

CALIFORNIA COASTAL COMMISSION

SOUTH CENTRAL COAST AREA
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 641 - 0142

**November 1, 2001****ITEM TH 3a**

To: Commissioners and Interested Parties

From: Peter Douglas, Executive Director
Chuck Damm, Deputy Director
Gary Timm, District Manager
Barbara J. Carey, Coastal Program Analyst

Subject: Draft City of Malibu Local Coastal Program Land Use Plan

STAFF NOTE

On August 31, 2000, the State legislature passed Assembly Bill 988 which added Section 30166.5 to the Coastal Act. Subsection (a) requires the Coastal Commission to prepare an initial draft of the Land Use Plan for the City of Malibu and submit it to the City on or before January 15, 2002. Subsection (b) requires the Commission, after public hearing and consultation with the City of Malibu, to certify a Local Coastal Program for the City by September 15, 2002. Section 30166.5 also requires the City to immediately assume coastal development permitting authority subsequent to certification of the LCP by the Commission and provides that, notwithstanding specified requirements for the review and approval of development projects, no application for a coastal development permit shall be deemed approved if the City fails to take timely action to approve or deny the application.

The Draft LCP Land Use Plan for the City of Malibu which accompanies this staff report was prepared pursuant to the requirements of AB 988 and Public Resources Code Section 30166.5. The Draft LUP was released for public review and comment in mid-September, 2001. The text of the attached Draft LUP (Exhibit 1) is unchanged from the September 2001 version. Minor changes have been made to the several of the attached maps.

A public meeting was held in Malibu on October 30, 2001 to receive public comment on the draft Land Use Plan. A transcript of the meeting and copies of written comments received will be provided to the Commission prior to the November Commission hearing. Copies will also be available to the public.

Staff is recommending that the Commission take public testimony and consider the attached draft Land Use Plan for submittal to the City of Malibu and as the basis for preparation of the Implementation Plan and subsequent certification of the City's Local Coastal Program. At the Commission's direction staff will schedule an additional public hearing in January at the regularly scheduled Commission hearing in the Los Angeles area.

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STAFF RECOMMENDATION

Motion

I move that the Commission submit to the City of Malibu the attached initial **draft** of the Land Use Plan portion of the Local Coastal Program for the City of Malibu in accordance with the requirements of PRC Section 30166.5.

Staff recommends a **YES** vote. Passage of this motion will result in adoption of the following resolution and findings. The motion passes only upon an affirmative vote of a majority of the appointed Commissioners.

Resolution

The Commission hereby submits to the City of Malibu the attached **draft** Land Use Plan portion of the Local Coastal Program for the City of Malibu and adopts the findings set forth below on grounds that the draft Land Use Plan will meet the requirements of and be in conformity with the policies of Chapter 3 of the Coastal Act.

FINDINGS

The Commission hereby finds and declares:

A. Description of the City of Malibu

The City of Malibu, which incorporated on March 28, 1991, lies entirely within the State designated Coastal Zone and extends approximately 25 miles from the Ventura County Line on the west to Topanga Canyon Boulevard on the east. Inland, the City's Coastal Zone boundary extends approximately 2 miles and includes portions of the coastal terrace and slopes of the Santa Monica Mountains.

The shoreline along the City of Malibu Coastal Zone contains sandy beaches, bluff backed crescent coves, and rocky headlands. The inland portion generally contains the major canyons and watersheds of the mountain range. The canyons constitute the natural drainages that run down toward the Pacific from the mountain peaks, located both within and outside of the unincorporated Los Angeles County Santa Monica Mountains Coastal Zone and the interior valleys.

The marine, canyon, and watershed environment from Malibu Point westward to the Ventura County line is in a relatively undisturbed state. The slopes and

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hillsides are dominated by coastal sage scrub and chaparral vegetation and large areas of riparian habitat in the canyons. Along the coast, kelp beds are found, providing habitat for many species of sea life. The natural environment from Malibu Point eastward has suffered some biological degradation. Grading and development have eliminated native hillside vegetation in some areas, portions of creeks have been channelized, and kelp beds have largely diminished or disappeared but reef and rock zones still provide habitat for many species of fish.

Broad sandy beaches at Leo Carrillo, Nicholas Canyon, Zuma, Westward, Point Dume, Surfrider and other beaches provide sunbathing, swimming, surfing, board sailing and other recreational opportunities to the public. Small, public pocket beaches backed by high bluffs provide more secluded and natural beach environments in the City's western portion. The more urbanized eastern portion of Malibu contains several vertical access points to beaches located behind residential communities. Access to many beaches throughout the City, however, is restricted due to blockage by development including gated communities or private compounds, unopened accessways, and lack of parking. Access to all beaches along the Malibu coast is provided by Pacific Coast Highway and a limited number of cross-mountain roads. The capacity of Pacific Coast Highway is exceeded regularly on summer weekends as coastal visitors and residents attempt to reach the beach or enjoy a drive along the coast.

Land use patterns vary considerably throughout the City. Commercial and residential development flanks the Pacific Coast Highway from Topanga to Point Dume. The Malibu Civic Center, located at the base of Malibu Canyon, and Point Dume Plaza contain the major commercial areas. The balance of the City generally consists of residentially zoned lots in small clusters of approximately 10,000 square feet to an acre in size, mid-sized parcels of 2, 5 and 10 acres and large parcels exceeding 20 acres on the coastal slopes throughout the City up to 300 acres in the extreme western portion of the City.

B. Local Coastal Planning History

An LCP is defined as "a local government's land use plans, zoning ordinances, zoning district maps, and, within sensitive coastal resources areas, other implementing actions, which, when taken together, meet the requirements of, and implement the provisions and policies of [the Coastal Act] at the local level" (PRC Section 30108.6). The Land Use Plan is defined as "the relevant portion of a local government's general plan, or local coastal element which are sufficiently detailed to indicate the kinds, location, and intensity of land uses, the applicable resource protection and development policies and, where necessary, a listing of implementing actions (PRC Section 30108.5).

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Efforts to complete a Local Coastal Plan in conformance with the California Coastal Act for the Malibu and Santa Monica Mountains area have been ongoing since shortly after the Coastal Act became effective on January 1, 1977. Prior to the City's incorporation, the initial planning, public hearings, and submittals were the responsibility of Los Angeles County. Initial studies and planning documents addressed the larger coastal zone for Malibu and the Santa Monica Mountains, which extends approximately 5 miles inland.

The first phase of the Local Coastal Plan prepared and submitted by the County consisted of the "Issue Identification/Work Program for the Malibu Area." The work program, which was approved by the Coastal Commission in December 1978, identified the specific issues to be addressed in the LCP Land Use Plan (LUP). The second phase consisted of preparation and submittal of the Land Use Plan. In December 1982, the Los Angeles County Board of Supervisors approved a Land Use Plan and subsequently submitted it to the Coastal Commission. After numerous public hearings and revisions the LUP was certified by the Coastal Commission on December 11, 1986. Since certification in 1986 the certified Land Use Plan has been consulted for guidance by the Coastal Commission in its permit decisions.

After incorporation, the City subsequently adopted a General Plan in November 1995 and an interim Zoning Ordinance. The City also appointed a Local Coastal Plan Committee in 1994, which held over 100 meetings on a regular basis for over 5 years. City staff subsequently submitted a draft LCP to Commission staff for informal review in March 2000. No formal review by the Commission was requested and no written comments on the submittal was provided by Commission staff, however, the City was informed verbally by Commission staff that the document was not sufficient in detail or content to meet the requirements of the Coastal Act.

In completing the attached draft Land Use Plan staff relied on several prior planning documents to varying extent. In particular, the 1986 Commission certified Land Use Plan for Malibu and the Santa Monica Mountains was used as the base document for starting this draft. Numerous revisions and additions were required, however, to reflect circumstances which have changed and new issues which have arisen since the 1986 certification as well as the geographic boundary change resulting from the City's incorporation in 1991. Staff also relied on the City's existing General Plan Land Use Map designations along with the 1986 LUP designations. The proposed map largely reflects the City's existing General Plan although there are recommended changes relative to the amount of allowed visitor-serving uses and some residentially zoned parcels have been recommended for reduced density designations due to steep slopes, the presence of significant natural habitat or geological restraints. The recommended LUP map largely reflects the City's existing General Plan, however.

C. Public Access and Recreation

A broad policy goal of California's Coastal Management Program is to maximize the provision of coastal access and recreation consistent with the protection of public rights, private property rights, and coastal resources as required by the California Constitution and provided in Section 30210 of the Coastal Act:

Section **30210** of the Coastal Act states that:

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

The Coastal Act also requires that development not interfere with the public right of access to the sea in Section 30211:

Section 30211

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30212 of the Coastal Act provides for public access in new development projects with limited exceptions and provides for the distribution of parking over a wide area in Section 30212.5:

Section 30212

(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:

- (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,
- (2) adequate access exists nearby, or,
- (3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

(b) For purposes of this section, "new development" does not include:

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- (1) Replacement of any structure pursuant to the provisions of subdivision (g) of Section 30610.
- (2) The demolition and reconstruction of a single-family residence; provided, that the reconstructed residence shall not exceed either the floor area, height or bulk of the former structure by more than 10 percent, and that the reconstructed residence shall be sited in the same location on the affected property as the former structure.
- (3) Improvements to any structure which do not change the intensity of its use, which do not increase either the floor area, height, or bulk of the structure by more than 10 percent, which do not block or impede public access, and which do not result in a seaward encroachment by the structure.
- (4) The reconstruction or repair of any seawall; provided, however, that the reconstructed or repaired seawall is not a seaward of the location of the former structure.
- (5) Any repair or maintenance activity for which the commission has determined, pursuant to Section 30610, that a coastal development permit will be required unless the commission determines that the activity will have an adverse impact on lateral public access along the beach.

As used in this subdivision "bulk" means total interior cubic volume as measured from the exterior surface of the structure.

(c) Nothing in this division shall restrict public access nor shall it excuse the performance of duties and responsibilities of public agencies which are required by Sections 66478.1 to 66478.14, inclusive, of the Government Code and by Section 4 of Article X of the California Constitution.

Section 30212.5

Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.

In addition, the Coastal Act encourages the provision of lower cost visitor and recreational facilities in Section 30213:

Section 30213

Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

The Commission shall not: (1) require that overnight room rentals be fixed at an amount certain for any privately owned and operated hotel, motel, or other similar visitor-serving facility located on either public or private lands; or (2) establish or approve any method for the identification of low or moderate income persons for the purpose of determining eligibility for overnight room rentals in any such facilities.

Section 30214 of the Coastal Act addresses the need to regulate the time, place, and manner of public access:

Section 30214

(a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:

- (1) Topographic and geologic site characteristics.
- (2) The capacity of the site to sustain use and at what level of intensity.
- (3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.
- (4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.

(b) It is the intent of the Legislature that the public access policies of this article be carried out in a reasonable manner that considers the equities and that balances the rights of the individual property owner with the public's constitutional right of access pursuant to Section 4 of Article X of the California Constitution. Nothing in this section or any amendment thereto shall be construed as a limitation on the rights guaranteed to the public under Section 4 of Article X of the California Constitution.

(c) In carrying out the public access policies of this article, the commission and any other responsible public agency shall consider and encourage the utilization of innovative access management techniques, including, but not limited to, agreements with private organizations which would minimize management costs and encourage the use of volunteer programs.

The Coastal Act specifies the need to protect ocean front land suitable for recreational use in Sections 30220 and 30221:

Section 30220

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

Section 30221

Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

The Coastal Act also gives priority to the use of land suitable for visitor-serving recreational facilities over certain other uses in Section 30222:

Section 30222

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

Section 30223 requires the protection of upland areas to support coastal recreation, where feasible:

Section 30223

Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

The Coastal Act encourages recreational boating use of coastal waters in Section 30224:

Section 30224

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

The Coastal Act also facilitates public access by providing for public transit, alternative means of circulation and adequate parking in new development in Section 30252:

Section 30252

The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.

The beaches of Malibu are world-famous tourist destinations for millions of visitors annually from foreign countries, all 50 states of the U.S., as well as for residents of cities and towns located throughout California. In addition, the Santa Monica Mountains area within and adjacent to the City provides an extensive network of public trails that traverse and connect Federal, State, and County parklands, and a system of heavily used historic trails on private land. Overall, a wide variety of recreational opportunities exist in the area including hiking, biking, horseback riding, camping, fishing, picnicking, nature study, surfing, diving, and swimming. Public access to and along the shoreline and trails, and the provision of public recreational opportunities and visitor-serving facilities such as campgrounds, hotels and motels has historically been a critical and controversial issue in Malibu. Continuing conflicts in providing maximum public access to and along the shoreline and trails, as mandated by the Coastal Act, is evidenced in the Coastal Commission's permit regulatory reviews and public hearings concerning proposed projects in Malibu since 1976.

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The loss of coastal recreation opportunities resulting from development occurring over the past 25 years represents a significant adverse impact to the availability of public access and recreation in Malibu. Defined broadly, these opportunities include not only the physical availability of access and recreation areas, but also the ability of the public to reach and utilize these sites. Coastal access is generally viewed as an issue of physical supply, and includes lateral access (access along a beach), vertical access (access from an upland street, parking area, bluff or public park to the beach), coastal blufftop trails, and upland trails that lead to the shore or traverse inland parklands within the coastal zone. These inland parks provide significant access and recreation opportunities in the City and Santa Monica Mountains coastal zone, and are as important to coastal access as shoreline accessways.

While the physical supply of access is a primary factor in assuring access opportunities, the Local Coastal Plan cannot view the issue of supply in isolation of a number of other factors. These variables include the availability of transit to beaches, parking availability, providing other support facilities such as restrooms and picnic areas, addressing user demands and conflicts, and maintenance of a diversity of coastal recreation experiences. Impacts to any one of these variables may ultimately affect the availability and use of the physical supply of access. For example, without adequate parking or alternate transportation, users will have difficulty reaching the shoreline or trailhead. Therefore, managing and increasing coastal access and ensuring that growth and development does not cumulatively impact the ability of the public to access the shoreline and trails, involves improving not only the physical supply of access, but all of the other variables that contribute to ensuring maximum coastal access.

To understand the importance of protecting and maximizing public access, it is critical to know that the public already possesses ownership interests in tidelands or those lands below the mean high tide line. Because the mean high tide line varies, the extent of lands in public ownership also varies with the location of the mean high tide line. By virtue of its admission into the Union, California became the owner of all tidelands and all lands lying beneath inland navigable waters. These lands are held in the State's sovereign capacity and are subject to the common law public trust. The use of these lands is limited to public trust uses, such as navigation, fisheries, commerce, public access, water-oriented recreation, open space, and environmental protection. The protection of these public areas and the assurance of access to them lies at the heart of Coastal Act policies requiring both the implementation of a public access program and the minimization of impacts to access through the regulation of development.

The recommended policies contained in the draft Land Use Plan carry out the provisions of the Access and Recreation policies of Chapter 3 of the Coastal Act in several ways. Some recommended policies reflect the intent of several

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relative Coastal Act policies. This policy section begins with several broad overriding policies which carry out the combined mandate of several, if not all, of the Coastal Act policies cited above regarding Access and Recreation. Other recommended policies are more specific to the intent of a single Coastal Act policy or certain inter-related policies. In other words, it is necessary to consider all of these policies as a unified whole as well as individually to be found consistent with the Coastal Act. These recommended policies can be grouped into a few distinct issue categories, however. These include:

- Provisions for lateral access along and vertical access to the coast (30210, 30211, 30212, 30214);
- Provisions for trails and bikeways, inland and along the coast, including the recently designated California Coastal Trail (30210, 30211, 30212, 30214);
- Provision and protection of parking, transit modes and other necessary infrastructure that facilitate public access and recreation (30212.5, 30214, 30252);
- Provision and protection of visitor and recreation serving uses on a priority basis (30213, 30220, 30221, 30222, 30223);
- Provisions for acquiring new and protecting existing parklands for open space and public recreation including Malibu Bluffs State Park and Point Dume State Preserve (30210, 30213, 30221, 30223, 30252).

The LUP initially establishes a number of policies which broadly provide for the overriding objectives of the Access and Recreation policies of Chapter 3 of the Coastal Act - to protect, enhance and expand coastal access and recreation opportunities as a resource of regional, state and national importance in Malibu (P2.1). Several policies provide for the protection and/ or provision of access and recreation including existing prescriptive rights in new development projects and provides for public access or trail improvements as a permitted use in all land use and zoning designations, including Environmentally Sensitive Habitat Areas (2.2 – 2.8, 2.11). Other broad policies provide for communication and coordination with other public and park agencies, private organizations and volunteer organizations to accept and assume responsibility for acquiring, maintaining and operating public accessways and trails, recreational areas or public open space (2.9 – 2.16). In addition, several policies provide for certain limited uses under limited circumstances on public beaches and recreation areas such as roads, parking, transit and other support facilities, signs, temporary events, and limited low-intensity visitor-serving commercial and recreational facilities on non-sand areas (2.17 – 2.25).

1. Lateral and Vertical Access

As previously stated, the public already possesses ownership interests in tidelands or those lands below the mean high tide line. These lands are held in the State's sovereign capacity and are subject to the common law public trust. The protection of these public areas and the assurance of access to them lies at the heart of Coastal Act policies requiring both the implementation of a public access program and the minimization of impacts to access and the provision of access, where applicable, through the regulation of development. To carry out the requirement of Section 4 of Article X of the California Constitution, PRC Section 30210 provides that maximum access and recreational opportunities be provided consistent with public safety, public rights, private property rights, and natural resource protection. PRC Section 30211 requires that development not interfere with the public's right of access to the sea with certain exceptions. Furthermore, PRC Section 30212 requires that public access from the nearest public roadway to the shoreline and along the coast be provided in new development projects with certain exceptions such as public safety, military security, resource protection, and where adequate access exists nearby. Certain minor types of development would also not require the provision of access. Finally, PRC Section 30214 provides that the implementation of the public access policies take into account the need to regulate the time, place, and manner of public access depending of such circumstances as topographic and geologic characteristics, the need to protect natural resources, proximity to adjacent residential uses etc.

All projects requiring a Coastal Development Permit must be reviewed for compliance with the public access and recreation provisions of Chapter 3 of the Coastal Act and, where applicable, with the access and recreation policies of a certified Local Coastal Program. Based on the access, recreation, and development policies contained in Chapter 3 of the Coastal Act, the Commission has required public access to and along the shoreline in new development projects and has required design changes in other projects along the coast in Malibu and elsewhere to reduce interference with or eliminate impacts on public access. Impacts to access can occur from physical blockage of existing access, direct occupation of sandy beach by structures as well as from impacts on shoreline sand supply and profile caused by seawalls and other shoreline protective structures.

Development on the beach, particularly the placement of shoreline protective devices, has been found to cause a number of effects on the dynamic shoreline and the availability of public land. As a result, development can often lead to significant impacts on public access. Development on a beach often leads to a change in the beach profile. A beach that rests either temporarily or permanently at a steeper angle than under natural conditions will have less horizontal distance

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between the mean low water and the mean high water lines. This reduces the actual area in which the public can pass on its own property. This steepening of a beach can also lead to a progressive loss of sand on the beach. This material is not then available to nourish the offshore bar which usually provides the sand to replenish beaches after winter storms. The lack of an effective bar can allow such high wave energy on the shoreline that materials may be lost far offshore where it is no longer available to nourish the beach resulting in a smaller beach. In addition, shoreline protective devices cumulatively affect public access by causing accelerated and increased erosion on adjacent public beaches and by their direct occupation of sandy beach area.

The permitting agency must also consider whether a project affects any public right to use the shoreline that exists independent of the public's ownership of tidelands and of public rights protected by the common law public trust doctrine. Generally, there are three additional types of public use: (1) recreational rights in navigable waters guaranteed to the public under the California Constitution and state common law; (2) any rights that the public may have acquired under the doctrine of implied dedication based on continuous public use over a five-year period; and (3) any additional rights that the public may have acquired through public purchase or offers to dedicate access.

As stated above, the beaches, trails, and parklands in the City of Malibu are extensively used by both local residents, visitors from other communities throughout the Los Angeles metropolitan area and across the state as well as by visitors from throughout the nation and other countries. Most planning and demographic studies indicate that attendance at recreational sites in southern California will continue to increase significantly over the coming years. The public has the right to access and use the shoreline under the public trust doctrine, the California Constitution, and California common law. Therefore, it is necessary that the Local Coastal Program must protect public access rights by assuring that any proposed shoreline development does not interfere with those rights.

To eliminate or reduce potential impacts from development on public access and recreation, the Commission, in numerous permit actions, has often required that new shoreline development be located as far landward as possible in order to reduce adverse impacts to the sand supply and public access resulting from the proposed development. In addition, the Commission has also required that public access to or along the shoreline be provided in new development projects as mitigation for adverse impacts to beach sand supply and/or public access. This form of required mitigation is usually accomplished through an offer-to-dedicate (OTD) an easement for public use.

The requirement for the recordation of an OTD, however, does not ensure public access; the offers must be accepted by a managing entity, and, for vertical

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easements which often require some form of physical improvement, be opened for public use. Data and information assembled by Commission staff have shown that, over the years, while development has been allowed to proceed, the mitigation has, in many cases, not been fully satisfied (ReCap, 1999). Furthermore, an OTD is valid for a limited time period. OTDs, in many cases, are not required to be made available for public use until the easement is accepted for management by a public agency or non-profit organization. Therefore, it is important that the LUP contain provisions to ensure that OTDs required as a condition of development are not only accepted prior to their expiration date, but that they are opened, improved, where necessary, and managed for public use.

The LUP contains several policies to insure the protection and provision of public access in new development along with the consideration of public safety needs, private property rights, and the protection of natural resources, where applicable. Several policies provide specifically for the requirement of an offer to dedicate a lateral or vertical public access easement as a special condition in new development projects where a nexus is demonstrated between the proposed development and its impact on public access. These policies also provide the physical standards for locating such easements (2.67 – 2.69). Other policies provide for the opening, construction and maintenance of new accessways or the ongoing operation of existing accessways as well as for the acceptance, operation and maintenance of offers to dedicate beach or trail access easements (2.40 – 2.45, 2.71 – 2.73, 2.82, 2.85 – 2.87). Additional policies provide for the consideration of public safety, minimizing impacts on private property and adjacent private uses such as residential dwellings, and for the protection and enhancement of sensitive natural resources in providing and regulating public access (2.74 – 2.76). Policy 2.83 requires all applicants for new development along the shoreline to obtain a determination from the State Lands Commission relative to the proposed project's location or impact upon the boundary between public tidelands and private property.

To provide maximum access opportunities and to minimize overburdening any particular area, vertical access locations need to be distributed throughout the City's shoreline. In certifying the Malibu/Santa Monica Mountains Land Use Plan in 1986, the Commission approved standards and objectives to be used for the provision of vertical access for individual beach segments. In approving the LUP, the Commission recognized that different spacing objectives was appropriate for different beaches in Malibu. Closer spacing standards (one accessway per 1000 feet) was required where population density was higher and the distance from the first public road to the beach was relatively short (eastern Malibu). A greater separation distance (one accessway per 2,500 feet) was allowed where population density was lower and where constraints like steep bluffs make the development of accessways more difficult and costly (western Malibu). In certifying the LUP, the Commission found that:

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Applying the standards of separation for each beach as described above will result in the creation of approximately 50 vertical accessways, in addition to public parks and beaches. The Commission finds that this number of vertical accessways in Malibu, if and only if implementation is assured by the LCP, will provide reasonable access to the public tidelands. Furthermore, the standards will distribute that access in such a way as to avoid overuse of any one area, while recognizing the different characteristics of the beaches in Malibu (CCC, 1987).

The Land Use Plan certified for the County of Los Angeles is not legally binding on the City of Malibu. In the Regional Cumulative Assessment Project (ReCap) for Malibu and the Santa Monica Mountains completed and approved in 1999, however, the Commission recommended that, to maximize public access, the City should incorporate, at a minimum, the same standards provided in the 1986 LUP to be sufficient to comply with the access policies of the Coastal Act

The LUP contains specific accessway standards or objectives for specific beaches in the City which largely reflect those contained in the 1986 LUP. These standards are objectives for public acquisition or dedication requirements in new development requirements where a nexus is found between the proposed development and its impact on public access. Vertical access standards generally recommend at least one accessway to the shoreline for each 1000 linear feet.

2. Trails and Bikeways

The Coastal Act policies discussed above relative to the protection and provision of public access to and along the shoreline are also applicable to the protection and provision of public trails as well. In addition to the policies previously cited, PRC Section 30221 protects oceanfront land suitable for recreation for such uses unless all demand for public, or commercial, recreational use has been provided. Furthermore, PRC Section 30223 provides that upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

The Santa Monica Mountains area provides an extensive network of public hiking and equestrian trails that traverse and connect Federal, State, and County parklands, and a system of heavily used historic trails on private lands. These trails also serve as alternative means of access to beach and mountain parklands. In order to preserve and formalize the public's right to use these trails, Los Angeles County adopted the Malibu/Santa Monica Mountains Trails Plan in 1982. The plan identified 23 proposed trail routes including the Backbone Trail, the Coastal Slope Trail, and numerous cross-mountain lateral trails linking the San Fernando Valley with numerous mountain and beach parks. The public

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parklands, beaches, and other areas made accessible by the hiking and equestrian trails identified in the Trails Plan, and the spectacular coastal and mountain views from these trails, are among the coastal resources protected by the public access and recreation policies of the Coastal Act. However, the existing, interconnected system of public and historic trails, widely used by the public to access and enjoy the beaches and parklands of the Santa Monica Mountains, is at risk today by the ongoing development of privately owned lands.

In permitting residential development in Malibu and the Santa Monica Mountains the Commission has found that in order to ensure that the public would continue to be able to use existing hiking and equestrian trails, adverse effects to those trails arising from such development would need to be minimized and, if necessary, mitigated. In its permit actions, the Commission has frequently required an offer-to-dedicate (OTD) an easement for public trail use when proposed development would adversely affect the public's ability to use one of the trails identified in the Trails Plan or a trail known to have been historically used by the public. The Los Angeles County Land Use Plan, certified by the Commission in 1986, incorporated the 1982 Trails Plan and included policies which called for mapped trails to be dedicated as a condition of property development. The LUP also contained numerous other policies supporting the development of a regional system of trails to provide access to and between the beach and mountain parks. In a more recent action to approve the previously mentioned ReCap Project in 1999, the Commission found that projected population increases in and near Malibu and the Santa Monica Mountains will also increase demand for coastal recreational opportunities, including trails in the mountains.

One of the major concerns identified in the ReCap study is that recordation of an offer to dedicate (OTD) a public trail easement, similar to an OTD for vertical or lateral beach access, does not ensure the availability of public access. As with beach access, a recorded offer must be accepted, opened, and managed by a public agency or acceptable non-government entity before the land becomes available for public use. Until trail OTDs are actually opened for public use, however, the impacts to the public from private development are not fully mitigated. Between 1978 and 1997 the Commission required an OTD for a public trail easement as a special condition of approval on 172 coastal development permits. Of the 172 permits approved by the Commission with a trail easement OTD condition, however, only 8 permits (encompassing 23 parcels) have had the OTD recorded and accepted (by the Santa Monica Mountains Conservancy) and none are yet open for public use (ReCap, 1999). An additional 80 permits (encompassing 107 parcels) have resulted in recorded OTDs but none have been accepted (ReCap, 1999). The 21 year period for recordation established by the permit were due to start expiring in 1999 as well. Those that were at the deadline were accepted prior to their expiration, however.

Barriers to accepting and opening recorded OTDs typically include liability concerns, costs of managing and maintaining the easements, and the geographic distribution and physical characteristics of the individual easements. Adding to these limitations, the use of a trail easement OTD requirement in permit actions has been severely restricted by court decisions over the last decade. Therefore, it is even more important that the Commission, and the City through its LCP, implement a policy approach requiring a more pro-active role in ensuring that recorded OTDs are accepted and opened for public use.

The Land Use Plan contains several proposed policies to protect existing trails and to provide for the requirement, acceptance and opening of trail OTDs where applicable. Policy 2.49 in particular provides that a public trail system be maintained throughout the mountains and along the shoreline that achieves several objectives. Objectives include providing links between trails, parks and major recreational facilities; allowing for flexible design and routing to minimize impacts on adjacent development and fragile habitat; designing trails to accommodate multiple uses, where appropriate, such as hiking, biking and equestrian use; providing public parking at trailheads; providing for safe maintenance; and protecting private property rights.

Policies are included in the Land Use Plan to provide not only for a trail OTD requirement in new development projects, where applicable (2.53 & 2.54), but several policies are provided to ensure that the objective of the OTD requirement is fully realized – that trail OTDs are accepted, opened and managed for public use. Policies 2.50 & 2.51 provide for coordination by the City with federal, state, and County park agencies and with non-profit land trusts and organizations in developing a strategic plan for the acceptance, construction, and operation of recorded trail easements and policy 2.57 provides for City support of efforts to obtain public and/or private funding to purchase parcels and/or easements to complete gaps in the public trail system throughout the City and the Santa Monica Mountains. In addition, several policies previously referenced above in the discussion of shoreline access are applicable to trail access as well relative to realizing the objective of opening trails for public use (2.71-2.73, 2.85-2.87). The LUP also includes policies which provide for safe bikeways and support facilities (2.46 – 2.48), trail campsites (2.52), and for the maintenance, restoration and, in limited circumstances, controlled access within trail areas in order to protect sensitive habitat resources.

3. California Coastal Trail

The California Coastal Trail (CCT) which has been designated a Millennium Trail by the Governor or California has been officially established by Senate Bill 908. This bill provides for the construction of the CCT along the state's coastline from the Oregon Border to the border with Mexico, to the extent feasible. This bill

requires the State Coastal Conservancy, in consultation with the Coastal Commission and the Department of Parks and Recreation, to coordinate in the planning and development of the CCT. SB 908 also requires other agencies, boards, departments etc. with property interests or regulatory authority in coastal areas to cooperate with the Conservancy, to the extent feasible, in planning and making land available for the trail. This bill also requires the CCT to be developed in a manner that respects property rights, privacy of adjacent property owners and the protection of coastal resources.

The Land Use Plan includes several policies which provide for the ultimate completion of the CCT link through the City. These policies provide for consultation and coordination with Federal, State, and County Park agencies, the Coastal Conservancy, the Santa Monica Mountains Conservancy, Los Angeles and Ventura Counties and other appropriate public and private entities and interested parties in implementing all essential components of the trail (2.58, 2.59). The LUP also provides for specific design and siting standards and objectives (2.60, 2.61), acquisition and management (2.62), signage program standards (2.63), support facilities (2.64), mapping (2.65), and the LCPs eventual incorporation of the final CCT plan by future amendment (2.66).

4. Parking / Transit Facilities / Signage

While the physical supply of access is a primary factor in assuring access to and along the shoreline and coastal trails, there are a number of other factors which are important components of any access program. These factors include the availability of transit to beaches, the availability of public parking facilities, adequate support facilities such as restrooms, and adequate signage. Impacts to any one of these variables may affect the availability or use of the physical supply of access. For example, without adequate parking or alternative transportation, beach and trail users will experience difficulty getting to the access site. Similarly, a lack of adequate support facilities or a site that is perceived as overcrowded may make a particular beach or trail less desirable for use. In other situations, it may be necessary to balance the provision of support facilities with the need to protect sensitive resources. Therefore, managing coastal access involves managing not only the physical supply of access, but all of the other factors that contribute to ensuring maximum access.

The Commission has found, in past actions, that the availability of parking is a critical component of public access in Malibu and other coastal areas. In Malibu, beach and trail access parking may be located in public parking lots or along public roadways. In particular, in areas where there are no public parking lots, on-street parking may be the only parking alternative. This is particularly true of Pacific Coast Highway in some areas of Malibu. In other areas, PCH supplements existing public parking lots. On-street parking provides low-cost

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access to public beach and trail areas where parking fees can be as high as several dollars per day. Often, on-street parking is the only alternative at inland trailheads. Frequently, increased development along the shoreline and public roads leads to increased competition for spaces and the proliferation of "No Parking" signs and zones. It is often difficult to identify and quantify new "No Parking" or other signs that restrict parking. However, such barriers to public parking have occurred in Malibu in the past, some of which have been resolved through Commission permit actions.

In order to minimize impacts to public parking the Commission has required that new development provide adequate off-street parking. If commercial and other uses do not provide adequate off-street parking, people will utilize on-street public parking which reduces the potential on-street parking normally available for trail and beach users. In Malibu, the availability of on-street parking along PCH and other public streets is limited. The Commission has also required, in permit actions, that non-visitor serving commercial and office development provide for the use of their parking lots by the public for beach access during the off hours of operation, including weekends and holidays. Provisions to ensure sufficient off-street parking and protect existing on-street parking were included in the Malibu/Santa Monica Mountains LUP certified in 1986.

A comprehensive signage program to identify available access points from public roads would also improve access opportunities in Malibu. Although some accessways are currently signed, many accessways are more difficult to locate and may only be recognized by the presence of a gated entrance and trash receptacle. Uncertainty about the existence of an accessway and proximity to existing development inhibit the public from using an accessway that is not adequately signed.

Public access to beaches and trails in Malibu would also be facilitated by the removal of unpermitted physical development, like signs and fences on the beach which inhibit public use of state tidelands as well as dedicated public lateral and vertical easements. Many beaches in Malibu contain numerous signs stating "Private Beach" or "Private Property". Such signs mislead and intimidate the public from legal beach access. In particular, signs portraying the boundary between public and private property as a fixed line are inaccurate since the line where the mean high tide intersects the beach is an ambulatory boundary that constantly moves to correspond to changes in the beach profile and daily tide flows. In some cases, these signs may be placed on public land. In recent permit decisions for beachfront development, the Commission has imposed a special condition which forbids the placement of any sign containing language which can be interpreted as limiting access to the public beach. In addition, existing signs, fences or other obstacles which have been illegally placed on a beach or on state tidelands need to be identified and removed, where necessary to protect public access.

The proposed Land Use Plan contains several policies which address parking, transit and signage issues. Policy 2.17 provides for designing and siting parking and support facilities to minimize adverse impacts to sensitive environmental and visual resources. Policy 2.18 requires public beaches and parks to maintain lower-cost user fees and parking fees, and maximize hours of use to the extent feasible. Policies are included to provide transit facilities, including shuttle programs (2.25), to require sufficient off-street parking in new development (2.26), protect existing parking (2.27), and prohibit parking restrictions such as "No Parking" signs, preferential parking programs, landscaping in road easements or physical barriers unless necessary to protect public safety (2.28, 2.33, 2.34). Gates, guardhouses and other barriers which restrict access are not permitted within private street easements (2.29). Any restrictions of public parking is subject to a coastal development permit. Other policies provide for public parking availability on weekends and holidays to be a component of certain types of commercial or office development (2.30, 2.31). The LUP also recommends that the City complete an inventory of existing public parking and identify all unpermitted signs and physical barriers and requires that all unpermitted signs and barriers which prevent public parking near the shoreline be removed (2.32).

5. Parklands

Several public beach parks operated by the County of Los Angeles and the Department of Parks and Recreation are located along the shoreline in Malibu. These parks include Nicholas Canyon County Beach, El Sol Beach, La Piedra, El Pescador and El Matador State Beaches (Robert H. Meyer pocket beaches), Zuma Beach County Park, Westward Beach/Point Dume State Beach, Point Dume Headlands State Preserve, Corral State Beach, Dan Blocker Memorial Beach, Malibu Bluffs State Park, Malibu Creek & Lagoon State Park, Malibu Pier/Surfrider Beach, and Las Tunas State Beach. In addition, the City is flanked on it's northern and southern boundaries by Leo Carrillo State Beach and Topanga Beach.

Many of these beach and/or bluff parks are heavily used by the public, particularly on summer weekends and holidays. Other public beaches and bluffs have been underutilized due primarily to limited public access. Among these are El Sol Beach and Dan Blocker Beach which are both owned by the Los Angeles County Department of Beaches and Harbors. The El Sol property consists of a blufftop area leading down to a large cove beach area west of the existing Robert H. Meyer pocket beaches. Dan Blocker Beach consists of a 1500-foot long blufftop and narrow sandy beach east of Latigo Point and includes an eastern unit known as Corral Beach. While the Corral unit is open to public use, the remainder is fenced. Improvements necessary to make El Sol and Dan Blocker

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available to the public include stairs, parking and support facilities such as restrooms.

Staff of the Commission and Coastal Conservancy have worked with County staff to facilitate opening these beaches to public use. The Conservancy has indicated to Los Angeles County that funding is available for the development of the El Sol property. The County has indicated it's desire to construct a parking lot and restroom and Dan Blocker Beach.

Another park property where public access opportunities are limited is Malibu Bluffs State Park. The California Department of Parks and Recreation acquired the 93 acre bluff property in 1979 utilizing \$6.8 million of State Bonds made available by a 1976 bond measure. In 1982, the Commission approved the construction of two temporary ballfields to replace two ballfields located nearer to Malibu Lagoon in order to facilitate a lagoon restoration project (5-82-780 L.A. County). The temporary ballfields with parking and restrooms were permitted for a maximum of 5 years. In 1985 the Commission denied a proposed amendment to the permit to develop a community park on all 93 acres on the basis that the Malibu area lacked adequate regional public park and camping facilities. Subsequently, the Commission approved an amendment to the permit in 1986 which allowed the development of a 30 acre park which included the addition of an interpretive center, picnic areas, walking paths, portable bleachers and a concession stand. The amendment also revised the special condition requirement that the ballfields be removed within 5 years to permit the ballfields to remain as a temporary interim use with the added requirement that the County, which had jurisdiction over the site at the time, "seek alternative local recreation facilities, including ballfields, with the Malibu-Calabasas area."

The State Department of Parks and Recreation has indicated its desire to operate the park in the manner for which it was originally intended when purchased by the State in 1979 as a visitor and recreation serving destination for a larger segment of the public. The State has informed the City that the current lease which allows the ballfields on a temporary basis will not be renewed and that alternative locations for the ballfields and other local facilities should be found. The ballfields are largely used by local residents and an interpretive center constructed in the park is primarily used as a community center. These local uses conflict with, and limit, the use of the State Park as a regional resource and the public access and recreation policies of the Coastal Act. To date, no alternative sites have been obtained by the City although a number of potential sites have been identified either by the City or State Parks and Recreation. One potential site is a privately owned blufftop property immediately east of the park. The City is currently involved in negotiations with the property owner to allow 8 residential units on the site if the owner will also allow the relocation of the ballfields to the site as well. This site is currently designated for visitor-serving commercial use in the proposed Land Use Plan. However, Commission staff

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have indicated tentative support for this proposal, in concept, if all of the ballfields are relocated to the site and if the site plan can be revised to eliminate or mitigate some potential view impacts from the park and if grading can be reduced.

Another underutilized public park site has been Point Dume State Preserve although recent improvements have enhanced public access opportunities. This 31-acre preserve includes Westward Beach, Dume Beach, Pirate's Cove, and an upland terrace/bluff preserve that provides spectacular views of the coast to the east and west. The upper blufftop portion of the park is designated a State Preserve in recognition of the resources on the site. In order to protect these resources, while also encouraging and facilitating public access to the bluff and Dume Beach, the Commission approved Permit No. 4-97-048 in 1997 for the development of a boardwalk and trails, along with the revegetation and restoration of approximately two acres. These improvements allow public use to be directed along a boardwalk and established trails rather than through a haphazard web of unplanned dirt paths. To further facilitate public access to the blufftop, the Commission approved Permit No. 4-00-126 in 2000, in a negotiated settlement agreement with the City to resolve an enforcement action, which resulted in the construction of 10 public parking spaces, a temporary drop-off space and a shuttle bus stop along Cliffside Drive which borders the Preserve.

The Land Use Plan contains policies which provide for the protection of existing access to regional parks along the City's shoreline and for the improvement of access where needed. Policy 2.77 provides for coordinating with and supporting efforts by Los Angeles County Department of Beaches and Harbors to open and provide increased public access to El Sol and Dan Blocker Beaches. Policy 2.78 provides for the development of a Public Works Plan for Malibu Bluffs State Park by the Department of Parks and Recreation that results in the removal and relocation of existing athletic fields and provides for uses which meet State and regional park objectives of expanding public access and visitor opportunities. Policy 2.79 prohibits any expansion, reconstruction or improvements to the existing athletic fields. In addition, the LUP provides for the City's support and coordination with the Department of Parks and Recreation in protecting and improving access to Point Dume State Preserve (2.80). Further, the Beach and Blufftop Accessway Standards also contained in the LUP also provide for the development of an accessway at El Sol; improved access to and along the blufftop at Point Dume along with the provision and protection of public parking; the improvement of vertical access, public parking and restroom facilities at Dan Blocker Beach; and replacement of local City park uses (ballfields and community center) with public blufftop trails and viewpoints and passive recreation at Malibu Bluffs State Park.

6. Visitor and Recreation Serving Uses

As stated previously, the beaches of Malibu are world-famous tourist destinations for visitors from nearby areas, other areas within California, the nation and many foreign countries. Overall, a wide variety of recreational opportunities exist within the City and the Santa Monica Mountains such as swimming, surfing, diving, boating, hiking and equestrian use. Historically, however, the provision of adequate visitor-serving facilities has been a controversial issue in Malibu particularly relative to the provision of overnight accommodations. Visitor-serving facilities also include various commercial enterprises such as restaurants, surfing and diving shops, visitor-centers, piers, parks and other uses.

Regarding overnight accommodations, there are currently six existing motels or hotels within the City containing a total of 151 rooms. In addition, the Adamson Hotel, which was approved by the Commission prior to the City's incorporation with approximately 300 rooms, has been approved by the City with a total of 146 rooms. This hotel is not yet under construction.

The 1986 certified LUP for Malibu and the Santa Monica Mountains designated approximately 90 acres as visitor-serving recreation or commercial including approximately 24 acres in the Civic Center area which contains several large undeveloped parcels. (The 1986 LUP recommended that a Specific Plan be prepared for the Civic Center as does the current proposed draft LUP.) The City's General Plan designates approximately 85 acres for visitor-serving uses, including the 28 acre Adamson Hotel site. The City's General Plan does not designate any property in the Civic Center as visitor-serving, which would give priority to this range of uses, however, the General Plan does designate approximately 28 acres of vacant land in the Civic Center as General Commercial which would allow motels, and bed and breakfast accommodations, among a wide range of commercial uses including office development. Permitted uses and land use designations are contained in the New Development Chapter of the draft LUP and are discussed in greater detail in that section.

The Access and Recreation Chapter of the draft LUP does contain policies which address the provision of visitor-serving facilities, however. Policies 2.35 and 2.39 gives priority to the development of visitor-serving commercial recreational facilities which enhance public opportunities for coastal recreation over private residential or general commercial development. Policy 2.36 protects existing, lower cost visitor serving facilities and encourages the development of new lower cost facilities. Policies 2.37 and 2.38 require that new development of overnight visitor-serving accommodations include a component of lower cost facilities or provide mitigation in the form of an in-lieu fee to help subsidize the construction of lower cost facilities.

Based on the discussion provided above including all of the recommended policies contained in the draft Land Use Plan the Commissions finds that the draft Land Use Plan meets the requirement of and conforms to all of the Public Access and Recreation policies contained in Chapter 3 of the Coastal Act cited above.

D. Marine and Land Resources

Section **30107.5** of the Coastal Act states that:

"Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.

Section **30230** of the Coastal Act states that:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section **30231** of the Coastal Act states that:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section **30233** of the Coastal Act states that:

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

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- (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.
 - (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
 - (3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.
 - (4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.
 - (5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.
 - (6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
 - (7) Restoration purposes.
 - (8) Nature study, aquaculture, or similar resource dependent activities.
- (b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.
- (c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay,

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and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division.

For the purposes of this section, "commercial fishing facilities in Bodega Bay" means that not less than 80 percent of all boating facilities proposed to be developed or improved, where such improvement would create additional berths in Bodega Bay, shall be designed and used for commercial fishing activities.

(d) Erosion control and flood control facilities constructed on water courses can impede the movement of sediment and nutrients which would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a coastal development permit for such purposes are the method of placement, time of year of placement, and sensitivity of the placement area.

Section **30236** of the Coastal Act states that:

Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

Section **30240** of the Coastal Act states that:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Section **30241** of the Coastal Act states that:

The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas agricultural economy,

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and conflicts shall be minimized between agricultural and urban land uses through all of the following:

- (a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses.
- (b) By limiting conversions of agricultural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses or where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.
- (c) By permitting the conversion of agricultural land surrounded by urban uses where the conversion of the land would be consistent with Section 30250.
- (d) By developing available lands not suited for agriculture prior to the conversion of agricultural lands.
- (e) By assuring that public service and facility expansions and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality.
- (f) By assuring that all divisions of prime agricultural lands, except those conversions approved pursuant to subdivision (b), and all development adjacent to prime agricultural lands shall not diminish the productivity of such prime agricultural lands.

Section **30241.5** of the Coastal Act states that:

(a) If the viability of existing agricultural uses is an issue pursuant to subdivision (b) of Section 30241 as to any local coastal program or amendment to any certified local coastal program submitted for review and approval under this division, the determination of "viability" shall include, but not be limited to, consideration of an economic feasibility evaluation containing at least both of the following elements:

- (1) An analysis of the gross revenue from the agricultural products grown in the area for the five years immediately preceding the date of the filing of a proposed local coastal program or an amendment to any local coastal program.
- (2) An analysis of the operational expenses, excluding the cost of land, associated with the production of the agricultural products grown in the

area for the five years immediately preceding the date of the filing of a proposed local coastal program or an amendment to any local coastal program.

For purposes of this subdivision, "area" means a geographic area of sufficient size to provide an accurate evaluation of the economic feasibility of agricultural uses for those lands included in the local coastal program or in the proposed amendment to a certified local coastal program.

(b) The economic feasibility evaluation required by subdivision (a) shall be submitted to the commission, by the local government, as part of its submittal of a local coastal program or an amendment to any local coastal program. If the local government determines that it does not have the staff with the necessary expertise to conduct the economic feasibility evaluation, the evaluation may be conducted under agreement with the local government by a consultant selected jointly by local government and the executive director of the commission.

Section **30242** of the Coastal Act states that:

All other lands suitable for agricultural use shall not be converted to nonagricultural uses unless (1) continued or renewed agricultural use is not feasible, or (2) such conversion would preserve prime agricultural land or concentrate development consistent with Section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands.

1. Coastal Act Provisions

One of the chief objectives of the Coastal Act is the preservation, protection, and enhancement of coastal resources, including land and marine habitats, and water quality. The rarest and most ecologically important habitats are protected from development. Section 30240 requires the protection of environmentally sensitive habitat areas (ESHA) against any significant disruption of habitat values. No development, with the exception of uses dependent on the resources, is allowed within any ESHA. This policy further requires that development adjacent to ESHA is sited and designed to prevent impacts that would significantly degrade ESHA and to be compatible with the continuance of the habitat areas. Finally, development adjacent to parks and recreation areas must be sited and designed to prevent impacts.

In addition to protection as ESHA, streams and associated riparian habitat are also protected in order to maintain the biological productivity and quality of coastal waters. Section 30231 requires that natural vegetation buffer areas that protect riparian habitats be maintained, and that the alteration of natural streams

be minimized. Section 30236 limits channelizations, dams, or other substantial alterations of rivers and streams to only three purposes: necessary water supply; protection of existing structures where there is no feasible alternative; or improvement of fish and wildlife habitat.

Marine resources are protected to sustain the biological productivity of coastal waters and to maintain healthy populations of all species of marine organisms. Section 30230 requires that marine resources be maintained, enhanced, and where feasible restored. Uses of the marine environment must provide for the biological productivity of coastal waters and that will maintain healthy populations of marine organisms. Section 30233 provides that the diking, filling, or dredging of open coastal waters, wetlands, or estuaries may only be permitted where there is no less environmentally damaging alternative and restricted to a limited number of allowable uses.

Finally, the Coastal Act requires that the biological productivity and quality of coastal waters be protected. Section 30231 requires the use of means, including managing waste water discharges, controlling runoff, protecting groundwater and surface water, encouraging waste water reclamation, and protecting streams, in order to maintain and enhance water quality.

2. City of Malibu Habitats

The Santa Monica Mountains region, including the City of Malibu, is a unique habitat area. On a global scale, the area is part of the Mediterranean Scrub biome. This biome type is found in only five areas worldwide: around the Mediterranean Sea, Chile, South Africa, Australia, and Southern California. All of these areas occur on the west coast of the respective continents where there are cold ocean currents offshore. The Mediterranean climate includes wet winters and dry summers with precipitation ranging from 15 to 40 inches per year. Temperatures are moderated by the maritime influence and fog associated with the cold ocean currents. Worldwide, this biome occupies a small area and a very small percentage of the historical extent remains undisturbed.

The Santa Monica Mountains are part of the Transverse Ranges, the only mountain range in California that is oriented in an east to west direction. The Transverse Ranges extend from the Santa Barbara Coast to the Mojave Desert, creating a natural barrier between Central and Southern California. There are several habitat types and individual plant species within the City that are considered sensitive. The Department of Fish and Game has identified habitats that are considered sensitive because of their scarcity and because they support a number of endangered, threatened, and rare plants, as well as sensitive bird and animal species. These vegetation communities found within the City include coastal sage scrub, walnut woodland, southern willow scrub, southern

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cottonwood-willow riparian forest, sycamore-alder woodland, oak riparian forest, salt marsh, and freshwater marsh. Within these habitat areas are several plant species that are considered endangered, threatened, rare, or of special concern under state or federal law or by designation of the California Native Plant Society. Such plants include Santa Susana tarplant, Coulter's saltbush, Blochman's dudleya, Santa Monica Mountains dudleya, and Plummer's mariposa lily. The Santa Monica Mountains, including the City, still include large areas of intact habitat, an extraordinary fact given the dense urban development that surrounds the area. Following is a description of the main habitats found within the City.

Coastal Sage Scrub

Most of the undeveloped portion of Malibu, especially near the coast and at lower elevations, consists of Coastal Sage Scrub (CSS). Although accurate estimates are difficult to obtain, it is believed that only about 10-15% of the original CSS habitat in California remains today, most being lost to development, (Bolger et al 1997). This remaining habitat is much more highly fragmented and sensitive than the original CSS distribution (Bolger et al 1997, CDFG 1993). About 100 listed species utilize CSS as habitat (Atwood 1993, CDFG NCCP 1993). Besides being a rare habitat, CSS is especially valuable in providing refuge for the many listed species it contains, most of which are rare and are endemic to limited geographic regions (Atwood 1993, CDFG NCCP 1993).

The species composition and structure of the CSS vegetation depends on moisture conditions. CSS in drier conditions (on south-facing slopes and at lower elevations) consists of more drought-resistant species (e.g., California sagebrush (*Artemisia californica*), coast buchweat (*Eriogonum cinereum*), cactus (*Opuntia* sp.), purple sage (*Salvia leucophila*) and native and/or non-native grasses) than on north-facing slopes and at higher elevations. Where more moisture is available, larger evergreen species such as Toyon (*Heteromeles arbutifolia*), Laurel Sumac (*Malosoma laurina*), Lemonadeberry (*Rhus integrifolia*) and Sugar Bush (*Rhus ovata*) predominate. As the moisture increases and the structure of the vegetation changes to larger evergreen species, there is more cover for wildlife on north-facing slopes and at higher elevations, and movement of large animals from chaparral into CSS is facilitated in these conditions. Characteristic CSS wildlife includes Anna's hummingbirds, rufous-sided towhees, California quail, greater roadrunners, Bewick's wrens, coyotes, coast horned lizards (NPS 2000), but most of these move between CSS and chaparral habitats as well.

Chaparral

At very roughly 1000 ft. elevation the vegetation shifts to more generally woody evergreen species with sclerophyllous leaves (hard with resinous or waxy coatings). Various subcommunities of chaparral occur in the Malibu/SMM area and are described briefly below.

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Northern mixed chaparral is found on moist, north facing slopes throughout the mountains. It commonly contains woody vines and large shrubs such as chamise (*Adenosoma fasciculatum*), scrub oak (*Quercus berberidifolia*), greenbark or spiny ceanothus (*Ceanothus spinosus*), mountain mahogany (*Cercocarpus betuloides*), toyon (*Heteromeles arbutifolia*), hollyleaf redberry (*Rhamnus ilicifolia*), sugarbush (*Rhus ovata*) and manzanita (*Arctostaphylos* spp.) (NPS 2000).

Red shank chaparral occurs in the SMM but is more of an inland habitat. Ceanothus chaparral occurs on stable slopes and ridges, where bigpod ceanothus (*Ceanothus megacarpus*) makes up over 50% of the vegetative cover. In other areas buckbush ceanothus (*Ceanothus cuneatus*), hoary-leaved ceanothus (*Ceanothus crassifolius*), or greenbark ceanothus may dominate. In addition to ceanothus, other species that are usually present in varying amounts are chamise, black sage (*Salvia mellifera*), holly-leaf redberry, coast golden bush (*Haploppapus venetus*) and sugarbush (NPS 2000).

Riparian Woodland

Riparian woodlands occur along both intermittent and perennial streams in nutrient rich soils or within the drainage of steep slopes throughout the Malibu/SMM area, and they form one of the most important ecological connections between the Malibu coast and the inland areas. These communities are the most species-rich to be found in the area, and they are particularly sensitive because of their narrow linear structure, highly connected flowing water system and large number of species. Dominant plant species may include arroyo willow (*Salix lasiolepis*), California black walnut (*Juglans californica*), sycamore (*Platanus racemosa*), Mexican elderberry (*Sambucus mexicana*), California bay laurel (*Umbellularia californica*) and mule fat (*Baccharis salicifolia*).

Some of the typical wildlife species include American goldfinches, black phoebes, warbling vireos, bank swallows, song sparrows, belted kingfishers, raccoons, California and Pacific tree frogs. Three sensitive species that may inhabit the streams are the southwestern pond turtle, tidewater goby and steelhead trout.

Coastal Saltmarsh

The main example of coastal saltmarsh in the Malibu area is the Malibu Lagoon on Malibu Creek. The lagoon supports typical saltmarsh vegetation consisting of pickleweed (*Salicornia* sp.) and saltgrass. Federally endangered tidewater gobies (*Eucyclogobius newberryi*) and southern steelhead trout (*Oncorhynchus mykiss irideus*) both use the lagoon and creek and federally endangered brown pelicans (*Pelecanus occidentalis californicus*) can be seen in and around the lagoon.

Malibu Creek and Lagoon supports what is believed to be the southernmost remaining steelhead trout run on the California coast (National Marine Fisheries Service 1997). This is the southernmost steelhead run in the Southern California Evolutionary Significant Unit (ESU) of steelhead trout, consisting of the Santa Ynez River, Gaviota Creek, Ventura River, Matilija Creek, Santa Clara River and Malibu Creek. However, other streams may also support small numbers of breeding fish (e.g., Arroyo Sequit in western Malibu – pers. comm. Mark Cappeli, NMFS). None of these streams is believed to support more than 200 fish (NMFS 1997).

Coastal Live Oak Woodland

According to the existing vegetation maps of Malibu and the SMM (1983 and 1993), coast live oak woodland occurs only very slightly within the Malibu City boundary mostly on the extreme western extent. Nevertheless, a brief description is provided here because of their sensitive nature.

Coast live oak woodland occurs mostly on north slopes, shaded ravines and canyon bottoms and is characterized by coast live oak (*Quercus agrifolia*), hollyleaf cherry (*Prunus illicifolia*), California bay laurel (*Umbrellularia californica*), coffeberry (*Rhamnus californica*), and poison oak (*Toxicodendron diversilobum*). This coast live oak woodland is a more coastal habitat than valley oak woodland since the coast live oak is more tolerant of salt-laden fog than other oaks and can thus be found nearer the coast (NPS 2000).

Typical wildlife in this habitat includes acorn woodpeckers, plain titmice, northern flickers, cooper's hawks, western screech owls, mule deer, gray foxes, ground squirrels, jackrabbits and several species of bats.

Coastal Strand

Malibu includes twenty-seven miles of coastline, much of which is coastal strand habitat, that is home to many sensitive species of plants and animals. Typical species of plants are sand verbena (*Abronia maritima*), silver beachweed (*Ambrosia chamissonis*), saltbush (*Atriplex* sp.) (two of which are sensitive – *A. coulteri* and *A. parishii*), beach morning glory (*Calystegia soldanella*) and the invasive iceplants hottentot fig (*Mesembrianthemum crystallinum*) and the sea fig, (*Carpobrotus edulis*). This habitat is very sensitive because of the salt spray, slow nutrient cycling and desiccating winds that contribute to a desert-like environment. The slow growth rates and shifting substrate make this habitat very slow to recover from disturbance. It is rare and valuable, performing an important role in the ecosystem, and is easily disturbed by human activities and development.

3. Environmentally Sensitive Habitat Designation

The Coastal Act provides a definition of “environmentally sensitive area” as: “Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments” (Section 30107.5).

Staff considered the various species and habitats within the City of Malibu with regard to the three questions raised by the definition of ESHA: 1) which plant or animal species or their habitats are rare; 2) which plant or animal species are especially valuable because of their special nature or role in an ecosystem; and 3) can these plant or animal species or habitats be easily disturbed or degraded by human activities and developments. As noted above, there are many plant and animal species within the City that are considered rare.

The Commission staff ecologist, Dr. Jon Allen has considered the habitats and species in Malibu. He concludes that there are species and habitats in Malibu that are not only rare, but are especially valuable because of their special nature or role in an ecosystem. Dr. Allen’s findings are attached as Exhibit 2. This report states that:

In the case of Malibu, its geographic location and role in the ecosystem at the landscape scale is critically important in determining the significance of its native habitats. Malibu averages about one mile of inland extent and 27 miles along the coast, forming a significant connecting link between the coast and large, undisturbed habitat areas in the Santa Monica Mountains. These areas are in turn connected by narrow corridors to the Sierra Madre, San Gabriel and San Bernardino Mts. to the north. Much of the ecological significance of the Malibu connection with inland areas is that it includes many riparian corridors that connect large inland watersheds with the coast. These corridors are home to many listed species and are easily disturbed by development, and in fact some have already been subject to considerable development near the coast, e.g. Las Flores Canyon, Malibu Creek & Lagoon, Ramirez Canyon and Trancas Canyon. Proceeding inland from the coast, however, the quality of the habitat improves rapidly and soon approaches a relatively undisturbed environment consisting of steep canyons containing riparian oak-sycamore bottoms, with coastal sage scrub and chaparral ascending the canyon walls.

So, in addition to the rarity of the species and habitats found in the City, (particularly coastal sage scrub, chaparral, and riparian), they are interconnected to habitat areas throughout the Santa Monica Mountains and beyond by habitat linkages. In this way, the City’s habitats are especially valuable because of their special nature or role in the larger ecosystem. Dr. Allen concludes that this connectivity is clearly indicated by the presence of large mammals, such as the mountain lion, that require very large territories to survive. His findings state that:

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1. A rare and valuable feature of natural habitats in the Malibu/SMM area is that they are still large and sufficiently connected to form a functional ecosystem that supports a great diversity of species, including keystone predators such as the mountain lion. The presence of this indicator species with its large area requirements verifies that this habitat is still functional on a large spatial scale. From the tenuous connecting corridors within it and to other areas, however, this large-scale function of the habitat appears seriously threatened... The occurrence of this habitat in the middle of the huge developed region surrounding it makes it at once extremely valuable and extremely vulnerable. Its current condition might well be categorized as precarious.
2. An important function of the ecosystem in Malibu and the Santa Monica Mountains is to provide refuge for many sensitive and threatened species including large predators. The large predators in this system have an important role in controlling the abundance of many species lower in the food chain, thus stabilizing the system. Losing them from this ecosystem would invite outbreaks of herbivores (e.g. muledeer) and lower level mesopredators (e.g., feral cats, raccoons, opossums, etc.) that would then impact native prey species lower in the food chain.
3. There is little doubt that the Malibu/SMM area is easily disturbed by human activities and developments. It has already been significantly fragmented. It cannot suffer substantial additional fragmentation and still remain ecologically functional on a large landscape scale. Its ecological health both regionally and locally is precarious and threatened by the huge urban matrix of development surrounding it. Further fragmentation will reduce the Malibu/SMM ecosystem to a series of pathetic remnants of the original habitat whose landscape function will have been lost.

Based on this information, staff determined that entire functional canyon habitats should be designated ESHA, including stream and riparian corridors, coastal sage scrub, and chaparral and oak woodlands. In the less developed western areas of the City and in higher elevation areas, entire canyons are considered ESHA. In more developed areas on the lower terrace, the extent considered to be ESHA is more closely confined to the riparian corridors that have remained relatively undisturbed and functional. Streams and associated riparian corridors serve as important and rare corridors for wildlife.

4. Draft City of Malibu Land Use Plan ESHA and Marine Resources Map

The LUP Environmentally Sensitive Habitat Areas (ESHA) Map shows the areas designated ESHA. In undeveloped areas, entire canyon habitats have been designated, including riparian corridors, coastal sage scrub, chaparral, and woodlands. Within developed areas, riparian corridors are designated as ESHA. On Point Dume, the riparian corridors and the adjacent canyons are designated ESHA. Coastal dunes and bluff face areas are designated as ESHA. There are

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also valuable marine ESHA areas including kelp forests, intertidal areas, and near shore shallow fish habitats that are discussed below.

In preparing the Draft ESHA Map, staff (including the Commission Ecologist, Dr. Jon Allen) consulted available information, including vegetation maps, historical habitat mapping, fire history information, and aerial photos. Staff identified candidate ESHA areas on the basis of this information. Staff conducted field investigation to verify the location and extent of the various habitat types. The information gathered in the field was recorded on aerial photographs of the area that are digitally referenced. Staff also recorded positions in the field, using a global positioning satellite (GPS) instrument. The final ESHA designated areas drawn by staff were developed into the LUP ESHA Map using a geographic information system (GIS), by the Commission's Technical Services Mapping staff.

The Coastal Act requires that areas meeting the definition of ESHA be protected, as provided by Section 30240. One way that the LUP provides for the protection of ESHA is by generally depicting the location of known resources on the LUP ESHA Map. However, if the LUP policies protecting ESHA were applied only to the areas shown on the map, there would not be complete assurance that all areas meeting the definition of ESHA would be protected as required by the Coastal Act. The LUP ESHA Map is a valuable source of information on the presence of sensitive resources. The map is a useful tool for identifying many of the habitat areas that meet the definition of ESHA. However, the map is not the end of the story.

The LUP ESHA Map, as described above, was developed using available information, including field visits. The map accurately depicts the location of ESHA areas according to the method used. However, it would be necessary to conduct in-depth site-specific biological surveys of the entire City in order to map ESHA down to a site by site level. Conducting such surveys would not only be time and cost prohibitive, but also an inefficient method to determine location of ESHA. Site-specific biological surveys of the entire City would still only provide an accurate depiction of ESHA at one point in time. As described below, circumstances change over time. It is more efficient to carry out a site-specific biological analysis of each site at the time that development is proposed.

Additionally, the resource areas that are considered ESHA are not static over time. Development across the state results in the loss of natural areas and fragmentation of habitat such that, in the future, certain habitats and/or plant and animal species may become more rare and their protection more critical. Additionally, scientific study may reveal new information and understanding of the existence, rarity, or importance of certain habitats and species.

Therefore, it is clear that the LUP ESHA Map, while a valuable tool in assessing the location of ESHA subject to protection under the policies of the LUP, must be used in conjunction with site specific information provided through a detailed biological study conducted at the time that development is proposed to determine the presence of ESHA on the ground. Policy 3.3 provides that any area not previously designated on the ESHA Map that meets the definition of ESHA shall be protected as ESHA. Any habitat area that is rare or especially valuable from a local, regional, or statewide basis, areas supporting plant or animal species designated as rare, threatened, or endangered under State or Federal law, and areas supporting significant populations designated 1b (Rare or endangered) by the California Native Plant Society shall be considered ESHA, unless there is compelling, site-specific evidence to the contrary. Examples of contrary evidence include fragmentation and extreme isolation from other natural habitats.

It is also clear that the LUP ESHA Map must be updated periodically to reflect current information. The LUP policies require that the map be reviewed every five years in cooperation with the ERB and the resource agencies (including but not limited to the California Department of Fish and Game, Resource Conservation District of the Santa Monica Mountains, California Department of Parks and Recreation, U. S. Fish and Wildlife Service, and National Marine Fisheries Service) to determine if modifications are necessary. The map will be updated to reflect any applicable new facts, including information on rare, threatened or endangered species. Areas subject to habitat restoration projects will also be considered for designation as ESHA. Any revision to the ESHA Map will be treated as an LCP amendment.

5. Protection of Environmentally Sensitive Habitat Areas

The Coastal Act requires the protection of environmentally sensitive habitat areas against any significant disruption of habitat values. No development may be permitted within ESHA, except for uses which are dependent on the resource. Section 30240 of the Coastal Act further requires that development adjacent to ESHA is sited and designed to prevent impacts that would significantly degrade ESHA and to be compatible with the continuance of the habitat areas. Finally, this policy requires that development adjacent to parks and recreation areas must be sited and designed to prevent impacts.

The LUP policies establish that areas determined to meet the definition of ESHA, as described above, will be protected against significant disruption of habitat values and only resource dependent uses may be permitted within ESHA. Residential, commercial, or institutional uses do not require a location within or adjacent to ESHA in order to function and are therefore not considered resource dependent uses. Thus, these uses may not be developed within ESHA, except in

very limited circumstances where there is no other feasible alternative that can avoid a taking of property, as discussed below.

New development must be sited and designed to avoid impacts to all sensitive resources. In the design and review of new development, alternative projects must be identified and analyzed. If there is no feasible alternative that can avoid or eliminate all significant impacts to resources, then the alternative that results in the fewest or least significant impacts should be selected. Any residual impacts that cannot be avoided must be fully mitigated, with priority given to on-site mitigation. In no case can mitigation measures be substituted for implementation of the project alternative that would avoid impacts to sensitive resources.

Mitigation measures, including habitat restoration, and habitat enhancement needs to be monitored for at least five years. The biologist or resource specialist must design specific mitigation objectives and performance standards so that the success of the restoration or enhancement can be measured over time and mid-course changes can be made to ensure that the mitigation will work.

The LUP policies establish the protection of areas adjacent to ESHA and adjacent to parklands through the provision of buffers. Natural vegetation buffer areas must be provided around ESHA or parkland that are of sufficient size to prevent impacts that would significantly degrade these areas. No development, including fuel modification, is permitted within required buffer areas.

Siting and designing new development such that an adequate buffer is provided between the outer edge of the ESHA and development will minimize adverse impacts to these habitats. Providing a significant distance between new development and ESHA will ensure that removal or thinning of native vegetation for fuel modification will not be required to provide fire protection. Additionally, the transitional "ecotones" between different habitat types are particularly valuable areas with a higher diversity of plants and animals. The provision of adequate buffers around ESHA protects the ecotone. Natural vegetation buffers also protect riparian habitats by providing area for infiltration of runoff, minimizing erosion and sedimentation. Finally, natural vegetation buffers minimize the spread of invasive exotic vegetation, that tend to supplant native species, from developed areas into sensitive resource areas.

The required buffer areas will extend from the outer edge of the ESHA. In the case of riparian areas, the buffer will extend from the outer edge of the canopy of riparian vegetation, and from the outer edge of the tree canopy for oak woodland ESHA. Adjacent to the Point Dume Canyon ESHAs, the buffer shall be measured from the top of the canyon slope. Similarly, the buffer for bluff ESHA will extend from the edge of the blufftop.

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Variations or modifications to buffer, or other sensitive resource protection standards may not be granted for new development, except where there is no other feasible alternative for siting a primary structure on the project site. In such a case, to minimize impacts, only one structure shall be permitted on the site, and the structure must be located, designed, and restricted in size to maximize the provision of buffer width, and to meet any other resource protection standards to the maximum extent feasible. Modifications to other required development standards that are unrelated to resource protection, such as street setbacks, shall be permitted where it is necessary in order to avoid or minimize impacts to sensitive resources. The LUP policies establish that the protection of sensitive resources and public access takes priority over other development policies or standards. Where there is any conflict between resource protection standards and other development standards, the conflict will be resolved by applying those that are most protective of sensitive resources or public access.

Applications for development within or adjacent to ESHA, or other areas containing sensitive resources will be subject to the review of the City Biologist and the Environmental Review Board (ERB). The ERB is comprised of qualified professionals with technical expertise in resource management. The LUP policies provide for the City Biologist and the ERB to review development proposals and make recommendations to the Hearing Officer, Planning Commission, and the City Council, as applicable, on the conformity of proposed projects with the policies of the LUP.

In order to assess sensitive resources present on a project site, siting and design alternatives to avoid and minimize environmental impacts, and potential mitigation measures to mitigate unavoidable impacts, development applications on sites containing or adjacent to ESHA must include a detailed biological study of the project site. LUP Policy 3.37 details the components of the required biological study, including an inventory and maps of the plant and animal species found on the project site, analysis of impacts resulting from the development, project alternatives, and mitigation measures to minimize or mitigate residual impacts that cannot be avoided through project alternatives.

Applications for new development that is not located within or adjacent to identified ESHA need to include an inventory of the plant and animal species known or expected to occur on the project site. If the City determines that the initial biological inventory indicates the presence or potential for sensitive species or habitat, a full, detailed biological survey, as detailed in LUP Policy 3.37 will be required. The detailed study will provide site-specific information to the City Biologist and the Environmental Review Board for the determination of the presence of ESHA on the proposed project site.

There may be cases where the majority or the entirety of a legal parcel contains habitat recognized as environmentally sensitive habitat area. Under Section

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30240 of the Coastal act, no development, with the exception of a resource-dependent use, could be permitted on such a site. However, Section 30240 must be applied in concert with other Coastal Act requirements, particularly Section 30010. This section states that:

The Legislature hereby finds and declares that this division is not intended, and shall not be construed as authorizing the commission, port governing body, or local government acting pursuant to this division to exercise their power to grant or deny a permit in a manner which will take or damage private property for public use, without the payment of just compensation therefor. This section is not intended to increase or decrease the rights of any owner of property under the Constitution of the State of California or the United States.

Thus if strict application of the ESHA protection requirements of Section 30240 would cause a taking of property, then the policy must be applied in a manner that would avoid this result. The U.S. Supreme Court has held that, in some situations, a permit decision may constitute a categorical or “per se” taking under *Lucas v. South Carolina Coastal Council* (1992) 505 U.S. 1005. According to *Lucas*, if a permit decision denies all economically viable use of property by rendering it “valueless”, the decision constitutes a taking unless the denial of all economic use was permitted by a “background principle” of state real property law. Background principles are those state law rules that inhere in the title to the property sold to be developed and that would preclude the proposed use, such as the common law nuisance doctrine.

Second, if the permit decision does not constitute a taking under *Lucas*, a court may consider whether the permit decision would constitute a taking under the ad hoc inquiry stated in cases such as *Penn Central Transp. Co. v. New York City* (1978) 438 U. S. 104, 123-125. This inquiry generally requires an examination into factors such as the character of the government action, its economic impact, and its interference with reasonable, investment-backed expectations. The absence of reasonable, investment-backed expectations is a complete defense to a taking claim under the ad hoc inquiry (e.g. *Ruckelshaus v. Monsanto Co.* (1984) 467 U.S. 986, 1005, 1008-1009), in addition to any background principles of property law identified in *Lucas* that would allow prohibition of the proposed use.

If the application of the ESHA policies would result in a taking private property use, then a use that is not consistent with the ESHA policies will be permitted. LUP Policies 3.9 through 3.12 sets forth the process and parameters for approval of such a use. An application for development of a use that is not resource-dependent within ESHA, or that is not consistent with all ESHA provisions, must include the information necessary for the City to determine whether the application of the ESHA policies and standards would constitute a taking.

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If the City determines that based on the evidence, the application of the ESHA policies and standards would constitute a taking, then a use that is not consistent with all the ESHA provisions of the LUP may be approved. Such use must still conform to all other applicable LUP policies, and must represent the minimum amount of development that is necessary to provide an economically viable use of the property.

Any development approved within or adjacent to ESHA in order to provide an economically viable use must still be sited and designed to minimize impacts to sensitive resources, consistent with the policies of the LUP, to the maximum extent feasible. Project alternatives must be considered and the least environmentally damaging alternative that would provide an economically viable use of the property will be chosen. The LUP policies establish an absolute maximum allowable development area (including building pad, all graded slopes, if any, and any permitted structures) in ESHA or ESHA buffer of 10,000 square feet for parcels containing 40-acres or less. In the few potential instances where development would be proposed on a parcel larger than 40-acres that is within or adjacent to ESHA, a larger maximum development area (increased by 250-sq. ft. for each acre over 40-acres to a maximum of 1-acre of development area) may be allowed if significant environmental impacts are minimized. These limits represent the maximum development area that may be approved within or adjacent to ESHA. If, based on site-specific conditions, a proposed development would result in significant adverse environmental impacts, the maximum development area will be reduced. Any residual impacts that cannot be avoided must be mitigated. As detailed in Policy 3.13, priority shall be given to on-site mitigation, where feasible. Off-site mitigation will only be approved where it is not feasible to fully mitigate project impacts on the project site.

As provided in LUP policies 3.68 and 3.70, new agricultural uses or confined animal facilities are prohibited within or adjacent to ESHA, except within coastal sage scrub or chaparral ESHA in conjunction with development approved pursuant to Policy 3.9. Such development may include limited crop, orchard, or vineyard use within the irrigated fuel modification area required around the approved structure(s), if the agricultural use would not be located on slopes greater than 3:1 and would not result in any increase to the required fuel modification area. Such development may include one accessory confined animal structure within the approved development area, and one corral within the irrigated fuel modification area required around the approved structure(s) if these facilities would not be located on slopes over 4:1, would not require additional grading, and would not result in any expansion to the required fuel modification area.

6. Stream Protection

In addition to protection as ESHA under Section 30240 of the Coastal Act, streams and associated riparian habitat are protected under additional Coastal Act policies in order to maintain the biological productivity and quality of coastal waters. Section 30231 requires that natural vegetation buffer areas that protect riparian habitats be maintained, and that the alteration of natural streams be minimized. Notwithstanding the stream protection provisions, the Coastal Act recognizes that in a few limited circumstances, it may be necessary to alter a stream. Section 30236 limits channelizations, dams, or other substantial alterations of rivers and streams to only three purposes: necessary water supply projects; protection of existing structures in the floodplain where there is no feasible alternative; or improvement of fish and wildlife habitat.

As discussed above, the Commission considers streams and riparian corridors to be important habitats that are designated ESHA and accords these areas all protections provided to ESHAs. The LUP policies provide for the prohibition of development within ESHA, including streams and riparian areas, except for resource dependent uses. Siting and designing new development such that an adequate buffer is provided between the outer edge of the canopy of riparian vegetation and development will minimize adverse impacts to these habitats. The buffer shall be measured from the outer edge of the canopy of riparian vegetation. Providing a significant distance between new development and riparian areas will ensure that removal or thinning of native vegetation for fuel modification will not be required to provide fire protection. Additionally, the transitional "ecotones" between different habitat types are particularly valuable areas with a higher diversity of plants and animals. The provision of adequate buffers around streams and riparian corridors protects the ecotone.

Natural vegetation buffers also protect riparian habitats by providing area for infiltration of runoff, minimizing erosion and sedimentation. Finally, buffers minimize the spread of invasive exotic vegetation that tend to supplant native species. The presence of surface or subsurface water throughout the year makes riparian areas especially susceptible to invasion by non-native species that can in many instances out compete native plants. Invasive plant species do not provide the same habitat values as natural riparian areas. Providing buffers as well as prohibiting the planting of invasive plant species in landscaping, as provided in LUP Policy 3.49 will reduce the risk of non-native species invading stream and riparian areas.

The LUP prohibits the channelization or alteration of streams, except for necessary water supply projects; protection of existing structures in the floodplain where there is no other feasible alternative; or improvement of fish and wildlife

habitat. Any alteration approved for one of these three purposes must minimize impacts to coastal resources, and include maximum feasible mitigation measures to mitigate for any unavoidable impacts. In the case of flood protection for existing development, bioengineering alternatives shall be preferred over concrete, riprap, or other hard structures.

To minimize future need for any stream alterations to protect structures from flood hazards, LUP Policy 4.8 prohibits new buildings in areas that are floodprone. Additionally, ESHA buffers around streams and riparian areas, described above, will serve to site new development a significant distance from any stream, providing protection from flooding.

Further, the LUP prohibits the alteration of streams for the purpose of road crossings, except where the alteration would not be substantial and there is no other feasible alternative to provide public access to public recreation areas or development on legal parcels that is sited outside riparian ESHA. Any such road crossing shall be bridged with required columns or abutments location outside the bed and banks of the stream. Shared bridges for multiple developments shall be used wherever feasible.

Finally, the LUP contains policies addressing specific issues relating to Malibu Creek. In addition to the wetland protection policies discussed below, the LUP provides parameters for any flood protection measures that may be proven necessary in the future along lower Malibu Creek in the Civic Center area. Any applications for such measures must include evidence that existing, permitted development is in danger from flood hazard, that alternatives for flood protection have been considered, that the proposed action is the least environmentally damaging alternative, and that any unavoidable impacts will be mitigated. The LUP also provides that no future enlargement, expansion, replacement or significant improvements may be permitted to the existing at-grade crossing of lower Malibu Creek (at Cross Creek Road). If improvements to this crossing are necessary, it shall be replaced with a bridge.

7. New Development

The LUP policies require that new development be sited and designed to minimize impacts to ESHA and sensitive resources. Alternative locations should be considered for siting proposed development on the project site. The preferred location for development is the one that can minimize grading and landform alteration, limit the removal of natural vegetation, and minimize the length of the approved access road or driveway. Limiting the maximum number of approved structures will minimize the total development area, grading footprint, and impervious surfaces. These siting and design measures will ensure that impacts

from soil erosion, stream siltation, reduced water percolation, increased runoff on sensitive resources will be avoided and minimized.

The LUP prohibits grading during the rainy season for any development that is located adjacent to ESHA, that includes any grading on slopes over 3:1, or where total grading would exceed 1,000 cu. yds. (including cut and fill). In areas next to ESHA, particularly riparian and stream areas, on steep slopes, or in large grading projects, grading during the rainy season greatly increases the potential for erosion and sedimentation. In other areas where grading may be permitted to proceed during the rainy season, erosion control measures must be implemented before grading commences and maintained throughout grading operations until landscaping and the permanent drainage system is installed.

Graded and other disturbed areas must be landscaped or revegetated with primarily native, drought resistant plants at the completion of grading. Invasive plant species may not be used as they will supplant native plants and lead to the degradation of natural habitats. In order to ensure that erosion is minimized from graded or disturbed areas, landscaping must be sufficient to provide ninety percent coverage within a period of five years. Landscaped or revegetated areas must be monitored for success for at least five years. Additional plantings and other corrective measures may prove necessary to ensure that the coverage criteria are achieved.

New development shall include measures to restore disturbed or degraded habitat on the project site if feasible. Fencing must be limited, and in or adjacent to ESHA, must be sited and designed to allow wildlife to pass through. The LUP requires exterior lighting to be limited in intensity and shielded to minimize impacts on wildlife.

8. Fuel Modification

Fuel modification is the removal or modification of combustible native or ornamental vegetation. It may include replacement with drought tolerant, fire resistant plants. The amount and location of required fuel modification would vary according to the fire history of the area, the amount and type of plant species on the site, topography, weather patterns, construction design, and siting of structures. There are typically three fuel modification zones applied by the Fire Department:

Zone A (Setback Zone) is required to be a minimum of 20 feet beyond the edge of protected structures. In this area native vegetation is cleared and only ground cover, green lawn, and a limited number of ornamental plant species are allowed. This zone must be irrigated to maintain a high moisture content.

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Zone B (Irrigated Zone) is required to extend from the outermost edge of Zone A to a maximum of 80 feet. In this area ground covers may not extend over 18 inches in height. Some native vegetation may remain in this zone if they are adequately spaced, maintained free of dead wood and individual plants are thinned. This zone must be irrigated to maintain a high moisture content.

Zone C (Thinning Zone) is required to extend from the outermost edge of Zone B up to 100 feet. This zone would primarily retain existing native vegetation, with the exception of high fuel species such as chamise, red shank, California sagebrush, common buckwheat and sage. Dead or dying vegetation must be removed and the fuel in existing vegetation reduced by thinning individual plants.

If there is not adequate area on the project site to provide the required fuel modification for structures, then brush clearance may also be required on adjacent parcels. Notwithstanding the need to protect structures from the risk of wildfire, fuel modification results in significant adverse impacts that are in excess of those directly related to the development itself. Within the area next to approved structures (Zone A), all native vegetation must be removed and ornamental, low-fuel plants substituted. In Zone B, most native vegetation will be removed or widely spaced. Finally, in Zone C, native vegetation may be retained if thinned, although particular high-fuel plant species must be removed (Staff would note that several of the high fuel species are important components of the coastal sage scrub community). In this way, for a large area around any permitted structures, native vegetation will be cleared, selectively removed to provide wider spacing, and thinned.

Obviously, native vegetation that is cleared and replaced with ornamental species, or substantially removed and widely spaced will be lost as habitat and watershed cover. Less obvious is the likelihood that even thinned areas will be greatly reduced in habitat value. Even where complete clearance of vegetation is not required, the natural habitat can be significantly impacted, and ultimately lost. For instance, in coastal sage scrub habitat, the natural soil coverage of the canopies of individual plants provides shading and reduced soil temperatures. When these plants are thinned, the microclimate of the area will be affected, increasing soil temperatures, which can lead to loss of individual plants and the eventual conversion of the area to a dominance of different non-native plant species. The areas created by thinning between shrubs can be invaded by non-native grasses that will over time out-compete native species.

For example, undisturbed coastal sage scrub vegetation typical of coastal canyon slopes, and the downslope riparian corridors of the canyon bottoms, ordinarily contains a variety of tree and shrub species with established root

systems. Depending on the canopy coverage, these species may be accompanied by understory species of lower profile. The established vegetative cover, including the leaf detritus and other mulch contributed by the native plants, slows rainfall runoff from canyon slopes and staunches silt flows that result from ordinary erosional processes. The native vegetation thereby limits the intrusion of sediments into downslope creeks. Accordingly, disturbed slopes where vegetation is either cleared or thinned are more directly exposed to rainfall runoff that can therefore wash canyon soils into downgradient creeks. The resultant erosion reduces topsoil and steepens slopes, making revegetation increasingly difficult or creating ideal conditions for colonization by invasive, non-native species that supplant the native populations. The cumulative loss of habitat cover also reduces the value of the sensitive resource areas as a refuge for birds and animals, for example by making them—or their nests and burrows—more readily apparent to predators.

The LUP policies acknowledge that vegetation will be required by the Fire Department to be removed, thinned or otherwise modified around new buildings in order to minimize the risk of fire hazard. Fuel modification on the project site and brush clearance, if required, on adjacent vacant sites reduces the fire risk for new or existing structures. The LUP, both in this chapter and the Hazards Chapter allows for required fuel modification to minimize the risk of fire.

However, fuel modification removes watershed cover, and may remove or have impacts on ESHA. The LUP policies require that new development is sited and designed to minimize required fuel modification. Policy 4.44 (Hazards) requires that new development minimize risks to life and property from fire hazard by avoiding hazardous locations, using appropriate building materials and design features, and considering topography, slope, vegetation, and wind patterns. These measures will help to minimize the amount of fuel modification that is required as well. Applications for new development need to include evidence of an approved fuel modification for the project site, a quantification of the area of natural vegetation that would be removed, thinned, irrigated or otherwise modified by the proposed project including the building pad area, road/driveway areas, fuel modification on the site, and brush clearance on adjacent properties. This information will be used by the decision-maker to assess the adverse impacts of the project and to identify potential project alternatives that can minimize such impacts.

While the impacts resulting from fuel modification can be reduced through siting and designing new development, they cannot be completely avoided, given the high fire risk present in the City and the Santa Monica Mountains. It is infeasible in most cases to provide mitigation in the form of habitat creation or enhancement on the project site. The LUP policies require that compensatory mitigation, in the form of an in-lieu fee be provided for unavoidable impacts resulting from the removal, conversion, or modification of natural vegetation for

new development, including required fuel modification and brush clearance. The fee will be based on the habitat type(s) in question, the cost per acre to restore or create the comparable habitat type, and the acreage of habitat affected by the project. The fees required through permits will be used to acquire or preserve habitat as mitigation.

9. Native Trees

The LUP requires the protection of native trees, including oak, walnut, and sycamore trees, that may not be otherwise protected as ESHA. It would be typical that these native tree species would be found within woodland or savanna areas that are considered ESHA and as such, would be protected from removal or other impacts as non-resource dependent development is prohibited under the LUP. However, due to past development impacts, or historical land uses like grazing, individual trees exist that may not be part of a larger habitat area. (Additionally, development may be permitted within ESHA to provide an economically viable use of property, as discussed above. In those cases, the native tree protection policies shall apply.) These trees are still valuable resources and the Commission has consistently required that they be protected from removal or encroachment into their root zones.

The LUP requires that new development be sited and designed to prevent removal of trees and encroachment into the root zone of each tree, unless there is no other feasible alternative. Structures, including roads or driveways must be sited to prevent any encroachment into the root zone and to provide an adequate buffer outside of the root zone to allow for future growth.

Applications for new development on sites containing native trees must provide a tree protection plan that includes an inventory and map of the size, type, and health of all native trees on site. This plan should include an analysis of all potential impacts from the proposed project with an identification of project alternatives that can avoid or minimize impacts to trees. Further, the plan should include mitigation measures to minimize or mitigate residual impacts that cannot be avoided through project alternatives, and a long-term monitoring plan.

Where the removal of trees cannot be avoided by any feasible alternative, replacement trees must be provided. If there is suitable area on the project site, replacement trees should be provided on-site, at a ratio of ten replacement trees for every one tree removed. The Commission has found that replacement trees, particularly oak trees, are most successfully established when the trees are seedlings or acorns. Many factors, over the life of the restoration, can result in the death of the replacement trees. In order to ensure that adequate replacement is eventually reached, it is necessary to provide a replacement ratio of at least 10:1. Additionally, the policies require that compensatory mitigation, in the form

of an in-lieu fee be provided for unavoidable temporal impacts of the loss of native tree habitat. The replacement trees, even if they grow well, will not achieve the size and habitat value of the native trees removed for many years. This loss of habitat values must be offset through the provision of an in-lieu fee. The fees required through permits will be used to restore or create native tree habitat as mitigation.

10. Agriculture and Confined Animal Facilities

The Coastal Act policies provide for the continuation of coastal agriculture on prime agricultural lands. In many areas of the state, prime soils combine with unique coastal climates for highly productive agriculture. Recognizing increasing pressure to develop these areas with urban land uses, the Coastal Act requires that lands in prime agricultural production be maintained, except in very limited circumstances.

Given the topography and development pattern, there are not significant areas of existing agricultural use in Malibu. Historically, some of the flatter plains, including alluvial plains like those adjacent to Malibu Creek, were cultivated with crops. Additionally, areas were historically used for grazing. However, most of these areas were converted to residential or commercial development. According to the City of Malibu General Plan, there are only very limited prime agricultural lands within the city, "...due to the patchy distribution of soils that have high capability for agricultural uses, and ... these soils typically occur along the low relief slopes adjacent to the coast". No areas are specifically designated for exclusive agricultural development.

The LUP policies establish parameters for the development of new agricultural uses or confined animal facilities. The conversion of vacant land containing native vegetation to new agricultural use is not permitted. The removal of natural vegetation and conversion of large areas to agricultural use on steep slopes will have significant adverse impacts, through erosion, sedimentation, and loss of habitat, on sensitive resources, including water quality. Crop, orchard, or vineyard uses in conjunction with an existing or new residential use may be permitted only within the irrigated fuel modification area (Zones A and/or B, if required) for any approved structures, so long as such agricultural uses do not result in any expansion of the fuel modification area required for the residential structures. The policies allow for the development of one accessory structure for confined animals in conjunction with an existing or new residential project within the approved development site and a corral facility within the required irrigated fuel modification if it is not located on a steep slope, does not require additional grading or fuel modification. The irrigated fuel modification zones would already be disturbed to carry out any clearing, thinning, landscaping with low-fuel plant species, and irrigation for the protection of approved residential structures. As

such, the development of agricultural or confined animal uses in these areas would not be expected to have any additional environmental impacts.

The development of new agricultural or confined animal uses are prohibited within or adjacent to ESHA. Such uses are not resource-dependent and will have significant adverse environmental impacts if located within or in close proximity to ESHA, particularly riparian and stream areas. The only exception provided is in the case of residential development approved within coastal sage scrub or chaparral ESHA in order to provide an economically viable use (as set forth under LUP Policies 3.9 to 3.12). In the case of such an approved use, limited agricultural use may be permitted within the irrigated fuel modification area. Further, one accessory structure for confined animals may be permitted within the approved development area, and one corral may be permitted within the approved fuel modification area so long as if it is not located on a steep slope, does not require additional grading or fuel modification.

Any approved agricultural or confined animal use must include measures to minimize impacts to water quality. LUP Policies 3.137 through 3.143 provide for such measures to protect water quality. Best management practices must be implemented in agricultural operations to prevent excessive sediment and pollutant impacts, including but not limited to the proper disposal of compost, wastewater, and any other byproducts of agricultural activities. With regard to confined animal uses, the LUP requires that the total number of animals on any site be limited according to constraints affecting the site, including, but not limited to size, slope, and presence of sensitive resources. Fewer total animals could be kept for instance, on a steep or small site, or one containing ESHA. Best management practices must be incorporated into approved confined animal projects, including vegetated filter strips and other measures to intercept, infiltrate, and filter runoff from the animal areas, and management of animal waste.

11. Marine Resources

The LUP policies provide protection for marine resources, including marine ESHA. These areas include kelp forests, intertidal habitat, and near shore shallow fish habitat. Marine ESHA are shown on the LUP ESHA Map. As discussed above, the ESHA Map will be updated periodically to reflect changed circumstances or new information. As for inland sensitive habitat areas, the presence of ESHA not already designated on the ESHA Map shall be determined on the basis of site-specific studies of the proposed project site.

Any development proposed within tidelands or submerged lands will remain under the permit jurisdiction of the Coastal Commission. Nonetheless, the LUP policies provide guidance on the protection of marine resources in these areas.

Additionally, the LUP provides policies regarding development on inland areas that could impact marine resources. Marine ESHA shall be protected against significant disruption of habitat values and only resource dependent uses may be permitted within ESHA. Development in areas adjacent to marine and beach habitats must be sited and designed to prevent impacts that could significantly degrade these areas. The LUP policies requiring the minimization of grading and landform alteration (Policy 3.42, and 6.9), the limitation or prohibition of earthmoving during the rainy season (Policies 3.46-3.48), and the landscaping or revegetation of cut and fill slopes and other areas disturbed by construction (Policy 3.49) ensure that erosion and sedimentation will be minimized. Marine resources, particularly kelp forests, are very sensitive to sedimentation. Finally, the water quality policies (Policies 3.92-3.143) require new development to be sited and designed, and to incorporate best management practices to prevent or reduce non-point source pollution and to protect water quality.

12. Wetlands

The Coastal Act requires the protection of wetlands. Section 30231 provides that the biological productivity and the quality of wetlands and estuaries shall be maintained, and where feasible restored to maintain optimum populations of marine organisms. Section 30233 provides that the diking, filling, or dredging of open coastal waters, wetlands, or estuaries may only be permitted where there is no less environmentally damaging alternative and restricted to a limited number of allowable uses.

The LUP policies provide for the protection of wetlands. The biological productivity and the quality of wetlands shall be protected and where feasible restored. There are several identified wetland areas within the City, including lower Malibu Creek and Malibu Lagoon, Zuma Lagoon, and a small parcel within the Civic Center area. These wetlands are shown on the LUP ESHA Map. Additionally, any areas which meet the following definition will be considered wetland and accorded all the protections provided for wetlands in the LUP:

Lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.

As described above, applications for new development that is not located within or adjacent to identified ESHA need to include an inventory of the plant and animal species known or expected to occur on the project site. If the City determines that the initial biological inventory indicates the presence or potential for wetland species or indicators, a full, detailed biological survey, as detailed in LUP Policy 3.37, with the addition of a delineation of all wetland areas on the site will be required. Wetland delineations must indicate all areas that meet the

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definition of wetland under the Coastal Act and the LUP. Delineations for the purpose of determining jurisdiction under federal law should be prepared in coordination with the U.S. Army Corps of Engineers and other applicable federal resource agencies. The detailed study will provide site-specific information to the City Biologist and the Environmental Review Board for the determination of the presence of ESHA and wetland on the proposed project site.

The LUP policies set forth the limited instances in which the diking, filling or dredging of wetlands or open coastal waters could be allowed, where there is no feasible less environmentally damaging alternative and where all feasible mitigation measures have been provided. Such diking, filling or dredging is limited to incidental public service purposes, habitat restoration, or nature study, aquaculture, or similar resource dependent activities. If dike or fill development is approved in conformance with the LUP, mitigation for impacts to wetland habitat shall include, at a minimum, acquisition of equivalent areas with equal or greater biological productivity for habitat protection, or restoration of degraded wetland areas of equivalent area.

The Coastal Act allows for additional uses in wetland or open coastal waters, including port, energy, coastal dependent industrial uses, maintaining existing dredged channels, entrance channels for boating facilities, and structural pilings for public recreational piers. However, the LUP policies do not provide for these uses within wetlands or open coastal waters in the City. There are no proposals for such uses and no suitable areas to develop these types of uses have been identified. No LUP land use designation allows port, energy, or boating uses (Section I contains a discussion of energy and coastal dependent industrial uses). Any future proposal for any of these uses would require an LUP amendment.

Coordination with applicable state and federal resource agencies will be required on all projects involving wetlands. Applications for development within or adjacent to wetlands must include evidence of consultation and preliminary approval from such agencies as California Department of Fish and Game, United States Army Corps of Engineers, United States Fish and Wildlife Services and any other applicable resource agency. Areas containing tidelands or submerged lands will also be subject to the permit jurisdiction of the Coastal Commission.

Lagoon breaching or water level modification shall not be permitted until and unless a management plan for the lagoon is developed and approved, except in the case a health or safety emergency. The LUP provides for the development of a lagoon management plan for Malibu Lagoon, which is located within Malibu Creek State Park. Any such management plan must address alternative projects for managing the water level in the lagoon or for breaching the lagoon. The alternatives analyzed should take into account the lagoon hydrology, water quality, sensitive species, potential adverse impacts to identified resources, and

the identification of the water level necessary to protect the various existing species within the lagoon. The alternative chosen shall avoid and minimize impacts to sensitive resources, particularly rare, threatened, and endangered plant and animal species. The management plan must include mitigation measures designed to mitigate unavoidable environmental impacts. Finally, the plan shall provide for monitoring the lagoon to evaluate the continuing health of the wetland, to assess adverse impacts resulting from water level management or breaching and the success of mitigation measures, and to identify project corrections. The lagoon management plan must be approved by the City and certified by the Commission as an amendment to the LCP.

13. Water Quality

The Commission recognizes that new development in the Santa Monica Mountains has the potential to adversely impact coastal water quality through the removal of native vegetation, increase of impervious surfaces, increase of runoff, erosion, and sedimentation, introduction of pollutants such as petroleum, cleaning products, pesticides, and other pollutant sources, as well as effluent from septic systems. Section 30231 of the Coastal Act requires that the biological productivity and quality of coastal waters be maintained and where feasible restored.

New development results in an increase in impervious surface, which in turn decreases the infiltrative function and capacity of existing permeable land on project sites. The reduction in permeable space therefore leads to an increase in the volume and velocity of stormwater runoff that can be expected to leave the site. The cumulative effect of increased impervious surface is that the peak stream discharge is increased and the peak occurs much sooner after precipitation events. Changes in the stream flow result in modification to stream morphology. Additionally, runoff from impervious surfaces result in increased erosion and sedimentation.

Further, pollutants commonly found in runoff associated with new development include petroleum hydrocarbons including oil and grease from vehicles; heavy metals; synthetic organic chemicals including paint and household cleaners; soap and dirt from washing vehicles; dirt and vegetation from yard maintenance; litter; fertilizers, herbicides, and pesticides; and bacteria and pathogens from animal waste. The discharge of these pollutants to coastal waters can cause cumulative impacts such as: eutrophication and anoxic conditions resulting in fish kills and diseases and the alteration of aquatic habitat, including adverse changes to species composition and size; excess nutrients causing algae blooms and sedimentation increasing turbidity which both reduce the penetration of sunlight needed by aquatic vegetation which provide food and cover for aquatic species; disruptions to the reproductive cycle of aquatic species; and acute and

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sublethal toxicity in marine organisms leading to adverse changes in reproduction and feeding behavior. These impacts reduce the biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes and reduce optimum populations of marine organisms and have adverse impacts on human health.

The State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control boards (RWQCB's) have primary responsibility for California's protection of water quality. In 1990, Congress passed new sections of law to improve and expand the Coastal Zone Act (the Coastal Zone Act Reauthorization Amendments or CZARA.) This legislation expanded the SWRCB/RWQCB partnership for reducing polluted runoff to include the Coastal Commission (CCC.) While the SWQCB and the Regional Boards regulate wastewater discharges and water quality, the Commission and local agencies regulate land uses that can contribute to water quality deterioration.

CZARA requires states, including California, to ensure that management practices that reduce or prevent polluted runoff are actually put into use or implemented. Toward this goal, in January, 2000 the Plan for California's Nonpoint Source Pollution Control Program (Plan) was adopted by the SWRCB and the CCC. The fifteen-year Plan adopts sixty-one management measures for various agencies and others, which together can prevent or reduce nonpoint source water pollution. Some of these measures should be implemented at the local planning level, as they are most cost effective at the design stage of development. Site-specific best management practices (BMPs) for development are used to achieve the goal of the management measures. Public education of nonpoint source issues and solutions is emphasized in the Plan as well.

The Los Angeles Regional Water Quality Control Board issued a Countywide Municipal National Discharge Elimination System (NPDES) permit to the County and 88 cities in 1996. The permit requires development and implementation of a program addressing storm water pollution issues in development planning for private projects. In March 2000 the RWQCB adopted a resolution that approved the Standard Urban Storm Water Mitigation Plan (SUSMP.) The RWQCB required all cities in its region to adopt local SUSMPs and implementing ordinances. The SUSMP contains a list of minimum Best Management Practices (BMP's) that must be used for designated projects.

The City of Malibu adopted a local SUSMP plan and an amendment to its stormwater and urban runoff pollution control ordinance in February 2001. Under the new standards of SUSMP, the City must ensure that new development captures either 85 percent of the runoff from a storm in a 24-hour period, or the first three-fourths of an inch of rain. This design standard currently applies to all new or redeveloped single-family hillside residences, commercial projects of more than 100,000 square feet, gas stations, auto repair garages, restaurants,

subdivisions of ten or more houses, and parking lots of 5,000 square feet or more, or with 25 or more parking spaces. It is anticipated that the RWQCB will strengthen its SUSMP permit in November 2001 to apply to more categories of development, including all projects of one or more acres.

The goal of the LUP water quality policies is to protect and enhance water quality and the beneficial uses of local coastal waters and ground waters from adverse impacts related to land development. The objectives of the policies are four-fold:

Protect, enhance and restore wetlands, streams, and groundwater recharge areas.

Promote the elimination of pollutant discharge, including nonpoint source pollution, into the City's waters through new construction and development regulation including but not limited to site planning, environmental review and mitigation, and permit conditions of approval;

Promote Best Management Practices to limit water quality impacts from existing development, including septic system maintenance and City services;

Attain water quality objectives established in the RWQCB Basin Plan and the SUSMP.

14. Conclusion

One of the primary goals of the Coastal Act is the preservation, protection, and enhancement of coastal resources, including land and marine habitats, and water quality. There are rich, diverse native habitats within the City. As described in detail above, the LUP policies along with the LUP ESHA Map provide for the protection of sensitive resources. The Commission finds that the Draft Land Use Plan meets the requirements of and conforms to the provisions of Sections 30230, 30231, 30233, 30236, 30240, 30241, 30241.5, and 30242 of the Coastal Act.

E. Shoreline/Bluff Structures and Hazards

Under the Coastal Act, development is required to be sited and designed to minimize risks, assure stability and structural integrity, and neither create nor contribute significantly to erosion or require the construction of protective devices that would substantially alter the natural landforms along bluffs and cliffs (Section 30253).

Section **30253** of the Coastal Act states that:

New development shall:

- (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
- (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.
- (3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development.
- (4) Minimize energy consumption and vehicle miles traveled.
- (5) Where appropriate, protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses.

Section 30235 of the Coastal Act allows the construction of shoreline protective devices where existing development is threatened from erosion and when designed to eliminate or mitigate impacts on shoreline sand supply.

Section 30235

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

The Coastal Act also provides that development damaged or destroyed by natural disasters can be rebuilt in the same location, exempt from a coastal development permit, under certain conditions in PRC Section 30610(g). Certain emergency actions are also exempt from permit requirements.

1. Introduction

The City of Malibu lies at the junction of the Santa Monica Mountains and the Pacific Ocean. Development within the City, including roads and other

infrastructure is highly vulnerable to a variety of natural hazards including threats from landslides, wild fires, earthquakes, storm waves, and flooding. Bluffs, beaches, and steep hillsides are subject to natural erosional forces, often accelerated by the effects of fires, torrential rains, and winter storms. Fire is a serious potential threat several months of every year due to the typically long summer dry season characteristic of the Mediterranean climate and periodic "El Nino" winter storm seasons which cause considerable destruction or severe damage to beachfront homes, widespread erosion along the shoreline and bluffs, and landslides that destroy or damage homes, septic systems and roads, including Pacific Coast Highway. Occasionally, a severe fire season is followed by a winter of high rainfall, leading to extraordinary erosion and landslides on hillside property which had been denuded of vegetation by the fire. The dependence on septic systems for waste disposal throughout the City, with minor exceptions, creates additional hazards due to the effect of poorly maintained or located systems on steep slopes and beaches, the aforementioned erosional forces and a high water table in many areas.

The Malibu shoreline consists of a series of rocky headlands and narrow crescent shaped beaches, vulnerable to erosion and wave uprush. Unlike many other coastal communities in the State, a large portion of the beachfront property in Malibu was subdivided and developed prior to 1976, before the effective date of the Coastal Act. Most of this development occurred without the benefit of planning or mitigation to minimize impacts from wave hazards and to coastal resources. Largely as a result of the pre-existing pattern of development in Malibu, development along the shoreline continues to be permitted, placing more property at risk. To reduce the risk to private beachfront development, armoring of the shoreline has often occurred in the form of vertical seawall and rock revetments. Many of these structures have been placed on the beach as emergency actions during or immediately following winter storms, often without permits or adequate planning relative to placement, design, and impacts to adjacent properties and shoreline processes and public recreation. Loss of beach and, therefore, public access is too often the result of the construction of protective structures such as seawalls and revetments.

The cumulative loss of shoreline and public recreational resources from the encroachment of armoring on sandy beaches is an important coastal management issue. The City lies within the Santa Monica Littoral cell. The major sediment source has historically been the streams draining the Santa Monica Mountains. The sediment from much of the drainage area, however, has been trapped behind dams and catchment basins, never reaching the coast (USACOE). Another significant sediment source has been the incremental addition of eroded material from coastal bluffs. In addition to covering beach area that provides for recreation, however, shoreline armoring also can exacerbate erosion by fixing the back beach and eliminating the influx of sediment from coastal bluffs. The City has found that over 60 percent of the

bluffs are blocked from the erosive forces of wave action by some form of development, including Pacific Coast Highway, vertical seawalls and revetments. Armoring also causes localized scour in front or at the end of the seawall or revetment. In addition, by allowing shoreline armoring in areas with existing development, the cycle of rebuilding storm damaged or destroyed development in the same hazardous areas is often perpetuated. From 1978 through 1996, the Coastal Commission and the County or City authorized protective devices along an estimated 2.8 miles of shoreline, covering an estimated 3.5 acres of sandy beach (ReCAP, 1999). The ReCAP report found that when added to the amount of shoreline armored prior to 1978, determined by Coastal Commission analysis of aerial photos, and the armoring which has taken place without permits, a total of approximately 50 percent of the City's shoreline has been impacted by shoreline protective structures. The report concluded that unless future armoring is avoided, future buildout of shoreline lots could result in up to 5 miles of additional shoreline armoring with hard structures. Additional armoring is even more likely given the location of Pacific Coast Highway (PCH). PCH continues to be threatened by erosion, wave uprush and flooding wherever it is located adjacent to the ocean, and given its importance to regional access and transportation, it is possible it will be armored throughout most of its length in the City unless alternative means of protection are developed.

To ensure consistency with the Coastal Act, the policies contained in the draft Land Use Plan are intended to facilitate development in a manner which minimizes impacts from hazards as well as impacts to coastal resources, including public access and recreation. These policies are discussed below under the following issue areas:

- General Development;
- Shoreline Development;
- Shoreline Erosion and Protective Structures;
- Fire Hazards;
- Emergency Actions and Response.

2. General Development

As discussed above, the shoreline, canyons and mountains within the City of Malibu are subject to an unusually high amount of natural hazards including landslides, erosion, and flooding. In addition, wildfire is an inherent threat to the indigenous chaparral community of the coastal mountains. Wildfires often denude hillsides in the Santa Monica Mountains of all existing vegetation, thereby contributing to an increased potential for erosion and landslides on property. Development in Malibu and the surrounding mountains results in an increase in the amount of impervious surfaces on a site, which increases both the volume and velocity of storm water runoff. If not controlled and conveyed off

of the site in a non-erosive manner, this runoff will cause increased erosion on and off of the site. Increased erosion may result in sedimentation of a nearby stream during and after construction. Uncontrolled erosion leads to sediment pollution of downgradient water bodies including the ocean as well. Surface soil erosion has been established by the United States Department of Agriculture, Natural Resources Conservation Service, as a principal cause of downstream sedimentation known to adversely affect riparian and marine habitats. The construction of single-family residences in sensitive watershed areas has been established as a primary cause of erosion and resultant sediment pollution in coastal streams.

Due to the wide array and frequency of geologic hazards in Malibu it is almost always necessary to conduct specific geotechnical investigations of proposed development sites to determine the site's suitability for development and any restrictions or recommendations that are necessary for safe development. Restrictions or recommendations are commonly included in geotechnical site investigations relative to grading and site preparation, foundations, settlement, drainage, retaining walls and septic systems. Occasionally, geologic restricted use areas are recommended on a site due to the presence of an active fault or landslide, expansive soils or extremely steep slopes. In past actions permitting development in the Santa Monica Mountains, the Commission has frequently required applicants to incorporate all recommendations of the consulting geologist into final design plans and to assume the risk of development and to waive any future claims of liability against the Commission for damage that may occur as a result of development. In addition, the Commission has regularly required applicants to institute drainage and erosion control measures during and after construction.

The proposed draft Land Use Plan contains a number of policies which provide for the siting, design and construction of new development in a manner and/or location which minimizes risks from geologic, flood and fire hazard including a requirement that applications contain a geotechnical investigation of the site (4.2-4.5). Additional policies provide for the remediation or stabilization of landslides (4.6), hillside management requirements for development on steep slopes (4.7), mitigation measures for development within flood hazard areas (4.8 & 4.11), and adequate erosion and drainage control measures (4.9). The LUP requires all development to utilize secondary treatment and evapotranspiration waste disposal systems, where feasible (4.10). The LUP also prohibits land divisions unless all proposed parcels can be demonstrated to be safe from flooding, erosion, geologic and fire hazards and be developed consistent with all applicable policies of the LUP (4.12).

3. Shoreline Development

The Malibu Coast has historically been subject to substantial damage from storm wave and flood impacts – most recently, and perhaps most dramatically, during the 1998 severe El Nino winter storm season. Past occurrences have caused property damage resulting in public costs through emergency responses and low-interest, publicly-subsidized reconstruction loans in the millions of dollars in the Malibu area alone. Substantial evidence exists that all beachfront development in Malibu is subject to an unusually high degree of risk due to storm waves and surges, high surf conditions, erosion and flooding.

In the winter of 1977-78, storm-triggered mudslides and landslides caused extensive damage along the Malibu coast. According to the National Research Council, damage to Malibu beaches, seawalls, and other structures during that season caused damages of as much as almost \$5 million to private property alone. The El Nino storms recorded in 1982-83 combined high tides of over 7 feet, with storm waves of up to 15 feet. These storms caused over \$12.8 million to structures in Los Angeles County, many located in Malibu. The severity of the 1982-1983 El Nino storm events are often used to illustrate the extreme storm event potential of the California, and in particular, Malibu coast. The 1998 El Nino storms also resulted in widespread damage to residences, public facilities and infrastructure along the Malibu coast.

Past Commission review of shoreline residential projects in Malibu has also shown that such development results in potential individual and cumulative adverse effects to coastal processes, shoreline sand supply, and public access. Shoreline development, if not properly designed to minimize such adverse effects, may result in encroachment on lands subject to the public trust (thus physically excluding the public); interference with the natural shoreline processes necessary to maintain publicly-owned tidelands and other public beach areas; overcrowding or congestion of such tideland or beach areas; and visual or psychological interference with public access to and the ability to use public tideland areas. In order to accurately determine the adverse effects to coastal processes and public access which may result from proposed development, it is necessary to analyze the development in relation to characteristics of the project site shoreline, location of the development on the beach, and wave action.

Shoreline development is subject to any of the policies discussed above under General Development relative to hazards, including storm waves and flooding which may be applicable. In addition, the proposed LUP requires that all applications for new development on a beach or blufftop include a wave uprush report and analysis (4.15) and a site map that shows all easements, deed restrictions or OTDs or other dedications for public access or open space (4.16).

Policy 4.16 also requires that any approved development must be located outside of and consistent with the provisions of such easement offers. To address the ongoing problems associated with coastal erosion policy 4.17 recommends that City-wide or beach specific Shoreline Management Plans be developed which address a number of variables and parameters for alternatives to seawalls and revetments in order to protect the shoreline and maintain beaches and sand supply.

4. Shoreline Erosion and Protective Structures

One of the main functions of a shoreline protective device such as a seawall or revetment is the protection of the property or structures landward of the protective device. While they are often effective in protecting the landward development, however, they do nothing to protect the beach seaward of the revetment or seawall and can often have adverse effects on the nearby beach. These adverse effects ultimately cause additional adverse effects on the availability of public access to a beach. Scouring and beach erosion resulting from construction of a seawall or rock revetment will translate into a loss of beach sand at an accelerated rate. The resultant sand loss will be greater during high tide and winter season conditions than would otherwise occur if the beach were unaltered. In addition, as wave run-up strikes the face of the protective device and is deflected seaward, wave energy is concentrated at the face of the wall and ocean conditions along the beach will become more turbulent than would otherwise occur along an unarmored beach. The increase in turbulent ocean conditions along the beach will accelerate displacement of beach sand where the seawall is constructed over time.

The effects of shoreline protective devices on a beach has been documented in numerous past permit decisions by the Commission in Malibu and elsewhere along the California shoreline. The Commission has found that one of the most critical factors controlling the impact of a shoreline protective device on the beach is its position relative to the surf zone. All other things being equal, the further seaward the wall is, the more often and more vigorously waves interact with it. The best place for a seawall or revetment, if one is necessary, is at the back of the beach where it provides protection against the largest of storms. By contrast, a seawall constructed too near to the mean high tide line may constantly create problems related to frontal and end scour, as well as upcoast sand impoundment. Even though the precise impact of a structure on the beach is a persistent subject of debate within the discipline of coastal engineering, it is generally agreed that a shoreline protective device will affect the configuration of the shoreline and beach profile whether it is a vertical seawall or a rock revetment. It has been well documented by coastal engineers and coastal geologists that shoreline protective devices will adversely impact the shoreline as a result of beach scour, end scour (the beach area at either end of the structure),

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the retention of potential beach material behind the wall, the fixing of the back beach, and the interruption of longshore processes.

An additional concern relative to shoreline erosion is the phenomenon of sea level rise. There is a growing body of evidence that there has been a slight increase in global temperature and that an accelerated rate of sea level rise can be expected to accompany this increase in temperature. Mean water level affects shoreline erosion in several ways and an increase in the average sea level will exacerbate shoreline erosion. For fixed structures on the shoreline, such as residences or protective devices, an increase in sea level will increase the extent and frequency of wave action and future inundation of the structure.

Accompanying this rise in sea level will be increased wave heights and wave energy. Along much of the California coast, ocean bottom depth controls nearshore wave heights, with bigger waves occurring in deeper water. A small increase in wave height can cause a significant increase in wave energy and wave damage. Combined with a physical increase in water elevation, a small rise in sea level can exposed previously protected back shore development to both inundation and wave attack, and those areas that are already exposed to wave attack will be exposed to more frequent wave attack with higher wave forces. An additional concern is that climatic changes associated with global warming and sea level rise could cause changes to storm patterns and wave activity for the entire coast. It is quite possible that some portions of the coast will experience more frequent storms. For these additional reasons to minimize future storm damage and to protect public access, it is important that new development along the shoreline, including shoreline protective devices, be located as far landward as feasible in order to minimize wave attack with higher wave forces as sea level rises over time.

In past permit actions in Malibu the Commission has found the protective devices can be permitted to protect existing structures or new structures which constitute infill development only when designed and engineered to eliminate or mitigate adverse impacts on the shoreline. In some cases the Commission has determined that in certain beach areas largely committed to residential development with shoreline protective devices, it may be appropriate to allow construction of new shoreline protective devices that tie into adjacent existing seawalls or revetments. Both the "District Interpretive Guidelines" for Malibu and the Santa Monica Mountains adopted by the Commission in 1981 and the Malibu/Santa Monica Mountains Land Use Plan certified by the Commission in 1986 contained a "stringline" policy for the siting of infill development. The stringline policy requires that no portion of a proposed new structure, including decks, seawalls and revetments, shall extend further seaward than an imaginary line drawn between the nearest adjacent corner of similar adjacent structures on either side of the development site. The stringline policy is limited to infill

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development only in existing developed shoreline areas in order to limit seaward encroachment of new structures, including protective devices, on a beach.

In addition to the policies discussed above relative to shoreline development, the LUP contains a number of policies which specifically address the problems and issues associated with shoreline erosion and the construction of protective devices on a beach. Many of the policies discussed below, and some of those previously discussed, are recommendations for future actions and not mandatory requirements. Regardless, they represent recognized and/or effective measures or policy approaches to address particular issues or problems.

Policy 4.18 recommends that a program be developed in conjunction with state and federal agencies to provide incentives to relocate development out of hazardous areas and to acquire oceanfront properties severely damaged by storms when relocation of development on the site is not feasible. Policy 4.19 recommends coordination with other responsible public agencies to fund and establish a program for periodic sand nourishment and 4.20 allows the placement of sediments removed from erosion control or flood control facilities along the shoreline for beach nourishment subject to suitability requirements and measures to minimize or eliminate impacts to beach, intertidal and offshore resources.

The LUP provides for the payment of a fee by a property owner to help fund periodic beach nourishment to mitigate for the loss of sandy beach when a shoreline protective device is required and permitted to protect an existing structure and when adverse impacts to sand supply and public access will occur (4.21), requires that siting and design of new shoreline development including protective devices take into account anticipated future changes in sea level (4.22), and that new development on a beach or bluff be sited outside areas subject to hazards during the projected 100 year economic life of the development and/or be elevated above the base flood elevation and set back as far landward as possible (4.23). Policy 4.31 provides for developing "soft solutions" to protect existing development such as dune restoration and sand nourishment as an alternative to the placement of shoreline protective structures on Broad Beach and other appropriate beaches.

In addition, the LUP provides for State Lands Commission review and approval, where applicable (4.24), erosion and runoff control measures during construction (4.25), and blufftop setbacks and development prohibitions to ensure structural safety and prevent runoff and erosion (4.26-4.28). Policies 4.29 and 4.30 provide for infill development and utilization of a stringline to determine the maximum extent of seaward development, where applicable.

The Land Use Plan provides that new development, including land divisions, new beachfront and blufftop structures, significant additions, accessory structures,

and septic systems be sited and designed to minimize risks from wave hazards and to avoid the need to construct a protective device for the life of the development (4.32 – 4.37). When it is determined that a shoreline protective device is necessary, the LUP requires that it be constructed as far landward as feasible, but, in no circumstance, further seaward than a stringline drawn between the nearest adjacent corners of protective devices on adjacent lots (4.38). Policy 4.39 states that a “vertical” seawall shall be the preferred means of protection for existing structures built at sand level. Rock revetments may be allowed when constructed underneath existing foundations or determined to be the preferred alternative in a “Shoreline Management Plan” for a particular beach and policy 4.40 provides for the repair and maintenance of existing shoreline protective structures.

Due to the extreme hazards associated with development on a beach or coastal bluff, the LUP requires property owners, as a condition of coastal development permits, to acknowledge and assume such risks and to waive any future claims against the permitting agency (4.41); to acknowledge that future repairs or additions to a shoreline protective device shall not extend the footprint seaward (4.42); and, in certain circumstances, where geologic and engineering evaluations conclude that development can be sited and designed to not require a shoreline protective device, to waive any future rights to construct such devices (4.43).

5. Fire Hazards

Section 30253 of the Coastal Act also requires that new development minimize the risk to life and property in areas of high fire hazard. The Coastal Act recognizes that new development may involve the taking of some risk. Coastal Act policies require the Commission to establish the appropriate degree of risk acceptable for the proposed development and to establish who should assume the risk. When development in areas of identified hazards is proposed, the Commission considers the hazard associated with the project site and the potential cost to the public, as well as the individual’s right to use his property.

As previously noted, fire is an inherent threat to the indigenous chaparral community of the Santa Monica Mountains. The long, dry season in combination with frequent “Santa Ana” winds, buildup of vegetation to provide fuel for fire, steep canyon terrain and hillsides, inappropriate development siting and design, and often inadequate access combine to provide a climate which provides extreme fire hazards for several months out of each year.

Vegetation in the coastal areas of the Santa Monica Mountains consists mostly of native coastal sage scrub and chaparral. Many plant species common to these communities produce and store terpenes, which are highly flammable

substances (Mooney in Barbour, Terrestrial Vegetation of California, 1988). Chaparral and sage scrub communities have evolved in concert with, and continue to produce the potential for, frequent wild fires. The typical warm, dry summer conditions of the Mediterranean climate combine with the natural characteristics of the native vegetation to pose a risk of wild fire damage to development that cannot be completely avoided or mitigated.

As a result of the hazardous conditions that exist for wildfires in the Santa Monica Mountains area, the Los Angeles County Fire Department requires the submittal of fuel modification plans for all new construction to reduce the threat of fires in high hazard areas. Typical fuel modification plans for development within the Santa Monica Mountains require setback, irrigation, and thinning zones that extend 200 feet from combustible structures. Off-site fuel modification is generally not recommended due to problems inherent with enforcement of regulations on adjacent property and the potential for confusion regarding responsibility for fuel modifications outside legal ownership. In numerous past actions to permit development on existing legal lots and occasional subdivisions in the Santa Monica Mountains, the Commission has required applicants to comply with County Fire Department fuel modification landscaping requirements while minimizing the removal of natural vegetation and to assume the risk of developing in high fire hazard areas.

The Land Use Plan requires that new development minimize risks to life and property from fire hazard by considering site specific characteristics in siting and designing structures to avoid hazardous locations, by incorporating County fuel modification and brush clearance techniques, and by using fire-retardant, native plant species in landscaping (4.44-4.45). To minimize or prevent brush clearance in parklands or sensitive habitat areas, the LUP requires that development be sited to avoid such areas to the maximum feasible extent and/or to use brush clearance measures and techniques which minimize removal of natural vegetation and impacts to sensitive environmental resources while providing adequate fire safety (4.46-4.48). In addition, the LUP requires that new development provide for emergency vehicle access, adequate water supply and line flow and to comply with County fire management programs (4.49-4.51).

6. Emergency Actions and Response

The Land Use Plan recognizes that emergency actions which require quick response are often necessary in certain situations such as fires, storm caused flooding, landsliding and wave damage. In many of these situations the immediacy of the response makes it impractical, if not impossible, to obtain a coastal permit prior to taking action even though the response may meet the Coastal Act definition of development. The Coastal Act recognizes that such conditions occur and such responses are often necessary in the Coastal Zone

and provides for certain exemption from permit requirements or the issuance of an emergency permit to address these situations.

The Land Use Plan contains policies which address emergency actions. Policy 4.53 provides for emergency actions to repair, replace, or protect damaged or threatened development including public works facilities, that such action be the minimum needed to address the emergency, and, to the maximum feasible extent, be the least environmentally damaging alternative. A regular permit application is required as a follow-up to all emergency actions. The LUP also requires that emergency permits be conditioned to obtain a regular follow-up permit or that the development to relieve the emergency be removed within a reasonable period of time. In order to facilitate the identification of unpermitted shoreline protection structures, in particular, which are constructed with greater frequency during severe winter storm seasons, the LUP requires the development of a permit tracking and monitoring system, including inspection (4.55).

Based on the discussion provided the Commission finds that the policies contained in the draft Land Use Plan relative to hazards and shoreline/bluff development meet the requirements of and conform to Sections 30235 and 30253 of Chapter 3 of the Coastal Act.

F. New Development

Section **30250** of the Coastal Act states that:

New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.

Section **30244** of the Coastal Act states that:

Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

The Coastal Act requires the protection of coastal resources, including public access, land and marine habitat, and scenic and visual quality. Focusing new

development to areas in close proximity to existing development with available public services serves to minimize the impacts of remote "leap-frog" development that would require the construction of roads, utilities, and other services. Section 30250 of the Coastal Act requires that new residential, commercial, or industrial development is located near existing developed areas, and where it will not have significant adverse impacts, either individually or cumulatively on coastal resources. Additionally, Section 30250 establishes that land divisions outside existing developed areas can only be permitted where fifty percent of existing parcels have already been developed and that the new parcels are no smaller than the average size of existing parcels. Section 30244 requires the protection of archaeological and paleontological resources and the implementation of mitigation measures to avoid or minimize any impacts.

1. Land Use Plan Designations

The LUP provides parameters for new development within the City. The Land Use Plan Map shows the land use designation for each property. The land use designation denotes the type, density and intensity of new development that may be permitted for each property, consistent with all applicable LCP policies. A Specific Plan overlay is applied to the Civic Center area that allows for a mix of land uses and specific development standards if a specific plan is developed, adopted, and certified as an LCP amendment for the area.

There are four categories of commercial use:

Commercial Neighborhood (CN): The CN designation is intended to provide for low intensity commercial activity to the residents in the surrounding neighborhoods.

Community Commercial (CC): The CC designation is intended to provide for the resident serving needs of the community similar to the CN designation, but on parcels of land more suitable for concentrated commercial activity.

Commercial Visitor Serving (CV): The CV designation provides for visitor serving uses such as hotels and restaurants that are designed to be consistent with the rural character and natural environmental setting. Uses allowed in the other commercial categories may be permitted on the upper story of visitor serving commercial structures so long as the ground floor of such structures are limited to only visitor serving uses.

Commercial General (CG): The CG designation provides for more intense commercial uses, visitor serving uses and light industrial uses located on larger sites.

The Commercial Recreation (CR) designation allows for facilities open to the public that are utilized for low intensity recreational use and athletic activities

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characterized by large open space areas with limited building coverage such as summer camps, hiking, equestrian, and tennis, and includes provision of food and beverage service for participants.

The Institutional (I) category accommodates existing public and quasi-public facilities in the City. This designation includes permitted and conditional uses such as educational institutions, government facilities, libraries, community centers, and religious institutions.

There are five categories of residential use:

Rural Residential (RR): The RR designation allows large lot single family residential development, with a range of maximum densities from one dwelling unit per acre to one dwelling unit per 40 acres. Minimum lot sizes range from 1 to 40 acres, with agricultural uses and animal keeping permitted as accessory uses to approved residential development. The maximum residential density is provided according to the following subcategories:

- RR1 One dwelling unit per acre
- RR2 One dwelling unit per 2 acres
- RR5 One dwelling unit per 5 acres
- RR10 One dwelling units per 10 acres
- RR20 One dwelling unit per 20 acres
- RR40 One dwelling unit per 40 acres

Single-Family Residential (SF): This land use designation allows single family residential development at a higher density than the rural residential category. Single-Family Low (SFL) allows a maximum density of 2 dwelling units per acre, with a minimum lot size of 0.5 acre. Single-Family Medium (SFM) allows a maximum density of 4 dwelling units per acre, with a minimum lot size of 0.25 acre.

Multi-Family Residential (MF): The MF designation provides for multi-family residential developments, such as duplexes, condominiums, stock cooperatives, and apartments. The Multi-family Residential (MF) designation allows a maximum density of six units per acre on a minimum lot size of 20,000 square feet.

Mobile Home Residential (MHR): The MHR designation is intended to accommodate existing mobile home parks and associated facilities.

The Private Recreational Facilities (PRF) category provides for existing private recreational facilities whose members have received exclusive use through deeded rights, property ownership or membership. The Public Open Space (OS) designation provides for publicly owned land which is dedicated to recreation or preservation of the City's natural resources, including public beaches, park lands and preserves. Allowable uses include passive recreation, research and education, nature observation, and recreational and support facilities. The

Recreational Vehicle Park (RVP) designation provides for recreational vehicle parks and requires 10-acre minimum lot size. This designation only applies to the existing RV Park located north of Pacific Coast Highway at Corral Canyon.

These land use categories are based on those in the City of Malibu General Plan, with modifications. With regard to the residential land use categories, the LUP adds the RR40 designation, which is Rural Residential with a density maximum of one dwelling unit per 40 acres. This designation is applied to several parcels that contain steep terrain and contain large areas of habitat designated as ESHA. In several areas, the LUP applies a lower density residential designation than that designated by the City General Plan. These modifications were made to reflect the presence of steep slopes, limited road access, sensitive resources, and other development constraints. Areas designated "Multi-Family Beach Front" in the City General Plan are designated "Single Family Medium" (4 dwelling units per acre) in the LUP in recognition of the constraints to developing new multi-family uses in the future on these beachfront parcels, including the provision of adequate parking facilities, and private sewage disposal capability. Finally, an area in the Civic Center designated "Community Commercial" (CC) and "General Commercial" (CG) by the City General Plan are designated "Visitor Serving Commercial" (CV-1) in the LUP. As discussed above, the Coastal Act requires that priority be given to visitor serving uses. The LUP clusters the areas designated for new visitor serving uses within the Civic Center area.

2. General Land Use Policies

The LUP provides general policies that are applicable to all new development projects. Approval of any coastal development permit must include written findings that the approved project is consistent with all Land Use Plan policies and Implementation Plan provisions of the City's certified LCP. The Environmental Review Board will review and make written recommendations regarding projects within or adjacent to ESHA to ensure that such projects are consistent with the policies of the LUP. The coastal development permit for development reviewed by the ERB shall include written findings relative to the project's conformance to the ERB's recommendations.

As part of all applications for new development on a vacant site, evidence must be provided that the parcel was legally created. Such evidence would include the date and method by which the parcel was created. If the parcel was not legally created or was created after the effective date of the Coastal Act without the approval of a coastal development permit, then a CDP authorizing the land division that created the parcel must be approved prior to the approval of any further development of the site.

3. Commercial/Civic Center Development Policies

The commercial development policies provide for pedestrian and bicycle circulation to be provided within new commercial projects in order to minimize vehicular traffic. Visitor serving commercial uses shall be allowed in all commercial zones in the City and shall be given priority over other non-coastal dependent development. Adequate off-street parking must be provided for new commercial and other uses to ensure that on-street parking remains available to the public for beach access. Parking facilities approved for office or other commercial developments shall be made available for public beach parking on weekends and other times when the parking is not needed for the approved uses.

The LUP provides for the preparation of a specific plan for the Civic Center area. Map No. 5 of the five segments that make up the Land Use Plan Map shows an enlargement of the Civic Center area. The Land Use Plan Map designates this area for Community Commercial and Visitor serving Commercial use. The LUP allows for a wider range and mix of uses, development standards, and design guidelines tailored to the unique characteristics of the Civic Center to be applied to this area if a specific plan is certified as an amendment to the LCP. The City has, in the past, developed and considered a draft specific plan for the Civic Center, but no specific plan has been approved to date. If a specific plan is approved by the City in the future, it can be considered as an amendment to the LCP.

LUP Policy 5.16 provides the components that should be included in any specific plan for the Civic Center. These components include, but are not limited to, land use designations and permitted uses, maximum permitted density and intensity standards, including floor to area ratios for commercial uses, development standards, design guidelines, provisions for open space areas, and provisions for shared or consolidated parking areas. Additionally, any specific plan must also address wetland protection, including a wetland delineation prepared for the area, and measures to protect delineated wetland habitat (as defined in Policy 3.84).

4. Residential Development Policies

The LUP policies address new residential development. All new residential development, including land divisions (subdivisions, lot line adjustments, and certificates of compliance) must conform to all of the applicable LUP policies, including density provisions. The residential density indicates the maximum number of units that could be allowed. It is not a guarantee. In order to ensure compliance with other applicable LCP policies or standards, the permitted density may be less than the maximum density indicated by the land use designation.

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The maximum number of structures allowed by the LUP policies in a residential development is one main residence and one accessory structure of no more than 750 sq. ft. Accessory structures include, but are not limited to, guesthouse, stable, workshop, gym, studio, pool cabana, office, or tennis court. Pursuant to Coastal Act Sections 30250 and 30252 cited above, new development raises issues relative to cumulative impacts on coastal resources. Construction of accessory structures, particularly a second residential unit, on a site where a primary residence exists intensifies the use of the subject parcel. The intensified use creates additional demands on public services, such as water, sewage, electricity, and roads. Thus, additional structures pose potential cumulative impacts in addition to the impacts otherwise caused by the primary residential development. Limiting the number of detached accessory structures will serve to cluster development, limit the overall size of the development area, minimize grading and landform alteration, and minimize impermeable surfaces.

The LUP provides that additional accessory structures may be permitted if consistent with all applicable LUP policies and the cumulative impacts are mitigated through the retirement of development credits (TDCs). In no case may more than one second residential be approved on any one parcel.

With regard to the maximum size of secondary structures, the Commission has limited the development of second residential units on residential parcels in the Malibu and Santa Monica Mountain areas to a maximum of 750 sq. ft. The Commission has found that placing an upper limit on the size of second residential units (750 sq. ft.) was necessary given the traffic and infrastructure constraints which exist in Malibu/Santa Monica Mountains area and given the abundance of existing vacant residential lots. Furthermore, in allowing these small units, the Commission found that the small size of units (750 sq. ft.) and the fact that they are likely to be occupied by one, or at most two people, such units would have less impact on the limited capacity of Pacific Coast Highway and other roads (as well as infrastructure constraints such as water, sewage, and electricity) than the development of the equivalent of a second single family residence. A limit of 750 sq. ft. encourages the units to be used for their intended purpose, as a guest unit, rather than as second residential units with intensified demands on coastal resources and community infrastructure.

The LUP requires that a minimum of one on-site parking space must be provided for the exclusive use of any second residential unit. Finally, any proposed accessory structure that includes plumbing facilities must demonstrate that the project site can accommodate the additional sewage disposal.

5. Lot Retirement Policies

The LUP provides for a lot retirement program designed to minimize the individual and cumulative impacts of the potential buildout of existing parcels that are located in ESHA or other constrained areas and still allow for new development and creation of parcels in areas with fewer constraints. This includes the Transfer of Development Credit (TDC) Program, lot merger process, and an expedited reversion to acreage process. New development that results in the creation of new parcels, or multi-family development that includes more than one unit per existing parcel must retire an equivalent number of existing parcels that meet the qualification criteria of the program.

The Commission has consistently required the mitigation of the cumulative impacts of creating new lots through subdivision and of developing multi-family units by retirement of future development on existing parcels within the Santa Monica Mountains region. The retirement process is formalized as the Commission's Transfer of Development Credit (TDC) Program.

The TDC program was created by the Commission through permit actions to address the fundamental planning issues caused by the existence of a large number of undeveloped parcels, the limited availability of public services, and the potential significant adverse environmental impacts that would result from developing the parcels and of providing services. The majority of the existing lots were identified as small, urban-sized parcels located in "small lot subdivision" areas.

The TDC Program establishes the criteria for determining if specific lots qualify to be retired as mitigation. While lots may be reviewed for qualification at any time, the actual retirement of development credit(s) on the TDC lot(s) will take place after approval of the project, as condition compliance. The project applicant must record an open space deed restriction across the TDC lot(s) and the lot(s) must be tied to a buildable site.

The LUP policies require that the TDC program be implemented on a region-wide basis, including the City as well as the unincorporated area of the Santa Monica Mountains within the Coastal Zone. Credits to mitigate development within the City may be generated from qualifying lots anywhere within this region. The TDC program was developed based on addressing the cumulative impacts of development over the region as a whole to best protect sensitive resources. The Commission has found that continuing to retire the development potential of parcels throughout the region as mitigation for the approval of new land divisions or multi-family development, without respect to the location of this new development [Regional Cumulative Assessment Project (ReCAP), 1999]. The

Santa Monica Mountains region is inextricably linked by the watersheds that cross it, as well as by roads and other public services of limited capacity. Retirement of parcels that qualify under the TDC program, including those within small lot subdivisions or ESHA will benefit the region as a whole, including the City.

In addition to the TDC program, the LUP policies provide that contiguous substandard lots may be merged, thereby reducing the potential impacts of developing existing small lots. Finally, an expedited procedure will be implemented to process reversion to acreage maps.

6. Land Divisions

The LUP policies require that land divisions minimize impacts to coastal resources and public access. Land divisions include subdivisions through parcel or tract map, lot line adjustments, and certificates of compliance. Under the provisions of the Coastal Act, all three types of land division are development that requires the approval of a coastal development permit, with one exception discussed below. Staff notes that lot line adjustments are exempt from the Subdivision Map Act in some circumstances if no new parcels are created, and the new parcels conform to local zoning and building ordinances. However, lot line adjustments are not exempt from the requirements of the Coastal Act because they meet the definition of "development".

An owner of property may request the local government to determine whether the parcel was created in conformance with the requirements of the Subdivision Map Act. After review, the local government is required to issue a certificate of compliance with or without conditions. Certificates of compliance determine only whether the parcel conforms to the requirements of the Subdivision Map Act, they do not grant any right to develop the parcel. However, certificates of compliance do constitute a land division under the provisions of the Coastal Act and in most cases require the approval of a coastal development permit.

Following are the three separate situations in which the issuance of a certificate of compliance may be requested:

1. Land division occurred prior to the effective date of the Coastal Act and lot was created in compliance with laws in effect at the time (LUP Policy 5.42).
2. Land division occurred prior to the effective date of the Coastal Act and lot was not created in compliance with laws in effect at the time (LUP Policy 5.43).
3. Land division occurred after the effective date of the Coastal Act without approval of a coastal development permit (LUP Policy 5.44).

In the first case described above, no coastal development permit would be required. In the second and third instance, the action of issuing a certificate of compliance authorizing the past creation of a new parcel through means that were not in compliance with the laws in effect at the time, is development under the Coastal Act. A certificate of compliance in one of these two cases shall not be issued unless a coastal development permit that approves the land division is approved. The coastal development permit can only be approved if the land division is consistent with all applicable policies of the LCP.

A land division cannot be approved unless every new lot created would contain an identified building site that can later be developed consistent with all policies of the LCP. Applications for land divisions must include plans depicting proposed grading, drainage, landscaping, conceptual fuel modification, and visual analysis for the proposed building pad and driveway for each proposed parcel. Additionally, applications for land divisions must demonstrate that water would be available for each parcel and that each parcel can accommodate an on-site disposal system. Land divisions must be designed to cluster development, to minimize landform alteration, to minimize site disturbance, and to maximize open space. Any land division resulting in the creation of additional lots must be conditioned upon the retirement of development credits (TDCs) at a ratio of one credit per new lot created.

7. Non-conforming Uses and Structures Policies

The LUP policies address the maintenance of existing uses and structures that do not conform to the provisions of the LCP. Policy 5.55 states that existing, lawfully established structures built prior to the effective date of the Coastal Act that do not conform to the provisions of the LCP may be maintained and repaired. Additionally, minor improvements may be made to such structures provided that such improvements do not increase the degree of nonconformity or extend the life of the structure. However, substantial additions or remodeling, or demolition and site redevelopment cannot be permitted unless all structures are brought into conformance with the policies and standards of the LCP.

8. Communications Policies

Communication facilities are provided for as a conditional use in all land use designations, with the exception of ESHA areas (as designated and described in the Marine and Land Resources Policies). All facilities and related support structures shall be sited and designed to protect coastal resources, including scenic and visual resources. Co-location of facilities is required where feasible to avoid the impacts of facility proliferation. New transmission lines and support

structures will be placed underground where feasible. Existing facilities should be relocated underground when they are replaced.

9. Archaeology

The greater province of the Santa Monica Mountains is the locus of one of the most important concentrations of archaeological sites in Southern California. Although most of the area has not been systematically surveyed to compile an inventory, the sites already recorded are sufficient in both numbers and diversity to predict the ultimate significance of these unique resources. As so many archaeological sites have been destroyed or damaged as a result of development activity or natural processes, the remaining sites, even if they are less rich in materials, have become increasingly valuable. Additionally, because archaeological sites, if studied collectively, may provide information on subsistence and settlement patterns, the loss of individual sites can reduce the scientific value of the sites that remain intact.

New development on natural sites or additional development on natural areas of developed sites can damage or destroy archaeological resources. Site preparation can disturb and/or obliterate archaeological materials to such an extent that the information that could have been derived would be lost. If a project is not properly monitored and managed during construction activities, archaeological resources can be degraded or destroyed. Section 30244 of the Coastal Act requires the protection of archaeological and paleontological resources and the implementation of mitigation measures to avoid or minimize any impacts.

The LUP policies require that new development protect and preserve archaeological, historical, and paleontological resources from destruction and avoid and minimize impacts to such resources. Applications for new development in areas known or anticipated to be archaeologically sensitive must include a site survey prepared by a qualified archaeologist. If cultural resources are identified on the project site, the development must be designed to protect or avoid such resources, consistent with the recommendations of the archaeologist. Where project alternatives cannot avoid all impacts to archaeological or paleontological resources, reasonable mitigation measures shall be required. In addition to protecting cultural resources, and implementing mitigation measures, all grading, excavation, and site preparation that involves earth-moving operations for new development must be monitored by a qualified archaeologist and appropriate Native American consultants.

10. Conclusion

The Coastal Act requires the protection of coastal resources, including public access, land and marine habitat, and scenic and visual quality. Section 30250 of the Coastal Act requires that new residential, commercial, or industrial development is located near existing developed areas, and where it will not have significant adverse impacts, either individually or cumulatively on coastal resources. Section 30244 requires the protection of archaeological and paleontological resources and the implementation of mitigation measures to avoid or minimize any impacts. As described in detail above, the LUP provides for the location and design of new development to minimize impacts, both individual and cumulative, on coastal resources, including cultural resources. The Commission finds that the Draft Land Use Plan meets the requirements of and conforms to the provisions of Sections 30250 and 30244 of the Coastal Act.

G. Scenic and Visual Resources

Section **30251** of the Coastal Act states that:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

One of the primary objectives of the Coastal Act is the protection of scenic and visual resources, particularly as viewed from public places. Section 30251 requires that development be sited and designed to protect views to and along the ocean and other scenic coastal areas. New development must minimize the alteration of natural landforms. This policy also requires that development is sited and designed to be visually compatible with the character of surrounding areas. Where feasible, development shall include measures to restore and enhance visual quality in visually degraded areas.

1. Introduction

The Santa Monica Mountains region, including the City of Malibu, is an area of incredible scenic beauty. This is due in large part to the dramatic topography. Steep mountains rise virtually out of the ocean. There is a narrow coastal plain in most areas that parallels the coastline. The plain is much wider in the center of the City on the Point Dume headland and on the alluvial plain formed by Malibu Creek where the City's Civic Center is located. In other areas there are wave-cut terraces separated from the beach below by sheer coastal bluffs. Deep stream-cut canyons extend through the mountains.

In addition to the topography, the scenic beauty of the area is inextricably linked to the native vegetation communities that typify the California Mediterranean landscape. Different vegetation communities have different visual textures and colors. South facing drier slopes support low growing coastal sage scrub species, while north facing or wetter slopes support denser chaparral vegetation. The textures of these areas contrast with the taller trees and shrubs growing in the riparian corridors that form linear features along streams.

There are sweeping views of the ocean and beach. Coastal views are possible from Pacific Coast Highway where there are breaks in the existing pattern of development. There are excellent views from the cross mountain roads, each of which follows a canyon through the mountains. Descending these scenic roads, there are alternating views of natural canyon areas and the ocean. There are also views of the beach, ocean and scenic areas from public parks, and riding and hiking trails. Finally, while the beach and ocean are important scenic elements, there are also mountain and canyon views as seen looking inland from the beach and ocean.

2. Scenic and Visual Resource Identification

The Land Use Plan provides for the protection of scenic and visual resources, including views of the beach and ocean, views of mountains and canyons, and views of natural habitat areas. The LUP Visual Resource Map shows the location of Scenic Roads, which are those roads within the City that traverse or provide views of areas with outstanding scenic quality, that contain striking views of natural vegetation, geology, and other unique natural features, including the beach and ocean. The Visual Resource Map also shows Public Viewing Areas, located along existing public roads where there are views of the beach and/or ocean, and other scenic areas. Additionally, there are intermittent beach or ocean views from all of the cross-mountain roads within the City (with the exception of certain portions of Decker Canyon Road where the topography prevents ocean views). Further, there are views of the ocean and other scenic

areas from public parklands and from riding and hiking trails. Trails and parklands are shown on the LUP Park and Trail Map. Finally, the LUP Public Access Map shows public beach parks and accessways that provide views of the mountains and other scenic areas. The Scenic and Visual Resource Identification maps are also carried out by the requirements of LUP policies 6.1 - 6.3.

3. New Development

The LUP policies require that new development not be visible from scenic roads or public viewing areas. Where this is not feasible, new development must minimize impacts through siting and design measures. Protection is provided for prominent ridgelines by requiring structures to be set below the ridgeline and to avoid intrusions into the skyline. Where the site is visible from public viewing areas or contains slopes over 3:1, the policies establish a maximum development area to limit the overall area of site disturbance. These measures and/or requirements are carried out by LUP policies 6.4 – 6.8.

The policies give parameters for the siting and design of all new development to ensure that the alteration of natural landforms is minimized. These measures include siting development on flatter areas of the site, conforming development to the natural topography, clustering development, and preventing flat building pads on slopes. Graded slopes must blend with the existing terrain of the site and the height and length of slopes must be minimized. Finally, the length of roads or driveways shall be minimized and slopes designed to follow the natural topography in order to minimize landform alteration. These measures are provided for in LUP policies 6.9 – 6.11.

The Commission has found through past permit actions that in highly scenic areas the color of a structure can adversely impact a viewshed if the color is not consistent with the surrounding environment. For example white structures are highly visible from long distances and can adversely impact the visual resources from scenic highways trails and public view areas. The Commission has found that structures that have exterior colors and materials that are compatible with the surrounding environment are less visually obtrusive. In addition, the Coastal Act provides, and the Commission has found, that new development should be visually compatible with the character of surrounding areas.

The policies require that new structures are sited and designed to minimize impacts to visual resources, by incorporating design measures to limit the appearance of bulk, ensuring visual compatibility with the character of surrounding areas, and by using colors and materials that are similar and blend in with natural materials on the site (6.12). The height of retaining walls must be minimized and fences, walls and landscaping must not block or obscure views

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from public viewing areas (6.13, 6.14). Development is required to be setback sufficiently from the bluff edge in order to minimize visual impacts from the beach (6.15).

Pacific Coast Highway is designated as a scenic highway for coastal views by the LUP. Further, Pacific Coast Highway is also a major coastal access route, not only utilized by local residents, but also heavily used by tourists and visitors to access public beaches which are only accessible from Pacific Coast Highway. Public views of the beach and water from Pacific Coast Highway have been substantially reduced, or completely blocked, in many areas by the construction of single family residences, privacy walls, fencing, landscaping, and other residential related development between Pacific Coast Highway and the ocean. This type of development limits the public's ability to view the coast or ocean to only those few parcels which have not yet been developed. The Commission notes that the construction of individual beachfront or bluff top residences, when viewed on a regional basis, results in potential cumulative adverse effects to public views and to the visual quality of coastal areas.

In past permit actions, consistent with Coastal Act Section 30251, the Commission has required that new development located on the seaward side of Pacific Coast Highway be sited and designed to protect public bluewater views of the ocean and, where feasible, to restore and enhance visual quality in visually degraded areas. Specifically, in regard to new development located on beachfront lots, where it is not possible to limit the height of new structures to an elevation lower than the highway, the Commission has required that new development occupy no more than 80% of the lineal frontage of Pacific Coast Highway in order to maintain a public view corridor over the lot for ocean views [Saban (4-99-146), Broad (4-99-185), 4-99-154 (Montanaro)]. However, in past permit actions regarding development on bluff top sites where slopes descend seaward from the highway, the Commission has further limited the height of new structures and landscaping to an elevation adequate to ensure that public views of the ocean are retained over the entire project site [CDPs 4-98-142, 143, & 163 (Duggan & Levinson), CDP 4-97-031 (Anvil), CDP 5-90-020 (Young)].

The LUP requires that new development must preserve bluewater ocean views by limiting the overall height and siting of structures where feasible to maintain ocean views over the structures. Where it is not feasible to maintain views over the structure through siting and design alternatives, view corridors must be provided in order to maintain an ocean view through the project site. These objectives are carried out by policies 6.16 –6.19. In addition, the LUP includes policies to enhance the Pacific Coast Highway corridor as a scenic highway and viewshed (6.33 – 6.36). The LUP also requires that public works projects along scenic highways incorporate design elements to ensure compatibility with the rural character of the Santa Monica Mountains (6.20).

The LUP policies set forth restrictions regarding the design of land divisions, including lot line adjustments, to ensure that building sites are clustered, that the length of roads and driveways are minimized, that shared driveways are provided, that grading is minimized, and that all graded slopes are revegetated. Land divisions that do not avoid or minimize impacts to visual resources will not be permitted. These provisions are carried out by policies 6.24 – 6.26.

Development is required to minimize the removal of natural vegetation both for the actual development area, as well as vegetation removed or thinned for fuel modification and brush clearance. Graded slopes and other areas disturbed by construction must be landscaped or revegetated with primarily native, drought tolerant plants to provide coverage of the disturbed areas and monitored to ensure success. These provisions are carried out by policies 6.27 – 6.29.

The LUP also contains policies relative to the protection of scenic and visual resources that address the design and location of signs and utilities (6.30 – 6.32) and permit application requirements (6.22, 6.33).

H. Public Works

Coastal Act 30254 requires that new or expanded public works facilities be “designed and limited” to accommodate development that can be permitted consistent with the policies of the Coastal Act. This section also provides that, where public works facilities to serve new development are limited, priority shall be given to coastal dependent uses, essential services, public and commercial recreation and visitor-serving land uses. The Coastal Act also provides that no term or condition may be imposed on the development of any sewage treatment plant relative to future development that can be accommodated (consistent with the Coastal Act).

Section **30254** of the Coastal Act states that:

New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided, however, that it is the intent of the Legislature that State Highway Route 1 in rural areas of the coastal zone remain a scenic two-lane road. Special districts shall not be formed or expanded except where assessment for, and provision of, the service would not induce new development inconsistent with this division. Where existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal dependent land use, essential public services and basic industries vital to the economic health of the region, state, or nation, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development.

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Section **30254.5** of the Coastal Act states that:

Notwithstanding any other provision of law, the commission may not impose any term or condition on the development of any sewage treatment plant that is applicable to any future development that the commission finds can be accommodated by that plant consistent with this division. Nothing in this section modifies the provisions and requirements of Sections 30254 and 30412.

Development and growth in the City of Malibu is limited by geologic and environmental constraints, steep slopes, and dependence on private septic systems for wastewater management as well as the general desire to limit growth throughout the City. Public works facilities that exist in the City include roads and highways, public water and telephone utilities and all publicly financed recreational facilities including parks, trails and public accessways financed by the State Coastal Conservancy, State Department of Parks and Recreation and Los Angeles County. There is no public sewage treatment plant in Malibu other than the small Malibu Mesa facility that serves Pepperdine University and the Malibu Mesa residential tract. While continued dependence on private septic systems for wastewater treatment has been a limiting factor for development, it has also been suspected of being a contributing factor to water pollution in Malibu Creek and Lagoon and other areas including the beaches. Prior to the City's incorporation in 1991, Los Angeles County proposed a large regional sewer system for much of Malibu. The County's application to construct the facility was withdrawn while it was pending before the Coastal Commission. The City proposes no facilities at present.

Major public works projects in Malibu consist of road repairs, maintenance and improvements. Responsibility for maintaining Pacific Coast Highway lies with the State Department of Transportation (Caltrans). Pacific Coast Highway is periodically damaged by landslides and mudflows on its inland side and by storm waves and erosion on its seaward side. In order to provide for adequate traffic circulation into and out of the City by residents and visitors accessing the public beaches and parks and to facilitate public safety it is important for the City to coordinate with Caltrans. The City is responsible for maintenance and improvements of other roads in the City. There has been considerable damage to roads within the City due to the impacts from several major winter storms since incorporation and considerable effort and expense has been required to keep roads open. It is also necessary to coordinate with Los Angeles County to insure a smooth flow of traffic along cross-mountain roads that provide access between the inland valleys and mountain areas to Pacific Coast Highway in the City. Most of the roads in the City traverse areas that are highly scenic and/or contain sensitive natural resources. Therefore, it is important that road improvements, repairs and maintenance utilize Best Management Practices including the least environmentally damaging feasible alternative.

To ensure consistency with the Coastal Act, the policies contained in the Land Use Plan are intended to facilitate the provision and maintenance of public services, including roads, parking, water and electricity, and wastewater management to protect existing and future residents and visitors to the City and to accommodate the level and types of development that the LUP envisions.

Pursuant to Section 30114 publicly financed recreational facilities, including all projects of the State Coastal Conservancy, are considered "Public Works." The Coastal Act definition of "Public Works" including Conservancy projects is provided for in policies 7.1 and 7.2 of the LUP.

The LUP contains policies which provide for improvements to existing roads and intersections for public safety and to improve coastal access (7.3 – 7.5, 7.9 – 7.11) Policies also provide for developing measures to improve transit service to and within the City, provide and improve parking facilities, shuttles and van pools (7.6 – 7.8, 7.12, 7.15).

The LUP recommends the creation of "wastewater management zones" for certain areas to facilitate the function and operation of on-site septic systems (7.17). In addition, as an alternative the plan allows for public package wastewater treatment facilities as a wastewater management solution (7.18)

The LUP also allows for a public sewer system to be designed and proposed by the City subject to approval as an amendment to the LCP by the Coastal Commission (7.19 – 7.21). It is important to note that the LUP does not require a sewer system, however, should one be proposed, it includes restrictions to protect marine resources and riparian habitat, and to limit capacity so that it is not growth inducing.

I. Industrial and Energy Development

Section **30101** of the Coastal Act states that:

"Coastal-dependent development or use" means any development or use which requires a site on, or adjacent to, the sea to be able to function at all.

Section **30101.3** of the Coastal Act states that:

"Coastal-related development" means any use that is dependent on a coastal-dependent development or use.

Section **30222.5** of the Coastal Act states that:

Ocean front land that is suitable for coastal dependent aquaculture shall be protected for that use, and proposals for aquaculture facilities located on those sites shall be given priority, except over other coastal dependent developments or uses.

Section **30250** of the Coastal Act states in part that:

(b) Where feasible, new hazardous industrial development shall be located away from existing developed areas.

Section **30255** of the Coastal Act states that:

Coastal-dependent developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal-dependent developments shall not be sited in a wetland. When appropriate, coastal-related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.

Section **30260** of the Coastal Act states that:

Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division. However, where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this section and Sections 30261 and 30262 if (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible.

Section **30261** of the Coastal Act states that:

Multicompany use of existing and new tanker facilities shall be encouraged to the maximum extent feasible and legally permissible, except where to do so would result in increased tanker operations and associated onshore development incompatible with the land use and environmental goals for the area. New tanker terminals outside of existing terminal areas shall be situated as to avoid risk to environmentally sensitive areas and shall use a monobuoy system, unless an alternative type of system can be shown to be environmentally preferable for a specific site. Tanker facilities shall be designed to (1) minimize the total volume of oil spilled, (2) minimize the risk of collision from movement of other vessels, (3) have ready access to the most effective feasible containment and recovery

equipment for oilspills, and (4) have onshore deballasting facilities to receive any fouled ballast water from tankers where operationally or legally required.

Section **30262** of the Coastal Act states that:

Oil and gas development shall be permitted in accordance with Section 30260, if the following conditions are met:

- (a) The development is performed safely and consistent with the geologic conditions of the well site.
- (b) New or expanded facilities related to such development are consolidated, to the maximum extent feasible and legally permissible, unless consolidation will have adverse environmental consequences and will not significantly reduce the number of producing wells, support facilities, or sites required to produce the reservoir economically and with minimal environmental impacts.
- (c) Environmentally safe and feasible subsea completions are used when drilling platforms or islands would substantially degrade coastal visual qualities unless use of such structures will result in substantially less environmental risks.
- (d) Platforms or islands will not be sited where a substantial hazard to vessel traffic might result from the facility or related operations, determined in consultation with the United States Coast Guard and the Army Corps of Engineers.
- (e) Such development will not cause or contribute to subsidence hazards unless it is determined that adequate measures will be undertaken to prevent damage from such subsidence.
- (f) With respect to new facilities, all oilfield brines are reinjected into oil-producing zones unless the Division of Oil and Gas of the Department of Conservation determines to do so would adversely affect production of the reservoirs and unless injection into other subsurface zones will reduce environmental risks. Exceptions to reinjections will be granted consistent with the Ocean Waters Discharge Plan of the State Water Resources Control Board and where adequate provision is made for the elimination of petroleum odors and water quality problems.

Where appropriate, monitoring programs to record land surface and near-shore ocean floor movements shall be initiated in locations of new large-scale fluid extraction on land or near shore before operations begin and shall continue until

surface conditions have stabilized. Costs of monitoring and mitigation programs shall be borne by liquid and gas extraction operators.

Section **30263** of the Coastal Act states that:

(a) New or expanded refineries or petrochemical facilities not otherwise consistent with the provisions of this division shall be permitted if (1) alternative locations are not feasible or are more environmentally damaging; (2) adverse environmental effects are mitigated to the maximum extent feasible; (3) it is found that not permitting such development would adversely affect the public welfare; (4) the facility is not located in a highly scenic or seismically hazardous area, on any of the Channel Islands, or within or contiguous to environmentally sensitive areas; and (5) the facility is sited so as to provide a sufficient buffer area to minimize adverse impacts on surrounding property.

(b) New or expanded refineries or petrochemical facilities shall minimize the need for once-through cooling by using air cooling to the maximum extent feasible and by using treated waste waters from inplant processes where feasible.

Section **30264** of the Coastal Act states that:

Notwithstanding any other provision of this division, except subdivisions (b) and (c) of Section 30413, new or expanded thermal electric generating plants may be constructed in the coastal zone if the proposed coastal site has been determined by the State Energy Resources Conservation and Development Commission to have greater relative merit pursuant to the provisions of Section 25516.1 than available alternative sites and related facilities for an applicant's service area which have been determined to be acceptable pursuant to the provisions of Section 25516.

The Coastal Act provides for the consideration of coastal-dependent industrial and energy-related development, and for other commercial and industrial land uses such as aquaculture, fishing, kelp harvesting, and seawater desalinization. The City of Malibu presently does not contain any of these land uses, and most--particularly oil and gas development (including directional drilling projects to develop offshore oil and gas resources from inland areas), are unlikely to be proposed within the City's limits in the foreseeable future.

If any land uses governed by the Coastal Act provisions cited in this section are proposed in the future for lands located within the boundaries of the City's certified LCP, an amendment to the City's LCP would be required before a coastal development permit for such a project could be approved.

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Coastal Act Sections 30101, 30101.3 and 30255 distinguish among coastal-dependent development, coastal-related development, and other types of developments, and establish priorities among various land uses identified in each category. Coastal Act Section 30250 in part requires that new hazardous industrial development be located away from existing development, where feasible. Other applicable policies of the Coastal Act contain more specific siting and permitting requirements based on the type of project under consideration. Oil and gas development projects, including extraction, processing, refining, or other petrochemical facilities, and tanker facilities, are subject to very specific policy standards that would be considered by the Commission in certifying any related LCP amendment that might be proposed in the future to allow for such development within the City limits.

In addition, potential future projects that would be considered energy and industrial, or related projects, would likely be located in areas subject to tidal action, and thus within the area of the Coastal Commission's retained jurisdiction. Such projects would therefore require a coastal development permit approved by the Coastal Commission, but could also require an LCP amendment to address portions of such projects that would be proposed for location within the boundaries of the City's LCP.

LIST OF EXHIBITS

Exhibit 1—Draft City of Malibu Land Use Plan, November 2001

Please Note: The text of the LUP is unchanged from the September 2001 version. Minor changes have been made to the several of the attached maps. Riding and Hiking Trails have been added to the Park Lands Map. Streams corridors have been added to the ESHA Map. Land Use Map 5 has been added to show an enlarged view of the Civic Center Specific Plan Area.

Exhibit 2—Ecological Findings, Dr. Jon Allen, October 2001

Draft / Discussion Document 11/2/01 12:03:42 PMSummary of Ecological Findings for Malibu

J. C. Allen
Staff Ecologist

Malibu and the Santa Monica Mountains (SMM) form a diverse ecosystem of many habitats linked by riparian drainages to the coast. This system is unique and sensitive because of the landscape setting within which it resides. At the landscape scale it is a relatively undisturbed natural habitat island surrounded by a growing metropolitan area, and many of the species living there rely on the remaining connectivity for their continued existence. Preserving habitat connectivity and reducing fragmentation by development are top priority issues with the California Resources Agency, and the Malibu/SMM area is a striking example of progressive fragmentation of a large area of natural habitat (see environmental scientist's group letter to Governor Gray Davis and maps in Appendix). As the most sensitive indicator species of large-scale connectivity, the mountain lion (*Felis concolor*) is used. The continued presence of this animal is evidence of large-scale functional habitat, but research shows that further development and fragmentation seriously threaten the region. As the maps indicate (see Appendix), not only is fragmentation and isolation a serious issue, but much of the remaining undeveloped land resides in private ownership. If this land is developed without regard to fragmentation and connectivity issues at the landscape level, it will be reduced to a series of pathetic remnants whose large-scale ecological function will have been lost.

Because of its geographic location and the threat of losing landscape ecological function, staff believes this area and its component ecological habitats are extremely sensitive to further development. They are at once rare and valuable, performing an important role in the ecosystem and easily degraded by human activities and developments, and therefore constitute an Environmentally Sensitive Habitat Area (ESHA) under the Coastal Act definition (Section 30107.5). Staff therefore recommends that all natural terrestrial habitats in Malibu be regarded as ESHA and that any determination to the contrary must be established by a site-specific analysis with consideration given to habitat connectivity issues. Wetlands, such as coastal salt marsh, and streams and their associated riparian corridors are clearly ESHA under the Coastal Act and are also given specific protection under Sections 30231, 30233, and 30236 of the Coastal Act. Development is never allowed within these habitats except for a small number of specified activities.

Draft / Discussion Document 11/2/01 12:03:42 PM**Ecological Findings for the Malibu Area**

J. C. Allen
Staff Ecologist

Section 30107.5 of the Coastal Act, defines an environmentally sensitive area as:

"Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.

Therefore, when considering any area, such as Malibu, with regard to an ESHA determination one must focus on three main questions:

- (1) Is a habitat or species rare or especially valuable?
- (2) Does the habitat or species have a special nature or role in the ecosystem?
- (3) Is the habitat or species easily disturbed or degraded by human activities and developments?

In making ESHA determinations, scale is important. Both temporal and spatial scales must be considered in determining ecologically sensitive habitat, and at different scales the conclusions may vary. Whereas on a local scale a small patch of degraded habitat might not be called ESHA, on a landscape scale its status might be different. For example, on a landscape scale it may form a vital stepping stone for dispersal of a listed species between larger habitat patches. At this scale it is valuable, performing an important role in the ecosystem and is easily degraded by human activities and developments, and so it fits the Coastal Act definition of ESHA. Similarly, habitats in a largely undeveloped region far from urban influences may not be perceived as rare or providing a special function, whereas a large area of such habitats surrounded by a dense urban area may be exceedingly rare and each constituent habitat within it an important functional component of the whole. Therefore, in order to appropriately categorize habitats, it is important to consider all applicable ecological scales and contexts. In addition to spatial and temporal scales, there are species scales. For example, one can focus on single species (e. g., mountain lions, flycatchers or tarplants), or one can focus on whole communities of organisms (e.g., coastal sage scrub or chaparral) or interconnected habitats in a geographic region (e. g., the Santa Monica Mountains and its habitats). On a world-wide scale, in terms of numbers of rare endemic species, endangered species and habitat loss, the Malibu/SMM area is part of a local hot-spot of endangerment and extinction and is in need of special protection (Myers 1990, Dobson et al. 1997, Myers et al. 2000).

In the case of Malibu, its geographic location and role in the ecosystem at the landscape scale is critically important in determining the significance of its native habitats. Malibu averages about one mile of inland extent and 27 miles along the coast, forming a significant connecting link between the coast and large, undisturbed habitat areas in the Santa Monica Mountains. These areas are in turn connected by narrow corridors to the Sierra Madre, San Gabriel and San Bernardino Mts. to the north. Much of the ecological significance of the Malibu connection with inland areas is that it includes many riparian corridors that connect large inland watersheds with the coast. These corridors are home to many listed species and are easily disturbed by development, and in fact some have already been subject to considerable development near the coast, e.g. Las Flores Canyon, Malibu Creek & Lagoon, Ramirez Canyon and Trancas Canyon. Proceeding inland from the coast, however, the quality of the habitat improves rapidly and soon approaches a relatively undisturbed environment consisting of steep canyons containing riparian oak-sycamore bottoms, with coastal sage scrub and chaparral ascending the canyon walls.

Description of Malibu Habitats

This section presents a brief description of the most common Malibu habitats and some of their common and sensitive species of plants and animals. The following section presents staff ESHA determinations for the Malibu/SMM area. The main habitat types in the Malibu/SMM area (National Park Service 2000) are:

1. Coastal Sage Scrub
2. Chaparral
3. Riparian Woodland
4. Coastal Salt Marsh
5. Coast Live Oak Woodland
6. Valley Oak Savanna
7. Grassland
8. Coastal Strand

Wetlands, such as coastal salt marsh, and streams and their associated riparian corridors are clearly ESHA under the Coastal Act and are also given specific protection under Sections 30231, 30233, and 30236 of the Coastal Act. Development is never allowed within these habitats except for a small number of specified activities. The other habitats present in the Santa Monica Mountains and Malibu are potentially ESHA and should generally be evaluated on a site-specific basis.

1. Coastal Sage Scrub

Most of the undeveloped portion of Malibu, especially near the coast and at lower elevations, consists of Coastal Sage Scrub (CSS) (Figs. 1 and 2). Although accurate estimates are difficult to obtain, it is believed that only about 10-15% of the original CSS habitat in California remains today, most being lost to

development, (Bolger et al 1997). This remaining habitat is much more highly fragmented and sensitive than the original CSS distribution (Bolger et al 1997, CDFG 1993). About 100 listed species utilize CSS as habitat (Atwood 1993, CDFG NCCP 1993). So good quality large and contiguous CSS habitat is rare, performing and important ecological function and therefore qualifies as ESHA under the Coastal Act even if no listed species are present at the particular place in question. The Federal view of listed species habitat is to simply say that all habitat that is required by and potentially occupied by a listed species is sensitive (i.e., 'critical' habitat) (U.S. Fish and Wildlife Service. 2000), and such habitat needs to be evaluated for impacts whenever developments are planned. Besides being rare a habitat, CSS is especially valuable in providing refuge for the many listed species it contains, most of which are rare and are endemic to limited geographic regions (Atwood 1993, CDFG NCCP 1993).

Apparent in Fig. 1 is the fact that the species composition and structure of the CSS vegetation depends on moisture conditions. CSS in drier conditions (on south-facing slopes and at lower elevations) consists of more drought-resistant species (e.g., California sagebrush (*Artemisia californica*), coast buch wheat (*Eriogonum cinereum*), cactus (*Opuntia* sp.), purple sage (*Salvia leucophila*) and native and/or non-native grasses) than on north-facing slopes and at higher elevations. Where more moisture is available, larger evergreen species such as Toyon (*Heteromeles arbutifolia*), Laurel Sumac (*Malosoma laurina*), Lemonadeberry (*Rhus integifolia*) and Sugar Bush (*Rhus ovata*) predominate. As the moisture increases and the structure of the vegetation changes to larger evergreen species, there is more cover for wildlife on north-facing slopes and at higher elevations, and movement of large animals from chaparral into CSS is facilitated in these conditions.

Characteristic CSS wildlife includes Anna's hummingbirds, rufous-sided towhees, California quail, greater roadrunners, Bewick's wrens, coyotes, coast horned lizards (NPS 2000), but most of these move between CSS and chaparral habitats as well. Several other reptiles, birds and mammals (32 total species) from CSS that are sensitive and/or listed are provided with the letter from Dr. Marti Witter, Fire Ecologist, National Park Service, (see attached letter).

2. Chaparral

At very roughly 1000 ft. elevation the vegetation shifts to more generally woody evergreen species with sclerophyllous leaves (hard with resinous or waxy coatings). Various subcommunities of chaparral occur in the Malibu/SMM area and are described briefly below.

Northern mixed chaparral is found on moist, north facing slopes throughout the mountains. It commonly contains woody vines and large shrubs such as chamise (*Adenosoma fasciculatum*), scrub oak (*Quercus berberidifolia*), greenbark or spiny ceanothus (*Ceanothus spinosus*), mountain mahogany (*Cercocarpus betuloides*), toyon (*Heteromeles arbutifolia*), hollyleaf redberry

(*Rhamnus ilicifolia*), sugarbush (*Rhus ovata*) and manzanita (*Arctostaphylos* spp.) (NPS 2000).

Red shank chaparral occurs in the SMM but is more of an inland habitat and to our knowledge and according to the existing vegetation maps (1983 and 1993) does not occur within the City of Malibu.

Ceanothus chaparral occurs on stable slopes and ridges, where bigpod ceanothus (*Ceanothus megacarpus*) makes up over 50% of the vegetative cover. In other areas buckbush ceanothus (*Ceanothus cuneatus*), hoary-leaved ceanothus (*Ceanothus crassifolius*), or greenbark ceanothus may dominate. In addition to ceanothus, other species that are usually present in varying amounts are chamise, black sage (*Salvia mellifera*), holly-leaf redberry, coast golden bush (*Haploppapus venetus*) and sugarbush (NPS 2000).

3. Riparian Woodland

Riparian woodlands occur along both intermittent and perennial streams in nutrient rich soils or within the drainage of steep slopes throughout the Malibu/SMM area (Fig. 1), and they form one of the most important ecological connections between the Malibu coast and the inland areas. These communities are the most species-rich to be found in the area, and they are particularly sensitive because of their narrow linear structure, highly connected flowing water system and large number of species. Dominant plant species may include arroyo willow (*Salix lasiolepis*), California black walnut (*Juglans californica*), sycamore (*Platanus racemosa*), Mexican elderberry (*Sambucus mexicana*), California bay laurel (*Umbellularia californica*) and mule fat (*Baccharis salicifolia*).

Some of the typical wildlife species include American goldfinches, black phoebes, warbling vireos, bank swallows, song sparrows, belted kingfishers, raccoons, California and Pacific tree frogs. Three sensitive species that may inhabit the streams are the southwestern pond turtle, tidewater goby and steelhead trout.

4. Coastal Saltmarsh

The main example of coastal saltmarsh in the Malibu area is the Malibu Lagoon on Malibu Creek. The lagoon supports typical saltmarsh vegetation consisting of pickleweed (*Salicornia* sp.) and saltgrass. Federally endangered tidewater gobies (*Eucyclogobius newberryi*) and southern steelhead trout (*Oncorhynchus mykiss irideus*) both use the lagoon and creek and federally endangered brown pelicans (*Pelecanus occidentalis californicus*) can be seen in and around the lagoon. Malibu Creek and Lagoon supports what is believed to be the southernmost remaining steelhead trout run on the California coast (National Marine Fisheries Service 1997). This is the southernmost steelhead run in the Southern California Evolutionary Significant Unit (ESU) of steelhead trout, consisting of the Santa Ynez River, Gaviota Creek, Ventura River, Matilija Creek, Santa Clara River and Malibu Creek. However, other streams may also support small numbers of

breeding fish (e.g., Arroyo Sequit in western Malibu – pers. comm. Mark Cappeli, NMFS). None of these streams is believed to support more than 200 fish (NMFS 1997).

5. Coastal Live Oak Woodland

According to the existing vegetation maps of Malibu and the SMM (1983 and 1993), coast live oak woodland occurs only very slightly within the Malibu City boundary mostly on the extreme western extent. Nevertheless, a brief description is provided here because of their sensitive nature.

Coast live oak woodland occurs mostly on north slopes, shaded ravines and canyon bottoms and is characterized by coast live oak (*Quercus agrifolia*), hollyleaf cherry (*Prunus illicifolia*), California bay laurel (*Umbrellularia californica*), coffeberry (*Rhamnus californica*), and poison oak (*Toxicodendron diversilobum*). This coast live oak woodland is a more coastal habitat than valley oak woodland since the coast live oak is more tolerant of salt-laden fog than other oaks and can thus be found nearer the coast (NPS 2000).

Typical wildlife in this habitat includes acorn woodpeckers, plain titmice, northern flickers, cooper's hawks, western screech owls, mule deer, gray foxes, ground squirrels, jackrabbits and several species of bats.

6. Valley Oak Savanna

Valley oak (*Quercus lobata*) savanna reaches the southernmost extension of its range in Malibu Creek State Park and according to the vegetation maps (1983 and 1993) does not extend into the City of Malibu. Nevertheless, a brief description of this habitat is included here because of its sensitivity and adjacency to Malibu. These majestic deciduous trees that reach ages of 400-600 years and a trunk diameter of 6-7 feet, once covered the native grasslands of central and coastal California. Although thousands of acres of valley oak savanna still remain, the grassland understory is vastly changed from its original native needlegrass species to non-native European annual grasses that have crowded out the original native species. Even more ominous is the replacement of a healthy age distribution of trees with stands dominated by old trees suggesting that recruitment of young trees is failing. Since these trees live a very long time, established stands take a long time to die out, and the observations suggest that this habitat is in trouble (NPS 2000).

The understory of these savannas still includes the native purple needlegrass (*Nassella pulchra*) but is now usually dominated by alien grasses such as wild oats (*Avena fatua*) and ripgut brome (*Bromus diandrus*) as well as black mustard (*Brassica nigra*). Typical wildflowers are mariposa lilies (*Calochortus catalinaea*), and coast goldfields (*Lasthenia chrysotoma*). Typical wildlife includes American kestrels, scrub jays, acorn woodpeckers, coyotes and mule deer.

7. Grassland

Grassland communities consist of low herbaceous vegetation that is dominated by grasses but may also harbor native or nonnative forbs and bulbs. Non-native grassland consists of dominant invasive annual grasses that are primarily of Mediterranean origin. The dominant species in this community include common wild oats (*Avena fatua*), slender oat (*Avena barbata*), red brome (*Bromus madritensis* ssp. Rubens), ripgut brome, (*Bromus diandrus*), and herbs such as black mustard (*Brassica nigra*), wild radish (*Raphanus sativus*) and sweet fennel (*Foeniculum vulgare*). Non-native grasslands are located in patches throughout the Malibu/SMM area in previously disturbed areas, cattle pastures, valley bottoms and along roadsides.

Native grassland consists of perennial native needlegrasses: purple needlegrass, (*Nassella pulchra*), foothills needlegrass, (*Nassella lepida*) and nodding needlegrass (*Nassella cernua*). These grasses may occur sympatrically but they do not typically mix tending to segregate based on slope and substrate factors (Sawyer and Keeler-Wolf 1995). Mixed with these native needlegrasses are many non-native annual species similar to non-native grasslands (Biol. Resources Assessment of the Proposed SMM Significant Ecological Area, Nov. 2000). Native perennial grasslands once covered nearly 20 percent of California, but today cover less than 0.1 percent (NPS 2000). The California Natural Diversity Database (CNDDDB) lists purple needlegrass habitat as a community needing priority monitoring and restoration. The CNDDDB considers grasslands with 10 percent or more cover by purple needlegrass to be significant, and that these should be protected as remnants of original California prairie. Patches of this sensitive habitat occur throughout the Malibu/SMM area and can be found intermingled with coastal sage scrub, chaparral and oak woodlands.

8. Coastal Strand

Malibu includes twenty-seven miles coastline, much of which is coastal strand habitat, that is home to many sensitive species of plants and animals. Typical species of plants are sand verbena (*Abronia maritima*), silver beachweed (*Ambrosia chamissonis*), saltbush (*Atriplex* sp.) (two of which are sensitive – *A. coulteri* and *A. parishii*), beach morning glory (*Calystegia soldanella*) and the invasive iceplants hottentot fig (*Mesembranthemum crystallinum*) and the sea fig, (*Carpobrotus edulis*). This habitat is very sensitive because of the salt spray, slow nutrient cycling and desiccating winds that contribute to a desert-like environment. The slow growth rates and shifting substrate make this habitat very slow to recover from disturbance, and because of this and the many listed species there (see CNDDDB listings in Appendix), this habitat should normally be considered ESHA. It is rare and valuable, performing an important role in the ecosystem, and is easily disturbed by human activities and development.

The Malibu/Santa Monica Mountains Ecosystem

The Importance of Large Scale Habitat Connectivity

The importance of large contiguous areas of natural habitat has been emphasized by many conservation biologists (Crooks 2000, Sauvajot et al. 2000, Soule 2000, Beier and Noss 1998, Beier 1996). The natural habitats of the Santa Monica Mountains and Malibu are unique in coastal southern California because they remain interconnected and part of a large, relatively undeveloped and contiguous natural area. However, they are highly threatened by current development pressure, fragmentation and impacts from the surrounding megalopolis (Figs. 3, 4 and 5). The developed part of Malibu represents the coastal extension of this encirclement. About 54% of the undeveloped area resides in private ownership (NPS 2000), and computer simulation studies of the development patterns over the next 25 years predict a serious increase in habitat fragmentation (Swenson and Franklin 2000). This is particularly true where development is concentrated on the coast, much of which is already badly fragmented (e.g. Point Dume and the eastern end of Malibu). On the other hand, if the habitats themselves are protected, the mere proximity of human development may not have as deleterious an effect on adjacent habitats as one might think (Sauvajot and Buechner 1993).

On a statewide scale, a southern California scale, a Santa Monica Mountain scale, and even on a smaller more local scale within the Malibu area, the trend toward habitat fragmentation is clear with only thin connecting corridors and stepping stone fragments remaining between many preserved areas (Figs. 3, 4 and 5). In a recent statewide report, the California Resources Agency (2001) has embraced wildlife corridors and habitat connectivity as the top priority. The report has been supported in a letter to Governor Gray Davis identifying habitat connectivity as our most urgent environmental issue signed by 60 leading environmental scientists (see Appendix). Statewide maps have been constructed showing geographically sensitive habitat linkages (Fig. 4), and the report has been covered in several recent newspaper articles (Christensen 2001, Martin 2001, Schoch 2001). Richard Rayburn, chief of natural resources at the California Department of Parks and Recreation has specifically mentioned the Santa Monica Mountains as particularly sensitive (Schoch 2001). In fact the maps illustrate the isolation of the SMM, surrounded by a large urban matrix with narrow corridors under Highway 101 and Highway 118 connecting them to other inland areas (Figs. 4 and 5) (National Park Service 2000). The habitat corridor maps show only a few tenuous connections remaining between the SMM and the larger habitats in the Sierra Madre, San Gabriel and San Bernardino Mts. to the north (Figs. 4 and 5). Throughout the state the species primarily affected by large scale connectivity are some of our most charismatic including the mountain lion, bobcat, Pacific fisher, wolverine, American marten, badger, coho and chinook salmon, steelhead trout and mule deer (Martin 2001). Of these, the large predators (mountain lion, bobcat, and gray fox) are probably the best

overall indicator species for large-scale terrestrial habitat connectivity in Malibu and the Santa Monica Mountains.

For a variety of reasons and at different scales all of the habitats in the Malibu/SMM area are interconnected and sensitive in one way or another. Whereas some wildlife species move freely between habitats (e.g., mountain lions, golden eagles) requiring connectivity at a large scale, others are confined to only one habitat (e.g., steelhead trout, tidewater gobies, globose dune beetles). Therefore at large spatial scales, habitats and connectivity need to be preserved and enhanced, but at smaller scales individual habitats and locations are sensitive because of particular sensitive species that occupy them. Soule (1991) has described this hierarchy of conservation structure as the 'biospatial hierarchy', and has concluded that all levels from landscapes to genes need to be addressed and considered in conservation strategy. Thus ecosystems are tightly woven webs of interconnected individuals, populations, species, communities and habitats interacting across many different scales in time and space. Their preservation requires an integrated approach that addresses this complexity with large-scale protective measures. In this approach, the priority should be on protecting the landscape on a regional scale because in so doing we will also protect the smaller areas, habitats and species within them. The consensus after of a fifteen-year debate in conservation biology is that large-scale connected habitat areas are to be preferred over similar sized but fragmented areas (Harris 1988, Soule et al 1988, Yahner 1988, Murphy 1989).

Indicator Species for Connectivity at the Landscape Scale

Because they require so much space and have such a stabilizing influence, large terrestrial predators are often considered as good indicators of the general health and habitat connectivity of an ecosystem (Noss 1995, Noss et al 1996). Mountain lions (*Felis concolor*) require about 100 mi² for a male territory and about 60-70 mi² for a female (Beier 1993). While the area of territories probably varies with the quality of the habitat, prey abundance and other conditions, the fact remains that large tracts of undisturbed connected habitat are required to support this species. Recent studies show that of the large mammalian predators, the mountain lion is the most sensitive indicator species to habitat fragmentation followed only by the spotted skunk and the bobcat (Sauvajot et al. 2000, Beier 1996). The mountain lion's continued presence in the Malibu/SMM area despite heavy development pressure is a sensitive indicator that this habitat is at a critical juncture, and it is extremely sensitive to further fragmentation and human encroachment.

Observations of mountain lions in the Malibu/SMM area¹ confirm its presence and support the notion that wildlife can coexist with adjacent development if

¹ Recent sightings of mountain lions in the Malibu area: Temescal Canyon (pers. com., Peter Brown, Facilities Manager, Calvary Church), Topanga Canyon (pers. com., Marti Witter, NPS), Encinal and Trancas Canyons (pers. com., Pat Healy), Stump Ranch Research Center (pers. com., Dr. Robert Wayne, Dept. of Biology, UCLA).

connectivity is provided. Beier (1996) estimated that there were about 20 mountain lions on 2070 km² (800 mi²) of habitat in the Santa Ana Mountains. The mountain lion is the top predator in the Malibu/SMM area, and its presence is a good indicator that large connected habitat areas are still ecologically functional in spite of significant fragmentation. This species may already have been extirpated from the extreme eastern end of the SMM where the San Diego and Hollywood Freeways cross the mountains isolating that area from the rest of the mountains (Radtke 1993). Considering the large area requirements of adult mountain lions, population viability analysis (PVA) suggests that a viable *population* requires an area of 2200 km² (about 850 mi²) in order to achieve a low risk of extinction (Beier 1993). The extent of the Santa Monica Mountains National Recreation Area (SMMNRA) is very roughly 150,000 acres (NPS 2000). This converts into about 235 mi² or not nearly enough for a viable population of mountain lions according to Beier's estimates. So why are these animals still seen throughout the Malibu/SMM area? There are two factors that may allow the mountain lion to persist in the area: (1) they are probably using undeveloped *private* land (this would double the area available), and (2) they are probably moving between the SMM and other large habitat areas (Sierra Madre, San Gabriel and San Bernardino Mts.). As habitat is lost and corridors are closed by development, however, the mountain lion and similar species are likely to disappear, and in fact their presence in the area now seems almost miraculous.

The Stabilizing Influence of Top Predators in Large Ecosystems

Both theory and experiments over 75 years in ecology confirm that large spatially connected habitats tend to have a stabilizing influence on predator-prey systems that would otherwise go extinct without spatial structure (Gause 1934, Gause et al. 1936, Huffaker 1958, Luckinbill 1973, Allen et al. 2001). Beyond simply destabilizing the ecosystem, fragmentation and disturbances can even cause a complete and unexpected change to a new and very different kind of system (Scheffer et al. 2001). Studies of mountain lions in Southern California by Beier have shown that their continued existence here is dependent upon a metapopulation of habitat patches with connectivity (Beier 1993, 1995, 1996). That is, all local subpopulations will go extinct without connectivity to the others. Beier's initial studies were in the Santa Ana Mountains, a small area of about 2070 km² (~800 mi²) isolated by urbanization much like the SMM. The studies indicated that the Santa Ana subpopulation of cougars would go extinct rapidly if not aided by connectivity to the larger metapopulation in the neighboring mountain habitats. The Malibu/SMM subpopulation is part of this system and is in a similar situation since the habitat area there is of similar size (~500 mi²) as well as being surrounded by urban development. Beier's (1995) research shows that dispersing juvenile cougars will use connecting corridors if they are available and that this dispersal will produce a viable metapopulation that will persist. Habitat corridors do provide connectivity and this does enhance survival of species that require large connected habitat areas (Noss 1987, Beier and Noss 1998). Because of this the mountain lion is a good indicator species for large-scale habitat connectivity. Its presence in the Malibu/SMM area is sensitive to further fragmentation that will almost certainly bring about its demise along with

similar species such as the bobcat, gray fox and golden eagle that require large connected habitat areas.

Large, top predators like the mountain lion are often called keystone species because of the stabilizing influence they exert on both smaller predators ('mesopredators') and herbivores lower in the food chain. The classic predator removal example is the deer herd on the Kaibab Plateau north of the Grand Canyon. Following the removal of large predators (781 mountain lions, 30 wolves, 4889 coyotes and 554 bobcats from 1906 to 1931) the deer population increased from 4000 in 1906 to 100,000 in 1924 (Rasmussen 1941). While this example has been criticized as being numerically suspect (Caughley 1970), the controlling influence of top predators on lower level species has been observed repeatedly in many different forms. Not only does removal of predators often produce outbreaks of herbivores, but, conversely, introduction of predators can often bring about herbivore control. This has been observed not only in large mammal systems such as the moose-wolf system on Isle Royale (Mech 1966, Dixon and Cornwell 1970), but is also the mainstay of biological control of non-native insect pests by importation of their natural enemies (DeBach and Schlinger 1965, Huffaker 1971, DeBach 1974, Van Driesche and Bellows 1996). So from a variety of results, top predators are a controlling factor in most natural ecosystems, and serious imbalances can result from their removal whether accidentally or by experimental design (Navarrete and Menge 1996). If fragmentation continues in the Malibu/SMM area to the point that the top predators are eliminated, then the whole foodweb may be destabilized releasing mesopredators to impact native species (Courchamp et al 1999, Edgar 2001) and/or causing herbivore outbreaks (Rasmussen 1941, Caughley 1970).

Landscape Level Ecosystem Function as the Basis for Determining ESHA

A landscape-level analysis of the undeveloped habitats in the Malibu/SMM area indicates that these habitats fit the Coastal Act definition of ESHA.

1. A rare and valuable feature of natural habitats in the Malibu/SMM area is that they are still large and sufficiently connected to form a functional ecosystem that supports a great diversity of species, including keystone predators such as the mountain lion. The presence of this indicator species with its large area requirements verifies that this habitat is still functional on a large spatial scale. From the tenuous connecting corridors within it and to other areas, however, this large-scale function of the habitat appears seriously threatened (Figs. 3, 4 and 5). The occurrence of this habitat in the middle of the huge developed region surrounding it makes it at once extremely valuable and extremely vulnerable. Its current condition might well be categorized as precarious.
2. An important function of the ecosystem in Malibu and the Santa Monica Mountains is to provide refuge for many sensitive and threatened species including large predators. The large predators in this system have an

important role in controlling the abundance of many species lower in the food chain, thus stabilizing the system. Losing them from this ecosystem would invite outbreaks of herbivores (e.g. muledeer) and lower level mesopredators (e.g., feral cats, raccoons, opossums, etc.) that would then impact native prey species lower in the food chain.

3. There is little doubt that the Malibu/SMM area is easily disturbed by human activities and developments. It has already been significantly fragmented. It cannot suffer substantial additional fragmentation and still remain ecologically functional on a large landscape scale. Its ecological health both regionally and locally is precarious and threatened by the huge urban matrix of development surrounding it. Further fragmentation will reduce the Malibu/SMM ecosystem to a series of pathetic remnants of the original habitat whose landscape function will have been lost.

For these reasons, all relatively undisturbed natural habitats in the Malibu area constitute ESHA under the Coastal Act. Therefore, because of their significance within the Santa Monica Mountains ecosystem, all natural habitats in Malibu will be presumed to be ESHA until site-specific analyses demonstrate otherwise. In addition, wetland and riparian habitats, even if disturbed or degraded, are considered ESHA, because of their rarity and important roles in the ecosystem.

Map of Environmentally Sensitive Habitat Areas

The general map of ESHA areas in Malibu are shown in Figure 6. These areas are subject to revision by ground-based observation and must be verified by site-specific biological surveys in particular cases. In general, undeveloped and relatively undisturbed CSS and chaparral have been designated ESHA for the reasons given above. Riparian areas and wetlands have, in most cases, also been designated as ESHA.

The maps were constructed by 1) identifying potential ESHA areas on aerial photographs, 2) field checking of the areas by a staff ecologist and an ecological consultant with much local experience 3) verifying positions on the ground with a global positioning instrument 4) documenting vegetation types with digital photographs. Potential ESHA areas were drawn over the hardcopies of large-scale aerial photographs of the area after extensive ground observation and photography. The ESHA polygons were then entered into the GIS computer database.

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Malibu Ecological Findings Appendix

1. List from the CDFG California Natural Diversity Data Base (CNDDDB) for coastal and adjacent inland quadrangles for the Malibu area (Quads: Camarillo, Newberry Park, Thousand Oaks, Calabasas, Canonga Park, Beverly Hills, Topanga, Malibu Beach, Point Mugu, Triunfo Pass and Point Dume).
2. Letter from the National Park Service (Dr. Marti Witter) supporting the determination of coastal sage scrub in the Malibu/SMM area as environmentally sensitive habitat.
3. Letter from 60 environmental scientists to Governor Gray Davis supporting habitat connectivity as the most urgent priority for the California Resources Agency.
4. Figures 1-6.