it to William, Hancock, and Joseph Banning in 1892. Much of the infrastructure of Avalon was formed during the Banning Brothers tenure including the layout of streets and recreational pastimes. They created the stage coach roads around the island, built Eagles Nest Hunting Lodge in Middle Canyon, and started regular transportation to the island to bring the many tourists looking for a great escape from Los Angeles.

b. Archaeological and Historic Resources. Roughly, 2,000 archaeological sites ~~are thought to exist on~~have been recorded across the island, including villages, tool manufacturing locations, soapstone quarries, and food refuse piles (middens).~~with less about 1,000 having been discovered to date. Many sites have been destroyed or disturbed due to extensive pot hunting (which occurred from the late 1870s until the mid-1930s), and changing land use patterns~~Few have been well documented and some have unfortunately been disturbed by pot hunting and amateur excavations that started in the 1870s. Major collections from the island exist in places such as the Peabody Museum at Harvard University, the Smithsonian Natural History Museum, and the National Museum of the American Indian.

Three properties in Avalon are listed in the National Register of Historic Places: the Tuna Club of Avalon (see Figure 4.4-1 for a photo), the Peter Gano House (Holly Hill House), and the Wrigley Summer Cottage (Inn at Mt. Ada). In addition, there are a number of structures of local historical and architectural interest within Avalon, including:

- *Zane Grey Pueblo – 199 Chimes Tower Road*
- *Casino Building – 1 Casino Way (see Figure 4.4-1 for a photo)*
- *Avalon Pleasure Pier*
- *Avalon Community Church – 236 Metropole*
- *El Encanto Marketplace – 101 Marilla*
- *Catalina Yacht Club*
- *Descanso/Third Street "Ship House"– 200 Descanso Avenue*
- *Avalon's Oldest House– 133 Vieudelou*
- *Liz Barlow House –130 Hiawatha Avenue*
- *Bird Park Aviary Buildings – 801 Avalon Canyon Road*
- *Catalina Country Club – 1 Country Club Drive*
- *St. Catherine of Alexandria Church – 800 Beacon Street*
- *Glenmore Plaza Hotel – 120 Sumner*

c. Regulatory Setting. A property may be designated as historic by National, State, or local authorities. In order for a building to qualify for listing in the National Register of Historic Places or the California Register of Historical Resources, it must meet one or more identified criteria of significance. If the designation is for a building, the structure should also retain sufficient

architectural integrity to continue to evoke the sense of place and time with which it is historically associated. An explanation of these designations follows.

National Register of Historic Places. The National Register of Historic Places (NRHP), which is administered by the National Park Service, is "an authoritative guide to be used by federal, state, and local governments, private groups, and citizens to identify the nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment." However, federal regulations explicitly provide that National Register listing of private property "does not prohibit under federal law or regulation any actions which may otherwise be taken by the property owner with respect to the property."

Listing in the NRHP assists in preservation of historic properties through the following actions: recognition that a property is of significance to the nation, the state, or the community; consideration in planning for Federal or federally assisted projects; eligibility for Federal tax benefits; consideration in the decision to issue a federal permit; and qualification for Federal assistance for historic preservation grants, when funds are available. Properties may qualify for NRHP listing if they:

A. *Are associated with events that have made a significant contribution to the broad patterns of our history*
B. *Are associated with the lives of persons significant in our past*
C. *Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction*
D. *Have yielded, or may be likely to yield, information important in prehistory or history*

According to the NRHP guidelines, the essential physical features of a property must be present for it to be considered significant. Further, in order to qualify for the NRHP, a resource must retain its integrity, or the "ability to convey its significance." The seven aspects of integrity are:

1. *Location (the place where the historic property was constructed or the place where the historic event occurred);*
2. *Design (the combination of elements that create the form, plan, space, structure, and style of a property);*
3. *Setting (the physical environment of a historic property);*
4. *Materials (the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property);*
5. *Workmanship (the physical evidence of the crafts of a particular culture or people during any given period of history or prehistory);*
6. *Feeling (a property's expression of the aesthetic or historic sense of a particular period of time); and*
7. *Association (the direct link between an important historic event or person and a historic property).*

The relevant aspects of integrity depend upon the NRHP criteria applied to the property. For example, a property nominated under the location criterion would be likely to convey its significance primarily through integrity of location, setting, and association. A property nominated solely under the design criterion would usually rely primarily on integrity of design, materials, and workmanship.

California Register of Historic Resources. The California Register of Historic Resources (CRHR) is an authoritative guide in California used by State and local agencies, private groups, and citizens to identify the State's historical resources and to indicate which properties are to be protected, to the extent prudent and feasible, from substantial adverse change. A resource is eligible for listing on the California Register if it meets any of the following criteria for listing:

A. It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
B. It is associated with the lives of persons important in our past;
C. It embodies the distinctive work of an important creative individual, or possesses high artistic values; or
D. It has yielded, or may be likely to yield, information important in prehistory or history.

The CRHR may also include properties listed in "local registers" of historic properties. A "local register of historic resources" is broadly defined in Public Resources Code Section 5020.1(k) as "a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution." Local registers of historic properties come in two forms: (1) surveys of historic resources conducted by a local agency in accordance with Office of Historic Preservation procedures and standards, adopted by the local agency and maintained as current; and (2) landmarks designated under local ordinances or resolutions (Public Resources Code Sections 5024.1, 21804.1, 15064.5).

By definition, the CRHR also includes all "properties formally determined eligible for, or listed in, the National Register of Historic Places," and certain specified State Historical Landmarks. The majority of formal determinations of NRHP eligibility occur when properties are evaluated by the State Office of Historic Preservation in connection with federal environmental review procedures (Section 106 of the Historic Preservation Act of 1966). Formal determinations of eligibility also occur when properties are nominated to the NRHP, but are not listed due to owner objection. The minimum age criterion for the NRHP and the CRHR is 50 years. A property less than 50 years old may be eligible for listing on the NRHP if it can be regarded as "exceptional", as defined by the NRHP procedures, or in terms of the CRHR, if "it can be demonstrated that sufficient time has passed to understand its historical importance."

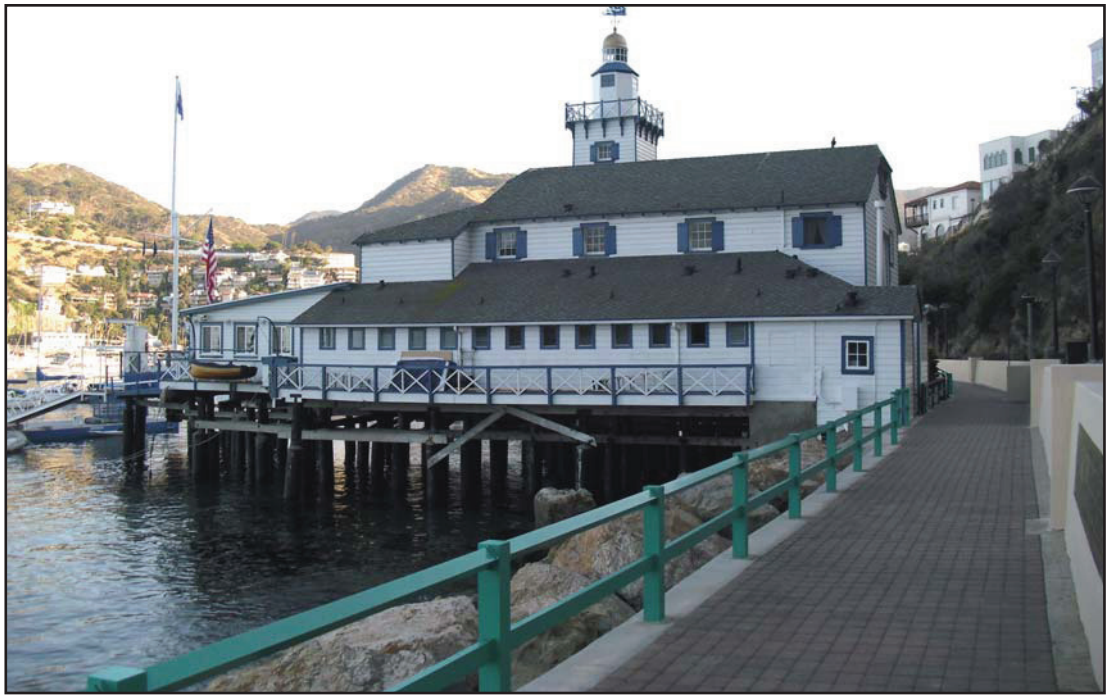

Photo 1 - The Tuna Club of Avalon, which is one of the three buildings in Avalon listed on the National Register of Historic Places.

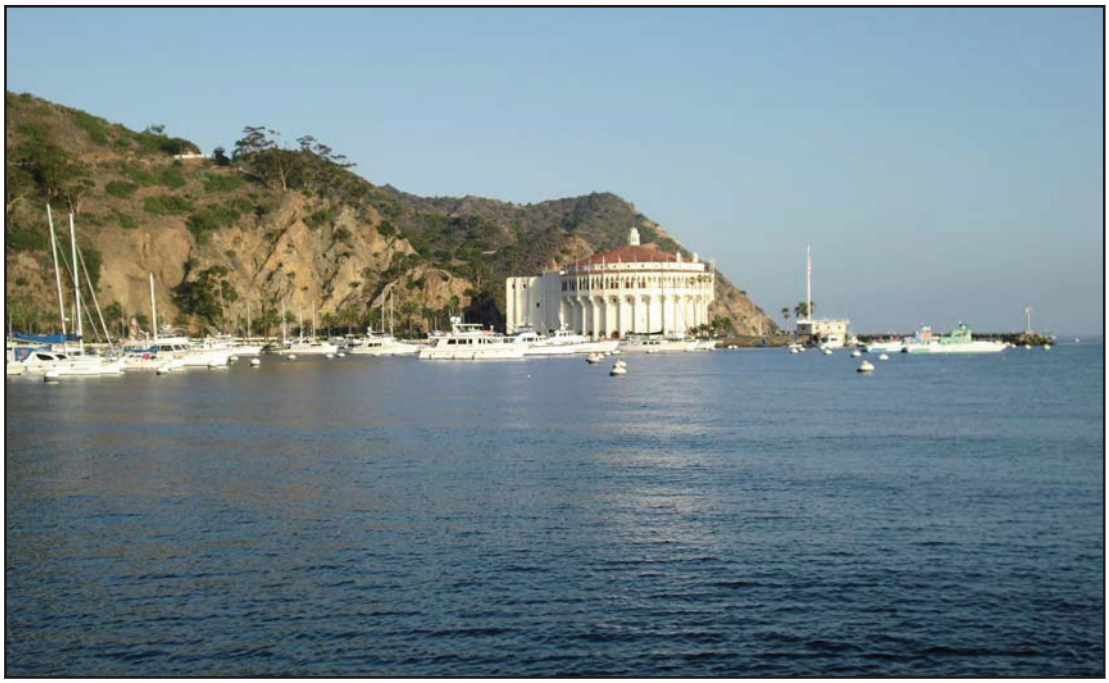

Photo 2 - View of the Casino Building from across Avalon Bay. The Casino building is considered a structure of local historical and architectural interest in the 2030 GP/LCP.

Photos of Historic Resources in Avalon

Figure 4.4-1

4.4.2 Impact Analysis

a. Methodology and Significance Thresholds. Evaluation of significance under CEQA is based on eligibility for listing on the NRHP or the CRHR. The NRHP is an effective planning tool for both long term and short-term cultural resource management considerations. An evaluation of significance in prehistoric and historic sites is usually measured by a number of variables, which reflect their applicability to present, and future research questions posed by scientists in describing and explaining culture change.

Generally, the historic resource impact of a project that follows the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995)*, shall be considered as mitigated to a level of less than significant.

Archaeological materials are fragile and non-renewable. Thus, any activity that alters the surface of the land, inducing archaeological pursuits, can affect these resources. The cultural resource evaluation process requires that a resource, or the information it represents, be related to some framework held in common by all archaeologists, and thus provide a measure of reference for determining the potential significance of similar resources. This framework usually addresses research orientation, and geographic, cultural and temporal questions within the context of significance.

The fact that a resource is not listed in, or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

If development facilitated under the 2030 GP/LCP causes damage to a significant archaeological resource, implementation of the GP/LCP may have a significant effect on the environment. Section 15064.5 of CEQA pertains to the determination of the significance of impacts to archaeological and historic resources. CEQA provides guidelines for administering to archaeological resources that may be adversely affected by development in Section 151226.4. Achieving CEQA compliance with regard to treatment of impacts to significant cultural resources requires that a mitigation plan be developed for the resource(s). Preservation in place is the preferred manner of mitigating impacts to significant archaeological resources.

Direct impacts may occur by:

(1) Physically damaging, destroying, or altering all or part of the resource;
(2) Altering characteristics of the surrounding environment that contribute to the resource's significance;
(3) Neglecting the resource to the extent that it deteriorates or is destroyed. Indirect impacts primarily result from the effects of project-induced population growth. Such growth can result in increased construction as well as increased recreational activities that can disturb or destroy cultural resources; or
(4) The incidental discovery of cultural resources without proper notification.

Direct impacts can be assessed by identifying the types and locations of development facilitated under the GP/LCP, determining the exact locations of cultural resources, assessing the potential significance of the resources that may be affected, and determining the appropriate mitigation.

Indirect impacts primarily result from the effects of development facilitated by the GP/LCP. Such growth can result in increased construction as well as increased recreational activities that can disturb or destroy cultural resources. Due to their nature, indirect impacts are more difficult to assess and quantify.

b. Project Impacts and Mitigation Measures.

Impact CR-1 Development facilitated by the 2030 GP/LCP could adversely affect identified and previously unidentified pre-historic archaeological resources. This is a Class II, *significant but mitigable*, impact.

It is known that prehistoric populations were present in Avalon, and that the plan area contains identified archaeological sites. The Preliminary Cultural Resource Management Plan identified one recorded pre-historic archaeological site and four recorded historic archaeological sites.

The pre-historic archaeological site contains the remains of a pre-historic village and is considered to be one of the most important archaeological sites in southern California. This sensitive area is located west of Crescent Avenue between Whittley Avenue and Metropole Avenue (Figure 4 in the Preliminary Cultural Resource Management Plan, Appendix B). Though the site is now almost completely covered with pavement, concrete, and buildings, the 2030 GP/LCP may facilitate development in this sensitive area. GP/LCP Policy II-15 encourages mixed-use development along "corridors of intensity," including Metropole Avenue.

The four historic archaeological sites include remains of homesites with historic debris, building foundations, stone walls, and walkways. Development may occur on our near these historic archaeological sites under the 2030 GP/LCP. Therefore, impacts to these resources would be potentially significant.

Further, it is estimated that approximately 2,000 archaeological sites are present on Catalina Island and less 1,000 having been discovered. Over 90% of the Avalon plan area has never undergone an archeological survey. Therefore, the potential to encounter additional, undiscovered resources within the City (and/or potential annexation areas) is considered moderate to high. The 2030 GP/LCP could potentially facilitate development in areas of cultural resource sensitivity.

The Conservation Element of the 2030 GP/LCP includes the following policy and implementation actions that address potential impacts to archaeological resources:

IV-38 Prevent the loss or compromise of significant archaeological, historical, and other cultural resources and landmarks located within the City.

Implementation Actions:

- *Require a professionally prepared archaeological report for any project located within a potential sensitive area.*
- *Ensure that only qualified professional archaeologists that meet the Secretary of the Interior's standard of qualifications are used on projects located within a potential sensitive area.*
- *When significant archeological sites or artifacts are discovered on a site, coordinate professional archeologists, relevant state agencies, and concerned Native American tribes regarding preservation of sites or professional retrieval and preservation of artifacts prior to development of the site.*

Implementation of Policy IV-38 and the subsequent implementation actions would reduce potential impacts to undiscovered archaeological and pre-historic resources from development under the 2030 GP/LCP. However, further implementation actions are needed to ensure impacts are less than significant.

Mitigation Measures. The following mitigation measure is required to reduce impacts from development on identified archaeologically sensitive areas.

CR-1 Add the following Implementation Actions to Section IV.H of the 2030 GP/LCP Conservation Element:

- Require excavation for any project located within a potential sensitive area to be monitored by a qualified archaeologist and/or Native American Representative.
- Require any proposed excavation or modification to areas on the four historic archeologically sensitive areas defined in Figure 4 of the Preliminary Cultural Resource Management Plan to require prior consultation with the planning department and a qualified archaeologist regarding the implementation of acceptable mitigation strategies.

Significance After Mitigation. Impacts to identified and undiscovered prehistoric archaeological resources would be less than significant after mitigation.

Impact CR-2 **Existing historic resources within Avalon are unlikely to be affected by future development. However, additional measures are needed to ensure protection of these resources. Impacts to historic resources are therefore Class II, *significant but mitigable*.**

As noted in the *Setting*, three properties in Avalon are listed on the National Register of Historic Places: the Tuna Club of Avalon, the Peter Gano House (Holly Hill House), and the Wrigley Summer Cottage (Inn at Mt. Ada). In addition, there are a number of structures of local historical and architectural interest within Avalon. These historic resources are not anticipated to be affected by future development activity. Historic resources and structures of local interest are well known and documented resources that are valued by the community and integral to the City's tourist economy. Therefore, future development is unlikely to affect these resources.

The Conservation Element of the 2030 GP/LCP includes the following policies and implementation actions that address potential impacts to historic resources.

IV-38 *Prevent the loss or compromise of significant archaeological, historical, and other cultural resources and landmarks located within the City.*

IV-39 *Provide public access to historic sites and communicate their historical significance to visitors.*

IV-40 *Encourage the rehabilitation and upkeep of structures identified as valuable to the City's significant architectural, historical, and cultural buildings and listed in the City's historic register.*

Implementation Action:

Require a professional, qualified historian to conduct a literature search and/or survey for any project that entails demolition or modification of an existing structure that may be of historical value in relation to the City's cultural heritage.

Though build-out of the 2030 GP/LCP is not anticipated to affect historic resources, the proposed General Plan would involve intensification of uses in the City Center where many structures of historic value are located. The proposed 2030 GP/LCP policies do not avoid impacts altogether. In addition, the 2030 GP/LCP encourages rehabilitation of identified structures of historical value. Rehabilitation activities have the potential to directly impact their significance by destroying the historic fabric of the structure. Impacts to historic resources may be potentially significant.

Mitigation Measures. The following mitigation measures are required to reduce impacts to historic resources.

CR-2 Add the following Implementation Actions to Section IV.H of the 2030 GP/LCP Conservation Element:

- Require projects involving modification or rehabilitation of structures that may be of historical value to incorporate the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*.
- Require projects involving demolition of an existing structure that may be of historical value to consult with local museums or cultural societies and incorporate mitigation, such as photodocumentation, collection of oral histories, and physical or digital model, as necessary.

Significance After Mitigation. Impacts to historical resources would be less than significant with mitigation.

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4.5 GEOLOGY

This section discusses potential impacts relating to geologic and soil hazards.

4.5.1 Setting

a. Santa Catalina Island Topography. Santa Catalina Island is approximately 21 miles long and 8 miles wide, with a land area of approximately 74 square miles. The island is characterized by rugged topography and a cliffed shoreline. The dominant landforms are steep, disconnected mountains and hills. Flat or level terrain is limited to the floors of a few large coastal canyons such as Avalon, Pebbly beach, Two Harbors, and Emerald Bay. Mount Orizaba, located in the central portion of the island, is the highest peak at 2,069 feet elevation. The major environmental factors controlling stability of the steeper hillsides include precipitation, topography, geology, soils, vegetation, and man-made alterations of the natural topography.

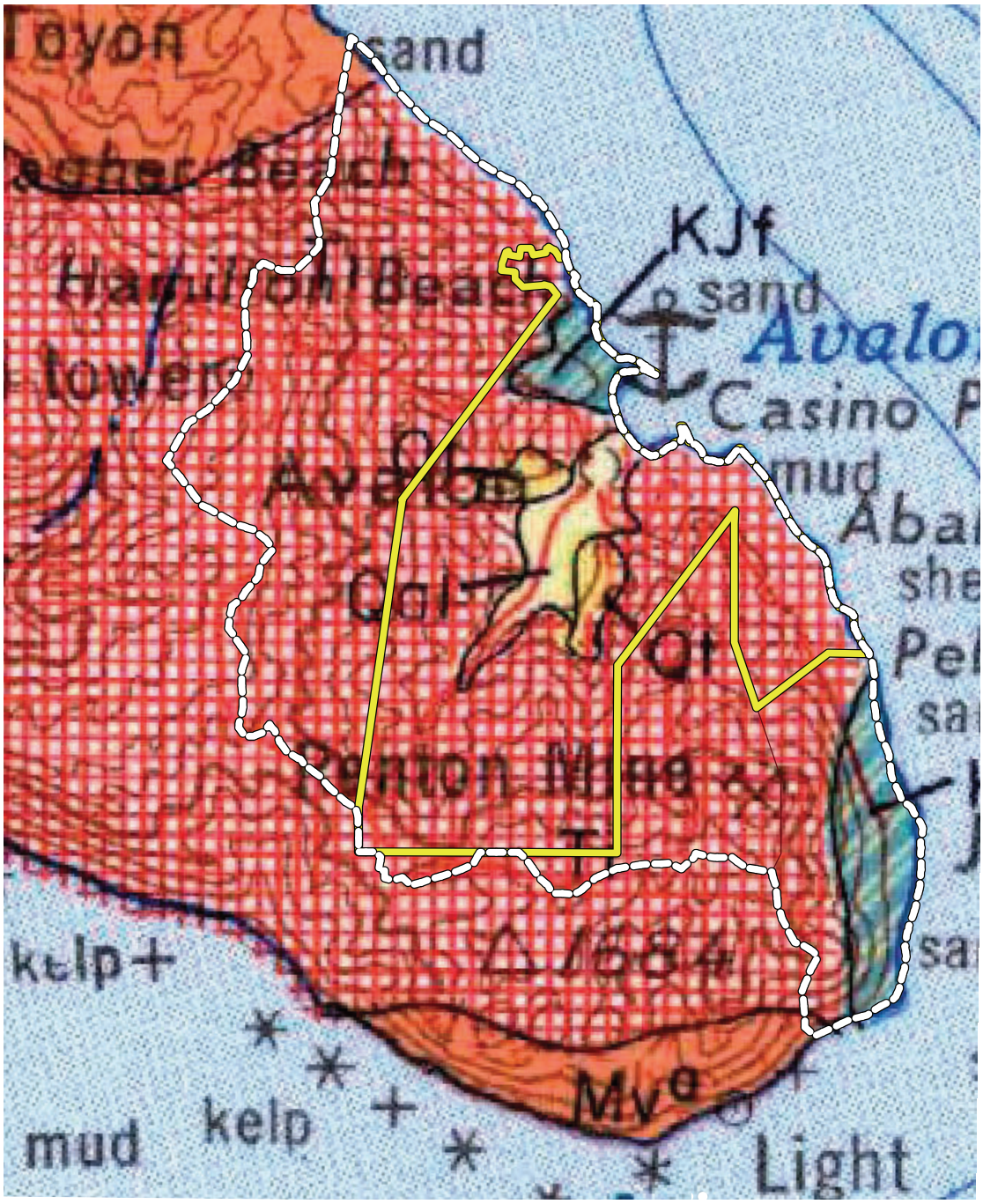
b. Geologic and Hydrogeologic Setting. Avalon encompasses approximately 3 square miles on a bay on the east side of Santa Catalina Island. Most of the City rests on the recent alluvium and alluvium fan deposits from Quaternary time periods. Other rock formations found within Avalon include Quaternary nonmarine terrace deposits; tertiary metamorphic rock from the Franciscan formation derived from eugeosynclinal sedimentary and volcanic rocks, consisting of metasandstone with up to 30% lawsonite and glaucophane, fine grained glaucophane schist, quartzite, metaconglomerate, metavolcanic rocks, talc-actinolite schist, and local green or red chert; and tertiary intrusive (hypabyssal) rocks undifferentiated. The latter comprises most of the earth materials surrounding the City (see Figure 4.5-1). The water table at Avalon is low (at or near sea level).

c. Seismic Setting. The U.S. Geological Survey defines active faults as those that have had surface displacement within Holocene time (about the last 11,000 years). Surface displacement can be recognized by the existence of cliffs in alluvium, terraces, offset stream courses, fault troughs and saddles, the alignment of depressions, sag ponds, and the existence of steep mountain fronts. Potentially active faults are ones that have had surface displacement during the last 1.6 million years. Inactive faults have not had surface displacement within the last 1.6 million years.

No active faults have been mapped within the City of Avalon; however, the City lies in a seismically active region that is prone to occasional earthquakes. According to the California Geological Survey there are three active faults and three potentially active faults within 25 miles of the City. The range of maximum probable magnitudes for earthquakes emanating from these faults ranges from 6.0 to 7.4. The regional faults most likely to affect the City of Avalon include the Palos Verdes fault, the San Diego Trough fault zone, the San Pedro Basin fault, the Newport-Inglewood fault, the San Clemente fault, and the San Andreas fault (see Figure 4.5-2).

Although higher accelerations may be experienced from these faults as compared to events on the San Andreas Fault, the recurrence interval for such events is much longer than for an event within the active San Andreas Fault Zone.

There are no known faults within Avalon; however, the aforementioned fault systems could cause property damage, possibly resulting in injury and loss of life in the event of a major earthquake due to ground motion. The level of impact resulting from any seismic activity will depend on factors such as: distance from epicenter, earthquake magnitude, and characteristics of soils and subsurface geology.



Map Source: California Division of Mines and Geology, 1962

LEGEND

Qal	Alluvium
Qt	Quaternary nonmarine terrace deposits
Mv	Miocene volcanic Mv^r—rhyolite; Mv^a—andesite; Mv^b—basalt; Mv^p—pyroclastic rocks
Ti	Tertiary intrusive (hypabyssal) rocks: Ti^r—rhyolite; Ti^a—andesite; Ti^b—basalt
KJf	Franciscan Formation
	Sphere of Influence
	Avalon City Limits

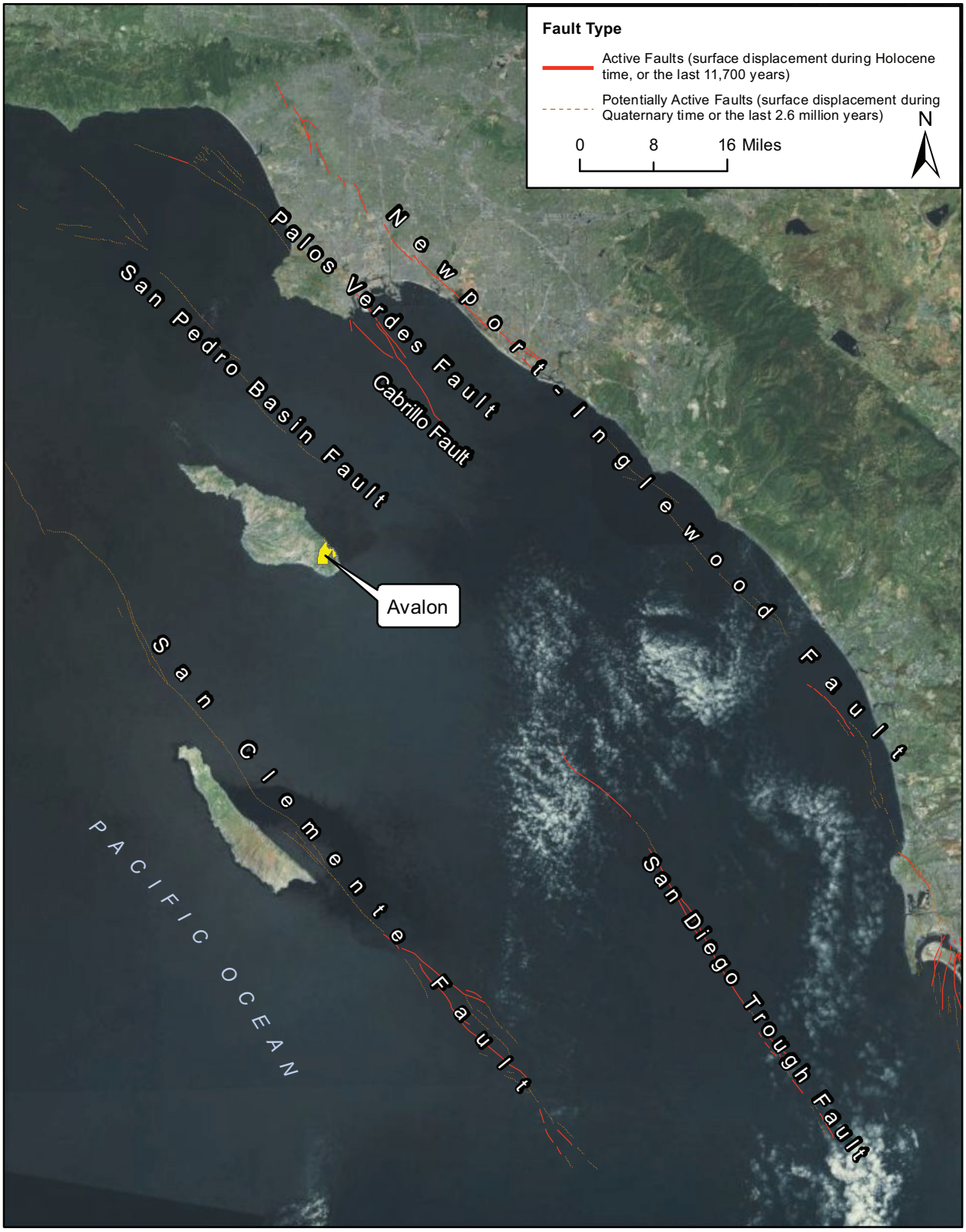
N

0 2000 4000

Scale in Feet

Geology Map

Figure 4.5-1



Imagery provided by Microsoft's Bing, ESRI and its licensors © 2012. Additional layer source: Bryant, W. A. (compiler), 2005, Digital Database of Quaternary and Younger Faults from the Fault Activity Map of California, version 2.0: California Geological Survey Web Page, <http://www.consrv.ca.gov/CGS/information/publications/QuaternaryFaults_ver2.htm>; (data downloaded from web site)

Regional Earthquake Faults — Figure 4.5- 2

The San Andreas Fault Zone is the dominant active fault in California. It is located approximately 85 miles north of Avalon. It is the primary surface boundary between the Pacific and the North American plate. There have been numerous historic earthquakes along the San Andreas fault.

d. Seismic Hazards. Faults generally produce damage in two ways: surface rupture and seismically induced ground shaking. Seismically induced groundshaking covers a wide area and is greatly influenced by the distance of the site to the seismic source, soil conditions, and depth to groundwater. Surface rupture is limited to very near the fault. Other hazards associated with seismically induced groundshaking include earthquake-triggered liquefaction, landslides and tsunamis. Tsunamis and seiches are associated with ocean surges and inland water bodies, respectively. Seiches would not affect Avalon because no inland bodies of water are within or near the City.

Groundshaking and Acceleration. Ground shaking is typically reduced to ground motion components of wave velocity and acceleration. The velocity, acceleration, and predominant period of a site are dependent upon the distance to the fault, the magnitude and failure mechanics of the earthquake, and the nature of the bedrock, alluvium, and soil through which the shock waves must travel. Generally, shock waves attenuate with distance from the focus of the earthquake.

Active and potentially active faults in the region can generate groundshaking that could affect the City of Avalon. The area has experienced strong seismically induced ground motion in the past and will likely experience strong seismically induced ground motion in the future.

Liquefaction. Liquefaction is defined as the sudden loss of soil strength due to a rapid increase in soil pore water pressures resulting from seismic ground shaking. Liquefaction potential is dependent on such factors as soil type, depth to ground water, degree of seismic shaking, and the relative density of the soil. During ground shaking, the alluvial grains are packed into a tighter configuration. Pore water is squeezed from between the grains, increasing the pore pressure. As the pore pressure increases, the load bearing strength of the material decreases. When liquefaction of the soil occurs, buildings and other objects on the ground surface may tilt or sink, and lightweight buried structures (such as pipelines) may float toward the ground surface. Liquefied soil may be unable to support its own weight or that of structures, which could result in loss of foundation bearing or differential settlement. As a result, structures built on this material can sink into the alluvium, buried structures may rise to the surface or materials on sloped surfaces may run downhill. Liquefaction may also result in cracks in the ground surface followed by the emergence of a sand-water mixture. Other effects of liquefaction include lateral spread, flow failures, ground oscillations, and loss of bearing strength. Liquefaction hazards are not expected in the City because groundwater is limited and the water table is low (Santa Catalina Island LCP, 1983).

Lateral Spreading. Lateral spreading, closely related to liquefaction, occurs when a subsurface layer liquefies and gravitational and inertial forces cause the layer, and the overlying non-liquefied material, to move in a downslope direction. The potential for lateral spreading is highest in areas underlain by soft, saturated materials, especially where bordered by sloping banks or inclined planes to an adjacent open face bank or slope. As the water table in Avalon is low, the potential for lateral spreading in Avalon is considered low.

Tsunamis. Tsunamis, or seismic sea waves, are great oceanic waves that are generated by earthquakes or less commonly, by large submarine landslides. An individual earthquake can generate a continuous train of tsunami waves that may oscillate for 8-12 hours. The first waves to reach any locality are not necessarily the strongest ones. In the deep ocean, the wave-length, from crest to crest, may be a hundred miles or more, although the wave height from crest to

trough may only be a few feet. They cannot be felt aboard ships in deep water and they cannot be seen from the air, but the energy they contain is substantial. Tsunamis affect only coastal areas, and watercourses emptying into these areas. The effects tend to be diminished in partially enclosed bays and estuaries, but the wave may be driven many miles inland up unprotected waterways. Areas in Avalon near the shoreline are at risk to inundation from tsunamis.

e. Soil Related Hazards. Soil related hazards include expansive soils, erosive soils, subsidence, and settlement. These types of hazards, and the areas within the City and/or annexation areas that have the potential for such failure, are discussed below.

Expansive Soils. During periods of water saturation, soils with high clay content tend to expand. Conversely, during dry periods, the soils tend to shrink. The amount of volume change depends upon the soil swell potential (amount of expansive clay in the soil), availability of water to the soil, and soil confining pressure. Swelling occurs when the soils containing clay become wet due to excessive water from poor surface drainage, over irrigation of lawns and planters, and sprinkler or plumbing leaks. These volume changes with moisture content can cause cracking of structures built on expansive soils. In addition, swelling clay soils can cause distress to lightly loaded structures, walks, drains, and patio slabs. According to the National Resources Conservation Service, soils in Avalon are generally sandy loam, loam, and clay loam and have a low potential for expansiveness (USDA, 2007).

Erosive Soils. Soil erosion is the removal of soil by water and wind. The rate of erosion is estimated from four soil properties: texture, organic matter content, soil structure, and permeability data. Other factors that influence erosion potential include the amount of rainfall and wind, the length and steepness of the slope, and the amount and type of vegetative cover. The topographical terrain of the City features hillside terrain and numerous valleys. Erosive soil potential is present throughout the hillside portions of Avalon and in areas near the coast where soils have a high sand content (USDA, 2007).

Subsidence. Subsidence is the lowering of ground surface. It often occurs as a result of withdrawal of fluids such as water, oil, and gas from the subsurface. When fluids are removed from the subsurface, the overburden weight, which the water had previously helped support through buoyant forces, is transferred to the soil structure. Subsidence typically occurs over a long period of time and results in a number of structural impacts. Facilities most affected by subsidence are long, surface infrastructure facilities such as canals, sewers, and pipelines.

The extraction of groundwater from an aquifer beneath an alluvial valley can result in subsidence or settlement of the alluvial soils. The factors that influence the potential occurrence and severity of alluvial soil settlement due to groundwater withdrawal include: degrees of groundwater confinement; thickness of aquifer systems; individual and total thickness of fine-grained beds; and compressibility of the fine-grained layers. No known areas of subsidence are located within the plan area.

Settlement Potential. The possible effects of liquefaction would likely include seismically-induced settlement and potentially lateral spreading. Seismically induced settlement of non-liquefied soil is the settlement that can occur in dry, sandy soils as a result of a seismic shock.

***f. Slope Stability and Landslides**. Landslides result when the driving forces that act on a slope (i.e., the weight of the slope material, and the weight of objects placed on it) are greater than the slope's natural resisting forces (i.e., the shear strength of the slope material). Slope instability may result from natural processes, such as the erosion of the toe of a slope by a stream, or by ground shaking caused by an earthquake. Slopes can also be modified artificially by grading, or by the addition of water or structures to a slope. Development on a slope can substantially increase the frequency and extent of*

potential slope stability hazards. Steep, unstable slopes in weak soil/bedrock units that have a record of previous slope failure typically characterize areas susceptible to landslides. Numerous factors affect the stability of the slope, including: slope height and steepness, type of materials, material strength, structural geologic relationships, ground water level, and level of seismic shaking. Landslides take place in widely different rock types and are of almost every conceivable size and shape. They occur at elevations ranging from lofty mountain peaks to the sea floor. There are basically three types of landslides:

1) *Fall – Limited to free falling of earth material of any size;*
2) *Slides – Rock, debris, or soil movement takes place on one or more shear or slip surfaces and the affected mass consists of single to numerous segments bounded by slip surfaces;*
3) *Flows – The displaced mass is deformed and moves like a viscous fluid.*

There are two known landslide areas in Avalon. A fall area occurs along the road to Pebbly Beach, where rocks fall onto the road. This condition only occurs during heavy rainstorms. The other area is a slide area in the vicinity of Vieudelou Avenue, Hill Street, Olive Street, and Maiden Lane. This area shows evidence of creep, in which the soil is pulled downhill by gravity through numerous small, discrete movements over time. A retaining wall, or bulkhead, exists along Olive Street to abate soil creep. Other hillside areas in and around the City are also potentially subject to landsliding.

f. Regulatory Setting. The City's Public Safety and Seismic Safety Element, the California Building Code (CBC), as well as the City of Avalon Municipal Code attempt to safeguard life or limb, health, property and public welfare. The City's Public Safety and Seismic Safety Element is intended to guide land use planning by providing pertinent data regarding geologic, soil, seismic, and fire hazards. The CBC is the regulatory environment for design and construction of building codes and standards covering state, federal, land use and environmental regulations which are developed specifically for the purpose of regulating the life safety, health and welfare of the public. Avalon, along with all of Southern California, is within Seismic Zone 4, the area of greatest risk and subject to the strictest building standards.

4.5.2 Impact Analysis

a. Methodology and Significance Thresholds. The 2030 GP/LCP would result in potentially significant impacts if development facilitated by the GP/LCP would result in any of the following conditions without providing a mechanism to address potential site-specific impacts:

- *Exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides;*
- *Substantial soil erosion or the loss of topsoil;*
- *Location of development on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse; or*
- *Location of development on expansive soil, creating substantial risks to life or property*

b. Project Impacts and Mitigation Measures.

Impact GEO-1 Future seismic events could produce ground shaking within the Avalon plan area that could damage structures and/or create adverse health and safety effects. However, with the implementation of 2030 GP/LCP policies and required building codes, impacts would be Class III, *less than significant*.

Avalon is located in a seismically active region of California. No active faults have been mapped within Avalon; however, the City lies in a seismically active region that is prone to periodic earthquakes. According to the Southern California Earthquake Data Center Map (SCEDC), there are 5 active or potentially active faults within 25 miles of Avalon. The range of maximum probable moment magnitudes for earthquakes emanating from these faults ranges from 6.0 to 7.4. These regional faults as well as the San Andreas Fault (85 miles away) are all capable of affecting Avalon. Faults generally produce damage in two ways: surface rupture and seismically induced ground shaking. Surface rupture is generally limited to areas very near the fault, while ground shaking can affect a wide area.

Groundshaking is typically reduced to ground motion components of wave velocity and acceleration. The velocity, acceleration, and predominant period of a site are dependent upon the distance to the fault, the magnitude and failure mechanics of the earthquake, and the nature of the bedrock, alluvium, and soil through which shock waves must travel. Generally, shock waves attenuate with distance from the focus of the earthquake. Nothing can ensure that structures do not fail under seismic stress. However, proper engineering, including compliance with the CBC, the Avalon Municipal Code and the policies described below, would minimize the risk to life and property, resulting in a less than significant impact to new development from groundshaking.

The Safety Element of the 2030 GP/LCP includes the following policies intended to minimize the risks associated with seismic related hazards:

Policy VII-1 *Ensure that new building construction conforms to the latest standards for seismic design.*

Policy VII-2 *Encourage the abatement of hazardous structures that represent a risk to the public safety, taking into account economic and social factors.*

Policy VII-3 *Ensure that all persons in the community have access to earthquake information.*

Policy VII-4 *Ensure that there are adequate provisions for the community to respond and recover from an earthquake as quickly and effectively as possible.*

Mitigation Measures. None required beyond compliance with applicable GP/LCP policies and provisions of the CBC.

Significance After Mitigation. Impacts would be less than significant with implementation of the CBC requirements and polices contained in the Safety Element of the 2030 GP/LCP.

Impact GEO-2 Development facilitated by the 2030 GP/LCP could occur in areas with geologic or soil instability that have the potential to present hazards (expansive soils, liquefaction, lateral spreading, or subsidence) to structures and roadways. However, compliance of future development projects with the CBC and 2030 GP/LCP policies would ensure impacts related to geologic or soil instability would be Class III, *less than significant*.

Due to the low water table, the potential for liquefaction in Avalon and in the Expansion Areas is low. Also, soils in and around Avalon have a low potential for expansiveness. Nonetheless, to more accurately determine geologic and soil stability, site-specific geologic studies would be needed. The Safety Element of the 2030 GP/LCP includes policies VII-5 and VII-6, which are

intended to reduce exposure to potentially hazardous geologic conditions. The CBC also includes specific requirements to address hazards.

The following policies in the Safety Element of the 2030 GP/LCP would reduce risks to a less than significant level:

Policy VII-5 *Require evidence of the geologic stability of individual sites in areas of known or suspected geologic instability prior to issuance of building permits.*

Policy VII-6 *Incorporate the use of geologic and soils analysis into the planning process to determine appropriate building design parameters.*

Mitigation Measures. Impacts would be less than significant with implementation of the CBC requirements and polices contained in the Safety Element of the 2030 GP/LCP. No mitigation measures are required.

Significance After Mitigation. Impacts would be less than significant without mitigation.

Impact GEO-3 The Avalon plan area contains numerous steep slopes, which present a moderate to severe slope stability hazard. Landsliding has the potential to damage and destroy structures and roadways. Compliance with the CBC would generally address landslide hazards. However, because the 2030 GP/LCP does not include specific requirements to address landslide hazards, impacts would be Class II, *significant but mitigable*.

Avalon is characterized by hillside terrain surrounding a flat City Center. Slope instability hazards are present throughout the hillside portions of the plan area. Slope instability may result in landslides, slumps, mudslides, or debris flows that can cause substantial damage and disruption to buildings and infrastructure. Any development within identified landslide hazard zones would have the potential for landslide-related damage. There are two known landslide areas in Avalon. A fall area occurs along the road to Pebbly Beach, where rocks fall onto the road. Pebbly Beach is part of Expansion Area No. 1. The other area is a slide area in the vicinity of Vieudelou Avenue, Hill Street, Olive Street, and Maiden Lane. This area shows evidence of creep, in which the soil is pulled downhill by gravity through numerous small, discrete movements over time. A retaining wall, or bulkhead, exists along Olive Street to abate soil creep. This area is already developed with high density residential uses. This land use designation would not change under the 2030 GP/LCP. Nevertheless, development in this area, in Expansion Area No. 1, or development facilitated by the GP/LCP in hillside areas would be subject to potential landslide hazards.

Impacts from these types of soil hazards are generally reduced to less than significant levels by the standard development review process. Standard building and grading procedures would mitigate most soil hazards. Geotechnical engineering of any landslide areas would be necessary to ensure that slopes would not become destabilized during grading activities. Onsite soil investigations identify local hazard conditions, which are then mitigated through implementation of appropriate engineering designs and construction techniques and through proper site improvements.

The GP/LCP Safety Element includes Policies VII-5 and VII-6 (listed in Impact GEO-2), which require evidence and mitigation of development projects within areas of geologic instability. The GP/LCP Land Use Element Policy II-9 encourages infill in the City Center in lieu of expanding development into Avalon's hillsides. However, the GP/LCP does not include specific policies to

minimize human exposure to landslide areas and require study and mitigation of development projects within landslide hazard zones. Therefore, impacts would be potentially significant.

Mitigation Measures. The following measure would address the potential landslide hazard.

GEO-3 Add the following policies to the 2030 GP/LCP Safety Element:

- *Reduce landslide hazards to acceptable levels for development within hillsides.*
- *Prior to approval of development projects on slopes over 20%, require applicants to prepare site-specific landslide studies and mitigation.*

Significance After Mitigation. Impacts would be less than significant with implementation of CBC requirements, policies contained in the Land Use and Safety Elements, and Measure GEO-3.

Impact GEO-4 Development facilitated by the 2030 GP/LCP has the potential to be located on erosive soils, causing loss of soil or topsoil and creating potential hazards to structures. Compliance with the CBC and 2030 GP/LCP policies would generally address erosion impacts. Impacts would be Class III, *less than significant*.

Soils in the Avalon hillsides and in areas near the coast have a moderate erosion potential. Development could lead to loss of soil or topsoil. Also, structures and facilities constructed on erosive soils, as well as occupants of the structures, would have the potential to be exposed to hazards related to erosion.

The CBC includes requirements to address soil related hazards. Typical measures to treat hazardous soil conditions involve removal, proper fill selection, and compaction. In addition, individual projects on one or more acre of land are subject to the Construction General Permit adopted by the State Water Resources Control Board (SWRCB). As such, the project would be required to develop and implement an erosion control plan. Further, the project would be required to meet the requirements for long-term control of runoff in the City's NPDES permit for Stormwater Discharges From Municipal Separate Storm Sewer Systems (MS4) (further discussion of SWRCB requirements can be found in Section 4.8, *Hydrology and Water Quality*).

Lastly, the GP/LCP Conservation Element contains specific policies related to erosion:

Policy IV-35 *Require the use of best management practices for soil erosion control as part of any grading activity or natural landform alteration. Additionally, require erosion control measures prior to grading operations commencement.*

Policy IV-36 *Preserve vegetation needed to prevent erosion and sedimentation.*

Adherence to CBC and SWRCB policies and the City's NPDES permit, as well as implementation of 2030 GP/LCP policies would reduce potential soil erosion impacts to a less than significant level.

Mitigation Measures. Compliance with the CBC and 2030 GP/LCP policies would reduce soil related hazard impacts and potential soil loss to a less than significant level. As individual development projects are considered for construction, separate environmental review may be required, which could result in the implementation of project-specific mitigation measures.

Significance After Mitigation. Impacts would be less than significant without mitigation.

4.6 GREENHOUSE GAS EMISSIONS/CLIMATE CHANGE

This section discusses potential impacts related to greenhouse gas emissions and climate change. Air quality impacts are discussed in Section 4.2*, Air Quality.*

4.6.1 Setting

a. Climate Change and Greenhouse Gases. Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. The term "climate change" is often used interchangeably with the term "global warming," but "climate change" is preferred to "global warming" because it helps convey that there are other changes in addition to rising temperatures. The baseline against which these changes are measured originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. The global climate is continuously changing, as evidenced by repeated episodes of substantial warming and cooling documented in the geologic record. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming during the past 150 years. Per the United Nations Intergovernmental Panel on Climate Change (IPCC, 2007), the understanding of anthropogenic warming and cooling influences on climate has led to a high confidence (90% or greater chance) that the global average net effect of human activities since 1750 has been one of warming. The prevailing scientific opinion on climate change is that most of the observed increase in global average temperatures, since the mid-20th century, is likely due to the observed increase in anthropogenic GHG concentrations (IPCC, 2007).

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by both natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases and sulfur hexafluoride (SF_6) (California Environmental Protection Agency [CalEPA], 2006). Different types of GHGs have varying global warming potentials (GWPs). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "carbon dioxide equivalent" (CO_2E), and is the amount of a GHG emitted multiplied by its GWP. Carbon dioxide has a GWP of one. By contrast, methane (CH_4) has a GWP of 21, meaning its global warming effect is 21 times greater than CO_2 on a molecule per molecule basis (IPCC, 1997).

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat trapping effect of GHGs, Earth's surface would be about 34° C cooler (CalEPA, 2006).

However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations. The following discusses the primary GHGs of concern.

Carbon Dioxide. The global carbon cycle is made up of large carbon flows and reservoirs. Billions of tons of carbon in the form of CO_2 are absorbed by oceans and living biomass (i.e., sinks) and are emitted to the atmosphere annually through natural processes (i.e., sources). When in equilibrium, carbon fluxes among these various reservoirs are roughly balanced (United States Environmental Protection Agency [USEPA], April 2011). CO_2 was the first GHG demonstrated to be increasing in atmospheric concentration, with the first conclusive measurements being made in the last half of the 20th Century. Concentrations of CO_2 in the atmosphere have risen approximately 40% since the industrial revolution. The global atmospheric concentration of CO_2 has increased from a pre-industrial value of about 280 parts per million (ppm) to 391 ppm in 2011 (IPCC, 2007; Oceanic and Atmospheric Association [NOAA], 2010). The average annual CO_2 concentration growth rate was larger during the last 10 years (1995-2005 average: 1.9 ppm per year) than it has been since the beginning of continuous direct atmospheric measurements (1960-2005 average: 1.4 ppm per year), although there is year-to-year variability in growth rates (NOAA, 2010). Currently, CO_2 represents an estimated 82.8% of total GHG emissions (Department of Energy [DOE] Energy Information Administration [EIA], August 2010). The largest source of CO_2, and of overall GHG emissions, is fossil fuel combustion.

Methane. CH_4 is an effective absorber of radiation, though its atmospheric concentration is less than that of CO_2 and its lifetime in the atmosphere is limited to 10 to 12 years. It has a GWP approximately 21 times that of CO_2. Over the last 250 years, the concentration of CH_4 in the atmosphere has increased by 148% (IPCC, 2007), although emissions have declined from 1990 levels. Anthropogenic sources of CH_4 include enteric fermentation associated with domestic livestock, landfills, natural gas and petroleum systems, agricultural activities, coal mining, wastewater treatment, stationary and mobile combustion, and certain industrial processes (USEPA, April 2011).

Nitrous Oxide. Concentrations of nitrous oxide (N_2O) began to rise at the beginning of the industrial revolution and continue to increase at a relatively uniform growth rate (NOAA, 2010). N_2O is produced by microbial processes in soil and water, including those reactions that occur in fertilizers that contain nitrogen, fossil fuel combustion, and other chemical processes. Use of these fertilizers has increased over the last century. Agricultural soil management and mobile source fossil fuel combustion are the major sources of N_2O emissions. The GWP of N_2O is approximately 310 times that of CO_2.

Fluorinated Gases (HFCS, PFCS and SF_6). Fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfurhexafluoride (SF_6), are powerful GHGs that are emitted from a variety of industrial processes. Fluorinated gases are used as substitutes for ozone-depleting substances such as chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and halons, which have been regulated since the mid-1980s because of their ozone-destroying potential and are phased out under the Montreal Protocol (1987) and Clean Air Act Amendments of 1990. Electrical transmission and distribution systems account for most SF_6 emissions, while PFC emissions result from semiconductor manufacturing and as a by-product of primary aluminum production. Fluorinated gases are typically emitted in smaller quantities than CO_2, CH_4, and N_2O, but these compounds have much higher GWPs. SF_6 is the most potent GHG the IPCC has evaluated.

Greenhouse Gas Inventory. Worldwide anthropogenic emissions of GHGs were approximately 40,000 million metric tons (MMT) CO_2E in 2004, including ongoing emissions from industrial and agricultural sources, but excluding emissions from land use changes (i.e., deforestation, biomass

decay) (IPCC, 2007). CO_2 emissions from fossil fuel use accounts for 56.6% of the total emissions of 49,000 million metric tons CO_2E (includes land use changes) and all CO_2 emissions are 76.7% of the total. CH_4 emissions account for 14.3% of GHGs and N_2O emissions account for 7.9% (IPCC, 2007).

Total U.S. GHG emissions were 6,633.2 million metric tons CO_2E in 2009 (USEPA, April 2011). While total U.S. emissions have increased by 7.3% from 1990 to 2009, emissions decreased from 2008 to 2009 by 427.9 million metric tons CO_2E, or 6.1% (DOE EIA, Table 12.1, August 2010). This decrease was primarily due to (1) a decrease in economic output resulting in a decrease in energy consumption across all sectors; and (2) a decrease in the carbon intensity of fuels used to generate electricity due to fuel switching as the price of coal increased, and the price of natural gas decreased substantially. Since 1990, U.S. emissions have increased at an average annual rate of 0.4%. The transportation and industrial end-use sectors accounted for 33% and 26%, respectively, of CO_2 emissions from fossil fuel combustion in 2009. Meanwhile, the residential and commercial end-use sectors accounted for 22% and 19%, respectively, of CO_2 emissions from fossil fuel combustion in 2009 (USEPA, 2011).

Based upon the California Air Resources Board (ARB) *California Greenhouse Gas Inventory for 2000-2009* (ARB, 2011), California produced 453 MMT CO_2E in 2009. The major source of GHGs in California is transportation, contributing 38% of the state's total GHG emissions. Electricity generation is the second largest source, contributing 23% of the state's GHG emissions (ARB, June 2011). California emissions are due in part to its large size and large population compared to other states. California's per capita emissions are, however, lower than in many other states. A factor that reduces California's per capita fuel use and GHG emissions, as compared to other states, is its relatively mild climate. ARB has projected statewide unregulated GHG emissions for the year 2020 at 596 MMT CO_2E (ARB, 2007). This represents the emissions that would be expected to occur in the absence of any GHG reduction actions.

Effects of Climate Change. Globally, climate change has the potential to affect numerous environmental resources through potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Scientists have projected that the average global surface temperature could rise by1.0-4.5°F (0.6-2.5°C) in the next 50 years, and the increase may be as high as 2.2-10°F (1.4-5.8°C) in the next century. In addition to these projections, there are identifiable signs that global warming is currently taking place, including substantial ice loss in the Arctic (IPCC, 2007).

According to the CalEPA's 2010 Climate Action Team Biennial Report, potential impacts of climate change in California may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (CalEPA, April 2010). Below is a summary of some of the potential effects that could be experienced in California as a result of climate change.

Sea Level Rise. According to *The Impacts of Sea-Level Rise on the California Coast*, prepared by the California Climate Change Center (CCCC) (May 2009), climate change has the potential to induce substantial sea level rise in the coming century. The rising sea level increases the likelihood and risk of flooding. The study identifies a sea level rise on the California coast over the past century of approximately eight inches. Based on the results of various global climate change models, sea level is expected to rise between 1.0 to 1.4 meters (40 to 55 inches) by the year 2100. The California Climate Adaptation Strategy (December 2009) also estimates a sea level rise of up to 55 inches by the end of this century. Sea Level Rise in Avalon could lead to inundation and flooding of structures near the shoreline and displacement of residents and

businesses in inundation and flooding areas. Sea level rise could also lead to erosion of beaches and cliffs along the shoreline in Avalon.

Air Quality. Higher temperatures, which are conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the magnitude of the effect and therefore its indirect effects, are uncertain. If higher temperatures are accompanied by drier conditions, the potential for large wildfires could increase, which, in turn, would further worsen air quality. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thereby ameliorating the pollution associated with wildfires. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state (CEC, March 2009).

Water Supply. Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future water supplies in California. However, the average early spring snowpack in the Sierra Nevada decreased by about 10% during the last century, a loss of 1.5 million acre-feet of snowpack storage. During the same period, sea level rose eight inches along California's coast. California's temperature has risen 1°F, mostly at night and during the winter, with higher elevations experiencing the highest increase. Many Southern California cities have experienced their lowest recorded annual precipitation twice within the past decade. In a span of only two years, Los Angeles experienced both its driest and wettest years on record (California Department of Water Resources [DWR], 2008; CCCC, May 2009).

This uncertainty complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. The Sierra snowpack provides the majority of California's water supply by accumulating snow during our wet winters and releasing it slowly when we need it during our dry springs and summers. Based upon historical data and modeling DWR projects that the Sierra snowpack will experience a 25% to 40% reduction from its historic average by 2050. Climate change is also anticipated to bring warmer storms that result in less snowfall at lower elevations, reducing the total snowpack (DWR, 2008).

Hydrology. As discussed above, climate change could potentially affect: the amount of snowfall, rainfall, and snow pack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for salt water intrusion. Sea level rise may be a product of climate change through two main processes: expansion of sea water as the oceans warm and melting of ice over land. A rise in sea levels could result in coastal flooding and erosion and could jeopardize California's water supply due to salt water intrusion. Increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events. Avalon's water supplies include groundwater, desalinated water, and saltwater.

Agriculture. California has a $30 billion agricultural industry that produces half of the country's fruits and vegetables. Higher CO_2 levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, water demand could increase; crop-yield could be threatened by a less reliable water supply; and greater air pollution could render plants more susceptible to pest and disease outbreaks. In

addition, temperature increases could change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (CCCC, 2006).

Ecosystems and Wildlife. Climate change and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Increasing concentrations of GHGs are likely to accelerate the rate of climate change. Scientists project that the average global surface temperature could rise by 1.0–4.5°F (0.6–2.5°C) in the next 50 years, and 2.2–10°F (1.4–5.8°C) in the next century, with substantial regional variation. Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. Sea level could rise as much as two feet along most of the U.S. coast. Rising temperatures could have four major impacts on plants and animals: (1) timing of ecological events; (2) geographic range; (3) species' composition within communities; and (4) ecosystem processes, such as carbon cycling and storage (Parmesan, 2004; Parmesan, C. and H. Galbraith, 2004).

While the above-mentioned potential impacts identify the possible effects of climate change at a global and potentially statewide level, in general scientific modeling tools are currently unable to predict what impacts would occur locally with a similar degree of accuracy. In general, regional and local predictions are made based on downscaling statewide models (CEC, March 2009).

b. Regulatory Setting. The following regulations address both climate change and GHG emissions.

International and Federal Regulations. The United States is, and has been, a participant in the United Nations Framework Convention on Climate Change (UNFCCC) since it was produced by the United Nations in 1992. The objective of the treaty is "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." This is generally understood to be achieved by stabilizing global greenhouse gas concentrations between 350 and 400 ppm, in order to limit the global average temperature increases between 2 and 2.4°C above pre-industrial levels (IPCC 2007). The UNFCC itself does not set limits on greenhouse gas emissions for individual countries or enforcement mechanisms. Instead, the treaty provides for updates, called "protocols," that would identify mandatory emissions limits.

Five years later, the UNFCC brought nations together again to draft the *Kyoto Protocol* (1997). The Protocol established commitments for industrialized nations to reduce their collective emissions of six GHGs (carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons) to 5.2% below 1990 levels by 2012. The United States is a signatory of the Protocol, but Congress has not ratified it and the United States has not bound itself to the Protocol's commitments (UNFCCC, 2007).

The United States is currently using a voluntary and incentive-based approach toward emissions reductions in lieu of the Kyoto Protocol's mandatory framework. The Climate Change Technology Program (CCTP) is a multi-agency research and development coordination effort (led by the Secretaries of Energy and Commerce) that is charged with carrying out the President's National Climate Change Technology Initiative (USEPA, December 2007).

The voluntary approach to address climate change and GHG emissions may, however, be changing. The United States Supreme Court in *Massachusetts et al. v. Environmental Protection Agency et al*. ([2007] 549 U.S. 05-1120) held that the United States Environmental Protection Agency (EPA) has the authority to regulate motor-vehicle GHG emissions under the federal Clean Air Act. EPA and the National Highway Traffic Safety Administration (NHTSA) are taking coordinated steps to enable the production of a new generation of clean vehicles with reduced

GHG emissions and improved fuel efficiency from on-road vehicles and engines. This will be done through coordination of the GHG emission limits and the NHTSA Corporate Average Fuel Economy (CAFE) standards. In May 2010, the final combined EPA and NHTSA standards that comprise the first phase of this national program were promulgated regarding passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. The CAFE standards require these vehicles to meet an estimated combined average emissions level of 250 grams of carbon dioxide per mile, equivalent to 35.5 miles per gallon (mpg) if the automobile industry were to meet this carbon dioxide level solely through fuel economy improvements. In October 2010, the agencies each proposed complementary GHG and CAFE standards under their respective authorities covering medium and heavy-duty trucks for the model years 2014-2018. In August 2012, new emissions limits and CAFE standards for the 2017 to 2025 model years were promulgated, increasing fuel economy to the equivalent of 54.5 mgp for cars and light-duty trucks.

California Regulations. Assembly Bill (AB) 1493 (2002), referred to as "Pavley," requires ARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, EPA granted the waiver of Clean Air Act preemption to California for its GHG emission standards for motor vehicles beginning with the 2009 model year. Pavley I took effect for model years starting in 2009 to 2016 and Pavley II, which is now referred to as "LEV (Low Emission Vehicle) III GHG" will cover 2017 to 2025. Fleet average emission standards would reach 22% reduction by 2012 and 30% by 2016.

In 2005, Governor Schwarzenegger issued Executive Order S-3-05, establishing statewide GHG emissions reduction targets. Executive Order (EO) S-3-05 provides that by 2010, emissions shall be reduced to 2000 levels; by 2020, emissions shall be reduced to 1990 levels; and by 2050, emissions shall be reduced to 80% of 1990 levels (CalEPA, 2006). In response to EO S-3-05, CalEPA created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the "2006 CAT Report") (CalEPA, 2006). The 2006 CAT Report identified a recommended list of strategies that the state could pursue to reduce GHG emissions. These are strategies that could be implemented by various state agencies to ensure that the emission reduction targets in EO S-3-05 are met and can be met with existing authority of the state agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture, etc.

California's major initiative for reducing GHG emissions is outlined in Assembly Bill 32 (AB 32), the "California Global Warming Solutions Act of 2006," signed into law in 2006. AB 32 codifies the Statewide goal of reducing GHG emissions to 1990 levels by 2020 (essentially a 15% reduction below 2005 emission levels; the same requirement as under S-3-05), and requires ARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires ARB to adopt regulations to require reporting and verification of statewide GHG emissions.

After completing a comprehensive review and update process, the ARB approved a 1990 statewide GHG level and 2020 limit of 427 MMT CO_2E. The Scoping Plan was approved by ARB on December 11, 2008, and includes measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. The Scoping Plan includes a range of GHG reduction actions that may include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms.

Executive Order S-01-07 was enacted on January 18, 2007. The order mandates that a Low Carbon Fuel Standard ("LCFS") for transportation fuels be established for California to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020.
Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in CEQA documents. In March 2010, the California Resources Agency (Resources Agency) adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts.

Senate Bill (SB) 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing ARB to develop regional greenhouse gas emission reduction targets to be achieved from vehicles for 2020 and 2035. SB 375 directs each of the state's 18 major Metropolitan Planning Organizations (MPO) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). On September 23, 2010, ARB adopted final regional targets for reducing greenhouse gas emissions from 2005 levels by 2020 and 2035. The Southern California Association of Governments (SCAG) was assigned targets of an 8% reduction in GHGs from transportation sources by 2020 and a 13% reduction in GHGs from transportation sources by 2035. In April 2012, SCAG adopted the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) which integrates land use and transportation strategies to achieve ARB emissions reduction targets and comply with SB 375. SCAG's RTP/SCS includes a commitment to reduce emissions from transportation sources by promoting compact and infill development.

ARB Resolution 07-54 establishes 25,000 metric tons of GHG emissions as the threshold for identifying the largest stationary emission sources in California for purposes of requiring the annual reporting of emissions. This threshold is just over 0.005% of California's total inventory of GHG emissions for 2004.

In April 2011, Governor Brown signed SB 2X requiring California to generate 33% of its electricity from renewable energy by 2020.

For more information on the Senate and Assembly bills, Executive Orders, and reports discussed above, and to view reports and research referenced above, please refer to the following websites: www.climatechange.ca.gov and http://www.arb.ca.gov/cc/cc.htm.

Local Regulations and CEQA Requirements. Pursuant to the requirements of SB 97, the Resources Agency has adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted CEQA Guidelines provide general regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, but contain no suggested thresholds of significance for GHG emissions. Instead, they give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. The general approach to developing a threshold of significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move the state towards climate stabilization. If a project would generate GHG emissions above the threshold level, its contribution to cumulative impacts would be considered significant. To date, the Bay Area Air Quality Management District (BAAQMD), the South Coast Air Quality Management District (SCAQMD), and the San Joaquin Air Pollution Control District (SJVAPCD) have adopted quantitative significance thresholds for GHGs. The SCAQMD threshold, which was adopted in December 2008, considers emissions of over 10,000 metric tons CO2e /year to be significant. However, the SCAQMD's threshold applies

only to stationary sources and is expressly intended to apply only when the SCAQMD is the CEQA lead agency. Although not formally adopted, the SCAQMD has a recommended quantitative threshold for all land use types of 3,000 metric tons CO2e /year (SCAQMD, "Proposed Tier 3 Quantitative Thresholds – Option 1", September 2010).

4.6.2 Impact Analysis

a. Methodology and Significance Thresholds. Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions in March 2010. These guidelines are used in evaluating the cumulative significance of GHG emissions from the proposed project. For individual projects, the significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds. However, use of these thresholds would not be appropriate for the 2030 GP/LCP since they are for individual projects while the GP/LCP EIR considers the cumulative effect of all individual projects within the City. Impacts related to GHG emissions from implementation of the 2030 GP/LCP would be significant if the project would:

- *Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; and/or*
- *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.*

b. Project Impacts and Mitigation Measures.

Impact GHG-1 Development facilitated by the 2030 GP/LCP would generate GHG emissions. However, policies contained in the 2030 GP/LCP aimed at limiting vehicle use and energy consumption would also limit GHG emissions. Impacts would therefore be Class III, *less than significant.*

Development facilitated by the 2030 GP/LCP would generate GHG emissions through vehicle use. The GP/LCP could facilitate the development of expansion areas as well as intensified development throughout the current City limits. This development would generally increase vehicle use and extend vehicle trips into currently undeveloped areas. Overall, vehicle miles traveled may increase with buildout of the 2030 GP/LCP, which would incrementally increase GHG emissions. However, this increase would be limited by the policies in the Land Use and Circulation Element that encourage compact development and alternative transportation. Development facilitated by the 2030 GP/LCP would also generate GHG emissions through energy consumption. However, Conservation Element contains specific policies to reduce energy consumption by promoting energy efficiency and renewable energy use as well as reducing solid waste. Therefore, implementation of 2030 GP/LCP policies is expected to reduce GHG emissions as compared to the "business as usual" approach.

The 2030 GP/LCP includes land use strategies to reduce vehicle trips and reduce greenhouse gas emissions. In particular, Land Use Policy II-4 promotes land development practices that reduce greenhouse gas emissions. This includes "concentration of uses and design of development to promote walking and use of transit in lieu of the automobile." The concentration of uses is also encouraged in Land Use Policies II-9 through II-15, which promote mixed-use development and infill development in the City Center. Circulation Element Policy VI-6 requires "all new development to fully mitigate the impacts of additional vehicle trips" and Circulation Element Policies VI-7 through VI-11 promote alternative transportation such as walking and biking. Integration of residential uses with commercial uses, along with enhancing the pedestrian network would encourage alternative transportation and discourage vehicle trips. This would in turn reduce GHG emissions.

The Conservation Element includes specific policies to reduce GHG emissions from energy use. Policy IV-9 calls for energy conservation and waste reduction in order to reduce emissions. Policies IV-24 and IV-25 encourage new construction to be energy efficient and reduce the use of non-renewable energy sources. Policy IV-27 encourages City operations to employ energy conservation techniques. Policies IV-31 through IV-34 encourage recycling, reuse, and composting in order to reduce solid waste. This would reduce GHG emissions from landfills.

SCAQMD currently recommends that the impact of projects generating GHG emissions that exceed 3,000 MT/year CO2e should be considered potentially significant. These thresholds apply to individual development projects only; they do not apply to plans such as the 2030 GP/LCP. Individual projects will be required to undergo independent project-level CEQA review and to include mitigation measures to address potentially significant impacts.

Mitigation Measures. Development accommodated by the 2030 GP/LCP would incrementally increase GHG emissions. However, policies contained in the 2030 GP/LCP would limit emissions. Individual development projects that could occur would be required to undergo CEQA review and would be subject to policies contained in the GP/LCP to reduce GHG impacts. No mitigation measures outside of adherence to the adopted policies in the 2030 GP/LCP would be required.

Significance after Mitigation. Impacts would be less than significant without mitigation. Individual future developments will be subject to CEQA review and mitigation of any significant project-specific impacts.

Impact GHG-2 Implementation of the proposed 2030 GP/LCP would be consistent the goals and strategies contained in the SCAG 2012-2035 RTP/SCS to reduce per capita GHG emissions. Impacts would be Class III, *less than significant.*

SB 375 required the California Air Resources Board to set regional targets for GHG emissions from use of light duty vehicles associated with land use decisions. Also, Metropolitan Planning Organizations (MPOs) must address their regional GHG reductions targets in a Sustainable Communities Strategy (SCS) as part of the MPO's Regional Transportation Plan (RTP). The Southern California Association of Governments (SCAG), which is the MPO for Avalon, adopted an RTP/SCS in 2012 for the planning period of 2012 through 2035. The primary goal of SCAG's SCS is to provide a vision for future growth in Southern California that will reduce per capita GHG emissions from automobiles and light trucks. The SCAG target is to reduce emissions by 8% per capita by 2020 and 13% per capita by 2035.

Avalon is a compact city and most destinations are attractions are within walking distance of residential areas. The primary modes of transportation in the City are walking, biking, and autoette. Autoettes are smaller vehicles with higher fuel efficiency. Due to Avalon's compact, walkable nature and the high use of smaller, fuel-efficient vehicles, it is reasonable to assume that per capita emissions in Avalon are below per capita emissions in other Southern California cities. Policies contained in the 2030 GP/LCP aim to further reduce per capita emissions by promoting infill and mixed-use development, energy conservation, and solid waste reduction (see discussion in Impact GHG-1).

The 2030 GP/LCP would be consistent with all of the goals and strategies identified in the 2012-2035 RTP/SCS to reduce GHG emissions (see Table 4.6-1) and the 2030 GP/LCP would maintain or reduce per capita emissions in Avalon below per capita emissions for the Southern California region. Impacts would be less than significant.

Table 4.6-1
2030 GP/LCP Consistency with SCAG 2012-2035 RTP/SCS

2012-2035 RTP/SCS	2030 GP/LCP Policies
GOALS	
Better Placemaking Create better places to live and work through compact development, varied housing options, bike and pedestrian improvements, and efficient transportation infrastructure in order to reduce travel time and relieve road congestion.	Land Use Element Policy II-9: Encourage infill of the City Center area and where appropriate, increase the intensity of development on vacant and underutilized properties, in lieu of expanded development outward into Avalon's hillsides, natural areas and open space. Housing Element Goal: Provide for the development of a variety of housing types in Avalon, and attain dignified, safe, and affordable housing opportunities within decent living environment for households of all socioeconomic segments in Avalon. Circulation Element Policy VI-7: Ensure that residents and visitors can walk, bicycle, or use transit to access key Avalon attractions, businesses, and places. Policy VI-9: Enhance the pedestrian environment by providing a continuous network of pedestrian facilities and minimizing conflicts between pedestrians and vehicles. Policy VI-10: Enhance bicycle facilities serving both residents and tourists to provide safe bicycle access throughout the community. Policy VI-11: Enhance wayfinding for pedestrians, bicyclists, and transit users.
Lower Cost to Taxpayers and Families Reduce the cost of development for taxpayers and reduce the everyday costs of housing and transportation by creating more compact neighborhoods and placing everyday destinations closer to homes and closer to one another.	Land Use Element Policy II-9: Encourage infill of the City Center area and where appropriate, increase the intensity of development on vacant and underutilized properties, in lieu of expanded development outward into Avalon's hillsides, natural areas and open space. Policy II-10: Concentrate high intensity commercial and "mixed-use" type development in the City Center as a means to encourage revitalization while also avoiding more intense development at the City's edge. Policy II-11: Encourage the revitalization of commercial areas through mixed-use developments to promote a range of business and visitor serving activities. The commercial uses as part of the mixed use developments shall create vitality, revenue, and employment opportunities and shall be compatible with Avalon's small town island lifestyle. Policy II-13: Promote the balanced mixture of retail and service needs within the City Center area for the benefit of citizens and tourists. Circulation Element Policy VI-7: Ensure that residents and visitors can walk, bicycle, or use transit to access key Avalon attractions, businesses, and places.
Benefits to Public Health and the Environment Better placemaking will encourage an active lifestyle and reduce impacts to	Land Use Element Policy II-4: Promote land development practices that reduce energy and water consumption, air and water pollution, greenhouse gas emissions, and waste, incorporating such

Table 4.6-1
2030 GP/LCP Consistency with SCAG 2012-2035 RTP/SCS

2012-2035 RTP/SCS	2030 GP/LCP Policies
natural environments.	techniques as: • Concentration of uses and design of development to promote walking and use of transit in lieu of the automobile • Capture and re-use of stormwater on-site for irrigation • Orientation of buildings to maximize opportunities for solar energy use, daylighting, and ventilation • Use of permeable paving materials • Shading of surface parking, walkways, and plazas • Convert waste to energy • Upgrade wastewater disposal system to allow for recycled water use **Policy II-9:** Encourage infill of the City Center area and where appropriate, increase the intensity of development on vacant and underutilized properties, in lieu of expanded development outward into Avalon's hillsides, natural areas and open space. **Policy II-16**: Provide an interconnected network of open spaces, active and passive parks, and resort recreational amenities with an emphasis on pedestrian access.
Greater Responsiveness to Demographics and the Changing Housing Market Strategies focused on high-quality places, compact infill development, and more housing and transportation choices will be responsive to newly emerging market forces.	**Land Use Element** **Policy II-10**: Concentrate high intensity commercial and "mixed-use" type development in the City Center as a means to encourage revitalization while also avoiding more intense development at the City's edge. **Policy II-13:** Promote the balanced mixture of retail and service needs within the City Center area for the benefit of citizens and tourists. **Circulation Element** **Goal:** Balance the needs of all travel modes within the City. **Goal:** Reduce the amount that people drive by increasing opportunities for walking, bicycling and transit **Housing Element** **Goal:** Provide increased affordable housing opportunities for all residents, and ensure that new development is compatible with the existing character and is adequately served with infrastructure and services.
Improved Access and Mobility Placing destinations closer together and increasing alternative transportation options to decrease the time and cost of traveling between destinations.	**Circulation Element** **Goal:** Balance the needs of all travel modes within the City. **Goal:** Reduce the amount that people drive by increasing opportunities for walking, bicycling and transit. **Policy VI-7:** Ensure that residents and visitors can walk, bicycle, or use transit to access key Avalon attractions, businesses, and places. **Policy VI-8:** Include alternative mode accommodation in transportation capital improvement projects and programs. **Policy VI-9:** Enhance the pedestrian environment by providing a continuous network of pedestrian facilities and minimizing conflicts between pedestrians and vehicles. **Policy VI-10:** Enhance bicycle facilities serving both residents and tourists to provide safe bicycle access throughout the community. **Policy VI-11:** Enhance wayfinding for pedestrians, bicyclists,

Table 4.6-1
2030 GP/LCP Consistency with SCAG 2012-2035 RTP/SCS

2012-2035 RTP/SCS	2030 GP/LCP Policies
	and transit users.
STRATEGIES	
A Land Use growth pattern that accommodates the region's future employment and housing needs and protects sensitive habitat and natural resource areas.	Land Use Element **Policy II-9:** Encourage infill of the City Center area and where appropriate, increase the intensity of development on vacant and underutilized properties, in lieu of expanded development outward into Avalon's hillsides, natural areas and open space.
A Transportation Network that consists of public transit, highways, local streets, bikeways, and walkways.	Circulation Element **Policy VI-7:** Ensure that residents and visitors can walk, bicycle, or use transit to access key Avalon attractions, businesses, and places. **Policy VI-8:** Include alternative mode accommodation in transportation capital improvement projects and programs. **Policy VI-9:** Enhance the pedestrian environment by providing a continuous network of pedestrian facilities and minimizing conflicts between pedestrians and vehicles. **Policy VI-10:** Enhance bicycle facilities serving both residents and tourists to provide safe bicycle access throughout the community. **Policy VI-11:** Enhance wayfinding for pedestrians, bicyclists, and transit users.
Transportation System Management (TSM) measures that maximize the efficiency of the transportation network.	Circulation Element **Policy VI-1:** Explore designation of appropriate street segments for one-way operation. **Policy VI-2:** Explore designation of appropriate street segments for closure to through traffic. **Policy VI-3:** Address the physical, social, health and safety, and economic aspects of all proposed physical and operational transportation efforts.

Source: Southern California Association of Governments, 2012-2035 RTP/SCS

Mitigation Measures. No mitigation measures would be required.

Significance after Mitigation. Impacts would be less than significant without mitigation.

Impact GHG-3 **Sea level rise caused by global climate change may cause coastal flooding and erosion and expose people and structures to hazards. The 2030 GP/LCP includes policies to intensify development in the City Center and other portions of the plan area that may be subject to sea level rise. Impacts are Class II, *significant but mitigable.***

The California Climate Change Center and the California Climate Adaptation Strategy estimate that sea level rise could reach 55 inches by the year 2100. As a result of sea level rise, coastal areas are at risk to inundation, flooding, and erosion. Avalon is located entirely within a coastal zone and the 2030 GP/LCP includes policies that encourage development near the shoreline, subjecting new development to inundation and flooding due to sea level rise. This is a potentially significant impact.

The Conservation Element includes GP/LCP policies and implementation actions to reduce risks associated with rising sea level. These include:

Policy IV-11 *Discourage development that may be adversely affected by sea level rise.*

Policy IV-12 *Improve infrastructure as needed to address rising sea levels.*

Implementation Actions

- *Engage state and local governments in defining responses to sea level rise.*
- *Collaborate with climate science experts on local climate change impacts, mitigation, and adaptation, including sea level changes, to inform public policy decisions.*
- *Integrate protection against the effects of sea level rise into the design of coastal structures.*

Though the 2030 GP/LCP aims to discourage development that may be adversely affected by sea level rise, it does not identify which areas may be adversely affected by rising seas. Research conducted by the California Climate Change Center, the State of California, and the National Research Council has examined the amount of sea level rise expected to occur on the California Coast. However, none of this research has been specific to Avalon. Sea level rise off the California coast is influenced by a variety of local factors such as wind-driven variation in ocean height, gravitational effects, and vertical land motions along the coast (National Research Council, 2012). Therefore, more specific analysis is needed to examine which areas of Avalon are most vulnerable to flooding and erosion due to sea level rise in order to avoid risks.

Mitigation Measures. The following measure would address potential impacts due to sea level rise caused by global climate change.

GHG-3 Add the following Implementation Action to Section IV.C in the Conservation Element:

- *Collaborate with climate science experts to identify areas that may be exposed to risks due to sea level rise, such as flooding or erosion.*

Significance after Mitigation. Impacts would be less than significant with implementation of Mitigation Measure GHG-3. However, despite planning efforts to minimize the effects of sea level rise on the community, portions of Avalon may continue to be subject to increased risk of coastal flooding due to sea level rise.

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4.7 HAZARDS and HAZARDOUS MATERIALS

This section analyzes the impacts associated with exposure to hazards and hazardous materials. Impacts relating to hazardous materials use, transportation, and development on contaminated sites are addressed. Potential hazards associated with wildland fires are discussed in Section 4.12, *Public Services*.

4.7.1 Setting

a. Hazardous Materials. The State of California defines a hazardous material as a substance that is toxic, flammable/ignitable, reactive, or corrosive. Extremely hazardous materials are substances that show high or chronic toxicity, carcinogenic, bioaccumulative properties, persistence in the environment, or that are water reactive. Hazardous substances include both hazardous wastes and hazardous materials. In general, a material or waste is classified as hazardous if it is one of more than 700 chemicals specifically listed in the California Code of Regulations; if it contains one of these chemicals; or if it is reactive, ignitable, corrosive, or toxic. Because of their potential threat to public health and the environment, hazardous substances are closely regulated by federal, state, and local laws that focus on controlling their production, handling, storage, transportation, and disposal.

Hazards and hazardous materials include those actions and materials affecting health and safety of the public and the release of hazardous materials into the environment. Hazards may include naturally occurring contamination (i.e., oil fields and soil gas), man-made contamination in soil (as well as groundwater), and public nuisances (vector management issues, such as activities that could involve conditions that attract rodents and insects that could transmit disease and create a health hazard). Hazardous materials include solids, liquids, or gaseous materials which, because of their quantity, concentration or physical, chemical or infectious characteristics may: (1) cause or contribute to an increase in mortality or serious illness; or (2) pose a substantial present or potential harm to human health or the environment when improperly handled, used, transported, stored or disposed. The risk of hazardous material exposure can come from a range of sources; these may include household and commercial/industrial uses. Improper use, storage, transport, and disposal of hazardous materials and waste may result in harm to humans, surface and groundwater degradation, air pollution, fire, and explosion.

Household Products. By far, the most common hazardous materials are those found or used in the home. Waste oil is a common hazardous material that is often improperly disposed of and can contaminate surface water through runoff. Other household hazardous wastes (used paint, pesticides, cleaning products and other chemicals) are common and often improperly stored in garages and homes throughout the community. Because of their prevalence and proximity to residents, household products constitute the most pervasive potential health hazard facing residents of Avalon.

Commercial and Industrial Uses. While commercial and industrial activity within Avalon is relatively small, potentially hazardous materials used by businesses may include petroleum based fuels, chlorinated solvents, acrylic coatings, corrosive or caustic additives, and to a lesser extent, chemical fertilizers, pesticides and herbicides. Specific known commercial or industrial activity within the City that may use or store hazardous materials include gasoline stations, a few small automotive repair shops, the Southern California Edison Pebbly Beach Generating Station, and Pebbly Beach Building Supply. These uses are all relatively small and do not represent a significant potential hazard within the plan area.

Landfills. Landfills can have an undesirable effect on surrounding properties, the ground, and groundwater below the landfill. The concern for these facilities relates to the kind of material put in them. Landfills are classified by their permitted contents:

- *Class I – for toxic or hazardous substances*
- *Class II – for chemically or biologically decomposable substances*
- *Class III – for non-water soluble, non-decomposable inert solids*

The Pebbly Beach Landfill is located on Dump Road, near Pebbly Beach, which is the eastern extent of the City. The site is listed as a municipal waste landfill (Class III) and has an estimated closure date of 2020 (CalRecycle, 2012). This facility does not accept toxic or hazardous substances.

b. Regulatory Setting. Numerous federal, state, and local regulations regarding use, storage, transportation, handling, processing and disposal of hazardous materials and waste have been adopted since the passage of the federal Resource Conservation and Recovery Act (RCRA) of 1976. The goal of RCRA is to assure adequate tracking of hazardous materials from generation to proper disposal. California Fire Code (CFC) Articles 79, 80 et al., which augment RCRA, are the primary regulatory guidelines used by the City to govern the storage and use of hazardous materials. The CFC also serves as the principal enforcement document from which corresponding violations are written. In addition, according to the California Health and Safety Code (HSC 25500 et seq.), all California facilities that store hazardous materials in quantities that, cumulatively for a site, exceed 55 gallons of a liquid or 500 pounds of a solid or 200 cubic feet of a gas at standard temperature and pressure or, for radioactive materials, the quantity for which an emergency response plan is required under federal or state regulations, are subject to hazardous material inventory and reporting regulations.

Federal EPA laws governing the use, storage, and disposal of hazardous substances include the following:

- **Resources Conservation and Recovery Act (RCRA)**—hazardous waste management.
- **Hazardous and Solid Waste Amendments Act (HSWA)**—hazardous waste management.
- **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)**—cleanup of contamination.
- **Superfund Amendments and Reauthorization Act (SARA)**—cleanup of contamination.
- **Emergency Planning and Community Right-to-Know (SARA Title III)**—business inventories and emergency response planning.
- **Toxic Substances Control Act (TSCA)**—tracks and screens industrial chemicals.
- **Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)**—controls pesticide distribution, sale, and use.

Specific requirements for implementation of these statutes are codified in Title 40 of the Code of Federal Regulations.

The oversight of hazardous materials release sites often involves several different agencies with often overlapping authority and jurisdiction. Cal/EPA has broad jurisdiction over hazardous materials management in the State. Within Cal/EPA, the Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board (RWQCB) are the two primary state agencies responsible for the regulation, investigation and cleanup of hazardous materials release sites. The DTSC has primary regulatory responsibility for hazardous waste management and cleanup. Enforcement of State regulations has been delegated to local jurisdictions that

enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the Hazardous Waste Control Law. Along with the DTSC, the RWQCB, which operates under the jurisdiction of Cal/EPA, is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. RWQCB regulations are contained in Title 27 of the California Code of Regulations (CCR). Additional state regulations applicable to hazardous materials are contained in Title 22 of the CCR. Title 26 of the CCR is a compilation of those sections or titles of the CCR that are applicable to hazardous materials.

Air quality issues related to remediation and construction at contaminated sites are also subject to federal and state laws and regulations which are administered at the local level. Investigation and remediation activities which have the potential for disturbing or releasing hazardous materials must comply with applicable federal, state, and local hazardous materials laws and regulations. DTSC has developed standards for the investigation of sites where hazardous materials contamination has either been identified or could exist based on current or past uses. The standards identify approaches to determine whether a release of hazardous wastes/substances exists at a site and delineate the general extent of contamination; estimates the potential threat to public health and/or the environment from the release and provides an indicator of relative risk; determines if an expedited response action is required to reduce an existing or potential threat; and completes preliminary project scoping activities to determine data gaps, and identifies possible remedial action strategies to form the basis for development of a site strategy.

South Coast Air Quality Management District (SCAQMD) Rule 1403 specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, including removal and associated disturbance of asbestos-containing materials (ACM). Requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and clean-up procedures, and storage, disposal, and landfilling requirements for asbestos-containing waste materials (ACWM). All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.

Federal and state regulations require businesses storing, using, or manufacturing specific amount of hazardous materials to report the quantities and types of materials to its local administering agency (otherwise known as the Certified Unified Program Agency).

The County of Los Angeles Fire Department is the Certified Unified Program Agency (CUPA) for the City of Avalon. The Unified Program is operated by the Health Hazardous Materials Division (HHMD) and is responsible for permits, inspection, and enforcement activities for hazardous materials and hazardous waste programs within the Los Angeles County, including the City of Avalon. The HHMD administers six programs within Los Angeles County: the Hazardous Waste Generator Program, the Hazardous Materials Release Response Plans and Inventory Program, the California Accidental Release Prevention Program (Cal-ARP), the Aboveground Storage Tank Program, the Underground Storage Tank Program, and Household Hazardous Waste Collection.

c. Hazardous Material Sites. According to the California State Water Resources Control Board GeoTracker database, several sites within Avalon have existing or previous recognized environmental conditions (REC). Table 4.7-1 summarizes the sites with RECs.

No sites within the City were identified on the DTSC's database, EnviroStor, and no sites were identified on the CAL/EPA Cortese List, aside from those listed in Table 4.7-1.

Table 4.7-1
Summary of Hazardous Material Sites in Avalon

Name	Location	Potential Contaminant	Potential Media Affected	Clean-up Status
Cartopia Cart Rental	615 Crescent Avenue	Gasoline	Aquifer used for drinking water supply	Case closed.
Pebbly Beach Building Supplies	40 Pebbly Beach Road	Petroleum/Fuels/ Oils	None Specified	Open – Site Assessment
Santa Catalina Island Co Bus Service Garage	44 Pebbly Beach Road	Gasoline	Aquifer used for drinking water supply	Open – Remediation
Santa Catalina (Pebbly Beach)	44 Pebbly Beach Road	*Permitted Underground Storage Tank*		
Southern California Edison	1 Pebbly Beach Road	Diesel	Aquifer used for drinking water supply	Open – Remediation

Source: California State Water Resources Control Board, GeoTracker, 2012.

Figure 4.7-1 shows the location of the hazardous material sites within the city.

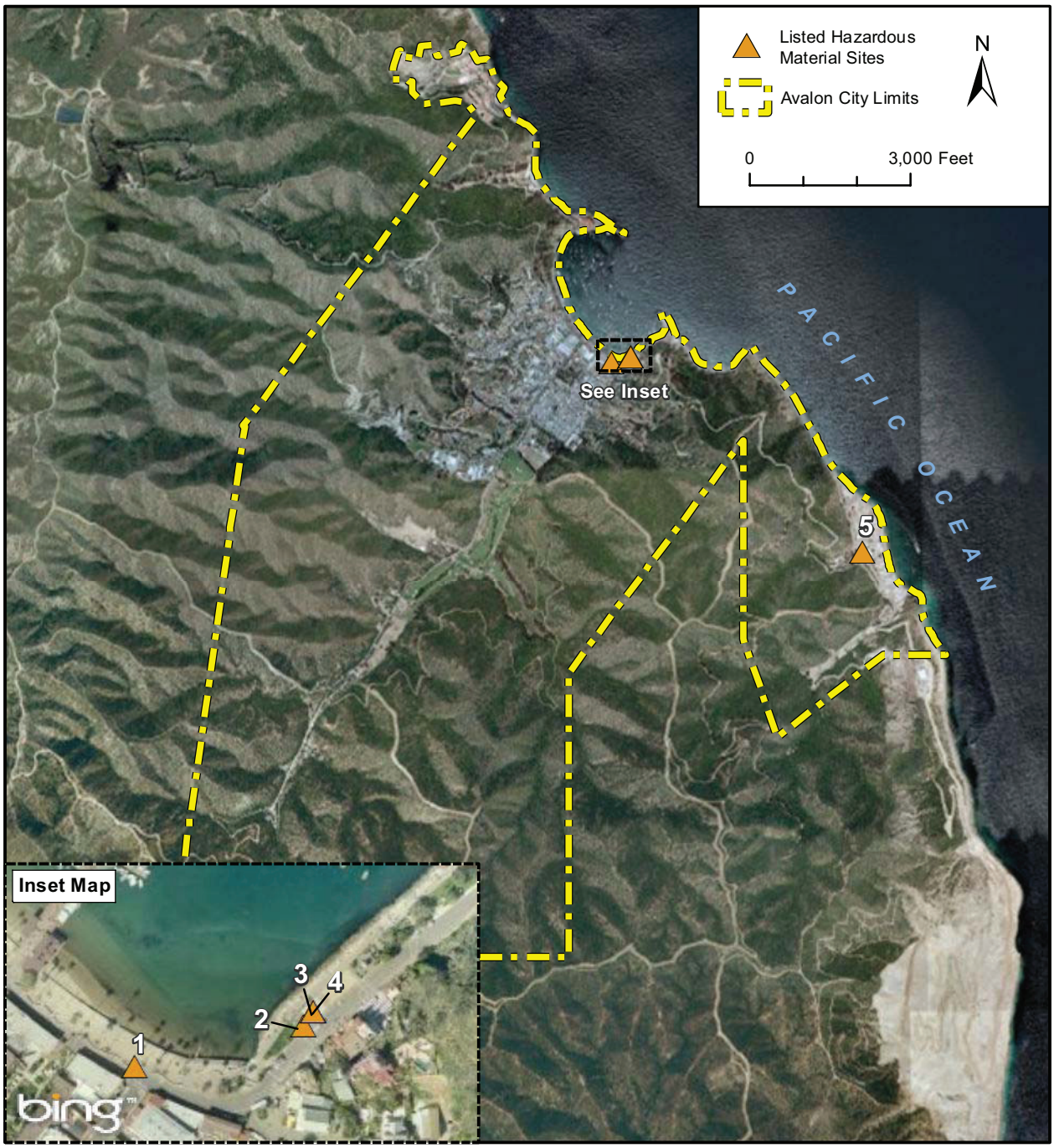
4.7.2 Impact Analysis

a. Methodology and Thresholds of Significance. For the purpose of this analysis, a significant impact would occur if the project would:

- *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials*
- *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment*
- *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school*
- *Be located on a site included on a list of hazardous material sites compiled pursuant to State Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment*
- *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan*

b. Project Impacts and Mitigation Measures.

Impact HAZ-1 The use and transport of hazardous materials within the City is limited to household hazardous wastes, small commercial/industrial uses, and liquid propane. Land use changes facilitated by the 2030 GP/LCP would relocate industrial uses to the Avalon Canyon area and could increase the use and transport of hazardous materials to the existing industrial area in Pebbly Beach. However, compliance with existing regulatory requirements, as well as 2030 GP/LCP policies, would reduce impacts to a Class III, less than significant, level.



Source: Esri, i-cubed, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community
Image courtesy of USGS © 2012 Microsoft Corporation Image courtesy of LAR-IAC

ID	Name	Potential Contaminant	Clean- up Status
1	Cartopia Cart Rental	Gasoline	Case closed.
2	Pebbly Beach Building Supplies	Petroleum/Fuels/Oils	Open – Site Assessment
3	Santa Catalina Island Co Bus Service Garage	Gasoline	Open - Remediation
4	Santa Catalina (Pebbly Beach)	*Permitted Underground Storage Tank*	
5	Southern California Edison	Diesel	Open - Remediation

Listed Hazardous Material Sites

Figure 4.7-1

The residential sector is a small-scale generator of hazardous wastes, such as paints, cleaners, oils, batters and pesticides that contain potentially hazardous ingredients and require special disposal care. Avalon has a household hazardous waste collection program to ensure that household hazardous wastes are collected and disposed of in a safe manner. Future residential development facilitated by the 2030 GP/LCP, including any new development in the expansion areas, would have access to the household hazardous waste program and would be subject to existing federal, state, and local regulations regarding the use and disposal of hazardous waste.

The proposed 2030 GP/LCP would facilitate the annexation of Expansion Area No. 1, which would increase light industrial uses within the City boundaries. New industrial uses would be similar in nature to existing industrial uses, such as automotive repair shops, and the use, storage, and transport of hazardous materials would be similarly minimal. New businesses in Expansion Area No. 1 would also be subject to federal, state, and local regulations regarding the use, storage, and transport of hazardous materials. Expansion Area No. 1 is also located nearly one mile away from the majority of housing within the City, such that the exposure of people to hazardous materials would be limited. Furthermore, the long-term plan for Expansion Area No. 1 would be to transition the area to more visitor-serving uses over time, thereby reducing the presence of industrial uses in this area.

Relocating industrial uses to the Falls Canyon/Avalon Canyon area could place potential users of hazardous materials within close proximity to schools, residences, and medical facilities. New industrial sites would have the potential to be up-gradient of sensitive uses, and down-gradient properties could be affected by hazardous waste sites. In addition, the relocation of industrial uses to the Falls Canyon/Avalon Canyon area could alter the transportation route of hazardous materials and/or waste. However, there are no large-scale generators or users of hazardous materials in the City. Regular transport of hazardous materials is limited to the propane that is barged over from the mainland to the Southern California Edison facility in Pebbly Beach. The propane is barged over in liquid form, then vaporized and cut with air to produce a gas that is domestically useful, similar to natural gas. Southern California Edison manages the transport of the propane. Safety measures follow Southern California Edison protocol and no incidents related to propane transport have occurred. Any future large-scale activities with the potential to generate or use hazardous materials in the City would be required to obtain a permit and comply with applicable federal, state, and local regulations. Small-scale hazardous material users would be subject to existing federal, state, and local regulations regarding the use and disposal of hazardous waste. In addition to regulations, the 2030 GP/LCP contains policies that aim to minimize adverse impacts to health and quality of life associated with exposure to hazardous materials. These include:

VII-18 *Manage activities within Avalon involving the transport, use, storage or disposal of hazardous materials in a responsible manner that protects public health, safety, and the environment.*

VII-19 *Promote the availability of safe and legal options for the management and disposal of hazardous wastes generated by businesses and households within the Avalon area.*

VII-20 *Promote community education and understanding of sound management practices for the storage, handling, use and disposal of hazardous materials.*

Compliance with federal, state, and local regulations, in combination with the proposed 2030 GP/LCP policies, would reduce impacts related to the use, storage, and transport of hazardous materials to a less than significant level. Because the use, storage, and transport of hazardous

materials within the City is limited and there are no hazardous material transportation corridors within the City, impacts related to upset or accident conditions would also be less than significant.

Mitigation Measures. No additional policy-oriented mitigation would be required to address this impact. As individual development projects are considered for construction, separate environmental review may be required, which could result in the implementation of project-specific mitigation measures.

Significance After Mitigation. Impacts would be less than significant without mitigation.

Impact HAZ-2 Potential new development facilitated by the 2030 GP/LCP would not be located within ¼ mile of a school. Intensification of existing development would not result in the emission or handling of hazardous materials within a ¼ mile of a school beyond typical household and small-scale commercial uses. Impacts would be Class III, *less than significant*.

Avalon Schools is a kindergarten through 12th grade school, located at 200 Falls Canyon Road. The new expansion areas proposed by the 2030 GP/LCP would not be located within ¼ mile of the school and/or would not include uses that would use hazardous materials or generate hazardous waste. However, the relocation of industrial uses to the Falls Canyon/Avalon Canyon area could place hazardous materials within ¼ mile of Avalon Schools. New industrial sites would be up-gradient of the school, which could result in potential impacts if a hazardous material release occurs. Small-scale hazardous material users would be subject to existing federal, state, and local regulations regarding the use and disposal of hazardous waste. In addition to regulations, the 2030 GP/LCP Policies VII-18 through VII-20 listed under Impact Haz-1 would further reduce impacts to schools associated with exposure to hazardous materials.
Compliance with federal, state, and local regulations, in combination with the proposed 2030 GP/LCP policies, would reduce impacts related to the use, storage, and transport of hazardous materials within a ¼ mile of a school to a less than significant level.

The 2030 GP/LCP would also intensify the use of several residential and commercial properties within the City; however, residential and commercial uses do not typically handle hazardous materials that would pose a threat to a school. There may be a slight increase in use of household hazardous wastes or small commercial hazardous waste, such as petroleum based fuels, chlorinated solvents, acrylic coatings, corrosive or caustic additives, but these materials are usually contained on-site and are subject to federal, state, and local regulations regarding use, storage, and disposal. Small-scale hazardous materials would not pose a threat to the nearby school. Impacts resulting from the use or emission of hazardous materials within proximity to a school would be less than significant.

Mitigation Measures. No additional policy-oriented mitigation would be required to address this impact. As individual development projects are considered for construction, separate environmental review may be required, which could result in the implementation of project-specific mitigation measures.

Significance After Mitigation. Impacts would be less than significant without mitigation.

Impact HAZ-3 Potential new development facilitated by the 2030 GP/LCP would not be located on any sites that have been listed as a hazardous material site, pursuant to *State Government Code*

Section 65962.5. **Impacts would be Class III, *less than significant.***

The 2030 GP/LCP would facilitate new or re-development within the City, as well as the annexation of Expansion Areas No. 1, 2, and 3. There are no sites located in any of the Expansion Areas that are listed as hazardous materials sites. A records search of the EnviroStor and GeoTracker databases, as well as the Cortese List, is summarized in Table 4.7-1. None of the sites listed in Table 4.7-1 would be expected to result in hazardous conditions for any new or re-development within the City or proposed Expansion Areas due to the remedial status of the listed sites. There is one site in the City Center, Pebbly Beach Building Supplies, where assessment is still underway. However, the potential media affected is not listed and any new or re-development on this site would be required to comply with Regional Water Quality Control Board regulations regarding potential contaminants. Small-scale hazardous material users would be subject to existing federal, state, and local regulations regarding the use and disposal of hazardous waste. In addition to regulations, the 2030 GP/LCP Policies VII-18 through VII-20 listed under Impact Haz-1 would further reduce impacts associated with existing hazardous materials sites within Avalon.

Compliance with federal, state, and local regulations, in combination with the proposed 2030 GP/LCP policies, would reduce impacts related to hazardous materials sites to a less than significant level.

Mitigation Measures. No additional policy-oriented mitigation would be required to address this impact. As individual development projects are considered for construction, separate environmental review may be required, which could result in the implementation of project-specific mitigation measures.

Significance After Mitigation. Impacts would be less than significant without mitigation.

Impact HAZ-4 **Development facilitated by the 2030 GP/LCP, notably the intensification of uses, may require the demolition or renovation of existing residential and/or commercial structures that could contain asbestos or lead based paints. The release of these materials has the potential to adversely affect human health and safety. However, existing regulations pertaining asbestos and lead-based materials would reduce these impacts to a Class III, *less than significant* level.**

The intensification of uses facilitated by the 2030 GP/LCP may result in the demolition or renovation of the existing structures in the plan area, which, due to their age, could contain asbestos and/or lead. Intensification within the Center City area is specifically encouraged by several GP/LCP policies. The removal of any asbestos and lead-containing materials would be required to comply with all pertinent existing rules and regulations, including SCAQMD Rule 1403, Asbestos Emissions from Demolition/Renovation Activities, which would minimize health hazards associated with these activities. In addition, any future development facilitated by the 2030 GP/LCP would have to comply with CalOSHA regulations regarding lead-based materials. California Code of Regulations, §1532.1, requires testing, monitoring, containment, and disposal of lead-based materials such that exposure levels do not exceed CalOSHA standards. Impacts would less than significant.

Mitigation Measures. Compliance with existing regulations pertaining to asbestos- and lead-based material would reduce impacts are less than significant level. No mitigation would be required.

Significance After Mitigation. Impacts would be less than significant without mitigation.

Impact HAZ-5 Potential new development or the intensification of uses facilitated by the 2030 GP/LCP would comply with all City evacuation and emergency plans. In addition, new development would be required to comply with City Fire Code standards regarding emergency access. Impacts to emergency response or evacuation plans would be Class III, *less than significant*.

New development and intensified development facilitated by the 2030 GP/LCP would be included in the City's existing emergency response operations. Local disaster response is coordinated under the Avalon Disaster Council, which is comprised of a Director of Emergency Services (the City Manager), an Assistant Director of Emergency Services, Chiefs of emergency services (Fire and Police Chiefs, Harbor Master), and other community representatives that may be appointed by the Director. In addition, the City maintains mutual aid agreements with regional agencies to ensure the City's ability to receive assistance when demands for emergency services are greater than the City's available resources. The City also utilizes the Emergency Management Information System (EMIS), a computer database system that provides detailed, real time information about emergencies from the County Emergency Operations Center.

New and intensified development would be required to comply with all of the existing emergency response operations. New and intensified development would also be required to comply with all Fire Code standards regarding emergency access. In addition to local regulations, the 2030 GP/LCP contains policies that aim to maintain emergency services and disaster response preparedness, including the following:

VII-21 *Continue to implement local preparedness planning and operations and participate in multi-jurisdictional disaster preparedness planning and operations.*

VII-22 *Coordinate planning activities with adjacent jurisdictions to promote the provision of quality medical and emergency medical care facilities and to identify and revise possible unnecessary constraints on their development.*

VII-23 *Follow or adhere to the National Incident Management System (NIMS), Incident Command System (ICS) or the Joint Regional Task Force (JRTF) (whichever the event requires).*

Compliance with local and regional emergency plans, in combination with the proposed 2030 GP/LCP policies, would reduce impacts related to emergency response and evacuation to a less than significant level.

Mitigation Measures. Compliance with existing emergency response systems and fire code regulations would reduce impacts related to emergency response and evacuation to a less than significant level. No mitigation would be required.

Significance After Mitigation. Impacts would be less than significant without mitigation.

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4.8 HYDROLOGY and WATER QUALITY

This section addresses impacts to the City's drainage infrastructure as well as surface water quality impacts.

4.8.1 Setting

a. Coastal Resources. Avalon is located entirely within the coastal zone, which is identified as a Coastal Resource Area. The Coastal Resource Area designation is intended to identify the biological resources of each area as equivalent in significance with Significant Ecological Areas (SEAs), while recognizing that the protection of these areas is regulated differently from other SEAs, through their individual Local Coastal Programs, instead of through the SEA ordinance. Some of the most prominent coastal resources in Avalon include the City's beach and coastal areas, Avalon Bay, the harbor, and marine life. Avalon Bay contains Avalon Harbor, which is one of two major ports of entry and primary population and service communities on Santa Catalina Island. Avalon is a primary destination for the majority of visitors to Catalina, and a major access point, via the harbor, to the open space easement/conservation areas.

b. Watershed and Surface Water. The primary hydrologic features of the plan area are the Santa Catalina Island – Frontal San Pedro Channel Watershed and Santa Catalina Island – Frontal Pacific Ocean Watershed, which are delineated by the island's middle ridgeline and encompasses the southern half of the island. Avalon's plan area is almost entirely encompassed by the Santa Catalina Island – Frontal San Pedro Watershed, which flows toward the heart of the City into Avalon Bay. Middle Ranch Watershed flows west into Middle Ranch Reservoir. Several intermittent streams and ephemeral drainages within the watershed in Upper Avalon Canyon occur along the canyon bottoms where flow is concentrated toward the valley floor, which comprises the Center City area (see Figure 4-8.1 Water Resources).

Santa Catalina Island has relatively little surface water or groundwater. The majority of streams are perennial or intermittent, flowing only after storm events. Groundwater recharge is minimal as most of the rainfall evaporates before entering the water table through bedrock. The areas with a notable water table are located immediately downstream and adjacent to perennial streams and reservoirs (Santa Catalina Island Local Coastal Plan, 1983).

c. Topography. The topographical conditions in the Avalon plan area are varied, consisting of differential hillside terrain with numerous ridge and canyon conditions, with intermittent streams and drainages in the canyon bottoms. Flat or level topography constitutes a small percentage of the terrain within the plan area and occurs primarily in the developed areas of the City. The unique canyons and drainages that characterize the study area include Upper Avalon Canyon. Significant ridgelines are identified in the Land Use Element in the GP/LCP as shown in Figure 4.1-2 in Section 4.1, Aesthetics.

d. Groundwater. All domestic water facilities, including the surface and groundwater rights on the Island, were acquired by the Southern California Edison (SCE) Company in 1962. SCE currently owns and operates the water utilities on Catalina Island, which provides service to the City. SCE has since completed many improvements, including the replacement of most of the City's distribution system and replacement of many of the old redwood and steel tanks. The water in the Catalina Island water system is a blended supply, with fresh groundwater sources at Middle Ranch Reservoir (also known as Thompson Reservoir or McGee Lake) and sea water processed by the desalination system located Pebbly Beach Generating Station (see Figure 4.8-1 Water Resources). The primary source of freshwater is groundwater, which is pumped into the Middle Ranch Reservoir located approximately 6.5 miles northwest of the City. The Middle Ranch Reservoir project was completed in 1925 and 12 miles of pipeline was installed to carry water

from the reservoir to Avalon. In 1965, SCE increased the height of the dam at its main storage facility, the Middle Ranch reservoir (Santa Catalina Island Local Coastal Plan, 1983). This increased the storage capacity of the reservoir from approximately 200 acre feet to approximately 1,143 af (PMC, 2006). The reservoir receives and stores runoff from Middle Canyon, which is the largest watershed area on the Island. The primary sources for groundwater include three wells: Middle Ranch 1A, Middle Ranch 5A and Middle Ranch 6, all of which are located in Middle Ranch Canyon. Water is also pumped into the reservoir from the two wells in Cottonwood Canyon. Two small tunnel systems in Avalon Canyon also supply the Avalon system.

In addition to the Middle Ranch Reservoir system, SCE operates the desalinization plant, which uses reverse osmosis of sea water to produce potable fresh water. The desalinization plant is located just south of the City (Figure 4.8-1 Water Resources). Salt water is also used as a domestic water supply source for toilet flushing and fire suppression on the Island and this service is provided by the City. There are two salt water reservoirs: Mount Ada Reservoir and Falls Canyon Reservoir. However, the desalinization process requires specialized maintenance due to corrosion and biological growth. Because of the corrosion and other limitations associated with the salt water system, the City has considered updates to the system, including development of a freshwater tertiary treatment plant. Saltwater is not an available water resource at locations with elevations greater than 170 feet above mean sea level, as the system is dependent on pressure generated from the reservoir elevations.

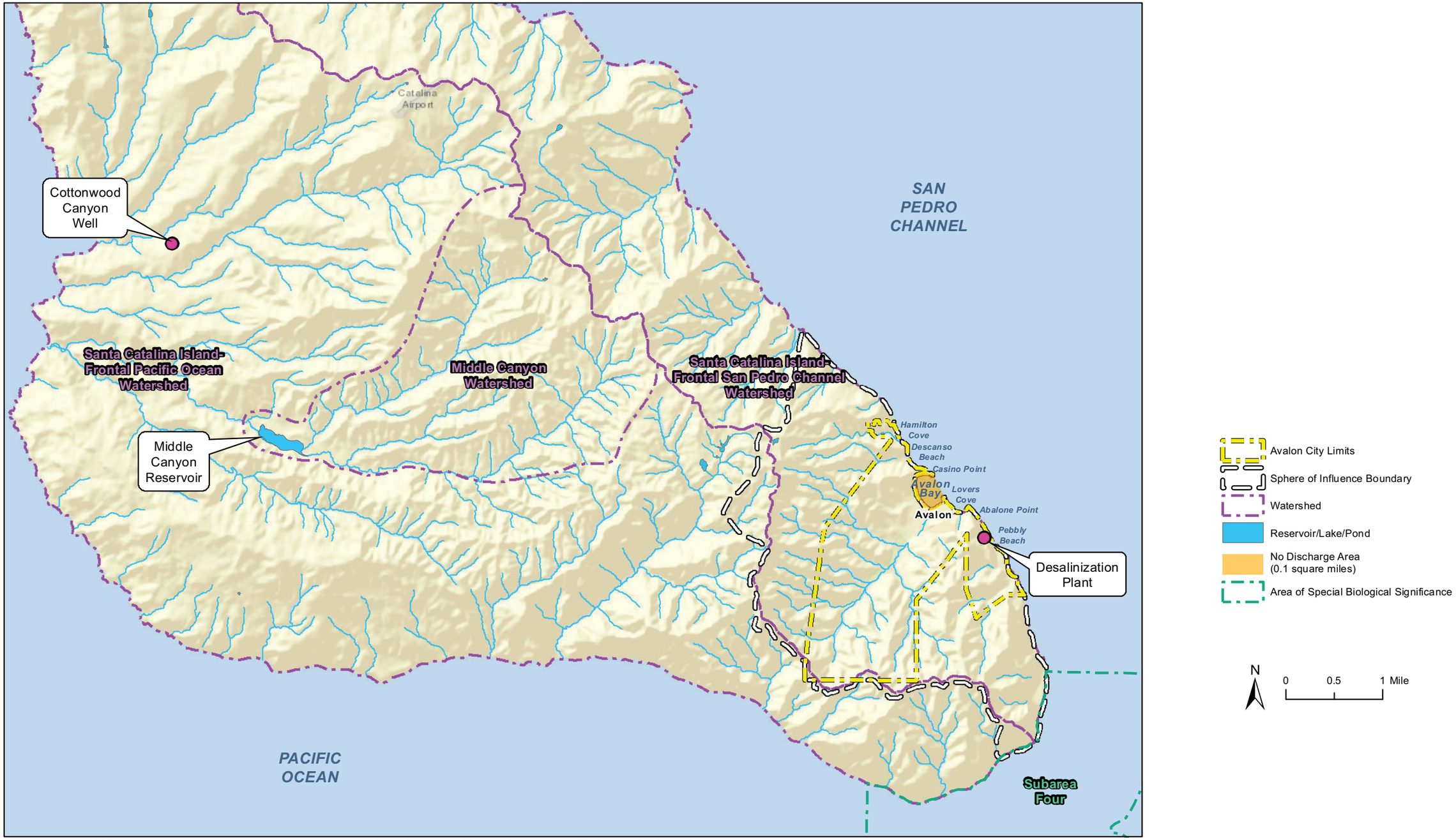
The safe yield of freshwater for the island is 600-acre feet per year (AFY); 515 AFY of ground water and 85 AFY of desalinized water. The desalinization plant could expand to producing up to 224 AFY of fresh water, but the process is expensive due to the high cost of energy on the island. Avalon's freshwater demand is 375 AFY (SCE, 2012).

e. Flood Hazards. Flooding can cause widespread damage to affected areas. Buildings and vehicles can be damaged or destroyed, while smaller objects can be buried in flood-deposited sediments. Floods can also cause drowning or isolation of people or animals. In addition, floodwaters can break utility lines, interrupting services and potentially affecting health and safety, particularly in the case of broken sewer or gas lines.

The secondary effects of flooding are due to standing water, which can result in crop damage, septic tank failure, and water well contamination. Standing water can also damage roads, foundations, and electrical circuits.

Inadequately-sized culverts and bridges can create impediments to the passage of high water flow in streams and gullies. Undersized infrastructure typically results in short-term back-ups behind the culvert of a bridge, causing pooling water and creating an unintended detention basin.

FEMA 100-Year Flood Hazard. Substantial areas of the City are within the Federal Emergency Management Agency (FEMA) Flood Zone A, which is an area subject to inundation by a 100-year flood and for which base flood elevations (BFEs) have been determined (see Figure 4.8-2). FEMA establishes base flood heights for 100-year and 500-year flood zones. The 100-year flood zone covers all of Avalon Bay and the coastline north to Hamilton Cove. Within Avalon, the flood zone generally includes the area southeast of Sumner Avenue to Clemente Avenue, narrowing slightly as it extends through Avalon Canyon. A 100-year flood represents the level of flood water expected to be equaled or exceeded every 100 years on average, and can also be described as a 1% chance of being equaled or exceeded in any single year. The City and the Santa Catalina Island Company undertook significant storm infrastructure improvements in 2004 and



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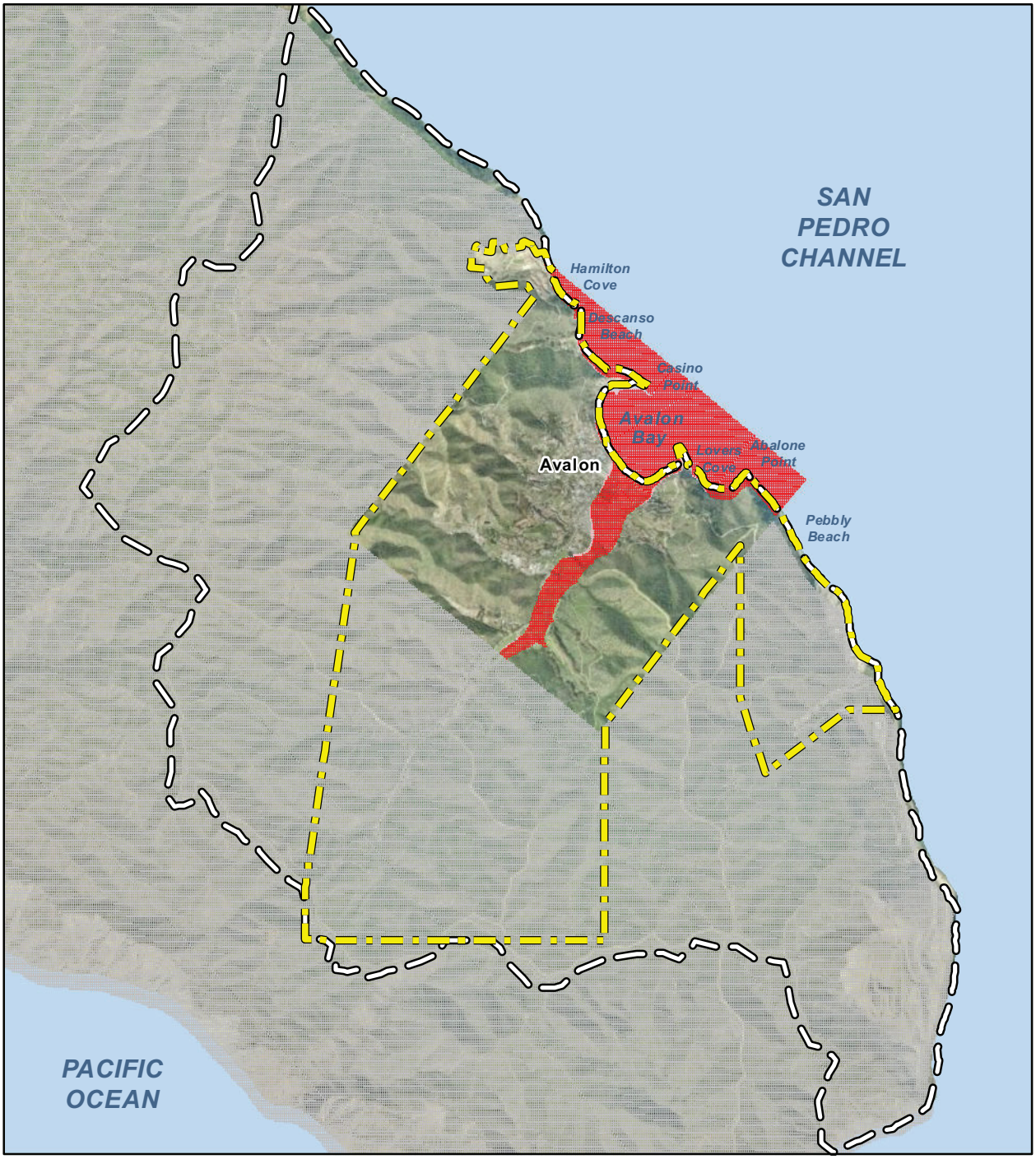
Water Resources
Figure 4.8- 1
CITY *of* AVALON



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Avalon City Limits

Sphere of Influence Boundary

(100-year Floodplain (Zone A))

(500-year Floodplain (Zone X)

Possible but undetermined flood hazards (Zone D)

0 1,600 3,200 Feet

N

FEMA 100- year Flood Hazard

Figure 4.8- 2

presumably the flood zone has been reduced as a result of those efforts. However, FEMA's Flood Insurance Rate Maps (FIRMs) have not been updated to reflect these improvements.

Sea Level Rise. According to The Impacts of Sea-Level Rise on the California Coast, prepared by the California Climate Change Center (CCCC) (May 2009), climate change has the potential to induce substantial sea level rise in the coming century. The rising sea level increases the likelihood and risk of flooding. The study identifies a sea level rise on the California coast over the past century of approximately eight inches. Based on the results of various global climate change models, sea level is expected to rise between 1.0 to 1.4 meters (40 to 55 inches) by the year 2100. The California Climate Adaptation Strategy (December 2009) also estimates a sea level rise of up to 55 inches by the end of this century. Sea Level Rise in Avalon could lead to inundation and flooding of structures near the shoreline and displacement of residents and businesses in inundation and flooding areas. Sea level rise could also lead to erosion of beaches and cliffs along the shoreline in Avalon. Jetties and seawalls may need to be raised and strengthened to protect harbors.

f. Water Quality. The primary sources of pollution to surface and groundwater resources include stormwater runoff from paved areas, which can contain hydrocarbons, sediments, pesticides, herbicides, toxic metals, and coliform bacteria. Improperly placed septic tank leach fields and properly placed septic tanks that do not have proper residence time or are not properly maintained or have improperly disposed of household cleaners and other materials can cause similar types of contamination. Illegal waste dumping can introduce contaminants such as gasoline, pesticides, herbicides and other harmful chemicals. Fresh groundwater sources are considered most vulnerable to the following influences: septic tanks, grazing animals, and poorly constructed or abandoned wells in the aquifer. Avalon's sewer pipelines are old and leaks have been identified throughout the system, contributing to the degradation of the water quality in Avalon Bay. The Sewer System Management Plan addresses these leaks and the City is in the process of implementing the plan. While groundwater underlying SCE's service area is of good quality and currently meets all drinking water regulatory requirements (SCE 2011 Consumer Confidence Report), water quality remains an issue in Avalon Bay.

Avalon Bay. In 1999 the County of Los Angeles began testing Avalon Bay for fecal indicator bacteria in accordance with AB411. The test results frequently exceeded California single-sample standards for fecal indicator bacteria in coastal bathing waters, and as a result beaches in Avalon are frequently posted as unfit for swimming. In 2001, the City received a grant from the State of California's Clean Beaches Initiative to further investigate the water quality problem in Avalon Bay and pursue mitigation measures. Investigations concluded that microbial indicators of human fecal pollution were detected at several groundwater sampling pits, suggesting that human sewage may contribute to water quality impairment of Avalon Bay. The studies also measured the rates of advection and turbulent diffusion within the Bay, and determined that water mixing/movement is sufficient to disperse contaminants introduced to the Bay within an hour or so, provided that the source of contamination is not continuous and that a significant fraction of the water in Avalon Bay is exchanged with the ocean over a single tide cycle. Also, the storm drain near the beach in the Bay does not appear to have a circulation problem, since studies determined that pollutants released into this area of the Bay are transported 80 to 100 meters into the Bay and diluted by a factor of 100 or more within 1-hour.

Areas of Special Biological Significance. Ocean areas requiring the protection of marine species or biological communities from an undesirable alteration in natural water quality are designated by the California Water Resources Control Board as Areas of Special Biological Significance (ASBS). ASBSs support an unusual variety of aquatic life, and often host unique individual species. There are four ASBS along the coastlines of Santa Catalina Island. The

Southeast Santa Catalina Island ASBS (#28) is located adjacent to the southeast portion of the City's plan area (see Figure 4.8-1). This ASBS is approximately 2,755 acres and encompasses 2.9 miles of coastline and has two direct discharges and three natural streams draining to the ASBS. Key pollution threats include runoff and aerial contamination from the Santa Catalina Island Company quarry, and possible dredging at the barge loading site (California Coastal Commission, California's Critical Coastal Areas #66, 2006 http://www.coastal.ca.gov/nps/Web/cca_pdf/socoastpdf/CCA66SantaCatalina4.pdf.

g. Regulatory Framework. Development in the plan area is subject to various local, state, and federal regulations and permits regarding the use of water resources.

The U.S Army Corps of Engineers (ACOE) has jurisdiction over the construction of shoreline structures and other activities in U.S waters. The ACOE exercises this authority by controlling the following permits. Section 10 permit, which is pursuant to the Rivers and Harbors Act of 1899, the ACOE handles permits for any structures, e.g., docks, piers, bulkheads not requiring fills, buoys, moorings, etc. Applicants must first obtain approval from the California Coastal Commission and the California Water Quality Control Board (WQCB). Section 404 permits are pursuant to the CWA of 1972, the ACOE controls all dredging and filling operations in U.S. waters, including any streams or wetlands leading to the ocean.

The Section 404 permit process proceeds when an application is presented to the ACOE and is relayed to the environmental section for a preliminary assessment. Public notice is also provided. Then the ACOE circulates the petition to a variety of other agencies including National Marine Fisheries, U.S Department of Fish and Wildlife, the Environmental Protection Agency, and the U.S Coast Guard. Additionally, the local jurisdiction must also approve the project at this initial stage. If any objections are raised during this phase, the project may be rejected or modified to satisfy the objections. If all objections are satisfied, a permit is issued and a certain time is designated within which the project must be completed. The ACOE is responsible for enforcement assuring that projects and activities conform to ACOE guidelines and permit provisions.

The U.S Environmental Protection Agency (EPA) is the primary Federal agency responsible for implementing the federal Clean Water Act (CWA). The Los Angeles Regional Water Quality Control Board (RWQCB) is the primary state agency responsible for implementing the CWA and the state's Porter-Cologne Water Quality Act within state waters. The RWQCB is also responsible for water quality regulation through its work in preparing and adopting the California Ocean Plan. Local agencies also have responsibility for managing wastewater discharges. All are required to meet criteria set forth in their NPDES permits, to monitor their discharges, and to submit monthly reports to the RWQCB and the EPA.

The CWA and the California Ocean Plan are the primary mechanisms by which pollutant discharges are regulated in California. Section 401 of the CWA requires water quality certification from the State Board or Regional Board when a project: 1) requires a federal license or permit (a Section 404 permit is the most common federal permit for Department projects), and 2) will result in a discharge to waters of the United States. Section 402 of the Act establishes the National Pollutant Discharge Elimination System (NPDES) permit system for the discharge of any pollutant (except dredge or fill material) into waters of the United States. The federal government administers the NPDES permit program and the State Water Resources Control Board administers the permit process. This board establishes requirements prescribing the quality of point sources of discharge and establishes water quality objectives. These objectives are established based on the designated beneficial uses (e.g., water supply, recreation, and habitat) for a particular surface water or groundwater. The NPDES permits are issued to point source dischargers of pollutants to surface waters and are issued pursuant to

Water Code Chapter 5.5, which implements the Federal Clean Water Act. Examples include, but are not limited to, public wastewater treatment facilities, industries, power plants, and groundwater cleanup programs discharging to surface waters (State Water Resources Control Board, Title 23, Chapter 9, Section 2200). Discharge limits, under the NPDES permits, for minerals and pollutants are established and regulated by the California Regional Water Quality Control Board.

Section 404 of the CWA prohibits the discharge of dredged or fill materials into Waters of the United States or adjacent wetlands without a permit from the U.S Army Corps of Engineers.

Other regulations under the federal CWA require that, for projects disturbing greater than 1.0 acre (0.4 hectare) during construction, a NPDES State General Construction Permit must be obtained from the Los Angeles Regional Water Quality Control Board. The Permit requires the preparation of a Storm Water Pollution Prevention Plan (SWPPP) that contains specific actions, termed Best Management Practices (BMPs), to control the discharge of pollutants, including sediment, into local surface water drainages. A Notice of Intent (NOI) to perform work under the Permit must be filed with the State. Completion of a SWPPP and submittal of a NOI to the LARWQCB satisfies the Erosion and Sediment Control Requirements for construction within the County Storm Water Management Program.

The California Ocean Plan prohibits discharges into ASBS. The Los Angeles Regional Water Quality Control Board may approve waste discharge requirements or recommend certification for limited-term (i.e. weeks or months) activities in ASBS (RWQCB, 2012 http://www.swrcb.ca.gov/water_issues/programs/ocean/docs/2009_cop_adoptedeffective_usepa.pdf).

Section 312(f)(4)(A) of the CWA, effective on March 28, 2012; prohibits large passenger vessels and large oceangoing vessels from discharging all sewage, whether treated or not, while in California marine waters. These areas are identified as No Discharge Zones. Currently in Avalon Bay, there is a 0.1 square mile No Discharge Zone which encompasses the entire bay from Casino Point to Cabrillo Peninsula (Figure 4.8-1).

4.8.2 Impact Analysis

a. Methodology and Significance Thresholds. Watershed information was obtained from the Avalon GP GP/LCP Technical Background Report (2010), City of Avalon 2030 GP/LCP (2012), Santa Catalina Island Local Coastal Plan (1983), while data regarding groundwater and water quality was obtained from the Los Angeles County Revised Draft General Plan 2035 (2012), Southern California Edison (SCE) Submission of a Revised Ground Water Modeling Study for SCE's Catalina Water Utility (2008), Avalon Bay Water Quality Improvement Project, Catalina Island (2011), and SCE Santa Catalina Island Water System 2011 Consumer Confidence Report.

Impacts would be considered significant if development facilitated by the 2030 GP/LCP would:

a) *Violate any water quality standards or waste discharge requirements?*
b) *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table?*
c) *Substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river, in a manner which could result in substantial erosion or siltation on- or off-site?*
d) *Substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river, or substantially increase the rate*

or amount of surface runoff in a manner which would result in flooding on- or off-site?

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

f) Otherwise substantially degrade water quality?

g) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

h) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

j) Inundation by seiche, tsunami, or mudflow?

b. Project Impacts and Mitigation Measures.

Impact HWQ-1 Development under the 2030 GP/LCP could result in an increase in pollutants in stormwater and wastewater, although water quality standards and waste discharge requirements would not be violated. Therefore, impacts to water quality would be Class III, *less than significant*.

Construction. Soil disturbance would temporarily occur due to construction of future developments facilitated by the proposed GP/LCP, due to earth-moving activities, such as excavation and trenching for foundations and utilities, soil compaction and moving, cut and fill activities, and grading. Disturbed soils are susceptible to high rates of erosion from wind and rain, resulting in sediment transport via stormwater runoff from the project area. Erosion and sedimentation affects water quality through interference with photosynthesis, oxygen exchange, and the respiration, growth, and reproduction of aquatic species. Runoff from construction sites would be typical of urban areas, and may include sediments and contaminants such as oils, fuels, paints, and solvents. Additionally, other pollutants, such as nutrients, trace metals, and hydrocarbons, can attach to sediment and be transported to downstream drainages and ultimately into collecting waterways, contributing to degradation of water quality.

Construction materials, debris handling, and the use of construction equipment, could also result in stormwater contamination and impact water quality. Spills or leaks from heavy equipment and machinery can result in oil and grease contamination. The potential demolition of buildings for redevelopment activities, and the removal of waste material during construction could also result in tracking of dust and debris and release of contaminants in existing structures. Staging areas or building sites can also be the source of pollution due to the use of paints, solvents, cleaning agents, and metals during construction. Pesticide use (including herbicides, fungicides, and rodenticides) associated with site preparation is another potential source of stormwater contamination. Larger pollutants, such as trash, debris, and organic matter could also be associated with construction activities.
Sediments and contaminants may be transported throughout site runoff to downstream drainages and ultimately into the collecting waterways, and potentially into the Pacific Ocean, thereby affecting surface water and off-shore water quality. Water quality degradation could result in health hazards and aquatic ecosystem damage associated with bacteria, viruses, and vectors.

Areas that disturb one or more acres of land surface are subject to the Construction General Permit, 99-08-DWQ adopted by the State Water Resources Control Board (SWRCB). Preparation

of a Stormwater Pollution Prevention Plan (SWPPP) is required for compliance with the NPDES General Construction Stormwater Activity Permit. Compliance with the permit would involve filing a Notice of Intent with the SWRCB and preparing and submitting a SWPPP prior to construction activities. The SWPPP must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Inspection of construction sites before and after storms is required to identify stormwater discharge from the construction activity and to identify and implement controls where necessary. The Construction General Permit requirements would need to be satisfied prior to beginning construction on any project located on a site greater than one acre. Certain other projects require the preparation of a Water Quality Management Plan (WQMP).

Typical BMPs that could be incorporated into the SWPPP or a WQMP would include, but are not limited to, the following:

- Diversion of off-site runoff around the construction site
- Construction of proposed landscaped/grassed swale areas as soon as feasible following grading activities
- Revegetation of exposed soil surfaces as soon as feasible following grading activities
- Placement of straw wattles around the project perimeter to prevent off-site transport of sediment
- Drop inlet protection (filters and sand bags or straw wattles), with sandbag check dams within paved roadways
- Regular watering of exposed soils to control dust during construction
- Specifications for construction waste handling and disposal
- Contained equipment wash-out and vehicle maintenance/staging areas
- Erosion and sedimentation control measures maintained throughout the construction period
- Stabilized construction entrances to avoid trucks from tracking out debris on City roadways
- General site housekeeping

Both the SWPPP and provisions for obtaining a grading permit require approval of an erosion control plan. The erosion control plan could include measures such as limitations on grading during the dry season and construction discharges, as well as requirements for soil stabilization and use of sediment traps. Additionally, grading permits would include recommendations and mitigation measures addressing erosion control which would be incorporated into grading plans.

The proposed GP/LCP also includes policies designed to minimize stormwater and erosional impacts during construction. Policies IV-15 and 20 require new development applications to follow NPDES requirements and implementation of BMPs to prevent or minimize erosion during construction.

Of particular concern is development adjacent to Sensitive Ecological Areas, including Avalon Bay, Upper Descanso Canyon, Haypress Area, Renton Mine Road, and Pebbly Beach Canyon. Sensitive Ecological Areas are areas where the County deems it important to facilitate a balance between limited development and resource conservation. Development activities are reviewed closely in these areas where site design is a key element in conserving fragile resources such as streams, oak woodlands and threatened or endangered species and their habitat. Grading associated with construction adjacent to these areas has the potential, if not properly regulated, to temporarily increase erosion and subsequent deposition of soil particles into the sensitive

habitat. Runoff produced during and after construction is subject to NPDES regulations, as well as local water quality and runoff standards. as discussed above, projects disturbing greater than one acre would be required to prepare and implement a SWPPP, which would require BMPs from the California Stormwater BMPs for Construction Activity, such as prevention of stormwater from flowing over unprotected slopes, sandbagging around appropriate borders of the project area, temporary catch basins, and hay bales to prevent additional runoff and/or sediment from washing into the adjacent wetland areas.

Compliance with regulations discussed above would reduce the risk of water degradation within the City from soil erosion related and construction activities. Since violations of water quality standards would be minimized, impacts to water quality from construction activities within the GP/LCP area would be less than significant.

Operation. Operation of future developments under the proposed GP/LCP would result in the addition of contaminants into both the stormwater runoff entering the City's drainage system and the wastewater stream entering the local wastewater collection and treatment systems. Future developments would increase the amount of impervious surfaces within the City, which could potentially increase stormwater runoff. In addition, the operation of new land uses could result in the release of contaminants that would further degrade the quality of the stormwater runoff and wastewater.

The proposed GP/LCP would promote infill development where appropriate throughout the plan area, consistent with existing land use patterns, intensities and building types. The potential for infill development to contribute to polluted runoff would be minimal. Areas of undeveloped land would provide areas for high density and low density development as well as resort/recreational development in Expansion Area 2. These developments would result in additional urban runoff typically containing contaminants such as oil, grease, metals, and landscaping chemicals (pesticides, herbicides, fertilizers, etc.). These contaminants could be transported by stormwater runoff into the City's drainage system and ultimately degrade surface water and groundwater quality.

In addition to stormwater runoff, polluted wastewater would be discharged by new development. The increase in industrial and residential land uses would result in increases in wastewater contaminated with household and industrial chemicals that would discharge to the local wastewater systems. Stormwater discharges originating from these and other land uses would be treated at the Avalon Wastewater Treatment Facility and discharged into the Pacific Ocean. Section 4.14, *Utilities and Service Systems*, contains a more detailed description of plan area wastewater services.

NPDES permits are required for operators of Municipal Separate Storm Sewer Systems MS4s, construction projects, and industrial facilities. An MS4 is a conveyance or system of conveyances that is: owned by a state, city, town, village, or other public entity that discharges to waters of the U.S.; designed or used to collect or convey stormwater (including storm drains, pipes, ditches, etc.); not a combined sewer; and not part of a Publicly Owned Treatment Works (sewage treatment plant). To prevent harmful pollutants from being washed or dumped into an MS4, operators must obtain a NPDES permit and develop a stormwater management program. These permits contain limits on the amount of pollutants that could be contained in each facility's discharge. Specifically, all development within the City would be subject to the provisions of the City's NPDES MS4 Permit.

Developments within the City would also be subject to the provisions in Chapter 1.11 (Erosion Control and Water Quality Requirements Systems) of the Avalon Municipal Code. Under the provisions of this chapter, any discharge that would result in or contribute to degradation of

water quality via stormwater runoff is prohibited. As is required for construction activities, operation of new development or redevelopment projects are required comply with provisions set forth in the City NPDES permit, including the implementation of appropriate erosion control measures, including permanent and temporary control devices, to control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing beneficial uses of the water. These BMPs would include a range of methods, including but not limited to desilting basins, check dams, riprap or other devices, as approved by the Building Official and/or Director of Public Works. In general , appropriate nonstructural BMPs to control typical runoff pollutants include tenant/homeowner education, activity restrictions, common area landscape management, BMP maintenance, common area litter and animal waste control, catch basin inspection, employee training, private street/lot sweeping, smart irrigation controllers to avoid over-watering, and use of native drought-tolerant landscaping.

In an effort to further ensure the protection of the City's water quality, the proposed GP/LCP has established four goals: achieve effective long-term management of water resources so that demand is in balance with efficient, sustainable supplies; provide a safe and adequate water supply that effectively meets the demand for the existing and future population through water efficiency and reclamation programs; meet National Pollution Discharge Elimination System (NPDES) water quality standards for runoff from developed areas; and Improve the water quality of Avalon Bay. Policies IV-14 through IV-23 would achieve these goals by implementing water conservation strategies, minimizing potable water use in new development projects, minimize water consumption, encourage high efficiency irrigation technology, limit development, reduce stormwater pollution, require BMPs during grading and construction, reduce waterborne pollutants, eliminate sewage from entering groundwater, and remediate sewage contamination.

Compliance with NPDES permits requirements, the City's Municipal Code, and GP/LCP policies would reduce the risk of water degradation within the City from the operation of new developments to the maximum extent practicable. Therefore, since violation of waste discharge requirements or water quality standards would be minimized, this impact would be less than significant.

Proposed 2030 GP/LCP GP/LCP Policies and Implementation Measures that Provide Mitigation. The following proposed GP/LCP policies and implementation measures would assist in avoiding or minimizing impacts to water quality:

Policies

II-4 *Promote land development practices that reduce energy and water consumption, air and water pollution, greenhouse gas emissions, and waste, incorporating such techniques as:*

- *Concentration of uses and design of development to promote walking and use of transit in lieu of the automobile*
- *Capture and re-use of storm water on-site for irrigation*
- *Orientation of buildings to maximize opportunities for solar energy use, day lighting, and ventilation*
- *Use of permeable paving materials*
- *Shading of surface parking, walkways, and plazas*
- *Convert waste to energy*
- *Upgrade wastewater disposal system to allow for recycled water use*

IV-14 *Implement a balanced, water conservation strategy as an effective way to manage demand by maximizing the efficiency of existing urban water through conservation measures/programs and developing alternative, reliable sources to sustain present and future water needs.*

IV-15 *Ensure that new development projects are designed to minimize potable water use based on the requirements of the California Green Building Code and encourage new development to achieve greater water use efficiencies (CalGreen Tier I and II levels) than are required by the Code.*

IV-16 *Minimize water consumption by existing and new development through an emphasis on drought-tolerant planting techniques, use of water-efficient plumbing, and water reclamation.*

IV-17 *Encourage the use of high efficiency irrigation technology and recycled site water to reduce the use of potable water for irrigation.*

IV-18 *Limit development in Avalon to levels that are within existing and/or future water service capabilities.*

IV-19 *Ensure that new development projects are designed to reduce storm water pollution consistent with the California Green Building Code and encourage new development to go beyond the basic requirements and meet CalGreen Tier I and II levels, such as implementing low impact development (LID) strategies.*

IV-20 *Require the use of best management practices (BMPs) during site grading and construction to control temporary erosion and offsite deposition of soils.*

IV-21 *Reduce waterborne pollutants and sedimentation from existing uses through public education, erosion control, and implementation of Best Management Practices.*

IV-22 *Eliminate all sources of sewage to shallow groundwater, through improvements of the sewer infrastructure, specifically laterals located in residential parcels.*

IV-23 *Remediate sewage contamination of the shallow groundwater underlying Avalon and focus on reducing fecal indicator bacteria concentrations in Avalon Bay.*

Implementation Measures

- *Require new development to demonstrate incorporation of techniques that reduce energy and water consumption, air and water pollution, greenhouse gas emissions, and waste*
- *Develop and expand recycled water programs to help meet non-potable water demands.*
- *Continue to explore alternative conservation measures and technologies as they become available.*
- *In partnership with Southern California Edison, implement conservation incentive programs that increase water-use efficiency and reduce urban runoff.*
- *Review and update the City's landscaping regulations as needed to ensure that they effectively address the efficient use of water in landscaping.*
- *Require runoff mitigation plans as part of the application and development review process that illustrate the Best Management Practices (BMPs) to be employed to prevent pollutants from running off the project site into area waterways. BMPs may include, but are not limited to, the use of bio-filtration techniques and/or provision of subsurface filtering.*
- *Continue to implement the Sewer System Management Plan in order to improve/update the sewer infrastructure, specifically laterals located in residential parcels.*
- *Continue to work with the State Water Resources Control Board (SWRCB) on remediation efforts to improve the water quality in Avalon Bay.*

Mitigation Measures. Implementation of 2030 GP/LCP policies would reduce impacts to a less than significant level. Therefore, mitigation is not required.

Significance After Mitigation. Implementation of 2030 GP/LCP policies would reduce impacts to a less than significant level. Individual future developments will be subject to further review and, as appropriate, project-specific mitigation.

Impact HWQ-2 Development of the 2030 GP/LCP could create additional impervious surfaces, which could interfere with groundwater recharge. Development could potentially deplete groundwater supplies or interfere substantially with groundwater recharge. However, with implementation of GP/LCP policies, impacts related to the increase in impervious surfaces would be Class III, *less than significant*.

Construction. Construction activities would primarily occur as part of infill with the the potential for development within Rural Residential development areas and development within Expansion Area 2. Because the plan area is near the coast, the groundwater table underlying the GP/LCP area is shallow and for the most part at sea level. Pile driving, dewatering, and other construction activities that would encounter groundwater could potentially occur. While the insertion of support and foundation structures in the groundwater may reduce the storage capacity of groundwater, the displaced volume would not be substantial relative to the volume of the basin as a whole. Likewise, while dewatering would remove groundwater, the volume of water removed would not likely be substantial relative to groundwater pumping for water supply. Also, water used during construction for cleaning, dust control, and other uses would be minimal and per Chapter 6.13 of the City of Avalon Municipal Code, freshwater will not be used for soil compaction or vehicle cleaning. Thus, construction activities would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. This impact would be less than significant.

Operation. The primary source of fresh water is groundwater, which is pumped into the Middle Ranch/Thompson Reservoir with a desalination plant, located at Pebbly Beach. This plant uses reverse osmosis of ocean water to produce potable fresh water. The average annual freshwater demand in Avalon is approximately 375 acre feet per year, with an annual supply of 600 acre feet per year of groundwater combined with desalinated water. New development occurring from implementation of the proposed GP/LCP would increase the demand for groundwater as supplied by Southern California Edison. As analyzed in Section 4.14, *Utilities and Service Systems*, under Impact U-1, the City's projected groundwater supplies will meet projected demand. Due to the limited groundwater supply in Avalon and the high cost of desalinated water, the City should continue to pursue new sources of freshwater and implement water conservation strategies. As such, the following GP/LCP policies would further reduce impacts to water supply. Implementation of GP/LCP policies II-4, and IV-14 through 23 would ensure water conservation and reduce potential impacts to groundwater supply. As such, increased demand for groundwater supply within the City under the proposed GP/LCP would not substantially deplete groundwater supplies. This impact would be less than significant.

The increase in development and addition of impervious surfaces as a result of development facilitated by the proposed GP/LCP would not interfere with groundwater recharge.
New development on vacant lands would incrementally reduce the amount of pervious surfaces within the plan area. However, the City is not identified as a key area of groundwater recharge. The proposed GP/LCP would focus on infill development, consistent with existing land use patterns, intensities and building types. The Center City area in which infill development would be focused is already developed with existing uses and impervious surfaces. While new areas of development would occur, Rural Residential development areas and Expansion Area 2, through

implementation of GP/LCP Policies II-4, and IV-14 through 23 would ensure water conservation and reduce potential impacts to groundwater supply. Therefore, new development would not substantially affect groundwater recharge. Potential impacts to groundwater recharge would be less than significant.

Proposed 2030 GP/LCP GP/LCP Policies and Implementation Measures that Provide Mitigation. The following proposed GP/LCP policies and implementation measures would assist in avoiding or minimizing impacts to water quality:

Policies

II-4 *Promote land development practices that reduce energy and water consumption, air and water pollution, greenhouse gas emissions, and waste, incorporating such techniques as:*

- *Concentration of uses and design of development to promote walking and use of transit in lieu of the automobile*
- *Capture and re-use of storm water on-site for irrigation*
- *Orientation of buildings to maximize opportunities for solar energy use, day lighting, and ventilation*
- *Use of permeable paving materials*
- *Shading of surface parking, walkways, and plazas*
- *Convert waste to energy*
- *Upgrade wastewater disposal system to allow for recycled water use*

IV-14 *Implement a balanced, water conservation strategy as an effective way to manage demand by maximizing the efficiency of existing urban water through conservation measures/programs and developing alternative, reliable sources to sustain present and future water needs.*

IV-15 *Ensure that new development projects are designed to minimize potable water use based on the requirements of the California Green Building Code and encourage new development to achieve greater water use efficiencies (CalGreen Tier I and II levels) than are required by the Code.*

IV-16 *Minimize water consumption by existing and new development through an emphasis on drought-tolerant planting techniques, use of water-efficient plumbing, and water reclamation.*

IV-17 *Encourage the use of high efficiency irrigation technology and recycled site water to reduce the use of potable water for irrigation.*

IV-18 *Limit development in Avalon to levels that are within existing and/or future water service capabilities.*

IV-19 *Ensure that new development projects are designed to reduce storm water pollution consistent with the California Green Building Code and encourage new development to go beyond the basic requirements and meet CalGreen Tier I and II levels, such as implementing low impact development (LID) strategies.*

IV-20 *Require the use of best management practices (BMPs) during site grading and construction to control temporary erosion and offsite deposition of soils.*

IV-21 *Reduce waterborne pollutants and sedimentation from existing uses through public education, erosion control, and implementation of Best Management Practices.*

IV-22 *Eliminate all sources of sewage to shallow groundwater, through improvements of the sewer infrastructure, specifically laterals located in residential parcels.*

IV-23 Remediate sewage contamination of the shallow groundwater underlying Avalon and focus on reducing fecal indicator bacteria concentrations in Avalon Bay.

Implementation Measures

- *Develop and expand recycled water programs to help meet non-potable water demands.*
- *Continue to explore alternative conservation measures and technologies as they become available.*
- *Review and update the City's landscaping regulations as needed to ensure that they effectively address the efficient use of water in landscaping.*

Mitigation Measures. Implementation of 2030 General Plan policies would reduce watershed runoff and percolation impacts to a less than significant level. Therefore, mitigation is not required.

Significance After Mitigation. Implementation of 2030 GP/LCP policies would reduce impacts to a less than significant level. Individual future developments will be subject to further review and, as appropriate, project-specific mitigation.

Impact HWQ-3 Development under the 2030 GP/LCP could alter the existing drainage pattern of the plan area and potentially result in erosion and siltation. However, with implementation of proposed GP/LCP policies, impacts related to drainage pattern alteration would be Class III, *less than significant*.

Construction. Construction activities under the proposed GP/LCP would involve stockpiling, grading, excavation, dredging, paving, and other earth-disturbing activities that could alter existing drainage patterns. These types of activities would constitute a temporary alteration of drainage patterns. The proposed GP/LCP includes policies designed to minimize stormwater and erosional impacts during construction. Policies IV-15 and 20, IV-35 through 37 require new development applications to follow NPDES requirements and implementation of BMPs to prevent or minimize erosion during construction. These policies would regulate construction activities to eliminate potentially destructive practices that remove topsoil and provide for continued enforcement of the requirements of the federal NPDES and other federal and state requirements pertaining to soil management and surface runoff. As described in Impact HWQ-1, compliance with SWRCB's NPDES General Construction Activity Stormwater Permit, NPDES MS4 regulations, and the City's Municipal Code would reduce the risk of short-term erosion resulting from drainage alterations during construction to a less than significant level.

Operation. Development under the proposed GP/LCP would result in alterations to drainage, such as changes in ground surface permeability via paving, changes in topography via grading and excavation. Impact HWQ-1 discusses applicable regulations that would limit pollutant discharges from proposed development under the GP/LCP. NPDES permit requirements would be imposed on applicable projects to limit pollutant discharges. Further, all development within the City would be subject to the provisions of the City's NPDES MS4 Permit. The inclusion of appropriate BMPs, including a range of methods that could minimize off-site erosion, including but not limited to hydrodynamic devices, swales/biofilters, basins, and various filters, are also required by the City of Avalon Municipal Code.

The proposed GP/LCP includes policies designed to minimize post-construction erosional impacts. These policies, IV-18 through 21 and IV-35, 36, and 37, require implementation of BMPs, incorporation of stormwater detention facilities, design of drainage facilities to minimize adverse effects on water quality, minimization of increases in impervious areas, preservation of

vegetation, ad minimizing grading. Implementation of these policies would reduce the volume sediment-laden runoff discharging from sites within project area. Therefore, compliance with NPDES regulations, the City's Municipal Code, and implementation of the proposed GP/LCP policies identified in this impact analysis would reduce the risk of erosion resulting from drainage alterations during the operation of new developments to a less than significant level.

For a description of non-runoff-induced erosion hazards and impacts, see Section 4.5, *Geology and Soils*.

Proposed 2030 GP/LCP GP/LCP Policies and Implementation Measures that Provide Mitigation. The following proposed GP/LCP policies and implementation measures would assist in avoiding or minimizing downstream erosion or siltation:

Policies

IV-15 *Ensure that new development projects are designed to minimize potable water use based on the requirements of the California Green Building Code and encourage new development to achieve greater water use efficiencies (CalGreen Tier I and II levels) than are required by the Code.*

IV-18 *Limit development in Avalon to levels that are within existing and/or future water service capabilities.*

IV-19 *Ensure that new development projects are designed to reduce storm water pollution consistent with the California Green Building Code and encourage new development to go beyond the basic requirements and meet CalGreen Tier I and II levels, such as implementing low impact development (LID) strategies.*

IV-20 *Require the use of best management practices (BMPs) during site grading and construction to control temporary erosion and offsite deposition of soils.*

IV-21 *Reduce waterborne pollutants and sedimentation from existing uses through public education, erosion control, and implementation of Best Management Practices.*

IV-35 *Require the use of best management practices for soil erosion control as part of any grading activity or natural landform alteration. Additionally, require erosion control measures prior to grading operations commencement.*

IV-36 *Preserve vegetation needed to prevent erosion and sedimentation.*

IV-37 *Promote balanced onsite grading operations to eliminate the need for transporting soils on or offsite. In addition, promote phased grading operations rather than mass grading.*

Implementation Measures

- *Regulate construction activities to eliminate potentially destructive practices that remove topsoil.*
- *Continue to enforce the requirements of the federal National Pollutant Discharge Elimination System (NPDES) and other federal and state requirements pertaining to soil management and surface runoff.*

Mitigation Measures. Implementation of 2030 GP/LCP policies and implementation actions listed minimize impact to drainage pattern and limit erosion and siltation. Additional mitigation with respect to GP/LCP implementation is not needed.

Significance After Mitigation. Implementation of 2030 GP/LCP policies would reduce impacts to a less than significant level. Individual future developments will be subject to further review and, as appropriate, project-specific mitigation.

Impact HWQ-4 Development under the 2030 GP/LCP could alter the existing drainage pattern of the plan area and potentially result in increased downstream flooding through the addition of impervious surfaces, exceeding the capacity of existing or planned stormwater drainage systems. However, with implementation of proposed GP/LCP policies, impacts related to downstream flooding would be Class III, *less than significant*.

Development under the proposed GP/LCP includes both infill development and new development. Construction in undeveloped areas including Rural Residential, Low Density residential, and expansion areas would add impervious surfaces. Increased impervious surfaces would increase the overall volume of stormwater runoff by reducing infiltration. This increased runoff could potentially exceed the capacity of existing and planned infrastructure and cause downstream flooding impacts. As discussed in the 2006 *Facilities and Services Holding Capacity Report*, potential future development could be conditioned to provide adequate stormwater facilities, in an effort to avoid impacts to existing stormwater facilities. In addition, infill development would be located in a highly developed area with existing storm drain facilities in place.

Compliance with MS4 requirements and the proposed GP/LCP policies identified in Impact HWQ-3, above, designed to minimize stormwater runoff would also apply to runoff-related flooding impacts. These policies include IV-18, 19, 20, and 21 and IV-35, 36, and 37, require implementation of BMPs, incorporation of stormwater detention facilities, design of drainage facilities to minimize adverse effects on water quality, minimization of increases in impervious areas, preservation of vegetation, and minimizing grading. Implementation of these policies would reduce the volume sediment-laden runoff discharging from sites within the plan area. As analyzed in Impact HWQ-3, implementation of these policies would also reduce the volume of runoff generated, and potential for flooding, throughout the plan area.

Additional policies that, if implemented, would minimize flooding are contained in the Safety Element of the proposed GP/LCP as well as the City of Avalon Municipal Code. These include Policies, VII-7 through 10 and Chapters 1.11 and 1.12 (Erosion Control and Water Quality Requirement System Maintenance) and require storm drain maintenance; mitigation of flood hazards by including onsite drainage systems that are connected to the City's storm drain system, grading of sites within the project area such that runoff does not impact adjacent properties, or elevating buildings above flood levels; and incorporation of stormwater detention basins.

The City and the Santa Catalina Island Company undertook significant storm infrastructure improvements in 2004 and presumably the flood zone has been reduced as a result of those efforts. However, the FEMA flood insurance rate maps (FIRMs) have not been updated to reflect these improvements.

If development proposes changes to drainages, this would occur in compliance with CDFG Streambed Alteration regulations in order to maintain drainage patterns. Therefore, implementation of the proposed GP/LCP policies and compliance with NPDES regulations, the City's Municipal Code, and CDFG regulations would reduce the risk of flooding resulting from drainage alterations to a less than significant impact.

Proposed 2030 GP/LCP GP/LCP Policies and Implementation Measures that Provide Mitigation. The following proposed GP/LCP policies and implementation measures would assist in avoiding or minimizing downstream flooding:

Policies

II-4 *Promote land development practices that reduce energy and water consumption, air and water pollution, greenhouse gas emissions, and waste, incorporating such techniques as:*

- *Concentration of uses and design of development to promote walking and use of transit in lieu of the automobile*
- *Capture and re-use of storm water on-site for irrigation*
- *Orientation of buildings to maximize opportunities for solar energy use, day lighting, and ventilation*
- *Use of permeable paving materials*
- *Shading of surface parking, walkways, and plazas*
- *Convert waste to energy*
- *Upgrade wastewater disposal system to allow for recycled water use*

IV-15 *Ensure that new development projects are designed to minimize potable water use based on the requirements of the California Green Building Code and encourage new development to achieve greater water use efficiencies (CalGreen Tier I and II levels) than are required by the Code.*

IV-18 *Limit development in Avalon to levels that are within existing and/or future water service capabilities.*

IV-19 *Ensure that new development projects are designed to reduce storm water pollution consistent with the California Green Building Code and encourage new development to go beyond the basic requirements and meet CalGreen Tier I and II levels, such as implementing low impact development (LID) strategies.*

IV-20 *Require the use of best management practices (BMPs) during site grading and construction to control temporary erosion and offsite deposition of soils.*

IV-21 *Reduce waterborne pollutants and sedimentation from existing uses through public education, erosion control, and implementation of Best Management Practices.*

IV-35 *Require the use of best management practices for soil erosion control as part of any grading activity or natural landform alteration. Additionally, require erosion control measures prior to grading operations commencement.*

IV-36 *Preserve vegetation needed to prevent erosion and sedimentation.*

IV-37 *Promote balanced onsite grading operations to eliminate the need for transporting soils on or offsite. In addition, promote phased grading operations rather than mass grading.*

VII-7 *Ensure that new development is in compliance with the provisions of the federal flood insurance program and require hydrologic investigations for all new development within or adjacent to sites identified in Flood Zone AE.*

VII-8 *Incorporate adequate mitigation measures into proposed development projects to achieve an acceptable level of risk from potential flooding hazards.*

VII-9 *Ensure that new flood control and drainage facilities, as well as improvements to existing facilities, are consistent with environmental protection standards.*

VII-10 Eliminate as feasible the 100-year floodplain that covers much of the City by implementing upstream improvements to reduce peak surface runoff.

Implementation Measures

- *Continue to enforce the local, state, and federal regulations regarding the construction of buildings within flood hazard areas.*
- *In conjunction with any development proposals within the Resort Recreation area along Avalon Canyon Road, require measures to reduce flood potential in downgradient areas of the Center City.*
- *Review the potential for a public/private partnership for revision of the City's Flood Insurance Rate Map to reflect upstream improvements (both completed and planned).*
- *Develop a plan for watershed management.*
- *Regulate construction activities to eliminate potentially destructive practices that remove topsoil.*
- *Continue to enforce the requirements of the federal National Pollutant Discharge Elimination System (NPDES) and other federal and state requirements pertaining to soil management and surface runoff.*

Mitigation Measures. Implementation of 2030 GP/LCP policies and implementation actions listed minimize impacts from downstream flooding. Additional mitigation with respect to GP/LCP implementation is not needed.

Significance After Mitigation. Implementation of 2030 GP/LCP policies would reduce impacts to a less than significant level. Individual future developments will be subject to further review and, as appropriate, project-specific mitigation.

Impact HWQ-5 Increases in stormwater runoff could require expansion of existing or construction of new storm drain facilities, the construction of which could result in significant environmental effects. However, with implementation of General Plan policies, impacts would be Class III, *less than significant*.

Due to the impending increasing population density within the City and the construction of multi-story and multi-family dwellings, new hotel units, and new subdivisions, the City's sewage system is approaching the limit of capacity to accommodate the increased volume of sewage generated by such developments. According to Section 7.101 of the City's Municipal Code, The sewer redevelopment program shall be carried out in accordance with a master plan of construction to be adopted by the City to best serve the public interests and safety. Implementation of the upgrades proposed by the City would help alleviate any existing deficiencies but would not provide adequate infrastructure to support development upon implementation of the proposed GP/LCP. While development in many urbanized portions of the GP/LCP area may not substantially exceed existing storm drain facilities, proposed development in currently vacant and underdeveloped areas, such as Expansion Area 2, would necessitate of the construction of new or the expansion of existing storm drain infrastructure. Policies II-4, IV-18, and VII-9 contained in the GP/LCP would ensure that new development can be adequately supported by utilities such as storm drainage infrastructure and re-use systems limiting overall drainage requirements. In addition to this policy, Section 7.106 of the City's Municipal Code requires expansion of existing or construction of new facilities prior to issuance of a building permit or occupation. To further ensure new facilities are provided, the newly adopted Sewer System Management Plan identified in the proposed GP/LCP will ensure that adequate facilities are provided to serve permitted land use development. Impacts to

infrastructure are therefore, considered less than significant.

Storm drain facility upgrades could result in short-term construction impacts due to earth trenching and other earth moving activities. These impacts would be similar to those described under Impact HWQ-1. However, the other construction impacts anticipated to result from implementation of the GP/LCP are comprehensively analyzed in Section 4.2 (Air Quality), Section 4.3 (Biological Resources), Section 4.9 (Noise), and Section 4.13 (Transportation and Traffic) of this EIR. It is not anticipated that this construction of necessary storm drainage upgrades in and of itself would result in impacts separate from the GP/LCP. Nonetheless, upgrades, expansion, and construction of necessary utilities to accommodate new development would be subject to project-specific environmental review. Impacts are, therefore, less than significant.

Proposed 2030 GP/LCP GP/LCP Policies and Implementation Measures that Provide Mitigation. The following proposed GP/LCP policies and implementation measures would reduce exceeding the capacity of stormwater drainage systems or creating additional sources of polluted runoff:

Policies

II-4 *Promote land development practices that reduce energy and water consumption, air and water pollution, greenhouse gas emissions, and waste, incorporating such techniques as:*

- *Concentration of uses and design of development to promote walking and use of transit in lieu of the automobile*
- *Capture and re-use of storm water on-site for irrigation*
- *Orientation of buildings to maximize opportunities for solar energy use, day lighting, and ventilation*
- *Use of permeable paving materials*
- *Shading of surface parking, walkways, and plazas*
- *Convert waste to energy*
- *Upgrade wastewater disposal system to allow for recycled water use*

IV-18 *Limit development in Avalon to levels that are within existing and/or future water service capabilities.*

VII-9 *Ensure that new flood control and drainage facilities, as well as improvements to existing facilities, are consistent with environmental protection standards.*

Implementation Measures

- Phase private development and public infrastructure projects based upon input from utility providers, private developers, and other public agencies to assure that adequate public facilities are available at the time of occupancy.
- Require new development to demonstrate incorporation of techniques that reduce energy and water consumption, air and water pollution, greenhouse gas emissions, and waste
- In partnership with Southern California Edison, implement conservation incentive programs that increase water-use efficiency and reduce urban runoff.
- Require runoff mitigation plans as part of the application and development review process that illustrate the Best Management Practices (BMPs) to be employed to prevent pollutants from running off the project site into area waterways. BMPs may include, but are not limited to, the use of bio-filtration techniques and/or provision of subsurface filtering.

- Continue to implement the Sewer System Management Plan in order to improve/update the sewer infrastructure, specifically laterals located in residential parcels.

Mitigation Measures. Implementation of 2030 GP/LCP policies and implementation actions listed minimize impacts regarding new stormwater infrastructure. Additional mitigation with respect to GP/LCP implementation is not needed.

Significance After Mitigation. Implementation of 2030 GP/LCP policies would reduce impacts to a less than significant level. Individual future developments will be subject to further review and, as appropriate, project-specific mitigation.

Impact HWQ-6 Development under the 2030 GP/LCP could result in the degradation of groundwater quality. However, with implementation of General Plan policies, impacts would be Class III, *less than significant*.

Construction. The GP/LCP area is located along the coast and is underlain by a shallow groundwater table. In addition to potential degradation of surface water resources, as analyzed in Impacts HWQ-1 and HWQ-3, above, construction of development under the proposed GP/LCP could result in degradation of groundwater resources. Construction would involve earth-disturbing activities, such as trenching for underground utilities and pile driving for foundations, which could encounter and contaminate groundwater resources. Compliance with Chapter 1.11 of the Municipal Code would ensure that these earth-disturbing activities would not result in adverse groundwater conditions.

In addition, hazardous materials used during construction could contaminate surface water and percolate into the groundwater underlying the project area if the materials are not properly contained. Such risks of contamination would be minimized by implementation of Policies III-18 and IV-18 through 23 of the proposed GP/LCP. These policies require protection of groundwater recharge areas as well as surface water and groundwater impacted by construction activities. As discussed previously, impacts associated with the degradation of groundwater quality during construction activities would be **less than significant**.

For a description of existing groundwater contamination in the City and an analysis of hazardous materials impacts to groundwater under the proposed GP/LCP, see Section 4.7 (Hazards and Hazardous Materials).

Operation. In coastal groundwater basins, groundwater quality can be degraded through the intrusion of seawater primarily by pumping for domestic and irrigation water supply. As groundwater is extracted, the ability is created for seawater to migrate into the area from which the groundwater was extracted. Degradation of groundwater quality would reduce the groundwater basin yield, diminishing production from existing activities and limiting future groundwater development. As determined in Section 4.14 (Utilities and Service Systems) of this EIR, development under the proposed GP/LCP would be adequately served by the existing water supply and as such would not substantially increase groundwater pumping, the project would not adversely impact groundwater quality due to saltwater intrusion. Additionally, the new infrastructure would be connected to the saltwater systems thereby further reducing the demand of fresh water.

Implementation of the proposed GP/LCP policies would minimize any other potential sources of water quality degradation. Implementation of Policies IV-14 through IV-18 work towards enhancement and protection of water quality of all natural water bodies, the maintenance of water quality standards through compliance with TMDL standards, and minimization of adverse

effects to water quality from sanitary sewer outflows. Implementation of Policies VII 18 through 20 of the Safety Element would achieve the goal of minimizing exposure of people and the environment to hazardous materials, including the contamination of groundwater by hazardous materials. Thus, with implementation of the proposed GP/LCP policies and compliance with the Municipal Code, development under the proposed GP/LCP would not otherwise degrade water quality. Impacts would be less than significant.

Proposed 2030 GP/LCP GP/LCP Policies and Implementation Measures that Provide Mitigation. The following proposed GP/LCP policies and implementation measures would assist in avoiding or minimizing impacts to groundwater quality:

Policies

VII-18 *Manage activities within Avalon involving the transport, use, storage or disposal of hazardous materials in a responsible manner that protects public health, safety, and the environment.*

VII-19 *Promote the availability of safe and legal options for the management and disposal of hazardous wastes generated by businesses and households within the Avalon area.*

VII-20 *Promote community education and understanding of sound management practices for the storage, handling, use and disposal of hazardous materials*

Implementation Measures

- *Continue to enforce applicable federal, state and local regulations pertaining to the transportation, storage, treatment, and disposal of hazardous materials within Avalon.*
- *Continue to provide hazardous waste disposal programs.*

Mitigation Measures. Implementation of 2030 GP/LCP policies and implementation actions listed minimize impacts regarding groundwater contamination. Additional mitigation with respect to GP/LCP implementation is not needed.

Significance After Mitigation. Implementation of 2030 GP/LCP policies would reduce impacts to a less than significant level. Individual future developments will be subject to further review and, as appropriate, project-specific mitigation.

Impact HWQ-7 Development under the proposed GP/LCP could place housing, structures and people within a 100-year flood zone. However, with implementation of General Plan policies and FEMA requirements, impacts related to flooding would be Class III, *less than significant*.

As shown in Figure 4.8.2, the 100-year flood zone is primarily contained in and along the edges of Avalon Canyon and Avalon Bay. As noted above, the City and the Santa Catalina Island Company undertook significant storm infrastructure improvements in 2004 and presumably the flood zone has been reduced as a result of those efforts. However, the FEMA FIRMs have not been updated to reflect these improvements. As shown, most of Avalon the 100-year floodplain occupies land around the bottom of Avalon Canyon along the intermittent stream (Figure 4.8.2). Delineated flood hazard areas are localized areas of potential inundation that exist immediately adjacent to water courses. Because the land designated for residential development adjacent to this 100-year floodplain is already developed, or approved for development, impacts to new residential development within the 100-year flood plain would be less than significant.

The Safety Element of the proposed GP/LCP has established a goal to protect human life and public and private property from the risks of flooding. The Safety Element includes flood policies that, if implemented, would achieve this goal. Under Policies VII-7 through 10, all new development within 100-year flood zones would be required to comply with the provisions of the federal flood insurance program and require hydrologic investigations and mitigation measures to achieve acceptable level of risk.

Furthermore, Chapter 9.101 of the City's Municipal Code establishes methods and provisions that would minimize flood damage to residential development. In particular, Section 9.501 requiring tethering, elevation above the highest adjacent grade to a height equal to or exceeding the depth number specified in feet on the FIRM, or elevated at least two feet above the highest adjacent grade if no depth number is specified in AO zones, elevated at least one foot above the base flood elevation, in A zones, and in all other zones, elevated at least one foot above the base flood elevation. Flood proofing measures included in the proposed GP/LCP and existing City of Avalon Municipal Code would be sufficient to protect new structures from damage in the event of a 100-year flood. Therefore, impacts of flood hazards to housing developed under the proposed GP/LCP would be less than significant.

A water displacement analysis would be required to investigate the effect of new structural development or fill on flooding depth, pursuant to FEMA regulation 44 CFR 60.3 (c)(10). Preparation of water displacement analyses where appropriate and compliance with FEMA regulations would ensure that GP/LCP development would not substantially impede or redirect flows. Impacts would be less than significant.

Impact GHG-3 addresses the potential of flooding risks by sea level rise. Through implantation of GP/LCP Policies IV-11 and 12 and inclusion of mitigation requiring collaboration with climate science exports to identify areas that may be exposed to risks due to sea level rise, such as flooding or erosion, impacts to housing, structures, and people due to sea level rise would be less than significant.

Proposed 2030 GP/LCP GP/LCP Policies and Implementation Measures that Provide Mitigation. The following proposed GP/LCP policies and implementation measures would assist in avoiding or minimizing impacts to housing structures, and people due to flooding:

Policies

VII-7 *Ensure that new development is in compliance with the provisions of the federal flood insurance program and require hydrologic investigations for all new development within or adjacent to sites identified in Flood Zone AE.*

VII-8 *Incorporate adequate mitigation measures into proposed development projects to achieve an acceptable level of risk from potential flooding hazards.*

VII-9 *Ensure that new flood control and drainage facilities, as well as improvements to existing facilities, are consistent with environmental protection standards.*

VII-10 *Eliminate as feasible the 100-year floodplain that covers much of the City by implementing upstream improvements to reduce peak surface runoff.*

IV-11 *Discourage development that may be adversely affected by sea level rise.*

IV-12 *Improve infrastructure as needed to address rising sea levels.*

Implementation Measures

- *Engage state and local governments in defining responses to sea level rise.*

- *Collaborate with climate science experts on local climate change impacts, mitigation, and adaptation, including sea level changes, to inform public policy decisions.*
- *Integrate protection against the effects of sea level rise into the design of coastal structures.*

Mitigation Measures. Implementation of 2030 GP/LCP policies and implementation actions listed above would protect sensitive species and buffer such species from urban uses. With compliance with FEMA regulations, impacts to structures placed within a 100-year flood zone Additional mitigation with respect to GP/LCP implementation is not needed.

Significance After Mitigation. Implementation of 2030 GP/LCP and FEMA policies would reduce impacts to a less than significant level. Individual future developments will be subject to further review and, as appropriate, project-specific mitigation.

Impact HWQ-8 Development facilitated by the 2030 GP/LCP could result in inundation be seiche, tsunami, or mudflow. However, with implementation of GP/LCP policies, impacts would be Class III, *less than significant*.

Development under the proposed GP/LCP would increase the exposure of people to the low-probability but high-risk events such as seiche, tsunami, and mudflows by increasing development in certain areas of the City, including Avalon Bay. The Safety Element of the proposed GP/LCP has established a goal to minimize adverse effects of coastal hazards related to tsunamis, rogue waves, storm surges, and seiche. Implementation of Policies VII-21 through 23 would achieve this goal by identifying evacuation routes in areas susceptible to inundation areas, developing and implementing response plans for adoption by the City's emergency services, and maintaining beach width to provide protection against tsunami run-up, and developing and implementing an educational program for people in susceptible areas.

The primary effect of flooding, where urban encroachment on floodplains has occurred, is the threat to life and property. Floods may also create health and safety hazards and disruption of vital public services. Economic costs may include a variety of flood relief expenses, as well as investment in flood control facilities to protect endangered development. The extent of damage caused by any flood depends on the topography of the area flooded; depth, duration, and velocity of floodwaters; the extent of development in the floodplain; and the effectiveness of forecasting, warnings, and emergency operations. Encroachment onto floodplains, such as artificial fills and structures, reduces the capacity of the floodplain and increases the height of floodwater upstream of the obstructions.

For most of Avalon the 100-year floodplain occupies land around the bottom of Avalon Canyon along the intermittent stream (Figure 4.8.2). Delineated flood hazard areas are localized areas of potential inundation that exist immediately adjacent to water courses. Development would expose people & structures to flood hazards; however, recent city improvements and several GP/LCP policies would help minimize flood hazard effects including III-17, IV-11, and IV-12. These policies discourage development on hillsides, shorefronts, flood plains, or those which may be harmed by sealevel rise. Implementation of these policies on all future development within the Avalon plan area would reduce flooding and related erosion/ sedimentation impacts to a less than significant level.

In addition, implementation of the flood protection policies contained in the Safety Element of the proposed GP/LCP, as described in Impact 4.7-8, would also help minimize the impact of flooding, including flooding as a result of seiche and tsunami inundation. Furthermore, all new development in the City occurring in areas that are subject to flood hazards would be required

to comply with the flood damage prevention provisions of the City's Municipal Code. Thus, risks associated with inundation by seiche, tsunami, and mudflow are considered to be less than significant in the plan area.

Proposed 2030 GP/LCP GP/LCP Policies and Implementation Measures that Provide Mitigation. The following proposed GP/LCP policies and implementation measures would assist in avoiding or minimizing impacts to special-status species:

Policies

III-17 Through the *development* review process, ensure that new development located in or near areas that may pose public health and safety hazards (such as on hillsides, shorefronts, flood plains, and/or areas of known or suspected fire hazard) is designed to minimize potential impacts on people and property.

IV-11 *Discourage development that may be adversely affected by sea level rise.*

IV-12 *Improve infrastructure as needed to address rising sea levels.*

VII-21 *Continue to implement local preparedness planning and operations and participate in multi-jurisdictional disaster preparedness planning and operations.*

VII-22 *Coordinate planning activities with adjacent jurisdictions to promote the provision of quality medical and emergency medical care facilities and to identify and revise possible unnecessary constraints on their development.*

VII-23 *Follow or adhere to the National Incident Management System (NIMS), Incident Command System (ICS) or the Joint Regional Task Force (JRTF) (whichever the event requires).*

Implementation Measures

- Support education in the schools that teaches children how to avoid dangers and how to behave during an emergency.
- Support the efforts of other organizations, such as television stations, utilities, emergency response providers, and the Office of Emergency Services that provide outreach and education to Avalon.
- Update disaster response plans for each type of disaster, including, fire, earthquake, tsunami, flood, and Acts of Violence.

Mitigation Measures. Implementation of 2030 GP/LCP policies and implementation actions listed minimize impacts to structures during 100-year storm events. Additional mitigation with respect to GP/LCP implementation is not needed.

Significance After Mitigation. Implementation of 2030 GP/LCP policies would reduce impacts to a less than significant level. Individual future developments will be subject to further review and, as appropriate, project-specific mitigation.

4.9 LAND USE and PLANNING

This section analyzes the 2030 GP/LCP's consistency with applicable local, regional, and state land use policies. Consistency with the South Coast Air Quality Management Plan (AQMP) is discussed in Section 4.2, *Air Quality*. Land use compatibility conflicts associated with growth facilitated by the 2030 GP/LCP are discussed in sections 4.1, *Aesthetics and Community Design*, 4.2, *Air Quality*, 4.6, *Hazards and Hazardous Materials*, and 4.9, *Noise*.

4.9.1 Setting

Avalon is subject to the land use regulatory policies of various state and regional agencies. These agencies and the corresponding state and regional policy documents that affect land use planning in Avalon are discussed below.

a. Regulatory Agencies. State, regional, and local agencies with roles in establishing and implementing land use policy in Avalon include the Southern California Association of Governments, and the Los Angeles County Local Agency Formation Commission (LAFCo).

Southern California Association of Governments (SCAG). Avalon is located within the planning area of the Southern California Association of Governments (SCAG). SCAG functions as the Metropolitan Planning Organization for Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial Counties. The region encompasses an area of more than 38,000 square miles with a population exceeding 18 million persons. As the designated Metropolitan Planning Organization, SCAG is mandated by the federal government to research and draw up plans for transportation, growth management, hazardous waste management, and air quality. Also functioning as the Metropolitan Transportation Authority, SCAG administers the state-mandated Regional Transportation Plan (RTP), designed to address the regional impact of urban congestion.

Los Angeles County Local Agency Formation Commission (LAFCo). The Los Angeles LAFCo was formed and operates according to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (California Government Code §56000 et seq.). State law provides for LAFCos to be formed as independent agencies in each county in California. LAFCos implement state requirements and state and local policies relating to boundary changes for cities and most special districts, including spheres of influence, incorporations, annexations, reorganizations and other changes of organization. In this capacity, the Los Angeles LAFCo is the boundary agency for cities and most special districts in Los Angeles County.

b. Applicable Plans and Policies. Plans, regulations, and policies of the above agencies that are relevant to the 2030 GP/LCP are described below.

Regional Comprehensive Plan. SCAG's 2008 Regional Comprehensive Plan (RCP) serves as a comprehensive planning guide for future regional growth through 2035. The guiding principles of the RCP are to improve mobility for all residents, foster livability in all communities, enable prosperity for all people, and promote sustainability for future generations. The RCP identifies voluntary best practices to approach growth and infrastructure challenges and includes goals and outcomes to measure progress. Specific RCP goals relate to land use and housing, open space and habitat, water, energy, air quality, solid waste, transportation, security and emergency preparedness, and the economy.

Growth Vision Report. In an effort to provide local decision-makers with the tools they need to plan more effectively for the six million new residents projected to live in Southern California

by 2030, SCAG undertook a growth visioning initiative called *Southern California Compass.* The objective of this effort was to develop a comprehensive new vision for Southern California over the next 30 years by taking a more all-encompassing, inclusive approach to planning at both the local and regional levels. The SCAG Growth Vision Report begins with a general discussion of the challenges facing Southern California as it prepares to accommodate an estimated 6.3 million additional people by 2030. It studies historical trends in demographics, housing, jobs, and other key aspects essential to understanding how the region will evolve and grow. Looking forward, the report explores how emerging trends and conditions will affect future growth in the region. It also discusses the challenges of continuously developing and refining the Growth Vision.

Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). SCAG's 2012-2035 RTP/SCS, adopted April 4, 2012, is a long-range transportation plan that provides a vision for transportation investments throughout the region. Using growth forecasts and economic trends that project out over a 20-year period, the RTP considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address regional mobility needs. The SCS is a newly required element of the RTP that was mandated by Senate Bill 375 (SB 375). SB 375 requires a SCS to provide a plan for meeting emissions reductions targets set by the California Air Resources Board. The SCS integrates land use and transportation strategies to achieve emissions targets.

Santa Catalina Island Local Coastal Plan (LCP). In 1983 the Los Angeles Department of Regional Planning prepared the LCP to guide future coastal development on Santa Catalina Island and improve public access to coastal areas. This document was drafted and adopted in response to the California Coastal Act of 1976, which required local governments in the coastal zone to develop plans to control development within their portion of the coastal zone. Goals of the LCP include the following:

- To provide a variety of recreation and outdoor education experiences for Los Angeles County's residents
- To maintain the essential natural integrity of the part of Santa Catalina Island that is under an Open Space Easement Agreement
- To determine the level of resource protection needed to assure continued enjoyment by the public of non-Easement areas

The broad vision of the LCP is to improve public access to natural and recreational areas while protecting coastal resources.

4.9.2 Impact Analysis

a. Methodology and Significance Thresholds. The following discussion of land use impacts analyzes the 2030 GP/LCP's consistency with applicable policies of the various state and regional plans, for the purposes of assessing the proposed project's environmental impacts related to land use.

The 2030 GP/LCP is a citywide plan intended to provide for the orderly development of the community through the year 2030. As such, it would not physically divide the community. In addition, no habitat conservation plan or natural community conservation plan applies to Avalon. Therefore, the 2030 GP/LCP would result in a potentially significant land use impact if it would conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including SCAG's Regional Comprehensive Plan and Guide and the

California Coastal Act) adopted for the purpose of avoiding or mitigating an environmental effect.

Although the analysis that follows evaluates consistency with various regulatory policies, each individual agency (SCAG, Los Angeles County LAFCo) ultimately has the discretion to determine consistency of the 2030 GP/LCP with the policies, plans, and/or programs that fall within that agency's purview.

b. Project Impacts and Mitigation Measures.

Impact LU-1 The 2030 GP/LCP includes three potential annexation areas that the City may consider annexing. Because any conflicts with LAFCo policies would need to be resolved prior to LAFCo approval of any boundary adjustment, impacts would be reduced to a Class III, *less than significant,* level.

The State of California has the exclusive power to regulate boundary changes, which means that no local government has the right to change its own boundary without State approval. The Legislature has prescribed a "uniform process" for boundary changes for both cities and special districts that is now embodied in the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (California Government Code Section 56000 et seq.). This Act delegates the Legislature's boundary powers to local agency formation commissions (LAFCos).

The Los Angeles LAFCo (www.lalafco.org) is responsible for reviewing and approving proposed jurisdictional boundary changes in Los Angeles County, including the annexation and detachment of territory to and/or from cities and most special districts, incorporations of new cities, formations of new special districts, and consolidations, mergers, and dissolutions of existing districts. In addition, LAFCos must review and approve contractual service agreements, conduct service reviews, and determine spheres of influence for each city and district.

The 2030 GP/LCP identifies three potential annexation areas adjacent to the current City corporate boundaries. The purpose of incorporating these areas would be to encourage greater tourist activity in the City and to incorporate open space into City limits. Of the three potential expansion areas, two areas are owned by the Santa Catalina Island Company and one is owned by the Catalina Island Conservancy.

The LAFCo would need to approve any annexation proposal and would typically notify affected landowners and agencies prior to consideration of the annexation. In general, LAFCos base decisions on the following objectives: to encourage the orderly growth of government agencies, to preserve agricultural lands, to discourage urban sprawl, and to assure efficient local government services (calafco.org -"LAFCo Objectives"). Because Avalon does not contain designated agricultural land, the LAFCo objective seeking to preserve agricultural land would not apply to the City.

The LAFCo objectives that would apply to potential future development under the 2030 GP/LCP are discussed below.

Encourage the Orderly Growth of Government Agencies. LAFCo encourages proposals that involve urban development or that result in urban development to include annexation to a city wherever possible. Unless exceptional circumstances are shown, LAFCo will not approve a proposal unless it is consistent with the applicable general plan and any applicable specific plan.

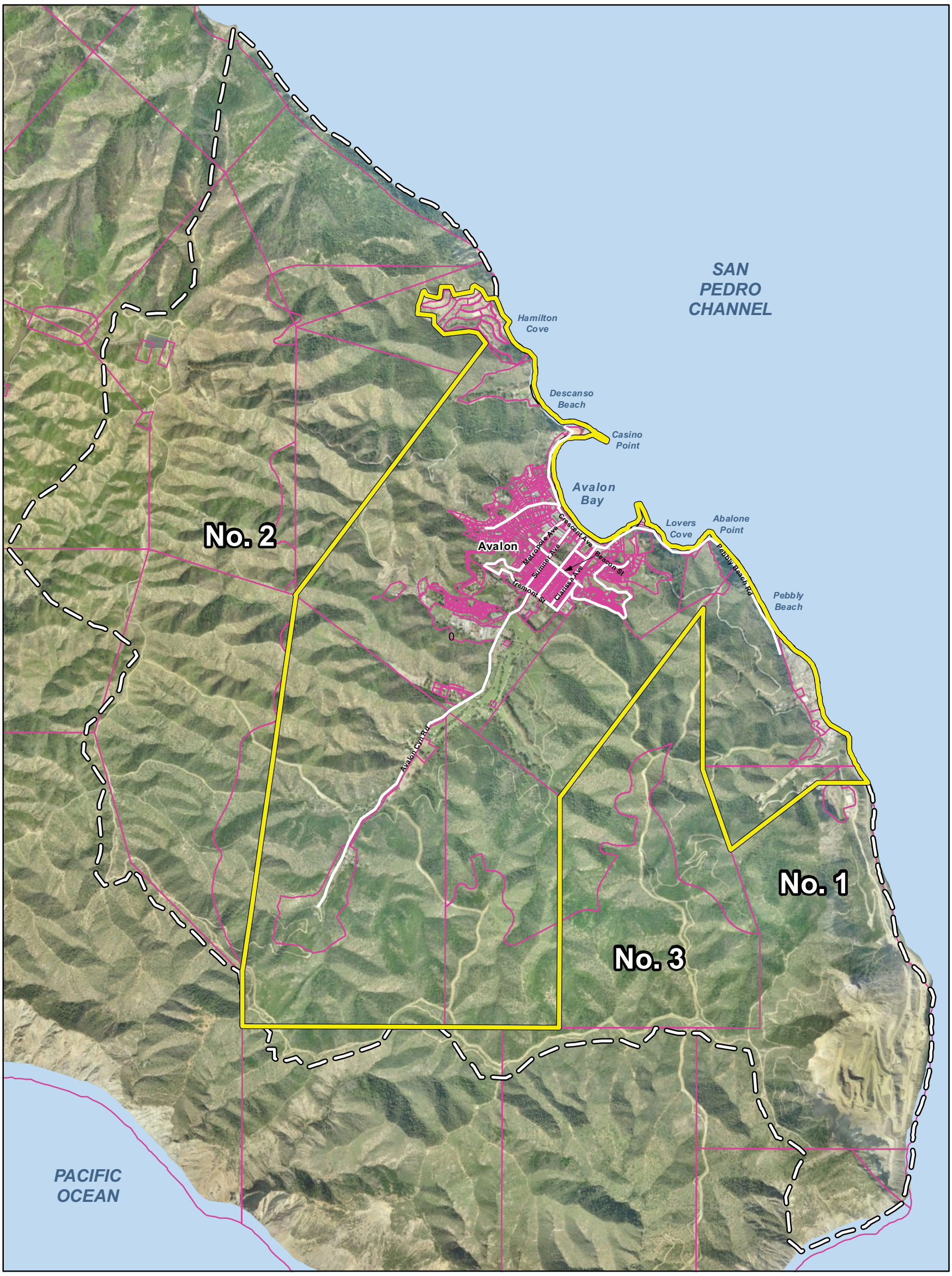
It is anticipated that future boundary adjustments sought by the City would be consistent with the 2030 GP/LCP. The GP/LCP applies land use designations for three areas indicating the anticipated future use of possible annexation areas. If annexed to the City, these areas could undergo land use changes relative to their current use, as discussed in Section 2.0, *Project Description*. The three areas include: (1) Expansion Area No. 1, a 524.25-acre, landfill and quarry area south of Pebbly Beach; (2) Expansion Area No. 2, a 1643.72-acre, variety of parcels with open space between Hamilton Cove and Divide Road; and (3) Expansion Area No. 3, which consists of two parcels containing 558.83 acres of open space between the City limits separating Pebbly Beach and the eastern boundary of Avalon Canyon. The three expansion areas are shown on Figure 4.9-1 below. In accordance with the 2030 GP/LCP, portions of the landfill and quarry area could facilitate light industrial uses, with the potential to transition over time to more visitor-serving uses as part of a Pebbly Beach Specific Plan Overlay District. Expansion Area No. 2 could be converted to Resort/Recreational uses, while Expansion Area No. 3 would maintain open space within City limits. Given that future boundary adjustments would only be made at such time as they are deemed consistent with applicable LAFCo policies, it is anticipated that any adjustments would only be made in a manner that encourages orderly development.

Discourage Urban Sprawl. LAFCo will approve a proposal for a change of organization that is likely to result in the conversion of open space land only if it finds that the proposal will lead to planned, orderly, and efficient development. The 2030 GP/LCP emphasizes the use of intensification and reuse of already developed lands and discourages development that would affect designated open space. No boundary adjustment is being sought at this time, but it is anticipated that any future boundary adjustments would either facilitate redevelopment of areas currently being used for other uses such as the landfill and quarry area (in Expansion Area No. 1), maintain the current land use as open space (the majority of Expansion Area No. 2 and all of Expansion Area No. 3), or allow for low-density development of Resort/Recreational facilities in areas above Hamilton Cove and southwest of the southern city limits (in Expansion Area No. 2). In addition, the following policies from the Land Use Element are intended to promote infill development rather than sprawl.

II-9 *Encourage infill of the City Center area and where appropriate, increase the intensity of development on vacant and underutilized properties, in lieu of expanded development outward into Avalon's hillsides, natural areas and open space.*

II-10 *Concentrate high intensity commercial and "mixed-use" type development in the City Center as a means to encourage revitalization while also avoiding more intense development at the City's edge.*

Assure Efficient Local Government Services. One of LAFCo's core missions is to encourage the efficient provision of public services, including, but not limited to: fire and police protection services, school, library, water, wastewater and solid waste disposal services. For example, LAFCo will not favor a change of organization where any affected school district certifies that there is no sufficient existing school capacity to serve the territory involved. Two areas identified for possible future annexation -- Expansion Areas 1 and 2 -- could facilitate new development other than open space uses, which could increase demand for local government services. Potential Expansion Area 3 would be expected to remain open space. Nonetheless, as discussed in Section 4.12, *Public Services*, Avalon schools have been operating under capacity and could accommodate additional students. Furthermore, no boundary adjustment is being sought in conjunction with the GP/LCP and any future adjustment request would need to be deemed consistent with the efficient provision of local services. As described in Section 4.12, *Public Services*, impacts related to police and fire services would be less than significant. And as



Imagery provided by Microsoft's Bing, ESRI and its licensors © 2012. Additional layers from City of Avalon, 2010, and Los Angeles County Department of Regional Planning, 2008.

Avalon City Limits
Sphere of Influence Boundary
Parcel Boundary

0 1,000 2,000 Feet

N

Annexation Areas

Figure 4.9- 1

described in Section 4.14, *Utilities and Service Systems,* impacts related to water and wastewater would also be less than significant.

Mitigation Measures. No mitigation is required. Individual boundary adjustment proposals will need to be addressed by the City and the Los Angeles LAFCo on a case-by-case basis.

Significance After Mitigation. As the City is not seeking any boundary adjustments at this time, no inconsistencies with LAFCo policies would occur.

Impact LU-2 The 2030 GP/LCP could be found to be consistent with SCAG Regional Comprehensive Plan (RCP) Land Use and Housing, Open Space and Habitat, and Energy policies. Impacts would be Class III, *less than significant*.

SCAG's Regional Comprehensive Plan (RCP) serves as a framework for decision-making with respect to regional growth and changes that can be anticipated through 2035 and beyond. The RCP provides a strategic plan for defining and solving inter-related housing, traffic, water, air quality, and other regional challenges. Relevant goals and policies contained within the Land Use and Housing, Open Space and Habitat, Energy, Water, and Solid Waste chapters are discussed below, with cross-references to sections of this EIR that are applicable to specific issue areas.

Land Use and Housing. The RCP includes Land Use and Housing goals that seek to integrate land and transportation planning and achieve land use and housing sustainability. The following policies are intended to guide efforts toward achievement of these goals.

LU-4.1 Local governments should adopt and implement General Plan Housing Elements that accommodate housing needs identified through the Regional Housing Needs Assessment (RHNA) process. Affordable housing should be provided consistent with RHNA income category distributions adopted for each jurisdiction. To provide housing, especially affordable housing, jurisdictions should leverage existing State programs such as HCD's Workforce Incentive Program and density bonus law and create local incentives (e.g., housing trust funds, inclusionary zoning, tax-increment-financing districts in redevelopment areas and transit villages) and partnerships with non-governmental stakeholders.

LU-6.1 Local governments should take a comprehensive approach to updating their General Plans, keeping General Plans up-to-date and providing progress reports on updates and implementation, as required by law.

LU-6.2 Developers and local governments should integrate green building measures into project design and zoning such as those identified in the U.S. Green Building Council's Leadership in Energy and Environmental Design, Energy Star Homes, Green Point Rated Homes, and the California Green Builder Program.

LU-6.4 Local governments and subregional organizations should develop adaptive reuse ordinances and other programs that will enable the conversion of vacant or aging commercial, office, and some industrial properties to housing and mixed-use with housing.

The 2030 GP/LCP meets LU-4.1 by including a Housing Element that incorporates the City's RHNA for the 2008-2013 and 2014-2021 cycles. In particular, Policy V-17 plans for "residential land uses that accommodate both existing demand and anticipated growth," while Policy V-19 addresses housing needs across income category distributions. The 2030 GP/LCP also meets LU-6-2 by integrating green building measures into planning. Through Policy V-12, the 2030

GP/LCP encourages energy-efficient building methods and promotes energy conservation measures. In addition, the City's Special Commercial land use designation in the City Center allows for mixed-use housing, including structures which contain commercial uses on the ground floor and residential uses above. With regard to LU-6.4, the 2030 GP/LCP continues a Special Commercial designation in the City Center where aging properties may be converted to mixed-use housing. Policy II-26 also pursues annexation for the purpose of adaptive reuse of a landfill and quarry area adjacent to City limits. Finally, GP/LCP is being prepared specifically to plan for future growth in an orderly fashion and maintain consistency with current regulations. Therefore, the 2030 GP/LCP could be found to be consistent with RCP Policies LU-4.1, LU-6.1, LU-6.2, and LU-6.4.

Open Space and Habitat. The purpose of the Open Space and Habitat Chapter is to plan and provide for the conservation of the region's open space resources. The Chapter recommends alternative approaches, and strategies that can be useful to local officials as they address future open space needs in their community and ensure a high quality of life and equity for Southern California residents. The following actions described in the RCPG that are related to the 2030 GP/LCP include:

OSN-13 Local governments should develop and implement mitigation for open space impacts by:

- Promoting coordinated mitigation programs for regional projects and establish the basis for inter-regional conservation strategies.
- Planning development in locations least likely to cause environmental impact.

OSC-8 Local governments should encourage patterns of urban development and land use, which reduce costs on infrastructure and make better use of existing facilities.

OSC-9 Developers and local governments should increase the accessibility to natural areas lands for outdoor recreation.

OSC-10 Developers and local governments should promote infill development and redevelopment to revitalize existing communities.

OSC-12 Developers and local governments should promote water-efficient land use and development.

OSC-13 Developers and local governments should encourage multiple use spaces and encourage redevelopment in areas where it will provide more opportunities for recreational uses and access to natural areas close to the urban core.

The 2030 GP/LCP focuses development in already urbanized or developed areas as well as areas adjacent to current City limits, as discussed under the Land Use and Housing analysis above. The Commercial and Special Commercial land use designations allow mixed-use development to be introduced to the City Center. Accessibility to natural areas for outdoor recreation is also facilitated by expanding the Resort Recreational land use designation. Furthermore, the 2030 GP/LCP identifies parcels near the City limits for potential future annexation to provide more open space uses within the City's jurisdiction. Water-efficient land use and development is also promoted by policies that minimize water consumption through drought-tolerant planting techniques and encourage greater water use efficiencies. Therefore, the 2030 GP/LCP could be found to be consistent with RCP Policies OSN-13, OSC-8 through OSC-10, OSC-12, and OSC-13.

Energy. The purpose of the Energy Chapter is to guide the Southern California region to develop clean, stable, and sustainable sources of energy. The RCP's primary energy goals are to reduce

regional consumption of non-renewable energy and increase the share of renewable energy. The following policy is intended to guide local efforts toward achievement of these goals.

EN-10S Local governments should employ land use planning measures, such as zoning, to improve jobs/housing balance and creating communities where people live closer to work, bike, walk, and take transit as a substitute for personal auto travel.

As discussed in Section 4.13, *Transportation and Traffic*, due to the City's small geographic area, walking and biking are common modes of transport and people live close to work. Avalon's vehicle permitting system also controls the presence of automobiles and restricts their size. Furthermore, Policy VI-7 ensures that residents and visitors can use alternative modes of transportation to access points of interest across the City. In terms of conservation practices, the 2030 GP/LCP meets both of the RCP's primary energy goals: Policy IV-25 encourages new development to reduce consumption of non-renewable energy sources, while Policy IV-26 encourages solar installations and other forms of renewable energy. Aside from land use planning measures, Section 4.6, *Greenhouse Gas Emissions/Climate Change*, discusses additional policies that reduce energy impacts. Therefore, the 2030 GP/LCP could be found to be consistent with RCP Policy EN-10S.

Mitigation Measures. With implementation of 2030 GP/LCP policies , the GP/LCP could be found to be consistent with RCP policies. No mitigation measures would be required.

Significance After Mitigation. The 2030 GP/LCP could be found to be consistent with applicable policies of the RCPG.

Impact LU-3 The 2030 GP/LCP could be found to be consistent with the Southern California Association of Governments' Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Impacts would be Class III, *less than significant*.

The SCAG 2012-2035 RTP/SCS links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic, and commercial limitations. The goals of the RTP/SCS relevant to the 2030 GP/LCP include:

- *Align the plan investments and policies with improving regional economic development and competitiveness*
- *Maximize mobility and accessibility for all people and goods in the region*
- *Ensure travel safety and reliability for all people and goods in the region*
- *Preserve and ensure a sustainable regional transportation system*
- *Maximize the productivity of our transportation system*
- *Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking)*
- *Actively encourage and create incentives for energy efficiency, where possible*
- *Encourage land use and growth patterns that facilitate transit and non-motorized transportation*

These goals are supported by the policies listed below. A discussion of the 2030 GP/LCP's consistency with each of the policies follows.

Policy 1: *Transportation investments shall be based on SCAG's adopted Regional Performance Indicators.*

Table 4.9.1 identifies the RTP/SCS performance measures/indicators, which are used to identify transportation investments to achieve RTP goals.

Table 4.9.1
Outcomes and Performance Measures/Indicators

Outcome	Performance Measure/Indicator
Location Efficiency	Share of growth in High-Quality Transit Areas (HQTAs)
	Land consumption
	Average distance for work or non-work trips
	Percent of work trips less than 3 miles
	Work trip length distribution
Mobility and Accessibility	Person delay per capita
	Person delay by facility type (mixed flow, HOV, arterials)
	Truck delay by facility type (highway, arterials)
	Total time distribution for transit, SOV, HOV for work and non-work trips
Safety and Health	Collision/accident rates by severity by mode
	Criteria pollutant emissions
Environmental Quality	Criteria pollutant and greenhouse gas emissions
Economic Well Being	Additional jobs supported by improving competitiveness
	Additional jobs supported by transportation investment
	Net contribution to gross regional product
Investment Effectiveness	Benefit/cost ratio
System Sustainability	Cost per capita to preserve multimodal system to current and state of good repair conditions

As discussed in Section 4.13, *Transportation and Traffic*, the City of Avalon has minimal transportation issues. Vehicle demand in the City does not approach concentrations observed in other urban areas, while alternative modes of transportation such as walking and biking are common. As a compact community, the City has high location efficiency. Although overall traffic levels could slightly increase under buildout of the 2030 GP/LCP, the 2030 GP/LCP includes policies that would at least partially reduce likely increases in traffic and could be found consistent with the performance indicators and goals of the RTP. As discussed under Impact LU-2, the 2030 GP/LCP encourages development that focuses on intensification and reuse of

existing lands within the existing City limits. As discussed in the 2030 GP/LCP, infill development would promote less reliance on autoettes, which would reduce air pollution and alleviate congestion.

A reduction in VMT would be consistent with the RTP performance indicators as it is likely to result in the following:

- *A reduction in automobile accident rates*
- *A reduction in maintenance costs resulting from wear and tear on existing infrastructure*
- *A reduced need to construct new roadways or expand existing roadways, thereby resulting in a more efficient use of existing roadways*
- *A reduction in air emissions*

Moreover, the unique character of Avalon's transportation system, with a compact urban form and autoettes as the predominant vehicle type, ensures that the City performs well according to RTP outcomes such as Location Efficiency and Safety and Health. The 2030 GP/LCP seeks to maintain this consistency with RTP guidance.

New development also would be subject to various 2030 GP/LCP transportation policies and actions aimed at strengthening and balancing vehicle, bicycle, pedestrian, and transit connections in the City and surrounding region. With implementation of the 2030 GP/LCP policies and actions, future development under the 2030 GP/LCP could be found to be consistent with the Regional Performance Indicators of SCAG RTP Policy 1.

> ***Policy 2:*** *Ensuring safety, adequate maintenance, and efficiency of operations on the existing multi-modal transportation system should be the highest RTP/SCS priorities for any incremental funding in the region.*
>
> ***Policy 3:*** *RTP/SCS land use and growth strategies in the RTP/SCS will respect local input and advance smart growth initiatives.*
>
> ***Policy 4:*** *Transportation demand management (TDM) and non-motorized transportation will be focus areas, subject to Policy 1.*
>
> ***Policy 6:*** *Monitoring progress on all aspects of the Plan, including the timely implementation of projects, programs, and strategies, will be an important and integral component of the Plan.*

As discussed in Section 4.13, *Transportation and Circulation*, the 2030 GP/LCP includes a number of policies designed to ensure the safety, adequate maintenance, and efficiency of operations on the City of Avalon's transportation system. By promoting intensification and reuse of already developed areas of the City as well as mixed-use and pedestrian-oriented development, implementation of the 2030 GP/LCP would result in a diverse, safe, and efficient transportation system that minimizes the need for system expansion investments. In addition, policies in the GP/LCP would minimize conflicts between pedestrians, bicyclists, and motor vehicles. Moreover, the growth projections and policies under the 2030 GP/LCP are generally consistent with RTP land use and growth strategies and, therefore, would not require significant changes to the RTP implementation plan. Therefore, buildout under the 2030 GP/LCP could be found to be consistent with SCAG RTP policies 2-5.

Mitigation Measures. The 2030 GP/LCP could be found to be consistent with the SCAG 2012 RTP. No mitigation is required.

Significance After Mitigation. The 2030 GP/LCP could be found to be consistent with the SCAG 2012 RTP.

Impact LU-4 The 2030 GP/LCP could be found to be consistent with the Southern California Association of Governments' Growth Vision Report. Impacts would be Class III, *less than significant*.

SCAG has prepared the Growth Vision Report to provide a framework for local and regional decision making that improves the quality of life for all SCAG residents. The following principles are guidelines for promoting and sustaining for future generations the region's mobility, livability, and prosperity. A discussion of the 2030 GP/LCP's consistency with these principles follows.

Principle 1: Improve mobility for all residents

- *Encourage transportation investments and land use decisions that are mutually supportive.*
- *Locate new housing near existing jobs and new jobs near existing housing.*
- *Encourage transit-oriented development.*
- *Promote a variety of travel choices.*

As discussed above under Impacts LU-1, LU-2, and LU-3, development under the 2030 GP/LCP would be subject to a number of policies and actions that would: (1) include transportation investments and land use decisions that are mutually supportive; (2) provide mixed-use, infill development that would locate housing and jobs near one another; (3) encourage transit-oriented development; and (4) promote new development that would facilitate a variety of travel choices, including bicycle, pedestrian, and public transit forms of transportation. Therefore, development under the GP/LCP could be found to be consistent with SCAG's Growth Vision Report Principle 1.

Principle 2: Foster livability in all communities

- *Promote infill development and redevelopment to revitalize existing communities.*
- *Promote developments that provide a mix of uses.*
- *Promote "people-scaled," pedestrian-friendly communities.*
- *Support the preservation of stable, single-family neighborhoods.*

As discussed under Impact LU-2, the 2030 GP/LCP would promote mixed-use, infill development in the urban core, along with a walkable downtown area. Moreover, future development in Avalon would be subject to a number of 2030 GP/LCP policies and actions that support the preservation of stable, single-family neighborhoods, including policies that advocate rehabilitating substandard residential housing. Therefore, development under the GP/LCP could be found to be consistent with SCAG's Growth Vision Report Principle 2.

Principle 3: Enable prosperity for all people

- *Provide a variety of housing types in each community to meet the housing needs of all income levels.*
- *Support educational opportunities that promote balanced growth.*
- *Ensure environmental justice regardless of race, ethnicity or income class.*
- *Support local and state fiscal policies that encourage balanced growth.*
- *Encourage civic engagement.*

As discussed in Sections 2.0, *Project Description*, and 4.10, *Population and Housing*, the 2030 GP/LCP promotes a mix of housing to meet the needs of all members of the community, as identified in the Housing Element. The 2030 GP/LCP also enables prosperity for all people with policies that encourage tourist activity in the City. For example, Policy II-11 encourages the revitalization of commercial areas to promote business and visitor serving activities. Moreover, the 2030 GP/LCP has been a product of multiple public workshops and hearings where citizens were given the opportunity to participate in the planning process. Therefore, future development under the 2030 GP/LCP could be found to be consistent with SCAG's Growth Vision Report Principle 3.

Principle 4: Promote sustainability for future generations

- *Preserve rural, agricultural, recreational and environmentally sensitive areas.*
- *Focus development in urban centers and existing cities.*
- *Develop strategies to accommodate growth that uses resources efficiently, eliminates pollution and significantly reduces waste.*
- *Utilize "green" development techniques.*

As discussed under Impacts LU-1 and LU-2, future development under the 2030 GP/LCP would be subject to various policies and actions that preserve recreational and environmentally sensitive areas by encouraging new development, reuse, or intensification within already developed areas of the City. Moreover, as discussed under Impact LU-2, future development would be subject to 2030 GP/LCP policies and actions that promote efficient use of resources, pollution reduction, and "green" development techniques. In addition, multiple policies in the 2030 GP/LCP encourage waste reduction at the source, waste-to-energy technologies, and organic waste reuse. Therefore, development under the 2030 GP/LCP could be found to be consistent with SCAG's Growth Vision Report Principle 4.

Mitigation Measures. With implementation of 2030 GP/LCP policies, future development under the 2030 GP/LCP could be found to be consistent with SCAG's Growth Vision Report. No mitigation is required.

Significance After Mitigation. Future development under the 2030 GP/LCP could be found to be consistent with SCAG's Growth Vision Report.

Impact LU-5 The 2030 GP/LCP could be found to be consistent with the Santa Catalina Island Local Coastal Plan (LCP). Impacts would be Class III, *less than significant*.

The Los Angeles County Department of Regional Planning has prepared this LCP to promote public access to and conservation of coastal resources on Santa Catalina Island. A discussion of the 2030 GP/LCP's consistency with the goals of the LCP follows.

Provide a variety of recreation and outdoor education experiences for a major segment of Los Angeles County's seven million residents including the young, disadvantaged and handicapped.

Given that Los Angeles County's population has greatly increased since the LCP's adoption in 1983, the importance of providing access to Santa Catalina Island's coastal resources has grown. As discussed under Impact LU-4, a number of policies in the 2030 GP/LCP promotes tourist activity on Santa Catalina Island. Moreover, circulation policies enhance the City's status as a tourist-oriented community by ensuring the continued availability of transport between

Santa Catalina Island and the mainland. Therefore, development under the 2030 GP/LCP could be found to be consistent with this LCP goal.

> *Accomplish this recreation goal without destroying, minimizing, or in any way compromising the essential natural integrity of the Easement area.*

The 2030 GP/LCP identifies three areas for possible future annexation that include open space, for the purposes of expanding recreational opportunities and including open space within City limits. Annexation would potentially enable low-intensity development of areas that are currently open space; however, any future development within these areas would be contiguous with current City limits, and the majority of Santa Catalina Island would remain in a natural state for conservation purposes. Policy II-19 encourages the clustering of development with Low Density Residential and/or Resort Recreational uses as a means of preserving significant environmental features. In addition, the proposed annexation would further the LCP's first goal of providing public access to coastal resources. Moreover, as discussed in Section 2.0, *Project Description*, the proposed annexation is subject to approval by the Los Angeles County LAFCo before the City can expand its boundaries. Therefore, the 2030 GP/LCP could be found to be consistent with this LCP goal.

> *Protect the role of existing land uses in the Non-Easement/Non-Conservancy areas and insure that these uses can continue and expand consistent with their needs and specialized role in the economy and in providing services to Santa Catalina Island.*

The 2030 GP/LCP assigns a variety of land use designations that are largely consistent with the current General Plan and Local Coastal Plan while expanding and intensifying certain existing land uses in order to meet future needs. As discussed under Section 4.11, *Population and Housing*, the proposed Housing Element would facilitate housing opportunities in accordance with RHNA allocations for a variety of income distributions, as resident and tourist populations increase over time. An expansion of the Resort Recreational land use is also proposed to promote the tourist economy and to facilitate recreational opportunities. Therefore, the 2030 GP/LCP could be found to be consistent with this LCP goal.

> *In Avalon Canyon, consistent with recommendations of the Avalon LCP, allow for resort/recreation facilities and activities, support housing, low density residential use and relocation of County facilities.*

As discussed under the above LCP goals, the 2030 GP/LCP identifies three areas for possible future annexation, in addition to meeting increased housing needs. The 2030 GP/LCP also creates a Resort Recreational Low Density land use designation to accommodate single family housing units in Avalon Canyon. Therefore, development under the 2030 GP/LCP could be found to be consistent with this LCP goal.

> *In the Pebbly Beach/Jewfish Point area, allow continuation, expansion and addition of industrial utility and disposal services consistent with existing use of the area and coastal dependent marine services, and continuation of support housing.*

The 2030 GP/LCP designates the Pebbly Beach area for continued light industrial use in the near term. If the City determines that such use is no longer necessary or viable, the area is identified for eventual development of a specific plan to guide a possible transition to other visitor-serving uses. However, any future transition of this area would include relocation of the existing uses to an appropriate location. Thus, the 2030 GP/LCP could be found to be consistent with this LCP goal.

4.10 NOISE

This section analyzes the impacts associated with exposure to noise. Impacts related to noise from construction, traffic, and flight operations are addressed.

4.10.1 Setting

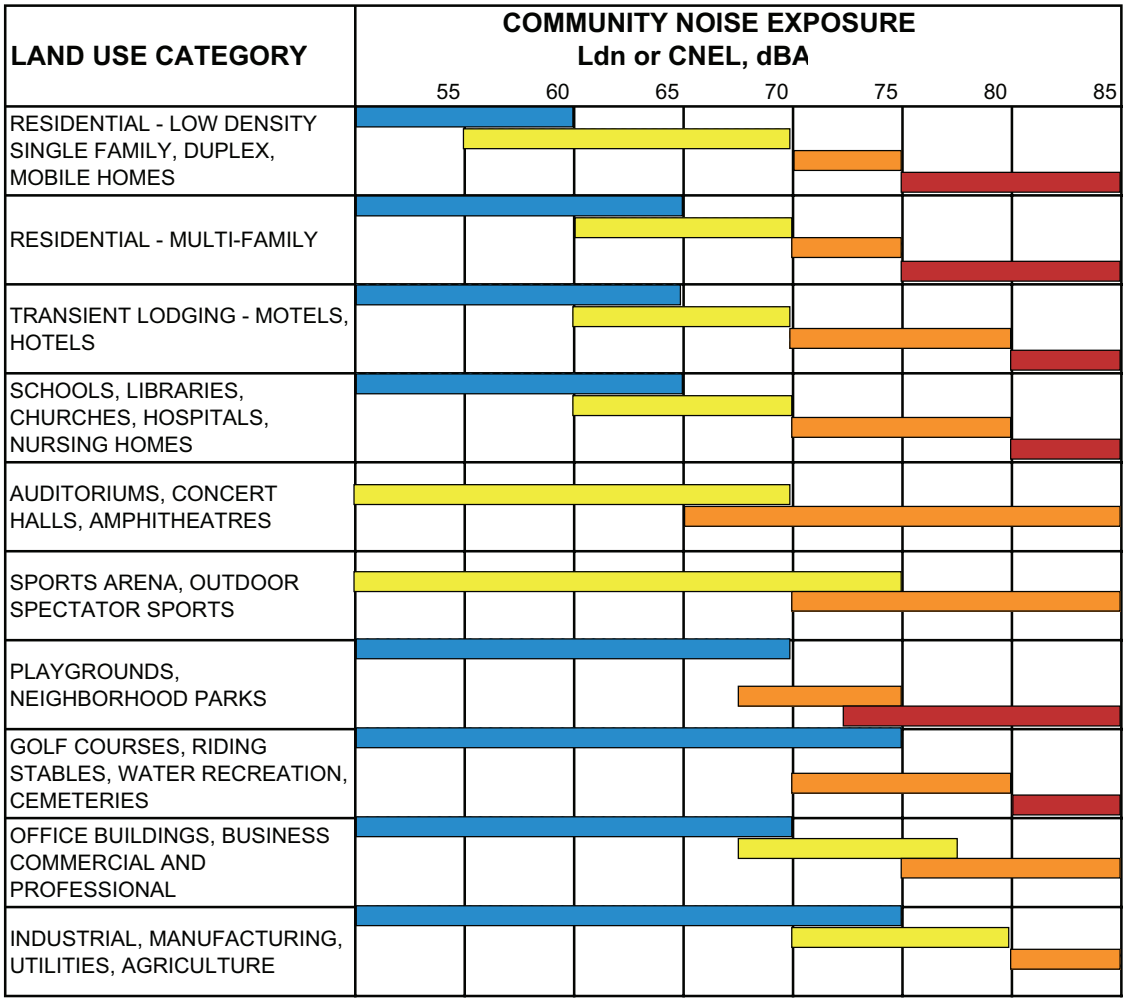
a. Overview of Sound Measurement. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz). In addition to the actual instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time. Typically, Leq is summed over a one-hour period.

The sound pressure level is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Decibels cannot be added arithmetically, but rather are added on a logarithmic basis. Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dB. Because of the nature of the human ear, a sound must be about 10 dB greater than the reference sound to be judged as twice as loud. In general, a 3 dB change in community noise levels is noticeable, while 1-2 dB changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while those along arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range and ambient noise levels greater than that can interrupt conversations.

Noise levels typically attenuate at a rate of 6 dB per doubling of distance from point sources such as industrial machinery (Harris, 1979). For example, a person standing 25 feet from an industrial machine may experience noise levels of 75 dBA, while a person standing 50 feet from the same noise source would experience noise levels of 69 dBA, and a person standing 100 feet from the source would experience noise levels of 63 dBA. Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dB per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dB per doubling of distance (Harris, 1979).

The time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than that which occurs during the daytime. The Day-Night average level (Ldn) recognizes this characteristic by weighting the hourly Leqs over a 24-hour period. The weighting involves the addition of 10 dBA to actual nighttime (10 PM to 7 AM) noise levels, accounting for the greater amount of disturbance associated with noise during that time period.

The California Office of Planning and Research developed the Land Use Compatibility for Community Noise Environments matrix (see Figure 4.10-1) as a guideline to determine whether a proposed new use would be compatible with the ambient noise environment in which it is proposed, as well as whether or not the proposed new use would create noise compatibility conflicts with established uses. The compatibility table illustrates the ranges of community noise exposure in terms of what is “normally acceptable,” “conditionally acceptable,” “normally unacceptable,” and “clearly unacceptable.”



NORMALLY ACCEPTABLE
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

NORMALLY UNACCEPTABLE
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design

CONDITIONALLY ACCEPTABLE
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

CLEARLY UNACCEPTABLE
New construction or development should generally not be undertaken.

Source: Guidelines for the Preparation and Content of Noise Elements of the General Plan, California Office of Planning and Research, 2003.

Noise Compatibility Matrix

Figure 4.10-1

These standards were used in creating the 2030 GP/LCP Land Use Map to promote an appropriate pattern of land uses that preserves a quiet environment where such an environment is desired. Uses where a quiet environment is particularly desirable include residences, schools, medical facilities, and hotels. For the most sensitive uses such as single family residential, 60 dBA Ldn is the maximum normally acceptable noise level.

b. Sensitive Receptors. Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Residences, hospitals, schools, guest lodging, libraries, and religious institutions are most sensitive to noise intrusion and therefore have more stringent noise exposure targets than commercial or recreational uses that are not subject to impacts such as sleep disturbance. Noise sensitive residential areas are located throughout Avalon. For the most part, noise sensitive uses are located in quiet areas lacking major noise sources. However, residences and hotels located in and near the City Center may experience elevated noise levels.

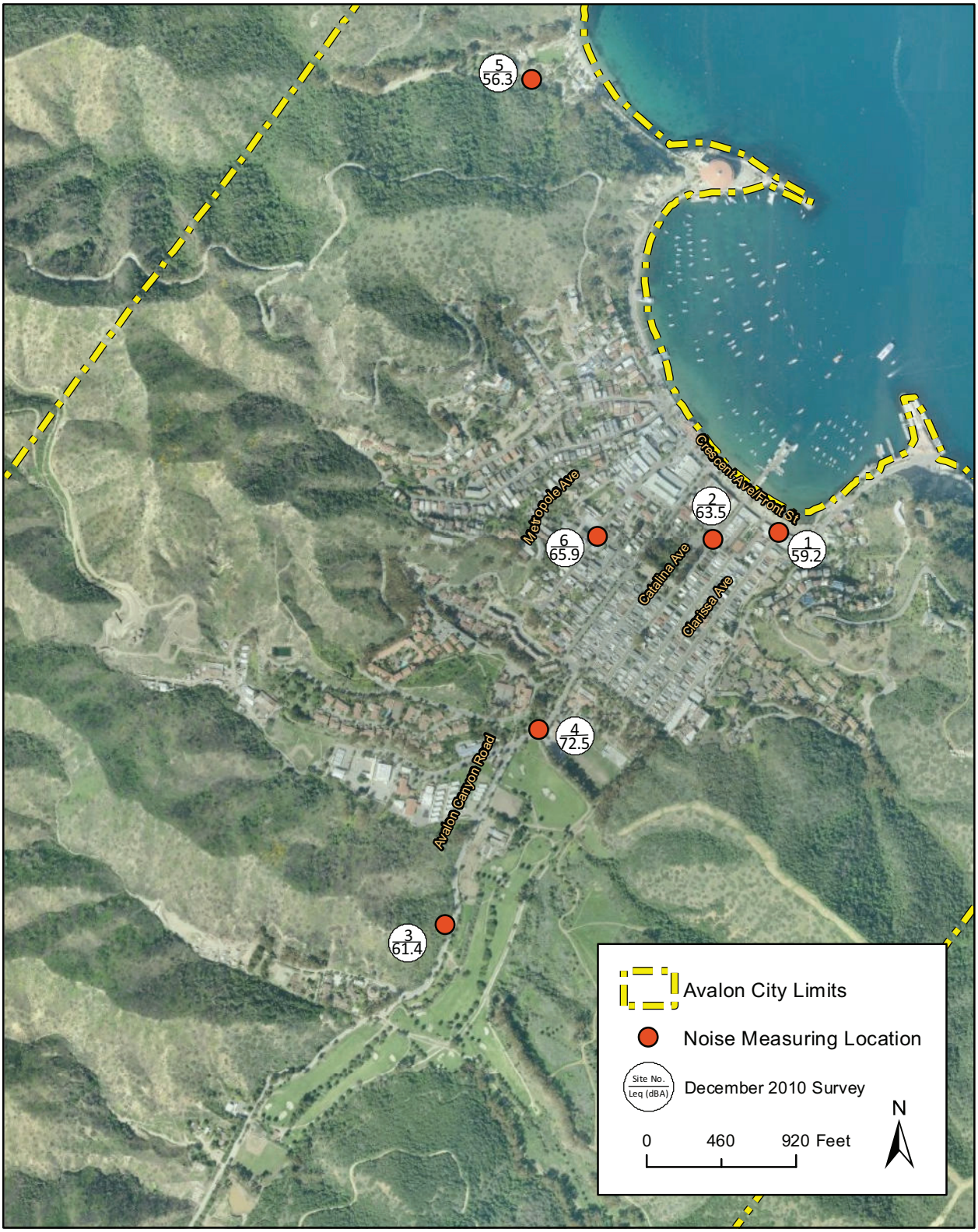
c. Current Noise Levels in Avalon. In order to characterize the noise environment in Avalon, noise levels were measured at 6 locations throughout the City. Table 4.10-1 shows current measured noise levels in Avalon, while Figure 4.10-2 shows the locations and corresponding noise level measurements. Noise levels are generally highest along or adjacent to major roadways. The noise contours for major roadways in Avalon are shown in Figure 4.10-3.

Table 4.10-1
Measured Noise Levels *

Site No.	Location	Leq	Lmin	Lmax
1	Clarissa Avenue at Crescent Avenue/Front Street	59.2	43.4	89.1
2	Catalina Street near Third Street	63.5	45.7	84.8
3	Avalon Canyon Road south of the school	61.4	39.7	81.4
4	Avalon Canyon Road near City Hall	72.5	49.2	91.1
5	Saint Catherine Way near Descanso Beach	56.3	36.4	81.4
6	Beacon Street at Metropole Avenue	65.9	47.8	89.5

** See Figure VIII-1 for noise measurement locations. Leq is the average sound level. Lmin is the minimum instantaneous sound level. Lmax is the maximum instantaneous sound level.*

The highest noise levels in Avalon are found on Avalon Canyon Road near City Hall during school drop-off and pick-up hours. The high level of noise at this location is primarily generated by the use of autoettes. Higher noise levels can also be found near the City Center, along busy streets. Noise in the City Center is generated by the use of autoettes, commercial establishments, landscaping/gardening equipment, large groups of pedestrians/ tourists, and various harbor uses, including private boats in the harbor.



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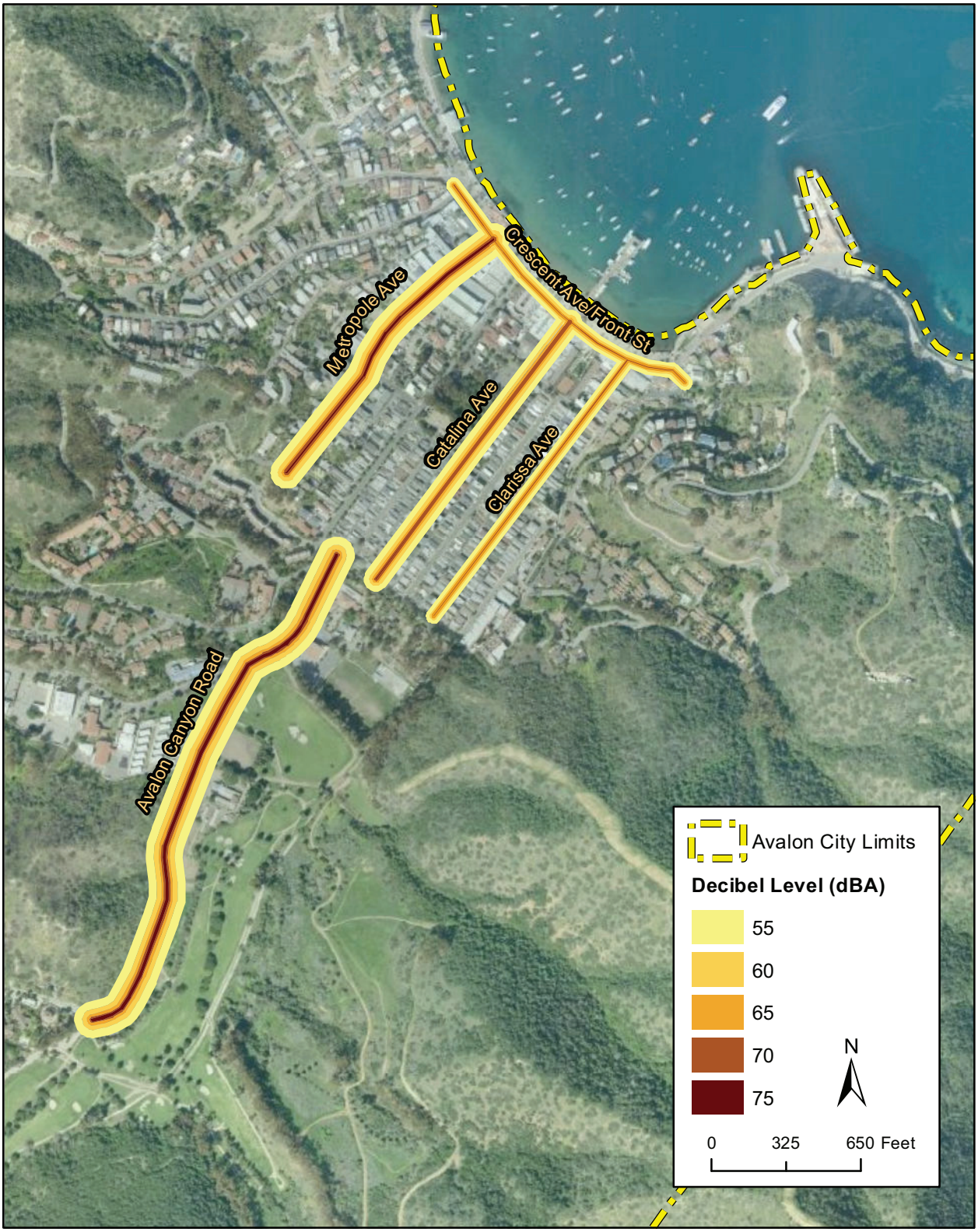
Existing Noise Levels

Figure 4.10- 2



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Existing Noise Contours

Figure 4.10- 3

d. Regulatory Setting. As required by Section 65302 of the Government Code of California, desirable noise levels are embodied within the noise elements of general plans. Division 28 of the California Health and Safety Code requires that the State Office of Noise Control within the Department of Health Services develop model elements and model noise ordinances for consideration by local jurisdictions in developing noise standards.

As discussed earlier, Figure 4.10-1 outlines the guidelines for noise compatible land use, based upon the California Office of Planning and Research (OPR) Noise Element Guidelines. The objective of noise compatibility guidelines is to provide the community with a means of judging the noise environment that it deems to be generally acceptable.

In general, evaluation of land use that fall into the "normally acceptable," "conditionally acceptable," or "normally unacceptable" noise environments should analyze other potential factors that would affect the noise environment. These include consideration of the type of noise source, the sensitivity of the noise receptor, the noise reduction likely to be provided by structures, and the degree to which the noise source may interfere with speech, sleep, or to other activities characteristic of the land use. The existing Noise Element also contains policies aimed at maintaining an acceptable noise environment in the City.

4.8.2 Impact Analysis

a. Methodology and Significance Thresholds. The analysis of noise impacts focuses upon the 2030 GP/LCP's impact to existing noise-sensitive land uses and the impact of existing noise sources upon future sensitive uses. The 2030 GP/LCP would result in potentially significant impacts if development facilitated by the 2030 GP/LCP would result in substantial adverse physical impacts associated with any of the following conditions:

- *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;*
- *Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;*
- *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or*
- *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.*
- *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise noise levels.*
- *For a project within the vicinity of a private airstrip, exposure of people residing or working in the project area to excessive noise levels.*

There are no public or private airports or airstrips located within two miles of the city limits. As such, development facilitated by the 2030 General Plan would have no impact on the exposure of people to excessive noise relating to airports. Please refer to Section 4.15, *Less than Significant Environmental Factors*, for further discussion of noise impacts as they relate to airports and private airstrips.

b. Project Impacts and Mitigation Measures.

Impact N-1 Construction of individual projects facilitated by the 2030 GP/LCP could produce noise levels ranging from 76 to 89 dBA at 50 feet from the source potentially affecting adjacent land uses. Such noise could cause temporary disturbance to nearby receptors, but GP/LCP policies would address potential impacts related to construction. Therefore, this would be a Class III, *less than significant,* impact.

Noise from individual construction projects that could be facilitated under the 2030 GP/LCP would create temporary noise level increases on and adjacent to individual construction sites. Since there are no specific plans or time scales for individual development projects, it is not possible to determine exact noise levels, locations, or time period for construction. However, construction noise would be highest and of the longest duration adjacent to sites where more future development/redevelopment is anticipated to occur. For example, Expansion Areas No. 1 and 2 may undergo considerable construction activity over the life of the GP/LCP, potentially including residential, resort/recreational, and light industrial development. The intensification of uses in the City Center would also generate substantial construction noise during new or redevelopment activities, including demolition and reconstruction.

Table 4.10-2 illustrates the general noise levels associated with construction activity. At a distance of 50 feet from the construction site, noise levels similar to those shown in Table 4.10-2 would be expected to occur with individual development projects. Noise would typically drop off at a rate of about 6 dB per doubling of distance; therefore, noise levels would be about 6 dB lower than shown in the table at 100 feet from the noise source and 12 dB lower at a distance of 200 feet from the noise source.

Table 4.10-2
Typical Noise Levels at Construction Sites

Equipment	Typical Level (dBA) 50 Feet from the Source
Air Compressor	81
Backhoe	80
Concrete Mixer	85
Paver	89
Saw	76
Scraper	89
Truck	88

Source: FTA, May 2006.

Noise levels associated with construction activity would exceed ambient noise levels and may cause temporary disturbance at neighboring properties. However, the City's Municipal Code prohibits construction activities between the hours of 7:00 p.m. and 8:00 a.m., and no construction is permitted on Sundays, with the exception of emergency construction work. The 2030 GP/LCP also includes the following policies that aim to reduce impacts associated with construction activity.

VIII-14 *Use noise standards during review of proposed development projects to determine whether a project promotes acceptable noise compatible land uses both during the construction and operational phases.*

VIII-19 *Construction noise shall adhere to maximum acceptable noise levels and noise mitigation may be required to reduce noise to acceptable levels.*

VIII-20 *Construction activities and landscaping equipment are limited to the hours of 8:00 a.m. and 7:00 p.m., Monday through Saturday, as enforced by the City of Avalon Municipal Code.*

Enforcement of the existing Municipal Code policy and implementation of the 2030 GP/LCP policies would improve protection from construction noise and reduce temporary construction impacts to a less than significant level. In addition, as indicated in Policy VII-14, site-specific review of individual development projects would be required, which would include a review of potential noise impacts on a case-by-case basis.

Mitigation Measures. The proposed GP/LCP policies would reduce impacts related to noise associated with development under the GP/LCP. No mitigation measures beyond implementation of the policies included in the GP/LCP Noise Element would be required.

Significance after Mitigation. Individual construction projects facilitated by the 2030 GP/LCP would generate noise exceeding ambient sound levels and may cause temporary disturbance at neighboring properties. However, implementation of proposed policies would reduce construction-related impacts to the degree feasible; therefore, impacts related to temporary construction activity would be less than significant without mitigation.

Impact N-2 Development facilitated by the 2030 GP/LCP could incrementally increase traffic and associated noise levels along City roadways, thus exposing existing and future noise-sensitive land uses to increased noise levels. However, implementation of GP/LCP policies would reduce impacts to a Class III, *less than significant*, level.

Development facilitated by the 2030 GP/LCP may incrementally increase noise along area roadways over the life of the GP/LCP. Growth in Avalon is forecast to generate approximately 631 new permanent housing units by the year 2030, which is a 22% increase over existing units. The City currently permits one vehicle per housing unit, which would increase traffic on area roadways by 631 new cars, plus any additional new vehicles permitted for visitor-serving uses. According to the Federal Transit Administration (FTA, 2006), a doubling of vehicle trips would result in a noise level increase of 3 dBA. As discussed in the setting, a change of 3 dBA in the community noise level is usually perceived, where a change of 1-2 dBA is usually not perceived. Development facilitated by the 2030 GP/LCP would increase traffic by approximately 22% in the busiest areas of the city, including the City Center and Avalon Canyon Road. Traffic noise would primarily affect sensitive uses, such as residences, Avalon Schools, and medical facilities along these corridors. An increase of 100% would typically be required to result in an audible increase in noise levels due to traffic. A 22% increase in traffic would be expected to generate less than 1 dBA of noise. As such, new traffic generated by development under the 2030 GP/LCP would not be expected to cause an audible increase in community noise. Moreover, the 2030 GP/LCP Noise Element includes the following policies specifically directed at addressing potential future traffic noise issues:

VIII-1 *Incorporate noise reduction technology into the design of transportation systems and ensure that noise impacts associated with roadway extensions and capacity enhancement projects are mitigated to acceptable levels.*

VIII-2 *Utilize site planning and traffic control solutions (such as one-way streets) on major roadways to minimize traffic related noise.*

VIII-3 *Increase the number alternative transportation modes such as bicycle paths and pedestrian walkways to minimize automobile traffic and its associated noise.*

VIII-4 *When the replacement of City-owned motor vehicles is required, consider the use of electric-powered vehicles.*

VIII-5 *Ensure that gas-powered autoettes (two-stroke and four-stroke) are properly maintained according to State requirements.*

VIII-6 *Increase the number of electric-powered vehicles for private residents and tour operators.*

VIII-7 *Establish a noise level threshold for vehicles in order to maintain acceptable decibel levels.*

VIII-8 *Enforce the noise level threshold such that vehicle noise is reduced and/or maintained at acceptable decibel levels.*

Implementation of the above policies would ensure that noise impacts are considered as individual development projects and transportation improvements incorporate appropriate noise attenuation techniques. Also, as technology improves and as outlined in Policies VIII-4 and VIII-6, it is expected that the use of alternative fuel vehicles, such as electric vehicles, will begin to replace the noisier gas powered vehicles. In addition, as noted in numerous Circulation Element policies, the City will continue to emphasize vehicle trip reduction techniques to address traffic issues, with the added benefit that the use of such techniques would also reduce vehicular noise. With implementation of GP/LCP policies, increases in roadway noise would be reduced to a less than significant level.

Mitigation Measures. The Noise Element goals and policies address the prevention and reduction of unwanted noise. Mitigation beyond the GP/LCP policies is not needed.

Significance after Mitigation. Impacts relating to the placement of new uses in noise environments exceeding the normally acceptable range would be less than significant without mitigation.

Impact N-3 New development facilitated by the 2030 GP/LCP could result in exposure of future residences and other noise-sensitive land uses to noise levels exceeding the "normally acceptable" range. However, implementation of 2030 GP/LCP policies would reduce impacts to a Class III, *less than significant*, level.

The 2030 GP/LCP would facilitate the development of new residential and other noise-sensitive uses that could be exposed to long-term noise exceeding the normally acceptable range based on the matrix shown on Figure 4.10-1, which is included in the GP/LCP Noise Element. New noise sensitive uses would include residential development within the City Center, along Avalon Canyon Road, and within Expansion Areas 1 and 2. Potential sources of noise exposure include: traffic on City roadways, intensification of commercial activity in the City Center, and industrial activity on sites that are adjacent to or near noise-sensitive uses.

For most sites, the primary generator of noise that could affect sensitive receptors would be roadway traffic. New residences could also be exposed to noise generated by commercial or industrial activity that exceeds the normally acceptable range. The 2030 GP/LCP includes a number of policies that aim to reduce noise impacts. In addition to policies VIII-1 through VIII-8 discussed under Impact N-1, the 2030 GP/LCP includes the following policies:

VIII-12 *Locate and design noise-sensitive land uses and noise generators in such a manner that noise objectives will be maintained.*

VIII-13 *Emphasize the following City preferred noise management strategies as an alternative to the construction of noise barriers:*

- *Avoid the placement of noise-sensitive uses within noisy areas*
- *Orient buildings to shield noise sensitive portions of a project from noise sources*
- *Use sound attenuating architectural design and building features*

VIII-14 *Use noise standards during review of proposed development projects to determine whether a project promotes acceptable noise compatible land uses both during the construction and operational phases.*

VIII-15 *Establish and enforce noise standards for Avalon Harbor to limit noise associated with vessels traveling within or anchored within harbor waters.*

Implementation of these policies would ensure that projects proposed in noise environments that potentially exceed acceptable standards would be evaluated and that appropriate sound attenuation techniques would be implemented on a case-by-case basis. Depending on the specific development project proposed and the location and source of noise, sound attenuation techniques may include site design to shield noise-sensitive uses from noise, special building standards to reduce interior noise, or the use of barriers to reduce exterior noise.

Mitigation Measures. The Noise Element goals and policies address the prevention and reduction of unwanted noise. Mitigation beyond the GP/LCP policies is not needed.

Significance after Mitigation. Impacts related to the placement of new uses in noise environments exceeding the normally acceptable range would be less than significant without mitigation.

Impact N-4 Noise generated by private and recreational aircraft could result in exposure of future residences and other noise-sensitive land uses to noise levels exceeding the "normally acceptable" range. However, implementation of 2030 GP/LCP policies would reduce impacts to a Class III, *less than significant*, level.

Catalina Airport is located approximately six miles northwest of Avalon city limits. Catalina Airport has approximately 16,473 aircraft operations annually (FAA, 2012). Of those 16,473 operations, approximately 86% are general aviation, 14% are air taxi, and less than 1% are military operations. With the annexation of Expansion Area No. 2, the airport would be approximately 4.75 miles from the new boundary. Expansion Area No. 2 would primarily consist of Open Space, with some Resort/Recreational uses closer to the existing City boundary. As such, there would not be any public airports or private airstrips within two miles of the City. However, the use of private, recreational airplanes and helicopters around the City is common. Noise generated from these recreational aircrafts could result in nuisance noise to future

development of sensitive uses. In addition to Policies VIII-12 through VIII-14 discussed under Impact N-3, the 2030 GP/LCP includes the following policy to address noise from aircrafts:

VIII-9 *The City of Avalon will encourage that flight operations be conducted in a manner to minimize noise.*

VIII-18 *The City shall establish noise tolerance level standards for commercial and residential land uses.*

Implementation of these policies would ensure that new development facilitated by the 2030 GP/LCP would not be exposed to excessive noise generated by recreational flight operations. In addition, noise generated by recreational aircrafts would be temporary in nature as the aircrafts travel along their route. Impacts would be less than significant.

Mitigation Measures. The Noise Element goals and policies address the prevention and reduction of unwanted noise. Mitigation beyond the GP/LCP policies is not needed.

Significance after Mitigation. Impacts relating to the placement of new uses in noise environments exceeding the normally acceptable range would be less than significant without mitigation.

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4.11 POPULATION and HOUSING

This section analyzes the 2030 General Plan's potential environmental impacts related to population and housing.

4.11.1 Setting

a. Population, Housing, and Employment. Since its incorporation in 1913, Avalon has grown from an unincorporated portion of Los Angeles County to a city of more than 3,700 residents. Since 1990, the City's population has grown from 2,918 to 3,780 in 2012 (California Department of Finance, 2012). This represents average growth of approximately 39 people, or 1.04 %, per year.

According to the California Department of Finance, Avalon has 2,289 dwelling units as of January 2012. These include 741 single-family dwelling units and 1,548 multi-family units. The current vacancy rate for permanent housing is approximately 35% and there are approximately 2.54 persons per occupied household (California Department of Finance, 2012). The median sale price for single family homes in Avalon was $559,000 in 2010, an increase of 12% from the previous year; however, only 12 and 11 single family homes were sold in 2009 and 2010, respectively. Furthermore, median condominium sale prices decreased from $500,000 to $350,000 from 2009 to 2010. Rent levels have not decreased since 2004 despite recent economic conditions.

Avalon has a distinctive set of employment and economic characteristics, based on its status as the only incorporated city in the Channel Islands and its unique tourist attractions. As shown on the following page, the leisure and hospitality sector accounted for 42.2% of jobs in the City as of 2008, while education, health, and retail sales each accounted for about 11% of jobs. There are an estimated 2,858 total jobs in Avalon (Avalon General Plan Technical Background Report, 2011).

The SCAG population, housing, and job forecasts, which are based on the RTP Population, Household, and Employment (April 2012) forecasts for Avalon are shown in Table 4.11-1.

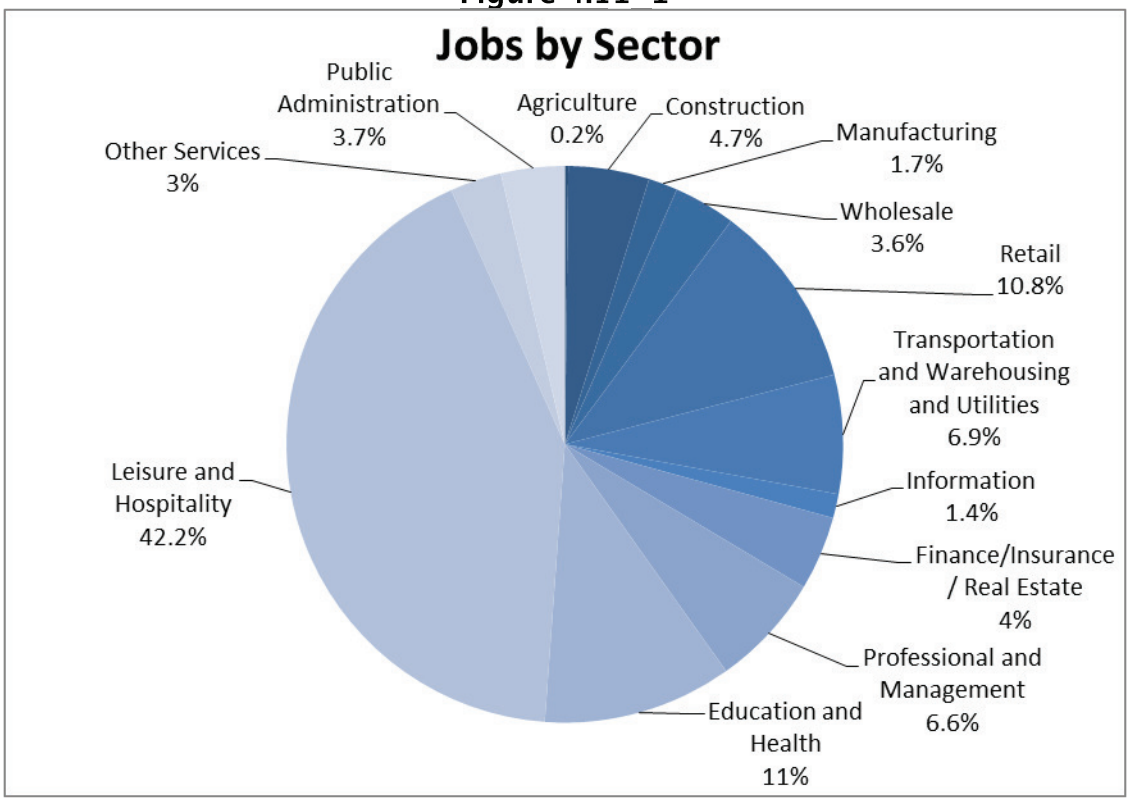
Table 4.11-1
SCAG Population, Household, and Employment Forecasts for the City of Avalon

	2008	2020	2035
Population	3,600	4,300	5,100
Occupied Households*	1,400	1,700	1,900
Employment	4,400	4,600	4,800

Source: SCAG, 2012 RTP/SCS Growth Forecast, April 2012.

**Occupied Households assumes a vacancy rate in Avalon of approximately 35%.*

Figure 4.11-1



b. Regulatory Setting. The following section summarizes regulations that pertain to population, housing, and employment.

Regional Housing Needs Assessment (RHNA). California's Housing Element law requires that each county and city develop local housing programs to meet their "fair share" of future housing growth needs for all income groups, as determined by the State Department of Finance. The regional councils of government, including the Southern California Association of Governments (SCAG), are then tasked with distributing the State-projected housing growth need for their region among their city and county jurisdictions by income category. This fair share allocation is referred to as the RHNA process. The RHNA represents the minimum number of housing units each community is required to plan for through a combination of: 1) zoning "adequate sites" at suitable densities to provide affordability; and 2) housing programs to support production of below-market rate units.

Avalon's RHNA is established at 80 units according to the Draft Regional Housing Needs Assessment for 2014 to 2021, as shown in Table 4.11-2.

Table 4.11-2
Draft Regional Housing Needs Assessment 2014-2021

Income Group	RHNA Allocation (units)	% of Total
Extremely Low	9	11%
Very Low	11	14%

Table 4.11-2
Draft Regional Housing Needs Assessment 2014-2021

Income Group	RHNA Allocation (units)	% of Total
Low	12	15%
Moderate	14	17.5%
Above Moderate	34	42.5%
Total	**80**	**100%**

Source: http://rtpscs.scag.ca.gov/Documents/rhna/draftRHNAcomponentsIncome.pdf, 2012; and Avalon Housing Element Technical Appendix, Tam and Associates, 2012.

Southern California Association of Governments (SCAG). As discussed in Section 4.8, *Land Use,* Avalon is located within the planning area of the Southern California Association of Governments (SCAG). SCAG functions as the Metropolitan Planning Organization for Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial Counties, and is responsible for implementing the Regional Comprehensive Plan (RCP), Regional Transportation Plan (RTP), and the Growth Visioning Report (GVR), each of which addresses regional issues associated with population growth, housing, and employment.

State Housing Element Statutes. State housing element statutes (Government Code Sections 65580-65589.9) mandate that local governments adequately plan to meet the existing and projected housing needs of all economic segments of the community. The law recognizes that in order for the private market to adequately address housing needs and demand, local governments must adopt land use plans and regulatory systems that provide opportunities for, and do not unduly constrain, housing development. As a result, State housing policy rests largely upon the effective implementation of local general plans and in particular, housing elements. Additionally, Government Code §65588 dictates that housing elements must be updated at least once every five years.

4.11.2 Impact Analysis

a. Methodology and Significance Thresholds. Impacts related to population and housing are considered significant if implementation of the 2030 GP/LCP would:

- *Induce substantial population growth either directly or indirectly*
- *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere*
- *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere*

For purposes of analysis, "substantial" population growth is defined as growth exceeding SCAG or SCAQMD population forecasts for the City. "Substantial" displacement would occur if allowed land uses would displace more residences than would be accommodated through growth accommodated by the 2030 GP/LCP.

b. Project Impacts and Mitigation Measures.

Impact PH-1 Implementation of the 2030 GP/LCP would not result in the displacement of substantial numbers of people or housing. To the contrary, the GP/LCP would facilitate the development of new housing in accordance with state and local housing requirements. Impacts would be Class III, *less than significant*.

An intent of the 2030 GP/LCP is to focus future development in Avalon in close proximity to urban and employment centers. Such "infill" development is anticipated to occur in areas with existing housing in the City Center, in vacant or underutilized parcels on nearby hillsides, or in low-density Resort Recreational areas up Avalon Canyon. Where housing currently exists, near the City Center, infill development could displace existing housing. However, displacement of such housing would be offset by the overall increase in housing units anticipated to occur through the year 2030 (estimated increase of approximately 631 new residential units). One of the goals of the 2030 GP/LCP is to establish diverse housing options that are affordable for residents and located in close proximity to jobs and services. In addition, the following policies are intended to increase housing options and would not displace substantial numbers of people or housing:

V-3 *Discourage the demolition or conversion of existing year-round housing units and encourage the provision of replacement affordable housing when demolition or conversion results in the reduction of the City's affordable housing inventory.*

V-6 *Assist in the development of affordable ownership housing for lower, moderate, and middle income residents.*

V-17 *Plan for residential land uses that accommodate both existing demand and anticipated growth.*

V-18 *Provide a variety of residential development opportunities in the City, including year-round housing and seasonal employee housing.*

V-19 *Address the housing needs of lower, moderate, and middle income households, as well as households with special needs.*

V-20 *Pursue State and federal funding sources to maintain the supply of affordable housing in Avalon.*

With the implementation of the 2030 GP/LCP including the goals and policies listed above, impacts related to the displacement of people or housing would be less than significant.

Mitigation Measures. No significant impacts relating to the displacement of people or housing would occur. Therefore, mitigation is not required.

Significance after Mitigation. Impacts would be less than significant without mitigation.

Impact PH-2 Proposed 2030 GP/LCP policies implement most SCAG policies related to growth, and the expected growth in Avalon would not exceed SCAG population forecasts. Impacts would be Class III, *less than significant*.

SCAG's Regional Comprehensive Plan (RCP) serves as a framework for addressing problems and creating a path to correct issues on a regional level through 2035. The RCP is broken up into nine chapters that include key areas where resource management is necessary due to the urban growth the area experiences. Population projections are made through SCAG's Regional

Transportation Plan (RTP) and are the basis for growth for the RCP. As shown in Table 4.11-1, SCAG projects a population of 5,100 for the City of Avalon by the year 2035.

Development facilitated by the 2030 GP/LCP would add an estimated 1,041 new permanent residents, bringing the citywide resident population from 3,780 to 4,821 by the year 2030. This growth projection for the year 2030 would not exceed SCAG's forecast population of 5,100 for the year 2035. In addition, the current Avalon Municipal Code restricts the density of residential units on steep hillsides, which would limit potential growth in the City's resident population. Further, the following policies and implementation actions from the 2030 GP/LCP would also limit growth potential:

IV-18 *Limit development in Avalon to levels that are within existing and/or future water service capabilities.*

Implementation Actions

- *Continue to regulate the levels of building intensity and density according to the standards and land use designations specified by the General Plan and the Avalon Municipal Code.*
- *Phase private development and public infrastructure projects based upon input from utility providers, private developers, and other public agencies to assure that adequate public facilities are available at the time of occupancy.*

One of the fundamental purposes of the 2030 GP/LCP is to direct future development in such a way as to minimize the impacts of growth by emphasizing the intensification and reuse of already developed areas such as the City Center, thus minimizing pressure to develop open space at the City's periphery, notably in the hillsides above the City. Given that the 2030 GP/LCP upholds this goal through implementation of policies and implementation actions such as those listed above, no substantial population growth is anticipated.

Mitigation Measures. Impacts would be less than significant as substantial population growth is unlikely to occur. Therefore, mitigation is not required.

Significance after Mitigation. Impacts would be less than significant without mitigation.

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4.12 PUBLIC SERVICES

This section assesses potential impacts to public services, including fire and police protection, public schools, libraries, and parks/recreation facilities. Impacts to water and wastewater infrastructure and solid waste collection and disposal are discussed in Section 4.14, *Utilities and Service Systems*.

4.12.1 Setting

a. Fire Protection and Emergency Medical Service.

Personnel, Facilities, and Equipment. The City of Avalon Fire Department provides fire protection service within the Avalon City limits and emergency medical service (EMS) is provided through a contract agreement with the Consolidated Fire Protection District of Los Angeles County (CFPD). CFPD service also includes lifeguard and paramedic service in Avalon Harbor. The County Fire Department is responsible for fire protection outside the Avalon city limits.

Three facilities in the City support fire service and EMS: Avalon Fire Station (Avalon City Fire Department), Avalon Station #55 (CFPD), and Baywatch Avalon (CFPD). Please refer to Figure 4.12-1 for the locations of fire stations. The Sheriff's Long Beach helicopter unit also responds to search and rescue needs. Collaboration is crucial to providing fire service and EMS within Avalon and throughout the island.

The majority of 911 calls in Avalon consist of emergency medical and rescue calls (PMC, 2006). Response times are within the National Fire Protection Association (NFPA) guidelines, which set forth a response time of six minutes within city limits. According to the CFPD, during 2012, the CFPD had an average emergency response time of 2.2 minutes for first arriving units ~~The County response time is 5.4 minutes~~ and the Avalon Fire Department response time is two minutes (PMC, 2006).

Wildland Fire Hazards. The entire Santa Catalina Island, including Avalon, is designated as a very high fire hazard zone by the California Department of Forestry and Fire Protection. Due to the unique island geography, Avalon must be well prepared for emergency response in the event of a fire, as back-up resources require more time to cross the channel and reach the island. The City of Avalon Fire Department provides fire protection service within the Avalon City limits. The County of Los Angeles Fire Department is responsible for fire protection outside the Avalon city limits. In addition to the three facilities within Avalon that support fire service, there are two saltwater reservoirs within the city limits that provide water for fire suppression.

b. Police Protection. Police services are provided by the Los Angeles County Sheriff Department (LASD) through a contract with the City. The Sheriff's station is located at 215 Sumner Avenue and is shown on Figure 4.12-1. There are 12-16 sworn officers on duty, varying with the season, and 10 civilian staff members supporting the City's police services.

Based on the City's permanent resident population (approximately 3,780 in 2012), the number of sworn officers is 37 officers per 10,000 residents (or one officer per 270 residents). However, this ratio does not reflect the visitor population present in the City. Service response times meet LASD guidelines and crime rates within the City are low (PMC, 2006). The unique geographical location, small area, and low population limit crime within the City. According to LASD (Hugh Carson, LASD, 2012), response times for the month of October in 2012 based on the urgency of the call were as follows:

- Routine: 1.9 minutes

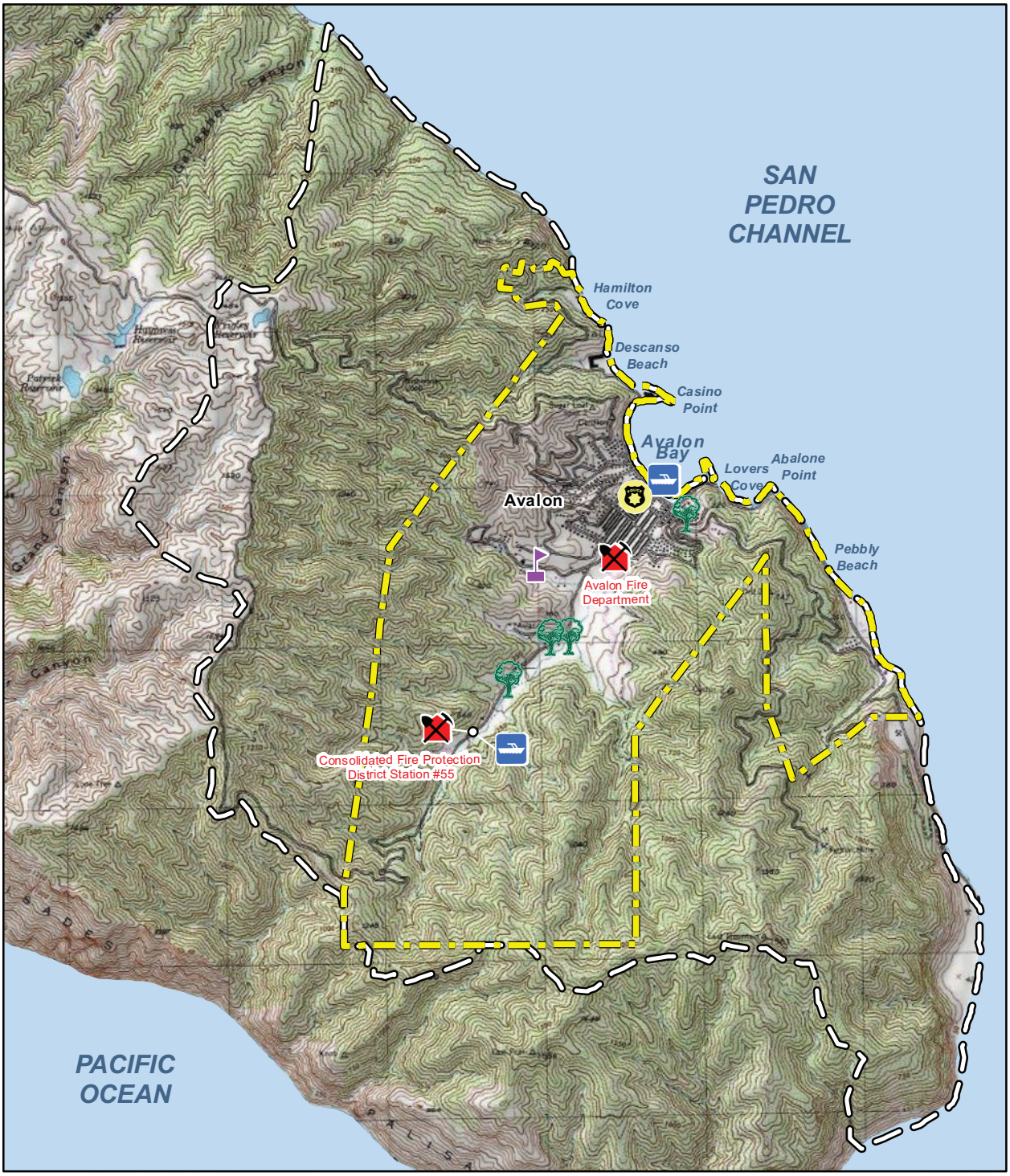
- Emergency: 1.7 minutes
- Emergency Priority: 1.2 minutes

c. Public Schools. Avalon Schools is comprised of a K-12 elementary, middle, and high school that resides on an 11.4-acre site, located at 200 Falls Canyon Road. Figure 4.12-1 shows the location of Avalon Schools, which is part of the Long Beach Unified School District (LBUSD) and currently has a staff of 36 teachers, two administrators, five clerical staff, two counselors, one nurse, and one accountant (Joe Carlson, 2010). Current enrollment is 600 students (LBUSD, 2012). According to the Facilities and Services Holding Capacity Report (PMC, 2006), which was based on a 2006 physical facility capacity, Avalon Schools would be able to accommodate an additional 230 students. At the time of that report, enrollment was 695 students, which is nearly 100 more students than the current enrollment. As such, Avalon Schools would be able to accommodate an additional approximately 330 students.

d. Parks/Recreation Facilities. There are several parks and recreational facilities within the City, as shown on Figure 4.12-1. People's Park and Mole Park provide picnic areas, and Crescent Beach is a public beach area located along the harbor. Catalina Island Golf Course is open to the public, as are Wrigley Memorial and Botanic Gardens, which are located southwest of the City Center. The City also has public beaches/waterfronts that offer a range of aquatic recreational opportunities. A network of trails also surrounds the community, providing hiking and bicycling opportunities to both residents and tourists. There are no park service ratios established, and one of the main attractions of Avalon, and Catalina Island as a whole, is the abundant recreational activities provided by the natural geographic setting. However, park facilities, such as ball fields and picnic areas are frequently at capacity (Amanda Cook, 2012).

e. Harbor. The City's Harbor Department provides a wide range of harbor services in Avalon Harbor, including law enforcement, mooring assignments, permitting, and dock scheduling. The Harbor Patrol is comprised of a Harbor Master, Assistant Harbor Master, Administrative Assistant, 11 Harbor Patrol Officers, and four maintenance personnel. During peak tourist months, the Harbor Department provides an additional eight Harbor Patrol Assistants and five Sanitation Workers (City website, 2012).

There are 364 pleasure boat moorings in the harbor. During peak season months (June – September), these facilities operate at capacity (PMC, 2006). In addition to the pleasure boats and commercial boats, passenger ships bring approximately 86,000 visitors during peak season months and cruise ships average 19,000 day visitors per month (PMC, 2006). Dinghy docks, a fuel dock, and shoreboat service are provided.



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Avalon City Limits
Sphere of Influence Boundary
Fire Station
Police Station
Harbor Department/ Baywatch Station
Park/Golf Course
Avalon Schools

0 1,600 3,200
Feet

N

Public Service Facility Locations

Figure 4.12- 1

4.12.2 Impact Analysis

a. Methodology and Significance Thresholds.

Fire Protection Service. Information on current service demands and available staff and equipment was provided by the Facilities and Service Holding Capacity Report (PMC, 2006) and personal communication with the Avalon Fire Department. Impacts would be considered if development under the 2030 GP/LCP would create the need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable response times.

Police Protection Service. Information on current service demands and available staff and equipment was provided by the Facilities and Service Holding Capacity Report (PMC, 2006) and the LASD (LASD, 2012). Impacts would be potentially significant if development facilitated by the 2030 GP/LCP would result in unacceptable response times, thus creating the need for new police protection facilities, the construction of which may create significant secondary environmental effects.

Public Schools. Information on current school facilities was collected from the Facilities and Services Holding Capacity Report (PMC, 2006), personal communications with Avalon Schools Principal (2010), and the School Accountability Report Card (LBUSD, 2012). Impacts would be significant if public schools in the City could not accommodate future student growth, requiring the construction of new facilities, or expansion of existing facilities.

Parks/Recreation Facilities. Information on park facilities was collected from personal communication with the City of Avalon (2012) and the Facilities and Services Holding Capacity Report (PMC, 2006). Impacts would be potentially significant if development facilitated by the 2030 GP/LCP would result in a demand for new or expanded park facilities, the construction of which may create significant secondary environmental effects.

Harbor. Information on harbor facilities and services was obtained from the City website, the Facilities and Services Holding Capacity Report (PMC, 2006), and personal communications with the Harbor Master (2012). Impacts would be potentially significant if development facilitated by the 2030 GP/LCP would result in the demand for new or expanded Harbor services, the construction of which may create significant secondary environmental effects.

b. Project Impacts and Mitigation Measures.

Impact PS-1 **Development facilitated by the 2030 GP/LCP would increase the City's population and development and would be located in areas designated as a very high fire hazard zone. This would increase demand for fire and emergency medical services and potentially create the need for new fire service facilities. However, compliance with GP/LCP policies and other City programs would reduce impacts related to fire protection services to a Class III, *less than significant*, level.**

The 2030 GP/LCP would facilitate the development of Expansion Areas No. 1, 2, and 3, as well as intensified development throughout the City, especially in the City Center and the Avalon Canyon areas. Intensified development would be located within the existing Avalon Fire Department service area and the existing response times would apply. As such, the intensification of development within the City would not require new or expanded fire or emergency service facilities because they would fall within the existing service area and

response times. However, the expansion areas would increase the service area, which may also increase response times. According to the Facilities and Services Holding Capacity Report (PMC, 2006), existing response times for the Avalon Fire Department are 2 minutes within City limits and 3.5 minutes within one mile outside of City limits. Expansion Areas No. 2 and 3 would still fall within one mile outside of City limits. A response time of 3.5 minutes would be expected for these areas, which would fall well under the NFPA recommended response times of six minutes for fire and emergency medical services. Personal communication with Assistant Fire Chief Mike Krug confirmed that response times within the Avalon Fire Department service area (one-mile beyond city limits) would be within 5 minutes.

Expansion Area No. 1 extends up to 1.5 miles from the existing City limits, which would be approximately 0.5 miles beyond the existing Avalon Fire Department service area. As such, Avalon Fire Department response times to any new development within this area may be greater than for the areas within the current City limits. However, all three expansion areas would still be expected to fall within a 5-minute response area (Mike Krug, Personal Communication, 2012).

While fire and emergency medical service capacity is primarily based on service area, an increase in population would incrementally increase the number of service calls and would eventually necessitate the need for additional staff and facilities. However, new development would be required to comply with any additional project-specific requirements set forth by the Avalon Fire Department, including providing adequate water pressure and water for fire flows. Property taxes also provide funding for CDFP personnel, which supports the Avalon Fire Department. The City can also require mitigation fees as a condition of approval for individual projects to ensure that new developments contribute a fair share to fire and emergency services, facilities, and infrastructure. In particular, new development in coastal area of Expansion Area No. 2 (the Hamilton Cove area) may be required to contribute to a new facility or a new access road. Currently, the Hamilton Cove area is only accessible through one road, which is prone to rock slides. During an emergency event, a slide could prevent emergency access to this area. Improvements in this area are already partially funded and underway. Currently, this area falls well within a 5-minute response area. Standard requirements would reduce impacts to fire hazards to a less than significant level.

In addition, new development sited in high fire hazard areas would be required to adhere to standard requirements set forth by the California Building Code (CBC) with City of Avalon amendments. The entire City is designated as a very high fire hazard zone. Therefore, any development in the City would be sited in very high fire hazard zones and would be required to adhere to applicable policies. Any development in hillside areas is of particular concern because these areas are especially fire prone. Adherence to standard requirements would minimize the risks of fire hazards.

Implementation of the following policies of the 2030 GP/LCP Safety Element would further ensure that impacts related to development would be less than significant.

VII-11 *Require all new development within the City to comply with applicable provisions of the Uniform Fire Code.*

VII-12 *Promote fire prevention as the City's preferred management strategy; facilitate programs that are aimed at the prevention of fires.*

VII-13 *Require that new development in mountainous brush areas be supplied with adequate water supply and street dimensions are standardized to meet emergency access requirements.*

VII-14 *Require maintenance of native brush and other vegetation in the mountainous areas of the City in compliance with the Uniform Fire Code.*

VII-15 *Encourage property owners to landscape with fire resistive plants and shrubs, such as rock rose, saltbrush, yerba santa, dwarf coyote, and trailing rosemary.*

VII-16 *Require that roof coverings, building additions, and building projections for new structures be constructed of fire resistant material.*

VII-17 *Require immediate and safe firefighting personnel access to all areas of new developments.*

Implementation of these policies and compliance with the existing building and fire codes would address potential wild fire hazards associated with potential new development. Thus, significant impacts would not occur.

Mitigation Measures. None required beyond implementation of 2030 GP/LCP fire protection policies.

Significance After Mitigation. Development facilitated by the 2030 GP/LCP would not result in the need for new or expanded fire protection facilities; therefore, impacts relating to fire protection would be less than significant without mitigation.

Impact PS-2 Development facilitated by the 2030 GP/LCP would increase demand for police protection service, but would not result in the need to construct new or expanded police facilities. Impacts would be Class III, *less than significant*.

Police protection services are not "facility-driven;" that is, police protection services are not as reliant on facilities in order to effectively patrol a beat. An expansion of, or intensification of development within, a beat does not necessarily result in the need for additional facilities if police officers and patrol vehicles are equipped with adequate telecommunications equipment in order to communicate with police headquarters. However, if the geographical area of a beat is expanded, population increases, or intensification/redevelopment of an existing beat results in the need for new police officers, new or expanded facilities could be needed.

As discussed in subsection 4.12.1, the Avalon Patrol Station provides police protection services within the City. The Avalon Patrol Station would continue to provide police protection services through 2030. Development facilitated by the 2030 GP/LCP would not result in the need to construct new police facilities and there would only be a slight increase, if any, in the response times for the potential expansion areas (Personal Communication, Hugh Carson, 2012).

While the response times would remain relatively low, the projected increase in population (increase of approximately 1,041 permanent residents) through the year 2030 could increase the demand for additional sworn officers. In the event that additional officers are needed to provide adequate police services, the City's General Fund would continue to provide the finances necessary to employ additional officers. Impacts to police protection service would be less than significant. In addition, implementation of the following policy of the 2030 GP/LCP Land Use Element would further ensure that impacts related to police protection service would be less than significant.

II-27 *Require annexation proposals to demonstrate a positive relationship between City facility and service costs and the revenues that will be generated subsequent to annexation with the exception of areas to be annexed for the purpose of parks, schools, open space, and other public facilities.*

Mitigation Measures. None required beyond implementation of 2030 GP/LCP policies.

Significance After Mitigation. Development facilitated by the 2030 GP/LCP would not result in the need for new or expanded police protection facilities; therefore, impacts would be less than significant without mitigation.

Impact PS-3 Development facilitated by the 2030 GP/LCP would increase enrollment at Avalon School. However, Avalon Schools has additional capacity to serve the majority of future growth, and payment of State-mandated school impact fees would further reduce impacts to schools. Therefore, impacts to schools would be Class III, *less than significant*.

Development facilitated by the 2030 GP/LCP would likely increase enrollment at Avalon Schools. Potential growth of permanent residents through the year 2030 is estimated to be 1,041 new residents. According to the 2010 U.S. Census, Avalon had a population of 3,661 people, of which 749, or 20.4%, were enrolled in Kindergarten through twelfth grade. Using the same percentage of population, 20.4%, and applying it to the estimated new resident population would yield an estimate of approximately 212 new students.

According to the Facilities and Services Holding Capacity Report (PMC, 2006), Avalon School can accommodate 925 students. According to the School Accountability Report Card (2012) for the 2010-2011 school year, 600 students were enrolled in Avalon School. As such, Avalon School has a remaining capacity of 325 students. Therefore, the 212 new students potentially generated by future development facilitated by the 2030 GP/LCP would not exceed the current capacity.

State-mandated school impact fees would, however, be required for any new development projects. Pursuant to Section 65995(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), the payment of statutory fees "...is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization." Because existing school facilities are sufficient to serve the existing population and the anticipated growth, expansion or construction of new facilities are not planned at this time. The remaining available capacity of Avalon School and future payments of school impact fees would ensure that impacts to schools would be less than significant.

Mitigation Measures. As discussed above, site- and project-specific environmental review would be required for schools if, or when, new sites are proposed for development in the future. Future developers would be required to pay State-mandated school impact fees which is presumed to provide full and complete mitigation of impacts to schools. Therefore, mitigation is not required.

Significance After Mitigation. Pursuant to State law, the collection of State-mandated school impact fees would reduce school capacity impacts to a less than significant level as these fees are presumed to be adequate to fund the construction of new school facilities that would be required to accommodate projected increases in school enrollment.

Impact PS-4 Development facilitated by the 2030 GP/LCP would increase demand for park services, which could result in the need for new recreation facilities, such as ball fields and picnic areas. However, the GP/LCP would include the addition of dedicated open space areas, as well as policies and implementation

measures to increase park services. Impacts to park services would be Class III, *less than significant.*

There are various parks and recreational activities within the City of Avalon and the surrounding area of Catalina Island, which are some of the main attractions for tourists and residents. Existing parks, such as the People's Park, Mole Park, Crescent Beach, Wrigley Memorial, and the Botanic Gardens, are some of the main recreational sites within the City. In addition, the City is surrounded by various water recreational activities, such as boating, snorkeling, scuba diving, and kayaking. The City and the island are also well-known for hiking trails. However, picnic and ball fields within the City are frequently filled with various functions and there is an existing need for additional facilities (Amanda Cook, City of Avalon, 2012). An increased population of approximately 1,041 permanent residents under the 2030 GP/LCP would put an additional strain on park facility resources. However, the 2030 GP/LCP includes two expansion areas that would increase the dedicated open space within the City. Expansion Area 2 would be mostly designated Open Space with some Resort/Recreational uses near the Hamilton Cove area. Expansion Area 3 would all be designated Open Space south of the Avalon Canyon area. Furthermore, the Open Space Element of the 2030 GP/LCP includes the following policies and implementation actions:

Policies

III-5 *Provide an open space and recreation system with an appropriate balance of facilities suitable for intensive use (beaches, playgrounds, sports fields) and those suitable for low intensity use (hiking, camping, golf) that meets the needs of residents and visitors.*

III-6 *Provide high-quality recreational facilities and programs to attract tourists and meet residents' needs.*

III-7 *Create and maintain a linked system of open spaces to provide opportunities for long distance hiking, horseback riding and biking.*

III-8 *Improve public access to designated open space areas and recreation facilities.*

III-9 *Beach front parks should be sought and designed using a most careful and thoughtful process of pedestrian and bike linkages.*

III-10 *Protect coastal areas suited for water-oriented recreational activities as necessary.*

III-11 *Preserve open space areas needed to provide cultural, historical, and educational opportunities for the City's and Santa Catalina Island's residents and visitors.*

III-12 *All beach areas should be preserved as a scenic and recreational asset.*

III-13 *The City should continue a program of acquiring sand portions of beach areas and easements.*

III-14 *Promote the protection of open space on public and privately owned property for the protection of health and safety through continued application of the Open Space and Resort/Recreation land use designations, as appropriate.*

Implementation Actions:

- Expand the Open Space and Resort/Recreation land use designations as necessary to encompass areas that have recreational value.

- Identify missing linkages in the parks, trails and coastal access system and work with the SCIC and Conservancy to link and protect them via acquisition, zoning or other preservation mechanisms.
- Accommodate and encourage active (e.g., zipline, recreation/sports facilities, golf course expansion, etc.) in the Resort Recreation zones and passive (e.g., hiking, camping, etc.) recreational uses within portions of the area designated Low Density Residential.
- Consider establishing secondary coastal access to Hamilton Cove and Pebbly Beach.
- Work with the SCIC, Conservancy and other community organizations to create a comprehensive parks and trails plan.
- To ensure the availability of adequate park and recreation programs and facilities, Avalon will coordinate recreational programming, park planning and park acquisition activities with Los Angeles County, SCIC, Conservancy and other community groups. City efforts shall include, but not be limited to:
    - Coordinating planned locations of parks and recreation areas within the City
    - Pursuit of alternative sources of funding for the acquisition and development of active park land.

With the addition of new designated Open Space uses and adherence to the 2030 GP/LCP policies and implementation actions, impacts to park services and recreation facilities would be reduced to a less than significant level.

Mitigation Measures. None required beyond implementation of 2030 GP/LCP policies.

Significance After Mitigation. 2030 GP/LCP policies and implementation actions would reduce impacts to park services and recreation facilities to a less than significant level.

Impact PS-5 Development facilitated by the 2030 GP/LCP would increase demand for harbor services, which could result in the need for new facilities, such as new docks. However, because harbor services are ancillary services, the construction of new harbor facilities would not be required. Furthermore, any new or expanded facilities would be subject to individual project review. Impacts to harbor services would be Class III, *less than significant*.

Development facilitated by the 2030 GP/LCP would likely generate increased demand for harbor services, such as additional moorings, docks, piers, and restrooms. The addition of moorings, docks, piers, or restrooms could result in potential adverse construction impacts, as well as potential adverse operational impacts. Operational impacts to aesthetics, water quality, utilities, and/or noise would primarily result from an increase in the number of boats and related facilities in the harbor. However, there are currently no planned or pending projects to expand harbor facilities and the construction of new harbor facilities would be subject to individual project review and approval by the City of Avalon, wherein any project specific impacts would be addressed. The provision of harbor services is an ancillary service within the City and is based on availability rather than need. As such, impacts would be less than significant. To further reduce impacts associated with the expansion of harbor services, Mitigation Measure PS-4 is recommended.

Mitigation Measure.

PS-5 **Additional GP/LCP Harbor Services Policy.** The addition of the following policy and implementation action to the 2030 GP/LCP is recommended.

III.B Open Space for Public Recreation

Policy

III-14 *Improve access to harbor services to meet the recreational, commercial, and industrial boating demands in a way that minimizes or improves environmental outcomes*.

Implementation Action

- Identify potential areas to expand harbor services, such as new moorings, docks, floats, piers, or restrooms that would result in the fewest environmental impacts.

Significance After Mitigation. Impacts would be less than significant without mitigation. However, Mitigation Measure PS-4 is recommended to further reduce impacts associated with an increased demand for harbor services.

4.13 TRANSPORTATION and CIRCULATION

The following section includes an analysis of existing and future traffic conditions in the City of Avalon.

4.13.1 Setting

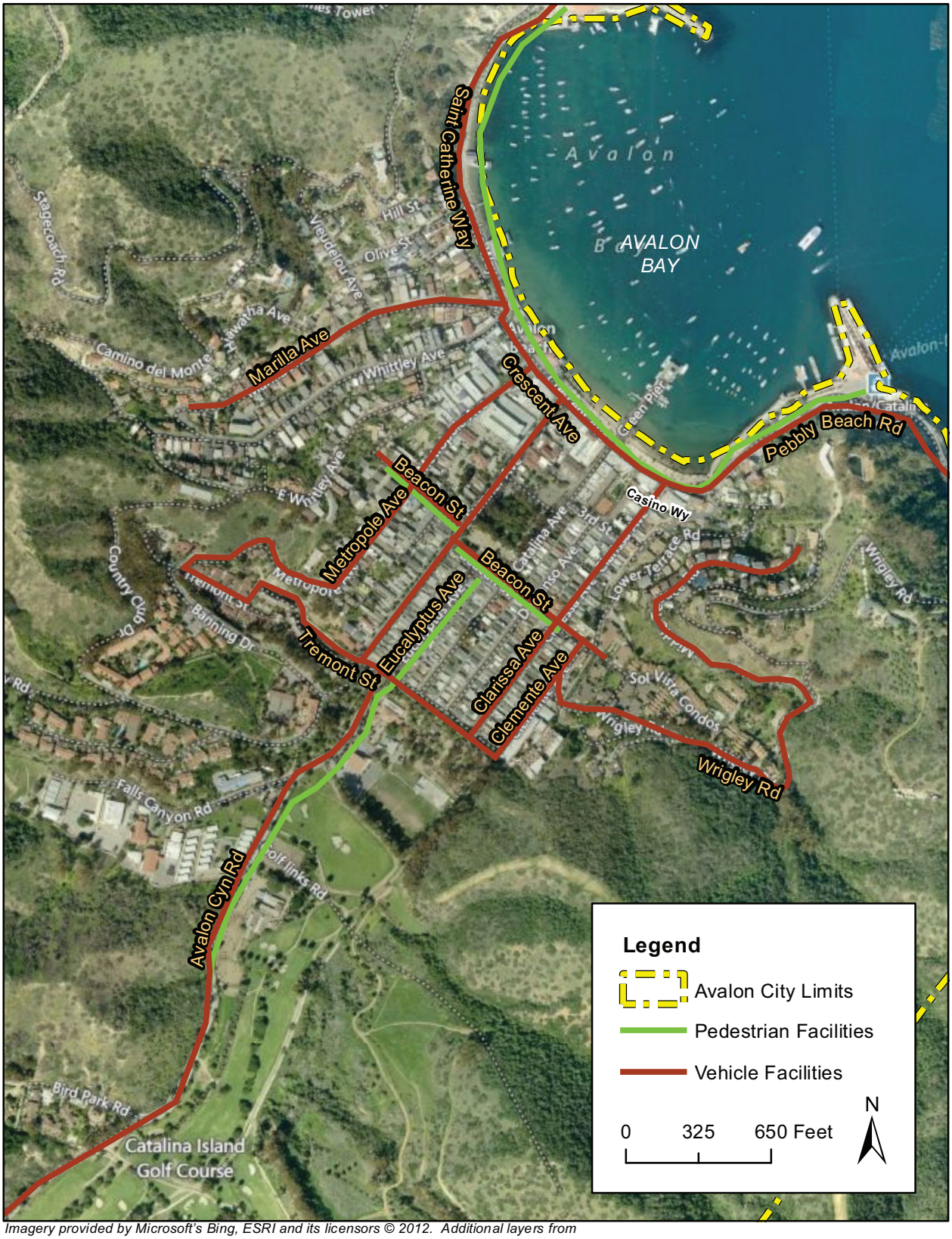
a. **Existing Vehicle Circulation System.** The City of Avalon has a unique transportation system. The City has a compact urban form, encompassing about three square miles of land area, and has no traffic signals. Circulation within the City is comprised of multiple modes with an emphasis on pedestrian and bicycle travel. The predominant vehicle type is the autoette, which is smaller and travels at lower speeds than traditional automobiles. During peak times, visitors can triple the daytime population of the City.

The roadway network in the center of town from Metropole Avenue to Clemente Avenue and Crescent Avenue to Tremont Street follows a grid-like pattern. This area is known as "The Flats" and is the floor of Avalon Valley. Outside of The Flats, roadways begin to mimic the natural landscape with curvy and sloped roadways on heavily sloped hillsides. Figure 4.13-1 shows the City's existing roadway network.

Major facilities within the vehicle network include:

- **Pebbly Beach Road East (Cabrillo Mole to Pebbly Beach)** – As the route connecting the Cabrillo Mole boat landing with the center of the City, Pebbly Beach Road East is used by vehicles transporting both people and freight to and from the light industrial zone in Pebbly Beach. The roadway is 24 feet wide.
- **Pebbly Beach Road West (Cabrillo Mole to Clarissa Avenue)** – Pebbly Beach Road West provides vehicle access to passenger and cruise ships. The roadway is 30 feet wide
- **Clarissa Avenue** – Provides the eastern portion of the truck route outside the pedestrian center of the City. The roadway is 30 feet wide.
- **Beacon Street** – Borders the central commercial pedestrian area of Avalon. The roadway is 25 feet wide.
- **Sumner Avenue** – Provides access from City Center south of Crescent Avenue to the Five Points Intersection, which provides access to Avalon Canyon Road. The roadway has a typical width of 25 feet, but expands to 30 feet between Beacon Street and the Five Points Intersection.
- **Avalon Canyon Road** – The single roadway into the Interior of the Island. The roadway is 30 feet wide.
- **Metropole Avenue** – Part of the loop of roads circling the central commercial pedestrian area of the City. The roadway has a typical width 40 feet wide between Crescent Avenue and Beacon Street, but narrows to 20 feet between Beacon Street and Tremont Street.
- **St. Catherine Way** – Primarily serves the Casino, Hamilton Cove, and Descanso Beach; these facilities are typically 24 feet wide.

b. **Vehicle Use.** Vehicle usage within the City limits is strictly regulated; therefore, vehicle demand in the City does not approach concentrations observed in urban areas on the California mainland. As specified in the Avalon Municipal Code, all autoettes, cars, and trucks must have a permit to be parked or operated in the City. There are four separate types of vehicle permits:



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Major Circulation Facilities

Figure 4.13- 1

residential (full size or autoette), commercial, and interior commercial (for vehicles outside Avalon).

Autoettes are defined as measuring up to 120 inches in length by 55 inches in width and weighing up to 1800 pounds. Full size vehicles can be no longer than 200 inches in length by 80 inches in width (with no maximum weight). A new residential permit for a full size vehicle is only issued when two full-size existing residential permits have become ineligible for renewal or have been voluntarily surrendered. Autoettes are allowed at a rate of one per registered legal dwelling unit. A new commercial and interior commercial permit is issued when an existing permit expires. Separate waiting lists are maintained for those interested in obtaining residential, commercial, or commercial interior vehicle permits.

Residential vehicle permits may not be bought or sold, and permits may only be transferred under unique circumstances specified by the City's Municipal Code. Commercial vehicle permits may be transferred when a business is sold if the transfer is approved by the City's Vehicle Hearing Officer. All residential permits expire on April 1st of each year and interior commercial vehicle permits expire on November 1st of each year. Commercial vehicle permits are valid for a full year from when they are issued before they must be renewed.

The number of vehicles permitted in Avalon in 2012 was 2,595, which includes autoettes, cars, and trucks (Morand, 2012).

c. **Existing Circulation Conditions.** Avalon is unlike most California cities with regard to traditional traffic conditions. Traffic control devices such as signing, striping, and marking are minimal and largely not necessary due to low traffic volumes and limited vehicle conflict locations. There are no traffic signals within the community and none are anticipated. Transportation issues and conditions do not lend themselves to typical level of service analysis. Therefore, a qualitative analysis is provided below.

- **Pedestrian/bicycle/vehicle mix**. Stakeholders indicate, and field observations support, a less-than-desirable mix of autoettes, motor vehicles, pedestrians, and bicycles on streets generally bounded by Crescent Avenue, 3rd Street, Clarissa Avenue, and Metropole Avenue. The pedestrian and bicycle experience could be enhanced by a strategic separation of these modes within this general area.
- **Parking**. Autoette and vehicle parking is not generally concentrated; rather, parking occurs throughout the Flats area, resulting in motorists hunting for limited on-street parking.
- **School traffic**. The propensity of parents to drive children to school, rather than allow walking or bicycling, contributes to morning traffic congestion near Avalon's public school at the Five Points Intersection.
- **Transit**. Transit options are seasonal in nature and somewhat limited, especially for residents traveling to and from the mainland.

d. **Alternative Transportation Systems.** Alternative transportation systems within Avalon include a bikeway system, pedestrians system and public transit system. Each of these systems is discussed below.

Pedestrians and Bicycles. Walking and biking are common modes of transport due to Avalon's small geographic area. Residents and visitors use these modes of transportation to access City attractions. Visitors to Avalon create peak demands on pedestrian facilities. Visitors arriving by ship or ferry disembark at the Cabrillo Mole boat landing and follow Pebbly Beach

Road into the City. Ferries from the mainland load and unload passengers continually throughout the day at an estimated rate of 500 per hour. Cruise ships visit average about once per week. In 2011, Avalon had 52 cruise ship visits carrying 126,448 visitors.

Major facilities within the pedestrian network include the following:

- **Pebbly Beach Road (Cabrillo Mole to Crescent Avenue)** – Functions as the primary route into the City for pedestrians. The walkway is about 12 feet wide.
- **Crescent Avenue** – Used by pedestrians for both recreational purposes and access to commercial amenities. The walkway is up to 30 feet wide in some segments.
- **Avalon Canyon Road** – Adjacent to the Catalina Island Golf Club, Avalon Canyon Road is the primary walkway into the Interior. The walkway is typically around 10 feet wide.
- **Sumner Avenue** – Used by pedestrians for both recreational purposes and access to commercial amenities as it begins at Crescent Avenue (where it is pedestrian only) and terminates southwest at the Five Points Intersection where pedestrians can continue to the interior on Avalon Canyon Road. The walkway is typically around 10 feet wide.
- **Eucalyptus Avenue** – Connects Beacon Street with Tremont Street. The paved area is typically up to 30 feet wide, and serves pedestrians and is restricted from vehicular traffic.
- **Beacon Street** – Serves a collection and dispersion function for access within the central commercial area of the City. The walkway is typically around 3 feet wide.
- **Casino Walkway** – Connects central Avalon with the Casino, Descanso Beach, and Hamilton Cove. The walkway is 10 feet wide.

Transit. Avalon offers contracted transit service to residents and visitors through Catalina Transportation Services. Catalina Transportation Services provides taxis, shuttles, and charter vans for the City and the Interior. It also operates the Avalon Trolley, which provides fixed-route service to destinations in town and inland as far as the Wrigley Memorial & Botanical Garden.

4.13.2 Impact Analysis

a. Methodology and Significance Thresholds. Based on Appendix G of the State CEQA Guidelines, impacts relating to transportation and circulation would be considered potentially significant if development allowed under the 2030 GP/LCP would:

- *Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system*
- *Conflict with an applicable congestion management program*
- *Result in a change of air traffic patterns*
- *Substantially increase traffic-related hazards due to a design feature or incompatible uses*
- *Result in inadequate emergency access*
- *Conflict with adopted policies relating to alternative transportation modes, including transit, walking, and bicycling*

Avalon does not contain any roadways that are part of the 2010 Los Angeles Congestion Management Plan Transit Network. Therefore, the 2030 GP/LCP would not conflict with the applicable congestion management plan and no impact would occur in this regard. No impact to air traffic patterns would occur as a result of buildout under the 2030 GP/LCP. Though there is an airfield on the northern part of Catalina Island, there are no airfields or airports within the City of Avalon.

b. Project Impacts and Mitigation Measures.

Impact TC-1 Development facilitated by the 2030 GP/LCP could add to traffic and road congestion. However, the 2030 GP/LCP includes physical and operational improvements and policies that would reduce traffic impacts. Further, existing City policies restrict vehicle use. Therefore, impacts would be Class III, *less than significant*.

The 2030 GP/LCP would facilitate development of expansion areas and intensify development in Avalon Canyon. This may incrementally increase traffic on Avalon's roadway system and affect both intersections and roadway capacities.

Avalon does not currently use level of service or other standards for pedestrian and vehicular circulation. According to the 2006 Facilities and Services Holding Capacity Report for the City of Avalon, overall, there is 46% of total vehicle capacity remaining. This was calculated by evaluating the supply and demand for vehicle space. Growth facilitated by the 2030 GP/LCP would increase population growth and housing units by 22% in the year 2030 (see Section 2.0, *Project Description*).

As mentioned in the *Setting*, the City strictly regulates vehicle use. A single new residential permit for a full-sized vehicle is issued when two existing full-sized residential permits have become ineligible for renewal or voluntarily surrendered. Commercial permits are issued when an existing permit expires and autoettes are restricted to one per registered legal dwelling unit. Therefore, it is expected that residential and commercial vehicle use would remain constant or drop over time, but the use of autoettes would increase as more housing units are developed. Assuming a 1 to 1 ratio of housing units to new autoettes, autoette usage would increase by 22%, which is within the remaining vehicle capacity of 46%.

In addition, the proposed GP/LCP identifies physical and operational improvements that would address existing circulation issues and accommodate growth. Potential improvements to Avalon's transportation system are listed in Table 4.13-1 (replicated from Table 2-6 in Section 2.0, *Project Description*).

Table 4.13-1
Potential Improvements to Circulation

Circulation Aspect	Potential Improvements
Safe Routes to Schools Project	This project, which has a completed conceptual plan, would include roadway and pedestrian improvements along Tremont Street between Clarissa Avenue and Avalon Canyon Road. Using both the existing roadway and nearby channel, a combination concrete deck and wood deck would provide continuous sidewalk along Tremont Street. In addition, ADA compatible ramps would be constructed to provide pedestrian linkages between Eucalyptus Avenue, Catalina Avenue, Descanso Avenue, and Clarissa Avenue with Tremont Street. Given the close proximity of the project site to Avalon School, a reduction in school trips by automobile is likely when the project is completed.
Five Points Intersection Improvements	This project, which has a completed design, will enhance the five-legged intersection consisting of Avalon Canyon Road, Country Club Drive, Sumner Avenue, and Tremont Street (east/west). The project includes traffic calming, a roundabout, landscaping, lighting, decorative pedestrian walkways, sidewalks, and irrigation controls. This project would clean up misaligned roadways, enhance circulation,

Table 4.13-1
Potential Improvements to Circulation

Circulation Aspect	Potential Improvements
	and increase the likelihood that students will walk or bike to school instead utilizing motor vehicles.
One-way street designations	Metropole Avenue narrows south of Beacon Street. Consider the merits of designating a segment of the street as one-way, to better facilitate mobility.
Parking	Avalon has only a limited number of joint parking facilities (e.g. parking lots). Significant parking takes place on-street, which creates friction (particularly on narrower streets) with cyclists and pedestriansComplementary wayfinding and signage, would direct autoette traffic to key locations from which pedestrians could access multiple places of interest. This would reduce traffic on popular streets.
Thru-traffic closure	Following the success of the Eucalyptus Street partial closure, examine closure of Descanso Avenue to thru traffic. The concept would limit access between Tremont Street and Beacon Street, and between Beacon Street and 3rd Avenue. Descanso Avenue has only limited purpose for through traffic, and this proposed strategy would enhance the residential character of the street.
One-way pairs	Explore designation of streets as one-way pairs, thereby reducing the friction between various modes and enhancing mobility and access
Pedestrian Controls	Explore the use of pedestrian controls at congested intersections in order to provide safe pedestrian access and in order to alleviate congestion.

Further, the 2030 GP/LCP includes a range of policies and actions specifically intended to accommodate traffic generated by new growth in the City. These include:

VI-1 *Explore designation of appropriate street segments for one-way operation.*

VI-2 *Explore designation of appropriate street segments for closure to through traffic.*

VI-6 *Require all new development to fully mitigate the impacts of additional vehicle trips, through physical and operational improvements as appropriate.*

Adherence to GP/LCP policies and implementation of planned improvements would ensure the roadway network in Avalon does not exceed capacity. Impacts would be less than significant.

Mitigation Measures. No mitigation measures are required beyond adherence to proposed GP/LCP policies and planned system improvements.

Significance After Mitigation. Impacts would be less than significant without mitigation.

Impact TC-2 The 2030 GP/LCP would involve intensification of existing uses that may expose pedestrians and bicyclists to roadway hazards. However, implementation of proposed policies related to traffic calming and improving walkability would reduce such impacts to a Class III, *less than significant*, level.

The 2030 GP/LCP encourages higher-density, mixed-use infill in the City Center. By emphasizing intensification and reuse in the City Center, the GP/LCP could accommodate new mixed use and residential development along existing roadways. The placement of residences along existing travel corridors is expected to generally increase bicycling and pedestrian activity in these areas, with the potential for increased hazards for pedestrians and bicyclists. However, the 2030 GP/LCP includes a range of policies and actions specifically intended to increase traffic calming and enhance the walkability throughout the City. These include:

VI-1 *Explore designation of appropriate street segments for one-way operation.*

VI-2 *Explore designation of appropriate street segments for closure to through traffic.*

VI-3 *Address the physical, social, health and safety, and economic aspects of all proposed physical and operational transportation efforts.*

VI-4 *Use traffic calming measures to discourage commercial traffic in residential zones.*

VI-5 *Minimize the number and location of streets utilized for commercial deliveries.*

VI-6 *Require all new development to fully mitigate the impacts of additional vehicle trips, through physical and operational improvements as appropriate.*

By designating appropriate street segments as one-way and closing appropriate segments to through traffic, friction between pedestrians, bicyclists, and vehicles would be reduced. Implementation of proposed policies is expected to generally improve overall safety conditions for pedestrians throughout the City. Implementation of GP/LCP policies on any future development would also minimize traffic-related hazards associated with the development of those areas. Therefore, impacts related to traffic safety as a result of development under the 2030 GP/LCP would be less than significant.

Mitigation Measures. None required.

Significance After Mitigation. Impacts would be less than significant without mitigation.

Impact TC-3 **Implementation of the 2030 GP/LCP would be expected to generally enhance the use of alternative transportation modes, including transit, bicycling, and walking. Impacts related to alternative transportation are considered Class IV, *beneficial*.**

A goal of the 2030 GP/LCP is to "reduce the amount that people drive by increasing opportunities for walking, bicycling, and transit." The 2030 GP/LCP includes a range of policies aimed at enhancement of alternative transportation mode opportunities throughout the City. These include:

VI-7 *Ensure that residents and visitors can walk, bicycle, or use transit to access key Avalon attractions, businesses, and places.*

VI-8 *Include alternative mode accommodation in transportation capital improvement projects and programs.*

VI-9 *Enhance the pedestrian environment by providing a continuous network of pedestrian facilities and minimizing conflicts between pedestrians and vehicles.*

VI-10 *Enhance bicycle facilities serving both residents and tourists to provide safe bicycle access throughout the community.*

VI-11 *Enhance wayfinding for pedestrians, bicyclists, and transit users.*

The GP/LCP emphasizes intensification and reuse of already developed areas of the City. In particular, future development is focused on the mixed-use and infill development in the City Center. Mixed-use areas are generally supportive of alternative transportation since residences, employment centers, and services are closer together.

Implementation of the policies included in the 2030 GP/LCP is expected to improve the availability of sidewalks, bike paths, and transit over time. Planned improvements in the Circulation Element, such as the Safe Routes to School Project and the use of pedestrian controls (see Table 4.13-1), would improve alternative transportation modes. By making these transportation alternatives more attractive, GP/LCP implementation is expected to foster an increase of alternative transportation use and a decrease of vehicle use.

Mitigation Measures. None required.

Significance After Mitigation. Impacts would be less than significant without mitigation.

Impact TC-4 The 2030 GP/LCP would facilitate development into hillside areas with limited access. However, implementation of the proposed GP/LCP would be required to meet applicable requirements and standards regarding emergency access. Impacts would be Class III, *less than significant.*

As stated in Section 4.12, *Public Services*, areas within one-mile beyond the existing city limits would be within the Avalon Fire Department's 5-minute response area. In addition, all three expansion areas would still be expected to fall within a 5-minute response area (Mike Krug, Personal Communication, 2012). However, the 2030 GP/LCP would facilitate development into Expansion Areas and into hillside areas that are currently not served by roads, or are served by one roadway. Currently, the Hamilton Cove area is only accessible through one road, which is prone to rock slides. During an emergency event, a slide could prevent emergency access to this area. Improvements in this area are already partially funded and underway.

Development facilitated by the proposed 2030 GP/LCP would be required to comply with applicable Building Code and Fire Code requirements. As such, new development would also be required to comply with any additional project-specific requirements set forth by the Avalon Fire Department, including providing adequate emergency access. The 2030 GP/LCP includes the following policies consistent with this requirement.

VII-11 *Require all new development within the City to comply with applicable provisions of the Uniform Fire Code.*

VII-13 *Require that new development in mountainous brush areas be supplied with adequate water supply and street dimensions are standardized to meet emergency access requirements.*

VII-17 *Require immediate and safe firefighting personnel access to all areas of new developments.*

Implementation of these policies and compliance with the existing building and fire codes would address potential emergency access issues associated with potential new development. Thus, significant impacts would not occur.

Mitigation Measures. None required.

Significance After Mitigation. Impacts would be less than significant without mitigation.

Impact TC-5 Implementation of the proposed 2030 GP/LCP may increase demand for regional transportation between Avalon and the California mainland. However, the GP/LCP includes policies to facilitate and enhance regional transport. Any development or enhancement of regional transportation facilities would be required to adhere to existing regulations. Impacts would be Class III, *less than significant.*

Transportation from the Los Angeles area to Catalina Island is provided by private companies. Passenger ships bring up to 90,000 visitors to Avalon during peak months and 20,000 to 40,000 during off peak months. Demand for regional transportation between Avalon and the California mainland may incrementally increase with implementation of the 2030 GP/LCP. However, a goal of the Circulation Element is to "ensure the continued availability of water and air transport between Avalon and the mainland." The 2030 GP/LCP includes the following policies and implementation actions from the 2030 GP/LCP intended to enhance the regional transportation system to and from Avalon.

VI-14 *Facilitate and, as feasible, enhance water and air transport between Avalon and the mainland.*

VI-15 *Facilitate continued operation of cruise ships, cross channel carriers, and freight service serving Avalon and, as feasible, enhance facilities accommodating cruise ships, cross channel carriers, and freight service.*

Implementation Actions

- Continue to coordinate with ferry service providers to ensure adequate service to meet the needs of residents and visitors.
- Investigate the feasibility of developing a ship/ferry terminal and, if determined appropriate, construct a terminal as funding permits.

Increased regional transportation demand may require enhanced facilities to accommodate ships, cross channel carriers, and freight service, the construction of which may result in secondary impacts to air quality, biological resources, greenhouse gas emissions, and public services (such as Harbor Patrol). However, any facility enhancement or construction activity would be required to adhere to the California Coastal Act, would require coastal permits, CEQA documentation, and review and oversight by the City and the Coastal Commission. Further, facilities would be required to follow all Coast Guard rules and regulations regarding sea travel, traffic schemes, and passenger safety. With adherence to these regulations, impacts would be less than significant.

Mitigation Measures. None required.

Significance After Mitigation. Impacts would be less than significant without mitigation.

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4.14 UTILITIES and SERVICE SYSTEMS

This section evaluates potential impacts to water, wastewater, and solid waste service. Section 4.8, *Hydrology and Water Quality,* addresses potential impacts to storm drain infrastructure and surface water quality.

4.14.1 Setting

a. Water. Avalon's water supply is part of an integrated water system that is composed of pumped groundwater stored in reservoirs, desalinized water, and saltwater. The City's water supplies and service systems are discussed below. Facilities discussed include the local reservoir, desalination plant, and saltwater distribution system.

Groundwater. The primary source of fresh water for the City is groundwater, which is primarily stored in the Middle Ranch/Thompson Reservoir. The reservoir is approximately 5.75 miles west of Avalon City limits. The Middle Ranch/Thompson Reservoir stores water for the entire island of Catalina, and has a capacity of 1,143 acre-feet (PMC, 2006). Middle Ranch/Thompson Reservoir is also supplemented by two distribution reservoirs, Wrigley and Whittley Avenue. Wrigley Reservoir has the capacity for 29 acre-feet, and Whittley Avenue reservoir can store up to 0.87 acre-feet (PMC, 2006).

Groundwater supplies on Catalina Island are limited, with a safe yield of 515 acre-feet per year (AFY) allocated to Avalon (PMC, 2006). In the event of extended droughts or temporary disruptions to groundwater resources, the groundwater storage capacity at the reservoir can meet approximately two years of current demand. However, the City has a rationing program to protect groundwater resources during periods of drought. Phase one water rationing begins when the Middle Ranch/Thompson reservoir is half-full, or at 600 acre-feet, phase two water rationing begins at 300 acre-feet, phase three begins at 200 acre-feet, and phase four at 50 acre-feet.

Desalinated Water. Groundwater supplies are supplemented by a reverse osmosis desalination plant operated by Southern California Edison at Pebbly Beach. The current capacity of the desalination plant is 85 AFY. The facility has a potential operational capacity between 112 AFY and 224 AFY, which would provide an additional 27 to 139 AFY. Desalination is expensive and capacity is primarily a function of the prices that water users are willing to pay for desalinated freshwater and the required infrastructure.

Saltwater. Saltwater is used to supplement Avalon's limited freshwater resources. The saltwater supply and distribution system provides saltwater for use in toilet flushing and fire suppression in certain areas, in an effort to reduce freshwater demand. The saltwater system pumps filtered saltwater from an intake pipe in Avalon Harbor to two saltwater reservoirs; the 300,000 gallon Mount Ada Reservoir and the 420,000 gallon Falls Canyon Reservoir. Together, these reservoirs have a total combined capacity of 720,000 gallons. However, saltwater users occasionally switch to freshwater for toilet flushing due to the appearance and more frequent cleaning needed for saltwater use, and then switch back to saltwater when freshwater is more expensive. The corrosive properties of saltwater also require additional maintenance and repair.

Avalon's saltwater distribution system is a gravity based system that serves a substantial portion of the city. The majority of the service area is in the lower-lying areas around the City Center, but there is not enough pressure to serve the higher elevation properties. In addition, areas of potential future development are outside of the existing saltwater service area.

Demand. Average annual water demand in Avalon is approximately 375 AFY, including both groundwater and desalinated water (SCE, 2012). However, water use is highly seasonal, with greater demand during the summer and less during the winter. Moreover, actual yearly demand varies depending on the volume of tourists visiting Avalon. Fresh water demand in Avalon comes largely from residents, overnight visitors, and day-visitors. Agricultural, industrial, and non-population based commercial uses are limited. Due to the limited water resources available, the City strongly emphasizes water conservation practices, such as saltwater use, efficient landscaping, and policy-making

Table 4.14-1
Avalon Annual Water Supply and Demand

	Freshwater Supply (Groundwater + Desalinated water) (AFY)	Freshwater Demand (AFY)	Saltwater Supply (AFY)	Saltwater Demand (AFY)
Annual	600	375	807	270[1]

Source: Southern California Edison, November 2012 and Facilities and Services Holding Capacity Report, PMC, 2006.
[1]Numbers are based on peak demand.

The current annual freshwater demand is approximately 375 AFY. Daily water demand ranges from 1.26 acre-feet per day in the peak summer months and 0.85 acre-feet per day in the winter months. As indicated in Table 4.14-1, annual freshwater supply is 515 AFY. Based on current water use, there is approximately 225 AFY of surplus freshwater supply.

The current annual saltwater demand is approximately 270 AFY, which assumes peak use year-around. Annual saltwater supply is approximately 807 AFY. Based on current saltwater use, there is approximately 537 AFY of surplus saltwater supply.

b. Wastewater.

Sewer System. The City's sewer system collects, combines, and transports sewage, through a large system of pipes, to the main sewer line below Crescent Avenue. Outlying areas of the City are typically serviced by 6-inch diameter lines, which flow to 8-inch diameter lines, located in the central "flats" area of Avalon. These 6-inch and 8-inch lines feed the 12-inch main sewer line at Crescent Avenue. There is also a 15-inch gravity line before the Catherine Lift Station. Wastewater is then pumped at the Catherine Lift Station and forced via a 16-inch pressure line to Pebbly Beach, where pumps lift the wastewater for processing at the Avalon Wastewater Treatment Facility (AWTF). The City is currently developing a rehabilitation and replacement plan to identify and prioritize system deficiencies and recommend short-term and long-term rehabilitation actions, resulting in a capital improvement plan. Table 4.14-2 shows the estimated capacities of typically-sized sewer lines.

Table 4.14-2
Estimated Capacity of Typical Sewer Lines

Sewer Lines	Capacity (gallons per day)
8-inch	271,400
12-inch	807,900
18-inch	2,397,800
24-inch	5,170,500

Source: Facilities and Services Holding Capacity Report, PMC, October 2006.

Currently, Avalon generates approximately 440,000 gallons per day (or 0.44 mgd) of wastewater (SCE, 2012). Based on the typical capacity of a 12-inch sewer line of 807,900 gallons per day, the sewer lines have approximately 367,900 gallons per day of remaining capacity.

Wastewater Treatment. Wastewater in the City of Avalon is treated at the AWTF, which is operated by EnvironStrategy. The AWTF treats wastewater and initial stormwater runoff to protect the water quality of the Avalon Bay and the Pacific Ocean. AWTF processes a mixture of fresh and saltwater effluent due to the saltwater system provided for toilet flushing for the majority of Avalon. Approximately 34% of the wastewater treated by AWTF is saltwater. Table 4.14-3 summarizes the existing flows and capacity at the AWTF, as well as the remaining capacity at the facility. AWTF has a design capacity of approximately 1.2 million gallons per day (mgd), an existing inflow of approximately 0.44 mgd, and a remaining capacity of an estimated 0.76 mgd, according to EvironStrategy.

Table 4.14-3
AWTF Capacity, Existing Flows and Remaining Capacity

Treatment Facility	Design Capacity (mgd)	Existing Flow (mgd)	Remaining Capacity (mgd)
Avalon Wastewater Treatment Facility	1.2	0.44	0.76

Source: David Clary, Plant Manager/Chief Plant Operator, Personal Communication, 2012.

c. Stormwater. The City's low-flow stormwater system collects and discharges runoff from rain events. This system has a 24-hour capacity of 230,400 gallons. Since stormwater primarily drains into Avalon Harbor, where the maintenance of water quality is a concern, the stormwater system pumps and diverts the first 9,600 gallons of runoff during rain events into the sewer system for wastewater treatment. Thus, the stormwater and sewer facilities are interrelated on a temporary basis. Existing stormwater facilities are being upgraded to meet 10-year flood conditions, while new development is conditioned upon meeting FEMA flood standards (PMC, 2006).

d. Solid Waste. The solid waste disposal service in Avalon is operated by a privately owned company, ~~Seagull Sanitation~~CR&R, Inc. (as of March 2013), under contract with the City. ~~Seagull Sanitation~~CR&R, Inc. collects and processes waste from residential and commercial sources at the City-owned Pebbly Beach disposal site, located approximately two miles from downtown Avalon in a former quarry. Items that are processed include durable goods, nondurable goods, containers and packaging, food scraps, yard trimmings, and miscellaneous inorganic wastes. The disposal site contains a landfill, a transfer facility, a recycling facility, and a composting

facility. In accordance with the mandates of AB 939 and SB 1016, recyclables are sorted, and the residual waste is transferred to the landfill.

Through recycling and composting, Avalon diverts 70% of its waste stream (CalRecycle, 2006). Avalon has a target disposal rate of 7.1 pounds per capita per day and maintains a disposal rate of 3.7 pounds per capita per day as of 2011 (CalRecycle, 2012). Currently, residents are provided with free bags for recyclables and green waste, and they are encouraged to separate appropriate materials into these bags. With assistance from the diversion program, average daily throughput is 7.3 tons/day. During the peak season for visitors, however, average daily throughput can reach 10.3 tons/day.

The Pebbly Beach Landfill has an estimated closure date of ~~2020~~2033 (CR&R, Inc., March 2013). Table 4.14-4 shows the permitted capacity of the landfill. As shown, the Pebbly Beach Disposal Site has a remaining capacity of approximately 41.66 tons per day. The current contract for solid waste services will expire in June 2013. However, the city has entered into a new contract with CR&R, Inc. Under this new disposal agreement with CR&R, the life and capacity of the landfill would be extended to the year 2033 on account of a larger baler that would be installed at the landfill site. Additionally, CR&R has agreed to pay for up to $200,000 in planning costs to raise the height of the landfill which, when accomplished, would add additional years to the landfill. Finally, CR&R and the City are currently working on an energy to power plant that would be used to further extend the life of the landfill and could potentially, depending upon technological advances, be utilized to "mine" existing waste in the landfill and turn into energy, thus reducing the current waste in the landfill and extending its life indefinitely.~~, and the City will enter into a contract with a new solid waste service provider.~~

Table 4.14-4
Landfill Capacity, Throughput, and Remaining Capacity

Disposal Facility	Maximum Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)	Maximum Permitted Throughput (tons/day)	Average Daily Throughput (tons/day)
Pebbly Beach Disposal Site	143,142	104,100	49	7.34

Sources: CalRecycle. Solid Waste Information System. July 2006.
CalRecycle. Landfill Tonnage Data. 2011.

4.14.2 Impact Analysis

a. Methodology and Significance Thresholds. The following thresholds have been used to determine the impacts to water provision, wastewater treatment, solid waste disposal, and stormwater facilities.

The 2030 GP/LCP would result in potentially significant impacts if growth facilitated by the plan would result in substantial adverse physical impacts associated with provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives.

Water. The 2030 GP/LCP would have a significant effect on water supplies if demand associated with projected growth exceeds the available supply, thereby causing water shortages

during average or peak demand periods. Significant impacts would occur if implementation of the 2030 GP/LCP would:

- *Fail to have sufficient water supplies available to serve the project from existing entitlements and resources; or*
- *Require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.*

Impacts to water supply are based on estimated increases in water demand. The water demand factor was calculated by apportioning existing average annual water demand to permanent residents and visitors according to their share of Avalon's total population and extrapolating daily per capita use. Based on population estimates of approximately 3,780 permanent residents (California Department of Finance, 2012) and daily visitor estimates of 2,805 visitors per day[1], approximately 57% of Avalon's daily population consists of permanent residents and 43% consists of visitors. According to Southern California Edison, average annual water demand is 375 AFY. Assuming that 57% of the current water demand is attributable to permanent residents and 43% is attributable to visitors, permanent residents would demand approximately 0.0565 AFY per capita and visitors would generate approximately 0.0574 AFY per capita. The per capita water demand factors were applied to 2030 population estimates to determine future water demand.

Wastewater. Impacts to the sewer system are considered significant if sewage generated by growth facilitated under the 2030 GP/LCP would exceed the existing or planned capacity of the wastewater treatment system, or require extension or expansion of wastewater conveyance infrastructure. According to EnvironStrategy, 0.44 million gallons per day (mgd) currently flows into the AWTF. Based on population estimates of approximately 3,780 permanent residents (California Department of Finance, 2012) and daily visitor estimates of 2,805 visitors per day, approximately 57% of Avalon's daily population consists of permanent residents and 43% consists of visitors. Assuming that 57% of the current wastewater flows are attributable to permanent residents and that 43% of the current wastewater flows are attributable to visitors, permanent residents would generate approximately 0.25 mgd of wastewater and visitors would generate approximately 0.1892 mgd of waste water. Per capita, permanent residents would generate 66 gallons/day and visitors would generate 67 gallons/day.

Impacts related to the 2030 GP/LCP would be considered significant if growth accommodated under the Plan would:

- *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;*
- *Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or*
- *Result in a determination that the wastewater treatment provider that it does not have adequate capacity to serve projected demand in addition to existing commitments.*

[1] Estimates the number of visitors using peak visitor rates from the Facilities and Services Holding Capacity Report (2006). These rates include cruise ships, day passengers, and overnight visitors. However, as peak times occur during the summer months (June-August) and since in 2012 there were a total of 52 cruise ships (one per week), in order to provide a conservative estimate of the average daily visitors, the peak daily number of visitors is divided by four to account for non-peak days/times of the year. This estimate is anticipated to be conservative as the number of peak visitors is not sustained throughout the whole year and varies from day to day.

Stormwater. The 2030 GP/LCP would have significant impacts related to stormwater if it would 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. Impacts to stormwater infrastructure are discussed in Section 4.8, Hydrology and Water Quality.

Solid Waste. The 2030 GP/LCP would have significant impacts on solid waste collection and disposal if the development it would facilitate exceeds the maximum permitted allowance at the Pebbly Beach landfill. Impacts related to the 2030 GP/LCP would be considered significant if the potential growth would:

- *Result in not being served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; or*
- *Comply with federal, state, and local statutes and regulations related to solid waste.*

According to CalRecycle (2011), the Pebbly Beach Disposal site currently averages a throughput of 7.34 tons/day. Based on population estimates of approximately 3,780 permanent residents (California Department of Finance, 2012) and daily visitor estimates of 2,805 visitors per day, approximately 57% of Avalon's daily population consists of permanent residents and 43% consists of visitors.. Assuming that 57% of the current solid waste throughput is attributable to permanent residents and 43% of the current solid waste throughput is attributable to visitors, permanent residents would generate approximately 4.18 tons/day of solid waste and visitors would generate approximately 3.16 tons/day of solid waste. Per capita, permanent residents would generate 0.0011 tons/day and visitors would generate 0.00112 tons/day.

b. Project Impacts and Mitigation Measures.

Impact U-1 Maximum development facilitated by the 2030 GP/LCP would generate a net increase in water demand estimated at 102 AFY. The existing freshwater and saltwater supply would be adequate to serve potential growth. Therefore, water supply impacts would be Class III, *less than significant.*

Development facilitated by the 2030 GP/LCP includes development and redevelopment of lands within the current City boundaries, as well as within potential annexation areas, referred to as "Expansion Areas." Although the majority of new development envisioned as part of the 2030 GP/LCP would occur within Avalon's incorporated boundary in the form of in-fill development, additional resort recreational uses in Avalon Canyon and within the three "expansion areas" outside of the City's incorporated boundaries are also being considered as part of the 2030 GP/LCP Land Use Element (Land Use Element Policy II-26). These areas represent a logical extension of City boundaries given the existing pattern of development. Areas where redevelopment activity could occur include areas that are already served by existing water infrastructure. Development of vacant lands would require new connections. New development would result in a permanent increase in the City's water demand relative to existing conditions. Water demand associated with potential population growth facilitated by the 2030 GP/LCP is shown in Table 4.14-5.

Table 4.14-5
Projected Water Demand by Population in the Year 2030

Type	Average Daily Population	Generation Factor	Average Demand (AFY)
Permanent Residents	4,821	0.0565 AFY/resident	272.4
Visitors	3,566	0.0574 AFY/ visitor	204.7
Total 2030 Demand			**477.075**
Current Demand			**375**
Projected Increase in Demand			**102.075**

Source: California Department of Financier, 2012; Facilities and Services Holding Capacity Report, PMC, October 2006, and Southern California Edison, 2012.

As shown in Table 4.14-5, Avalon's 2030 water demand would total approximately 272 AFY for permanent residents and 205 AFY for visitors, for a total of approximately 477 AFY. Based on an existing water demand of 375 AFY, total water usage in the City is projected to increase by an estimated 102 AFY by 2030. These projections are based on a population of 4,821 permanent residents and 3,566 visitors in 2030. As discussed in Section 4.14.1(a), Water, the City currently has a surplus water supply of 225 AFY. Therefore, the current surplus of 225 AFY would be adequate to serve the estimated increase in demand of 102 AFY. In addition, the desalination plant has the capacity to increase the production of desalinated water up to 224 AFY, which would provide an additional buffer of freshwater availability for growth projected under the 2030 GP/LCP.

Infrastructure improvements and increased connectivity to the saltwater system would further reduce demand on freshwater. Currently, the capacity of saltwater storage is 807 AFY and the demand is only 270 AFY. The supply of saltwater is nearly triple the demand. Therefore, there would be adequate supply of saltwater to serve future population growth under the 2030 GP/LCP.

Due to the limited groundwater supply in Avalon and the high cost of desalinated water, the City should continue to pursue new sources of freshwater and implement water conservation strategies. As such, the following GP/LCP policies would further reduce impacts to water supply.

IV-1 *Implement a balanced, water conservation strategy as an effective way to manage demand by maximizing the efficiency of existing urban water through conservation measures/programs and developing alternative, reliable sources to sustain present and future water needs.*

IV-2 *Ensure that new development projects are designed to minimize potable water use based on the requirements of the California Green Building Code and encourage new development to achieve greater water use efficiencies (CalGreen Tier I and II levels) than are required by the Code.*

IV-3 *Minimize water consumption by existing and new development through an emphasis on drought-tolerant planting techniques, use of water-efficient plumbing, and water reclamation.*

IV-4 *Encourage the use of high efficiency irrigation technology and recycled site water to reduce the use of potable water for irrigation.*

IV-5 *Limit development in Avalon to levels that are within existing and/or future water service capabilities.*

Mitigation Measures. No mitigation measures would be required.

Significance after Mitigation. Impacts would be less than significant without mitigation.

Impact U-2 Development facilitated by the 2030 GP/LCP would increase wastewater generation above existing conditions. Maximum potential population growth would generate an estimated increase of approximately 0.25 mgd at the Avalon Wastewater Treatment Facility (AWTF). The AWTF currently has 0.76 mgd of excess capacity. Therefore, wastewater impacts would be Class III, less than *significant*.

Population growth projected under the 2030 GP/LCP would increase city-wide wastewater generation. Table 4.14-6 shows the estimated increase in wastewater generation with projected maximum development that could be facilitated under the GP/LCP. As shown therein, maximum buildout under the 2030 GP/LCP would result in wastewater generation estimated at 0.56 mgd.

As discussed in Section 4.14.1(b) above, the AWTF currently has a capacity of 1.2 mgd and treats approximately 0.44 mgd, resulting in 0.76 mgd of available capacity. With the increase in population estimated through the year 2030, the projected wastewater demand would be 0.56 mgd. The increase in wastewater generation compared to existing conditions would be approximately 0.25 mgd. Therefore, sufficient treatment capacity exists at the AWTF to serve the increase in population under the 2030 GP/LCP. In addition, the 12-inch sewer mains have an estimated capacity of 0.8 mgd, which would be sufficient to accommodate the existing plus new demand of 0.56 mgd.

Table 4.14-6
Projected Wastewater Generation by Population the Year 2030

Type	Average Daily Population	Total Wastewater Generation (mgd)	Wastewater Capacity (mgd)
Permanent Residents	4,821	0.318	N/A
Visitors	3,566	0.239	N/A
Total	**8,387**	**0.557**	**1.2**

Source: Facilities and Services Holding Capacity Report, PMC, October 2006, SCAG 2012-2035 RTP/SCS Growth Forecast for Avalon, adopted April 2012.

Sewer line capacity estimates indicate that there is sufficient capacity to accommodate existing and new wastewater generated by additional population under the 2030 GP/LCP. In addition, Section 6-7.311, *Sewer Design and Construction*, of the City's Municipal Code requires all plans for the construction of sewer infrastructure to meet all design requirements, as established by the City Engineer. Furthermore, projects that could occur during the lifetime of the 2030 GP/LCP would be examined on an individual basis to determine their effects on the wastewater infrastructure. Therefore, impacts related to the City's sewer system capacity would be less than significant with adherence to the requirements of the City's Municipal Code. In addition, the City has recently adopted a Sewer System Management Plan to identify sewer system deficiencies and has contracted with a consultant to develop a capital improvement plan for wastewater

conveyance infrastructure. Implementation of capital improvement projects would further reduce impacts to wastewater conveyance infrastructure.

Because the wastewater treatment provider has adequate capacity to meet the potential population growth, no new wastewater treatment facilities or the expansion of existing facilities would be necessary. Therefore, wastewater impacts would be less than significant.

Mitigation Measures. No mitigation measures are required.

Significance after Mitigation. Impacts would be less than significant without mitigation.

Impact U-3 Increased population and development that may occur under the GP/LCP would generate an additional 1.96 tons/day of solid waste. The anticipated closure date of the Pebbly Beach Disposal Site is the year 2033. ~~20~~ Solid waste generated by population growth w~~c~~ould not exceed the capacity of the landfill ~~by the year 2020~~. Therefore, the increase in solid waste generated by new population and development under the 2030 GP/LCP would be a Class III, *less than significant ~~and unavoidable~~* impact.

As illustrated in Table 4.14-7, the total estimated population under the 2030 GP/LCP would generate approximately 9.3 tons/day. The Pebbly Beach Disposal site currently averages 7.34 tons/day. Population growth under the 2030 GP/LCP would generate an additional 1.96 tons/day of solid waste. The landfill has a maximum permitted capacity of 49 tons/day. Therefore, the landfill would have sufficient capacity to serve the daily throughput of solid waste generated by the 2030 population.

Table 4.14-7
Projected Solid Waste Generation and Capacity

Type	Average Daily Population	Tons Generated Per Day
Permanent Residents	4,821	5.3
Visitors	3,566	3.99
Total Waste Disposed at Landfill		**9.3**
Landfill Capacity (Max permitted daily throughput)		**49**

Sources: CalRecycle. Solid Waste Information System. July 2006.
CalRecycle. Landfill Tonnage Data. 2011.

T~~While t~~he landfill could process the daily throughput generated by the estimated 2030 population. In addition, the City has entered into a new contract with CR&R, Inc that would extend the capacity and life of the landfill. Under this new disposal agreement with CR&R, the life and capacity of the landfill would be extended to the year 2033 on account of a larger baler that would be installed at the landfill site. Additionally, the height of the landfill would be raised and an energy to power plant is being proposed that would further extend the life of the landfill. ~~, the landfill has a projected cease to operate date of 2020.~~ Further, ~~T~~the City has implemented 25 diversion programs to increase the life of the landfill. The California Integrated Waste Management Act of 1989 requires all cities in California to achieve a 50% solid waste diversion rate by the year 2000. As of 2006, the City of Avalon achieved a solid waste diversion rate of 70%. Applying the 70% diversion rate to the total solid waste generation in Avalon by the year 2030 would result in approximately 2.79 tons/day or 1,018 tons/year of solid waste tonnage to

the landfill. In addition to the diversion programs in place, the 2030 GP/LCP also includes the following policies:

IV-31 *Minimize waste generation through reduction of waste generation at the source (source reduction) and reuse and recycling of materials.*

IV-32 *To change patterns of consumption that produce unnecessary waste generation, encourage the following:*

- *Purchase of products that use minimal materials;*
- *Purchase of products that are recyclable and/or are made with recyclable materials;*
- *Reduction of yard waste through backyard composting, greenwaste disposal, and low maintenance landscaping;*
- *Purchase of products with longer life spans, and products that are easily repairable;*
- *Recycling of construction wastes; and*
- *Purchase of products that are biodegradable.*

IV-33 *Continue to work with Southern California Edison, Los Angeles County and others to deploy environmentally responsible waste-to-energy technologies.*

IV-34 *Promote organic waste reuse to produce compost and/or biofuel from the maximum amount of organic waste generated within the City as possible.*

GP/LCP implementation actions also include:

- *Continue to implement and expand ongoing City waste diversion programs.*
- *Continue to identify and assess alternatives to standard disposal practices as fiscally- and environmentally-sound technologies become available.*
- *Cooperate on a regional basis with local governments, state agencies, and private solid waste companies to find the best practicable and environmentally safe solutions to waste management.*
- *Educate the public on the purchase of environmentally preferable purchasing of products and materials.*
- *Reduce subsidies to disposal and encourage incentives for waste diversion.*

Potential future development facilitated by the 2030 GP/LCP would also be reviewed on a project-by-project basis; solid waste impacts would be evaluated based on existing and planned disposal facilities and capacities available.

Through the continued efforts of t~~Despite t~~he existing diversion programs and the new disposal agreement with CR&R that would extend the life and capacity of the landfill through at least the year 2033, the GP/LCP policies and implementation actions, and project specific review, the current landfill facility ~~could reach maximum capacity before the year 2030~~would have sufficient capacity to serve the daily throughput of solid waste generated by the 2030 population. ~~. A new or expanded facility has not yet been identified.~~ As such, impacts related to solid waste would be Class III, less than significant ~~and unavoidable~~.

Mitigation Measures. No mitigation measures would be required.
~~No mitigation is feasible to reduce impacts to less than significant. The following policy and implementation action shall be added to the GP/LCP to help reduce impacts to solid waste.~~

~~U-3 *Additional Conservation Element Policy. The following policy and implementation measure shall be added to the Conservation Element:*~~

~~IV.F Solid Waste Management~~

~~Policy~~

~~IV-35 Identify a new or expanded site to accommodate future landfill needs.~~
~~Implementation Action:~~

~~Perform a study to determine a viable option or options for a new or expanded landfill facility.~~

Significance after Mitigation. ~~Mitigation Measure U-3 would help reduce impacts to solid waste disposal capacity. However, the Pebbly Beach Landfill is projected to close in 2020 and no alternative disposal site has been identified. As such,~~ Impacts would be less than significant without mitigation.
~~impacts would remain significant and unavoidable.~~

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4.15 LESS than SIGNIFICANT ENVIRONMENTAL FACTORS

This section discusses those factors determined to be less than significant that do not require a full environmental impact analysis. Environmental Factors discussed in this section include Agricultural, Mineral Resources, and Noise.

4.15.1 Agriculture and Forestry Resources

There are no areas within Avalon currently utilized for agricultural or forestry activities. Accordingly, the City contains no Prime Farmland, Unique Farmland, or Farmland of Statewide Significance, as shown on maps provided by the Farmland Mapping and Monitoring Program of the California Department of Conservation. Further, there are no General Plan or Zoning designations that would support farming in Avalon. With regard to forest land, the 2030 General Plan contains a number of policies to preserve critical biotic resources such as oak woodlands and indigenous mature trees. Therefore, no impacts on Agriculture and Forestry Resources would occur from implementation of the 2030 General Plan.

4.15.2 Mineral Resources

Some areas within the City contain mineral resources and are appropriate for mineral extraction. In the 2030 General Plan, it is the intent of the City to conserve areas needed for the managed production of these resources. Therefore, there would be no loss of availability of known mineral resources or of locally important mineral resource recovery sites. In addition, mineral extraction operations would be required to implement appropriate mitigation measures to avoid creating significant and adverse environmental impacts. As a result, no impacts relating to mineral resource extraction are anticipated.

4.15.2 Noise

Catalina Airport is located approximately six miles from Avalon city limits. Annexation of Expansion Area No. 2 would extend the City's boundaries, and the Catalina Airport would be approximately 4.75 miles from the new boundary. As such, Avalon would not be within two miles of an airport or private airstrip, and there would be no impacts regarding airport noise.

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5.0 OTHER CEQA DISCUSSIONS

This section discusses other issues for which CEQA requires analysis in addition to the specific issue areas discussed in Section 4.0, *Environmental Impact Analysis*. These additional issues include the potential to induce growth and significant and irreversible impacts on the environment.

5.1 GROWTH INDUCING EFFECTS

Section 15126.2(d) of the *CEQA Guidelines* requires that EIRs discuss the potential for projects to induce population or economic growth, either directly or indirectly. CEQA also requires a discussion of ways in which a project may remove obstacles to growth.

Population and Employment Growth

As discussed in Section 2.0, *Project Description*, it is anticipated that approximately 631permanent residential units could be facilitated by the 2030 General Plan. This number of units would accommodate an estimated 1,041 new residents in Avalon, which would bring the City's population to about 4,821 in the year 2030. Such growth represents an approximately 22% increase in population over the roughly 20-year timeframe of the 2030 GP/LCP. Such a population incrementally would not exceed the SCAG 2035 population forecast for Avalon (5,100). In addition, the current Avalon Municipal Code restricts the density of residential units on steep hillsides, which would limit potential growth in the City's resident population. Further, the following policies and implementation actions from the 2030 GP/LCP would also limit growth potential:

IV-18 *Limit development in Avalon to levels that are within existing and/or future water service capabilities.*

Implementation Actions

- *Continue to regulate the levels of building intensity and density according to the standards and land use designations specified by the General Plan and the Avalon Municipal Code.*
- *Phase private development and public infrastructure projects based upon input from utility providers, private developers, and other public agencies to assure that adequate public facilities are available at the time of occupancy.*

Consequently, no exceedance of the population forecasts upon which SCAG's Regional Transportation Plan and the 2007 South Coast Air Quality Management Plan (AQMP) are based is anticipated. It is the specific purpose of the 2030 GP/LCP to accommodate the orderly development of Avalon. Therefore, by its nature, the 2030 GP/LCP is intended to reduce the potential for uncontrolled growth and associated environmental impacts.

Removal of Obstacles to Growth

The 2030 GP/LCP encourages the reuse and intensification already developed areas of the City Center area rather than extension of urban development into undeveloped areas within and surrounding the City. Although the majority of new development envisioned as part of the 2030 GP/LCP would occur within Avalon's incorporated boundary in the form of in-fill development, additional resort recreational uses in Avalon Canyon and within the three "expansion areas" outside of the City's incorporated boundaries are also being considered as part of the 2030 GP/LCP Land Use Element (Land Use Element Policy II-26). These areas represent a logical extension of City boundaries given the existing pattern of development. Areas where redevelopment activity could occur include areas that are already served by existing

infrastructure. Development of vacant lands would require new connections. However, major infrastructure extensions generally are not envisioned and improvements would be primarily limited to replacement/upgrade of aging facilities and enhancement of existing infrastructure in key locations. In addition, as listed above, policies included in the 2030 GP/LCP and in the Avalon Municipal Code limit development in the hillside areas (both within the City and within the potential Expansion Areas). Therefore, development would be limited and the 2030 GP/LCP would not remove obstacles to growth.

5.2 IRREVERSIBLE ENVIRONMENTAL EFFECTS

The CEQA *Guidelines* require that EIRs evaluating projects involving amendments to public plans, ordinances, or policies contain a discussion of significant irreversible environmental changes. CEQA also requires decisionmakers to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve a project. This section addresses non-renewable resources, the commitment of future generations to the proposed uses, and irreversible impacts associated with the proposed development.

Construction activity that would be accommodated under the 2030 GP/LCP would involve the use of building materials and energy, some of which are non-renewable resources. Consumption of these resources would occur with any development in the region and are not unique to Avalon or the General Plan. The addition of new residential and non-residential development in the City through 2030 would irreversibly increase local demand for non-renewable energy resources such as petroleum and natural gas. Increasingly efficient building fixtures and automobile engines, as well as implementation of policies included in the 2030 GP/LCP, are expected to offset the demand to some degree. It is not anticipated that growth accommodated under the General Plan would significantly affect local or regional energy supplies.

Growth facilitated by the General Plan would require an irreversible commitment of law enforcement, fire protection, water supply, and wastewater treatment. As discussed in Sections 4.12 and 4.14, impacts to public services and utilities would be reduced to a less than significant level with implementation of policies included in the 2030 GP/LCP. However, as discussed in Section 4.14, impacts related to solid waste disposal services would be significant and unavoidable since the Pebbly Beach Landfill is projected to close in 2020 and no alternative disposal site has been identified.

The additional vehicle trips associated with growth through 2030 would incrementally increase local traffic, noise levels and regional air pollutant emissions. As discussed in Section 4.2, *Air Quality*, implementation of General Plan policies and regional air pollution programs could reduce the air pollutant emissions associated with individual future development projects to below significance thresholds. As discussed in Section 4.10, *Noise*, implementation of proposed policies could reduce the noise impacts associated with future growth to a less than significant level. As discussed in Section 4.13, *Transportation and Circulation,* the 2030 GP/LCP includes physical and operational improvements and policies that would reduce traffic impacts to a less than significant level.

6.0 ALTERNATIVES

As required by Section 15126.6 of the *CEQA Guidelines,* this section of the EIR examines a range of alternatives to the 2030 General Plan/Local Coastal Plan (2030 GP/LCP). Included in this analysis are two versions of the CEQA-required "no project" alternative (no further development and growth in accordance with the 1978 General Plan), a No Annexation Alternative, and a Lower Growth Alternative. The alternatives are listed below:

- *Alternative 1: No Project (No Further Development)*
- *Alternative 2: No Project (1978 General Plan Buildout)*
- *Alternative 3: No Annexation Alternative*
- *Alternative 4: Increased Open Space Alternative*

As required by CEQA, this section also includes a discussion of the "environmentally superior alternative" among those studied.

6.1 ALTERNATIVE 1: NO PROJECT (NO FURTHER DEVELOPMENT)

6.1.1 Description

The "no project" alternative assumes that no further residential or non-residential development would occur in Avalon and that environmental conditions would not change. No new visitor serving, commercial, industrial, residential, or infrastructure facilities would be constructed. It is assumed that the City's current permanent population of approximately 3,780 would not change, though it should be recognized that the City cannot control whether or not population growth occurs. Absent additional housing to support future growth, any population growth in the City would likely be accommodated through increasing the number of persons per household.

This is a purely hypothetical alternative that is not realistic given that even if the proposed GP/LCP is not adopted, property owners in Avalon would retain the development rights they have under the current General Plan.

6.1.2 Impact Analysis

Implementation of this alternative would not facilitate any new physical changes, as it would not accommodate new development. As such, it would not have any of the adverse or positive effects associated with new development envisioned as part of the 2030 GP/LCP. This alternative would reduce the magnitude of impacts associated with implementation of the 2030 GP/LCP. For example, this alternative would avoid the potential impacts to biological resources, hydrology and water quality, and geology and seismic impacts associated with expanding low density residential land use designations in the hillsides surrounding the City Center. It would also avoid the potential impacts associated with future development within the three potential expansion areas. Because no additional development would occur, this alternative would also reduce impacts with respect to aesthetics, air quality, noise, water supply, and infrastructure.

This alternative would not, on the other hand, implement any of the goals and policies proposed in the 2030 GP/LCP that are anticipated to improve aesthetic character of the community and protect natural resources. In addition, this alternative would not facilitate the expansion of uses which the community has expressed a desire, including visitor serving uses, resort/recreational amenities, and infrastructure improvements. As this alternative would not facilitate changes to the local circulation system, it would not address impacts relating to regional traffic growth, nor

would it add bike lanes, pedestrian, facilities, or other circulation system improvements. The failure to facilitate the construction of additional housing and non-residential development could also potentially result in overcrowded conditions within the existing housing stock and a lack of jobs and/or retail shopping opportunities for local residents and tourists.

6.2 NO PROJECT (1978 GENERAL PLAN)

6.2.1 Description

This version of the "no project" alternative involves continued implementation of the existing General Plan (adopted in 1978). The overall area considered by the 1978 General Plan is approximately 2.81 square miles, or 1,798 acres of land and is shown on Figure 6-1. This is approximately 2,727 acres less than less the 4,525 acres considered in the proposed 2030 GP/LCP. The primary difference in total acreage proposed by the 2030 GP/LCP is inclusion of three "expansion areas" as shown on Figure 2-4. The three potential "annexation areas" include:

- Expansion Area No. 1 – This area is located in a landfill and quarry area south of Pebbly Beach. Within this area, light industrial uses are planned, with the potential to transition over time to more visitor-serving uses as part of a Pebbly Beach Specific Plan Overlay District.

- Expansion Area No. 2 – This area consists of various parcels between Hamilton Cove and the Divide Road. This area would facilitate Resort/Recreational land uses.

- Expansion Area No. 3 – This area is located between the City limits separating Pebbly Beach and the eastern boundary of Avalon Canyon. More open uses within City limits would occur here.

This alternative assumes that the existing General Plan policies would continue to facilitate development primarily within the existing low density residential, resort recreational, and commercial land use designations. Furthermore, the land use changes proposed in the 2030 GP/LCP would not occur. The key land use changes proposed as part of the 2030 GP/LCP (and those that would not be implemented under this alternative) are outlined below:

- Create a Light Industrial zone intended for areas vital to moderate industrial services;
- Create a Specific Plan Overlay Districts for the Lover's Cove and Pebbly Beach areas;
- Create a Resort Recreational High Density (RR-HD) and Resort Recreational Low Density (RR-LD) designations which would accommodate visitor serving recreational and commercial uses as well as single family housing units;
- Create a new Open Space designation for lands whose primary purpose is the provision of active and/or passive recreation, the protection of public health and safety, preservation of sensitive environmental resources, and resource management;
- Create a new Low/Moderate Income Housing designation that would replace the existing High Density Residential – Community designation and accommodate residential development;
- Expand the Low Density Residential designation to hillside areas surrounding the RR-LD and RR-HD designations.

Despite these key differences between the existing and proposed General Plan Land Use Maps, the amount of development facilitated under either scenario is anticipated to be roughly equivalent. The difference would be in the nature and location of new development. Figure 6-1shows the existing land use designations established by the 1978 General Plan. As shown in Table 2-3, *Project Description,* Avalon's population is expected to increase by approximately

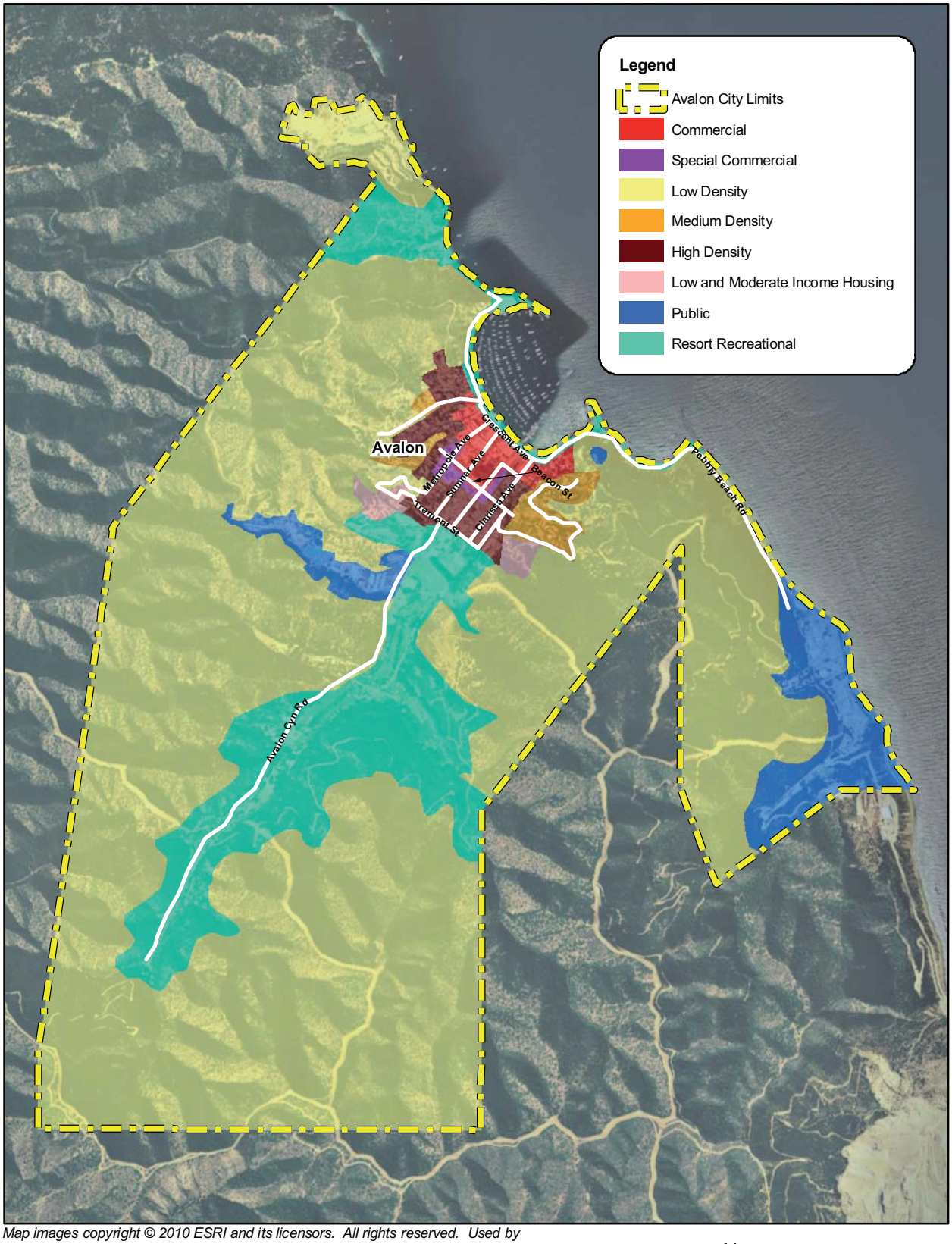
1,000 permanent residents over the planning period. An estimated 631 new residential units are forecast to be added over the planning period (through 2030).

6.2.2 Impact Analysis

For most of the area within the existing City Limits, the array of land use types and the anticipated intensity of development are similar under both the 1978 General Plan and proposed 2030 GP/LCP. However, as shown on the proposed 2030 GP/LCP Land Use Map (Figure 2-4) the 2030 GP/LCP identifies three expansion areas, which would more than likely accommodate a significant portion of the forecasted development and would also require the construction of supporting infrastructure within a large area outside of the existing City limits. In addition, the 2030 GP/LCP would accommodate an expansion of resort recreational uses in Avalon Canyon (within the existing City limits); the 1978 General Plan identifies much of this area for low density residential development. The No Project (1978 General Plan Buildout) Alternative would not include City development in the expansion areas nor would it permit the expanded resort recreational uses. However, it is assumed that the existing General Plan would accommodate future growth primarily within the areas designated Low Density, High Density, and Commercial, while the proposed 2030 GP/LCP would accommodate growth primarily within the Commercial and Resort Recreational High/Low Density areas, and potentially the Lover's Cove Specific Plan Area and Pebbly Beach Specific Plan Area.

This 1978 Buildout Alternative would eliminate development opportunities within the three identified expansion areas and would therefore eliminate the impacts tied directly to physical disturbances within approximately 2,727 acres. The primary environmental benefit of reducing development potential in the expansion area would be the preservation large areas of steep coastal hillsides in a more natural condition. Therefore, the impacts to biological and cultural resources, geology, hydrology and water quality would be reduced when compared to the proposed 2030 GP/LCP. Impacts related to aesthetics, including the addition of new light and glare, would also be reduced.

The existing level of water, wastewater, and solid waste infrastructure improvements would be maintained in their current condition and the infrastructure improvements facilitated by the 2030 GP/LCP would not occur. As a result, this alternative would avoid the physical impacts associated with infrastructure development (particularly within hillside environments). However, some of the benefits associated with infrastructure construction would not occur, the most notable being: (1) the ~~construction of a~~expansion of the existing landfill~~ (possibly within the Pebbly Beach Specific Plan area) to replace the existing Pebbly Beach Landfill scheduled to close in 2020 (see Mitigation Measure U-3 in Section 4.14, *Utilities and Service Systems*)~~; (2) the construction of various circulation improvements within the City Center area that would create safe routes to school, improve intersection functionality, improve parking availability, improve pedestrian access, and create transportation operating systems to expand transportation choices; and (3) the deployment of environmentally responsible waste-to-energy projects. Because the population forecasts for buildout under this alternative and the proposed project are similar, population-dependent impacts to infrastructure/utilities (such as water, wastewater, transportation and solid waste disposal) would be increased under this alternative when compared to the proposed 2030 GP/LCP.



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Feet

No Project
(1978 General Plan Buildout)

Figure 6-1

6.3 NO ANNEXATION ALTERNATIVE

6.3.1 Description

Under this alternative, the majority of the land use designations proposed as part of the 2030 GP/LCP would remain and therefore it is assumed that infill development within the City Center, high density and low density resort/recreational development in the upper Avalon Canyon area, and low density residential development in the hillside areas at the edge of the City, would occur as currently envisioned. The three identified expansion areas would be removed. However, the planned increase in permanent residential units (631 units) and permanent net population growth (1,041 persons) would therefore occur within the existing City boundaries and not within the expansion areas. As a result, the ultimate development intensity within the City would be higher with no new development in the expansion areas. Figure 6-2 shows the proposed alternative's land use designations.

6.3.2 Impact Analysis

Aesthetics

This alternative would eliminate future development in the three identified expansion areas and consequently, it would facilitate more development within the current City limits. As discussed in Section 4.1, *Aesthetics,* development within the proposed expansion areas would result in the greatest impacts to visual/scenic resources. The majority of the expansion areas contain steep hillside topography and thus development would require significant grading and vegetation removal at elevations visible from almost all areas of the City. Because development in these locations would be eliminated, impacts to scenic views, visual character, and light and glare occurring in these areas under the proposed 2030 GP/LCP would not occur. However, increased development intensity within the existing City limits has the potential to change the visual character of the existing City limits and increase the light and glare and shadow impacts, particularly in the more sensitive areas near the coastline. Overall, visual and scenic resource impacts would be reduced under this alternative when compared to the proposed 2030 GP/LCP and would remain less than significant.

Air Quality

Consistency with the South Coast Air Quality Management District's (SCAQMD) 2007 Air Quality Management Plan (AQMP) is determined based on consistency with Southern California Association of Governments (SCAG) population forecasts, the rate of increase in vehicle trips and miles traveled, and the inclusion of applicable land use and transportation control measures. Although this alternative would eliminate development within the expansion areas, an increase of approximately 4,821 permanent residents is still anticipated in 2030 due to increased intensity within the City limits. Therefore, neither this alternative nor the proposed project would exceed SCAG's 2035 population forecast of 5,100. This alternative would therefore be consistent with SCAG population forecasts and impacts related to AQMP consistency would be similar when compared to the proposed 2030 GP/LCP. As with the proposed project, impacts would remain less than significant.

This alternative would eliminate future development in the three identified expansion but would also increase development within the existing City Limits. Therefore, grading and construction related to future development within the expansion area's hillsides would not occur, but construction-related air quality impacts (e.g. demolition, site clearance, and building construction) would be increased in areas with a higher number of sensitive receptors. Overall

construction-related air quality impacts would be incrementally increased when compared to the project. Because vehicle trip lengths and the need to utilize personal autos would be reduced by concentrating development in the existing City limits, operational air quality impacts would be incrementally reduced when compared to the proposed project.

Although development would be eliminated within the three expansion areas, mixed-use commercial, industrial, and residential types of development would still occur in the existing City limits. Therefore, the potential for odor impacts would remain and could potentially be increased when compared to the proposed project, particularly if land uses such as fast food restaurants, photographic studios, laundry facilities and industrial operations are located in already urbanized areas. Impacts related to odors would be similar when compared to the proposed 2030 GP/LCP.

Overall air quality impacts would be incrementally increased when compared to the proposed project and would remain less than significant.

Biological Resources

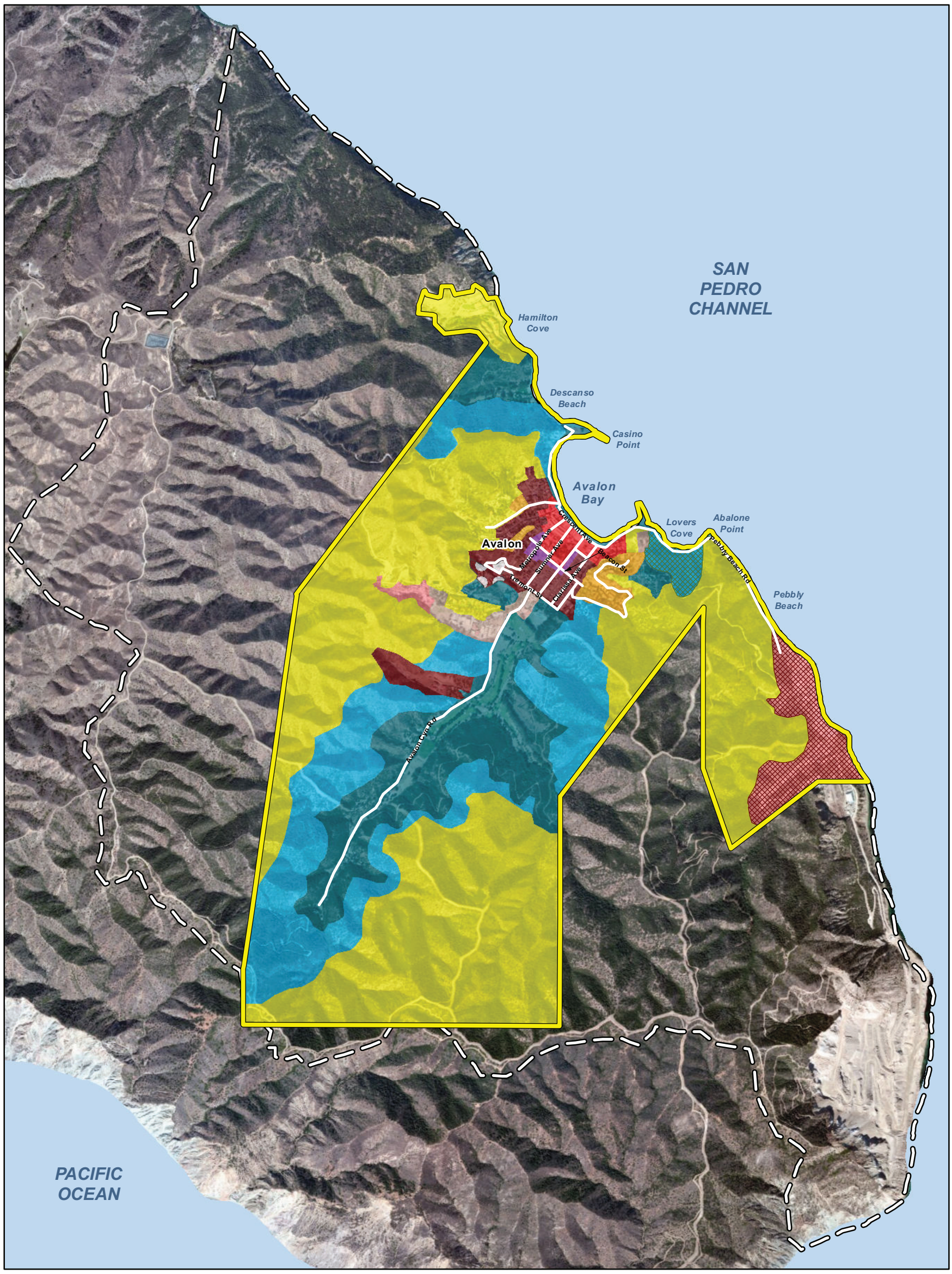
This alternative would eliminate development potential within the three expansion areas. Any existing sensitive habitats and wildlife movement opportunities provided by existing riparian corridors within the expansion areas would remain. Therefore, direct impacts to sensitive habitats, special status species, and wildlife movement would not occur. In particular, impacts would not occur within sensitive habitats and wildlife movement opportunities provided by existing riparian corridors and the Significant Ecological Areas designated within upper Descanso Canyon and Pebbly Beach Canyon. Therefore, impacts to biological resources would be reduced under this alternative when compared to the proposed 2030 GP/LCP and would remain less than significant.

Cultural Resources

This alternative would eliminate development potential within the three identified expansion areas. As noted in Section 4.4, *Cultural Resources,* it is estimated that approximately 2,000 archaeological sites are present on Catalina Island and less 1,000 having been discovered. Therefore, the potential to encounter additional, undiscovered resources within the City would remain moderate to high under this alternative. However, because site disturbance would not occur in the expansion areas, impacts to previously unidentified pre-historical archaeological resources would be reduced. Similar to the proposed project, implementation of the proposed General Plan policies and mitigation measure CR-1 would be required to reduce impacts to a less than significant level.

The elimination of development within the expansion areas would reduce potential impacts to unidentified cultural resources. However, additional development potentially occurring within the City limits could increase impacts to historical buildings, structures, and districts. Therefore, this alternative's impact on historic resources could be incrementally increased when compared to the proposed project because development would be concentrated within the existing incorporated boundaries. Similar to the proposed project, implementation of the proposed General Plan policies and mitigation measure CR-2 would be required to reduce impacts to a less than significant level.

Overall impacts to cultural/historic resources would be incrementally increased under this alternative. Mitigation measures CR-1 and CR-2 would be required to reduce impacts to a less than significant level.



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Avalon City Limits
Sphere of Influence Boundary
Lover's Cove Specific Plan Area
Pebbly Beach Specific Plan Area
Public
Light Industrial
Commercial
Special Commercial
Resort Recreational - Low Density
Resort Recreational - High Density
Open Space
Low Density Residential
Medium Density Residential
High Density Residential
High Density Residential - Community Housing

No Annexation Alternative

Figure 6-2

Geologic Hazards

This alternative would eliminate development potential within the three identified expansion areas. As a result, site specific geologic impacts within those areas would be eliminated. This includes impacts related to ground-shaking, soil-related hazards, liquefaction, slope instability hazards, and radon exposure. Geologic impacts would be reduced when compared to the proposed project and would remain less than significant.

Greenhouse Gas

This alternative would eliminate development potential within the three identified expansion areas. As a result, the total number of vehicles and the number of extended vehicle trips into areas outside of the City's more urbanized areas would not occur. Focusing development within the City's more urbanized core could incrementally reduce greenhouse gas impacts when compared to the proposed project, as it could potentially reduce the total vehicle miles traveled annually and it could increase the use of non-motorized transportation. As with the proposed 2030 GP/LCP impacts would be less than significant.

Hazards and Hazardous Materials

This alternative would remove development potential within the three identified expansion areas. As a result, risk of upset impacts would be reduced by eliminating the potential for locating visitor serving uses adjacent to or on property previously utilized for industrial purposes (such as the landfill and hazardous materials storage in the Pebbly Beach area). Impacts related to wildland fire hazards would also be reduced since the potential for urban encroachment into wildland areas would be reduced. Overall hazards would be reduced when compared to the proposed project. As with the proposed 2030 GP/LCP, hazard impacts would be less than significant with implementation of existing regulations and proposed policies.

Hydrology and Water Quality

As discussed in Section 4.8, *Hydrology and Water Quality*, soil disturbance due to earth moving has the potential, if not properly regulated, to temporarily increase erosion and subsequent deposition of soil particles into areas containing sensitive habitat. The three potential expansion areas considered in the 2030 GP/LCP are adjacent to or within Sensitive Ecological Areas and contain soil types and landforms that would be subject to erosion, and thus sediment could be transported into fragile resources such as streams, oak woodlands and threatened or endangered species and their habitat, particularly during site grading. Because development within these areas would be eliminated under this alternative, water quality impacts would be incrementally reduced. In addition, the overall reduction in site disturbance would reduce the total area of impervious surfaces and would therefore reduce the volume of runoff, reduce storm water contamination, and increase groundwater recharge. Overall impacts to hydrology and water quality would be incrementally reduced when compared to the proposed project. As with the proposed 2030 GP/LCP, impacts would be less than significant with implementation of existing regulations and proposed policies.

Land Use and Planning

Like 2030 GP/LCP, this alternative would generally be consistent with most regional land use plans and policies, including those of SCAG's Regional Comprehensive Plan, Regional Transportation Plan, and Growth Visioning Report. It would also facilitate a mix of residential and commercial uses within the existing City boundaries that would provide a balance of jobs and housing. Therefore, impacts related to land use and planning would be similar to those of

the proposed project and would be less than significant. Impacts related to consistency with the Los Angeles County Local Agency Formation Commission (LAFCo) guidelines would be incrementally reduced when compared to the proposed project, as this alternative would focus future growth within already urbanized areas that are for the most part adequately served by existing infrastructure and public services.

Overall land use compatibility impacts would be incrementally reduced when compared to the 2030 GP/LCP. As with the proposed 2030 GP/LCP, impacts would be less than significant.

Noise

This alternative would eliminate development potential in the three identified expansion areas. Construction-related noise impacts to wildlife and low density single-family dwellings and resort recreational uses would therefore be reduced. However, an increase in construction-related noise impacts could occur within the existing City limits as a result of locating a higher number of noise sources in closer proximity to sensitive receptors. This could also increase the average number of daily vehicle trips within the existing City limits which could increase operational noise levels when compared to the 2030 GP/LCP.

Overall noise-related impacts would be incrementally increased when compared to the 2030 GP/LCP, and would remain less than significant.

Population and Housing

Although development would be eliminated within the three expansion areas, mixed-use commercial, industrial, and residential types of development would still occur in the existing City limits. Therefore, the anticipated population growth would be similar when compared to the 2030 GP/LCP and would still not exceed SCAG's 2035 population forecast. Impacts would remain less than significant. This alternative could also provide the required number of housing units using infill development strategies in accordance with RHNA requirements. Impacts to population and housing would be similar compared to the proposed project and would remain less than significant.

Public Services

This alternative would eliminate development opportunities outside the City's existing City limits. As a result, police and fire services would not need to be provided to a potential development area exceeding 2,700 acres. Development would be concentrated within the existing City limits and therefore, the potential impacts on police/fire staffing levels would be similar when compared to the proposed project. Response times would be incrementally reduced when compared to the proposed project. Impacts on schools would be similar, as this alternative's estimated student generation would remain at 212 students. Impacts to harbor services would also be similar.

Overall impacts to public services would be similar when compared to the proposed project. As with the proposed 2030 GP/LCP, impacts would be less than significant.

Transportation and Circulation

The elimination of the three expansion areas would not reduce population or housing unit growth below the 22% anticipated in the 2030 GP/LCP. However, the total number of vehicle trips and the total number of vehicle miles traveled within the City could be incrementally reduced due to an increase in density/intensity within the existing City limits and a potential

increase in the use of non-motorized transportation. Furthermore, this alternative would also eliminate the need to construct new transportation infrastructure within the 2,727 acre expansion area. Therefore, additional resources could be allocated toward the improvement of transportation systems within the existing City limits, as described in Section 4.13, *Transportation and Circulation* (Table 4.13-1).

Overall impacts on transportation and circulation would be incrementally reduced when compared to the proposed project, and would remain less than significant.

Utilities and Service Systems

The elimination of the three expansion areas would not reduce population or housing unit growth below the 22% anticipated in the 2030 GP/LCP. Therefore, water and wastewater demand estimates would remain at a net increase of approximately 102 acre-feet/year and 0.25 million gallons per day, respectively. Solid waste impacts would be similar to the 1,018 tons of solid waste per year anticipated at full buildout of the proposed project. Overall ~~solid waste~~ impacts for water, wastewater and solid waste would remain ~~significant and unavoidable, as this alternative would not include a location for a new or expanded landfill. As a result, the existing landfill is still likely to reach capacity in 2030~~less than significant.

6.4 INCREASED OPEN SPACE ALTERNATIVE

6.4.1 Description

Under this alternative, the southernmost area designated for Low Density Residential on the proposed 2030 GP/LCP Land Use Map would be converted to the Open Space land use designation as shown on Figure 6-3. Elimination of this low density residential designation would maintain the forecasted number of permanent residential units (631 units) and permanent net population growth (1,041 persons) by incrementally concentrating development within the City limits.

6.4.2 Impact Analysis

Aesthetics

This alternative would convert the southern-most low density residential land use designation to the open space land use designation. As discussed in Section 4.1, *Aesthetics,* development within the southern portion of the City would require the grading of large areas of undisturbed hillsides for a relatively small number of residential dwellings. In addition to site grading, future development would require vegetation clearance for fire safety, and paved access roads would need to be constructed to establish adequate vehicle access. This alternative would incrementally reduce potential impacts to Avalon's scenic hillsides and reduce the potential impacts cause by light and glare when compared to the proposed project even though the area's potential growth would be concentrated in the more urban areas of Avalon. As with the proposed 2030 GP/LCP, impacts would remain less than significant.

Air Quality

This alternative would reduce the extent of low-density residential land uses in the City of Avalon when compared to the proposed project. Therefore, grading and construction related to future development within the City's hillsides would be reduced. However, the area's potential density would be re-distributed throughout other areas the City and therefore construction-related air quality impacts (e.g. demolition, site clearance, and building construction) would be

incrementally increased in areas with a higher number of sensitive receptors. Operational air quality impacts would not change when compared to the proposed project as the City's population would not change.

The potential for odor impacts would not change when compared to the proposed project, as the distribution of land uses throughout this alternative would be similar to the land uses proposed in the 2030 GP/LCP.

Overall air quality impacts would be similar when compared to the proposed project and would remain less than significant.

Biological Resources

This alternative would eliminate grading and development within the southern-most portion of the low density residential land use designation. Any existing sensitive habitats and wildlife movement opportunities provided by existing riparian corridors within upper Avalon Canyon would remain. Therefore, direct impacts to sensitive habitats, special status species, and wildlife movement in these undisturbed areas would not occur. Overall, biological resource impacts would be incrementally reduced under this alternative, but would remain less than significant.

Cultural Resources

As noted in Section 4.4, *Cultural Resources,* it is estimated that approximately 2,000 archaeological sites are present on Catalina Island and less 1,000 having been discovered. Therefore, the potential to encounter additional, undiscovered resources within the City would remain moderate to high under this alternative. However, the preservation of additional open space would ensure that slightly less area (approximately 375 acres) would be disturbed upon buildout of the proposed project. Thus, any previously unidentified pre-historical archaeological resources present within this area would be reduced. Similar to the proposed project, implementation of the proposed General Plan policies and mitigation measure CR-1 would be required to reduce impacts to a less than significant level.

No existing historic structures are present within this portion of the low density residential land use designation (refer to Section 4.4, Cultural Resources). However, impacts to historical buildings, structures, and districts would be incrementally increased as development would be slightly more concentrated in urbanized areas of the City.

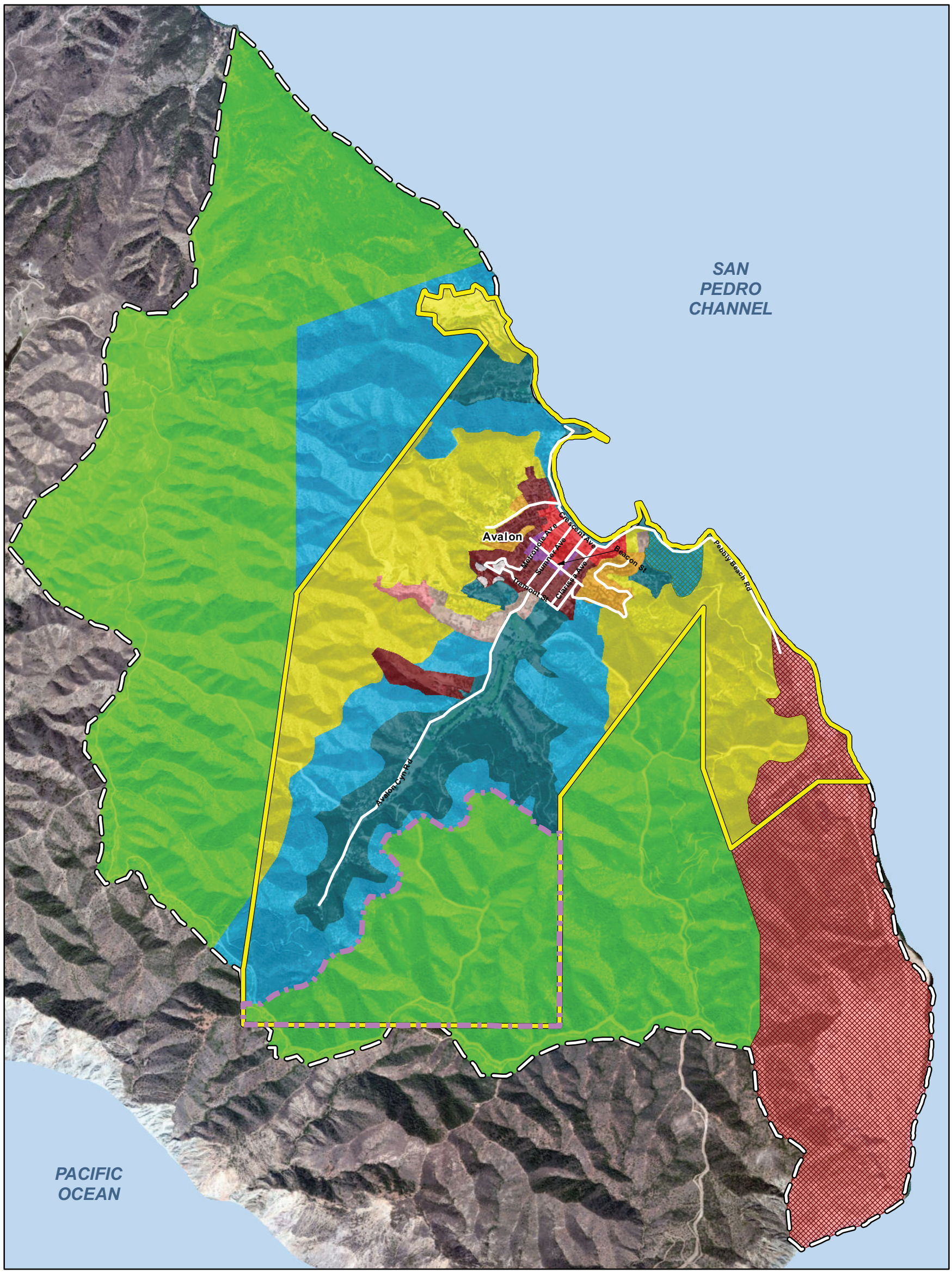
Geologic Hazards

This alternative would eliminate grading and development within the southern-most portion of the low density residential land use designation. As a result, site specific geology impacts that would occur in these areas would be eliminated. This includes impacts related to ground-shaking, soil-related hazards, liquefaction, slope instability hazards, and radon exposure.

Overall geologic impacts would be incrementally reduced when compared to the 2030 GP/LCP and would remain less than significant.

Greenhouse Gas

This alternative would eliminate grading and development within the southern-most portion of the low density residential land use designation. Vehicle use and extended vehicle trips into this undeveloped area would be reduced. Therefore, overall vehicle miles traveled would be slightly reduced when compared to the 2030 GP/LCP. Focusing development within the City's more



Imagery provided by ESRI and its licensors © 2013. Additional layers from City of Avalon, 2010, and Los Angeles County Department of Regional Planning, 2008.

0 950 1,900 Feet

N

- Avalon City Limits
- Sphere of Influence Boundary
- Lover's Cove Specific Plan Area
- Pebbly Beach Specific Plan Area
- Area Changed from Low Density Residential to Open Space
- Public
- Light Industrial
- Commercial
- Special Commercial
- Resort Recreational - Low Density
- Resort Recreational - High Density
- Open Space
- Low Density Residential
- Medium Density Residential
- High Density Residential
- High Density Residential - Community Housing

Increased Open Space Alternative

Figure 6-3

urbanized core could also increase the use of non-motorized travel within the City, which would incrementally reduce greenhouse gas impacts when compared to the proposed project. As with the proposed 2030 GP/LCP impacts would be less than significant.

Hazards and Hazardous Materials

This alternative would eliminate grading and development within the southern-most portion of the low density residential land use designation. Therefore, impacts related to wildland fire hazards would be reduced since the potential for urban encroachment into wildland areas would be reduced. The potential risk of encountering hazardous materials would be similar when compared to the proposed project as the development potential associated with the conversion area would be concentrated in the remaining areas of the City.

Overall hazards and hazardous materials impacts would be similar when compared to the 2030 GP/LCP and would remain less than significant.

Hydrology and Water Quality

As discussed in Section 4.8, *Hydrology and Water Quality*, soil disturbance due to earth moving has the potential, if not properly regulated, to temporarily increase erosion and subsequent deposition of soil particles into areas containing sensitive habitat. This area is near Sensitive Ecological Areas and it also contains soil types and landforms that would be subject to erosion and thus soil and other debris could be transported into fragile resources such as streams, oak woodlands and threatened or endangered species and their habitat. The risk would be especially high during the development of residential land uses. This alternative's proposed conversion to open space would eliminate impacts to water quality in this area. The proposed conversion to open space would also preserve the existing pervious surfaces, which would promote groundwater recharge. Overall hydrology and water quality impacts would be slightly reduced when compared to the proposed project. As with the proposed 2030 GP/LCP, impacts would be less than significant with implementation of existing regulations and proposed policies.

Land Use and Planning

This alternative would convert the southern-most low density residential land use designation to the open space land use designation. The open space area would be adjacent to Annexation Area No. 3. Therefore, the potential land use compatibility impacts associated with placing residential development adjacent to open space would be reduced when compared to the proposed project. The removal of urban encroachment would also be consistent with the goals, policies, and implementation measures of the 2030 General Plan Open Space and Conservation Elements,

Overall land use compatibility impacts would be incrementally reduced when compared to the 2030 GP/LCP and would remain less than significant.

Noise

This alternative would convert the southern-most low density residential land use designation to the open space land use designation. Although the growth potential of this area would be concentrated in the more urbanized areas of the City, construction-related noise impacts would be similar when compared to the proposed project given the relatively small increase in urban

development. Operational noise levels would also remain similar to those anticipated in the 2030 GP/LCP as the overall traffic volumes would not change.

Overall noise-related impacts would not change when compared to the 2030 GP/LCP and would remain less than significant.

Population and Housing

Avalon's anticipated population growth at buildout would not change under this alternative. Similar to the proposed project, the anticipated increase in population would still not exceed SCAG's 2035 population forecast. In addition, conversion of this area from the low-density residential land use designation to the open space designation would not hinder Avalon's ability to meet its Regional Housing Needs Assessment goal of 81 residential units during the period of 2014 to 2021, as the housing units would likely be constructed in other areas of the City.

Overall population and housing impacts would not change when compared to the 2030 GP/LCP and impacts would remain less than significant.

Public Services

This conversion of the southern-most low density residential land use designation to the open space land use designation would not change population growth when compared to 2030 GP/LCP. Therefore, the potential impacts on police/fire staffing levels would remain the same when compared to the proposed project. Impacts on schools would not change, as this alternative's estimated student generation would remain at 212 students. Impacts to harbor services would not change given similar levels of population growth. As with the proposed 2030 GP/LCP, impacts would be less than significant.

Transportation and Circulation

Overall traffic impacts would not change when compared to the 2030 GP/LCP. Although converting the low density residential land use designation to the open space land use designation would remove one area's potential for residential growth, the growth would still occur within other more urbanized areas of the City. Thus, the total number of vehicle trips would not change when compared to the proposed project, and impacts would remain less than significant.

Utilities and Service Systems

This alternative would convert the southern-most low density residential land use designation to the open space land use designation. Although converting the low density residential land use designation to the open space land use designation would remove this area's potential for residential growth, the growth would still occur within other more urbanized areas of the City. Therefore, water and wastewater demand estimates would remain at 102 acre-feet/year and 0.25 million gallons per day, respectively. Solid waste impacts would also remain at 1,018 tons of solid waste per year. Overall ~~solid waste~~ impacts ~~would~~ related to water, wastewater and solid waste would remain less than significant ~~and unavoidable, as this alternative would not include a location for a new or expanded landfill. As a result, the existing landfill is still likely to reach capacity in 2030~~.

6.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

This section discusses the environmentally superior alternative. Table 6-1 provides a summary comparison of the impacts of each of the project alternatives to those of the 2030 General Plan. Each of the alternatives discussed in this section has certain advantages and disadvantages as compared to the proposed 2030 General Plan, as summarized below.

- *The **No Project (no further development)** alternative could be considered environmentally superior because it would result in no increase in traffic, air pollution or noise, and no increase in demand for utilities or services. Furthermore, it would result in no physical impacts. On the other hand, this alternative would not achieve many of the 2030 General Plan objectives.*
- *The **No Project (1978 General Plan)** alternative would allow roughly the same amount of development to occur as would be allowed under the proposed 2030 General Plan. However, this alternative would eliminate development within the three proposed expansion areas. In addition, this alternative does not include the Pebbly Beach Specific Plan Area, the Lover's Cove Specific Plan Area, and a number of other land use designations. This alternative would reduce impacts in the identified expansion areas and reduce the potential for land use compatibility impacts. However, some of the benefits associated with infrastructure construction would not occur. The most notable being: (1) the expansion of the existing~~construction of a~~ landfill ~~(possibly within the Pebbly Beach Specific Plan area) to replace the existing Pebbly Beach Landfill scheduled to close in 2020~~; (2) the construction of various circulation improvements within the City Center area that would create safe routes to school, improve intersection functionality, improve parking availability, improve pedestrian access, and create transportation operating systems to expand transportation choices; and (3) the deployment of environmentally responsible waste-to-energy projects. Because the population forecasts for buildout under this alternative and the proposed project are anticipated to be similar, population-dependent impacts to infrastructure/utilities (such as water, wastewater, transportation and solid waste disposal) would be increased under this alternative when compared to the proposed 2030 General Plan.*

- *The **No Annexation** alternative would eliminate development in the three identified expansion areas and would therefore reduce direct ground disturbance impacts in this area (including biological resources, cultural resources, geology and hydrology). Per-capita based impacts (including air quality, population growth, public services, recreation, transportation and utilities) would not change, as the growth attributed to the expansion areas would be concentrated within the City's existing boundaries. Impacts related to aesthetics, hazards, and land use compatibility would be incrementally reduced. Overall environmental impacts would be incrementally reduced when compared the proposed 2030 GP/LCP.*
- *The **Increased Open Space** alternative would eliminate the southernmost portions of the low-density residential land use designation in favor of the open space land use designation. All other land use designations proposed as part of the 2030 GP/LCP would remain unchanged and the growth associated with conversion of the low-density residential would be concentrated in other more urbanized areas or the remaining low-density residential land use designations. Direct ground disturbance impacts (including biological resources, cultural resources, geology, and hydrology) would be incrementally reduced. Per-capita based impacts (including air quality, population growth, public services, recreational, transportation, and utilities) would not change, as the growth attributed to conversion of the low-density residential*

would be concentrated in other areas of the City. Overall environmental impacts would be similar when compared to the proposed 2030 GP/LCP.

Although the No Project (no further development) alternative is not feasible (from either a legal or practical standpoint) and may not be desirable in many respects, it can be considered environmentally superior overall since it would avoid all impacts associated with future growth. However, it would not meet RHNA requirements or housing needs identified in the City's Housing Element, nor would it achieve many of the existing General Plan's goals and policies. Among the remaining alternatives, the No Annexation Alternative could be considered environmentally superior because it would facilitate the greatest reduction in direct ground disturbance impacts over the largest area. It would also avoid the indirect impacts associated with constructing and maintaining infrastructure improvements in outlying areas adjacent to the City. In addition, this alternative would meet the majority of the objectives of the proposed 2030 General Plan.

Table 6-1
Summary Comparison of 2030 General Plan Alternatives

Issue Area	2030 General Plan	No Project (No Further Development)	No Project (1978 General Plan)	No Annexation	Increased Open Space
Aesthetics	Class III	Class IV / –	Class III / –	Class III / –	Class III / –
Air Quality	Class III	Class IV / –	Class III / –	Class II / +	Class III / =
Biological Resources	Class III	Class IV / –	Class III / –	Class III / –	Class III / –
Cultural Resources	Class II	Class IV / –	Class II / –	Class II / +	Class II / +
Geology and Soils	Class II	Class IV / –	Class III / –	Class III / –	Class II / –
Greenhouse Gas	Class III	Class IV / –	Class III/ –	Class III / –	Class III / –
Hazards/Hazardous Materials	Class III	Class IV / –	Class III / –	Class III / –	Class III / =
Hydrology/Water Quality	Class III	Class IV / –	Class III / =	Class III / –	Class III / –
Land Use/Planning	Class III	Class IV / –	Class III / –	Class III / –	Class III / –
Noise	Class III	Class IV / –	Class III / –	Class III / +	Class III / =
Population and Housing	Class III	Class IV / –	Class III / +	Class III / =	Class III / =
Public Services	Class III	Class IV / –	Class III / +	Class III / =	Class III / =
Transportation/Circulation	Class III	Class IV / –	Class III/ +	Class III / –	Class III / =
Utilities/Service Systems	Class III	Class III /–	Class III / +	Class III / =	Class III / =

Class I = significant and unavoidable
Class II = significant but mitigable impact
Class III = less than significant impact
Class IV = no impact
** Impact classifications are shown for the greatest impact within the issue area (i.e., if Class II and III impacts were identified within the issue area, the table indicates the overall impact within that issue areas as Class II).*
– impact would be lower than that of the 2030 General Plan
+ impact would be greater than that of the 2030 General Plan

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7.1 REFERENCES

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7.1.2 Persons Contacted

Bray, Brian, Harbor Master, Avalon Harbor Department, email communication, November 21, 2012.

Carlson, Joe, Avalon Schools Principal, phone conversation, October 27, 2010.

Carson, Hugh, Sheriff's Dispatcher, Los Angeles Sheriff's Department, Avalon Station, phone conversation, November 2, 2012.

Clary, David, Plant Manager/Chief Plant Operator, City of Avalon Wastewater Treatment Facility, email communication, November 19, 2012.

Cook, Amanda, Planning Director, City of Avalon, email communication, November 29, 2012.

Hite, Ron. District Manager – Catalina, Southern California Edison, email communication, November 9–19, 2012.

Krug, Mike, Assistant Fire Chief, Avalon Fire Department, phone conversation, October 31, 2012.

7.2 REPORT PREPARERS

This EIR was prepared by the City of Avalon with the assistance of Rincon Consultants, Inc., Fehr & Peers, and Veronica Tam and Associates. Consultant staff involved in the preparation of the EIR are listed below.

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8.0 COMMENTS and RESPONSES

This section includes comments received during the circulation of the Draft Environmental Impact Report (EIR) for the 2030 General Plan/Local Coastal Plan; responses to the comments on the Draft EIR; and corrections and information added to the Final EIR, where appropriate, in response to comments related to the proposed project's environmental effects.

The Draft EIR was circulated for a 45-day public review period that began on February 8, 2013 and ended March 25, 2013. The City received 4 comment letters on the Draft EIR and also received verbal comments. Commenters and the page number on which each commenter's letter or verbal comments can be found are listed below.

	Commenter	Page #
1.	Wendy Teeter	8-2
2.	David Singleton, Program Analyst, Native American Heritage Commission	8-10
3.	J. Paul DeMeyer, Senior Vice President, Real Estate, Santa Catalina Island Company	8-15
4.	Frank Vidales, Acting Chief, Forestry Division, Prevention Services Bureau, County of Los Angeles Fire Department	8-20
5.	Verbal Comments Received During Comment Period	8-25

Section 15088 of the CEQA Guidelines requires that "[t]he lead agency shall evaluate *comments on environmental issues* received from persons who reviewed the draft EIR and shall prepare a written response." (Italics added for emphasis.) Consistent with the Guidelines, the responses to comments focus on those comments that pertain to environmental issues.

The comment letters, verbal comments, and the City's responses follow. Each comment letter has been numbered sequentially and each separate issue raised by the commenter, if more than one, has also been assigned a number. The responses to each comment identify first the number of the comment letter, and then the number assigned to each issue (Response 2.1, for example, indicates that the response is for the first issue raised in Comment Letter 2).

Letter 1

-----Original Message-----
From: Teeter, Wendy [mailto:wteeter@arts.ucla.edu]
Sent: Thursday, February 07, 2013 7:15 PM
To: Amanda Cook
Subject: RE: Draft EIR and General Plan

Dear Amanda,
Thanks for your response and for forwarding to the City manager. I just saw the funding for a three year project reported in the newspaper as a new city project.

I did have some corrections that I thought I had sent, but are not reflected in this draft. I know it may not seem big, but Catalina has such a rich history. 1.1
The dates from Little Harbor are around 7800 B.P. (between 5,000-6,000 BC). We will be pushing that date back even farther as San Clemente and San Nicolas have dates each of 10,000 years ago. Please change the first sentence to reflect this well established date. If Rincon would like I can provide them with the references.
The Chumash are not likely predecessors of Catalina or any southern Channel Island. These are modern constructs and there is no biological evidence of replacement on this or any of the Channel Islands. The habitation in place 10,000 years ago is likely ancestral to the same people encountered by Cabrillo. I would just remove the sentence.
When the Spanish arrived we have no idea what villages were being inhabited other than the ones referred to in their chronicles. One of them being Avalon, Nájquqar (Two Harbors), and likely White's Landing or Empire Landing. The island was called Pimugna and probably one of the villages. We are looking for Spanish trade items that would support habitation at contact though, which will support habitation at Little Harbor. So much data is unpublished currently.
I would at least mention that Thomas Robbins received the grant to Catalina in 1846 from Governor Pio Pico and was consolidated by James Lick with the assistance of the US union soldiers that resided in Two Harbors.

Sigh…I just made changes on the attached. I found it misleading and too brief. I can add a few last sentences on the draft if it's okay. You may not want a lot in this section, but see if this might work and I'll finish it up for you.

~~Avalon is distinguished from other small towns by the natural beauty of its island location and its historic ambiance. The residents are enthusiastic about their community, value their cultural diversity, and take care to preserve the history and cultural resources.~~

The city of Avalon has a cultural heritage that stretches back thousands of years and spans many cultures which have inhabited Santa Catalina Island. Traces of Gabrielino/Tongva, Spanish, Mexican, and US cultural traditions can still be seen in Avalon today.

Earliest dated evidence of occupation on the island comes from Little Harbor at approximately 7800 B.P. (or between 5,000-6,000 BC). However, San Clemente and San Nicolas have dates reaching back 10,000 years ago. The four Southern Channel Islands (San Clemente, Santa Catalina, San Nicolas, and Santa Barbara) were inhabited by the Gabrielino/Tongva people, while the northern Channel Islands are identified as being Chumash. Over thousands of years people from the island s utilized the rich land and marine resources, as well as visited and traded with each other and the mainland. Fish, sea mammals, and soapstone were some of the items traded for chipping stone, deer, and other mainland items. When the Spanish arrived in 1542 under Juan Rodriguez Cabrillo, he reported rich, thriving villages eager to trade. He mentions visiting villages at Avalon Bay, Nájquqar (Two Harbors), and likely White's or Empire Landing. The island was called Pimugna. Even though Cabrillo named the island San Salvador in the name of the Spanish crown, it was renamed Santa Catalina when General Sebastian Viscaino visited on the eve of Saint Catherine's Day in 1602.

Visits to the island continued sporadically including Russian fur traders, adventure seekers, privateers, and miners. The island moved from Spanish to Mexican hands with Mexican Independence and Thomas Robbins received a grant to Catalina in 1846 from Governor Pio Pico. Many cattle and sheep were pastured on the island both in town and within the many coves as squatters. Title was clarified and consolidated by James Lick with the assistance of the US union soldiers that resided in Two Harbors during the Civil War. While Lick was unable to make owning the island profitable, George Shatto made a valiant attempt with his purchase of the island in 1887. He ordered the construction of the Hotel Metropole and sold lots on the flats near the hotel. It was Shatto's sister, Etta Whitney, who suggested Avalon as a better name than Shatto City with its romantic and mysterious tones.

1.1

While the start of Avalon was realized, Shatto could not make a meet his mortgage payments and the island reverted back to the James Lick trustees, who then sold it to William, Hancock, and Joseph Banning in 1892. Much of the infrastructure of Avalon was formed during the Banning Brothers tenure including the layout of streets and recreational pastimes. They created the stage coach roads around the island, built Eagles Nest Hunting Lodge in Middle Canyon, and started regular transportation to the island to bring the many tourists looking for a great escape from Los Angeles. …(I can finish up if you'd like).

~~Catalina has a rich history of inhabitation, dating back to 3,000-4,000 BC. The Gabrielino/ Tongva inhabited the island during the time of the Spanish, although it is thought that the Chumash were likely predecessors. When the Spanish arrived in the early 16th century, the~~

~~major population centers were in present day Avalon, Two Harbors, Toyon, Johnson's Landing, Little Harbor, and Whites Landing. With the Europeans came disease and epidemics, which devastated the native population. Spanish control of the island was relinquished when Mexico proclaimed independence in 1821, and the title to the land was transferred many times to private owners. During the 1800s, there was also a brief mining boom on the island. When Catalina fell under the ownership of George Shatto and Charles Sumner in 1887, they began to construct a city, which would soon be named Avalon. The cost of building Avalon became too great and the deed to the island once again began exchanging hands, which included the James Lick Trust, the William Banning Family, and the William Wrigley Jr. Family.~~

The term "cultural resource" means any tangible or observable evidence of past human activity, regardless of significance, found in direct association with a geographic location, including tangible properties possessing intangible traditional cultural values. Cultural resources include both archaeological (pre-historic) and historic resources.

Roughly, 2,000 archaeological sites ~~are thought~~have been recorded across ~~to exist on~~ the island including villages, tool manufacturing locations, soapstone quarries, and food refuse piles (middens)~~, with less about 1,000 having~~
~~been discovered to date~~. ~~Many sites have been destroyed or disturbed due to extensive pot hunting (which occurred from the late 1870s until the mid-1930s), and changing land use patterns.~~ Few have been well documented and some have unfortunately been disturbed by pot hunting and amateur excavations that started in the 1870s. Major collections from the island exist in places such as the Peabody Museum at Harvard University, the Smithsonian Natural History Museum, and the National Museum of the American Indian. The Catalina Island Conservancy and Santa Catalina Island Company are continually striving to~~ward~~ preserve~~ing~~ and protect~~ing~~ the ~~remaining~~ cultural resources on the island. 1.1

Three properties in Avalon are listed in the National Register of Historic Places: the Tuna Club of Avalon, the Peter Gano House (Holly Hill House), and the Wrigley Summer Cottage (Inn at Mt. Ada). In addition, there are a number of structures of local historical and architectural interest within Avalon, including:

- *Zane Grey Pueblo - 199 Chimes Tower Road*
- *Casino Building - 1 Casino Way*
- *Avalon Pleasure Pier*
- *Avalon Community Church - 236 Metropole*
- *El Encanto Marketplace - 101 Marilla*
- *Catalina Yacht Club*
- *Descanso/Third Street "Ship House"- 200 Descanso Avenue*
- *Avalon's Oldest House- 133 Vieudelou*
- *Liz Barlow House -130 Hiawatha Avenue*
- *Bird Park Aviary Buildings - 801 Avalon Canyon Road*
- *Catalina Country Club - 1 Country Club Drive*
- *St. Catherine of Alexandria Church - 800 Beacon Street*
- *Glenmore Plaza Hotel - 120 Sumner*

Goal

Preserve and protect sites of significant archaeological, historic, or architectural resources wherever feasible.

Policies

IV-38 Prevent the loss or compromise of significant archaeological, historical, and other cultural resources and landmarks located within the City.

IV-39 Provide public access to historic sites and communicate their historical significance to visitors.

IV-40 Encourage the rehabilitation and upkeep of structures identified as valuable to the City's significant architectural, historical, and cultural buildings and listed in the City's historic register.

Implementation Actions

Ensure that only qualified archaeologists that meet the Secretary of the Interior's standard of qualifications are used on projects (http://www.nps.gov/history/local-law/arch_stnds_9.htm) 1.2

- Require a professionally prepared archaeological report for any project located within a potential sensitive area.
- When significant archeological sites or artifacts are discovered on a site, coordinate professional archeologists, relevant state agencies, and concerned Native American tribes regarding preservation of sites or professional retrieval and preservation of artifacts prior to development of the site.
- Require a professional, qualified historian to conduct a literature search and/or survey for any project that entails demolition or modification of an existing structure that may be of historical value in relation to the City's cultural heritage.

Letter 1

COMMENTER: Wendy Teeter

DATE: February 7, 2013

RESPONSE:

Response 1.1

The commenter recommends some edits and suggests the addition of historical information to the Draft General Plan's Conservation Element regarding the setting for Cultural Resources. These edits include a revision to the date of occupation at Two Harbors and on Catalina Island in general, additional information about the groups that inhabited Catalina Island and the visitors to the island over time, additional details regarding the early history of Avalon, and background information regarding the archaeological sites in Avalon and on Catalina Island. These suggested edits are reflected in the Final General Plan (see pages IV-15 and IV-16) and also updated in the Final EIR (see pages 4.4-1). These changes do not alter any of the impact analysis in the Draft EIR. The following shows the changes made in the Final General Plan and in the Final EIR:

Final General Plan, Pages IV-15, 16:
~~"Avalon is distinguished from other small towns by the natural beauty of its island location and its historic ambiance. The residents are enthusiastic about their community, value their cultural diversity, and take care to preserve the history and cultural resources.~~
The city of Avalon has a cultural heritage that stretches back thousands of years and spans many cultures which have inhabited Santa Catalina Island. Traces of Gabrielino/Tongva, Spanish, Mexican, and US cultural traditions can still be seen in Avalon today.

Earliest dated evidence of occupation on the island comes from Little Harbor at approximately 7800 B.P. (or between 5,000-6,000 BC). However, San Clemente and San Nicolas have dates reaching back 10,000 years ago. The four Southern Channel Islands (San Clemente, Santa Catalina, San Nicolas, and Santa Barbara) were inhabited by the Gabrielino/Tongva people, while the northern Channel Islands are identified as being Chumash. Over thousands of years people from the island s utilized the rich land and marine resources, as well as visited and traded with each other and the mainland. Fish, sea mammals, and soapstone were some of the items traded for chipping stone, deer, and other mainland items. When the Spanish arrived in 1542 under Juan Rodriguez Cabrillo, he reported rich, thriving villages eager to trade. He mentions visiting villages at Avalon Bay, Nájquqar (Two Harbors), and likely White's or Empire Landing. The island was called Pimugna. Even though Cabrillo named the island San Salvador in the name of the Spanish crown, it was renamed Santa Catalina when General Sebastian Viscaino visited on the eve of Saint Catherine's Day in 1602.

Visits to the island continued sporadically including Russian fur traders, adventure seekers, privateers, and miners. The island moved from Spanish to Mexican hands with Mexican Independence and Thomas Robbins received a grant to Catalina in 1846 from Governor Pio Pico. Many cattle and sheep were pastured on the island both in town and within the many coves as squatters. Title was clarified and consolidated by James Lick with the assistance of the US union soldiers that resided in Two Harbors during the Civil War. While Lick was unable to make owning the island profitable, George Shatto made a valiant attempt with his purchase of the island in 1887. He ordered the construction of the Hotel Metropole and sold lots on the flats near the hotel. It was Shatto's sister, Etta Whitney, who suggested Avalon as a better name than Shatto City with its romantic and mysterious tones.

While the start of Avalon was realized, Shatto could not make a meet his mortgage payments and the island reverted back to the James Lick trustees, who then sold it to William, Hancock, and Joseph Banning in 1892. Much of the infrastructure of Avalon was formed during the Banning Brothers tenure including the layout of streets and recreational pastimes. They created the stage coach roads around the island, built Eagles Nest Hunting Lodge in Middle Canyon, and started regular transportation to the island to bring the many tourists looking for a great escape from Los Angeles.
~~Catalina has a rich history of inhabitation, dating back to 3,000-4,000 BC. The Gabrielino/ Tongva inhabited the island during the time of the Spanish, although it is thought that the Chumash were likely predecessors. When the Spanish arrived in the early 16th century, the major population centers were in present day Avalon, Two Harbors, Toyon, Johnson's Landing, Little Harbor, and Whites Landing. With the Europeans came disease and epidemics, which devastated the native population. Spanish control of the island was relinquished when Mexico proclaimed independence in 1821, and the title to the land was transferred many times to private owners. During the 1800s, there was also a brief mining boom on the island. When Catalina fell under the ownership of George Shatto and Charles Sumner in 1887, they began to construct a city, which would soon be named Avalon. The cost of building Avalon became too great and the deed to the island once again began exchanging hands, which included the James Lick Trust, the William Banning Family, and the William Wrigley Jr. Family.~~

The term "cultural resource" means any tangible or observable evidence of past human activity, regardless of significance, found in direct association with a geographic location, including tangible properties possessing intangible traditional cultural values. Cultural resources include both archaeological (pre-historic) and historic resources.

Roughly, 2,000 archaeological sites ~~are thought to exist on~~have been recorded across the island, including villages, tool manufacturing locations, soapstone quarries, and food refuse piles (middens).~~with less about 1,000 having been discovered to date. Many sites have been destroyed or disturbed due to extensive pot hunting (which occurred from the late 1870s until the mid-1930s), and changing land use patterns~~Few have been well documented and some have been disturbed by pot hunting and amateur excavations that started in the 1870s. Major collections from the island exist in places such as the Peabody Museum at Harvard University, the Smithsonian Natural History Museum, and the National Museum of the American Indian. The Catalina Island Conservancy and Santa Catalina Island Company are continually striving to~~ward~~ preserve~~ing~~ and protect~~ing~~ the ~~remaining~~ cultural resources on the island."

Final EIR, Pages 4.4-1, 2:

a. Prehistoric and Historical Background. ~~Catalina has a rich history of inhabitation, dating back to 3,000-4,000 BC. The Gabrielino/ Tongva inhabited the island during the time of the Spanish, although it is thought that the Chumash were likely predecessors. When the Spanish arrived in the early 16th century, the major population centers were in present day Avalon, Two Harbors, Toyon, Johnson's Landing, Little Harbor, and Whites Landing. With the Europeans came disease and epidemics, which devastated the native population. Spanish control of the island was relinquished when Mexico proclaimed independence in 1821, and the title to the land was transferred many times to private owners. During the 1800s, there was also a brief mining boom on the island. When Catalina fell under the ownership of George Shatto and Charles Sumner in 1887, they began to construct a city, which would soon be named Avalon. The cost of building Avalon became too great and the deed to the island once again began exchanging hands. The William Banning Family took over Catalina and in 1894 the Bannings formed the Santa Catalina Island Company as a family corporation. By 1909, the permanent population was estimated to be about 500. In 1913, the summer population was estimated to be as high as 10,000. On June 26, 1913, Avalon became incorporated as a city. In 1919, the Bannings lost their majority~~

~~interest in the island to the William Wrigley, Jr. family. In December 1941, the island was restricted to the public and became part of the war effort. The Office of Strategic Services, the Coast Guard, and the Signal Corps all had a presence on the island. In 1975, the Wrigley family gifted 42,135 acres of land to the Santa Catalina Island Conservancy through the Santa Catalina Island Company.~~
Earliest dated evidence of occupation on the island comes from Little Harbor at approximately 7800 B.P. (or between 5,000–6,000 BC). However, San Clemente and San Nicolas have dates reaching back 10,000 years ago. The four Southern Channel Islands (San Clemente, Santa Catalina, San Nicolas, and Santa Barbara) were inhabited by the Gabrielino/Tongva people, while the northern Channel Islands are identified as being Chumash. Over thousands of years people from the island s utilized the rich land and marine resources, as well as visited and traded with each other and the mainland. Fish, sea mammals, and soapstone were some of the items traded for chipping stone, deer, and other mainland items. When the Spanish arrived in 1542 under Juan Rodriguez Cabrillo, he reported rich, thriving villages eager to trade. He mentions visiting villages at Avalon Bay, Nájquqar (Two Harbors), and likely White's or Empire Landing. The island was called Pimugna. Even though Cabrillo named the island San Salvador in the name of the Spanish crown, it was renamed Santa Catalina when General Sebastian Viscaino visited on the eve of Saint Catherine's Day in 1602.

Visits to the island continued sporadically including Russian fur traders, adventure seekers, privateers, and miners. The island moved from Spanish to Mexican hands with Mexican Independence and Thomas Robbins received a grant to Catalina in 1846 from Governor Pio Pico. Many cattle and sheep were pastured on the island both in town and within the many coves as squatters. Title was clarified and consolidated by James Lick with the assistance of the US union soldiers that resided in Two Harbors during the Civil War. While Lick was unable to make owning the island profitable, George Shatto made a valiant attempt with his purchase of the island in 1887. He ordered the construction of the Hotel Metropole and sold lots on the flats near the hotel. It was Shatto's sister, Etta Whitney, who suggested Avalon as a better name than Shatto City with its romantic and mysterious tones.

While the start of Avalon was realized, Shatto could not make a meet his mortgage payments and the island reverted back to the James Lick trustees, who then sold it to William, Hancock, and Joseph Banning in 1892. Much of the infrastructure of Avalon was formed during the Banning Brothers tenure including the layout of streets and recreational pastimes. They created the stage coach roads around the island, built Eagles Nest Hunting Lodge in Middle Canyon, and started regular transportation to the island to bring the many tourists looking for a great escape from Los Angeles.

b. Archaeological and Historic Resources. Roughly, 2,000 archaeological sites ~~are thought to exist on~~have been recorded across the island, including villages, tool manufacturing locations, soapstone quarries, and food refuse piles (middens).~~with less about 1,000 having been discovered to date. Many sites have been destroyed or disturbed due to extensive pot hunting (which occurred from the late 1870s until the mid-1930s), and changing land use patterns~~Few have been well documented and some have unfortunately been disturbed by pot hunting and amateur excavations that started in the 1870s. Major collections from the island exist in places such as the Peabody Museum at Harvard University, the Smithsonian Natural History Museum, and the National Museum of the American Indian.

Response 1.2

The commenter suggests the addition of an implementation measure in the Draft General Plan that only qualified archaeologists that meet the Secretary of the Interior's standard of qualifications are used on projects.

The second implementation action below has been added to the Conservation Element in the Final General Plan (see pages IV-17, 18). This change has also been reflected in the Final EIR (see page 4.4-7). This change does not alter the impact analysis related to archaeological resources, and the impact remains less than significant with implementation of Mitigation Measure CR-1:

Implementation Actions

- Require a professionally prepared archaeological report for any project located within a potential sensitive area.
- Ensure that only qualified professional archaeologists that meet the Secretary of the Interior's standard of qualifications are used on projects located within a potentially sensitive area.

Letter 2

STATE OF CALIFORNIA Arnold Schwarzenegger, *Governor*

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
ds_nahc@pacbell.net
www.nahc.ca.gov
(916) 657-5390 - Fax

February 26, 2013

Ms. Amanda Cook, Planner
City of Avalon
P.O. Box 707
Avalon, CA 90704

RE: SCH# 2011091042 CEQA Notice of Completion – **City of Avalon General Plan / Local Coastal Plan Update** - draft Environmental Impact Report (DEIR); project located in the City of Avalon; Los Angeles County , California

Dear Ms. Cook:

The Native American Heritage Commission has reviewed the Notice of Preparation (NOP) regarding the above referenced project. The California Environmental Quality Act (CEQA) states that any project that causes a substantial adverse change in the significance of an historical resources, which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA guidelines 15064(b)). To adequately comply with this provision and mitigate project-related impacts on archaeological resources, the Commission recommends the following actions be required:

- ✓ Contact the appropriate Information Center for a record search to determine:
  - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources, which we know that it has.
  - The NAHC recommends that known cultural resources recorded on or adjacent to the APE be listed in the draft Environmental Impact Report.
- ✓ If an additional archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey. We suggest that this be coordinated with the NAHC, if possible. 2.1
  - The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure pursuant to California Government Code Section 6254.10.
- ✓ Contact has been made to the the Native American Heritage Commission for:
  - A Sacred Lands File Check, and cultural resources have been identified to your agency.
  - A list of appropriate Native American Contacts for consultation concerning the project site has been provided and is attached to this letter.
  - Lack of surface evidence of archeological resources does not preclude their subsurface existence once ground-breaking activity begins. If that occurs, the NAHC suggests that inadvertent discoveries be coordinated with the NAHC;
  - Project is also subject to California Government Code Section 65352.3 et seq. *(SB 18).*

Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.

NATIVE AMERICAN HERITAGE COMMISSION
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(916) 657-5390 - Fax

- Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans. 2.1
- Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,

Dave Singleton
Program Analyst
(916) 653-6251

CC: State Clearinghouse

Attachment: Tribal Contacts

Native American Contacts
Los Angeles County
February 26, 2013

LA City/County Native American Indian Comm
Ron Andrade, Director
3175 West 6th St, Rm. 403
Los Angeles , CA 90020
randrade@css.lacounty.gov
(213) 351-5324
(213) 386-3995 FAX

Gabrieleno/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693 Gabrielino Tongva
San Gabriel , CA 91778
GTTribalcouncil@aol.com
(626) 286-1632
(626) 286-1758 - Home
(626) 286-1262 -FAX

Owl Clan
Qun-tan Shup
48825 Sapaque Road Chumash
Bradley , CA 93426
mupaka@gmail.com
(805) 472-9536 phone/fax
(805) 835-2382 - CELL

Gabrielino Tongva Nation
Sam Dunlap, Cultural Resources Director
P.O. Box 86908 Gabrielino Tongva
Los Angeles , CA 90086
samdunlap@earthlink.net

(909) 262-9351 - cell

Ti'At Society/Inter-Tribal Council of Pimu
Cindi M. Alvitre, Chairwoman-Manisar
3094 Mace Avenue, Apt. B Gabrielino
Costa Mesa, , CA 92626
calvitre@yahoo.com
(714) 504-2468 Cell

Coastal Band of the Chumash Nation
Toni Cordero, Chairwoman
P.O. Box 4464 Chumash
Santa Barbara CA 93140
cordero44@charter.net
805-964-3447

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
Private Address Gabrielino Tongva
,
tattnlaw@gmail.com
310-570-6567

Gabrielino-Tongva Tribe
Bernie Acuna, Co-Chairperson
P.O. Box 180 Gabrielino
Bonsall , CA 92003
(619) 294-6660-work
(310) 428-5690 - cell
(760) 636-0854- FAX
bacuna1@gabrieinotribe.org

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2011091042; CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the City of Avalon General Plan / Local Coastal Plan Update; located in the City of Avalon; Los Angeles County, California.

Native American Contacts
Los Angeles County
February 26, 2013

Gabrielino-Tongva Tribe
Linda Candelaria, Co-Chairperson
P.O. Box 1800 Gabrielino
Bonsall , CA 92003
palmsprings9@yahoo.com
626-676-1184- cell
(760) 636-0854 - FAX

Gabrieleno Band of Mission Indians
Andrew Salas, Chairperson
P.O. Box 393 Gabrielino
Covina , CA 91723
(626) 926-4131
gabrielenoindians@yahoo.com

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2011091042; CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the City of Avalon General Plan / Local Coastal Plan Update; located in the City of Avalon; Los Angeles County, California.

Letter 2

COMMENTER: Dave Singleton, Program Analyst, Native American Heritage Commission (NAHC)

DATE: February 26, 2013

RESPONSE:

The commenter states that the Native American Heritage Commission (NAHC) has jurisdiction and special expertise, as a state agency, over affected Native American resources impacted by proposed projects. The commenter goes on to recommend several actions that could be useful in complying with the provisions of CEQA. The commenter also recommends contacting persons who have knowledge of the religious and cultural significance of the historic properties in the project area and includes a list of Native American contacts, and provides general information about existing regulations and best practices for cultural resource management.

The comments provided do not question or otherwise indicate changes to the analysis or conclusions of the Draft EIR. Cultural resources impacts and mitigation measures are discussed in Section 4.4, Cultural Resources, of the EIR. In addition, as discussed above in Response 1.2, the Final General Plan includes a number of implementation actions to prevent the loss or compromise of significant archaeological, historical, and other cultural resources and landmarks located within the City, including any Native American cultural resources.

Letter 3

SANTA CATALINA ISLAND COMPANY

March 25, 2013

Amanda Cook

Planning Director, City of Avalon

410 Avalon Canyon Road

P.O. Box 707

Avalon, CA 90704

RE: Avalon General Plan Update and EIR

Dear Amanda,

First of all, thank you for spearheading the update to Avalon's General Plan on behalf of the City and the community of Avalon. We appreciate the effort that you and your team have put in and are glad that the finish line is in sight.

Thank you also for providing the Santa Catalina Island Company ("SCICo") the opportunity to review and provide feedback to the draft General Plan and EIR. As you are well aware, we have actively engaged the City and its consultants in shaping the Plan's policies and recommendations, and are glad to see our mutual efforts setting the foundation for long-term benefits to the residents, visitors, businesses, and property owners of Avalon. 3.1

Via this letter, SCICo is formally responding to a specific open space policy pertaining to ridgelines. Section III.E (Open Space for the Protection of Scenic Resources) promotes smart development on the lower hillsides of Avalon Canyon in order to prevent sprawling developments at higher elevations. This is a position we are philosophically in agreement with. However, despite the elimination of language regarding a 200-foot buffer on these ridgelines, we still think that the policy and implementation actions (III-20) listed in this section are untenable.

To begin with, the identification of significant ridgelines in the draft update to the General Plan is premature. The land use elements of the prior General Plan only identified a few ridgelines for consideration without any discussion of recommended policy and implementation actions. As you are well aware, SCICo is the landowner of the majority of the hillsides and ridges in and around Avalon. In the research conducted for the update to the General Plan, we added dozens more hillsides and ridges that we believe should be considered and we have conducted extensive analyses to understand and categorize them based on numerous vista points across the City. What we have learned and shared with you and your team is that all ridgelines are not created equal. Some deserve higher levels of sensitivity and attention than others, and we have 3.2 3.3

consistently maintained that a comprehensive hillside/ridgeline vision and development strategy with specific development guidelines should be prepared. In that context, Figure III-2, with its simplistic identification of 18 ridgelines in a single category, without any analysis, does not reflect the nuance and sensitivity that a discussion of hillside management should be approached with. Further, SCICo strongly objects to the Policy III-20 language: "Preserve views of 18 prominent ridgelines in Upper Avalon Canyon, as depicted on Figure III-2, by restricting development in the vicinity of the ridgelines." The existing General Plan allows generally allows low density residential development across all the land comprising the hillside/ridgelines of concern, and we consider such language to be equivalent to a "taking" or down-zoning of our existing entitlements. We request that such language be removed from the document. 3.3 3.4

As the major landowner of the property identified, we are acutely concerned that the City, at least on this particular issue, has not engaged us to the extent we would expect. We all recognize that granularity or otherwise delving into details is not one of the virtues of a General Plan, and reiterate our premise that the community would be better served if the City does not attempt to use the General Plan as the vehicle to manage hillsides. The effort is complex and requires a fine-grained approach that a General Plan by definition is unable to provide. We would, instead, propose an implementation mechanism akin to the City Center visioning and planning effort that we have successfully partnered on. SCICo, the Conservancy, City leadership, and selected stakeholders should convene as a task force charged with identifying the principles, standards, and guidelines for hillside management. We would be pleased to again volunteer in facilitating this exercise. 3.5 3.6

We look forward in continuing to work with you in your efforts to finalize and adopt the General Plan.

Sincerely,

J. Paul DeMyer

Sr. Vice President, Real Estate

Santa Catalina Island Company

Letter 3

COMMENTER: J. Paul DeMeyer, Senior Vice President, Real Estate, Santa Catalina Island Company

DATE: March 25, 2013

RESPONSE:

Response 3.1

The commenter suggests that Section III.E (Open Space for the Protection of Scenic Resources) of the Draft General Plan promotes smart development on the lower hillsides of Avalon Canyon in order to prevent sprawling developments at higher elevations and states that this is a position the commenter is philosophically in agreement with.

This comment is introductory in nature. No response is necessary.

Response 3.2

The commenter states an opinion that the policy and implementation actions listed in Section III.E of the Draft General Plan related to Policy III-20 (Preserve views of 18 prominent ridgelines in Upper Avalon Canyon) are untenable and that the identification of significant ridgelines in the General Plan is premature. The commenter notes that the prior General Plan only identified a few ridgelines and did not recommend policy or implementation actions for such ridgelines.

It should be noted that Policy III-20 of the General Plan and Figure III-2 have been updated to remove the "200 foot buffer" related to development near the prominent ridgelines. As such, the Final EIR has been updated as follows on page 4.1-14 to be consistent with the updated policy in the Draft General Plan which states, "Preserve views of 18 prominent ridgelines in Upper Avalon Canyon~~by restricting development within 200 horizontal feet of the ridgelines~~, as depicted on Figure III-2 of the 2030 General Plan/Local Coastal Plan."

As described in Section III. E of the Open Space Element in the Draft General Plan, it is the City's goal to retain as much as possible, the existing scenic hillsides for the community of Avalon and its visitors by preserving views of the 18 prominent ridgelines in Upper Avalon Canyon, as depicted on Figure III-2 of the Draft General Plan, by restricting development in the vicinity of the ridgelines. Avalon's ridgelines create and define the City's view corridors and scenic vistas and form the community's visual backdrop. (See Draft EIR, section 4.1.1 and Figure 4.1-2.) The Santa Catalina Island LCP also values and protects ridgelines. (See Draft EIR, section 4.1.1, page 4.1-9.)

Response 3.3

The commenter references research it conducted and submitted to the City on hillsides and ridges. The commenter concludes that some of the ridgelines deserve higher levels of sensitivity and attention than others, and that a comprehensive hillside/ridgeline vision and development strategy with specific development guidelines should be prepared. The City utilized the commenter's research on hillsides and ridgelines to supplement its own research to determine Avalon's prominent ridgelines and scenic hillside areas. This analysis included graphical depiction of the scenic hillsides as seen from lower elevations using both aerial and topographical maps as well as Google Earth imagery. Utilizing this analysis, along with the research conducted by the commenter, the City determined 18 prominent ridgelines and

mapped those ridgelines (see Figure III-2 in the Open Space Element of the Draft General Plan). The Draft General Plan, see Implementation Action on page III-8 of the Open Space Element, suggests that in order to carry out the policy to preserve views of 18 prominent ridgelines in Upper Avalon Canyon, a Scenic Hillside Restricted Zone should be established and appropriate development standards should be developed to restrict development from unnecessarily encroaching on scenic hillsides. This implementation action is consistent with the commenter's suggestion that a comprehensive hillside/ridgeline vision and development strategy with specific development guidelines should be prepared.

Response 3.4

The commenter objects to Policy III-20 and suggests it be removed as it would be equivalent to a "taking" or down-zoning of the Santa Catalina Island Company's existing entitlements.

As described in the Draft General Plan's Open Space Element, the goal of Policy III-20 is to retain as much as possible, the existing scenic hillsides for the community of Avalon and its visitors. The commenter's suggestion pertains to the merits of the Draft General Plan (the proposed project) in an operational and economic context, rather than their potential environmental effects.

The commenter does not address, question or challenge the assumptions, information, analysis or conclusions in the Draft EIR. It should be noted that Policy III-20 and the associated implementation action in the Draft General Plan are intended to provide general guidelines for future development to preserve views of prominent ridgelines in Upper Avalon Canyon. Specific details of how to zone the areas in and around the prominent ridgelines would be achieved by establishing a Scenic Hillside Restricted Zone and appropriate development standards to restrict development as part of the implementation action. The policy does not take away any development rights for properties on which designated ridgelines are located. Rather, it simply requires that future development be sensitive to the importance of preserving ridgeline views.

Response 3.5

The commenter states a concern that the Santa Catalina Island Company (SCICo) has not been engaged by the City to the extent they expected in regard to ridgeline protection.

Development of the draft 2030 GP/LCP entailed a 24-moth process, which included a series of meetings with City staff, members of the public and key stakeholders. The City also held five public workshops with the Planning Commission and the City Council to gather input from the community on the direction of the General Plan. (See Draft EIR, section 1.2, p. 1-2.)

Response 3.6

The commenter suggests that the community would be better served if the City does not attempt to use the General Plan as the vehicle to manage hillsides. Therefore, the commenter suggests that an implementation mechanism similar to the City Center visioning and planning effort and that SCICo, the Conservancy, City leadership, and selected stakeholders should convene as a task force charged with identifying the principles, standards, and guidelines for hillside management.

As described in the Draft General Plan Open Space Element page III-8, the implementation action for the protection of scenic resources is to establish a Scenic Hillside Restricted Zone and appropriate development standards to restrict development from unnecessarily encroaching on scenic hillsides. The Draft General Plan does not provide the exact standards to restrict

development, but instead establishes a mechanism to development those standards through implementation of a Scenic Hillside Restricted Zone which would become a part of the City's Zoning Code.

The commenter's suggestion that stakeholders should convene as a task force to identify the principles, standards and guidelines related to a Scenic Hillside Restricted Zone is consistent with this implementation action and would be encouraged in order to implement the goals and policies of the Draft General Plan.

Letter 4

COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294
(323) 881-2401

DARYL L. OSBY
FIRE CHIEF
FORESTER & FIRE WARDEN

March 21, 2013

Amanda Cook, Planner
Planning Department
City of Avalon
410 Avalon Canyon Road, P.O. Box 707
Avalon, CA 90704

Dear Ms. Cook:

DRAFT ENVIRONMENTAL IMPACT REPORT, GENERAL PLAN/LOCAL COASTAL PLAN UPDATE, THE GP/LCP IS INTENDED TO FUNCTION AS A POLICY DOCUMENT TO GUIDE LAND USE DECISIONS WITHIN AVALON'S PLANNING AREA THROUGH THE YEAR 2030, CITYWIDE AVALON (FFER #201300029) 4.1

The Draft Environmental Impact Report has been reviewed by the Planning Division, Land Development Unit, Forestry Division and Health Hazardous Materials Division of the County of Los Angeles Fire Department. The following are their comments:

PLANNING DIVISION:

4.12 PUBLIC SERVICES

4.12.1 Setting

a. Fire Protection and Emergency Medical Service

Paragraph 3 under this section should be corrected as follows: 4.2

The majority of 911 calls in Avalon consist of emergency medical and rescue calls (PMC, 2006). Response times are within the National Fire Protection Association (NFPA) guidelines, which set forth a response time of six minutes within city limits. ~~The County~~

~~response time is 5.4~~ According to the CFPD, during 2012, the CFPD had an average emergency response time of 2.2 minutes for first arriving units and the Avalon Fire Department response time is two minutes (PMC, 2006). 4.2

LAND DEVELOPMENT UNIT:

1. The County of Los Angeles Fire Department, Land Development Unit appreciates the opportunity to comment on this project. The Land Development Unit does not have specific requirements for the "General Plan/Local Coastal Plan Update." Any new development within the County of Los Angeles Fire Department jurisdiction will be required to meet all applicable and current codes for access and water system requirements. The current fire codes for access and water are located in the 2011 County of Los Angeles Fire Code Chapter 5 and Appendix B & C. 4.3

2. The development of this project must comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows and fire hydrants.

3. This area is located within the area described by the Forester and Fire Warden as a Fire Zone 4, Very High Fire Hazard Severity Zone (VHFHSZ).

4. Access roads shall be maintained with a minimum of 10 feet of brush clearance on each side. Fire access roads shall have an unobstructed vertical clearance clear-to-sky with the exception of protected tree species. Protected tree species overhanging fire access roads shall be maintained to provide a vertical clearance of 13 feet 6 inches. 4.4

5. Should any questions arise regarding access and water systems requirements within the area served by the County of Los Angeles Fire Department, please contact the County of Los Angeles Fire Department, Land Development Unit Inspector, Wally Collins, at (323) 890-4243.

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

1. The statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources and the County Oak Tree Ordinance. 4.5

2. The areas germane to the statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division have been addressed.

HEALTH HAZARDOUS MATERIALS DIVISION:

1. The Health Hazardous Materials Division has no objection to the proposed project. 4.5

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

FRANK VIDALES, ACTING CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

FV:ij

Letter 4

COMMENTER: Frank Vidales, Acting Chief, Forestry Division, Prevention Services Bureau, County of Los Angeles Fire Department

DATE: March 21, 2013

RESPONSE:

Response 4.1

This comment is introductory in nature. No response is required.

Response 4.2

The commenter recommends a change regarding response times for the Consolidated Fire Protection District of Los Angeles County (CFFD) personnel.

The suggested edit is related to the setting for public facilities and the change would not affect the impact analysis contained in the Draft EIR. The change is reflected on page 4.12-1 of the Final EIR:

The majority of 911 calls in Avalon consist of emergency medical and rescue calls (PMC, 2006). Response times are within the National Fire Protection Association (NFPA) guidelines, which set forth a response time of six minutes within city limits. According to the CFPD, during 2012, the CFPD had an average emergency response time of 2.2 minutes for first arriving units ~~The County response time is 5.4 minutes~~ and the Avalon Fire Department response time is two minutes (PMC, 2006).

Response 4.3

The commenter states that any new development within the County of Los Angeles Fire Department jurisdiction will be required to meet all applicable and current codes for access and water system requirements.

This comment is consistent with the impacts analysis for fire protection services in the Draft EIR which states that implementation of General Plan policies (including requiring all new development within the City to comply with applicable provisions of the Uniform Fire Code) and compliance with the existing building and fire codes would address potential wild fire hazards associated with potential new development. (See Draft EIR, p. 4.7-9, Impact Haz-5.) Thus, significant impacts would not occur.

Response 4.4

The commenter states that the City is located in a Very High Fire Hazard Severity Zone and that access roads shall be maintained with minimum of 10 feet of brush clearance on each side, have an unobstructed vertical clearance clear-to sky, with the exception of protected tree species. And that protected tree species overhanging fire access roads shall be maintained to provide a vertical clearance of 13 feet 6 inches.

As described on page 4.12-6 of the Draft EIR, new development sited in high fire hazard areas would be required to adhere to standard requirements set forth by the California Building Code (CBC) with City of Avalon amendments. Consistent with the commenter's statement, the Draft

EIR states that the entire City is designated as a very high fire hazard zone. Therefore, any development in the City would be sited in very high fire hazard zones and would be required to adhere to applicable policies (including those described by the commenter regarding brush clearance). Adherence to standard requirements would minimize the risks of fire hazards. Further, the following policies are included in the Draft General Plan such that any new development is equipped with appropriate fire access roads and maintains appropriate brush clearance (consistent with the commenter's suggestion):

VII-13 *Require that new development in mountainous brush areas be supplied with adequate water supply and street dimensions are standardized to meet emergency access requirements.*

VII-14 *Require maintenance of native brush and other vegetation in the mountainous areas of the City in compliance with the Uniform Fire Code.*

Response 4.5

The commenter states that the Forestry Division and the Health Hazardous Materials Division of CFFD have no objections or comments to the Draft General Plan or the Draft EIR as issues related to these divisions have been addressed.

Comment noted.

5. Verbal Comments Received During Public Comment Period

COMMENTER: Multiple

RESPONSE:

Response 5.1

During the public review period for the Draft EIR, the City conducted a public hearing (held on March 19, 2013 during a Special Joint Meeting of the City Council and Planning Commission). During the public hearing, three parcels located on Whittley Avenue in the City Center area of Avalon were discussed. In the Draft General Plan that was reviewed in the Draft EIR, these three adjacent parcels were proposed to be changed from "High Density Residential" (under the current General Plan land use designation) to "Commercial" under the proposed Draft 2030 General Plan/Local Coastal Plan. Comments by the public and by the City Council suggested that these parcels were more appropriately designated as "High Density Residential" for the proposed Land Use Map (consistent with their current use and current designation under the City's existing General Plan and Zoning Code) rather than being designated as "Commercial". Therefore, in the Final EIR, the proposed General Plan Land Use Map (see Figures 2-4 and 2-5 in the Final EIR) has been revised/updated accordingly to reflect the comments received that these three parcels be designated as "High Density Residential".

This updated/revised land use designation for the three parcels on Whittley Avenue would not result in new significant impacts or a substantial increase in the severity of environmental impacts, and, therefore, would not require additional mitigation measures or alternatives to the proposed project. In fact, the updated/revised land use designation does not alter any of the analysis in the EIR. Further, the updated designation of "High Density Residential" on these three parcels, is consistent with the current designation and the current uses onsite, and thus no change would occur compared to existing conditions. Recirculation of an EIR is not required when new information makes insignificant changes to an adequate EIR (CEQA Guidelines Section 15088.5(b)).

Response 5.2

During the public review period for the Draft EIR, the City reviewed the proposed land use of the area around Bird Park Canyon for consistency with the proposed Housing Element. In the Draft General Plan that was reviewed in the Draft EIR, the parcels in Bird Park Canyon were proposed to be changed from "Low Density Residential" (under the current General Plan land use designation) to "Resort Recreational Low Density" under the Draft 2030 General Plan/Local Coastal Plan. In reviewing the land uses and the Housing Element, it was determined that this site would be more appropriately designated as "High Density Residential" consistent with the findings of the Draft Housing Element rather than "Resort Recreational Low Density". The "High Density Residential" designation in the 2030 General Plan/Local Coastal Plan would allow for multi family dwelling units (similar to the type of development that currently exists in Bird Park Canyon). On the other hand, the new "Resort Recreational Low Density" designation in the 2030 General Plan/Local Coastal Plan would allow uses associated with the resort character of Avalon and low density residential housing uses. It was determined by the City that the site would be more appropriately designated as "High Density Residential" rather than "Resort Recreational Low Density" and thus the site could accommodate additional housing opportunities including providing housing units that would assist the City in reaching its RHNA numbers as discussed in the Housing Element. The proposed land use designation change of the area within Bird Park Canyon in the Final EIR to "High Density Residential" would mean that the proposed use of the area is consistent with their current use and somewhat similar to the existing residential

designation (though at a higher allowed density) under the City's existing General Plan and Zoning Code. Thus, in the Final EIR the updated Land Use Map (see Figure 2-4 in the Final EIR) has been revised to reflect the City's determination that this area be designated as "High Density Residential".

This updated/revised land use designation for the area in Bird Park Canyon would not result in new significant impacts or a substantial increase in the severity of environmental impacts, and, therefore, would not require additional mitigation measures or alternatives to the proposed project. In fact, the updated/revised land use designation does not alter any of the analysis in the EIR. Further, the updated designation of "High Density Residential" on the area in Bird Park Canyon is somewhat consistent with the current residential designation and the current uses onsite, and thus no change would occur compared to existing conditions. This designation as "High Density Residential" was also considered in the Draft Housing Element. This change makes the Housing Element and Land Use Element consistent. Recirculation of an EIR is not required when new information makes insignificant changes to an adequate EIR (CEQA Guidelines Section 15088.5(b)).

Response 5.3

During the public review period for the Draft EIR, the City conducted a public hearing (held on March 19, 2013 during a Special Joint Meeting of the City Council and Planning Commission). During the public hearing, it was announced that the City had entered into a new contract with CR&R, Inc. to provide solid waste and landfill services. In the Draft EIR (see Section 4.14, *Utilities*) it was anticipated that the landfill would reach capacity and close by the year 2020. Thus, it was determined in the Draft EIR that the proposed General Plan/Local Coastal Plan and the associated population growth (which would generate an additional 1.96 tons/day of solid waste compared to existing conditions) would result in significant impact related to solid waste as the landfill was anticipated to reach capacity and close by the year 2020. However, during the public review period, it was determined that under the City's new disposal agreement with CR&R (dated March 20, 2013), the life and capacity of the landfill would be extended to the year 2033 on account of a larger baler that would be installed at the landfill site. Additionally, CR&R has agreed to pay for up to $200,000 in planning costs to raise the height of the landfill which, when accomplished, would add additional years to the landfill. Finally, CR&R and the City are currently working on an energy to power plant that would be used to further extend the life of the landfill. These updates to the existing conditions related to the landfill have been revised in the Final EIR (see page 4.14-4) and the impact analysis has been updated with the new closure date (anticipated to be 2033 rather than 2020 as discussed in the Draft EIR). Based on this expanded capacity and closure date of the landfill, the impacts have been reduced from a significant and unavoidable impact (as stated in the Draft EIR) to a less than significant impact in the Final EIR as the landfill facility would have sufficient capacity to serve the daily throughput of solid waste generated by the 2030 population (see pages 4.14-9 and 4.14-10). This updated impact determination and the associated analysis is also reflected in the discussion of solid waste impacts related to each of the alternatives discussed in Section 6.0, *Alternatives*.

This updated/revised impact determination related to solid waste and the additional capacity and extended date for closure related to the landfill facility would not result in new significant impacts or a substantial increase in the severity of environmental impacts, and, therefore, would not require additional mitigation measures or alternatives to the proposed project. In fact, the impacts are reduced compared to the previous conditions (where the landfill was anticipated to close by the year 2020).

Appendix A

Notice of Preparation and NOP Responses

Notice of Preparation

TO:	State Clearinghouse	FROM:	City of Avalon
	1400 Tenth Street		410 Avalon Canyon Road
	Sacramento, CA		P.O. Box 707
	95814		Avalon, CA 90704

Subject: **Notice of Preparation of a Draft Environmental Impact Report**

The City of Avalon will be the Lead Agency for the preparation of an environmental impact report (EIR) for a proposed update of the City of Avalon General Plan / Local Coastal Plan. The proposed project involves the update of the General Plan that currently serves as the blueprint for the development of the City and an update to the Local Coastal Plan which serves to demonstrate how the City will protect coastal resources. The General Plan / Local Coastal Plan elements will be updated with goals, policies, and implementation measures that reflect the current needs and preferences of the community. The land use map will also be updated.

The City intends to emphasize infill development and reuse of developed lands within the current city limits over the life of the General Plan / Local Coastal Plan (through 2030). However, as part of the General Plan / Local Coastal Plan update, the City is also considering certain areas outside the current City limits for inclusion within the City's Sphere of Influence and for future development. These include:

- **Expansion Area No. 1**: The landfill and quarry area (Parcel # 7480-045-033) south of the Pebbly Beach area. This area would be designated to facilitate public-infrastructure uses with the potential to transition over time to more visitor-serving uses as part of a Pebbly Beach Specific Plan Overlay District.
- **Expansion Area No. 2**: Catalina Island Company land (various parcels) between Hamilton Cove and the Divide Road. The land would be designated to facilitate Resort/Recreational land uses.
- **Expansion Area No. 3**: Catalina Island Conservancy land (Parcels #7480-045-013 and #7480-045-014) located between the City limits separating Pebbly Beach and the eastern boundary of Avalon Canyon. The land would be utilized for open space preservation.

The proposed General Plan land use diagram is attached.

The Draft EIR will be a program EIR that examines each of the issue areas on the City's environmental checklist. Issues to be examined include:

- Aesthetics
- Agriculture/Forest Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology
- Greenhouse Gases
- Hazards/Hazardous Materials
- Hydrology/Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Transportation/Traffic
- Utilities/Service Systems

We need to know the views of your agency as to the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency may need to use the EIR prepared by our agency when considering your permit or other approval of certain aspects of the project.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to Amanda Cook, Planning Director, at the address shown above or at planning@cityofavalon.com. Ms. Cook can be reached at (310) 510-0220, ext. 110. We will need the name for a contact person in your agency. Materials related to the General Plan / Local Coastal Plan EIR are available for review at the City of Avalon Planning Department, Avalon City Hall, 410 Avalon Canyon Road, Avalon, CA 90704. Background materials can also be viewed online at http://www.cityofavalon.com/.

The City will hold an EIR scoping meeting on the General Plan / Local Coastal Plan Update at 6 PM on Tuesday, September 20, 2011. The meeting will be held in the City Council Chambers at Avalon City Hall, 410 Avalon Canyon Road. The purpose of the meeting is to solicit input on the scope and content of the environmental analysis that will be included in the Draft EIR.

Project Title: City of Avalon 2030 General Plan / Local Coastal Plan

Project Sponsor: City of Avalon

Date September 12, 2011

Signature

Name Amanda Cook

Title Planning Director, City of Avalon

Telephone (310) 510-0220 x 110

JERRY BROWN
GOVERNOR

Cal E·M·A
CALIFORNIA EMERGENCY MANAGEMENT AGENCY

MIKE DAYTON
ACTING SECRETARY

September 30, 2011

Amanda Cook
City of Avalon
410 Avalon Canyon Road
P.O. Box 707
Avalon, CA 90704

RE: Notice of Preparation for a Draft Environmental Impact Report for the City of Avalon's General Plan/Local Coastal Plan Update, SCH # 2011091042

Dear Ms. Cook:

Thank you for the opportunity to comment on your Notice of Preparation for a Draft Environmental Impact Report (DEIR) for the city's general plan/local coastal plan update. In preparing the general plan and accompanying DEIR, the city should examine the sections of state planning law that involve potential hazards the city may face. For your information, I have underlined specific sections of state planning law where identification and analysis of hazards are discussed (see Attachment A).

Prior to the release of the draft general plan or within the DEIR, city staff or your consultants should examine each of the requirements in state planning law and determine if there are hazard issues within the community which the general plan should address. A table in the DEIR (or general plan) which identifies these specific issues and where they are addressed in the general plan would be helpful in demonstrating the city has complied with these requirements. If the DEIR determines that state planning law requirements have not been met, it should recommend that these issues be addressed in the general plan as a mitigation measure.

We note that state planning law includes a requirement for consultations with state agencies in regard to information related to hazards. Cal EMA would be happy to share all available information at our disposal to facilitate the city's ability to comply with state planning and environmental laws.

If you have any questions about these comments, please contact Monique Wilber at (916) 845-8266 or monique.wilber@calema.ca.gov.

Sincerely,

Dennis Castrillo

Dennis Castrillo
Environmental Officer

cc: State Clearinghouse

3650 SCHRIEVER AVENUE • MATHER, CA 95655
RECOVERY BRANCH
(916) 845-8200 [OFFICE] • (916) 845-8385 [FAX]

Attachment A

Hazards and State Planning Law Requirements

General Plan Consistency

65300.5. In construing the provisions of this article, the Legislature intends that the general plan and elements and parts thereof comprise an integrated, internally consistent and compatible statement of policies for the adopting agency.

Seven Mandated Elements

65302. The general plan shall consist of a statement of development policies and shall include a diagram or diagrams and text setting forth objectives, principles, standards, and plan proposals. The plan shall include the following elements:

(a) A land use element that designates the proposed general distribution and general location and extent of the uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses of land. The location and designation of the extent of the uses of the land for public and private uses shall consider the identification of land and natural resources pursuant to paragraph (3) of subdivision (d). The land use element shall include a statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the plan. The land use element shall identify and annually review those areas covered by the plan that are subject to flooding identified by flood plain mapping prepared by the Federal Emergency Management Agency (FEMA) or the Department of Water Resources. The land use element shall also do both of the following:

(1) Designate in a land use category that provides for timber production those parcels of real property zoned for timberland production pursuant to the California Timberland Productivity Act of 1982, Chapter 6.7 (commencing with Section 51100) of Part 1 of Division 1 of Title 5.

(2) Consider the impact of new growth on military readiness activities carried out on military bases, installations, and operating and training areas, when proposing zoning ordinances or designating land uses covered by the general plan for land, or other territory adjacent to military facilities, or underlying designated military aviation routes and airspace.

(A) In determining the impact of new growth on military readiness activities, information provided by military facilities shall be considered. Cities and counties shall address military impacts based on information from the military and other sources.

(B) The following definitions govern this paragraph:

(i) "Military readiness activities" mean all of the following:

(I) Training, support, and operations that prepare the men and women of the military for combat.

(II) Operation, maintenance, and security of any military installation.

(III) Testing of military equipment, vehicles, weapons, and sensors for proper operation or suitability for combat use.

(ii) "Military installation" means a base, camp, post, station, yard, center, homeport facility for any ship, or other activity under the jurisdiction of the United States Department of Defense as defined in paragraph (1) of subsection (e) of Section 2687 of Title 10 of the United States Code.

(b) A circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, any military airports and ports, and other local public utilities and facilities, all correlated with the land use element of the plan.

(c) A housing element as provided in Article 10.6 (commencing with Section 65580).

(d) (1) A conservation element for the conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. The conservation element shall consider the effect of development within the jurisdiction, as described in the land use element, on natural resources located on public lands, including military installations. That portion of the conservation element including waters shall be developed in coordination with any countywide water agency and with all district and city agencies, including flood management, water conservation, or groundwater agencies that have developed, served, controlled, managed, or conserved water of any type for any purpose in the county or city for which the plan is prepared. Coordination shall include the discussion and evaluation of any water supply and demand information described in Section 65352.5, if that information has been submitted by the water agency to the city or county.

(2) The conservation element may also cover all of the following:

(A) The reclamation of land and waters.

(B) Prevention and control of the pollution of streams and other waters.

(C) Regulation of the use of land in stream channels and other areas required for the accomplishment of the conservation plan.

(D) Prevention, control, and correction of the erosion of soils, beaches, and shores.

(E) Protection of watersheds.

(F) The location, quantity and quality of the rock, sand and gravel resources.

(3) Upon the next revision of the housing element on or after January 1, 2009, the conservation element shall identify rivers, creeks, streams, flood corridors, riparian habitats, and land that may accommodate floodwater for purposes of groundwater recharge and stormwater management.

(e) An open-space element as provided in Article 10.5 (commencing with Section 65560).

(f) (1) A noise element which shall identify and appraise noise problems in the community. The noise element shall recognize the guidelines established by the Office of Noise Control in the State Department of Health Care Services and shall analyze and quantify, to the extent practicable, as determined by the legislative body, current and projected noise levels for all of the following sources:

(A) Highways and freeways.

(B) Primary arterials and major local streets.

(C) Passenger and freight on-line railroad operations and ground rapid transit systems.

(D) Commercial, general aviation, heliport, helistop, and military airport operations, aircraft overflights, jet engine test stands, and all other ground facilities and maintenance functions related to airport operation.

(E) Local industrial plants, including, but not limited to, railroad classification yards.

(F) Other ground stationary noise sources, including, but not limited to, military installations, identified by local agencies as contributing to the community noise environment.

(2) Noise contours shall be shown for all of these sources and stated in terms of community noise equivalent level (CNEL) or day-night average level (Ldn). The noise contours shall be prepared on the basis of noise monitoring or following generally accepted noise modeling techniques for the various sources identified in paragraphs (1) to (6), inclusive.

(3) The noise contours shall be used as a guide for establishing a pattern of land uses in the land use element that minimizes the exposure of community residents to excessive noise.

(4) The noise element shall include implementation measures and possible solutions that address existing and foreseeable noise problems, if any. The adopted noise element shall serve as a guideline for compliance with the state's noise insulation standards.

(g) (1) A safety element for the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction, and other seismic hazards identified pursuant to Chapter 7.8 (commencing with Section 2690) of Division 2 of the Public Resources Code, and other geologic hazards known to the legislative body; flooding; and wild land and urban fires. The safety element shall include mapping of known seismic and other geologic hazards. It shall also address evacuation routes, military installations, peakload water supply requirements, and minimum road widths and clearances around structures, as those items relate to identified fire and geologic hazards.

(2) The safety element, upon the next revision of the housing element on or after January 1, 2009, shall also do the following:

(A) Identify information regarding flood hazards, including, but not limited to, the following:

(i) Flood hazard zones. As used in this subdivision, "flood hazard zone" means an area subject to flooding that is delineated as either a special hazard area or an area of moderate or minimal hazard on an official flood insurance rate map issued by the Federal Emergency Management Agency. The identification of a flood hazard zone does not imply that areas outside the flood hazard zones or uses permitted within flood hazard zones will be free from flooding or flood damage.

(ii) National Flood Insurance Program maps published by FEMA.

(iii) Information about flood hazards that is available from the United States Army Corps of Engineers.

(iv) Designated floodway maps that are available from the Central Valley Flood Protection Board.

(v) Dam failure inundation maps prepared pursuant to Section 8589.5 that are available from the Office of Emergency Services.

(vi) Awareness Floodplain Mapping Program maps and 200-year flood plain maps that are or may be available from, or accepted by, the Department of Water Resources.

(vii) Maps of levee protection zones.

(viii) Areas subject to inundation in the event of the failure of project or nonproject levees or floodwalls.

(ix) Historical data on flooding, including locally prepared maps of areas that are subject to flooding, areas that are vulnerable to flooding after wildfires, and sites that have been repeatedly damaged by flooding.

(x) Existing and planned development in flood hazard zones, including structures, roads, utilities, and essential public facilities.

(xi) Local, state, and federal agencies with responsibility for flood protection, including special districts and local offices of emergency services.

(B) Establish a set of comprehensive goals, policies, and objectives based on the information identified pursuant to subparagraph (A), for the protection of the community from the unreasonable risks of flooding, including, but not limited to:

(i) Avoiding or minimizing the risks of flooding to new development.

(ii) Evaluating whether new development should be located in flood hazard zones, and identifying construction methods or other methods to minimize damage if new development is located in flood hazard zones.

(iii) Maintaining the structural and operational integrity of essential public facilities during flooding.

(iv) Locating, when feasible, new essential public facilities outside of flood hazard zones, including hospitals and health care facilities, emergency shelters, fire stations, emergency command centers, and emergency communications facilities or identifying construction methods or other methods to minimize damage if these facilities are located in flood hazard zones.

(v) Establishing cooperative working relationships among public agencies with responsibility for flood protection.

(C) Establish a set of feasible implementation measures designed to carry out the goals, policies, and objectives established pursuant to subparagraph (B).

(3) After the initial revision of the safety element pursuant to paragraph (2), upon each revision of the housing element, the planning agency shall review and, if necessary, revise the safety element to identify new information that was not available during the previous revision of the safety element.

(4) Cities and counties that have flood plain management ordinances that have been approved by FEMA that substantially comply with this section, or have substantially equivalent provisions to this subdivision in their general plans, may use that information in the safety element to comply with this subdivision, and shall summarize and incorporate by reference into the safety element the other general plan provisions or the flood plain ordinance, specifically showing how each requirement of this subdivision has been met.

(5) Prior to the periodic review of its general plan and prior to preparing or revising its safety element, each city and county shall consult the California Geological Survey of the Department of Conservation, the Central Valley Flood Protection Board, if the city or county is located within the boundaries of the Sacramento and San Joaquin Drainage District, as set forth in Section 8501 of the Water Code, and the Office of Emergency Services for the purpose of including information known by and available to the department, the office, and the board required by this subdivision.

(6) To the extent that a county's safety element is sufficiently detailed and contains appropriate policies and programs for adoption by a city, a city may adopt that portion of the county's safety element that pertains to the city's planning area in satisfaction of the requirement imposed by this subdivision.

Consistency with Airport Land Use Plans

65302.3. (a) The general plan, and any applicable specific plan prepared pursuant to Article 8 (commencing with Section 65450), shall be consistent with the plan adopted or amended pursuant to Section 21675 of the Public Utilities Code.

Review of Safety Element

65302.5. (a) At least 45 days prior to adoption or amendment of the safety element, each county and city shall submit to the Division of Mines and Geology of the Department of Conservation

one copy of a draft of the safety element or amendment and any technical studies used for developing the safety element. The division may review drafts submitted to it to determine whether they incorporate known seismic and other geologic hazard information, and report its findings to the planning agency within 30 days of receipt of the draft of the safety element or amendment pursuant to this subdivision. The legislative body shall consider the division's findings prior to final adoption of the safety element or amendment unless the division's findings are not available within the above prescribed time limits or unless the division has indicated to the city or county that the division will not review the safety element. If the division's findings are not available within those prescribed time limits, the legislative body may take the division's findings into consideration at the time it considers future amendments to the safety element. Each county and city shall provide the division with a copy of its adopted safety element or amendments. The division may review adopted safety elements or amendments and report its findings. All findings made by the division shall be advisory to the planning agency and legislative body.

(1) The draft element of or draft amendment to the safety element of a county or a city's general plan shall be submitted to the State Board of Forestry and Fire Protection and to every local agency that provides fire protection to territory in the city or county at least 90 days prior to either of the following:

(A) The adoption or amendment to the safety element of its general plan for each county that contains state responsibility areas.

(B) The adoption or amendment to the safety element of its general plan for each city or county that contains a very high fire hazard severity zone as defined pursuant to subdivision (b) of Section 51177.

(2) A county that contains state responsibility areas and a city or county that contains a very high fire hazard severity zone as defined pursuant to subdivision (b) of Section 51177, shall submit for review the safety element of its general plan to the State Board of Forestry and Fire Protection and to every local agency that provides fire protection to territory in the city or county in accordance with the following dates as specified, unless the local government submitted the element within five years prior to that date:

(A) Local governments within the regional jurisdiction of the San Diego Association of Governments: December 31, 2010.

(B) Local governments within the regional jurisdiction of the Southern California Association of Governments: December 31, 2011.

(C) Local governments within the regional jurisdiction of the Association of Bay Area Governments: December 31, 2012.

(D) Local governments within the regional jurisdiction of the Council of Fresno County Governments, the Kern County Council of Governments, and the Sacramento Area Council of Governments: June 30, 2013.

(E) Local governments within the regional jurisdiction of the Association of Monterey Bay Area Governments: December 31, 2014.

(F) All other local governments: December 31, 2015.

(3) The State Board of Forestry and Fire Protection shall, and a local agency may, review the draft or an existing safety element and report its written recommendations to the planning agency within 60 days of its receipt of the draft or existing safety element. The State Board of Forestry and Fire Protection and local agency shall review the draft or existing safety element and may

offer written recommendations for changes to the draft or existing safety element regarding both of the following:
(A) Uses of land and policies in state responsibility areas and very high fire hazard severity zones that will protect life, property, and natural resources from unreasonable risks associated with wildland fires.
(B) Methods and strategies for wildland fire risk reduction and prevention within state responsibility areas and very high hazard severity zones.
(b) Prior to the adoption of its draft element or draft amendment, the board of supervisors of the county or the city council of a city shall consider the recommendations made by the State Board of Forestry and Fire Protection and any local agency that provides fire protection to territory in the city or county. If the board of supervisors or city council determines not to accept all or some of the recommendations, if any, made by the State Board of Forestry and Fire Protection or local agency, the board of supervisors or city council shall communicate in writing to the State Board of Forestry and Fire Protection or to the local agency, its reasons for not accepting the recommendations.

Open Space Plans

65560. (a) "Local open-space plan" is the open-space element of a county or city general plan adopted by the board or council, either as the local open-space plan or as the interim local open-space plan adopted pursuant to Section 65563.
(b) "Open-space land" is any parcel or area of land or water that is essentially unimproved and devoted to an open-space use as defined in this section, and that is designated on a local, regional or state open-space plan as any of the following:
(1) Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, bays and estuaries; and coastal beaches, lakeshores, banks of rivers and streams, and watershed lands.
(2) Open space used for the managed production of resources, including but not limited to, forest lands, rangeland, agricultural lands and areas of economic importance for the production of food or fiber; areas required for recharge of groundwater basins; bays, estuaries, marshes, rivers and streams which are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.
(3) Open space for outdoor recreation, including but not limited to, areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes, including access to lakeshores, beaches, and rivers and streams; and areas which serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, and scenic highway corridors.
(4) Open space for public health and safety, including, but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs and areas required for the protection and enhancement of air quality.

Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

Richard J. Bruckner
Director

September 21, 2011

Amanda Cook, Planning Director
City of Avalon
410 Avalon Canyon Road
PO Box 707
Avalon CA 90704-0707

SUBJECT: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR PROPOSED GENERAL PLAN/LOCAL COASTAL PLAN UPDATE

Dear Ms. Cook,

The Los Angeles County Department of Regional Planning appreciates the opportunity to comment on the Notice of Preparation (NOP) of a draft environmental impact report (DEIR) for the City's proposed General Plan/Local Coastal Plan update.

The County requests that the DEIR evaluate any potential impacts to unincorporated County territory being considered for inclusion within the City's Sphere of Influence and for future development, identified in the NOP as Expansion Areas 1, 2 and 3. The lands identified in the NOP for possible future development/annexation are included within the County's certified Santa Catalina Island Local Coastal Program, and contain natural resources such as Significant Ecological Areas, Major Ridgelines, and undeveloped locally-indigenous habitat that could be negatively impacted by development. As such, the County requests that you evaluate any potential impacts to agriculture/forest resources, biological resources, cultural resources, and hydrology/water quality that may occur in the Expansion Areas.

It is apparent that annexation would result in physical changes to the environment, as the NOP indicates the updated General Plan/Local Coastal Plan would designate future development in the Expansion Areas. We see an advantage to assessing the potential impacts early and in a cumulative way, instead of waiting and assessing the impacts during the annexation process or project by project. Expansion of the City's Sphere of Influence and designating future development in those areas are City actions that fit within the California Environmental Quality Act's broad definition of a project because they are a discretionary activity of a public agency that will unquestionably have an ultimate impact on the environment.

Please feel free to contact me at 213-974-6422 if you have any questions. Our offices are open Monday through Thursday from 7:00 a.m. to 5:00 p.m.

Respectfully submitted,

Gina M. Natoli
Supervising Regional Planner

GMN:KF:GMN

State of California -The Natural Resources Agency
DEPARTMENT OF FISH AND GAME
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.dfg.ca.gov

EDMUND G. BROWN, JR, Governor
CHARLTON H. BONHAM, Director

October 12, 2011

Ms. Amanda Cook
City of Avalon
410 Avalon Canyon Road
P.O. Box 707
Avalon, CA 90704
Fax #: (310) 510-2608

Subject: Notice of Preparation of a Draft Environmental Impact Report for the Update to the Avalon General Plan/Local Coastal Plan SCH # 2011091042, Los Angeles County

Dear Ms. Cook:

The Department of Fish and Game (Department) has received the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the update to the Avalon General Plan and Local Coastal Plan (Project Plan). The Project Plan will serve as the current blueprint for the development of the City and an update to the Local Coastal Plan which serves to demonstrate how the City will protect coastal resources.

The Department is California's Trustee Agency for fish and wildlife resources, holding these resources in trust for the People of the State pursuant to various provisions of the California Fish and Game Code. (Fish & G. Code, §§ 711.7, subd. (a), 1802.) The Department submits these comments in that capacity under the California Environmental Quality Act (CEQA). (See generally Pub. Resources Code, §§ 21070; 21080.4.) Given its related permitting authority under the California Endangered Species Act (CESA) and Fish and Game Code section 1600 *et seq.*, the Department also submits these comments likely as a Responsible Agency for the project under CEQA. (*Id.*, § 21069.)

The California Wildlife Action Plan, a recent Department guidance document, identified the following stressors affecting wildlife and habitats within the project area: 1) growth and development; 2) water management conflicts and degradation of aquatic ecosystems; 3) invasive species; 4) altered fire regimes; and 5) recreational pressures. With these stressors in mind, the Department has previously worked with the City in recommending conservation and protective measures for biological and botanical resources and looks forward to continuing this effort. Please let Department staff know if you would like a copy of the California Wildlife Action Plan to review.

To enable Department staff to adequately review and comment on the goals, policies and implementation measures of the Project Plan, we recommend the following information, where applicable, be included in the DEIR:

1. A complete, recent assessment of flora and fauna within and adjacent to the project area, with particular emphasis upon identifying endangered, threatened, and locally unique species and sensitive habitats.

   a) A thorough recent assessment of rare plants and rare natural communities, following the Department's Guidelines for Assessing Impacts to Rare Plants and Rare Natural Communities (See Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities at: http://www.dfg.ca.gov/habcon/plant/).
   b) A complete, recent assessment of sensitive fish, wildlife, reptile, and amphibian species. Seasonal variations in use within the project area should also be addressed. Recent, focused, species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with the Department and U.S. Fish and Wildlife Service.
   c) Endangered, rare, and threatened species to address should include all those species which meet the related definition under the CEQA Guidelines. (See Cal. Code Regs., tit. 14, § 15380.)
   d) The Department's Biogeographic Data Branch in Sacramento should be contacted at (916) 322-2493 (www.dfg.ca.gov/biogeodata) to obtain current information on any previously reported sensitive species and habitats, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code. Also, any Significant Ecological Areas (SEAs) or Environmentally Sensitive Habitats (ESHs) or any areas that are considered sensitive by the local jurisdiction that are located in or adjacent to the project area must be addressed.

2. A thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts. This discussion should focus on maximizing avoidance, and minimizing impacts.

   a) CEQA Guidelines, Section 15125(a), direct that knowledge of the regional setting is critical to an assessment of environmental impacts and that special emphasis should be placed on resources that are rare or unique to the region.
   b) Project impacts should also be analyzed relative to their effects on off-site habitats and populations. Specifically, this should include nearby public lands, open space, adjacent natural habitats, and riparian ecosystems. Impacts to and maintenance of wildlife corridor/movement areas, including access to undisturbed habitat in adjacent areas are of concern to the Department and should be fully evaluated and provided. The analysis should also include a discussion of the potential for impacts resulting from such effects as increased vehicle traffic, outdoor artificial lighting, noise and vibration and pest management.
   c) A cumulative effects analysis should be developed as described under CEQA Guidelines, Section 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.
   d) Impacts to migratory wildlife affected by the project should be fully evaluated including proposals to remove/disturb native and ornamental landscaping and

other nesting habitat for native birds. Impact evaluation may also include such elements as migratory butterfly roost sites and neo-tropical bird and waterfowl stop-over and staging sites.

e) All migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section 10.13). Sections 3503, 3503.5 and 3513 of the California Fish and Game Code prohibit take of birds and their active nests, including raptors and other migratory nongame birds as listed under the MBTA. Proposed project activities (including but not limited to, staging and disturbances to native and non-native vegetation, structures, and substrates) should occur outside of the avian breeding season which generally runs from March 1-August 31 (as early as January 1 for some raptors) to avoid take of birds or their eggs. If project activities cannot avoid the avian breeding season, nest surveys should be conducted and active nests should be avoided and provided with a minimum buffer as determined by a biological monitor (the Department generally recommends a minimum 300 foot nest avoidance buffer (or 500 feet for all active raptor nests).

f) Impacts to all habitats from City or County required Fuel Modification Zones (FMZ). Areas slated as mitigation for loss of habitat shall not occur within the FMZ.

3. A range of alternatives should be analyzed to ensure that alternatives to the proposed project are fully considered and evaluated. A range of alternatives which avoid or otherwise minimize impacts to sensitive biological resources including wetlands/riparian habitats, alluvial scrub and coastal sage scrub, should be included. Specific alternative locations should also be evaluated in areas with lower resource sensitivity where appropriate.

   a) Mitigation measures for project impacts to sensitive plants, animals, and habitats should emphasize evaluation and selection of alternatives which avoid or otherwise minimize project impacts. Compensation for unavoidable impacts through acquisition and protection of high quality habitat elsewhere should be addressed with off-site mitigation locations clearly identified.

   b) The Department considers Rare Natural Communities as threatened habitats having both regional and local significance. Thus, these communities should be fully avoided and otherwise protected from project-related impacts (Attachment).

   c) The Department generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species. Department studies have shown that these efforts are experimental in nature and largely unsuccessful.

4. An Incidental Take Permit (ITP) from the Department may be required if the project, project construction, or any project-related activity during the life of the project that will result in "take" as defined by the Fish and Game Code of any species protected by CESA. (Fish & G. Code, §§86, 2080, 2081, subd. (b), (c).) Early consultation with Department regarding potential permitting obligations under CESA with respect to the project is encouraged. (Cal. Code Regs., tit. 14, § 783.2, subd. (b).) It is imperative with these potential permitting obligations that the DEIR prepared by the Lead Agency in the present case includes a thorough and robust analysis of the potentially significant impacts to endangered, rare, and threatened species, and their habitat, that

may occur as a result of the proposed project. For any such potentially significant impacts the Lead Agency should also analyze and describe specific, potentially feasible mitigation measures to avoid or substantially lessen any such impacts as required by CEQA and, if an ITP is necessary, as required by the relevant permitting criteria prescribed by Fish and Game Code section 2081, subdivisions (b) and (c). The failure to include this analysis in the project environmental impact report could preclude the Department from relying on the Lead Agency's analysis to issue an ITP without the Department first conducting its own, separate lead agency subsequent or supplemental analysis for the project. (See, e.g., Cal. Code Regs., tit. 14, § 15096, subd. (f); Pub. Resources Code, § 21166.) For these reasons, the following information is requested:

a) Biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA Permit.
b) A Department-approved Mitigation Agreement and Mitigation Plan are required for plants listed as rare under the Native Plant Protection Act.

5. The Department opposes the elimination of watercourses (including concrete channels, blue-line streams and other watercourses not designated as blue-line streams on USGS maps) and/or the canalization of natural and manmade drainages or conversion to subsurface drains. All wetlands and watercourses, whether intermittent, ephemeral, or perennial, must be retained and provided with substantial setbacks which preserve the riparian and aquatic habitat values and maintain their value to on-site and off-site wildlife populations. The Department recommends a minimum natural buffer of 100 feet from the outside edge of the riparian zone on each side of drainage.

   a) The Department also has regulatory authority with regard to activities occurring in streams and/or lakes that could adversely affect any fish or wildlife resource. For any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) or a river or stream or use material from a streambed, the project applicant (or "entity") must provide written notification to the Department pursuant to Section 1602 of the Fish and Game Code. Based on this notification and other information, the Department then determines whether a Lake and Streambed Alteration (LSA) Agreement is required. The Department's issuance of an LSA is a project subject to CEQA. To facilitate issuance of an Agreement, if necessary, the environmental impact report should fully identify the potential impacts to the lake, stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the Agreement. Early consultation is recommended, since modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources. Again, the failure to include this analysis in the project's DEIR could preclude the Department from relying on the Lead Agency's analysis to issue an Agreement without the Department first conducting its own, separate lead agency subsequent or supplemental analysis for the project.

The Department supports any measure within the Project Plan area that will improve efforts to maximize the protection of biological and botanical resources during future implementation by the City. Thank you for this opportunity to provide comments. Please contact Mr. Scott Harris, Environmental Scientist at (626) 797-3170 if you should have any questions and for further coordination on the proposed project.

Sincerely,

Edmund Pert
for Regional Manager
South Coast Region

Attachment

cc: Department of Fish and Game
Ms. Leslie MacNair, Laguna Hills
Ms. Terri Dickerson, Laguna Niguel
Ms. Kelly Schmoker, Pasadena
Ms. Erinn Wilson, Huntington Beach
Mr. Scott Harris, Pasadena

State Clearinghouse, Sacramento

Sensitivity of Top Priority Rare Natural Communities in Southern California

Sensitivity rankings are determined by the Department of Fish and Game, California Natural Diversity Data Base and based on either number of known occurrences (locations) and/or amount of habitat remaining (acreage). The three rankings used for these top priority rare natural communities are as follows:

S1.# Fewer than 6 known locations and/or on fewer than 2,000 acres of habitat remaining.

S2.# Occurs in 6-20 known locations and/or 2,000-10,000 acres of habitat remaining.

S3.# Occurs in 21-100-known locations and/or 10,000-50,000 acres of habitat remaining.

The number to the right of the decimal point after the ranking refers to the degree of threat posed to that natural community regardless of the ranking. For example:

S1.1 = very threatened
S2.2 = threatened
S3.3 = no current threats known

Sensitivity Rankings (February 1992)

Rank	Community Name
S1.1	Mojave Riparian Forest
	Sonoran Cottonwood Willow Riparian
	Mesquite Bosque
	Elephant Tree Woodland
	Crucifixion Thorn Woodland
	Allthorn Woodland
	Arizonan Woodland
	Southern California Walnut Forest
	Mainland Cherry Forest
	Southern Bishop Pine Forest
	Torrey Pine Forest
	Desert Mountain White Fir Forest
	Southern Dune Scrub
	Southern Coastal Bluff Scrub
	Maritime Succulent Scrub
	Riversidean Alluvial Fan Sage Scrub
	Southern Maritime Chaparral
	Valley Needlegrass Grassland
	Great Basin Grassland
	Mojave Desert Grassland
	Pebble Plains
	Southern Sedge Bog
	Cismontane Alkali Marsh

S1.2	Southern Foredunes Mono Pumice Flat Southern Interior Basalt Flow Vernal Pool
S2.1	Venturan Coastal Sage Scrub Diegan Coastal Sage Scrub Riversidean Upland Coastal Sage Scrub Riversidean Desert Sage Scrub Sagebrush Steppe Desert Sink Scrub Mafic Southern Mixed Chaparral San Diego Mesa Hardpan Vernal Pool San Diego Mesa Claypan Vernal Pool Alkali Meadow Southern Coastal Salt Marsh Coastal Brackish Marsh Transmontane Alkali Marsh Coastal and Valley Freshwater Marsh Southern Arroyo Willow Riparian Forest Southern Willow Scrub Modoc-Great Basin Cottonwood Willow Riparian Modoc-Great Basin Riparian Scrub Mojave Desert Wash Scrub Engelmann Oak Woodland Open Engelmann Oak Woodland Closed Engelmann Oak Woodland Island Oak Woodland California Walnut Woodland Island Ironwood Forest Island Cherry Forest Southern Interior Cypress Forest Bigcone Spruce-Canyon Oak Forest
S2.2	Active Coastal Dunes Active Desert Dunes Stabilized and Partially Stabilized Desert Dunes Stabilized and Partially Stabilized Desert Sandfield Mojave Mixed Steppe Transmontane Freshwater Marsh Coulter Pine Forest Southern California Fellfield White Mountains Fellfield
S2.3	Bristlecone Pine Forest Limber Pine Forest

Department of Toxic Substances Control

Matthew Rodriquez
Secretary for
Environmental Protection

Deborah O. Raphael, Director
5796 Corporate Avenue
Cypress, California 90630

Edmund G. Brown Jr.
Governor

October 3, 2011

Ms. Amanda Cook, Planning Director
City of Avalon
410 Avalon Canyon Road
P.O. Box 707
Avalon, California 90704

NOTICE PREPARATION (NOP) OF A DRAFT ENVIRONMENTAL REPORT FOR THE CITY OF AVALON 2030 GENERAL PLAN / LOCAL COASTAL PLAN PROJECT, (SCH#2011091042), LOS ANGELES COUNTY

Dear Ms. Cook:

The Department of Toxic Substances Control (DTSC) has received your submitted Notice of Preparation for a draft Environmental Impact Report (EIR) for the above-mentioned project. The following project description is stated in your document: "the proposed project involves the update of the General Plan that currently serves as the blueprint for the development of the City of Avalon (City) and an update to the Local Coastal Plan which serves to demonstrate how the City will protect coastal resources. The General Plan / Local Coastal Plan elements will be updated with goals, policies, and implementation measures that reflect the current needs and preferences of the community. The land use map will also be updated. The City intends to emphasize refill development and reuse of developed lands within the current city limits over the life of the General Plan / Local Coastal Plan (through 2030)".

Based on the review of the submitted document DTSC has the following comments:

1) The EIR should evaluate whether conditions within the Project area may pose a threat to human health or the environment. Following are the databases of some of the regulatory agencies:

   - National Priorities List (NPL): A list maintained by the United States Environmental Protection Agency (U.S.EPA).

   - Envirostor (formerly CalSites): A Database primarily used by the California Department of Toxic Substances Control, accessible through DTSC's website (see below).

- Resource Conservation and Recovery Information System (RCRIS): A database of RCRA facilities that is maintained by U.S. EPA.

- Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS): A database of CERCLA sites that is maintained by U.S.EPA.

- Solid Waste Information System (SWIS): A database provided by the California Integrated Waste Management Board which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations.

- GeoTracker: A List that is maintained by Regional Water Quality Control Boards.

- Local Counties and Cities maintain lists for hazardous substances cleanup sites and leaking underground storage tanks.

- The United States Army Corps of Engineers, 911 Wilshire Boulevard, Los Angeles, California, 90017, (213) 452-3908, maintains a list of Formerly Used Defense Sites (FUDS).

2) The EIR should identify the mechanism to initiate any required investigation and/or remediation for any site within the proposed Project area that may be contaminated, and the government agency to provide appropriate regulatory oversight. If necessary, DTSC would require an oversight agreement in order to review such documents.

3) Any environmental investigations, sampling and/or remediation for a site should be conducted under a Workplan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous substance cleanup. The findings of any investigations, including any Phase I or II Environmental Site Assessment Investigations should be summarized in the document. All sampling results in which hazardous substances were found above regulatory standards should be clearly summarized in a table. All closure, certification or remediation approval reports by regulatory agencies should be included in the EIR.

4) If buildings, other structures, asphalt or concrete-paved surface areas are being planned to be demolished, an investigation should also be conducted for the presence of other hazardous chemicals, mercury, and asbestos containing materials (ACMs). If other hazardous chemicals, lead-based

paints (LPB) or products, mercury or ACMs are identified, proper precautions should be taken during demolition activities. Additionally, the contaminants should be remediated in compliance with California environmental regulations and policies.

5) Future project construction may require soil excavation or filling in certain areas. Sampling may be required. If soil is contaminated, it must be properly disposed and not simply placed in another location onsite. Land Disposal Restrictions (LDRs) may be applicable to such soils. Also, if the project proposes to import soil to backfill the areas excavated, sampling should be conducted to ensure that the imported soil is free of contamination.

6) Human health and the environment of sensitive receptors should be protected during any construction or demolition activities. If necessary, a health risk assessment overseen and approved by the appropriate government agency should be conducted by a qualified health risk assessor to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.

7) If the site was used for agricultural, livestock or related activities, onsite soils and groundwater might contain pesticides, agricultural chemical, organic waste or other related residue. Proper investigation, and remedial actions, if necessary, should be conducted under the oversight of and approved by a government agency at the site prior to construction of the project.

8) If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5). If it is determined that hazardous wastes will be generated, the facility should also obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942. Certain hazardous waste treatment processes or hazardous materials, handling, storage or uses may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA.

9) DTSC can provide cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies that are not responsible parties, or a Voluntary Cleanup Agreement (VCA) for private parties. For additional information on the EOA or VCA, please see www.dtsc.ca.gov/SiteCleanup/Brownfields, or contact Ms. Maryam Tasnif-Abbasi, DTSC's Voluntary Cleanup Coordinator, at (714) 484-5489.

If you have any questions regarding this letter, please contact Rafiq Ahmed, Project Manager, at rahmed@dtsc.ca.gov, or by phone at (714) 484-5491.

Sincerely,

Greg Holmes
Unit Chief
Brownfields and Environmental Restoration Program

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044
state.clearinghouse@opr.ca.gov.

CEQA Tracking Center
Department of Toxic Substances Control
Office of Environmental Planning and Analysis
P.O. Box 806
Sacramento, California 95812
Attn: Nancy Ritter
nritter@dtsc.ca.gov

CEQA # 3352

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net

September 19, 2011

RECEIVED
SEP 22 2011
BY:.....

Ms. Amanda Cook, Planner
City of Avalon
410 Avalon Canyon Road; P.O. Box 707
Avalon, CA 90704

Re: SCH#2011091042; CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR), for the ""**City of Avalon General Plan / Local Coastal Plan Update Project;**" located in the City of Avalon; Los Angeles County, California.

Dear Ms. Cook:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources pursuant to California Public Resources Code §21070 and affirmed by the Third Appellate Court in the case of EPIC v. Johnson (1985: 170 Cal App. 3rd 604). The NAHC wishes to comment on the proposed project.

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and interested Native American individuals as 'consulting parties' under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. The NAHC Sacred Lands File (SLF) search resulted as follows: **Native American cultural resources were identified** within one-half mile of some of the 'area of potential effect (APE) based on the USGS coordinates provided. Note: the absence of recorded Native American cultural resources does not preclude their existence. This area is known to the NAHC as being very culturally sensitive.

The NAHC "Sacred Sites,' as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254 (r).

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway.

Culturally affiliated tribes and individuals may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We strongly urge that you make contact with the list of Native American Contacts on the attached list of Native American contacts, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Pursuant to CA Public Resources Code § 5097.95, the NAHC requests that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties. The NAHC recommends *avoidance* as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and Section 2183.2 that requires documentation, data recovery of cultural resources.

Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's *Standards* include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to "research" the cultural landscape that might include the 'area of potential effect.'

Confidentiality of "historic properties of religious and cultural significance" should also be considered as protected by California Government Code §6254(r) and may also be protected under Section 304 of he NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity.

Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery'.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton
Program Analyst

Cc: State Clearinghouse

Attachment: Native American Contact List

Native American Contacts
Los Angeles County
September 19, 2011

Charles Cooke
32835 Santiago Road
Acton , CA 93510
suscol@intox.net

(661) 733-1812 - cell
suscol@intox.net

Chumash
Fernandeno
Tataviam
Kitanemuk

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This list is current only as of the date of this document.
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This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2011091042; CEQA Notice of Preapration (NOP); draft Environmental Impact Report (DEIR) for the City of Avalon General Plan / Local Coastal Plan Update; located in the City of Avalon; Santa Catalina Island; Los Angeles County, California.

Appendix B

Cultural Resources Report

A Preliminary Cultural Resource Management Plan
For the City of Avalon General Plan Update and EIR
City of Avalon, Santa Catalina Island, Los Angeles County, California.

Prepared for

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October 2010

I. Introduction

1.1 Purpose and Scope of the Project

At the request of Rincon Consultants, Inc., Ventura, California, a Preliminary Cultural Resource Management Plan for the City of Avalon General Plan Update and EIR, City of Avalon, Santa Catalina Island, California. The investigation detailed herein, was undertaken by H.E.A.R.T. to determine if any cultural resources (of a prehistoric or historic or ethnographic nature) would be affected by the proposed City of Avalon General Plan Update and EIR. Furthermore, this report, which is being prepared in conjunction with the update of the Avalon General Plan, is designed to assist the client in achieving compliance with extant laws, policies and procedures that regulate the performance of cultural resource studies within the State of California, County of Los Angeles, and the City of Avalon. These laws minimally include the: California Environmental Quality Act (CEQA); Santa Catalina Island Specific Plan (SCISP); Los Angeles County Local Coastal Program for Santa Catalina Island; and California Coastal Commission. The SCISP constitutes the primary implementation mechanism for the Santa Catalina Island Land Use Plan (LUP) as certified by the California Coastal Commission in November 1983. As such, it establishes regulations for the development, protection, and management of the Island's unique resource, one of which concerns prehistoric, historic and ethnographic resources. The objectives of this study were to:

1. Perform a record search at the South Central Coastal Information Center, California State University Fullerton.
2. Conduct additional research into historic maps and assessors parcel maps to obtain more information into potentially significant resources within the project area not covered by the record search.
3. Conduct interviews with local resource centers and personnel on the island to obtain additional historical data.
4. Consult with local Native American representatives regarding the nature and extent of any sacred lands, shrine sites or prehistoric and ethnographic cultural resources within the project area
5. Provide a report detailing the results of the preliminary cultural resource evaluation of the project area and provide appropriate mitigation measures based on the results.

1.2 Location and Description of the Project

Santa Catalina Island is located off the southern California coast, lying 32 kilometers south of Point Vicente, the nearest mainland point. With a total land area is 194 square miles, Catalina's length is 34 kilometers, and its width varies from less than 1 kilometer at the Isthmus, to 13 kilometers at its widest part. The project is located roughly 23 miles by sea from the mainland (Figure 1).

Figure 1: Aerial View of Santa Catalina Island

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More specifically, the project area is depicted on Santa Catalina East 7.5 minute USGS Topographic Quadrangle (1943 – photorevised 1980) The project area roughly covers an area encompassing the Wrigley Memorial on the southwest, Pebbly Beach on the east and Hamilton Cove on the west (Figure 2).

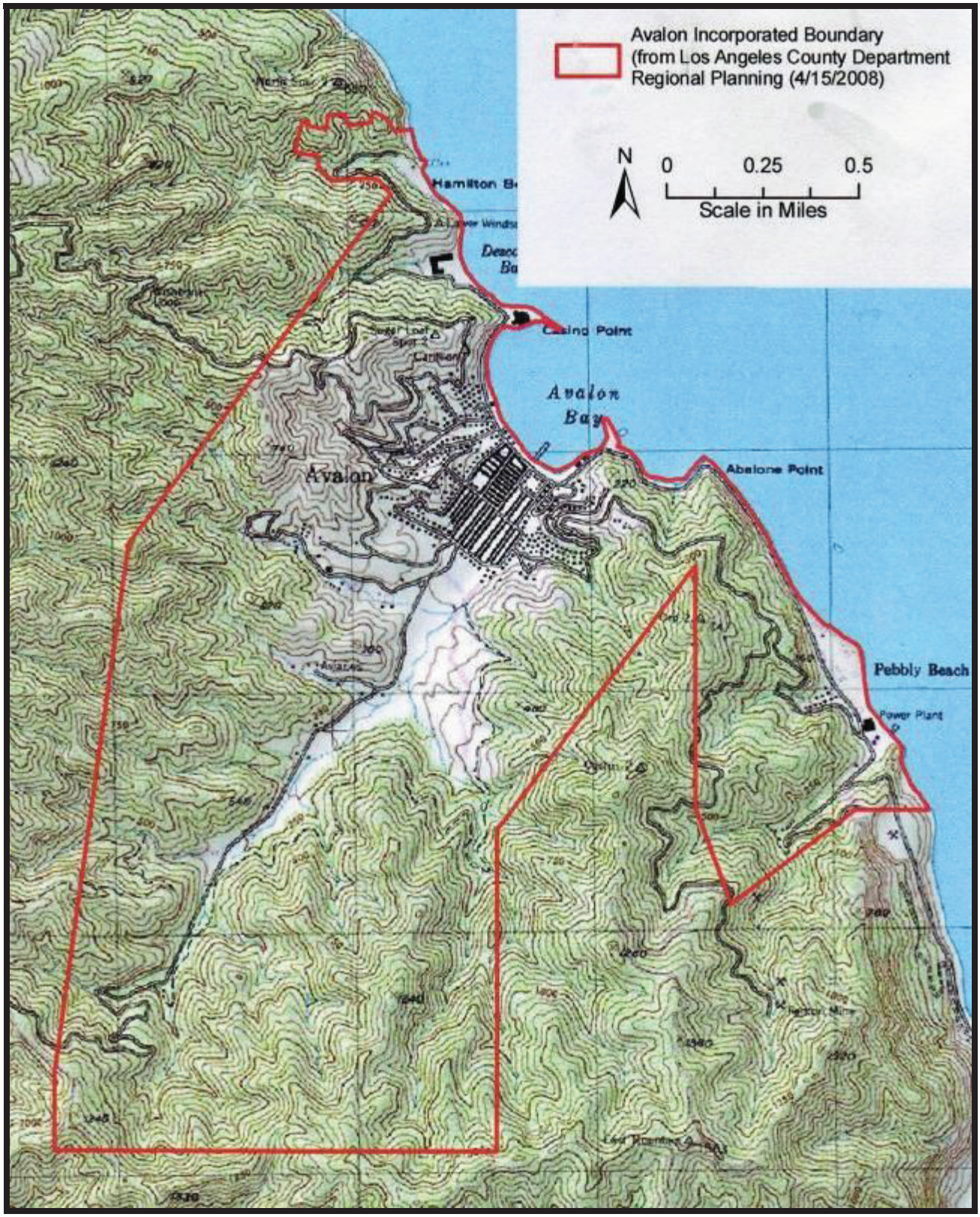


Figure 2: Boundaries of the Project Area

II. Environmental Information

Santa Catalina Island is characterized by rugged topography and cliffed shoreline. Level terrain is limited to the floors of a few large coastal canyons and the highest peak is Mt. Orizaba at 2,069 feet (Figure 3).

Figure 3: Map of Santa Catalina Island
(Courtesy of the Catalina Island Conservancy)

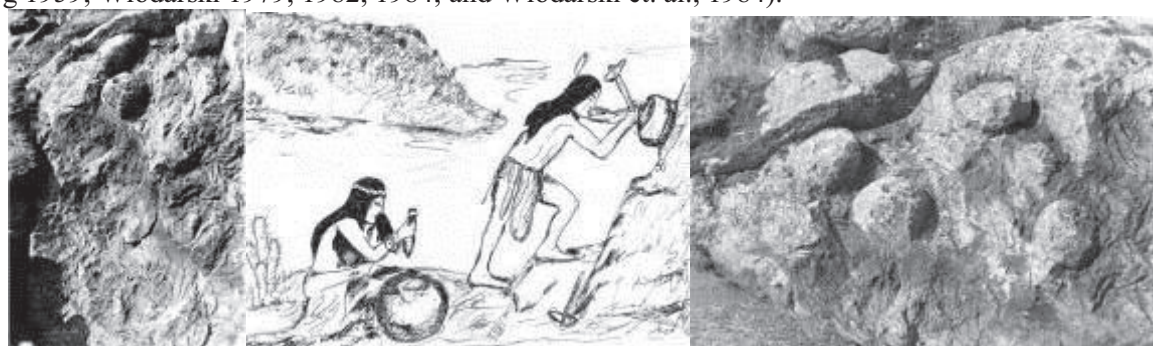
The climate is Mediterranean and average rainfall is approximately 12 inches per year. The island is traversed end to end by a single main ridge, with secondary ridge systems branching out on either side. The basal formations consist of crystalline metamorphic rocks, principally quartzite, and include talc-schist and serpentine dominating the whole western half of the island. The eastern end contains diorite and porphyrite with numerous flows of andesite, interbedded with volcanics. In addition to abundant mineral resources including soapstone, a variety of floral and faunal (terrestrial and maritime) resources were available to the Native Americans who inhabited Catalina Island.

III. Cultural Overview

The following information was synthesized from Gregg (1934), White & Tice 2002, Sturdwick, et al. (2007), and Wlodarski (2009). Santa Catalina is a prime archaeological base for investigations into Channel Island Native American lifeways. According to most researchers, the island has been occupied for over 6,000 years. The cultural evolution of the islanders, including adaptation to population pressures and variable resource availability, is preserved in the archaeological record on Catalina. The earliest evidence of habitation on Catalina Island comes from a series of radiocarbon dates from a coastal windward village at Little Harbor that range from 3,000-4,000 BC. Ecological information suggests that the earliest inhabitants utilized terrestrial and maritime resources to survive. In addition to collecting roots, bulbs, and seeds, the islanders fished and hunted sea mammals, as well as procured shellfish.

As the population increased through time, there was an observable shift in the exploitation of food and minerals resources. A shift in the location of major population centers probably occurred around 2000 years ago, with village sites on the windward side shifting to the leeward side of the island after this time. At the time of the Spanish, the Gabrielino/Tongva, a Shoshonean-speaking group, inhabited Catalina. However, their Hokan-speaking Chumash neighbors to the northwest played a important role in the exchange network operating between Santa Catalina Island and the mainland for at least a thousand years. There is little doubt that the Chumash and their ancestors inhabited Santa Catalina Island prior to the arrival of the Gabrielino/Tongva. After the slow influx of the desert people into the Los Angeles Basin, assimilation and acculturation resulted in bi-ethnic villages and inter-marriages between both cultures in the borderland areas such as Malibu, and the western San Fernando Valley. Marriages documented in the mission registers indicated that there were marriages between Native Americans occupying Catalina and San Clemente Islands to the south and those occupying Santa Rosa and Santa Cruz Islands to the north.

As a formalized group, the Gabrielino/Tongva occupied a major portion of present-day Orange and Los Angeles counties, and the islands of Santa Catalina, San Clemente, Santa Barbara, and San Nicolas. They are considered, along with their Chumash neighbors to the west, the wealthiest, most populous and powerful ethnic nationality in aboriginal southern California. The Gabrielino/Tongva gained their notoriety from the quarrying, manufacture and distribution of an island resource called "soapstone." From this material, they fashioned and traded bowls, ollas, comals, effigies, figurines, and charmstones throughout southern California (Meighan 1957; Meighan and Johnson 1957; Meighan and Rootenberg 1959; Wlodarski 1979, 1982, 1984; and Wlodarski et. al., 1984).



Santa Catalina Island has been variously referred to as Pimu, Pimuna, Pimunga, Pumunga, and Pimuunam. The various suffixes appended frequently to the Pimu stem refers to the place itself (-nga and -na) or designate a person from that place (-bit or -pat) in the Gabrielino language (Johnston 1962, and Johnson 1988). At the time of European Contact there appear to have been two major population centers in existence on the island, one at the Isthmus (Two Harbors), and the other at Avalon. Other major settlements were located at Toyon, Whites Landing, Empire Landing, Parson's Landing, Johnson's Landing, and Little Harbor.

The total population of the island probably did not exceed 1000 individuals. In addition to the major villages, various base camps, special use sites, hunting sites, food procurement and processing areas, rockshelters, mining and quarrying sites, and ceremonial sites supported village populations. Additional references pertaining to the Gabrielino/Tongva and prehistoric developments on Santa Catalina Island can be found by consulting: Baldwin 1996; Bean and Smith 1978; Catalina Island Company 1926; Decker 1970, 1971; Doran 1963; Gregg 1934; Heizer 1968; Johnson 1988; Johnston 1962; King 1982; Kroeber 1925; Leonard n.d; Meighan 1959; Santa Catalina Island Museum Society 1962; Sturdwick, et al**.** 2007 and, Windle 1931; and Wlodarski 1978a, 1978b, 1982, 2009.

Gabrielino/Tongva and Chumash cultures underwent dramatic changes immediately following European intrusion toward the end of the late 18th century. Disease and epidemics quickly weakened and decimated most Native American cultures in California. By 1810 most villages were greatly depleted or abandoned. However, some of the population survived, and worked to build the Spanish Missions, as well as helping to maintain the Mexican and American ranches which followed; Most were assimilated into the cultural landscape. Several thousand Gabrielino/Tongva and Chumash live today in Los Angeles, Orange, Ventura, Santa Barbara, and San Luis Obispo counties. They place a high value on objects and places associated with their past (archaeological sites and artifacts). Present day Gabrielino/Tongva and Chumash are organized into dozens of social, cultural, and political groups, some that take part in local affairs. Native Americans are very concerned with preserving their cultural heritage as it is manifested in the remaining cultural resource base.

Roughly, 2,000 archaeological sites are thought to exist on the island, with less about 1,000 having been discovered to date. Unfortunately, many sites have been destroyed or disturbed due to extensive pot hunting (which occurred from the late 1870s until the mid-1930s), and changing land use patterns. In order to alleviate further adverse impacts to the remaining cultural resources (recorded or not), the resources must be inventoried and evaluated in light of current scientific knowledge and preservation interests. The Catalina Conservancy and Island Company are continually striving toward preserving and protecting the remaining cultural resources on the island.

The Gabrielino/Tongva Indians inhabited Santa Catalina Island. They occupied a major portion of present-day Orange and Los Angeles Counties, and the islands of Santa Catalina, San Clemente, Santa Barbara, and San Nicolas. Along with their Chumash neighbors to the north, The Gabrielino/Tongva are considered the most populous and powerful ethnic nationality in aboriginal southern California. The earliest island inhabitants were hunters and gatherers who existed on resources obtained from the land and sea. Trade with the mainland, by means of the plank canoe, enabled the inhabitants to obtain resources that were limited on the island, such as hides, tools, raw materials and food.

The islanders collected roots, bulbs, berries and seeds, procured shellfish, fished from land and by canoe using shell, bone and stone hooks and weights and hunted sea mammals.

Archaeological work on the island, as part of a research program initiated by the UCLA Archaeological Survey in the 1960s-1970s, discovered that as early as 2000 B.C., the Native American inhabitants of Catalina Island were successfully hunting dolphin, porpoise, seal, otter, whale, sheepshead, sea bass, and bonita, while supplementing their diet with abalone, crab, mussel, and other shellfish. The inference was that the islanders were adept fishermen, had access to watercraft, and were successfully trading with the mainland at an earlier time than previously thought.
The Gabrielino/Tongva gained their notoriety from the quarrying, manufacture, and distribution of an island resource called "soapstone." From this material, they manufactured and traded ollas (bowls), comals (cooking stones), effigies, figurines, and charmstones throughout southern California (Wlodarski, 1979; Wlodarski, et. al., 1984). Santa Catalina Island was considered the center of the Gabrielino/Tongva religion, Chinigchinich. A temple dedicated to their deity was thought to have existed at the Isthmus.

When the Spanish arrived in Alta California in the early part of the 16th century, several major population centers were in existence on Santa Catalina Island. The largest centers were located at Avalon, Two Harbors (Isthmus), Toyon, Johnson's Landing, Little Harbor, and Whites Landing. A number of seasonal villages and base camps, rockshelters, mining and quarrying sites, and ceremonial sites supported the villages, with the total population of the Island probably not exceeding 1,000 individuals.

General Juan Rodriguez Cabrillo was the first non-native to visit Catalina. Reaching the southern Channel Islands in October, 1542, Cabrillo named San Clemente La Victoria, and Santa Catalina San Salvador, after his two ships, claiming the islands for the King of Spain. Bartholome Ferrelo, Cabrillo's chief pilot, noted that upon arriving, the Indians openly welcomed them. They spent the night on San Salvador, traded gifts, and left the following day. Upon his return trip, Cabrillo spent the winter of 1542-1543 on the island, where conflicts between the two cultures resulted in Cabrillo's death. According to research by John Johnson (1988) the Spanish are now thought to have buried Cabrillo on Catalina rather than San Miguel or Santa Rosa as previously thought. Another Spaniard, Cermenho, is believed to have visited the island briefly in 1595, trading trinkets for food described as cakes made of a very yellow root resembling the sweet potato, which was cooked under the sand. In 1598, the galleon San Pedro was thought to have sunk off the coast of Santa Catalina. The island natives serving as divers, helped retrieve the ship's cargo. In 1602, explorer General Sebastian Vizcaino reached San Salvador.

Accompanied by Fray Antonio de Ascension, a Carmelite friar for the expedition, they visited several settlements on the island. Believing that he was the first to discover Catalina, Vizcaino christened it Santa Caterina in honor of the martyred Saint of Augustine, on whose feast day it was. Fray Antonio recorded valuable insights about the inhabitants and their lifestyle before Vizcaino departed on December 1st. The founding of the mainland missions of San Buenaventura, San Fernando, San Gabriel, and San Juan Capistrano in the 1760s-1770s, signaled the beginning of the end of Native American occupation of the Channel Islands. For a brief time there was a concerted effort by Father Tapis, the successor to Father Francisco de Lausen, to establish a mission on the island. Although the concept was approved by Governor Arrillaga of Nueva California, it was never implemented.

In 1804, the Boston clipper ship Lelia Byrd, owned by William Shaler, visited the Island. He spent six weeks repairing his ship and estimated that about 150 Native Americans lived on the island. Tapis, in 1805, reported that more than 200 natives of Santa Catalina and the neighboring island of Santa Rosa, died from a measles outbreak. The Native American inhabitants of Santa Catalina Island were faced with disease, water, and food shortage. By 1807, when the O'Cain visited the island, only 40 or 50 inhabitants were counted. Jonathon Winship in 1807 followed Shaler in search of sea otter. Excursions by Russian hunters and traders contributed to the demise of the local Native American population, and the island became a haven for hunters, traders and smugglers. By 1810 most villages were abandoned, and by 1811 the island became a casualty of the Missionization process with all of the Native population removed.

Mexico's declaration of independence from Spain in 1821 meant that control of Catalina Island, once the domain of the King of Spain, now fell under Mexican jurisdiction. In 1824 Samuel Prentiss became the first white man to live on Santa Catalina Island. He was rumored to have come to the island in search of hidden treasure. He spent 30 years in this lifelong pursuit, unsuccessfully excavating throughout the island. He died in 1854 at the age of 72. Captain George Calvert Yount, a friend of Samuel Prentiss, discovered gold-bearing quartz on Catalina, somewhere in Cherry Valley while hunting for otter. This was twelve years before Francisco Lopez discovered gold in Placerita Canyon, and eighteen years before James Marshall's discovery at Sutter Mill on the American River on January 24, 1848. There was no further mention of Yount's discovery until the mid-1850s.

While the island was under Mexican sovereignty, and governed by Don Juan Batista Alvarado, Tomas Robbins unsuccessfully attempted to obtain control of the Catalina. Later, Robbins became a friend of Don Pio Pico, the last Mexican governor of Alta California, and his second appeal for the land was more successful than his first. Robbins' ownership was obtained under duress. The United States, while petitioning for California independence, had become embroiled in a war with Mexico. As Pio Pico fled Monterey on his way to Mexico, he chanced to stay with Robbins. Seizing the opportunity fate had provided, Robbins, under candlelight, drafted a grant deed on butcher paper. Pico signed the deed on July 4, 1846, his final official act as the last Mexican governor of Alta California. Robbins was granted Santa Catalina Island, and the deed was validated in the United States District Court in 1857.

From 1846 to 1864, title passed from Robbins to: Jose Maria Covarrubias, Albert Packard, Eugene Sullivan, Charles

Hitchcock, James Ray, Walter Hawxhurst, and finally to James Lick of San Francisco in separate deeds from 1864-1867. Even as Lick secured title to the Island, ranchers and sheep owners who were squatters, unaware that the Island was privately owned, were already settling it. Captain William Howland, who raised 3000 sheep, lived in a comfortable cove toward the west end of the island, which still retains his name. Howland fathered Charles Howland, the first white child born on the island on April 8, 1865. Other ranchers included Ben Weston, who constructed a house at Little Harbor, Spencer Wilson, Francisco Guerrero, Juan Cota, Swain Larson, John and Charles Johnson, Johan Behn, and Thomas Whitley. They all settled the area, but were eventually evicted by Lick in 1874.

Trans-channel crossings during this period were made on an irregular basis using chartered vessels. General Phineas Banning operated the Cricket and the San Diego in 1863, which sailed from the port of San Pedro. Eventually, miners heard about George Yount's discovery of gold, and began flocking to the island in 1863-64, staking claims in the area of Two Harbors. Henry Wilson, an early inhabitant, had a vision of establishing the town of Wilson Harbor, located at present-day Emerald Bay/Johnson's Landing. However, the dream never came to fruition. Santos Louis Bouchette, who was a friend of Samuel Prentiss, and may have been entrusted with the secret of the buried treasure, established The Mineral Hills Mines where he extracted gold, silver, and lead. It was the only mining claim honored by James Lick when he obtained title to Santa Catalina.

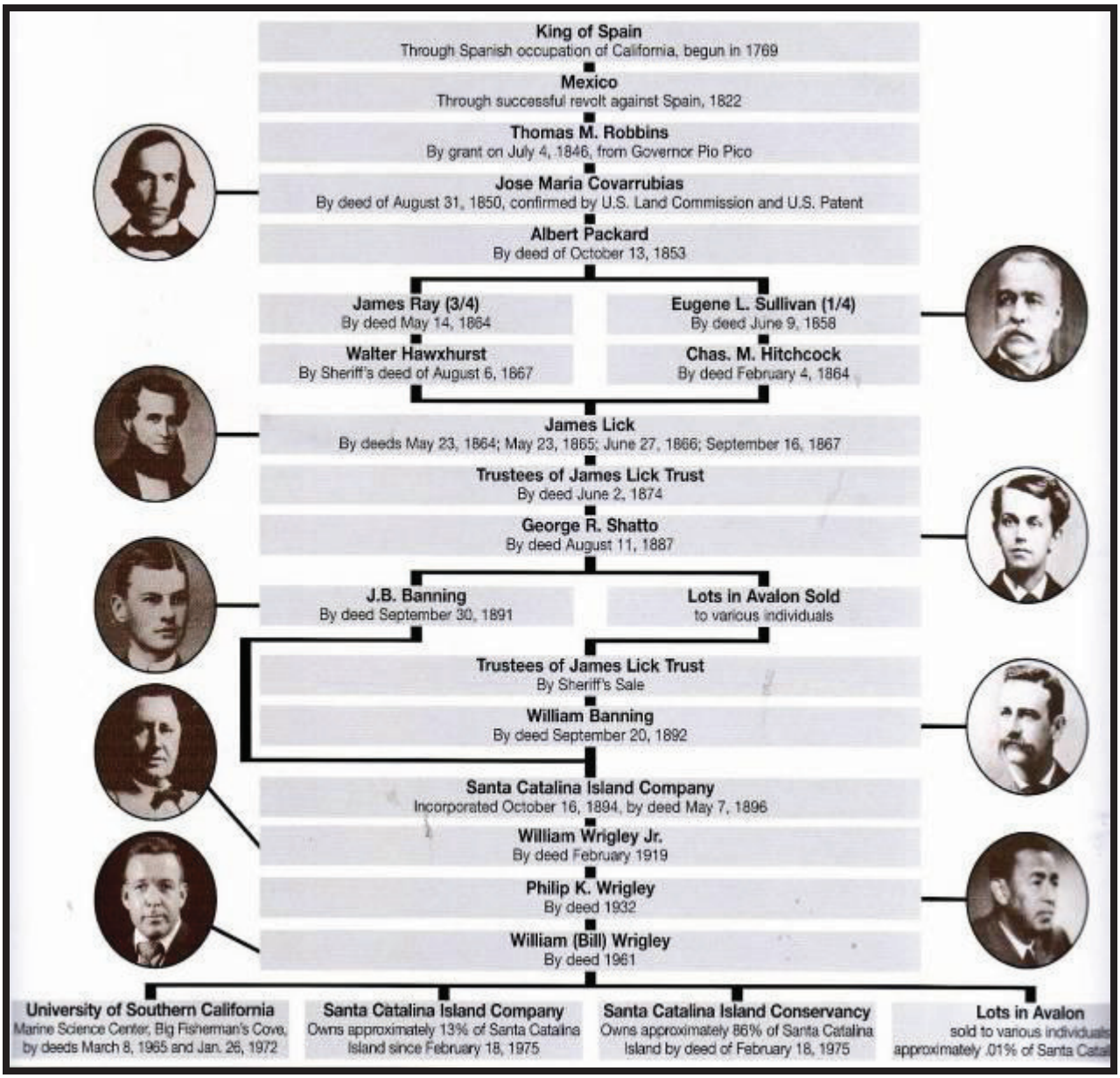


Figure 4: Santa Catalina Island Owners

(Courtesy of the Catalina Island Conservancy)

During 1863 while the United States was embroiled in the Civil War, the U.S. Army sent Captain B.R. West with a garrison to the Isthmus. Troops were stationed on the island to deter possible illicit seizures of California gold shipments on their way to Washington. Captain West was empowered to remove all civilians, but the miners, fearing this was a ploy to steal their claims, at first refused. A show of force by West finally convinced the miners to abando the island, putting an end to the brief mining boom. The government constructed barracks for the garrison a few hundred yards from shore; they are still standing, and currently leased by the Isthmus Yacht Club.

Avalon

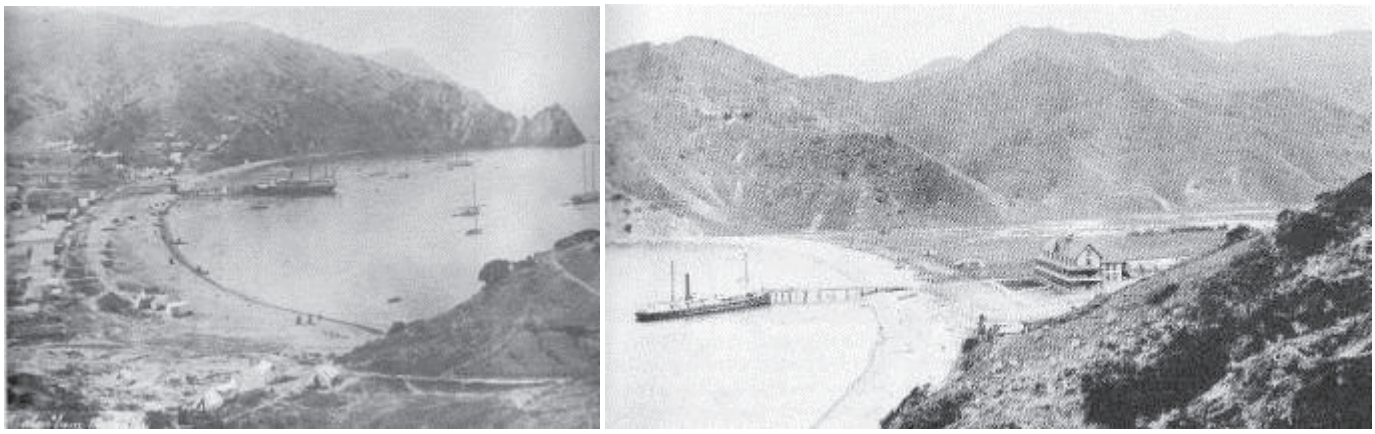
The City of Avalon was not the first town projected for Santa Catalina Island. In 1863 a mining boom on the island centered around the Fourth of July Harbor and Cherry Valley, and a notice of location was filed on May 24, 1864, of forty acres of land for a Town site which is located in Town lots, known as Queen city, situated one-half mile from Wlilson's Harbor and running southerly covering Wood or Beach Valley, running southerly towards the Main Ridge and lying West of Silver Hill and East of Boushey's new Road to the mines. Although nothing became of this venture two smaller population centers at the Isthmus and Little Harbor, did.

Avalon, the metropolis, was at first an encampment known as "Timm's Landing," reputedly named after Mr. Timm of San Pedro. When George Shatto and Charles Sumner purchased the island in 1887 for $200,000, they began construction on a town that for a time was simply called "Shatto"; however, Shatto did not favor the name, and did not record the maps bearing it. Avalon was named in 1887, and was not recorded on any maps of the Island before that time. The townsite was renamed Avalon, for the King Arthur legend, by Etta Whitney, George Shatto's sister-in-law.

Shatto and Sumner laid out the townsite, and began selling lots while they supervised the construction of the Hotel Metropole, the first building in Avalon.

Avalon in the 1880s
(Courtesy of the Santa Catalina Island Company)

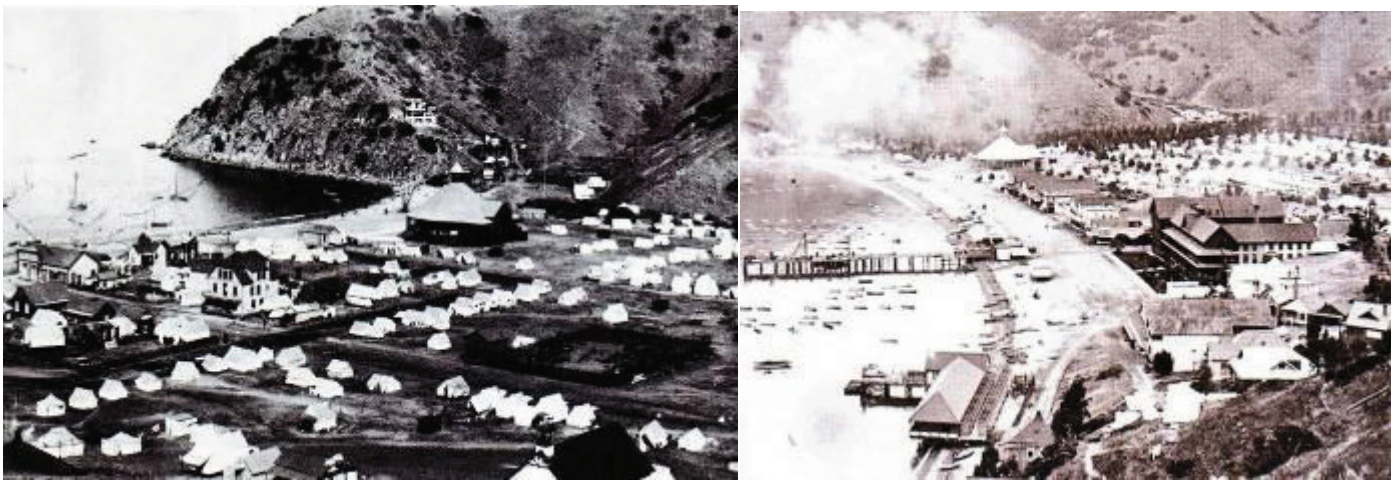
The Metropole was located on top of a major Indian village that once fronted the bay. By 1880, the side-wheeler Amelia was making trips across the channel, complete with a restaurant and salon.



Avalon circa 1886-1888
(Courtesy of the Santa Catalina Island Company)

In 1888, Shatto commissioned the steamer Ferndale into service for trans-channel crossings, soon followed by the Falcon, the Hattie, La Paloma, Hermosa, Oleander, and Warrior. The costs associated with beginning a new town ultimately forced Shatto and Sumner to sell the island. The deal fell through, returning the island to the Lick Trust for a brief period. The population of Avalon in its early days was small and the area was predominantly used by occasional campers.

By 1899, Avalon was a summer "tent city," and the permanent population was estimated as around 100 people. During the summer month, the population would reach as many as 3,000 persons. The first church, The Congregational Church of Avalon, was organized in 1889, pastored by the Rev. Charles Uzzel. The first meeting of the Board of Trustees of Catalina School District occurred on duly 4, 1891, and the first teacher of the school was Miss M. P. Morris.



Avalon circa 1890s-1900
(Courtesy of the Santa Catalina Island Company)

A deal was finally completed with Judge Brent Banning, Captain William Banning, and Hancock Banning; the three sons of General Phineas Banning (the southwest stagecoach king who bought Catalina for under $130,000). In 1894, the Bannings formed the Santa Catalina Island Company as a family corporation.

A second house was built in Descanso Canyon, which was ultimately replaced by the St. Catherine Hotel. By the late 1890s, several establishments graced Avalon, including the: Metropole Hotel, Avalon Home, Hotel Grand View, Hutchins' Camp that contained furnished cottages and tents, the Catalina House, the Glenmore House, the Leneta Hotel, and Mrs. Knowles' Spanish Hotel. Other hotels outside Avalon included the Eagle's Nest Lodge, and the Little Harbor Inn, both situated on Native American sites. The 1894 Sanborn Fire Insurance maps of Avalon illustrate the initial development of the townsite, with most structures fronting the bay along Crescent Avenue.

In 1909 the permanent population was estimated as about 500. In 1913, the summer population was estimated to be as high as 10,000. The 1913 population estimate of 586 permanent residents was based on the census figures.

The supply of water at Avalon, was a continual problem. In the earliest days, the Native American campsites were situated near an available source of water. During the mining boom of 1863, water became a problem; and immediately thereafter, when the large number of Union troops were stationed there, they spent much time and effort in attempting to insure an adequate supply of water. The Bannings, in 1893, told the residents that they would eventually, by tapping the springs near town, make an under-ground reservoir or lake that will afford an unlimited supply of water to any amount of people. They abandoned the project, however, for lack of a sufficiently powerful pump on the Island. For fire purposes and for pumping salt water for the sprinkling carts, a force pump arrived on the Island under the direction of W. L. Hobbs, a Los Angeles engineer. Drinking water under the ownership of the Bannings, was hauled from Wilmington in tanks on the old steamers, Cabrillo and Hermosa, and then pumped into water tanks on Metropole Avenue.

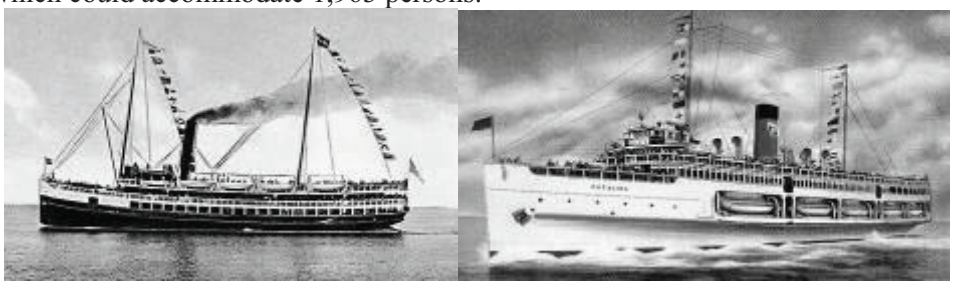
According to the leaders of the movement for city incorporation, several main factors stimulated their wish to have an incorporated city, The factors were: first, the water problem, second, the reluctance of the Santa Catalina Island Company to improve the town in other ways, such as asphalting the streets, despite supposed agreement to do these things; and third, the action of the Bannings in buying up as many lots as possible, and holding lots off the market so that residents of Avalon could not own their property. But in 1913 there grew a strong movement to incorporate Avalon. The leaders of the incorporation movement were LeFavor and Mr. Woodman. Leaders and spokesmen against it were Stamford, Carraher, and Feik, who moved that the petition be withdrawn. On June 26, 1913, Avalon became incorporated as a city.

Views of the St. Catherine Hotel
(Courtesy of the Santa Catalina Island Company)

The Bannings did well for a time, but like their predecessors Shatto and Sumner, they soon ran into financial troubles, and by 1919 lost their majority interest in the island to William Wrigley, Jr. The famous Saint Catherine Hotel, constructed in 1918, was followed by a flurry of tents and cottages, which began springing up everywhere. People, who once leased lots under Shatto and Sumner, could now purchase the land under Wrigley. The Hotel Atwater, including an adjacent cafeteria (which is now the arcade area), was built in 1920 to provide additional housing.

Views of the Hotel Atwater
(Courtesy of the Santa Catalina Island Company)

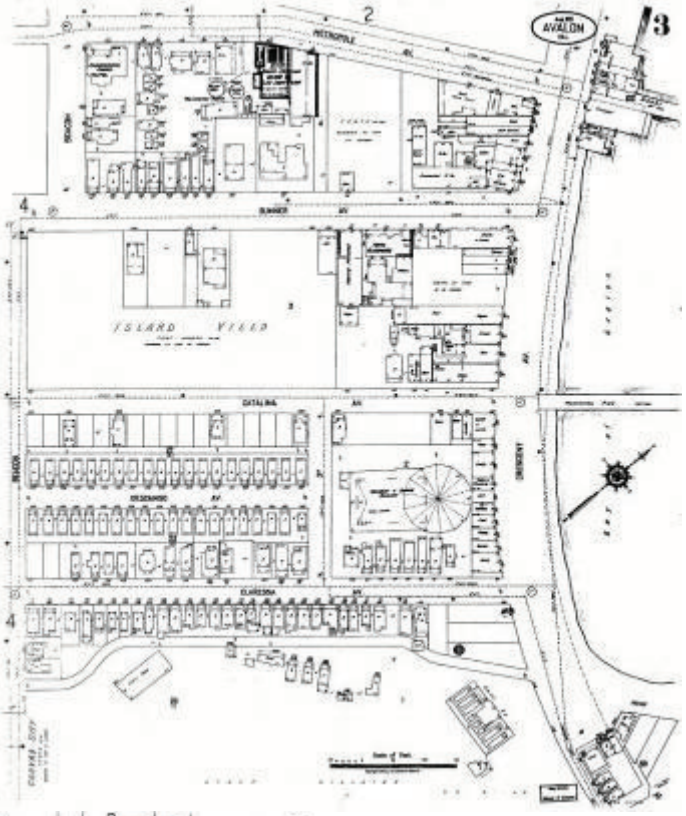
By now, transportation from the mainland passed from the *Hermosa II*, to the *S.S. Cabrillo*, and in 1920, to the *S.S. Avalon*, formerly the *S.S. Virginia*. To augment the *S.S. Avalon*, Wrigley commissioned a second steamer, the *S.S. Catalina* in 1923, which could accommodate 1,963 persons.

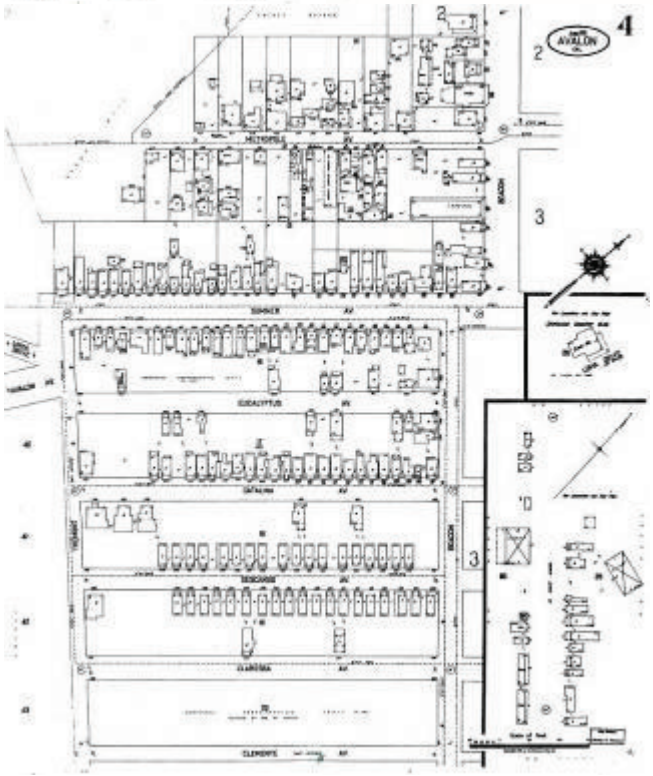


The growing community was treated to the arrival of the Chicago Cubs in 1921, when Wrigley brought the team to the island for spring training. The Cubs played every spring for 27 seasons, bringing with them sportswriters from the Midwest and east, who not only wrote about the club, but the beauty, and enchantment of Catalina Island. Such notable Chicago Cubs who trained on the island included Rogers Hornsby, Joe McCarthy, Gabby Hartnett and Charlie Grimm.

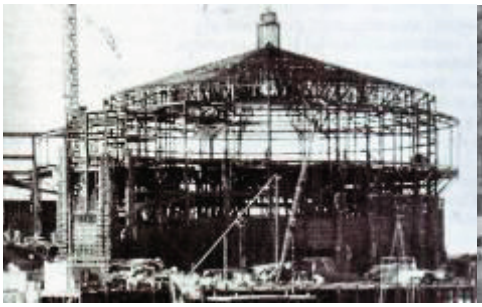
Chicago Cubs Training in Avalon with the Country Club in the Background
(Courtesy of the Santa Catalina Island Company)

The Sanborn Fire Insurance maps of 1924 illustrate the extent of development in the city.





Wrigley continued to invest in the Island, upgrading its potable water and road systems, and in 1928 created the magnificent Casino and Bird Park as tourist attractions that were dedicated in May 1929. The Casino, with its massive ballroom that could hold 3,000 dancers, drew big name bands led by Jan Garber, Dick Jergens, Ben Bernie, Kay Kyser, Bennie Goodman, Bob Crosby, and Ray Noble. The Casino also contained the first acoustically engineered theater for showing motion pictures which could hold 1,200 patrons. Cecil B. de Mille, Joe Schenck, Louis B. Mayer and Samuel Goldwyn yachted over to the island with their new talking pictures.



Philip Wrigley continued the work of his father, who passed away in 1932. The small town of Avalon, noted for fishing, and as a quiet getaway, was growing rapidly. Palm and olive trees were introduced from the mainland, along with sand to cover the cobble beaches. The years of free-spirited growth, and the feeling of peace, and tranquility were shattered in December 1941, when the island was restricted to the public, and Santa Catalina became a part of the war effort. Almost every service branch was represented on the island. The O.S.S. was headquartered at Toyon, the Coast Guard trained at the Isthmus; and the Signal Corps were stationed at Camp Cactus. The Hotel St. Catherine served as a school for cooks, while the Yacht Club was converted into classrooms. With the end of the war, and the withdrawal of the military, the Santa Catalina Island Company spent a tremendous amount of time and money repairing, and reconditioning the facilities on the Island. In November 1948, they began leasing the Hotel St. Catherine, the Atwater Hotel, the recently completed Pavilion Lodge, the *S.S. Catalina* and the Casino.

Less than 50 years after Native Americans were removed from Santa Catalina Island, remains of their villages and cemeteries were removed, by individuals and museum-sponsored expeditions. From 1850 until the 1950s, the physical remains of the former inhabitants were fair game for trophy hunters and organizations looking to fill personal or museum space without regard for their inherent sacred and scientific value. The Peabody Museum, Smithsonian Institution, and the Heye Foundation Museum of the American Indian sponsored some of the larger expeditions.

Ralph Glidden carried out the most destructive of these pseudo-scientific undertakings between 1915 and 1923. Conducting one of the most thorough and extensive explorations of the island's archaeological resources since Paul Schumacher in the 1870s, Glidden is known to have removed 801 burials from 105 individual locations, and either sold them, or used them for display in his own museum in Avalon.

This loss of valuable scientific data, as well as the desecration of human remains, has plagued legitimate research into to the present time. Since the 1950s, The UCLA Archaeological Survey, and a number of individuals and organizations have conducted scientific studies, which address research questions focusing on the development of Native American culture on Catalina Island. These studies are controlled by the Santa Catalina Island Conservancy to ensure that the information obtained does not result in the permanent loss of data, or the destruction of the remaining, extremely sensitive, and fragile cultural resource base. Numerous book and reference materials pertaining to Santa Catalina Island are available at Sugarloaf Books, the Avalon Museum at Casino Point, and other shops throughout the island.

IV. Background Research Synthesis

A record search phase was conducted for the project area by professional archaeologist, Wayne Bonner at the South Central Coastal Information Center, California State University Fullerton (SCCIC-CSUF) on October 11, 2010. The following information applies for the record search radius:

- One prehistoric archaeological site is recorded (**SCAI-29-19-003712**). According to Strudwick & Aron (2005), this site was originally recorded as a habitation site measuring containing an extensive midden deposit, burials, and steatite items (Nels C. Nelson-2-28-56). The previously identified site area is now almost completely covered with pavement, concrete, and buildings including homes and hotels, although no cultural material was found, it is possible that hidden deposits exist. Additional information from the author (1973 to 2010) indicates that remains of this prehistoric village (intact and disturbed) are still encountered below the existing pavement through the recorded site area. Human remains have also been documented by archaeologists and Native Americans over the years when utility trenching was conducted. This site is considered one of the most significant prehistoric villages on the island and one of the most important archaeological sites in southern California (Figure 4).

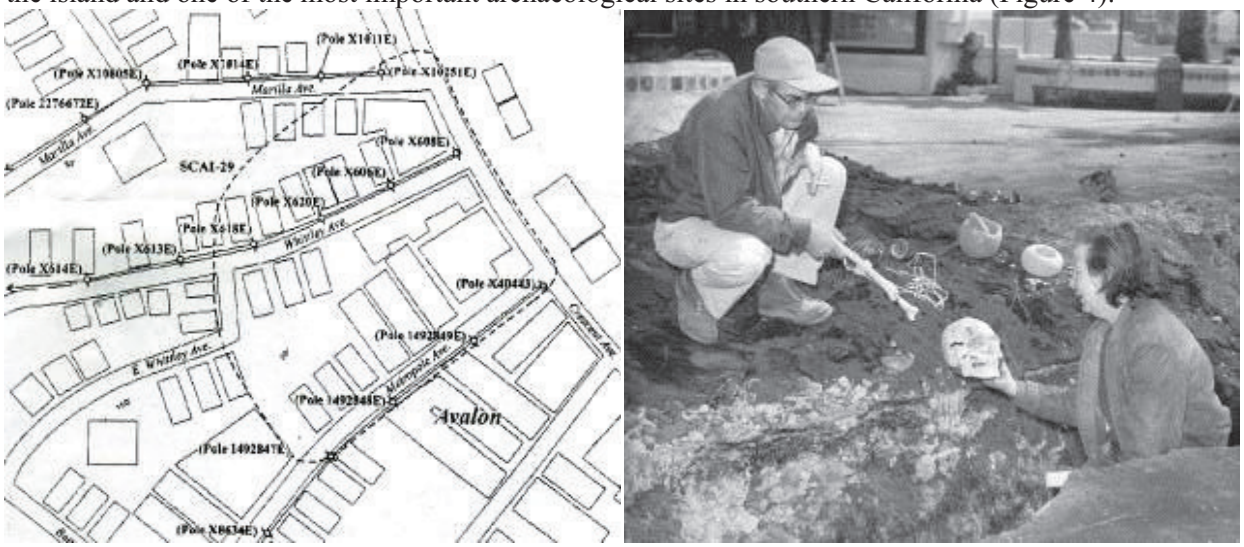


Figure 4: Maps illustrating the Approximate Boundaries of CA-SCAI-29

(from Sturdwick et al., 2007; and the Santa Catalina Island Company

- Four historic archaeological sites are recorded: **CA-LAN-3523 (19-003523)** - According to Smith & Roberts (2005), the site is located on the side of a hill at the end of Rifle Range Road in Avalon. A dirt road runs along the rock retaining wall. The site is the remains of a homesite with historic debris on the north side of Rifle Range Road, consisting of scattered stucco and bricks. The site has extensive disturbance including the power pole and dirt road; **CA-LAN-3531 - 19-003531** – According to Sturdwik, Baumann and Smith (2005), the site is located atop the ridge at the SE side of Avalon Bay, and represent the remains of' the Avalon to Lovers Cove Incline Railway. The railway was built by the Banning brothers in 1904 and originally consisted of a track leading cast up to a teahouse atop the ridge at the SE edge of Avalon Bay and then continuing east down to a point at Lovers Cove. The remains... consist of a building foundation with associated terraced landscaping, which includes concrete and fieldstone walls, brick walkways, a concreted stone-lined fountain, and a fieldstone archway entrance; **19-002678 (Avalon Golf Course Stone Retaining Walls)** – According to Maki and Carbone (1998), the stone retaining walls are located along the dirt road that traverses the northeast corner of the Avalon Golf Course. The site consists of two lengths of stone retaining walls located along an unnamed Avalon Golf Course access road.... The stonewalls are not reinforced and have collapsed in several locations; **19-188182 (**Catalina Pottery and-Tile Company Factory Building) - According to Marvin (2003), this architcetural resource is a one-story, frame Mission-style industrial building with a front-gable truss roof clad in standing seam metal.
- Eleven studies are noted: LA70; LA237; LA2151; LA2228; LA2373; LA2452; LA2457; LA2504; LA2509; LA2640; LA2642. Over 90% of the project area has never undergone a systematic survey focused specifically on the current project area has been performed by a qualified archaeologist in the past (Figure 5).
- General overview studies overlapping portions of the property include: **Leonard** (n.d), **Decker** (1970), **Gutman** (1970), **Wlodarski** (1982, 2009), **Baldwin** (1996), and **Sturdwick et al. (**2007).

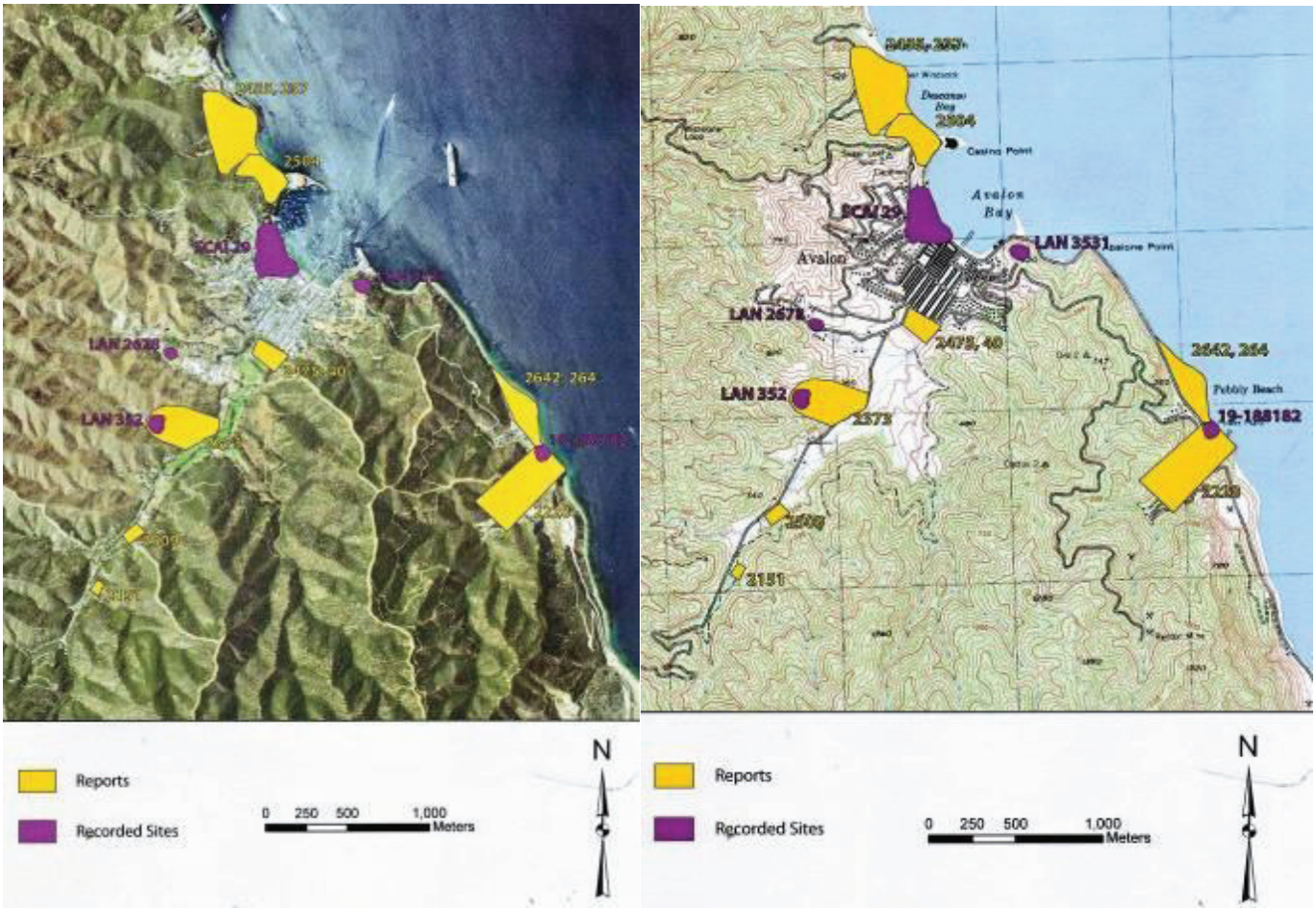
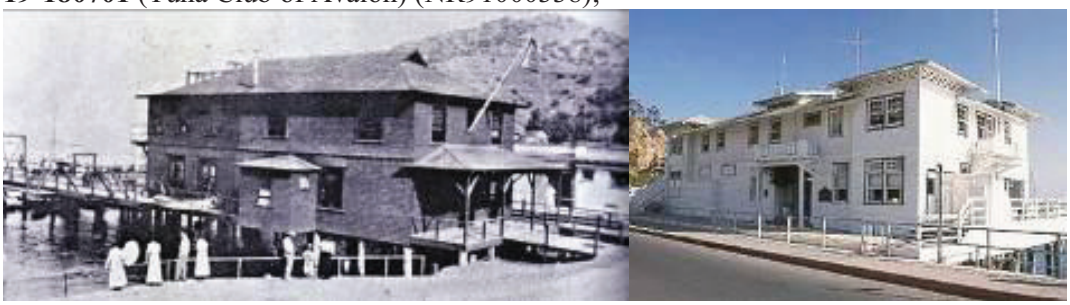


Figure 5: Record Search Results for the Project Area

- Three properties are listed on the National Register of Historic Places (2009, with supplements to date):

19-180701 (Tuna Club of Avalon) (NR91000338);



19-178671 (Peter Gano House, AKA Holly Hill House) (NR83001194)

19-178670 (Wrigley Summer Cottage) NR85001785)

- No California Register of Historic Resources exists (1992, with supplemental information to date).
- No California Historical Landmarks are listed (1995, with supplemental information to date).
- No California Points of Historical Interest are noted (1992, with supplemental information to date).
- No State Historic Resources Commission issues are presented (1980-present - minutes from quarterly meeting).
- No listed properties in the Office of Historic Preservation Historic Property data file (02/03/2005) are noted.
- No Archaeological Determinations of Eligibility are noted (listed through 02/03/2005).

Contact was made with the following individuals and institutions regarding additional cultural resource information pertaining to the project area: Cindi Alvitre, Inter-Tribal Council of Pimu (Appendix A); Kathleen Hill Carlisle, **ArtCatalina**, Avalon, California; Bill and Jeannie Hill, residents, Avalon, California; Chuck Liddell, **Liddell Talent Management**, Avalon, California; Renee Martinez, **Cogstone Resource Management** Consulting Archaeologist/ Tongva Native American, Rosemead, California (Appendix C); Jeannine L. Pedersen, Curator, **Catalina Island Museum**, Avalon, California; Keith Schmidt, Project Manager, Real Estate Planning, **Santa Catalina Island Company**, Avalon, California; Jim Watson, **Channel Catalina**, Avalon, California, and; Dr. Wendy Giddens Teeter, Ph.D., Curator of Archaeology, **Fowler Museum at UCLA** (Appendix C)**.** Based on information provided by respondents, additional cultural resources data was obtained and is illustrated in Figure 6).

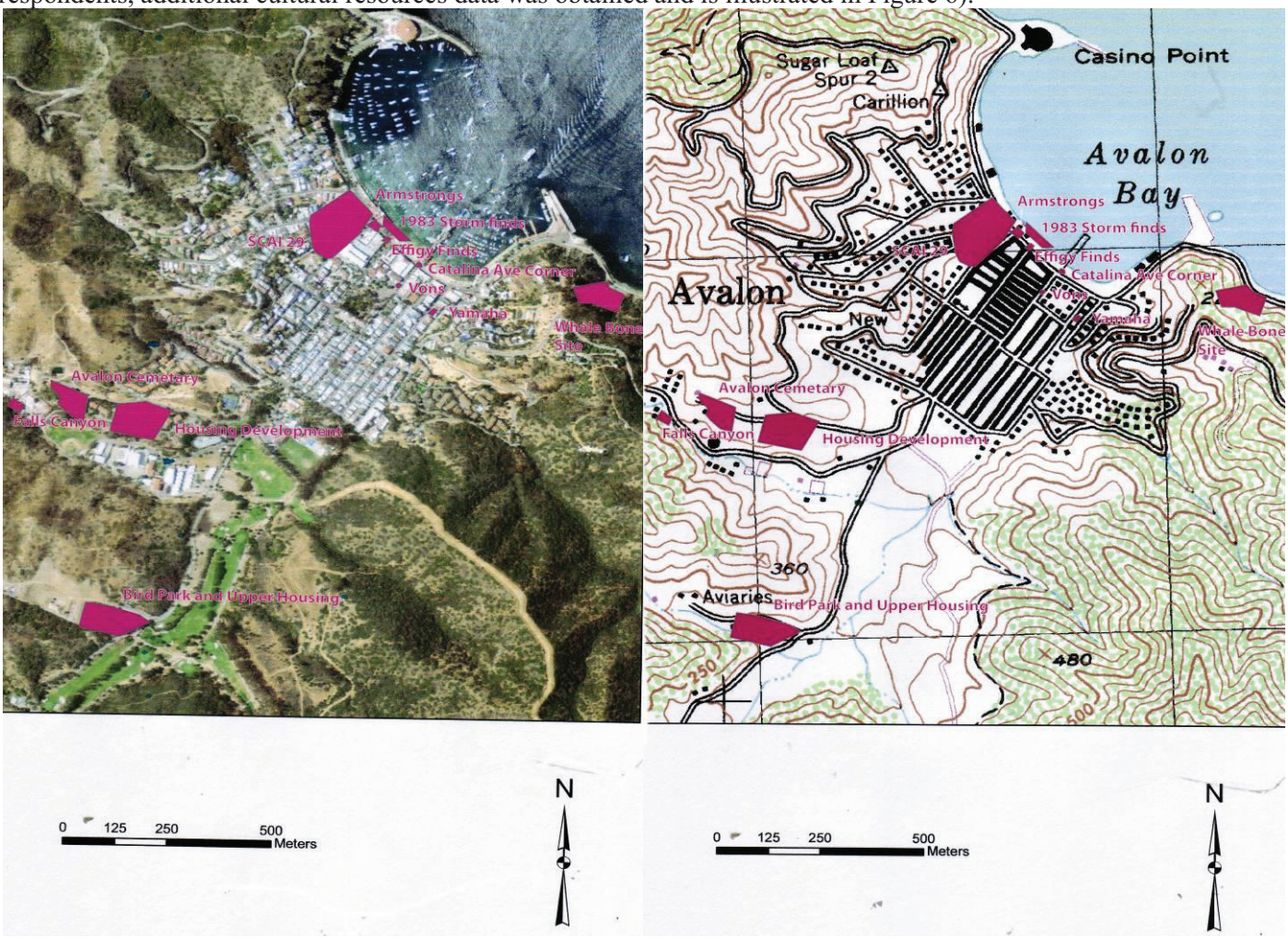
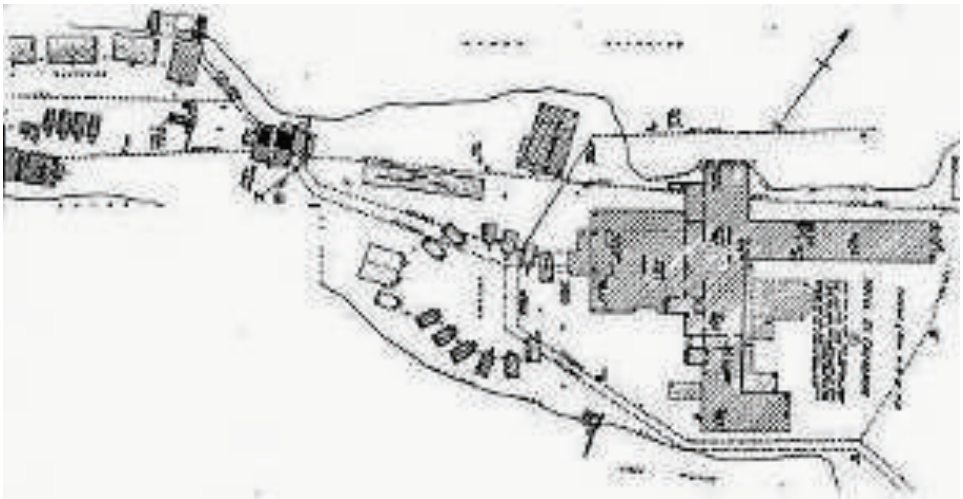


Figure 6: Additional Cultural Resource Locations by Respondents

Descanso Beach

The word Descanso means "rest", or "peace" in Spanish. Formerly known as Banning Cove, it later became Descanso Cove. In 1895, Joseph Brent (J.B.) Banning built a two-story home in Banning Cove. In 1915, after a devastating fire destroyed the Hotel Metropole, the Banning Brothers built the St. Catherine Hotel, after moving their own residence farther upstream in 1917. Their residence was then used as an employee's dormitory for the St. Catherine Hotel. In 1918, the St. Catherine Hotel was completed. In 1919, William Wrigley, Jr. added a west wing and improvements including landscaping, swimming pool, tennis courts, and three dining rooms. In 1941 the hotel housed the Merchant Marine Service. After World War II, the hotel was used for employee housing. In 1966, the hotel was torn down.



Green Pleasure Pier The Banning brothers, in order to relieve the congestion, built a pier running parallel to the beach, but a storm destroyed it in 1908. In February 1909, the Freeholders Improvement Association of Avalon built a pleasure wharf. Seaplanes landed at the end of the pier in the 1950s and 1960s.

Las Casitas

While the Chicago Cubs had spring training on Catalina Island, the team would stay at the Atwater Hotel or Las Casitas. The City of Avalon has opened the new City Hall and Fire Station facilities on the Las Casitas site located at 410 Avalon Canyon Road as of June 8, 2004.

Santa Catalina Island Incline Railway - CA-LAN-3531 - 19-003531

This unique Santa Catalina Island incline railway was built in 1904 to carry passengers up from the Amphitheater to the top of the mountain for the breathtaking view of the Pacific Ocean and the beautiful City of Avalon down below. Some stayed for lunch at the inn atop the hill; while others dashed into the other incline car for the spectacular ride down the other side of the mountain to Pebble Beach in Lovers' Cove.

Avalon Bay Amphitheater

Built by the Banning Brothers in the late 1880s

Avalon Canyon Road

400 Avalon Canyon Road, Avalon, CA 907604 - APN#7480-051-004
Commercial/Industrial - Square Footage: 1,552 - Year Built / Effective Year Built 1900/1957
Square Footage: 19,290 - Year Built / Effective Year Built 1940/1941
Square Footage: 1,337 - Year Built / Effective Year Built 1900/1939
Square Footage: 17,280 - Year Built / Effective Year Built 1900/197

Catalina Bird Park

Catalina's Bird Park was established in the winter of 1929 by William Wrigley Jr.. The park was built in Avalon Canyon and covered eight full acres of land. During 1944 a blimp crashed killing six crewman. It was closed in 1966.

Wrigley Memorial and Gardens

The Memorial and Gardens are 1 ½ miles up Avalon Canyon Road at the end of the road. The Wrigley Memorial was built in 1933, and opened to the public in October 1934. Quarried Catalina stones can be seen in the reinforced concrete construction; the facade having been sandblasted to hide the cement and highlight the native crushed stones. The blue flagstone rock on the ramps and terraces comes from Little Harbor, on Catalina's "back" side. And the red roof tiles and all the colorful handmade glazed tiles used for finishing's came from the Catalina Pottery plant, which was in operation from 1927 to 1937. The marble inside the tower was quarried in Georgia and over 150,000 feet of lumber was used in the construction of the memorial.

Beacon Street

301 Beacon Street, Avalon, California 90704 - APN#7480-031-040
Residence - Square Footage: 5,882
Year Built / Effective Year Built 1923/1923

319 Beacon Street, Avalon, California 90704 - APN#7480-031-002
Residence - Square Footage: 972
Year Built / Effective Year Built 1916/1926

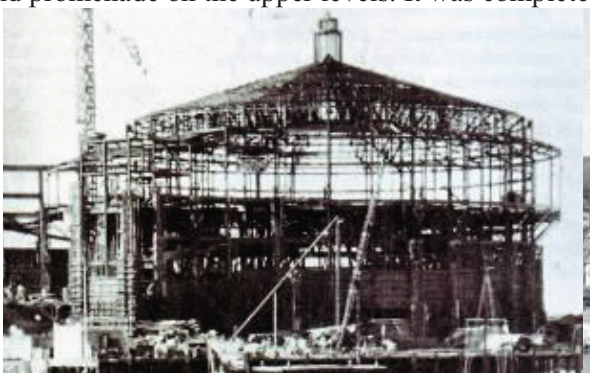
323 Beacon Street, Avalon, California 90704 - APN#7480-031-001
Residence - Square Footage: 761
Year Built / Effective Year Built 1908/ 1920

409 Beacon Street, Avalon, California 90704 - APN#7480-033-001
Residence - Square Footage: 1,712
Year Built / Effective Year Built 1914/1933

419 Beacon Street, Avalon, California 90704 - APN#7480-034-050
Residence - Square Footage: 674
Year Built / Effective Year Built 1928/ 1928

Casino Way

The Casino Theater and Ballroom
1 Casino Way, Avalon, CA 90704 - APN#7480-021-002
Commercial/Industrial - Square Footage: 54,199
Year Built / Effective Year Built 1929/1929
During 1921, William Wrigley Jr. commissioned the construction of a dance pavilion on Sugar Loaf Point. The pavilion was found inadequate and was razed in 1928. A new Casino was built with a theater on the first floor and a ballroom and promenade on the upper levels. It was completed in 1929.



Catalina Island Yacht Club
30 Casino Way, Catalina Island California 90704
Catalina Island Yacht Club was formed in 1893 and is one of the oldest clubs on the West Coast. The building was destroyed in the great fire of Avalon in 1915. The new yacht club was built shortly after the fire and in the early part of 1924, Art Sanger and James Jump, secured the facility from the Catalina Island Company. From 1942 to 1945, the Club was used by the U.S. Merchant Marines.

Catalina Avenue

301 Catalina Avenue, Avalon, California 90704 - APN#7480-014-036
Residence - Square Footage: 1,885
Year Built / Effective Year Built 1920 / 1930

305 Catalina Avenue, Avalon, California 90704 - APN#7480-034-002
Residence - Square Footage: 816
Year Built / Effective Year Built 1910/1932

307 Catalina Avenue, Avalon, California 90704 - APN#7480-034-003
Residence - Square Footage: 760
Year Built / Effective Year Built 1890/1905

309 Catalina Avenue, Avalon, California 90704 - APN#7480-034-004
Residence - Square Footage: 1,324
Year Built / Effective Year Built 1917/1975

313 Catalina Avenue, Avalon, California 90704 - APN#7480-034-006
Residence - Square Footage: 1,044
Year Built / Effective Year Built 1915/1928

Richardson/Hill house
315 Catalina Avenue, Avalon, CA 90704 - APN#7480-034-007
Residential - Square Footage: 1376
Year Built / Effective Year Built: 1908/1933
317 Catalina Avenue, Avalon, California 90704 - APN#7480-034-008
Residence - Square Footage: 1,252
Year Built / Effective Year Built 1912/1936

319 Catalina Avenue, Avalon, California 90704 - APN#7480-034-009
Residence - Square Footage: 821
Year Built / Effective Year Built 1888/1929

321 Catalina Avenue, Avalon, California 90704 - APN#7480-034-010
Residence - Square Footage: 772
Year Built / Effective Year Built 1900/1940

Richardson/Hill House
325 Catalina Avenue, Avalon, California 90704 - APN#7480-034-012
Residence - Square Footage: 1,104
Year Built / Effective Year Built 1922/1950

327 Catalina Avenue, Avalon, California 90704 - APN#7480-034-013
Residence - Square Footage: 794
Year Built / Effective Year Built 1904/1940

329 Catalina Avenue, Avalon, California 90704 - APN#7480-034-014
Residence - Square Footage: 1,042
Year Built / Effective Year Built 1904/1927

331 Catalina Avenue, Avalon, California 90704 - APN#7480-034-015
Residence - Square Footage: 1,120
Year Built / Effective Year Built 1895/1940

333 Catalina Avenue, Avalon, California 90704 - APN#7480-034-016
Residence - Square Footage: 752
Year Built / Effective Year Built 1900/1912

335 Catalina Avenue, Avalon, California 90704 - APN#7480-034-017
Residence - Square Footage: 878
Year Built / Effective Year Built 1908/1929

337 Catalina Avenue, Avalon, California 90704 - APN#7480-034-018
Residence - Square Footage: 1,248
Year Built / Effective Year Built 1885/1920

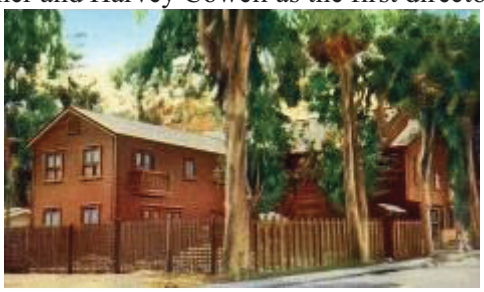
Charles Richardson House
339 Catalina Avenue, Avalon, California 90704 - APN#7480-034-019
Residence - Square Footage: 1,440
Year Built / Effective Year Built 1908/1918

341 Catalina Avenue, Avalon, California 90704 - APN#7480-034-020
Residence - Square Footage: 816
Year Built / Effective Year Built 1931/1931

343 Catalina Avenue, Avalon, California 90704 - APN#7480-034-021
Residence - Square Footage: 1,065
Year Built / Effective Year Built 1939/1939

345 Catalina Avenue, Avalon, California 90704 - APN#7480-034-022
Residence - Square Footage: 1,041
Year Built / Effective Year Built 1904/1906

Catalina Bible Church/Singing Waters Christian Center
346 Catalina Avenue, Avalon, Santa Catalina Island, California 90704 - APN#7480-035-011
Square Footage: 4,084 - Year Built / Effective Year Built 1924 / 1930
The church building was built back in 1923 by famous author and conservationist, Gene Stratton Porter. She named her home "Singing Waters" because of the musical notes she heard from the water flowing in her patio fountain.
In the winter of 1963 a handful of Christians formed the Catalina for Christ Association with Jim McKeever, Harry Stiritz, Dave Fletcher and Harvey Cowell as the first directors.



347 Catalina Avenue, Avalon, California 90704 - APN#7480-034-023
Residence - Square Footage: 1,204
Year Built / Effective Year Built 1908/1920

351 Catalina Avenue, Avalon, California 90704 - APN#7480-034-024
Residence - Square Footage: 2,253
Year Built / Effective Year Built 1924/1930

355 Catalina Avenue, Avalon, California 90704 - APN#7480-034-025
Residence - Square Footage: 1,631
Year Built / Effective Year Built 1923/1937

359 Catalina Avenue, Avalon, California 90704 - APN#7480-034-026
Residence - Square Footage: 1,494
Year Built / Effective Year Built 1919/1938

236 Catalina Avenue, Avalon, California 90704 - APN#7480-014-036
Residence - Square Footage: 1,885
Year Built / Effective Year Built 1920 / 1930

232 Catalina Avenue, Avalon, California 90704 - APN#7480-014-010
Commercial/Industrial - Square Footage: 2,231
Year Built / Effective Year Built 1926 / 1950

228 Catalina Avenue, Avalon, California 90704 - APN#7480-014-009
Residence - Square Footage: 898
Year Built / Effective Year Built 1920 / 1935

226 Catalina Avenue, Avalon, California 90704 - APN#7480-014-008
Residence - Square Footage: 966
Year Built / Effective Year Built 1930 / 1930

224 Catalina Avenue, Avalon, California 90704 #1 - APN# 7480-014-038
Condo - Square Footage: 756
Year Built / Effective Year Built 1930 / 1930

224 Catalina Avenue, Avalon, California 90704 #2 - APN# 7480-014-039
Condo - Square Footage: 813
Year Built / Effective Year Built 1930 / 1930

220 Catalina Avenue, Avalon, California 90704 - APN# 7480-014-032
Residence - Square Footage: 1,695
Year Built / Effective Year Built 1921/ 1941

214 Catalina Avenue, Avalon, California 90704 - APN# 7480-014-005
Residence - Square Footage: 768
Year Built / Effective Year Built 1916/ 1926

212 Catalina Avenue, Avalon, California 90704 - APN# 7480-014-004
Residence - Square Footage: 1,688
Year Built / Effective Year Built 1935/ 1940

206 Catalina Avenue, Avalon, California 90704 - APN# 7480-014-002
Residence - Square Footage: 1,708
Year Built / Effective Year Built 1920/ 1936

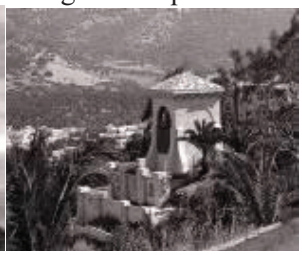
202 Catalina Avenue, Avalon, California 90704 - APN# 7480-014-001
Residence - Square Footage: 1,400
Year Built / Effective Year Built 1920/ 1930

Chimes Road

189 Chimes Road, Avalon, CA 90705 - APN#7480-022-030
Residence - Square Footage: 480
Year Built / Effective Year Built 1928/1931

Chimes Tower

Built in 1925 as a gift to the town of Avalon by Mrs. Ada Wrigley. Located up and across from the Zane Grey Pueblo Hotel, the chimes have been tolling on the quarter of the hour between 8:00am and 8:00pm since 1925



Zane Grey Pueblo Hotel

199 Chimes Road, Avalon, CA 90705 - APN#7480-022-029
Commercial/Industrial - Square Footage: 6,382
Year Built / Effective Year Built 1925 / 1930

Pearl Zane Grey from Zanesville, Ohio, and wife, Lina Roth Grey constructed the pueblo building in 1926, when Grey was in his mid-50s. Grey's original home had a long hall dividing the bedrooms overlooking the ocean, and those overlooking the hills. A large living room and dining room were graced by a fireplace with a long mantle, open beam ceilings, a hewn plank door, and an oak dining table brought from Tahiti on one of his fishing trips. A dirt patio, now a lovely pool, separated the home from that of his brother Romer C. Grey.

Clarissa Avenue

111 Clarissa Avenue, Avalon, CA 90704 - APN#7480-015-017
Commercial / Industrial - Square Footage 3,243
Year Built / Effective Year Built 1912/1974

112 Clarissa Avenue, Avalon, CA 90704 - APN#7480-011-001
Commercial / Industrial - Square Footage 2,160
Year Built / Effective Year Built 1900/1938

116 Clarissa Avenue, Avalon, CA 90704 - APN#7480-011-032
Commercial / Industrial - Square Footage 1,180
Year Built / Effective Year Built 1913/1925

122 Clarissa Avenue, Avalon, CA 90704 - APN#7480-011-027
Residential - Square Footage 1,497
Year Built / Effective Year Built 1912/1923

124 Clarissa Avenue, Avalon, CA 90704 - APN#7480-011-028
Residential - Square Footage 1,072
Year Built / Effective Year Built 1912/1935

Catalina Island Conservancy Office
125 Clarissa Avenue, Avalon, California 90704
Built by the Lambs around 1930. Lucile Lamb, went to school with Lucile Pinneo Sook. Two of her children were the late Francis Lamb Guion (who was married to Jay Guion of Joe's Rent-a-boat on the pier) and Spud Lamb. John Olsen is the one who made it into a bed and breakfast before it became the Conservancy business offices.

126 Clarissa Avenue, Avalon, CA 90704 - APN#7480-011-006
Residential - Square Footage 1,300
Year Built / Effective Year Built 1915/1962

201 Clarissa Avenue, Avalon, CA 90704 - APN#7480-013-034
Residential - Square Footage 969
Year Built / Effective Year Built 1912/1920

204 Clarissa Avenue, Avalon, CA 90704 - APN#7480-011-011
Residential - Square Footage 1,332
Year Built / Effective Year Built 1911/1927

205 Clarissa Avenue, Avalon, CA 90704 - APN#7480-013-033
Residential - Square Footage 2,652
Year Built / Effective Year Built 1908/1945

215 Clarissa Avenue, Avalon, CA 90704 - APN#7480-013-030
Residential - Square Footage 1,308
Year Built / Effective Year Built 1908/1924

219 Clarissa Avenue, Avalon, CA 90704 - APN#7480-013-029
Residential - Square Footage 867
Year Built / Effective Year Built 1912/1926

225 Clarissa Avenue, Avalon, CA 90704 - APN#7480-013-027
Residential - Square Footage 994
Year Built / Effective Year Built 1916/1945

231 Clarissa Avenue, Avalon, CA 90704 - APN#7480-013-026
Residential - Square Footage 1,358
Year Built / Effective Year Built 1919/1970

235 Clarissa Avenue, Avalon, CA 90704 - APN#7480-013-024
Residential - Square Footage 1,163
Year Built / Effective Year Built 1919/1936

241 Clarissa Avenue, Avalon, CA 90704 - APN#7480-013-023
Residential - Square Footage 1,337
Year Built / Effective Year Built 1919/1936

243 Clarissa Avenue, Avalon, CA 90704 - APN#7480-013-039
Residential - Square Footage: 3,078
Year Built / Effective Year Built 1927/1927

244 Clarissa Avenue, Avalon, CA 90704 - APN#7480-012-014
Residential - Square Footage 857
Year Built / Effective Year Built 1912/1928

247 Clarissa Avenue, Avalon, CA 90704 - APN#7480-013-040
Residential - Square Footage: 3,780
Year Built / Effective Year Built 1927/1927

301 Clarissa Avenue, Avalon, CA 90704 - APN#7480-036-041
Residential - Square Footage 2,133
Year Built / Effective Year Built 1920/1932

Clemente Avenue

332 Clemente Avenue, Avalon, CA 90704 - APN#7480-038-005
Residential - Square Footage 5,439
Year Built / Effective Year Built 1915/1915

Country Club Drive

Clubhouse Bar and Grille
1 Country Club Drive, Avalon, California 90704
The building follows the lines of Early California architecture, and the Country Club House consisted of a cloistered patio, fountain and gardens of tropical plants. The structure was built between 1927 and 1929 over the original Country Club House that was constructed in 1894. William Wrigley, Jr. brought the Chicago Cubs to the island for spring training in 1921 and the trained there for 26 seasons. Several individuals operated the Country Club over the years, and a wine cellar was built for the restaurant. During 1989 the restaurant reopened as Palms Room with Silky's Bar.

Crescent Avenue

15 Crescent Avenue, Avalon, CA 90704 - APN# 7480-022-059
Residential - Square Footage 4,144
Year Built / Effective Year Built 1933/1933

111 Crescent Avenue, Avalon, CA 90704 - APN# 7480-019-023
Commercial/Industrial - Square Footage 3,648
Year Built / Effective Year Built 1900/1947
Commercial/Industrial - Square Footage 2,187
Year Built / Effective Year Built 1900/1947
Commercial/Industrial - Square Footage 6,712
Year Built / Effective Year Built 1900/1958

155 Crescent Avenue, Avalon, CA 90704 - APN#7480-020-031
Residential - Square Footage 2,963
Year Built / Effective Year Built 1927 / 1939

159 Crescent Avenue, Avalon, CA 90704 - APN#7480-020-031
Residential - Square Footage 1,347
Year Built / Effective Year Built 1924 / 1925

163 Crescent Avenue, Avalon, CA 90704 - APN#7480-020-032
Commercial /Industrial - Square Footage 7544
Year Built / Effective Year Built 1934 /1958 (Improvement 1)
Commercial/Industrial - Square Footage: 1539
Year Built / Effective Year Built 1935 /1955 (Improvement 2)

Hotel Metropole
205 Crescent Avenue, Avalon, CA 90704/401 Crescent Avenue, Avalon, CA 90704 - APN#7480-016-006
Commercial/Industrial - Square Footage 8,528
Year Built / Effective Year Built 1910 / 1930

407 Crescent Avenue, Avalon, CA 90704 - APN#7480-017-001
Commercial/Industrial - Square Footage 16,867
Year Built / Effective Year Built 1926/1960

Hotel Mac Rae
409 Crescent Avenue, Avalon, CA 90704 - APN#7480-016-005
Commercial/Industrial - Square Footage: 15,111
Year Built / Effective Year Built 1926/1941

El Galleon Restaurant & Karaoke Lounge
411 Crescent Avenue, Avalon, CA 90704 - APN#7480-016-004
Commercial/Industrial - Square Footage: 3,465
Year Built / Effective Year Built 1938/1952

415 Crescent Avenue, Avalon, CA 90704 - APN#7480-016-003
Commercial/Industrial - Square Footage: 8,190
Year Built / Effective Year Built 1922/1930

417 Crescent Avenue, Avalon, CA 90704 - APN#7480-016-002
Commercial/Industrial - Square Footage: 24,300
Year Built / Effective Year Built 1922/1939

421 Crescent Avenue, Avalon, CA 90704 - APN#7480-016-001
Commercial/Industrial - Square Footage: 4,636
Year Built / Effective Year Built 1923/1940

Hotel Atwater / Pavilion Hotel
513 Crescent Avenue, Avalon, CA 90704 - APN#7480-015-001
Commercial/Industrial - Square Footage: 3,555
Year Built / Effective Year Built 1930/1930
Commercial/Industrial - Square Footage: 5,586
Year Built / Effective Year Built 1920/1935
Built in 1920 by William Wrigley Jr.

CC Gallagher
523 Crescent Avenue, Avalon, CA 90704 (The corner of Claressa and Crescent)
(originally built to house **Security Pacific Bank** - vault is still inside)

603 Crescent Avenue, Avalon, California 90704 - APN#7480-011-037
Commercial/Industrial - Square Footage 4,542
Year Built / Effective Year Built 1925/1955
Commercial/Industrial - Square Footage 5,942
Year Built / Effective Year Built 1925/1925

702 Crescent Avenue, Avalon, California 90704
APN#7480-005-019
Commercial / Industrial - Square Footage 2,482
Year Built / Effective Year Built 1912 / 1935

Catherine Hotel
708 Crescent Avenue, Catalina Island, California 90704 - APN# 7480-005-003
Improvement 1 - Square Footage 3,558
Year Built / Effective Year Built 1911 / 1935
Improvement 2 - Square Footage 4,065
Year Built / Effective Year Built 1911 / 1935
The building was originally constructed as the Sunset House sometime after 1894 then became known as the Sunset Apartments. By 1958 it became the "Jade Pagoda" Around 1966, Catherine Pettit purchased the building and renamed the business venture, The Catherine Hotel.

The Peter Gano/Holly Hill House
718 Crescent Avenue, Avalon, CA 90704 - APN# 7480-005-023
Residential - Square Footage 2,495
Year Built / Effective Year Built 1890/1930
This picturesque Queen Anne style house, perched on a hill overlooking Avalon Bay, is the third oldest building on Catalina Island. Best known as the Holly Hill House, it was built in 1890 by Peter Gano who named it Overlook Cottage. Gano brought building materials over on his sailboat and used a trained circus horse and cable/pulley system to get the materials to the building site. Gano named it "Look Out Cot"; however, the name was change by the Giddings, to the Holly Hill House. Its current owner, Victor Kries, has restored it. It is listed on the National Register of Historic Places. 19-178671 (Peter Gano House, AKA Holly Hill House) (NR83001194)

724 Crescent Avenue, Avalon, CA 90704 - APN# 7480-005-008
Residential - Square Footage 2,234
Year Built / Effective Year Built 1927/1930

800 Crescent Avenue, Avalon, CA 90704 - APN# 7480-005-011
Commercial/Industrial - Square Footage 2,430
Year Built / Effective Year Built 1939 / 1939

Descanso Avenue

Boat House
200 Descanso Ave. (at the corner of Descanso and Third St.) - APN#7480-013-001
Residence - Square Footage 1,466
Year Built / Effective Year Built 1917 / 1921
Made by connecting two boats (one in front, one in back)-dragged up from the harbor - the Warrior and the Falcon.

201 Descanso Avenue, Avalon, CA 90704
APN#7480-014-031
Multi-Family Residence
Square Footage: 950
Year Built / Effective Year Built 1919 / 1940

203 Descanso Avenue, Avalon, CA 90704
APN#7480-014-030
Multi-Family Residence
Square Footage: 831
Year Built / Effective Year Built 1919 / 1924

204 Descanso Avenue, Avalon, CA 90704
APN#7480-013-002
Residence - Square Footage: 945
Year Built / Effective Year Built 1919/1936

207 Descanso Avenue, Avalon, CA 90704 - APN#7480-014-029
Residence - Square Footage: 1,268
Year Built / Effective Year Built 1919 / 1954

208 Descanso Avenue, Avalon, CA 90704 - APN#7480-013-004
Residence - Square Footage: 1,191
Year Built / Effective Year Built 1919/1939

209 Descanso Avenue, Avalon, CA 90704 - APN#7480-014-028
Residence - Square Footage: 747
Year Built / Effective Year Built 1919 / 1935

210 Descanso Avenue, Avalon, CA 90704 - APN#7480-013-005
Residence - Square Footage: 659
Year Built / Effective Year Built 1919/1926

212 Descanso Avenue, Avalon, CA 90704 - APN#7480-013-006
Residence - Square Footage: 698
Year Built / Effective Year Built 1919/1925

213 Descanso Avenue, Avalon, CA 90704 - APN#7480-014-027
Residence - Square Footage: 822
Year Built / Effective Year Built 1919 / 1931

215 Descanso Avenue, Avalon, CA 90704 - APN#7480-014-026
Residence - Square Footage: 624
Year Built / Effective Year Built 1919 / 1940

216 Descanso Avenue, Avalon, CA 90704 - APN#7480-013-007
Residence - Square Footage: 730
Year Built / Effective Year Built 1919/1930

217 Descanso Avenue, Avalon, CA 90704 - APN#7480-014-025
Residence - Square Footage: 681
Year Built / Effective Year Built 1919 / 1936

218 Descanso Avenue, Avalon, CA 90704 - APN#7480-013-008
Residence - Square Footage: 778
Year Built / Effective Year Built 1919/1933

220 Descanso Avenue, Avalon, CA 90704 - APN#7480-013-009
Residence - Square Footage: 497
Year Built / Effective Year Built 1919/1921

222 Descanso Avenue, Avalon, CA 90704 - APN#7480-013-010
Residence - Square Footage: 854
Year Built / Effective Year Built 1919/1937

224 Descanso Avenue, Avalon, CA 90704 - APN#7480-014-011
Residence - Square Footage: 734
Year Built / Effective Year Built 1919 / 1940

225 Descanso Avenue, Avalon, CA 90704 - APN#7480-014-021
Residence - Square Footage: 858
Year Built / Effective Year Built 1919 / 1936

226 Descanso Avenue, Avalon, CA 90704 - APN#7480-014-012
Residence - Square Footage: 738
Year Built / Effective Year Built 1919 / 1923

228 Descanso Avenue, Avalon, CA 90704 - APN#7480-014-013
Residence - Square Footage: 1,042
Year Built / Effective Year Built 1919 / 1934

230 Descanso Avenue, Avalon, CA 90704 - APN#7480-014-014
Residence - Square Footage: 621
Year Built / Effective Year Built 1919 / 1924

232 Descanso Avenue, Avalon, CA 90704 - APN#7480-014-015
Residence - Square Footage: 1,465
Year Built / Effective Year Built 1919 / 1958

233 Descanso Avenue, Avalon, CA 90704 - APN#7480-014-018
Residence - Square Footage: 1,607
Year Built / Effective Year Built 1919 / 1945

234 Descanso Avenue, Avalon, CA 90704 - APN#7480-014-016
Residence - Square Footage: 821
Year Built / Effective Year Built 1919 / 1936

235 Descanso Avenue, Avalon, CA 90704 - APN#7480-014-017
Residence - Square Footage: 741
Year Built / Effective Year Built 1919 / 1928

236 Descanso Avenue, Avalon, CA 90704 - APN#7480-014-017
Residence - Square Footage: 753
Year Built / Effective Year Built 1919 / 1929

237 Descanso Avenue, Avalon, CA 90704 - APN#7480-014-016
Residence - Square Footage: 849
Year Built / Effective Year Built 1911 / 1964

238 Descanso Avenue, Avalon, CA 90704 - APN#7480-013-900
Residence - Square Footage: 823
Year Built / Effective Year Built 1919 / 1935

239 Descanso Avenue, Avalon, CA 90704 - APN#7480-014-015
Residence - Square Footage: 1,183
Year Built / Effective Year Built 1919 / 1940

240 Descanso Avenue, Avalon, CA 90704 - APN#7480-013-019
Residence - Square Footage: 1,177
Year Built / Effective Year Built 1919 / 1939

241 Descanso Avenue, Avalon, CA 90704 - APN#7480-014-014
Residence - Square Footage: 727
Year Built / Effective Year Built 1919 / 1924

244 Descanso Avenue, Avalon, CA 90704 - APN#7480-014-020
Residence - Square Footage: 671
Year Built / Effective Year Built 1919 / 1937

Eucalyptus Avenue

304 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-034-049
Residence - Square Footage: 869
Year Built / Effective Year Built 1922/1924

305 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-033-003
Residence - Square Footage: 1,970
Year Built / Effective Year Built 1936/1948

311 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-033-004
Residence - Square Footage: 904
Year Built / Effective Year Built 1904/1930

321 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-033-007
Residence - Square Footage: 587
Year Built / Effective Year Built 1920/1935

323 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-033-008
Residence - Square Footage: 646
Year Built / Effective Year Built 1920/1925

327 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-033-009
Residence - Square Footage: 1,350
Year Built / Effective Year Built 1908/1932

329 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-033-010
Residence - Square Footage: 645
Year Built / Effective Year Built 1920/1930

331 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-033-011
Residence - Square Footage: 1,090
Year Built / Effective Year Built 1920/1930

333 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-033-012
Residence - Square Footage: 1,196
Year Built / Effective Year Built 1920/1957

335 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-033-013
Residence - Square Footage: 760
Year Built / Effective Year Built 1920/1927

336 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-034-055
Residence - Square Footage: 662
Year Built / Effective Year Built 1920/1936

337 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-033-014
Residence - Square Footage: 875
Year Built / Effective Year Built 1920/1930

338 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-034-054
Residence - Square Footage: 417
Year Built / Effective Year Built 1908/1925
Residence - Square Footage: 1,865
Year Built / Effective Year Built 1924/1945

341 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-033-015
Residence - Square Footage: 1,266
Year Built / Effective Year Built 1920/1939

343 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-033-016
Residence - Square Footage: 629
Year Built / Effective Year Built 1920/1925

344 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-034-056
Residence - Square Footage: 960 - Year Built / Effective Year Built 1916/1925
Residence - Square Footage: 450 - Year Built / Effective Year Built 1920/1923

345 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-033-017
Residence - Square Footage: 1,204
Year Built / Effective Year Built 1920/1940

347 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-033-018
Residence - Square Footage: 476
Year Built / Effective Year Built 1920/1928

348 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-034-030
Residence - Square Footage: 772
Year Built / Effective Year Built 1920/1934

349 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-033-019
Residence - Square Footage: 672
Year Built / Effective Year Built 1920/1930

350 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-034-029
Residence - Square Footage: 1,182
Year Built / Effective Year Built 1920/1931

351 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-033-020
Residence - Square Footage: 960
Year Built / Effective Year Built 1920/1970

352 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-034-028
Residence - Square Footage: 778
Year Built / Effective Year Built 1920/1925

353 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-033-021
Residence - Square Footage: 1,578
Year Built / Effective Year Built 1926/1930

359 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-034-028
Residence - Square Footage: 778
Year Built / Effective Year Built 1920/1925
Residence - Square Footage: 438
Year Built / Effective Year Built 1937/1937

360 Eucalyptus Avenue, Avalon, CA 90704 - APN#7480-034-027
Residence - Square Footage: 405
Year Built / Effective Year Built 1938/1938
Residence - Square Footage: 1,673
Year Built / Effective Year Built 1922/1930

Falls Canyon Road

Avalon Cemetery on Catalina Island – This cemetery is located up Falls Canyon Road near Fairview Terrace and graves date to the late 1800s: Callie Brown, 1893; Regnier (daughter 1896).

Hiawatha Avenue

124 Hiawatha Avenue, Avalon, CA 90704 - APN#7480-023-027
Residence - Square Footage 1,919
Year Built / Effective Year Built 1904/1933

130 Hiawatha Avenue, Avalon Ca 90704 - APN#7480-023-016
Residence - Square Footage 2,756
Year Built / Effective Year Built 1910/1915

134 Hiawatha Avenue, Avalon Ca 90704 - APN#7480-023-017
Residence Square Footage 1,652
Year Built / Effective Year Built 1908/1912

Hill Street

131 Hill Street, Avalon Ca 90704 - APN#7480-022-045
Residence - Square Footage 2,136
Year Built / Effective Year Built 1924/1950

Lower Terrace Road

5 Lower Terrace Rd, Avalon Ca 90704 - APN#7480-010-003
Residence - Square Footage 1,732
Year Built / Effective Year Built 1923/1933

7 Lower Terrace Rd, Avalon Ca 90704 - APN#7480-010-006
Residence - Square Footage 1,740
Year Built / Effective Year Built 1924 / 1930

149 Lower Terrace Rd, Avalon Ca 90704 - APN#7480-010-031
Commercial/Industrial - Square Footage 576
Year Built / Effective Year Built 1939 / 1939

155 Lower Terrace Rd, Avalon Ca 90704 - APN#7480-010-001
Residence - Square Footage 1,925
Year Built / Effective Year Built 1927/1927

161 Lower Terrace Rd, Avalon Ca 90704 - APN#7480-010-002
Residence - Square Footage 1,314
Year Built / Effective Year Built 1923/1930

187 Lower Terrace Rd, Avalon Ca 90704 - APN#7480-010-008
Residence - Square Footage 2,382
Year Built / Effective Year Built 1927/ 1934

Marilla Avenue

El Encanto/The Landing Rstaurant
101 Marilla Avenue, Avalon, California 90704
The building opened in 1932

Hotel Vincentes
108-115 Marilla Avenue, Avalon, California 90704 - APN#7480-020-017
Commercial/Industrial - Square Footage 1,680
Year Built / Effective Year Built 1941/1941
Commercial/Industrial - Square Footage 1,512
Year Built / Effective Year Built 1922/1925
Commercial/Industrial - Square Footage 264
Year Built / Effective Year Built 1933/1933
Commercial/Industrial - Square Footage 789
Year Built / Effective Year Built 1924/1932
Commercial/Industrial - Square Footage 354
Year Built / Effective Year Built 1920/1920
During 1894, the area currently containing the Hotel Vincentes was a Barber Shop and Dwelling; a Wine Store and dwelling in 1909, and then vacant from 1915-1930. Sometime around 1947 Vincent Scaramucci opened a restaurant on adjacent to the current Hotel Vincentes. The building was used as bar called the Sky Lounge.

123 Marilla Avenue, Avalon, CA 91304
APN#7480-020-018
Single-family Residence
Square Footage 1,050
Year Built / Effective Year Built 1920/1920

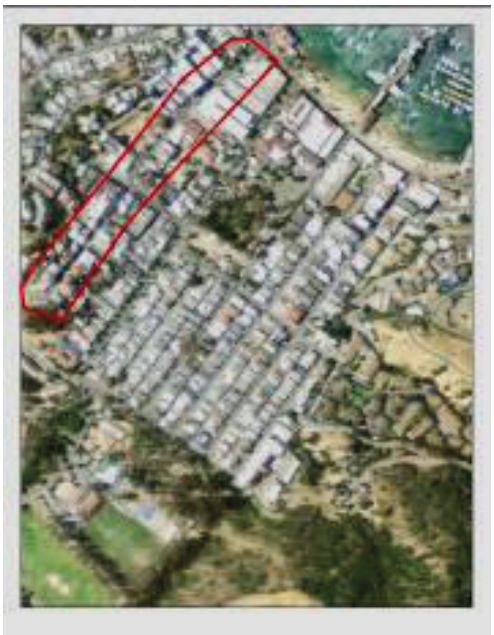
127 Marilla Avenue, Avalon, CA 91304
APN#7480-020-019
Single-family Residence
Square Footage 2,052
Year Built / Effective Year Built 1939/1939

147 Marilla Avenue, Avalon, CA 91304 - APN#7480-020-022
Residence - Square Footage 2,004
Year Built / Effective Year Built 1920/1925

Catalina Beach House Hotel (The Captain's Beach House)
200 Marilla Avenue, Avalon, California 90704 - APN#7480-019-010
Residence - Square Footage 1,942
Year Built / Effective Year Built 1916 / 1916
Constructed originally in the late 1880s, history says that Captain Joseph McAfee sailed his flat-bottom houseboat from Venice Beach to Santa Catalina Island in the early 1900s, and hauled his ship to the current location.

361 Marilla Avenue, Avalon, CA 91304 - APN#7480-025-008
Residence - Square Footage 1,791
Year Built / Effective Year Built 1929/1944

Metropole Avenue



0 Metropole Avenue, Avalon, CA 90704 - APN#7480-018-001
Residence - Square Footage: 10,739
Year Built / Effective Year Built 1936/1960

Santa Catalina Island Company Building
150 Metropole Avenue, Avalon, California 90704

The Avalon Community Church
236 Metropole Avenue, Avalon, CA 90704 - APN#7480-017-001
Church - Square Footage: 6,645
Year Built / Effective Year Built 1888/1900/ 1924

310 Metropole Avenue, Avalon, California 90704 - APN# 7480-031-039
Residence - Square Footage 1,720
Year Built / Effective Year Built: 1912/1920

312 Metropole Avenue, Avalon, California 90704 - APN# 7480-031-044
Residence - Square Footage 1,120
Year Built / Effective Year Built: 1918/1937

316 Metropole Avenue, Avalon, California 90704 - APN# 7480-031-033
Residence - Square Footage 1,200
Year Built / Effective Year Built: 1900/1922

318 Metropole Avenue, Avalon, California 90704 - APN# 7480-031-035
Commercial/Industrial - Square Footage 1,825
Year Built / Effective Year Built: 1910/1934 - APN# 7480-031-034
Commercial/Industrial - Square Footage 476
Year Built / Effective Year Built: 1908/1918

320 Metropole Avenue, Avalon, California 90704 - APN# 7480-031-030
Commercial/Industrial - Square Footage 1,362
Year Built / Effective Year Built: 1910/1929
APN# 7480-031-031 - Commercial/Industrial - Square Footage 1,604
Year Built / Effective Year Built: 1910/1916
APN# 7480-031-032 - Commercial/Industrial - Square Footage 440
Year Built / Effective Year Built: 1914/1916

321 Metropole Avenue, Avalon, California 90704 - APN# 7480-031-050
Commercial/Industrial - Square Footage 3,000
Year Built / Effective Year Built: 1910/1920
Commercial/Industrial - Square Footage 2,104
Year Built / Effective Year Built: 1929/1929

328 Metropole Avenue, Avalon, California 90704 - APN# 7480-031-050
Commercial/Industrial - Improvement 1 - Square Footage 3,000
Year Built / Effective Year Built: 1910 / 1920
Commercial/Industrial - Improvement 2 - Square Footage: 2,104
Year Built / Effective Year Built: 1929 / 1929
Commercial/Industrial - Improvement 3 - Square Footage: 1,352
Year Built / Effective Year Built: 1992 / 1992

336 Metropole Avenue, Avalon, California 90704 - APN# 7480-032-025
Residence - Square Footage 3,373
Year Built / Effective Year Built: 1921/1933

342 Metropole Avenue, Avalon, California 90704 - APN# 7480-032-024
Residence - Square Footage 3,216
Year Built / Effective Year Built: 1913/1930

350 Metropole Avenue, Avalon, California 90704 - APN# 7480-032-036
Residence - Square Footage 1,645
Year Built / Effective Year Built: 1906/1912

358 Metropole Avenue, Avalon, California 90704 - APN# 7480-032-035
Residence - Square Footage 1,732
Year Built / Effective Year Built: 1927/1931

Olive Street

106 Olive Street, Avalon, CA 90704 - APN# 7480-020-003
Residential - Square Footage: 2,270
Year Built / Effective Year Built 1922/1928

110 Olive Street, Avalon, CA 90704 - APN# 7480-020-034/035/036
Condo - Square Footage: 600/850/870 - Year Built / Effective Year Built 1928/1930

112 Olive Street, Avalon, CA 90704 - APN# 7480-020-005
Residential - Square Footage: 1,344
Year Built / Effective Year Built 1925/1935

Pebbly Beach Road

Grisham House
101 Pebbly Beach Road - APN#7480-005-005
Residence - Square Footage 344
Year Built / Effective Year Built 1946/1946
Built in 1910 as a private three-story residence. Sometime in the late 1940's or early 1950's the building changed hands and became the site of the romantic island hotel "The Tropics". During the early 1970's the property was acquired by Wayne & Millie Grisham and Don & Elizabeth Grisham as a vacation home.

Pebbly Beach

During the spring of 1919, the Pacific Telephone & Telegraph Company inaugurated the first commercial radio telephone system for Catalina Island, which continued until the site was abandoned in 1923. About the same time, a crusher rock plant was established on the hillside near Pebbly Beach. This operation continued until the mid-1930s when the heavy rock operation needed to provide material for breakwaters and shore abutments was moved down the shoreline toward Seal Rocks. Around 1924, a brick and tile plant was established at Pebbly Beach utilizing native clays transported from various island locations. The plant was in operation until approximately 1930, when it was converted into the manufacture of pottery ware. This local souvenir industry was forced to close with the advent of World War II. Over time, boat storage, repair operations, a mooring service, winter storage, a paint shop, and general warehouse storage facilities, relocated to the area. By 1932, numerous wood-frame structures were constructed in the area. By 1941, the public utilities which had operated in the main valley of Avalon, relocated to Pebbly Beach. The diesel electric plant was moved there in 1946 and is still operating. Freight which was transported from the mainland to Avalon by way of barge and steamship was also shifted to the Pebbly Beach area. Another operation which moved to Pebbly Beach was the amphibian seaplane service. The area is a major center for industrial and commercial use.

St. Catherine Way

Tuna Club of Avalon
100 St. Catherine Way, Avalon
The Tuna Club of Avalon marks the birthplace of modern big game sportfishing in 1898. This property was also listed in the National Register of Historic Places on 4/2/1991. 19-180701 (NR91000338)

Sumner Avenue

117 Sumner Avenue, Avalon, CA 90704 - APN#7480-017-025
Residence - Square Footage: 67,382
Year Built / Effective Year Built 1920 / 1924 - Improvement 1
Residence - Square Footage: 1,000
Year Built / Effective Year Built 1942 / 1942 - Improvement 2
Residence - Square Footage: 3,048
Year Built / Effective Year Built 1922 / 1930 - Improvement 3

118 Sumner Avenue, Avalon, CA 90704 - APN#7480-016-007
Commercial/Industrial - Square Footage: 20,728
Year Built / Effective Year Built 1915

Glenmore Plaza Hotel
120 Sumner Avenue, Avalon, California 90704
The Glenmore Plaza Hotel was constructed in the late 1800s. The four-story hotel has undergone remodeling over the years; however, there are still some older rooms available for tourists. The older rooms do not date back to the original hotel, since it was destroyed by the fire of 1915. Portions of the current building were constructed right after the fire.

122 Sumner Avenue, Avalon, CA 90704 - APN#7480-016-008
Commercial/Industrial - Square Footage: 7,545
Year Built / Effective Year Built 1913 / 1920

302 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-050
Residence - Square Footage: 792
Year Built / Effective Year Built 1915/1940

304 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-049
Residence - Square Footage: 843
Year Built / Effective Year Built 1908/1910

305 Sumner Avenue, Avalon, CA 90704 - APN#7480-031-012
Residence - Square Footage: 1,558
Year Built / Effective Year Built 1904/1940

306 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-048
Residence - Square Footage: 624
Year Built / Effective Year Built 1915/1937

310 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-046
Residence - Square Footage: 1,695
Year Built / Effective Year Built 1932/1936

312 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-045
Residence - Square Footage: 776
Year Built / Effective Year Built 1890 / 1922

313 Sumner Avenue, Avalon, CA 90704 - APN#7480-031-015
Residence - Square Footage: 656
Year Built / Effective Year Built 1916/1920

314 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-044
Residence - Square Footage: 757
Year Built / Effective Year Built 1912/1940

315 Sumner Avenue, Avalon, CA 90704 - APN#7480-031-016
Residence - Square Footage: 582
Year Built / Effective Year Built 1920/1931

316 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-043
Residence - Square Footage: 1,198
Year Built / Effective Year Built 1912/1925

317 Sumner Avenue, Avalon, CA 90704 - APN#7480-031-017
Residence - Square Footage: 1,081
Year Built / Effective Year Built 1912/1920
Residence - Square Footage: 1,152
Year Built / Effective Year Built 1904/1918

318 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-042
Residence - Square Footage: 736
Year Built / Effective Year Built 1895/1910

320 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-900
Residence - Square Footage: 1,000
Year Built / Effective Year Built 1896/1925

322 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-040
Residence - Square Footage: 686
Year Built / Effective Year Built 1912/1920

324 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-039
Residence - Square Footage: 1,984
Year Built / Effective Year Built 1912 / 1955

328 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-054
Residence - Square Footage: 757
Year Built / Effective Year Built 1890/1925

327 Sumner Avenue, Avalon, CA 90704 - APN#7480-031-022
Residence - Square Footage: 1,910
Year Built / Effective Year Built 1924/1925
Residence- Square Footage: 1,152
Year Built / Effective Year Built 1904/1918

330 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-053
Residence - Square Footage: 842
Year Built / Effective Year Built 1908/1915

333 Sumner Avenue, Avalon, CA 90704 - APN#7480-031-049
Residence - Square Footage: 1,256
Year Built / Effective Year Built 1928/1930

334 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-051
Residence - Square Footage: 915
Year Built / Effective Year Built 1898/1940

336 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-033
Residence - Square Footage: 1,200
Year Built / Effective Year Built 1923/1927

337 Sumner Avenue, Avalon, CA 90704 - APN#7480-031-046
Residence - Square Footage: 1,184
Year Built / Effective Year Built 1922/1930

338 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-032
Residence - Square Footage: 1,204
Year Built / Effective Year Built 1900/1955

339 Sumner Avenue, Avalon, CA 90704 - APN#7480-032-001
Residence - Square Footage: 360
Year Built / Effective Year Built 1916/1921
Residence - Square Footage: 756
Year Built / Effective Year Built 1921/1935

341 Sumner Avenue, Avalon, CA 90704 - APN#7480-032-002
Residence - Square Footage: 714
Year Built / Effective Year Built 1901/1910

342 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-030
Residence - Square Footage: 837
Year Built / Effective Year Built 1890/1940

344 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-029
Residence - Square Footage: 938
Year Built / Effective Year Built 1922/1938

345 Sumner Avenue, Avalon, CA 90704 - APN#7480-032-004
Residence - Square Footage: 959
Year Built / Effective Year Built 1880/1876

346 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-028
Residence - Square Footage: 785
Year Built / Effective Year Built 1912/1915

347 Sumner Avenue, Avalon, CA 90704 - APN#7480-032-033
Residence - Square Footage: 946
Year Built / Effective Year Built 1900/1900

348 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-027
Residence - Square Footage: 521
Year Built / Effective Year Built 1900/1900

349 Sumner Avenue, Avalon, CA 90704 - APN#7480-032-008
Residence - Square Footage: 1,098
Year Built / Effective Year Built 1904/1908

351 Sumner Avenue, Avalon, CA 90704 - APN#7480-032-009
Residence - Square Footage: 946
Year Built / Effective Year Built 1900/1900
Residence - Square Footage: 1,176
Year Built / Effective Year Built 1908/1934

352 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-026
Residence - Square Footage: 642
Year Built / Effective Year Built 1920/1936

355 Sumner Avenue, Avalon, CA 90704 - APN#7480-032-011
Residence - Square Footage: 1,002
Year Built / Effective Year Built 1890/1910

356 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-024
Residence - Square Footage: 690
Year Built / Effective Year Built 1908/1915

358 Sumner Avenue, Avalon, CA 90704 - APN#7480-033-023
Residence - Square Footage: 953
Year Built / Effective Year Built 1912/1915

359 Sumner Avenue, Avalon, CA 90704 - APN#7480-032-013
Residence - Square Footage: 656
Year Built / Effective Year Built 1886/1900

361 Sumner Avenue, Avalon, CA 90704 - APN#7480-032-014
Residence - Square Footage: 748
Year Built / Effective Year Built 1908/1928

367 Sumner Avenue, Avalon, CA 90704 - APN#7480-032-016
Residence - Square Footage: 8,400
Year Built / Effective Year Built 1929/1929

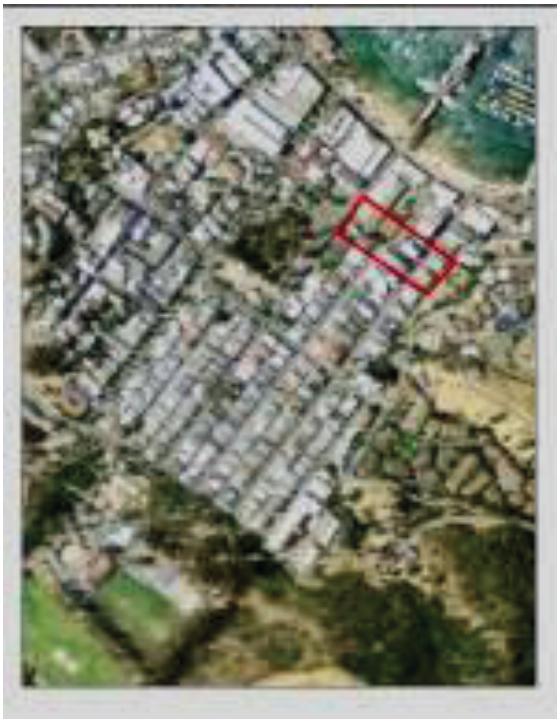
Tremont Avenue/Street

220 Tremont Avenue, Avalon, CA 90704 - APN#7480-002-072
Residence - Square Footage: 6,324
Year Built / Effective Year Built 1928/1928
Residence - Square Footage:1,118
Year Built / Effective Year Built 1929/1929
Residence - Square Footage: 2,483
Year Built / Effective Year Built 1930/1930
Residence - Square Footage: 1,118
Year Built / Effective Year Built 1929/1929

Tremont Hall/Mexican Village
201 Tremont Street, Avalon, CA 90704 -APN#7480-029-016
Residence - Square Footage: 2,668
Year Built / Effective Year Built 1929/1929
Residence - Square Footage: 3,817
Year Built / Effective Year Built 1929/1929
The Old Tremont houses were originally constructed in the early 1930s to house Island Company employees, and referred to as the Mexican Village.

410 Tremont Street, Avalon, CA 90704 - APN#7480-033-022
Single Family Residence - Square Footage 2,259
Year Built / Effective Year Built 1924/1957

3rd Street



125 3rd Street, Avalon, CA 90704
APN#7480-015-008
Residence - Square Footage: 3,928
Year Built / Effective Year Built 1923/ 1930

Vieudelou Avenue

103 Vieudelou Avenue, Avalon, CA 90704 - APN# 7480-023-011
Residence - Square Footage: 1,376
Year Built / Effective Year Built 1920 / 1926

105 Vieudelou Avenue, Avalon, CA 90704 - APN# 7480-023-010
Residence - Square Footage: 983
Year Built / Effective Year Built 1922 / 1922

First Catholic Church
107 Vieudelou Avenue, Avalon, CA 90704 - APN# 7480-023-009
Residence - Square Footage: 1,812
Year Built / Effective Year Built 1911/1911
The structure is now owned by Mike King who runs the Yamaha golf cart repair and sales enterprise on Clarissa Avenue

113 Vieudelou Avenue, Avalon, CA 90704 - APN# 7480-023-007
Residence - Square Footage: 1,258
Year Built / Effective Year Built 1928 / 1928

117 Vieudelou Avenue, Avalon, CA 90704 - APN# 7480-023-006
Single Family Residence - Square Footage: 1,330
Year Built / Effective Year Built 1927 / 1932

122 Vieudelou Avenue, Avalon, CA 90704 - APN# 7480-020-026
Residence - Square Footage: 1,112
Year Built / Effective Year Built 1920/1920

123 Vieudelou Avenue, Avalon, CA 90704 - APN# 7480-023-021
Residence - Square Footage: 1,820
Year Built / Effective Year Built 1927 / 1927

128 Vieudelou Avenue, Avalon, CA 90704 - APN# 7480-020-025
Residence - Square Footage: 2,146
Year Built / Effective Year Built 1920/1961

132 Vieudelou Avenue, Avalon, CA 90704 - APN# 7480-020-024
Residence - Square Footage: 2,396
Year Built / Effective Year Built 1910/1945

Etta Whitney House
133 Vieudelou Avenue, Avalon, A 90704 - APN# 7480-023-021
Residence - Square Footage: 1,820
Year Built / Effective Year Built 1908 / 1910
The Victorian home was built in 1888 by Etta Whitney who named the town of Avalon. It is Avalon's oldest residence.

Whittley Avenue

117 Whittley Avenue, Avalon, CA 90704 - APN#7480-019-013
Commercial/Industrial - Square Footage 1,503
Year Built / Effective Year Built 1932/1932

120 Whittley Avenue, Avalon, CA 90704 - APN#7480-018-024
Commercial/Industrial - Square Footage 6,060
Year Built / Effective Year Built 1926/1926

121 Whittley Avenue, Avalon, CA 90704 - APN#7480-019-014
Residential - Square Footage 2,784
Year Built / Effective Year Built 1927/1927

Avalon Hotel
124 Whittley Avenue, Avalon California 90704
Constructed in the late 1800s as the Pilgrim Club; destroyed in the Great Fire of 1915. After the fire, the building became the Bayview Hotel and served as dorm rooms for the Boos Bros. Cafeteria. The structure was rebuilt when Wrigley bought the island in 1919 and was used for the construction workers.

Hotel Catalina
Address: 129 Whittley Ave. P.O. Box 365 Avalon, California 90704 - APN# 7480-019-015
Commercial/Industrial - Square Footage: 1,176
Year Built / Effective Year Built 1915/1915
The Hotel Catalina was one of the first hotels on the Island. Dating back to 1898. It was destroyed by the pre-dawn fire of November 29, 1915. The owner William H. Gill, reopened on June 16, 1916. By April 4, 1918, there was an enlarged lobby, an added wing and the now-familiar sign on top. Room rates were listed at $3.50.

139 Whittley Avenue, Avalon, CA 90704 - APN#7480-019-016
Residential - Square Footage 4,220
Year Built / Effective Year Built 1938/1938

138 Whittley Avenue, Avalon, CA 90704 - APN#7480-018-007
Residence - Square Footage 1,127
Year Built / Effective Year Built 1923/1925

134 Whittley Avenue, Avalon, CA 90704 - APN#7480-018-006
Residence - Square Footage 1,623
Year Built / Effective Year Built 1924/1933

205 W. Whittley Avenue, Avalon, CA 90704 - APN#7480-019-017
Residence - Square Footage 283
Year Built / Effective Year Built 1908/1909

207 W. Whittley Avenue, Avalon, CA 90704 - APN#7480-019-018
Residence - Square Footage 986
Year Built / Effective Year Built 1921/1921 (Improvement 1)
Residence - Square Footage 1,620
Year Built / Effective Year Built 1916/1917 (Improvement 2)

225 W. Whittley Avenue, Avalon, CA 90704 - APN#7480-019-022
Residence - Square Footage 1,467
Year Built / Effective Year Built 1903/1904

229 W. Whittley Avenue, Avalon, CA 90704 - APN#7480-026-001
Residence - Square Footage 1,560
Year Built / Effective Year Built 1890/1895

233 W. Whittley Avenue, Avalon, CA 90704 - APN#7480-026-002
Commercial/Industrial - Square Footage 7,190
Year Built / Effective Year Built 1911/1975

237 W. Whittley Avenue, Avalon, CA 90704 - APN#7480-026-003
Residence - Square Footage 1,693
Year Built / Effective Year Built 1904/1925

243 W. Whittley Avenue, Avalon, CA 90704 - APN#7480-026-026
Residence - Square Footage 2,652
Year Built / Effective Year Built 1903/1927

307 W. Whittley Avenue, Avalon, CA 90704 - APN#7480-026-011
Residence - Square Footage 163
Year Built / Effective Year Built 1934/1934
Residence - Square Footage 1,462
Year Built / Effective Year Built 1904/1920

311 W. Whittley Avenue, Avalon, CA 90704 - APN#7480-026-013
Residence - Square Footage 1,269
Year Built / Effective Year Built 1904/1904

315 W. Whittley Avenue, Avalon, CA 90704 - APN#7480-026-015
Residence - Square Footage 2,347
Year Built / Effective Year Built 1899/1937

319 W. Whittley Avenue, Avalon, CA 90704 - APN#7480-026-018
Residence - Square Footage 603
Year Built / Effective Year Built 1923/1925
Residence - Square Footage 1,280
Year Built / Effective Year Built 1924/1924

323 W. Whittley Avenue, Avalon, CA 90704 - APN#7480-026-020
Residence - Square Footage 1,272
Year Built / Effective Year Built 1926/1930

357 W. Whittley Avenue, Avalon, CA 90704 - APN#7480-026-022
Residence - Square Footage 1,890
Year Built / Effective Year Built 1929/1932

371 W. Whittley Avenue, Avalon, CA 90704 - APN#7480-025-014
Residence - Square Footage 1,595
Year Built / Effective Year Built 1928/1928

Wrigley Terrace Road

Wrigley Mansion/Inn at Mt. Ada
207 Wrigley Road, E Terrace Road, Avalon, CA 90704 **-** APN#7480-004-007
Residence - Square Footage 7,182
Year Built / Effective Year Built 1921/1921
The former home of William Wrigley, Jr. and his wife Ada, was constructed in 1921. In 1978, the landmark home was donated to the University of Southern California as an academic and cultural center. Later, it was turned into a Bed and Breakfast and called the Inn on Mount Ada, with six rooms ready for occupancy. The restored Georgian colonial home is listed on the National Register of Historic Places (19-178670 (Wrigley Summer Cottage) - NR85001785)

Summary

The purpose of this study was to provide preliminary information regarding potentially eligible/significant structures, cultural landscapes and/or ethnic resources within the study area. Based on: interviews; record search data from the South Central Coastal Information Center, California State University Fullerton; historic research into Sanborn Fire Insurance maps and plat survey maps; a examination of historic USGS topographic maps, and; a review of Los Angeles County assessors parcel information, data was obtained to assist the client in better understanding the nature and extent of existing and potential cultural resources within the study area. Although every effort was made to include the most accurate and updated information available, there may be discrepancies in the assessors parcel map data pertaining to a particular property. In addition, not all historic properties that may be potentially eligible or significant under federal, state and county guidelines and policies may be included in the listings provided herein.

Given the nature and scope of this project, data gaps may still exist in this document. Therefore, the use of this information is cautionary and the data only represent a general collection or potentially significant cultural resources that should be used to direct additional research and specific mitigation measures and recommendations. Finally, with regard to the standing structures, basic information was obtained from the Los Angeles County Assessors Office for each parcel. This information provides a date of construction that might initially aid in determining potential resource significance. However, other variables that are traditionally used in a final significance/evaluation determination process can only be achieved with a thorough review of each structure, since integrity of design, workmanship, historic context and other key criteria also contribute to a final determination of significance/eligibility. Other key variables such as historical context and association are for the most part, lacking at this preliminary research phase. With this in mind, additional unrecorded prehistoric and historic resources were noted during the research and consultation phase and are listed in Figure 6 and below.

The term "cultural resource" means any tangible or observable evidence of past human activity, regardless of significance, found in direct association with a geographic location, including tangible properties possessing intangible traditional cultural values. Once a cultural resource is evaluated, if it is found to be significant, it is then called a historic property under Section 106, or a historical resource under CEQA, depending on whether federal and/or state regulations apply. Using the definitions contained in the National Register of Historic Places (National Register) and California Register of Historical Resources (California Register) criteria, which are quite similar, can further refine the definition of "cultural resource."

The National Register and California Register criteria for evaluation use the same categories for types of cultural resources: building, structure, object, site and district. The following definitions have been excerpted from National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation:

- Building - "A building, such as a house, barn, or similar construction, is created principally to shelter any form of human activity. ' Building' may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn." (Examples: houses, stables, garages, city halls, commercial buildings, factories, hotels, mills, and train depots).
- Structure - "The term 'structure' is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter." (Examples: bridges, tunnels, gold dredges, fire lookout towers, canals, ditches, dams, power plants, silos, systems of roadways and paths, kilns, earthworks, and bandstands).
- Object - "The term 'object' is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment." (Examples: sculpture, statuary, monuments, boundary markers, and fountains).
- Site - "A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archeological value regardless of the value of any existing structure." (Examples: habitation sites, rock shelters, cemeteries, gardens, battlefields, ruins of historic buildings and structures, mining sites, shipwrecks, locations of treaty signings, trails, designed landscapes, and land areas having traditional cultural significance).
- District - "A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development." (i.e., college campuses, central business districts, large forts, industrial complexes, rural villages, canal systems, large farms, ranches, estates or plantations, transportation networks, large landscaped parks, & collections of habitation and limited activity sites).

/In order to address potential project impacts at the earliest possible planning stage, this study was designed to provide extant cultural resource information for the Avalon General Plan Update boundaries. Existing cultural resource studies and existing and potential prehistoric and historic archaeological resources and historic properties are listed or overlain on aerial photographs and USGS topographic maps as accurately as possible All cultural resource information contained herein (particularly maps), is strictly confidential in nature. All cultural resource information is designed for use in planning purposes only, and not for public dissemination. Maximum effort must be made to ensure that sensitive site location information remains confidential].

Recommendations

At this preliminary planning stage, the following basic recommendations are presented as a planning tool when dealing with developable areas within the General Plan Update boundaries:

- If an area to be developed has not been previously surveyed, then a Phase archaeological Study is recommended
- If an area to be developed was previously surveyed, but not within the past five years, a new Phase 1 Study is recommended.
- If an area to be developed has been previously surveyed within the last five years and cultural resource(s) was/were encountered, then the mitigation measures within the context of the original Phase 1 archaeological study shall be implemented. If an Extended Phase 1 or Phase II study were performed for the resource(s), then the recommendations within the context of the original Phase 1, Extended Phase 1 or Phase II archaeological study shall be implemented.
- Any proposed excavation within the area demarcated as **CA-SCAI-29 - 19-003712** (Figure 4) shall be monitored by a qualified archaeologist and Native American representative (Native American Heritage Commission Most Likely Descendants List). Excavation is considered any permitted action requiring physical digging or grading of a project area using mechanical equipment or hand tools, including core sampling, soil borings, work required for placing caissons or footings, planting trees, disking, grubbing, trenching and installation of poles, underground electrical systems, sewers, water mains, or other utilities, or geological/geotechnical testing.
- Any proposed excavation or modifications to areas where four historic archaeological sites are recorded: **CA-LAN-3523 (19-003523)**; **CA-LAN-3531 - 19-003531**; **19-002678**, and; **19-188182**, shall require consultation with the planning department and a qualified archaeologist regarding the implementation of acceptable mitigation strategies prior to any improvements.
- Any proposed modifications to existing structures or historically sensitive areas detailed or referenced herein (i.e., standing strutures or places like the Bird Park, Descanco Beach; Avalon Ampitheater; Incline Railway, etc), shall require an evaluation by a qualified architectural historian to first determine significance/eligibility.
- If human remains are encountered during excavation within the study area, all work must halt, and the County Coroner must be notified (Section 7050.5 of the California Health and Safety Code). The coroner will determine whether the remains are of forensic interest. If the coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, the coroner will contact the Native American Heritage Commission (NAHC). The NAHC will be responsible for designating the most likely descendant (MLD), who will be responsible for the ultimate disposition of the remains, as required by Section 5097.98 of the Public Resources Code. The MLD should make his/her recommendations within 48 hours of their notification by the NAHC. This recommendation may include A) the nondestructive removal and analysis of human remains and items associated with Native American human remains; (B) preservation of Native American human remains and associated items in place; (C) relinquishment of Native American human remains and associated items to the descendants for treatment; or (D) other culturally appropriate treatment.

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- Hill, Bill and Jeannie, residents, Avalon, California;
- Liddell, Chuck, **Liddell Talent Management**, Avalon, California;
- Martinez, Renee, Consulting Archaeologist, **Cogstone Resource Management**, Rosemead, California (Letter response, Appendix B);
- Peterson, Jeannine L., Curator, **Catalina Island Museum**, Avalon, California;
- Teeter, Dr. Wendy Giddens, Ph.D., Curator of Archaeology, **Fowler Museum at UCLA** (Letter response, Appendix C);
- Schmidt, Keith, Project Manager, Real Estate Planning, **Santa Catalina Island Company**, Avalon, California;
- Watson, Jim, **Channel Catalina**, Avalon, California;

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Appendix A
Letter Response from Cindi Alvitre

Cindi M. Alvitre, *Manisar*
6515 E. Seaside Walk #C
Long Beach, California 90803

October 13, 2010

Rob Wlodarski
Principal Investigator
Historical Environmental Archaeological Research Team (H.E.A.R.T.)
8701 Lava Place
West Hills, California 91304

Dear Mr. Wlodarski,

I was recently advised that the City of Avalon is in the process of revising their General Plan and has retained Robert Wlodarski of Historic Environmental Archaeological Resources Team (H.E.A.R.T) to document the pre-contact and historic resources within the city boundaries. I am in support of hiring Mr. Wlodarski to oversee this process.

On behalf of my tribal community, as a descendant of the Tongva, and tribal leader, I have an obligation to a larger community in these situations. I have great concerns regarding the protection of the unique and sensitive archaeological resources within Avalon.

Avalon is a beautiful and unique community built on a former village of our tribe, as evident in the cultural and historic resources that remain to this day. As a former resident of Avalon, I observed first-hand the black-oily soils of midden sites, the precious remains of our ancestors, and their personal belongings (artifacts) that were revealed throughout the majority of construction projects that occurred when I lived there.

As a "most likely descendant", acknowledged by the State of California Native American Heritage Commission, I am charged with the responsibility of determining disposition of Native American remains encountered within the City of Avalon and throughout the island. Amazingly, the number of remains I have handled on the island since 1995 outnumber the total amount of ancestral remains I have ever encountered on the mainland. This is a testament to the density and continued presence of cultural resources in Avalon and the island.

It is my hope that in the process of revising the General Plan that we can become a model city that embraces the rich, irreplaceable cultural and historical resources that imbues Avalon with its distinctiveness. It is not my intent to impede development, but rather to support responsible development that considers the past, present and future generations.

I appreciate your efforts and support in the past and look forward to a continued relationship. Should you have any questions, I can be reached at 714 504 2468 or calvitre@yahoo.com.

Best regards,

Cindi M. Alvitre, Manisar
Ti'at Society/Inter-tribal Council of Pimu

CC: Dave Singleton, Native American Heritage Commission

Appendix B
Letter Response from Desiree Martinez

cogstone

PALEONTOLOGY - ARCHAEOLOGY - HISTORY

Rob Wlodarski
Historical Environmental Archaeological Research Team (H.E.A.R.T.)
8701 Lava Place
West Hills, California 91304

October 4, 2010

Dear Mr. Wlodarski:

I understand that the City of Avalon is in the process of revising their City General Plan and has hired you to document the historic and the prehistoric cultural resources within the city limits. As a Co-Director of the UCLA Pimu Catalina Island Archaeology Project, I am writing to express my hope that as the city reviews and amends its General Plan, it takes into consideration not only the prehistoric uniqueness of the archaeological site (SCAI-29) that underlies the city, but also the special relationship the island has with the Gabrieliño (Tongva) community.

As an archaeologist with over 15 years of experience, the archaeological resources on Catalina Island are immense and incomparable. Dating over 8,000 years old, the remnants of human occupation litter the landscape with one of the largest concentrations at Avalon. The as yet untapped knowledge from Avalon cultural resources has the possibility of changing our understanding of the relationship of Native Catalinans to the landscape, to their relatives on the mainland and beyond. Because there have been substantial impacts over the years by amateur collectors, academic researchers, and Catalina islanders, it is imperative that we preserve what remains in order to expand our understanding of the prehistoric Gabrieliño (Tongva) populations. As a result, it is crucial that any changes to the General Plan not adversely impact cultural resources further and instead create measures to protect them from further disturbance.

Also as a Gabrieliño (Tongva) community member, I remind you that under California Senate Bill 18:

> *Prior to the adoption or any amendment to a General Plan, proposed on or after March 1, 2005, the city or county shall conduct consultations with California Native American tribes for the purpose of preserving or mitigating impacts to Cultural Places (General Code 65352.3)*

These "Cultural Places" include, "Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historic Resources pursuant to Section 5024.1, including any historic or prehistoric ruins, any burial ground, any archaeological or historic site" as defined in California Public Resources Code 5097.993. "'Consultation' means the meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement" (GC 65352.4). Furthermore, "During the preparation or amendment of the general plan, the planning agency shall provide opportunities for the involvement of citizens, California Native American tribes, public agencies, and other community groups, through public hearings and any other means the city or county deems appropriate" (GC 65351). California Native American tribes are to be given 45 days to comment on any amendments to the General Plan (GC 65352).

Catalina Island is considered sacred to the Gabrieliño/Tongva people. Powerful medicine and spiritually connected people lived on Catalina. That spiritual connection remains and as a result, any intentional and/or inadvertent impacts to archaeological sites are of great concern to the Gabrieliño/Tongva community. SCAI-29 and other areas of Avalon proper have been known to yield Native American artifacts and human remains. As a result, any project that requires a permit or license from a public agency is required to comply with the California Environmental Quality Act (CEQA) (Pub. Res. Code §21000 *et seq.*).

CEQA requires:

1) the identification of the significant environmental effects of their actions; and, either
2) avoid those significant environmental effects, where feasible; or
3) mitigate those significant environmental effects, where feasible.

I urge the City to use Public Resources Code § 25373 and 37361 "to enact ordinances to provide special conditions or regulations for the protection or enhancement of places or objects of special historical or aesthetic interest or value." I recommend that the city require an archaeological and a tribal monitor for any new ground disturbance within the city limits.

I provide these laws and codes not to hinder the development or expansion of Avalon. Instead, I want to remind the City of its obligation to not only its city and state citizens, but also to the Gabrieliño (Tongva) community. The vast history that currently underlies the city should be preserved for future generations. Thank you for your attention to this matter.

Sincerely,

Desireé R. Martinez

Desireé Reneé Martinez, MA
Archaeologist
Gabrielino/Tongva

CC: DAVE SINGLETON, NATIVE AMERICAN HERITAGE COMMISSION
CC. AMANDA COOK, PLANING DIRECTOR, CITY OF AVALON

Appendix C
Letter Response from Dr. Wendy Teeter

Fowler
MUSEUM AT UCLA

phone 310/825.4361 fax 310/206.7007 www.fowler.ucla.edu

Rob Wlodarski
Principal Investigator
Historical Environmental Archaeological Research Team (H.E.A.R.T.)
8701 Lava Place
West Hills, California 91304

October 10, 2010

Dear Mr. Wlodarski:

This letter is in support of your hiring to document the historic and the prehistoric cultural resources within the City of Avalon and inform the process of City General Plan revisions. As a Co-Director of the UCLA Pimu Catalina Island Archaeology Project, I hope that the Avalon seriously considers the importance of both historic and prehistoric resources that have made it such a wonderful and important place.

As a Register Professional Archaeologist with over 20 years of experience, the archaeological resources on Catalina Island are immense and irreplaceable. The village under Avalon, recorded as SCAI-29, has produced many sets of human remains and beautiful examples of the Pimu Gabrieliño (Tongva) culture. The village was ethnographically recorded by early explorers as having over 300 inhabitants, but much of our understanding about their daily life is still left to be studied. There have been substantial impacts over the years by amateur collectors and researchers so that it is imperative that we preserve what remains in order to expand our understanding of the prehistoric island people.

The consistent discovery of cultural remains throughout Avalon and the canyons as it has been developed shows that there are many intact cultural deposits that should be considered and protected as best possible for current and future generations. It is also important that the City follow California Senate Bill 18 (General Code 65352) as it amends its General Plan to ensure the best information is available to the city from both the Gabrielieno/Tongva community and the city's multi-generational residents.

It is crucial that any changes to the General Plan not unnecessarily adversely impact historic and prehistoric cultural resources further and instead create measures to protect them from further disturbance. Please ask the city to ensure that any project that requires a permit or license from a public agency is required to comply with the California Environmental Quality Act (CEQA) (Pub. Res. Code §21000 *et seq.*) and that the City use Public Resources Code § 25373 and 37361 "to enact ordinances to provide special conditions or regulations for the protection or enhancement of places or objects of special historical or aesthetic interest or value." Based on the above information and the evidence curated within the Catalina Island Museum I recommend that the city require an archaeological and a tribal monitor for any new ground disturbance within the city limits.

I draw attention to these laws and codes not to hinder the city, but so that the vast history (historic and prehistoric) of Avalon be preserved for current and future generations. Thank you for your time and attention. I can be reached at 310-825-1864 or wteeter@arts.ucla.edu if there are any questions.

Most Sincerely,

Wendy G. Teeter, PhD, RPA
Curator of Archaeology
Co-Director, UCLA Pimu Catalina Island Archaeology Project

MAILING: Box 951549, Los Angeles, California 90095-1549
SHIPPING: 308 Charles E. Young Drive North, Los Angeles, California 90095-1549

Appendix C

Mitigation Monitoring and Reporting Program (MMRP)

MITIGATION MONITORING AND REPORTING PROGRAM

This document is the Mitigation Monitoring and Reporting Program (MMRP) for the 2030 GP/LCP project, in the City of Avalon, California. Public Resources Code Section 21081.6(a) requires that a Lead Agency adopt an MMRP prior to approving a project in order to mitigate or avoid significant impacts that have been identified in an Environmental Impact Report. The purpose of the MMRP is to ensure that the required mitigation measures identified in the Environmental Impact Report are implemented as part of the overall project implementation. In addition to ensuring implementation of mitigation measures, the MMRP provides feedback to agency staff and decision-makers during project implementation, and identifies the need for enforcement action before irreversible environmental damage occurs.

The following table summarizes the mitigation measures for each issue area identified in the Environmental Impact Report for the proposed project. The table identifies each mitigation measure; the action required for the measure to be implemented; the time at which the monitoring is to occur; the monitoring frequency; and the agency or party responsible for ensuring that the monitoring is performed. In addition, the table includes columns for compliance verification. These columns will be filled out by the monitoring agency or party and would document monitoring compliance. Where an impact was identified to be less than significant, no mitigation measures were required.

This MMRP will be used by City staff or the City's consultant to determine compliance.

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
CULTURAL RESOURCES							
CR-1 Add the following Implementation Actions to Section IV.H of the 2030 GP/LCP Conservation Element: • Require excavation for any project located within a potential sensitive area to be monitored by a qualified archaeologist and/or Native American Representative. • Require any proposed excavation or modification to areas on the four historic archeologically sensitive areas defined in Figure 4 of the Preliminary Cultural Resource Management Plan to require prior consultation with the planning department and a qualified archaeologist regarding the implementation of acceptable mitigation strategies.	Verify that the implementation actions have been added to the General Plan/Local Coastal Plan.	Prior to General Plan/Local Coastal Plan approval	Once	Community Development			
CR-2 Add the following Implementation Actions to Section IV.H of the 2030 GP/LCP Conservation Element: • Require projects involving modification or rehabilitation of structures that may be of historical value to incorporate the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. • Require projects involving demolition of an existing structure that may be of historical value to consult with local museums or cultural societies and incorporate mitigation, such as photodocumentation, collection of oral histories, and physical or digital model, as necessary.	Verify that the implementation actions have been added to the General Plan/Local Coastal Plan.	Prior to General Plan/Local Coastal Plan approval	Once	Community Development			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
GEOLOGY							
GEO-3 Add the following policies to the 2030 GP/LCP Safety Element: • Reduce landslide hazards to acceptable levels for development within hillsides. • Prior to approval of development projects on slopes over 20%, require applicants to prepare site-specific landslide studies and mitigation.	Verify that the policies have been added to the General Plan/Local Coastal Plan.	Prior to General Plan/Local Coastal Plan approval	Once	Community Development			
GREENHOUSE GAS EMISSIONS							
GHG-3 Add the following Implementation Action to Section IV.C in the Conservation Element: • Collaborate with climate science experts to identify areas that may be exposed to risks due to sea level rise, such as flooding or erosion.	Verify that the implementation action has been added to the General Plan/Local Coastal Plan.	Prior to General Plan/Local Coastal Plan approval	Once	Community Development			

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