CALIFORNIA COASTAL COMMISSION
45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5200
FAX (415) 904-5400

FINAL

2010 Updated Assessment and Strategy for the California Coastal Management Program (CCMP)

Performed Under Section 309
(the Coastal Zone Enhancement Grants Program)
of the
Coastal Zone Management Act

Includes Response to Public Comments

(Assessment of 2006-2010, Strategy for FY 2011-2015)

This is an update to the 2006 Assessment and Strategy of the California Coastal Management Program. It provides a description and assessment of coastal resources and program needs in nine enhancement areas, according to guidance provided by the federal Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration. The Assessment includes achievements made under the current Section 309 grant and will serve as the basis for developing a strategy to address priority program needs in one or more enhancement areas during the next five year federal grant cycle.

PREFACE

California's burgeoning population and popularity as a tourist destination has created extraordinary development pressures along the state's scenic coastline. Through the funding provided by the Enhancement Grants Program, the California Coastal Commission has greatly enhanced its ability to analyze and manage coastal resources. Coastal Commission studies and program changes funded by Enhancement Grants over the years have documented:

- An insufficient number of locations where the public can get to the coast from Highway 1;
- A diminution of affordable overnight accommodations along the coast for the general visiting public;
- Seawalls blocking sandy and cobble beach areas that could be used by the public;
- Harm to coastal wildlife and vegetation caused by development along the coast;
- Polluted runoff resulting in beach closures and damage to marine life;
- A degradation of water quality and the health of the wildlife and vegetation of coastal streams and wetlands;
- Continued threats to the remaining 9% of California's wetlands by development encroachments; and,
- Inadequate roads and insufficient water supply to serve planned development and serve California's coastal visitors.

The Enhancement Grants Program has been an important asset to coastal management in California, providing crucial funding for not only identifying these concerns, but also developing solutions. The Commission remains dedicated to its mission of protecting the coast. This Assessment and Strategy has allowed the Commission to reflect upon its accomplishments, identify the state's coastal management needs, and create an updated 5-year strategy to address these needs.

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INTRODUCTION

The Updated Assessment and Strategy examines progress made from 2006 through 2010 in achieving the coastal zone "enhancement objectives" specified in Section 309 of the Coastal Zone Management Act (CZMA) of 1990, as amended. It assesses the current ability of the California Coastal Management Program (CCMP) to make improvements in the specified enhancement areas. This document considers the portions of the CCMP administered by California Coastal Commission (Coastal Commission or the Commission) and applies only to the Pacific coast elements. The Bay Conservation and Development Commission (BCDC), which administers CCMP activities within San Francisco Bay, has its own Assessment and Strategy document. Both the Commission and BCDC consider work conducted by the State Coastal Conservancy (SCC) in their respective updates.

Section 309 of the CZMA established a grant program to encourage states to improve their coastal management programs in nine enhancement areas: 1) public access, 2) coastal hazards, 3) ocean resources, 4) wetlands, 5) cumulative and secondary impacts, 6) marine debris, 7) special area management planning, 8) energy and governmental facility siting, and, 9) aquaculture. Within each area, states are required to update their last assessment of coastal resources and to document the coastal management program's ability to manage those resources. The assessment identifies major gaps the state program faces in addressing the programmatic goal of each enhancement area. As documented in this 2010 Assessment update, the Commission has identified five areas as high priority for program improvements. The Commission will update its Strategy for fiscal years 2011 to 2016 to guide future application for, and use of, 309 Enhancement Grant funds.

2010 CCMP ASSESSMENT

High Priority Areas for Improvements

1) Public Access
2) Coastal Hazards
3) Wetlands
4) Cumulative & Secondary Impacts
5) Special Area Management Planning

The Assessment and Strategy is organized according to July 2009 guidelines provided by the Office of Ocean and Coastal Resource Management (OCRM), part of the National Oceanic and Atmospheric Administration (NOAA). The Assessment section begins by summarizing work performed to enhance the coastal management program since the 2006 report. Next, the enhancement area analysis documents the status of the CCMP in each area, discusses program needs, and establishes a priority for improvement of that area of the program. This document not only provides an accounting of the program achievements made since the 2006 Assessment and Strategy, it also gives the public an opportunity to comment on future needs of the state coastal program within the nine specified enhancement areas. The final updated Assessment and Strategy will be the basis for targeting priority improvements to the CCMP in the future. The Assessment conforms to the required format and additional supporting documentation is provided in Appendices.

BACKGROUND: SECTION 309 ENHANCEMENT PROGRAM

The Commission has participated in the 309 Enhancement Grant Program since its inception in 1992. At that time, three areas were identified as high priorities for improving the program: wetlands, coastal hazards, and cumulative and secondary impacts of development. The Coastal

Commission's current enhancement program, updated in 1997, 2001 and 2006, added public access and special area management planning, respectively, to that list of high priority areas.

The need to update local coastal programs (LCPs) continues to be of paramount significance. LCPs are the primary means through which the Coastal Act policies of the California coastal management program (CCMP) are implemented. Certified LCPs that have not (or not recently) been revised are becoming even more out of date, and the state's fiscal crises have led to cutbacks in planning activities. Given limited resources it becomes important to develop guidance to improve the LCPs and to develop more efficient ways to share best practices, including greater use of technology. The need is growing as well to evaluate LCP and permit implementation in order to improve compliance with regulatory provisions. It is of growing importance that the Commission enhance the capacity of the CCMP including the LCPs to address adaptation to climate change across all priority issue areas. Adaptation issues can include, for example, how tidal wetlands or shoreline access remain viable as sea level rises, how access to the coast can be maximized as transportation planning aimed at reducing single-occupancy vehicle travel advances, how habitat resource areas can be protected, and how oceanfront development is built to withstand winter storms. Therefore, the 309 Strategy focuses on (1) Enhancing the LCP Program Implementation; (2) Improving Condition Compliance; and (3) Integrating Climate Adaptation Strategies into Planning, Permitting and LCPs. Such improvements will advance management of all five high priority areas identified by the Commission.

DEVELOPING THE ASSESSMENT AND STRATEGY

The Assessment was developed using OCRM's guidance document and framework for reporting on the nine enhancement areas. Commission staff used measures developed under the Coastal Zone Management Act Performance Measurement System (CZMPMS) as the basis for assessing the work done of the 2006 – 2010 period for those questions that relate to topics covered under the CZMAPMS. Staff conducted additional research of past Commission actions, interviewed various district and other staff members on activities and outcomes, worked with the Mapping Unit and Public Access Staff, and contacted our partner agencies to answer other questions.

To develop the Strategy, Commission used the high priority enhancement areas identified through the Assessment and evaluated these areas as they related to on-going high priority needs of the Agency that have been previously identified. These included the areas of LCP updates and improved LCP program implementation, addressing issues with permit condition compliance and better integration of climate change – both in planning and permitting. Commission staff also considered the recommendations of the latest Section 312 evaluation completed in March to help guide development of the strategy and confirm desired outcomes of the next five-year 309 Strategy. The Draft Strategy, including potential projects and work program ideas, was developed and vetted under the direction of the Commission's Senior Management Team.

Public review is a key piece of developing the Draft Assessment and Strategy and allows the public to see the results of the Commission's program enhancement efforts from 2006 through 2010. To that end, the Draft Assessment and Strategy document was available for public on the Commission's website. There was also an opportunity to provide public comment at the

Commission's July hearing where the document was presented to the Commissioners. The public comment period ran from June 22 until July 23, 2010.

HIGHLIGHTS OF PROGRAM ENHANCEMENTS 2006-2010

Below is a summary of the significant program changes and improvements that have occurred in the past five years using Section 309 grant funds under the adopted 2006 Strategy. There is significant overlap among the five high priority enhancement areas (cumulative impacts of development, coastal hazards, public access, special area management planning, and wetlands protection).

Cumulative Impacts, Coastal Hazards, Public Access & Wetland Protection

- A data base and monitoring system were developed to track key indicators of changes to public access and coastal resources.
- A GIS has been substantially expanded with a focus on mapping key regulatory boundaries (coastal zone boundary, appeal jurisdiction) critical to regulatory and planning analyses.

Cumulative Impacts, Public Access & Wetland Protection

- The Commission staff negotiated acceptance by managing entities of 163 offers to dedicate (OTDs) open space easements to prevent the offers from expiring, ensuring the permanent protection of at least 1,000 acres of conservation and open space lands and associated coastal resources.

Cumulative Impacts & Public Access

- The Commission staff negotiated acceptance by managing entities of 205 offers to dedicate public accessways or access easements to prevent the offers from expiring and to increase public access to the coast. The 309 funded Indicator program and the 309 funded GIS/ARC IMS program both enhance easement monitoring.
- The Commission conducted a workshop on potential impacts of condominium hotels and other interval ownership developments, such as fractional interest projects or timeshares on the public's access to affordable overnight accommodations. The Commission continues to use the workshop information in review of applicable coastal permits and LCP Amendments and in requiring mitigation for impacts of development.
- The Commission staff is preparing policy and procedural guidance on addressing ways to protect and provide access to affordable overnight accommodations in planning and regulatory actions.
- New tools were developed to improve information sharing among Commission analysts including compilation of key Commission actions on in lieu fees and a monthly report on significant Commission decisions.

Public Access

- The Commission published volumes 2 and 3 of the 4-volume regional guide series "Experience the California Coast." Volume 2 covers the South Central California region, and includes Monterey, San Luis Obispo, Santa Barbara and Ventura Counties.

Volume 3 covers Southern California, and includes Los Angeles, Orange and San Diego Counties. (Volume 1 for the north coast region - Del Norte to Marin County - was published in 2005, as reported in the previous 2006 assessment.) These regional access and resource guides include information on California's coastal accessways, coastal parks, and natural and historical coastal resources. Information contained in the Guides is linked to Commission data bases and GIS mapping for use in its planning, regulatory and monitoring work.

Special Area Management Planning, Public Access, Coastal Hazards & Wetland Protection

- Staff completed an online Guide: *Updating the LCP-- A Guide for Local Planners. (LCP Update Guide - Volume I 2007).* This provides local and Commission staff with guidance for revising LCPs to reflect new information and changed conditions related to Coastal Act policy issue areas. A companion *Guide to Updating LCP Implementing Procedures (Volume II, in progress*) will contain guidance on updating the procedural components of the coastal permit and appeal regulatory program to carry out LCP policies.

Wetlands

- The Commission held a public workshop on the definition and delineation of wetlands in the coastal zone. The workshop material was subsequently used in training sessions for coastal staff and other professionals who address wetlands in the regulatory arena and remains available on line for reference.
- Information was compiled on the existing wetland buffer requirements in the LCPs of various coastal jurisdictions. This is used by coastal analysts in the review of coastal permits and LCPs to enhance wetland protection.

1. WETLANDS

SECTION 309 ENHANCEMENT OBJECTIVE

Protection, restoration, or enhancement of the existing coastal wetlands base, or creation of new coastal wetlands

RESOURCE CHARACTERIZATION

Purpose: To determine the extent to which problems and opportunities exist with regard to the enhancement objective.

1. Please indicate the extent, status, and trends of wetlands in the coastal zone using the following table:

Table 1.1, presents data for the coastal zone; where coastal zone data are not available (e.g., historic extent) regional or statewide data may be discussed following Table 1.1 or in the Appendices. Acreages lost or gained are based on regulatory actions carried out by the Coastal Commission consistent with Coastal Act policies and regulations. Additional wetland acreage restored or acquired through other state, non-CZM activities are discussed in the "Management Characterization - Wetland Restoration or Enhancement Program" section, or in the Appendices.

Table 1.1. Extent, Status, and Trends of Wetlands in the Coastal Zone

Wetlands type	Estimated historic extent (acres)	Current extent (acres)	Trends in acres lost since 2006 (Net acres gained & lost)[b]	Acres gained through voluntary mechanisms since 2006[c]	Acres gained through mitigation since 2006[d]	Year and source(s) of Data[e]
Tidal (Great Lakes) vegetated	Data not available.	Approximately 144,719 acres in the coastal zone	Approximately 598 acres of tidal wetlands gained (result of 214 acres created plus 446 acres restored minus 62 acres lost) (undifferentiated between vegetated and non-vegetated)	Data not available.	Approximately 660 acres.	Commission regulatory actions FY0607 through FY0809

Wetlands type	Estimated historic extent (acres)	Current extent (acres)	Trends in acres lost since 2006 (Net acres gained & lost)[b]	Acres gained through voluntary mechanisms since 2006[c]	Acres gained through mitigation since 2006[d]	Year and source(s) of Data[e]
Tidal (Great Lakes) non-vegetated	NA	NA	See above	NA	NA	NA
Non-tidal/ freshwater[1]	Data not available.	Data not available.	Approximately 72 acres of non-tidal wetlands gained or restored	Data not available.	Approximately 72 acres	Commission regulatory actions FY0607 through FY0809
Other - Riparian Habitat[2]	Data not available.	Data not available.	Approximately 283 acres of riparian habitat gained or restored	Data not available.	Approximately 283 acres	Commission regulatory actions FY0607 through FY0809

[b] Trends since 2006: These numbers reflect only estimates from CCC regulatory actions within the Commission's original and appeal jurisdiction. They do not include acreage from most locally issued coastal development permits issued under certified Local Coastal Program jurisdictions, unless that project was appealed and heard before the CCC. Some regulatory actions were conditioned to require further site-specific habitat mapping or assessment before total acreage of habitat lost or gained could be finalized. As a result, the numbers reported, while based on best available information, may under-represent the final acreages.

[c] Acres Gained (Voluntary): The Commission has not had the resources to develop a system that differentiates and tracks voluntary and required habitat restoration/creation, thus this data is not available.

[d] Acres Gained (Mitigation) The numbers currently count wetland acres restored or created that were proposed as part of a coastal development permit (CDP) application as well as those required by CDP conditions to mitigate a project's potential impacts. Whether habitat restoration/creation is voluntary or required is not differentiated during the tracking process.

[e] Data Source: Commission regulatory actions (FY0607 through FY0809) from Commission public hearing agendas

[f] Non-tidal wetland habitat includes freshwater wetlands and vernal pools.

[g] Riparian habitat includes both aquatic and terrestrial riparian habitats.

2. If information is not available to fill in the above table, provide a qualitative description of information requested, including wetlands status and trends, based on the best available information.

[1] Non-tidal wetland habitat includes freshwater wetlands and vernal pools.
[2] Riparian habitat includes both aquatic and terrestrial riparian habitats.

Estimated Historic Wetland Extent

While historic wetland acreage numbers are not available for the coastal zone, previous published reports have cited that approximately 91% of California's wetland acreage present before European settlement has been lost.[3]

Data available through the National Wetlands Inventory do not include historic data layers. Work is continuing in various regions of the state to estimate historic extent of wetlands as part of a statewide effort, not confined to the coastal zone. However, when such data layers are completed, it may be possible to use them in combination with a coastal zone boundary data layer to arrive at an historic extent of wetlands within the jurisdictional coastal zone. In the meantime, this highlights the need for further work to complete evaluation of historic wetland extents within the coastal zone.

Current Wetland Extent

This number reflects current extent of all wetlands within the coastal zone, based on National Wetland Inventory GIS data layer, clipped to coastal zone boundary. Work has not been carried out to differentiate vegetated vs. non-vegetated wetlands, nor freshwater or riparian wetlands from this data. Table 1.2 summarizes the NWI mapped wetland types located within the mainland coastal zone boundary (CZB). The acres provided do not include the Farallones or Channel Islands, or deepwater offshore area. As shown in Table 1.2 below, the total amount of wetlands in the coastal zone mainland is 144,719 acres. This is about 4% of the total 3,570,220 acreage of NWI wetlands mapped throughout the state of California[4]

Table 1.2. Current Extent of National Wetland Inventory (NWI) Wetland Habitats within the California Coastal Zone Boundary (CZB)

NWI Wetland Type	Acres in CZB
Estuarine and Marine Deepwater	33,541
Estuarine and Marine Wetland	40,633
Freshwater Emergent Wetland	33,589
Freshwater Forested/Shrub Wetland	18,873
Freshwater Pond	2,677
Lake	4,701
Other	372
Riverine	10,333
Grand Total	**144,719**

Most wetland assessment is being carried out on a statewide basis rather than just within the coastal zone. These efforts are directed by other non-CZMA agencies, but with ongoing Commission staff participation. However to date the statewide efforts are limited in the ability to assess only coastal zone wetland conditions and changes.

[3] Dahl, T.E. 1990. Wetland losses in the United States 1780's to 1980's. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.(www.fws.gov/wetlands/_.../WetlandsLossesUS1780sto1980s.pdf)

[4] Based on summary of wetland habitat acreage (which by the NWI classification includes sub-tidal or open water, intertidal or flats, and vegetated wetland habitats) courtesy of T. Dahl, MDB, September 2008.

Perennially Tidal Estuarine Wetland Assessment

In 2007 the California Natural Resources Agency and regional partners initiated a collaborative statewide wetland assessment effort for tidal estuaries. This was conducted as part of the Southern California Coastal Water Research Project's (SCCWRP's) California Wetland Demonstration Program Pilot (final draft report dated December 2008). [5]

The effort developed and implemented a robust assessment program that established condition assessments statewide and for four regions based on the eco-regional boundaries developed by Hickman (1993). The four regions include: (1) North Coast - extending north-south from the northern limits of the Russian River watershed to the Oregon State Border; (2) Central Coast - extending south from the northern limits of the Russian River Watershed to Point Conception; (3) the SF Estuary (extending inland from the Golden Gate to the historical limits of the tides before European contact in the region); and (4) South Coast (extending south from Point Conception to the Mexico international border.

However, the use of the data from the effort to report on total wetland habitat in the coastal zone is limited because: (1) some of the "perennially tidal estuarine wetlands" mapped extend beyond the coastal zone; and (2) most of the "seasonally tidal estuarine wetlands," or "coastal lagoons" acreage has not yet been determined Without the acreages for the roughly 500 coastal lagoons, the acreage of perennial tidal estuarine wetlands only accounts for a portion of the current total wetland habitat within the coastal zone.

Keeping in mind these limitations on the data, the SCCWRP Pilot Program reports that there are 44,456 acres of perennially tidal estuarine wetlands (or 12% of the 380,860 acres of subtidal and intertidal habitat that exists in California).. And, the SCCWRP assessment reports that the North Coast, Central Coast and South Coast regions together include approximately 11,114 acres (or 25%) of the perennially tidal estuarine wetlands in the state, with the Central Coast (4,490 acres) and South Coast regions (4,153 acres) having roughly 3 times more perennially tidal estuarine wetland area than the North Coast (1,486 acres).[6] The SCCWRP San Francisco Bay region accounts for the other 33,342 acres (or 75%) of state-wide perennially tidal estuarine wetlands.

In addition, SCCWRP reports that the perennially tidal estuaries are dominated by subtidal habitat in all regions, and to a much greater extent in SF Estuary. In the North Coast region, the area of mudflat is about 6 times that of estuarine marsh; in combination with other intertidal habitats (e.g., intertidal aquatic beds), the perennially tidal estuarine marsh is approximately 10% of the total intertidal estuarine habitat. In both South Coast and Central Coast, estuarine marsh represents 54% of total intertidal habitat. More information on this distribution is included in Appendix B, pg 4.

[5] California's Wetland Demonstration Program Pilot: A Final Draft Project Report for Review by the California Resources Agency; Southern California Coastal Water Research Project (SCCWRP); Technical Report 572; December 2008.
[6] Ibid. Pg 57.

3. Provide a brief explanation for trends.

Since 2005 the Commission has significantly increased and protected wetland habitat through its regulatory program. The Commission's regulatory actions on coastal development permits (CDPs) ,federal consistency review and enforcement actions, will result in the gain or restoration of over 600 acres of tidal wetlands, 72 acres of freshwater, and 283 acres of riparian habitat in the coastal zone (as shown in Table 1.1). The Commission staff also continues to participate in regional and statewide efforts to more accurately assess and map wetland habitat statewide. However, until these regional and statewide mapping efforts are completed, it remains difficult to comprehensively assess changes to wetlands specifically in the coastal zone.

Over the last 30 years there has been relatively little loss of wetlands within the California coastal zone because of the extremely protective nature of Section 30233 of the Coastal Act, which went into effect in 1976. Essentially all impacts to wetlands since 2005 have been small in scope, have been mitigated, and are a result of essential public use projects, such as seismic retrofits of bridges, double-tracking for railroads, and repair of utility lines. Wetland restoration and enhancement projects have focused on restoring historic wetland areas by removing or breaching levees, restoring and/or improving hydrologic function by expanding tidal channels and tidal channel networks, and conducting native plant restoration to enhance fish and wildlife habitat.

There have been several large and ecologically significant restoration projects initiated in recent years. Some of the more recent wetland restoration projects include the following:

- In fall 2006, construction began on the **restoration of 150 acres of tidal habitat in the San Dieguito Lagoon**, as partial mitigation of the San Onofre Nuclear Generating Station (SONGS). Most of the construction, which entailed the movement of some 2 million cubic yards of earth, was completed in 2009. There has been a very rapid positive response of bird and fish populations to the restoration. Under the terms of the CDP, SCE is legally responsible for the ecological success of the project until at least 2050 and will fund various levels of independent monitoring until that time.
- Planning is continuing for significant tidal restoration in the **San Elijo Lagoon** that is expected to entail construction of a new tidal inlet and considerable excavation of sediments that have degraded tidal habitats. Several hundred acres of habitat will be affected by the restoration. The effort is being conducted through an interagency work group that includes Commission staff. Initial design work and hydrological modeling for the restoration have begun.
- Interstate Highway 5 and the Los Angeles to San Diego (LOSSAN) Rail Corridor cross six major coastal lagoons or estuaries in north San Diego County. Significant improvements to both corridors, including double-tracking the railway and the addition of highway traffic lanes, are currently being planned. Commission staff is working closely with the Department of Transportation and the San Diego Association of Governments to ensure that Coastal Act requirements are addressed in these plans. Part of this work includes a full inventory of opportunities for protecting and improving all of the potentially affected wetlands. A Public Works Plan (PWP) is being developed for the Commission's review and is expected to include large restoration components for several southern California coastal wetlands.

- The **Wood Creek Tidal Marsh Enhancement Project** in Humboldt County, approved in October 2008, involves restoring tidal hydrology and brackish marsh habitat across 23 to 29 acres of diked former tidelands (seasonal freshwater wetlands) and enhancing 4,500 square feet (sf) of juvenile salmonid summer rearing habitat along Wood Creek.
- In Huntington Beach, a **Huntington Beach Wetlands Conservancy project** approved in August 2008 will restore approximately 130 acres of wetland plus 1.7 acres of subtidal pool habitat. This includes 24 acres at Talbert Marsh, 67 acres at Brookhurst Marsh and 40 acres at Magnolia Marsh.,
- In June of 2009, the Commission approved a riparian restoration project proposed by the City of Arcata (in Humboldt County) to restore an approximately 1,934-ft long meandering channel of Fickle Hill Creek that had been historically dredged, straightened and bermed, significantly changing its original configuration. The project will plant approximately 2.5 acres of riparian vegetation along the length of the newly reconfigured channel and will improve instream aquatic habitat by adding several large log and boulder structures for fish cover.

4. Identify ongoing or planned efforts to develop monitoring programs or quantitative measures for this enhancement area.

Measuring change in wetland extent and function is a significant challenge for the CCMP. Over the past 5 years, the Commission has taken additional steps to improve wetland change assessment. The Commission began tracking the Commission's regulatory actions that include wetland restoration, enhancement and protection, and is participating in statewide and regional wetland monitoring programs directed by other non CZMA agencies to (1) document current extents, (2) assess the ecologic and hydrologic condition of existing wetlands and wetland restoration/creation projects, and (3) design and implement a statewide wetland tracking system that allows multiple agencies to access and utilize data for various regulatory and scientific purposes. There are nevertheless major constraints to accurately quantifying wetland change in the coastal cone.

Tracking Regulatory Actions

In July 2006, the Commission began tracking wetland acreage created/enhanced and protected specifically within the coastal zone as a result of Commission regulatory actions as required by the national Coastal Zone Management Act Performance Measurement System (CZMAPMS). Data collected on wetland habitats (along with information collected on beach/dune, nearshore submerged and other sensitive terrestrial habitats) can be used to assist analysts in ongoing regulatory and plan review, condition compliance, and enforcement. However, the data remain incomplete and additional work is needed to improve the methods and extent of data collected to more accurately measure changes to habitats.

Central Coast Wetlands Group

In 2001, with funding assistance from the EPA, the Central Coast Wetlands Group (CCWG) was established as a partnership of agencies, scientists, non-governmental and private organizations working to preserve and restore Central Coast Wetlands and is led by Commission's Water Quality Unit staff. The CCWG is working to build the necessary monitoring programs to measure achievement of the state and federal "No Net Loss" policy for wetlands.

The State Wetland Monitoring Program

As noted previously, the Commission's Water Quality Unit staff is participating in the statewide wetland monitoring program, being implemented with other state and regional partners (including SWRCB, SCCWRP and SFEI) and supported through USEPA. The first phase of the program was initiated in 2005 and work continued to demonstrate how California can implement EPA's three-tiered assessment framework with a variety of wetland assessment tools. The three tiered monitoring process defined by USEPA include: (1) inventory; (2) rapid assessment; and (3) intensive study of specific resources. This effort developed several technical assistance documents and published the 2009 State of the State Wetland Report, which included a suggested framework for measuring performance of the California's "Wetland no-net-loss" policy. The Program is continuing to develop better wetland assessment and monitoring tools including the California Rapid Assessment Method (CRAM) and the web based Wetland Tracker GIS. These efforts are not yet fully implemented in the coastal zone, although the CRAM assessment tool has been used to assess at least 90 wetlands within the coastal zone and the California Wetland Tracker includes data on 144 Central Coast projects, and 36 South Coast projects.

Commission staff continues to work with state and regional partners toward the implementation of these toolkits to monitor all wetlands and riparian habitat projects being conducted through various state programs and private mitigation efforts. However, further implementation statewide is uncertain because of limited resources, legal and other constraints, such as limited understanding of the tools. As a result, adoption of these standard tools is uncertain and more education on these programs is needed. Application of these tools in the Commission's regulatory and planning programs has yet to be determined. More information on this program and the related programs of the CRAM and Wetland Tracker GIS is provided in Appendix B, pgs 5-6.

5. Use the following table to characterize direct and indirect threats to coastal wetlands, both natural and man-made. If necessary, additional narrative can be provided below to describe threats.

Table 1.3. Direct and Indirect Threats to Coastal Wetlands

Type of threat	Severity of impacts(H,M,L)	Geographic scope of impacts(extensive or limited)	Irreversibility (H,M,L)
Development/Fill	L-M[a]	Extensive	H
Alteration of hydrology	M	Extensive	M
Erosion	M-L	Extensive	M
Pollution	M	Extensive	M
Channelization	L	Limited	H
Nuisance or exotic species	M-H	Extensive	H
Freshwater input	M	Extensive	M

Sea level rise/Great Lake level change	H	Extensive	H
Other -Sedimentation	M-H	Extensive	H

[a] – Impacts to wetlands from fill would be considered very severe except for the application of strong Coastal Act policies.

6. (CM) Indicate whether the Coastal Management Program (CMP) has a mapped inventory of the following habitat types in the coastal zone and the approximate time since it was developed or significantly updated

Table 1.4. Habitat Inventory Maps

Habitat type	CMP has mapped inventory (Y or N)	Date completed or substantially updated
Tidal Wetlands	Y	In 2009, the U.S. Fish and Wildlife Service (USFWS) completed the National Wetlands Inventory (NWI) mapping for all of the U.S. Geological Survey topographic quadrangles in the coastal zone.
Beach and Dune	No Mapped Inventories.	NA
Nearshore	Y	**Substrate Habitat Mapping –** 2004. Based on data from Greene, Kvitek, Bizzarro, et al (Fisheries Habitat Characterization of the California Continental Margin, published by California Sea Grant College Program, 2004). Data originally compiled by Greene, et al., using best data available at the time (geophysical database assembled by industry between 1960's and 1980's for hydrocarbon exploration and newer data sets collected in the early 2000s for specific areas of the coast). There are also, ongoing efforts to map submerged habitats using high resolution multi-beam bathymetry, sidescan, Lidar, and video for characterizing habitat based on substrate characteristics (e.g., hardness, rugosity, relief). This work is being carried out by a U.S. Geological Survey multi-agency group (See Chapter 7, "Ocean Resources")
		Kelp/Seagrass Habitat Inventory – Annually. Seagrass data based on National Oceanic and Atmospheric Administration/National Marine Fisheries Service (NOAA/NMFS) and California Department of Fish and Game (CDFG) marine map.org; Kelp mapping based on annual habitat surveys carried out by CDFG Natural resources mapping.
		West Coast Seamounts - 2008. Based on Pacific Coast Marine Habitat Program (PCMHP) map of seamounts. 2008 GIS data layer.
		Artificial Reefs – 2001. Based on 2001 CDFG point shapefile of artificial reef locations and extents from report text.

7. (CM) Use the table below to report information related to coastal habitat restoration and protection. The purpose of this contextual measure is to describe trends in the restoration and protection of coastal habitat conducted by the State using non-CZM funds or non Coastal and Estuarine Land Conservation Program (CELCP) funds. If data is not available to report for this contextual measure, please describe below actions the CMP is taking to develop a mechanism to collect the requested data.

Table 1.5. Cumulative acres of habitat restored or protected - 2004 - 2010.

Contextual measure	Cumulative acres for 2004-2010
Number of acres of coastal habitat restored using non-CZM or non-Coastal and Estuarine Land Conservation Program (CELCP) funds	256,120 acres coastal habitat + 10,304 acres in SF Bay area[a]
Number of acres of coastal habitat protected through acquisition or easement using non-CZM or non-CELCP funds	158,766 acres coastal habitat protected[b]

[a] - Based on best available information for the period FY0304 through FY0708. (Data for a and b provided by the California State Coastal Conservancy.) Project types include: Fish habitat/passage; Habitat Restoration or Enhancement; Oceans; Watersheds; and Wetlands.

[b] - Based on best available information for period FY0304 through FY0708 from the California State Coastal Conservancy. Includes 66,419 acres of habitat protected by fee simple purchase. Acreages may also include agricultural easements, which may not be exclusively intended for habitat restoration, but can also serve to protect habitats.

Wetland restoration efforts that result directly from the California CMP are generally carried out either as a result of regulatory requirements of Coastal Commission approvals, enforcement actions and federal consistency reviews, or as a result of State Coastal Conservancy grants for projects that include habitat restoration (such projects may also include public access improvements, and other public benefits) – many of which also require permits from the Coastal Commission. Restoration efforts resulting from Commission actions are already reported in the Resource Characterization section 1, above. Restoration efforts resulting from the State Coastal Conservancy efforts are reported in the "Management Characterization – Wetland Restoration or Enhancement Programs," below.

The Commission lacks sufficient resources and efficient means to systematically and annually collect all wetland restoration acres resulting from outcomes of State Coastal Conservancy grants and other non-CZMA programs such as the State Department of Fish and Game and Boating and Waterways. Information on other statewide restoration projects conducted by other organizations such as the San Francisco Bay Joint Venture, the Pacific Coast Joint Venture, the Southern California Wetland Recovery Project, the Central Coast Wetlands Group, and a newly established group of wetland managers working on the north coast is also difficult to collect. As a result the Commission is carrying out steps to collect best available information from the SCC project tracking database for the period 2004 to 2010 (as reported above) and information from available published reports. It is hoped that completion of the State Wetland Monitoring Program will provide additional context information for wetland status statewide.

Commission staff has been directly involved in restoration activities being undertaken in the Upper Newport Bay through the Community Based Restoration and Education Program (CBREP), described below, under Management Characterization Section 2.

MANAGEMENT CHARACTERIZATION

Purpose: To determine the effectiveness of management efforts to address those problems described in the above section for the enhancement objective.

1. For each of the wetland management categories below, indicate if the approach is employed by the state or territory and if significant changes have occurred since the last assessment:

Table 1.7. Management Categories - Wetlands

Management categories	Employed by state/territory (Y or N)	Significant changes since last assessment (Y or N)
Wetland regulatory program implementation, policies, and standards	Y	Y
Wetland protection policies and standards	Y	Y
Wetland assessment methodologies (health, function, extent)	Y	Y
Wetland restoration or enhancement programs	Y	Y
Wetland policies related public infrastructure funding	Y	N
Wetland mitigation programs and policies	Y	Y
Wetland creation programs and policies	Y	Y
Wetland acquisition programs	Y	Y
Wetland mapping, GIS, and tracking systems	Y	Y
Special Area Management Plans	Y	Y
Wetland research and monitoring	Y	Y
Wetland education and outreach	Y	Y
Other (please specify)		

2. For management categories with significant changes since the last assessment provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference rather than duplicate the information.

(a) Characterize significant changes since the last assessment;
(b) Specify if it was a 309 or other CZM-driven change (specify funding source) or if it was driven by non-CZM efforts; and
(c) Characterize the outcomes and effectiveness of the changes.

Wetland Regulatory Program Implementation, Policies and Standards

(a) Significant changes since last assessment: The Commission's core regulatory and planning program continued with only the one minor change as indicated in the Wetland Protection Policies and Standards section, below. Since mid-2006 the Commission has acted on at least 95 regulatory actions (e.g., coastal development permits (CDPs), appeals of local actions, and enforcement actions) involving wetlands.

In order to assist regulatory staff in evaluating wetland buffers, the Commission's regulatory and biological staff prepared a compendium of statewide buffer and mitigation ratio policies and trained regulatory staff in the results (see Chapter 5 "Cumulative Impacts" Management Characterization section).

Additionally, some aspects of some tidal wetlands became regulated through the Marine Life Protection Program, administered by the Department of Fish and Game (see Chapter 7, "Ocean Resources, below).

(b) Funding Source: The Commission's regulatory program is funded in part with 306 federal funds, and other state CZM and non-CZM monies.

(c) Outcomes & Effectiveness: See "Resource Characterization" above for amount of wetlands that have been protected and enhanced through the Commissions program. As discussed elsewhere in this section the Commission is currently able to measure wetland change in a limited way. More resources, tools and capacity are needed both in the coastal zone and in the state as a whole to ensure complete and systematic monitoring of ecosystem protection and enhancement over time

Wetland Protection Policies and Standards

(a) Significant changes since last assessment: In 2006, Coastal Act Section 30233 regarding dredging was amended to, among other things, delete provision 30233(a)(3) which allowed dredging in order to expand boating facilities in degraded wetlands. This was done through approval of State Senate Bill SB1843 (Committee on Natural Resources and Water) Chapter 294. The bill also added Section 30601.3, which authorizes the Commission to process a consolidated coastal development permit, when requested by the local government and the applicant and approved by the Executive Director, for projects that would otherwise require CDPs from both the Commission and a local government with a certified LCP.

(b) Funding Source: These changes were not funded by CZMA funds.

(c) Outcomes & Effectiveness: These two changes to the Coastal Act provide for (1) greater resource protection of wetland habitats, and (2) greater overall review of development projects that may impact sensitive habitats. It is too early to assess their long-term effectiveness.

Wetland Assessment Methodologies (Health, Function, Extent)

(a) Significant changes since last assessment: The major change is the significant progress in developing the **California Rapid Assessment Method (CRAM),** as discussed in the Resource Characterization section and in Appendix B, pg 5, and which is being directed by non CCMP agencies. A draft "Application of CRAM for Wetland Regulatory and Management Programs Framework to Support Development of Agency-specific Guidance" has been prepared by the State Wetland Monitoring Program and is awaiting further verification and validation procedures (described in Collins et al. 2009[7]).

(b) Funding Source: driven by non-CZM funded efforts, including USEPA grants.

(c) Outcomes & Effectiveness: CRAM is not in use in the CCMP but is in limited use by others to assess the state's wetland resources. This information will be available to the Commission regulatory and planning program. It is too early to judge CRAM's effectiveness.

Wetland Restoration or Enhancement Programs

1. Community Based Restoration and Education Program

(a) Significant changes since last assessment: In addition to facilitating wetland protection enhancement and restoration through its planning and regulatory programs, the Commission directly sponsors one restoration/enhancement program -- the Community-Based Restoration and Education Program (CBREP) at Upper Newport Bay. The Commission staff continues to work on this program which began in 2001.

Between 2005 and 2009, the CBREP has:

- Involved 8,908 volunteers participating in wetland restoration and native plant propagation activities;
- Installed 16,200 native plants;
- Removed 18,532 pounds invasive plant material (not counting a great deal of unweighed material left to decompose on site); and
- Restored 13.3 acres of wetland habitat.

In 2009, Commission staff involved in the CBREP focused on capacity building for restoration in the Upper Newport Bay that included building a new expanded native plant nursery space and hiring of staff to manage the new nursery, lead Steward Day plant propagation events and assist at monthly volunteer restoration events.

(b) Funding Source: CBREP is funded through multiple sources including the Commission's Whale Tail Grants, grants from private foundations, and corporate donations.

[7] Collins, J.N., E.D. Stein, M. Sutula, R. Clark, A.E. Fetscher, L. Grenier, C. Grosso, and A. Wiskind, 2008. California Rapid Assessment Method (CRAM) for Wetlands, Version 5.0.2. 151pp.

(c) Outcomes & Effectiveness: To date, 13,200 CBREP volunteers have planted 19,000 native plants (half of which have been propagated in an on-site native plant nursery) and removed 53 tons of invasive plant material (not including material left on site). In the process, volunteers have restored over 13 acres of coastal salt marsh, and riparian and coastal sage scrub habitats. In the restored areas, plant survivorship is high, averaging 70% to date. More recently planted plots have had survivorship of 80-90%, indicating that CBREP's skill has improved over time.

2. State Coastal Conservancy Restoration Projects

(a) Significant changes since last assessment: Neither the California Coastal Commission nor the State Coastal Conservancy (SCC) use CZM funds for the protection, restoration or creation of coastal habitats. However, the SCC does fund projects to acquire easements and fee simple ownership of lands in order to protect wetlands and other coastal habitats, and to fund projects to restore and/or enhance wetlands and other coastal habitats. Many of these SCC funded projects provide for multiple benefits such as providing public access (as described in Chapter 3, "Public Access") or protection of agricultural lands and uses. Habitat restoration projects located in the coastal zone require coastal development permits (with acreages of habitat restored, created or protected tracked as part of the CZMA Performance Measurement System, as described above).

Since last assessment (from July 2006 through February 2010), the SCC authorized $50.46 million in grant funding (and leveraged approximately $43.3 in other state monies, and $33.3 million in non-state monies) for 36 projects, protecting a total of 9,135 acres of coastal habitat. Of the 36 projects, 32 were fee simple purchase projects protecting 6,432 acres, and four provided grantees to purchase easements protecting 2,703 acres of coastal habitats.

The SCC also granted approval of approximately $3.6 million dollars for the direct purchase of 11 easements protecting nearly 2,859 acres of coastal habitat through agricultural, conservation and open space easements. The SCC holds seven of the 11 easements; the other four easements are held by Marin Agricultural Land Trust and California Department of Forestry.

(b) Funding Source - SCC uses non-CZM funds to accomplish its goals, with the majority of funding from State resource bond acts approved by voters in 2000, 2002 and 2006.

(c) Outcomes & Effectiveness: While these SCC funded projects often involve multiple purposes (including public access, agricultural lands, and timber lands), where habitat restoration, enhancement and protection may have been a major or minor component, combined they served to protect, restore or enhance nearly 12,000 acres of coastal habitat.

Wetland Mitigation Programs and Policies

(a) Significant changes since last assessment: See Wetland Regulatory Program, and Wetland Restoration or Enhancement, above.

(b) Funding Source: See Wetland Regulatory Program, and Wetland Restoration or Enhancement, above.

(c) Outcomes & Effectiveness: See Wetland Regulatory Program, and Wetland Restoration

or Enhancement, above.

Wetland Creation Programs and Policies

(a) Significant changes since last assessment: See Wetland Regulatory Program, and Wetland Restoration or Enhancement, above.

(b) Funding Source: See Wetland Regulatory Program, and Wetland Restoration or Enhancement, above.

(c) Outcomes & Effectiveness: See Wetland Regulatory Program, and Wetland Restoration or Enhancement, above.

Wetland Acquisition Programs and Policies

(a) Significant changes since last assessment: See Wetland Regulatory Program, and Wetland Restoration or Enhancement, above.

(b) Funding Source: See Wetland Regulatory Program, and Wetland Restoration or Enhancement, above.

(c) Outcomes & Effectiveness: See Wetland Regulatory Program, and Wetland Restoration or Enhancement, above.

Wetland Mapping, GIS, and Tracking Systems

(a) Significant changes since last assessment: There has been a continuous and significant increase in the development of useful GIS layers that identify the extents and condition of wetland and riparian habitats. (Refer also to the "Resource Characterization -Monitoring Programs," section, above). The biggest challenges are to coordinate mapping and GIS efforts throughout the state, to increase the availability of GIS layers, to develop funding and infrastructure to house geographic information systems (in ArcIMS or other formats), to maintain both the network system and databases that store attribute information, and to obtain access to parcel level data.

In 2009, Commission staff obtained recent updates of digital National Wetland Inventory maps for use in planning and regulatory reviews. (See Table 1.4 above.)

Additionally, as described in the "Resource Characterization – Tracking Regulatory Actions" section, above, since FY06, the Commission has participated in the CZMAPMS reporting on wetland measures. Commission staff developed a database module that integrates with our existing Permit Tracking System to collect this data. However, the tracking does not yet provide links between the projects database, the indicator database module, and the NWI wetland GIS data layers. (See Resource Characterization Section above for further details about wetland mapping and monitoring. See also Chapter 5 "Cumulative and Secondary Impacts.")

(b) Funding Source: funded in part with 306 and 309 funds, and other state non-CZM monies

(c) Outcomes & Effectiveness: The availability of more precise and detailed wetland information has enabled the Commission to make more informed decisions about individual projects involving or affecting wetlands.

Special Area Management Plans

(a) Significant changes since last assessment: As noted above, several wetland projects have required Commission permit review or revisions to, or implementation of, existing wetland management plans, such as the Lake Earl Wildlife Area Management Plan and the Carpinteria Salt Marsh Wetland Enhancement Project. Wetland policies are included in amended or updated LCPS. Also, see as noted in the Resource Characterization section above, for work of the Central Coast Wetlands Group. The Marine Life Protection Act and the Critical Coastal Areas Program result in special area management plans for wetlands. For descriptions of these items, see Chapter 7, "Ocean Resources," below.

(b) Funding Source: Wetland management plans required as conditions of permits are funded by the applicants. Wetland management plans that are presented to the Commission for approval are funded by their sponsors.

(c) Outcomes & Effectiveness: Conditioned wetland management plans typically have a minimum five year monitoring requirement, with provisions to adjust projects that are not adequately meeting established success criteria. The Commission does not have the resources to comprehensively track the outcomes of required management plans.

Wetland Research and Monitoring

(a) Significant changes since last assessment: See description of efforts of State Wetlands Monitoring Program under question #4 of the Resource Characterization section.

(b) Funding source: non-CZM funding

(c) Outcomes & Effectiveness: Currently there are obstacles to implementing various monitoring tools as discussed in the Wetlands Resource Characterization section 4, above, and it is premature to assess effectiveness of the tools.

Wetland Education and Outreach

(d) Significant changes since last assessment: Between 2005 and 2009 the Community-Based Restoration and Education Program CBREP sponsored in part by the Commission distributed various educational materials: 893 copies of "Our Wetlands, Our World" curriculum to high school teachers, and 328copies of "Digging In" to local community-based restoration groups For more details on these materials see Appendix B, pg 8.

(e) Funding Source: CBREP is funded through multiple sources including the Commission's Whale Tail Grants, grants from private foundations, and corporate donations.

(f) Outcomes & Effectiveness: The high level of participation in the restoration component of the CBREP is some evidence of the success of the educational component. However, the Commission does not have the resources to estimate effectiveness of education materials.

3. (CM) Indicate whether the CMP has a habitat restoration plan for the following coastal habitats and the approximate time since the plan was developed or significantly updated.

Table 1.8. Habitat Restoration Plans

Habitat type	CMP has a restoration plan (Y or N)	Date completed or substantially updated
Tidal (Great Lake) Wetlands	N	NA
Beach and Dune	N	NA
Nearshore	N	NA

The Coastal Commission does not itself develop habitat restoration plans. The Commission addresses habitat restoration mostly through regulation of site-specific or small-scale mitigation of development projects or through local and regional habitat restoration plans that have been developed by permit applicants. The California State Coastal Conservancy (SCC) funds habitat restoration projects, which are based on approved site-specific or regional habitat restoration plans prepared by others.

PRIORITY NEEDS AND INFORMATION GAPS

Using the table below, identify major gaps or needs (regulatory, policy, data, training, capacity, communication and outreach) in addressing each of the enhancement area objectives that could be addressed through the Coastal Management Program and partners (not limited to those items to be addressed through the Section 309 Strategy). If necessary, additional narrative can be provided below to describe major gaps or needs.

Table 1.9. Wetland Priority Needs and Information Gaps

Gap or need description	Select type of gap or need (regulatory, policy, data, training, capacity, communication & outreach)	Level of priority (H, M, L)
Need for improved assessment and tracking of wetland change.	Regulatory, data	H
Need to ensure consistent application of Coastal Act wetland definitions and delineation methods in permits, LCPs and data collection.	Regulatory, data	M
Need to assess and respond to impacts to wetlands from sea level rise.	Regulatory, data	M
Need to assess and respond to impacts to wetlands from invasive species.	Regulatory, data	M
Need to ensure all LCPs have updated wetland protection policies and ordinances and climate change adaptation measures (including updated buffer provisions).	Regulatory	H
Need additional resources to participate in regional wetland planning (e.g., Central and North Coasts)	Capacity	M

Gap or need description	Select type of gap or need (regulatory, policy, data, training, capacity, communication & outreach)	Level of priority (H, M, L)
and to integrate results into agency program and procedures		
Need to implement improved condition compliance to enable monitoring and assessment of required wetland mitigations	Regulatory, data, capacity	H
Need to enhance ability to identify and incorporate best practices in wetland mitigation conditions.	Regulatory, data, capacity	M
Need to train additional staff to review wetland delineations and mitigation proposals	Capacity, training	H
Need to develop educational and training materials on coastal wetland protection for CCC and local government staff.	Data, communication & outreach	M

ENHANCEMENT AREA PRIORITIZATION

1. What level of priority is the enhancement area for the coastal zone (including, but not limited to, CZMA funding)?

High ___X__ Medium _____ Low _____

Briefly explain the level of priority given for this enhancement area.

2. Will the CMP develop one or more strategies for this enhancement area?

Yes ___X___ No _____

Briefly explain why a strategy will or will not be developed for this enhancement area.

The Strategy will focus on enhancements to wetland change data collection, on updating LCPs to incorporate improved wetland policies especially for addressing impacts from climate change and on capacity building among coastal staff.

2. COASTAL HAZARDS

SECTION 309 ENHANCEMENT OBJECTIVE

Prevent or significantly reduce threats to life and property by eliminating development and redevelopment in high-hazard areas, managing development in other hazard areas, and anticipating and managing the effects of potential sea level rise and Great Lakes level change

RESOURCE CHARACTERIZATION

Purpose: To determine the extent to which problems and opportunities exist with regard to the enhancement objective.

1. Characterize the level of risk in the coastal zone from the following coastal hazards:

(Risk is defined as: "the estimated impact that a hazard would have on people, services, facilities and structures in a community; the likelihood of a hazard event resulting in an adverse condition that causes injury or damage." *Understanding Your Risks: Identifying Hazards and Estimating Losses. FEMA 386-2. August 2001*)

Table 2.1. Types, Risk Level and Geographic Scope of Coastal Hazards

Type of hazard	General level of risk (H,M,L)	Geographic Scope of Risk (Coast-wide, Sub-region)
Flooding	H	Low-lying coastal areas, estuaries, lagoons and riverine systems
Coastal storms, including associated storm surge	M	Areas along the coast.
Geological hazards (e.g., tsunamis, earthquakes)	H	The entire coastal zone is at risk from earthquakes; the areas along the coast are at risk from tsunamis.
Shoreline erosion (including bluff and dune erosion)	H	Areas along the coast
Sea level rise and other climate change impacts	H	Low-lying coastal areas, coastal bluffs, estuaries, lagoons, and riverine systems.
Land subsidence	M	Coastal region, especially areas with oil and gas or water extraction.
Other (please specify) Fire hazards	M-H	Areas of urban-rural interface along the coast and more rural wildland areas where fire-adapted vegetation (e.g., coastal sage scrub and grasslands) is prevalent are at risk from wildfire hazards

2. For hazards identified as a high level of risk, please explain why it is considered a high level risk. For example, has a risk assessment been conducted, either through the State or Territory Hazard Mitigation Plan or elsewhere?

The hazards identified as high risk are flooding, geologic hazards (earthquakes), shoreline erosion, sea level rise and fires. Flooding, geologic hazards and erosion were identified in the prior assessment as high hazard. Flooding has been mapped by FEMA, and new mapping efforts are being planned to update current maps. Flooding is a problem for low-lying coastal areas, especially during El Niño storm conditions. With an increase in sea level rise, flood risks will expand to new areas along the coast and coastal waterways that reach further inland. A recent study by the Pacific Institute[8] found that 260,000 people in California are currently living in areas that, without some type of protection, would be vulnerable to inundation from a 100-year flood event. With a 1.4 meter rise in sea level, an additional 220,000 people, based on current population figures, will be in areas vulnerable to 100-year flooding and the 260,000 people already in vulnerable areas will be at greater risk from a 100-year flood event.

Erosion remains a high risk for much of the California coastal low lands and bluffs. The Commission continues to receive permit applications for shoreline armoring to address perceived and often significant erosion problems. Two studies by USGS (Open File Report 2006-1219,Hapke et al. 2006 and Open File Report 2007-1133, Hapke and Reid 2007) provide information on statewide erosion rates for shoreline areas and coastal bluffs. This information has helped put current erosion conditions into a longer-term perspective. A research study by Philip Williams and Associates (included in the Pacific Institute Report) found that an additional 41 square miles of coast (from the Oregon border to Santa Barbara) may be lost to erosion by 2100 if there were a 1.4 meter rise in sea level, and 14,000 people could be displaced. Since this study did not include the low-lying coastal plains of southern California, it under-represents the statewide impacts from erosion.

Much of the California coast has been modified through seismic activity and earthquakes remain a significant risk for development throughout most of the state. The California Geological Survey (CGS) made available updated seismic hazard maps on December 17, 2009. CGS, in conjunction with the California Emergency Management Agency (CalEMA) also made available tsunami maps that show the maximum likely inundation zones for use in emergency planning. While neither map set is intended for planning purposes, they do provide useful information on the extent of potential hazards.

Sea level rise has and continues to be a concern for the Commission and many studies suggest a high potential for accelerated sea level rise in the future. Sea level rise has historically contributed to coastal flooding and erosion. The estimates of future sea level change, ranging from +0.8 to +2.0 meters, have spurred renewed concern about sea level rise and the resulting potential for inundation, storm damage and erosion. Studies by the California Climate Action Team[9] (including the aforementioned Pacific Institute Report), material from the

[8] Heberger, M., et al. (2009) "Impacts of Sea Level Rise in the California Coast." Prepared for the California Climate Change Center. http://www.energy.ca.gov/2009publications/CEC-500-2009-024/CEC-500-2009-024-F.PDF

[9] Climate Action Team (2009) Draft Biennial Report; http://www.climatechange.ca.gov/publications/cat/index.html

Intergovernmental Panel on Climate Change, other scientific reports and studies of sea level impacts[10] have been the impetus for heightened consideration of the sea level rise hazard.

Much of the rural California coast is quite susceptible to wild fires, given very dry summer conditions. Several fires have consumed large areas of the coast in the last few years including the Lockheed Fire (Santa Cruz County, 2009, 7,817 acres), the Basin Complex Fire (Monterey County, 2008, 162,818 acres) and the Chalk Fire (Monterey County, 2008, 16,269 acres).[11] In addition to the direct impacts from the fire on sensitive coastal habitats, recreational facilities, infrastructure, and residential development, there are long-term indirect impacts as a result of areas of denuded vegetation. Especially of concern are subsequent erosion, flooding, mudslides, and landslides.[12]

3. If the level of risk or state of knowledge of risk for any of these hazards has changed since the last assessment, please explain.

The coast has been the focus of several important research efforts (cited in the previous discussion) that have improved both the state of knowledge of risk and provided reference-able, peer-reviewed reports that can be used to support observations or expectation of hazard effects. The availability of these reports has provided a better understanding and awareness of coastal hazards for the CA coastal areas.

4. Identify any ongoing or planned efforts to develop quantitative measures of risk for these hazards.

The Commission staff continues to work with research agencies such as the California Energy Commission, NOAA, USGS and NASA to encourage support for coastal hazards research. Staff continues to use and support the Coastal Data Information Program (run out of Scripps Institution of Oceanography) and regular acquisition of LIDAR data of the coast to establish baseline conditions and to determine coastal change. Commission staff also continues to participate in the Coastal Sediment Management Workgroup and to support the development of Regional Sediment Management efforts that quantify the sediment sources and sinks for littoral-cell based coastal segments.

As a result of the Oakland Hills fire of 1991, Assembly Bill 337 (the Bates Bill) was passed in 1992 requiring CAL FIRE to work with local governments to identify high fire hazard severity zones within local agency responsibility areas throughout each county in the state. In September 2005, the California Building Standards Commission approved emergency regulations amending the California Code of Regulations (CCR) to require that new buildings located in (1) any fire hazard severity zone in areas were the state is responsible for fire prevention (State Responsibility Areas or SRAs), or (2) in Very High Fire Hazard Severity Zones in areas where local agencies are responsible for fire prevention (Local Agency Responsibility Areas or LRAs), or (3) in any Wildland-Urban Interface area, to comply with regulations designed to lessen the vulnerability of a building to resist intrusion of flames and burning embers during a wildfire.

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[10] For example, the US Climate Change Science Program, Synthesis and Assessment Product 4.1 (2009) Coastal Sensitivity to Sea-Level Rise: A Focus on the Mid-Atlantic Region; http://www.climatescience.gov/Library/sap/sap4-1/final-report/

[11] See each year's" Large Fires List" on http://cdfdata.fire.ca.gov/incidents/incidents_statsevents.

[12] Also of concern are indirect impacts to sensitive habitats that may occur as a result of further fuel reduction (i.e., vegetation removal efforts) that may be necessary to reduce or minimize potential fire hazards in these areas.

The Fire hazard severity zone maps in SRAs were last updated in 2007, and recommendations for Very High Fire Hazard Severity Zone maps were last made and forwarded to local agencies in 2008, however some map updates are still in progress. Local governments have the constitutional authority to adopt these fire hazard maps and are required to designate by ordinance very high fire hazard severity zones within their jurisdictions. Whether or not this has been carried out through LCP amendments in all coastal zone jurisdictions or not is unknown.

CALFIRE is continually updating risk assessments for wild fires and publishes maps on its website of areas at risk and the factors involved. To see fire hazard severity zone maps, see the CALFIRE website at http://frap.fire.ca.gov/projects/hazard/fhz.html.

5. (CM) **Use the table below to identify the number of communities in the coastal zone that have a mapped inventory of areas affected by the following coastal hazards. If data is not available to report for this contextual measure, please describe below actions the CMP is taking to develop a mechanism to collect the requested data.**

Table 2.2. Communities with Coastal Hazard Inventory Maps

Type of hazard	Number of communities that have a mapped inventory	Date completed or substantially updated
Flooding	All 75 coastal jurisdictions have FEMA Flood Insurance Rate Maps that show the 100-year and 500-year floodplain.	Maps for coastal communities were completed in the mid-1980s; but may not show all areas along the coast.
Storm surge	None.	Not a major concern for the open coast. Has not been mapped for the state coastal zone.
Geological hazards (including Earthquakes, tsunamis)	All 75 coastal jurisdictions have seismic maps that identify zones of earthquake faults, landslides, and potential liquefaction. The tsunami inundation area has been mapped on approximately 75% of all coastal quads; areas not mapped include some of the less developed coastal areas along the north coast and the Big Sur coast.	Varies. California Geological Survey regularly updates geologic hazard maps; dates for each community are noted on the map. Tsunami maps updated in 2009.
Shoreline erosion (including bluff and dune erosion)	All 75 coastal jurisdictions were covered by the USGS shoreline assessment and change studies by Hapke et al. (2006) and Hapke and Reid (2007). Many communities also have more site specific maps of erosion areas. Information on the number or dates for these community maps is not available.	Shoreline erosion information was completed in 2006; bluff erosion was completed in 2007.
Sea level rise	All 75 coastal jurisdictions were mapped by the Pacific Institute study for flooding impacts from sea level rise. Communities from the Oregon Border through the City of Santa Barbara were	2008

Type of hazard	Number of communities that have a mapped inventory	Date completed or substantially updated
	mapped for erosion impacts from sea level rise. San Diego County[13] has maps of many of its coastal areas for impacts from sea level rise and wave impacts. There are no maps that identify only the hazard of sea level without inclusion of potential flooding, erosion or storm damage.	
Great lake level fluctuation	NA	NA
Land subsidence	Not aware of any such maps at this time.	NA
Other (please specify) Fire hazards	All 15 coastal counties have adopted Fire Hazard Severity Zone (FHSZ) maps in State Responsibility Areas (SRAs); 6 of the 15 counties also have Recommended Very High Fire Hazard Severity Zone (VHFHSZ) maps for Local Responsibility Areas (LRAs)	CAL FIRE completed an update of FHSZ maps for SRAs in November 2007, and prepared recommendations for VHFHSZ maps for LRAs in May 2008; additional VHHSZ map updates are still in progress.

MANAGEMENT CHARACTERIZATION

Purpose: To determine the effectiveness of management efforts to address those problems described in the above section for the enhancement objective.

1. For each of the management categories below, indicate if the approach is employed by the state or territory and if significant changes have occurred since the last assessment:

Table 2.3. Management Categories – Coastal Hazards

Management categories	Employed by state/territory (Y or N)	Significant changes since last assessment (Y or N)
Building setbacks/ restrictions	Y	N
Methodologies for determining setbacks	Y	N
Repair/rebuilding restrictions	Y	N
Restriction of hard shoreline protection structures	Y	N
Promotion of alternative shoreline stabilization methodologies	Y	N

[13] San Diego Foundation (2008) Focus 2050; http://www.sdfoundation.org/communityimpact/environment/Initiative-focus2050.html

Management categories	Employed by state/territory (Y or N)	Significant changes since last assessment (Y or N)
Renovation of shoreline protection structures	Y	N
Beach/dune protection (other than setbacks)	Y	N
Permit compliance	Y	N
Sediment management plans	Y	Y
Repetitive flood loss policies, (e.g., relocation, buyouts)	N	N
Local hazards mitigation planning	Y	N
Local post-disaster redevelopment plans	N	N
Real estate sales disclosure requirements	N	N
Restrictions on publicly funded infrastructure	Y	Y
Climate change planning and adaptation strategies	Y	Y
Special Area Management Plans	Y	Y
Hazards research and monitoring	Y	N
Hazards education and outreach	Y	N
Other (please specify)		

2. For management categories with significant changes since the last assessment provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference rather than duplicate the information.

(a) Characterize significant changes since the last assessment;
(b) Specify if it was a 309 or other CZM-driven change (specify funding source) or if it was driven by non-CZM efforts; and
(c) Characterize the outcomes and effectiveness of the changes.

<u>Sediment Management Plans</u>

(a) Significant changes since last assessment: The Commission staff participates in the Coastal Sediment Management Workgroup (CSMW) and this program has begun to support the preparation of Regional Sediment Management Plans that quantify regional sediment sources, sinks and transport mechanisms.

(b) Funding Source: The CSMW efforts are funded by Coastal Impact Assistance Program (CIAP), state General funds and US Army Corps of Engineers funds.

(c) Outcomes & Effectiveness: The outcomes of the RSM efforts were discussed in the Resource Management Section 4, above.

Restrictions on Publicly-Funded Infrastructure

(a) Significant changes since last assessment: On November 14, 2008, Governor Schwarzenegger issued Executive Order S-13-08 directing state agencies to plan for sea level rise and climate impacts. Four key provisions of the order[14] required that (1) California resource agencies develop a statewide climate change adaptation strategy to assess expected climate change impacts, identify where California is most vulnerable and recommend climate adaptation policies by early 2009 (see below); (2) request the National Academy of Science to establish an expert panel to report on sea level rise impacts in California to inform state planning and development efforts; (3) issue interim guidance to state agencies on how to plan for sea level rise in designated coastal and floodplain areas for new projects; and (4) initiate a report on existing and planned critical infrastructure projects vulnerable to sea level rise. Commission staff has responded to the interim guidance on infrastructure projects by coordinating with other state agencies to ensure development projects include analysis of potential impacts due to sea level rise, using a range of sea level rise scenarios.

(b) Funding Source: Staff time on Caltrans projects is funded through a special agreement with Caltrans using state funds; other staff work on the California climate change adaptation strategy is funded by other non-CZM funds.

(c) Outcomes & Effectiveness: The Commission review of proposed projects continues to analyze potential sea level rise using a range of sea level rise scenarios.

Climate Change Planning and Adaptation Strategies

(a) Significant changes since last assessment: The Commission staff formed a Climate Change Task Force. This group provided input to development of the 2009 California Climate Adaptation Strategy (CAS)[15] and the USAID (2009) Adapting to Coastal Climate Change: A Guidebook for Development Planners[16] The 2009 CAS report summarizes "… the best known science on climate change impacts in the state to assess vulnerability and outlines possible solutions that can be implemented within and across state agencies to promote resiliency…". In addition, in 2009 a NOAA Coastal Fellow joined the Commission staff to help carry out the agency efforts to address climate change. Also, the Commission is in the process of developing a CIAP project to develop guidance materials for climate change planning in Local Coastal Programs.

(b) Funding Source: The NOAA Coastal Fellow is funded by NOAA/OCRM funds. Commission CCTF staff time is funded by State funds.

(c) Outcomes & Effectiveness: The Commission is beginning to carry out the 2009 state adaptation policy. There is no evaluation available yet. However the Commission

[14] As identified in Press Release dated 11/14/2008 on the California government website: http:'//gov.ca.gov/press-release/11035.

[15] 2009 CA Climate Adaptation Strategy – A Report to the Governor of the State of California in Response to Executive Order S-13-2008. See http://www.climatechange.ca.gov/adaptation/count/click.php

[16] http://www.usaid.gov/our_work/environment/climate/docs/reports/cc_vamanual.pdf

continues to address sea level rise in permits and LCP amendments.

Special Area Management Plans

1. Updating Fire Hazard Reduction Policies

(a) Significant changes since last assessment: California increased defensible space requirements from 30 to 100 feet from structures as a fire prevention measure in 2005. Since then both individuals and communities have been responding to this new requirement. For example, the Commission has approved a local coastal program amendment in the City of San Diego that provides for brush management (City of San Diego LCP Amendment No. 2-08) and has addressed the issue in several permits and appeals. Several communities are also preparing Community Wildfire Protection Plans (status on: http://www.cafirealliance.org/cwpp/cwpp_status).

(b) Funding Source: Review of permits and LCP amendments for fire hazard measures funded though annual 306 Federal and state-match funding and through non-CZM funding.

(c) Outcomes & Effectiveness: Changes to the California Building Code (CCR Title 24, Part 2, CBC Section 701A3.2) regarding buildings in fire Hazard Severity Zones in SRAs, LRAs and Wildland-Urban Interface Fire areas are primarily the responsibility of CAL FIRE and local governments. However, at least one LCP has been revised, and over time more local governments may amend their LCPs to incorporate these requirements. While not all LCPs have yet been updated to reflect these changes, the law remains in effect and will continue to be implemented by CAL FIRE and local governments.

2. Updating Tsunami Hazard Policies

(a) Significant changes since last assessment: The Commission approved two LCP amendments in northern California that addressed and updated policies on sea level rise and tsunami hazards. The Commission approved Crescent City LCP amendment number CRC-Maj-1-09 on June 12, 2009 and Del Norte County LCP amendment number DNC-Maj-2-03 in October, 2009.

(b) Funding Source: Staff review of LCP Amendments funded though annual 306 Federal and state-match funding and through non-CZM funding

(c) Outcomes & Effectiveness: The Commission has updated at least two LCPs that addressed updating specific tsunami hazard policies. However, as the Commission cannot itself initiate LCP amendments, such updates occur only upon amendment submittal.

3. **(CM) Report the number of communities in the coastal zone that use setbacks, buffers, or land use policies to direct development away from areas vulnerable to coastal hazards. If data is not available to report for this contextual measure, please describe below actions the CMP is taking to develop a mechanism to collect the requested data**.

For CMPs that do not use state-established numerical setbacks or buffers to direct development away from hazardous areas, report the following:

Table 2.4. Communities with Coastal Hazard Policies and Plans

Contextual measure	Number of communities
Number of communities in the coastal zone that are required to develop and implement land use policies to direct development away from hazardous areas that are approved by the state through local comprehensive management plans.	128[a]
Number of communities that have approved state comprehensive management plans that contain land use policies to direct development away from hazardous areas.	92[b] **The 92 communities and their location in coastal counties is provided as part of Appendix F beginning at page 162**

(a) Based on FY0708 CZMAPMS data. Under the California Coastal Act, all 75 coastal local government jurisdictions (60 coastal cities and 15 counties) are required to prepare Local Coastal Programs (LCPs) in conformance with Coastal Act policies, including policies addressing coastal hazards (e.g. Section 30253). These 75 jurisdictions include 128 local planning segments (or "communities"), all of which are required to conform to the same policies.

(b) Based on FY0708 CZMAPMS data. To date, the CCC has effectively certified 92 of the 128 LCP segments as being consistent with Coastal Act policies, which allows the local government to regulate development consistent with their certified LCP. Of the remaining 36 uncertified LCP segment areas, 19 have certified Land Use Plans (LUPs), but do not yet have certified Coastal Implementation Plans (LIPs). Coastal Act policies serve as the standard of review in the 36 remaining uncertified LCP segment areas. However, certified LUP policies can provide additional guidance as to setback and buffer requirements, or other land use policies to direct development away from hazardous areas.

PRIORITY NEEDS AND INFORMATION GAPS

Using the table below, identify major gaps or needs (regulatory, policy, data, training, capacity, communication and outreach) in addressing each of the enhancement area objectives that could be addressed through the CMP and partners (not limited to those items to be addressed through the Section 309 Strategy). If necessary, additional narrative can be provided below to describe major gaps or needs.

Table 2.5. Priority Needs and Information Gaps – Coastal Hazards

Gap or need description	Type of gap or need (regulatory, policy, data, training, capacity, communication & outreach)	Level of priority (H,M,L)
Encourage further research and mapping of hazards including mapping of sea-level related erosion from City of Santa Barbara to the CA/Mexico Border; encourage information sharing of GIS data layers once available	Data (mapping information), capacity	H
Guidance for project applicants on how to factor sea level rise into shoreline and bluff erosion analysis taking into account site specific context	Regulatory, Policy, Capacity, Communications	H
Pilot studies for local coastal planning to address climate change and sea level rise; one possible starting area could be Humboldt Bay or South Monterey Bay.	Policy, data, training, communication and outreach.	H

Gap or need description	Type of gap or need (regulatory, policy, data, training, capacity, communication & outreach)	Level of priority (H,M,L)
Inventory of LCP Hazard policy status to identify which LCPs are in need of updated policies for the different hazard issue areas.	Data	H
Overall update of LCPs to address sea level rise rates and associated hazards analyses for project evaluations and alternatives analyses	Data, policy, communication, outreach	H
Guidance for updating Hazard policies and ordinances in LCPs	Policy, data, training, capacity, communication, outreach	H
Guidance for procedures and policies to address clearance around structures for fire prevention	Regulatory, policy	M
Obtain Research and data on methods (other than complete clearing) to manage sensitive vegetation within fire buffer zones	Data, Outreach	M
Staff available to process LCP amendments and permits addressing hazard prevention measures	Regulatory, capacity	H

ENHANCEMENT AREA PRIORITIZATION

1. What level of priority is the enhancement area for the coastal zone (including, but not limited to, CZMA funding)?

High ___X__ Medium _____ Low _____

Briefly explain the level of priority given for this enhancement area.

Climate change has been identified as one of the most critical environmental issues for the 21st century. There is a great deal of uncertainty about the likely impacts for climate change and many communities feel too overwhelmed to undertake climate change planning. Demonstration of some of the planning options, through pilot studies and development of baseline, state-wide projections of impacts will be important elements of such planning and outreach efforts.

2. Will the CMP develop one or more strategies for this enhancement area?

Yes ___X___ No _____

Briefly explain why a strategy will or will not be developed for this enhancement area.

Addressing hazards management, especially with regard to adapting to the impacts of climate change, will be an important part of the strategy. The Commission is actively participating in several initiatives to address adaptation and transferring knowledge and capacity to local governments for implementation through LCPs will be important.

3. PUBLIC ACCESS

SECTION 309 ENHANCEMENT OBJECTIVE

Attain increased opportunities for public access, taking into account current and future public access needs, to coastal areas of recreational, historical, aesthetic, ecological, or cultural value.

RESOURCE CHARACTERIZATION

Purpose: To determine the extent to which problems and opportunities exist with regard to the enhancement objective.

1. Characterize threats and conflicts to creating and maintaining public access in the coastal zone:

Table 3.1. Threats and Conflicts related to Creating and Maintaining Public Access in the Coastal Zone.

Type of threat or conflict causing loss of access	Degree of threat (H,M,L)	Describe trends or provide other statistics to characterize the threat and impact on access	Type(s) of access affected
Private residential development (including conversion of public facilities to private)	M-H	Development of private lots that impacts potential prescriptive rights; closure of existing access by private property owners; encroachment on public lands (beach, trails) by private developments (e.g., decks, seawalls, etc); conversion of publicly available lower-cost visitor serving facilities to time-share or condo-hotel facilities; conflicts (e.g., parking, use restrictions) between residential and visitor-serving land uses	Vertical and lateral beach and blufftop access; lower-cost visitor-serving facilities
Non-water dependent commercial/industrial uses of the waterfront (existing or conversion)	M-H	Ensuring access while balancing needs for public safety around industrial areas; restrictions or lack of access around restaurants and commercial waterfront buildings, or proposed expansion of use into existing public access areas	Vertical and lateral beach and blufftop access; lateral waterfront access
Erosion	H	Loss of access paths/beaches due to erosion of beaches, bluffs and blufftop	Vertical and lateral beach and blufftop access;

Type of threat or conflict causing loss of access	Degree of threat (H,M,L)	Describe trends or provide other statistics to characterize the threat and impact on access	Type(s) of access affected
Sea level rise/ Great Lake level change	H	Loss of access due to erosion caused by sea level rise; inadequate mitigation in earlier permits to address potential future erosion; loss of beach area due to installation and footprint of seawalls and in front of seawall over time due to ongoing shoreline erosion	Vertical and lateral beach and blufftop access; lower-cost visitor serving facilities
Natural disasters	M-H	Short term and long term impacts to shoreline access from tsunamis and large storm surges	Vertical and lateral beach /shoreline access; lower-cost visitor serving facilities
National security	M	Development of security facilities can impact public access to and along the shoreline, and park and recreational areas; As national security concerns increase, it raises issues related to how best to protect and maximize public access consistent with Coastal Act Section 30212, which requires public access consistent with public safety and military security needs.	Vertical and lateral beach and blufftop access;
Encroachment on public land	M	Encroachment on public lands (beach, trails, existing easements) by installation of seawalls; encroachment of private development into existing easements on beach and bluff- tops; installation of private development in public right-of-ways including unauthorized No Parking Signs, painting the curb red to eliminate public parking, private planter boxes, etc ; also visual impact of development visible from public viewing areas such as beaches, trails and scenic roadways	Vertical and lateral beach and blufftop access

Type of threat or conflict causing loss of access	Degree of threat (H,M,L)	Describe trends or provide other statistics to characterize the threat and impact on access	Type(s) of access affected
Other – Loss or conversion of lower-cost visitor serving uses	M-H	Demolition of overnight accommodations, including lower cost hotels and replacement with high cost resort destinations; conversion of publically available hotels to private time share clubs or condominium ownership; conversion of campgrounds to other park employee or maintenance facilities; increased day-use and overnight fees to use parks and campgrounds; reduced hours of parks operation; Lack of long term protection of affordable facilities.	lower-cost visitor serving facilities
Other – Lost or missed opportunities for public access near or adjacent to coastal agricultural lands	M	In some cases, public access has been eliminated or restricted around agricultural lands; in other cases, agricultural easements have missed opportunities to also allow/require public access near or adjacent to agricultural lands	Vertical and lateral beach and blufftop access

2. Are there new issues emerging in your state that are starting to affect public access or seem to have the potential to do so in the future?

Impacts to public access statewide are increasing from closure and/or reduction of hours to public facilities and services as a result of budget constraints. At the same time long term affordability of access is affected by increased fees for state and local parks use and for parking. As California State Parks account for 25% of the entire California coastline, these issues may raise significant access concerns.

Appropriate park services are not keeping up with the demands of changing population demographics. For example, camping facilities used to be the most popular State Park amenity, but currently large family style group picnic grounds and soccer fields are in more demand.

The loss of or conversion of lower-cost visitor serving uses to higher cost facilities is impacting public access. Protecting the affordability of visitor serving uses is a growing challenge.

The increasing threat of erosion that impacts or eliminates public trails and walkways is a growing issue. For example during recent storm events, sections of a public walkway/access were lost to bluff erosion in the City of Pacifica (San Mateo County). Local governments through their LCPs need to implement adaptation plans to ensure long term protection of public shoreline resources, and try to protect and maximize public access while minimizing conflicts between coastal residents and visitors.

3. Use the table below to report the percent of the public that feels they have adequate access to the coast for recreation purposes, including the following. If data is not available to report for this contextual measure, please describe below actions the CMP is taking to develop a mechanism to collect the requested data.

Table 3.2. Summary of Public Access and Recreation Demand Surveys

Contextual measure	Survey data
Number of people that responded to a survey on recreational access (equivalent to CM# 16.1)	The Coastal Commission does not currently have the budget resources or a mechanism for conducting public access surveys, and has had to rely on surveys conducted by others to obtain this information. Based on six different surveys conducted by others, approximately 13,362 people responded to various surveys regarding public and recreational access. *(To see specific details regarding each survey, see Table D1 in Technical Appendix D.)*
Number of people surveyed that responded that public access to the coast for recreation is adequate or better. (equivalent to CM# 16.2)	Most surveys did not ask this specific question. However, of the 2003 responses to the 2006 PPIC survey, 42% (or 841 people) surveyed think that "limited public access" is not a problem; whereas 33% found it to be somewhat of a problem, and 20% found "limited public access" to be a big problem.
What type of survey was conducted (i.e. phone, mail, personal interview, etc.)? (equivalent to CM# 16.3)	Of the six different surveys reviewed, survey types include: random statewide or local/regional telephone and mail-in surveys; polling of park visitors during peak, shoulder and off-peak seasons; and one-time random survey of beachgoers at several Southern California beaches.
What was the geographic coverage of the survey? (equivalent to CM# 16.4)	Geographic coverage varied among the six different surveys reviewed. Three of the surveys were conducted statewide, the fourth was conducted in the Marin and San Francisco region; the fifth was conducted in Los Angeles and Orange counties, and the sixth survey was conducted throughout Southern California, from Ventura to San Diego counties.
In what year was the survey conducted? (equivalent to CM# 16.5)	Surveys were conducted between 2001 and 2006. No new surveys have been identified.

4. Briefly characterize the demand for coastal public access within the coastal zone, and the process for periodically assessing public demand.

The Coastal Commission does not currently have the budget resources or a mechanism for conducting public access surveys, and so must rely on surveys conducted by others. However, the demand for access to the coast is expected to grow as California's population is projected to grow to more than 40 million by 2012 (see Chapter 5, Cumulative and Secondary Impacts, resource characterization section, on pg 71). At least 10% of California's population is estimated to live within 30 minutes drive of the coast.

5. Please use the table below to provide data on public access availability. If information is not available, provide a qualitative description based on the best available information. If data is not available to report on the contextual measures, please also describe actions the CMP is taking to develop a mechanism to collect the requested data.

Table 3.3. Summary of Public Access Availability in the Coastal Zone

Types of public access	Current number(s) [17]	Changes since last assessment (+/-)	Cite data source
Number of acres in the coastal zone that are available for public access (report both the total number of acres in the coastal zone and acres available for public access) (CM #17)	Acres of land in Coastal Zone is 1,758,941 acres (2,748 square miles Land areas include: all areas landward of shoreline (refined mainland CZ acreage of 1,533,143 acres), as well as offshore rocks and islands (1,282 acres), Farallones Islands (107 acres) and Channel Islands (224,409 acres). - Of the approximate 1,758,941 acres (or 2,748 square miles) of land in Coastal Zone, approximately 538,077 acres or 840.7 square miles are publicly available (i.e., include those areas shown in the CPAD 2009 database/GIS as having open, restricted, or unknown access).	This information was not requested in the last assessment. However, since first reporting in the CZMA Performance Measures Study (for FY0506), an improved data source has been developed which has helped us to refine the values reported for total coastal zone (CZ) acreage and shoreline miles, and for CZ acres and shoreline miles available to the public. However, the data available does not allow measurement of change since 2006.	California Coastal Commission's Coastal Zone Boundary and 3-mile limit shapefiles. The CZB shapefile was digitized from the 1:24,000 scale USGS topographic quads; the 3-mile limit shapefile was made by buffering the 1:24K digitized shoreline. Acreage measurements were derived from spatial analyses performed using ArcView 3.2 and ArcGIS v9.1 and v9.2. California Protected Areas Database, version 1.2 (CPAD 2009), and associated GIS data layer that was clipped to coastal zone boundary. CPAD 2009 was designed to inventory lands that have been protected primarily for open space uses through fee ownership (i.e., it does not include military lands that are off limits to public access). Publicly available lands include areas that are identified by CPAD 2009 as having open, restricted (provides limited access for various reasons) or unknown access (assumed open until confirmed otherwise).

[17] All numbers given for acres and shoreline miles should be considered approximate.

Types of public access	Current number(s) [17]	Changes since last assessment (+/-)	Cite data source
			Acreage available to the public includes: City: 15,563 acres County: 17,577 acres Special District: 13,581 acres Non-Profit: 98,462 acres; State: 159,359 acres; Federal: 232,106 acres; and Other: 147 acres. Current estimates are based on the best available data. As data is refined, this baseline number may change.
Miles of shoreline available for public access (report both the total miles of shoreline and miles available for public access) (CM #18)	Based on data collected in FY06, the total miles of coastal zone shoreline is approximately 2,051 miles. This figure Includes: 1,100 miles of mainland shoreline, 335 miles of offshore island shoreline (Farallon and Channel Islands), and an estimated 616 miles of estuarine shoreline Of the 1,716 miles of mainland and estuary shoreline, approximately 933 miles is available for public use (does not yet include publicly available offshore island shoreline miles)	Given limited resources the Commission has not yet been able to complete the work to determine the change from 2006.	Mainland shoreline miles determined using "Coast24" GIS data layer, originally digitized from 1:24,000 topographic quadrangles in early 1990s, and later refined based on digital USGS quadrangles in the early 2000s. Offshore islands shoreline miles based on digital data obtained from Gulf of the Farallones National Marine Sanctuary (for Farallones Islands), and from 24K shoreline data set (for Channel Islands). Shoreline miles available for public access determined from GIS data layers (24k shoreline digital data segments adjacent to shoreline parcels and shoreline segments identified as publicly available by SCC and Coastwalk California[18]) for ocean shoreline only.

[18] "Coastwalk California" is a non-profit organization that has subcontracted with the SCC to assist in planning and implementation of the California Coastal Trail. For more on Coast Walk California, see http://www.coastwalk.org/

Types of public access	Current number(s) [17]	Changes since last assessment (+/-)	Cite data source
Number of State/County/Local parks and number of acres	At least 1,226 State, County, Local and other Non-Profit Lands (i.e., named units) are considered generally available for public use within the coastal zone. These lands make up approximately 304,689 acres (476 square miles). See: "State, County, and Non-Profit Lands Protected for Open Space Uses" below. When including Federal units, totals come to 1,306 units and 538,077 acres (840.7 square miles) available for public use.	The 2006 Assessment identified 9 federal parks and 84 state parks but current GIS mapping uses different measurements so a direct comparison is not possible, The more recent CPAD 2009 data includes: 80 Federal Units 239 State Units 200 County Units 571 City Units 120 Special District Units, 92 Non-Profit Units located in the coastal zone. The acreages by Agency Level and by County are shown in Tables D2 and D3, in Technical Appendix D.	Based on CPAD 2009 GIS data clipped to the coastal zone boundary. The CPAD "Units" data layer represents aggregations of parcels that are known under one common name – e.g., a State, county or local park may be comprised of several individual parcels, which together make up one "unit" with a single, common name. Again, publicly available lands include units, (located either entirely or partly within the coastal zone) that are identified as having open, restricted or unknown access (assumed open until confirmed otherwise). For more info, see: "State, County, and Non-Profit Lands Protected for Open Space Uses" below.

Types of public access	Current number(s) [17]	Changes since last assessment (+/-)	Cite data source
Number of public beach/shoreline access sites	Current total of 882 beach/shoreline access sites (704 from Coastal Access Guide 2003 (CAG 2003) inventory + 178 new).	At least 178 new beach/shoreline access sites have been created since the last assessment. (CCC regulatory actions have also protected 374 sites and enhanced 85 sites since 2005.)	Based on Public Access Site Inventory, Commission's Coastal Access Guide (2003) and two more- recently published regional access guides: "Experience the California Coast - A Guide to Beaches and Parks in Northern California" (2005), and "Experience the California Coast - Beaches and Parks from Monterey to Ventura,(2007); tracking of regulatory actions conducted as part of CZMAPMS from FY0506 through FY0809; and OTDs and DRs recorded and/or accepted as a result of regulatory condition compliance.
Number of recreational boat (power or non-power) access sites	Current total of 149 recreational boating sites (143 from CAG 2003 inventory + 6 new).	At least 6 new recreational boating sites have been created since the last assessment. (CCC regulatory actions have also protected 34 sites and enhanced 14 sites.)	Ibid.
Number of designated scenic vistas or overlook points	Current total of 336 scenic access sites (315 from CAG 2003 inventory + 21 new).	At least 21 new scenic access sites have been created since the last assessment. (CCC regulatory actions have also protected 17 sites and enhanced 9 sites.)	Ibid.
Number of State or locally designated perpendicular rights-of-way (i.e. street	This type of access is generally referred to in the CCMP as "vertical" access which is generally an area of land that provides a connection between the first	At least 14 vertical OTDs have been accepted since the last assessment. (Additionally, 78 lateral	The Coastal Commission's Public Access database and one statewide and three regional coastal access guides published to date (publication dates included 2003, 2005, 2007

Types of public access	Current number(s) [17]	Changes since last assessment (+/-)	Cite data source
ends, easements)	public road paralleling the sea and the publically owned tidelands or established lateral accessway. According to a recent report conducted by the Commission's Public Access Program[19], the Commission has acquired approximately 231 vertical accessways in connection with new development, which account for about 10% of all access sites acquired through Commission actions (beach laterals and inland trail account for the other 90% of access acquired through regulatory actions). Of the 231 vertical accessways, 170 were obtained through offers to dedicate (OTDs), 27 through deed restrictions, and 34 through other types of legal documentation.	OTDs, 54 trail OTDs and 3 other types of public access OTDs have been accepted since 2006.)	and 2009) (see Public Access Guides discussion under Management Characterization. section 3, below).
Number of fishing access points (i.e. piers, jetties)	At least 31 piers are included in the Public Access Site Inventory. Additionally, at least 452 sites have been identified in the Public Access Site Inventory as having fishing access.	Data necessary to measure change since 2006 is not available.	CCC Public Access Site Inventory, as described above.
Number and miles of coastal trails/boardwalks	At least 342 sites include trails, with some are linked to larger trail networks. [Note: Actual trail miles are not identified in all cases, so total miles can not be calculated.]	Data necessary to measure change since 2006 is not available.	CCC Public Access Site Inventory, as described above.

[19] As reported in the Public Access Program: Status report regarding Coastal Commission required Vertical Offers to Dedicate Public Access Easements and Vertical Public Access Deed Restrictions in San Diego and Orange Counties (Agenda Item W32b) prepared for Commission review and comment at December 9, 2009 Commission hearing. See http://documents.coastal.ca.gov/reports/2009/12/W32b-12-2009.pdf.

Types of public access	Current number(s) [17]	Changes since last assessment (+/-)	Cite data source
Number of dune walkovers	PA Site inventory does not track this.	NA	NA
Percent of access sites that are ADA compliant access	Data on percent of access sites that are ADA compliant are not available; however, at least 435 sites in our Public Access Site Inventory are identified as having disabled access. Additionally, at least 87 beaches (and at least 1 in each of the 15 coastal counties) provide beach wheelchairs free of charge.	Between 2005 and 2009, nine additional beaches have been added to the list of beaches that provide beach wheelchairs free of charge	CCC Public Access Site Inventory, as described above. Number of beaches that provide beach wheelchairs obtained from CCC website and CCC Public Education Unit which funds wheelchairs with grants provided through the State "Whale Tail" environmental license plate grant program.
Percent and total miles of public beaches with water quality monitoring and public closure notice programs	According to data provided by SWRCB Beach Water Quality Program, 280 of the 433 beaches in the SWRCB regions have water quality monitoring and public closure notice programs (i.e., 65% of beaches meet the criteria required for monitoring under AB411); 153 beaches are not monitored (i.e., 35% do not meet the criteria required for monitoring under AB411). The beaches monitored account for approximately 631 miles of mainland and estuarine shoreline (or approximately 37% of the 1,716 miles of mainland and estuarine shoreline).	Not required or reported in previous assessment.	State Water Resources Control Board [SWRCB] Clean Beaches Program and Beach Watch website. See: "Beach Watch Water Quality Monitoring Program" below.

Types of public access	Current number(s) [17]	Changes since last assessment (+/-)	Cite data source
Average number of beach mile days closed due to water quality concerns	For the period July 1, 2005 through February 23, 2010 there were a total of 1,312 beach mile days closed, and an average of approximately 328 beach mile days closed each year.	The last assessment reported that approximately 13,100 beach-mile days were closed between Jan 1, 2005 and Dec 15, 2005 due to water quality concerns. The new SWRCB data for July 1, 2005 through February 23, 2010, indicates a significant reduction of nearly 90% in beach mile days closed due to water quality concerns.	Ibid.

State, County, and Non-Profit Lands Considered Generally Available for Public Use

Table D2, in Technical Appendix D, shows the number and acres of state, local and non-profit lands considered generally available for public access within the California coastal zone as determined from the 2009 CPAD Units GIS data layer. The method to compile these data and the limitation of the data are described more fully in Appendix D, pgs 11-12. Efforts to complete the data will require significant financial assistance to retrieve historical paper files to capture data. Such program needs are being addressed in the Section 309 Strategy.

California Beach Water Quality Monitoring Program

Explanation of data from the State Water Resources Control Board is provided in Appendix D, pgs 14-15.

MANAGEMENT CHARACTERIZATION

Purpose: To determine the effectiveness of management efforts to address those problems described in the above section for the enhancement objective.

1. For each of the management categories below, indicate if the approach is employed by the state or territory and if significant changes have occurred since the last assessment:

Table 3.4. Management Categories - Public Access

Management categories	Employed by state/territory (Y or N)	Significant changes since last assessment (Y or N)
Statutory, regulatory, or legal system changes that affect public access	Y	Y
Acquisition programs or policies	Y	Y
Comprehensive access management planning (including GIS data or database)	Y	Y
Operation and maintenance programs	Y	Y
Alternative funding sources or techniques	Y	Y
Beach water quality monitoring and pollution source identification and remediation	Y	Y
Public access within waterfront redevelopment programs	Y	Y
Public access education and outreach	Y	Y
Other – California Coastal Trail (CCT) Planning	Y	Y
Other – Comprehensive planning through LCP Certifications and Updates	Y	Y

2. For management categories with significant changes since the last assessment provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference rather than duplicate the information.

(d) Characterize significant changes since the last assessment;
(e) Specify if it was a 309 or other CZM-driven change (specify funding source) or if it was driven by non-CZM efforts; and
(f) Characterize the outcomes and effectiveness of the changes.

Statutory, Regulatory or Legal System Changes

No changes have been made to Coastal Act policies regarding public access and recreation since the last assessment. However, there has been other legislation passed related to public access including legislation regarding the California Coastal Trail, and other alternative transportation related issues.

1. Legislative Changes Related to the California Coastal Trail

(a) Significant changes since last assessment: The California Legislature adopted Assembly Concurrent Resolution No. 153 proclaiming October 11, 2008 as California Coastal Trail Day which reemphasized the critical elements of the CCT designation in 1999, noted that the trail is currently 50 percent complete and emphasized need for continual leadership, planning, and the dedication of numerous agencies, volunteers and communities to complete and maintain the Trail.

(b) Funding Source: State funding

(c) Outcomes & Effectiveness: The CCT is estimated to be 50% completed. State and regional transportation planning agencies are required to include provisions of the CCT in their plans. The State Coastal Conservancy, with the assistance of the Coastal Commission and State Department of Parks and Recreation are in the process of planning and developing the trail.

2. Alternative Transportation-Related Legislative Changes

(a) Significant changes since last assessment: Public access to and along the coast through alternative transportation has increased as a result of new legislation:

AB32, the California Global Warming Solutions Act of 2006,

- SB 375, commonly referred to as the "Climate Change Smart Growth Bill," in 2008,
- AB 1358 the California Complete Streets Act of 2008,
- AB1396, requiring regional transportation plans to include the coastal trail, in 2007.

(b) Funding Source: State funding.

(c) Outcomes & Effectiveness: Together these laws will result in implementing more alternative transportation to and along the coast.

Public Access Acquisition Programs or Policies

(a) Significant changes since last assessment: Since last assessment, significant new access has been acquired through acceptance of easement offers, as shown in Table 3.5 below. Distribution of these access sites is included in Appendix D, pgs 15-16.

Table 3.5. Public Access OTDs Accepted 2005 though 2009

Accepted and Managed by	Offer to Dedicate (Lateral)	Offer to Dedicate (Other)	Offer to Dedicate (Trail)	Offer to Dedicate (Vertical)	Other Legal Document (Vertical)	Total
State Agency	64		56	9		129
Local Government	29	1	3	12		45
Nonprofit	23		3	3		29
Property Owner					1	1
Unknown		1				1
Total	116	2	62	24	1	205

Over the last 5 years the SCC provided grant funding for the acquisition of approximately 101 acres of land that provide for public access through easements and approximately 30,675 acres of land that provide for public access though fee simple transfer from 42 SCC grant-funded projects.

(b) Funding Source - SCC uses non-CZM funds to accomplish its goals, with the majority of funding from State resource bond acts approved by voters in 2000, 2002 and 2006.

(c) Outcome & Effectiveness. The public has gained significant new access since 2006.

Comprehensive Access Management Planning

Since the last Assessment in 2006 Commission staff completed the following program changes in management planning including GIS and Database development to enhance the Commission's ability to monitor increase in public access:

(a) Significant changes since last assessment: Since the last assessment, Commission staff implemented significant GIS and Data tracking improvements including:

- A Public Access Site Inventory to establish a 2005 baseline inventory, and to which new sites created after 2005 can be added. The inventory contains numerous associated attributes (e.g., relating to facilities available, environmental setting, recreational activities available, historic and cultural features, etc)
- A Database Module as part of the Commission's Permit Tracking System (PTS) to track new access sites acquired and existing sites enhanced as a result of the Commission's regulatory actions.
- A GIS Map/data layer of existing and new public access sites which can be updated annually as new sites are made available to the public.

(b) Funding source: funded primarily through Federal 309 enhancement grants, with some staff time funded through annual 306 funds and other non-CZM funds.

(c) Outcomes & Effectiveness: The Public Access Site Inventory: Information tracked in the Indicators database module and the GIS Mapping together provide more robust data collection and a means to classify and map different types of accessways throughout all 15 coastal counties, assess changes to public access and report on the annual Coastal Zone Management Act Performance Measurement System (CZMAPMS), In addition, the Public Access Site Inventory GIS data layer available to staff through the ArcIMS mapping system provides access to enhanced information and increases the capacity of Commission staff to analyze the type and spatial distribution of public access sites when considering permits and/or LCP updates or amendments that include a public access component.

However, a systematic method for integrating the Public Access Inventory database output with geographic reference data to map newly recorded and accepted accessways obtained each fiscal year is still needed to ensure that this Public Access Site GIS data layer remains complete and up to date.

2. Developing Guidelines and Policies to Protect Lower-Cost Overnight Accommodations along the Coast

(a) Significant changes since last assessment: The Commission conducted a public workshop regarding public access and visitor serving issues related to hotel-condominium developments and protection of lower-cost visitor serving over-night accommodations in the coastal zone at their August 9, 2006 hearing. Information highlighted the deficit of lower-cost overnight accommodations within the coastal zone. [See **HOTEL CONDOMINIUM WORKSHOP**.][20]. Policy guidance to address public access and recreation issues related to the conversion of hotels to condominiums is being developed as part of the 309 Enhancement Grant Program.

(b) Funding source: funded primarily through federal 309 enhancement grants and other state non-CZM funds.

(c) Outcomes & Effectiveness: The workshop underscored the need for constantly reassessing land use priorities and evolving policy questions in light of demographic changes and reduced land availability. Commission regulatory actions helped to protect and mitigate the loss of priority visitor-serving overnight accommodations. Updated and revised permit conditions and mitigation requirements are included in coastal permits and LCP amendments.

3. Published Regional Public Access and Resources Guides for Southern California and South Central California

(a) Significant changes since last assessment: Published "Experience the California Coast" volume 2 for South Central California, and volume 3 for Southern California. Once completed, the 4-volume "Experience the California Coast" series will include

[20] Report and background materials for Commission workshop on conversion to limited use overnight accommodations (Hotel-Condominium Workshop) can be found at http://documents.coastal.ca.gov/reports/2006/8/W3-8-2006.pdf.

information on all of California's beaches and coastal accessways, coastal parks, and other natural and historical coastal resources. (Volume 1 for the north coast region - Del Norte to Marin County - was published in 2005, as reported in the previous 2006 assessment.) Volume 2, for the South Central Coast region was published in 2007 and includes Monterey, San Luis Obispo, Santa Barbara and Ventura counties. Volume 3 for the Southern California regions was published in 2009 and includes Los Angeles, Orange and San Diego counties. (Volume 4 for the central coast region – San Francisco to Monterey County - is expected to be completed in 2011 or 2012.)

(b) Funding source: funded primarily through Coastal Impact Assistance Program (CIAP) funds and other state non-CZM funds.

(c) Outcomes & Effectiveness: Data compiled for these and other regional guides in the "Experience the California Coast" series provide information on existing public access sites as well as features on various marine and terrestrial habitats, plants and wildlife, geology and other natural and historical coastal resources. The data also resulted in GIS maps that are used by Commission staff in permit review and in federal performance measure reporting.

Operation and Maintenance Programs

The Coastal Commission does not operate or maintain any land and the State Coastal Conservancy provides limited funds for such activities. More information on these Conservancy activities is outlined in Appendix D, pg 17.

Alternative Funding Sources or Techniques

Due to recent and ongoing budget constraints, the Commission and SCC look to alternative funding sources, including permit fees and other grant funds, whenever possible.

1. Commission Permit Fees

(a) Significant changes since last assessment: In March 2008, the Commission amended its regulations to raise fees for coastal development permit applications.

(b) Funding Source: funded in part by federal 306 grant and other state, non-CZM funds.

(c) Outcomes & Effectiveness: Over the last two years (FY08 and FY09), General Fund revenues from filing fees increased.

2. Coastal Commission Whale Tail Grants Program

(a) Significant changes since last assessment: Proceeds from the sale of the official Coastal Protection license plate (or "WHALE TAIL® ") issued by the California Department of Motor Vehicles (DMV) benefit the Coastal Commission's Adopt-A-Beach Program, Coastal Cleanup Day and other coastal protection and restoration projects throughout the state. The Whale Tail Grants program[21] also distributes Whale Tail grants in support of coastal education programs and projects. Between 2005 and 2009, $3,729,000 in Whale

[21] For information on the Whale Tail Grants program, or the Whale Tail license plates, see: http://www.coastal.ca.gov/publiced/plate/plgrant.html or http://www.coastal.ca.gov/publiced/plate/platefaq.html.

Tail grant monies were awarded for coastal/marine education and habitat clean-up/protection projects.

(b) Funding Source: funding from the California DMV environmental license plate program.

(c) Outcomes & Effectiveness: The $3 million distributed has funded 212 educational projects reaching an estimated 628,000 residents (with radio and local public transit ads for some of these projects reaching an estimated audience of over 4.7 million radio listeners and public transit riders).

Beach Water Quality Monitoring and Pollution Source Identification and Remediation

(a) Significant changes since last assessment: Beach monitoring is implemented by the State Water Resources Control Board and is described in Appendix D, pgs 14-15. Based on data provided by the SWRCB Beach Watch Program for the period July 1, 2005 through February 23, 2010[22], of the 280 beaches monitored (out of 433 beaches that meet the AB411 water quality monitoring criteria), there were 3,458 beach postings, and 250 beach closure events, which resulted in 1,312 beach mile days closed. SWRCB data includes information from beaches that are outside of the coastal zone (i.e., some data collected from beaches located within San Francisco Bay).

(b) Funding Source: funded using state non-CZM funds.

(c) Outcomes & Effectiveness: As noted above, the State Water Resources Control Board is responsible for monitoring water quality. Information provided by the SWRCB is considered in the Commission's regulatory and LCP planning analysis in order to implement coastal policies on protection of marine resources and public access and recreation. Restoration or provision of adequate funding is necessary to keep this important program operating and capable of providing information to inform coastal management.

Public Access within Waterfront Redevelopment Programs

(a) Significant changes since last assessment: Most waterfront redevelopment projects are regulated by the Coastal Commission through project-driven LCP amendments, port master plans, and state or local government public works agency plans/projects.

Waterfront redevelopment projects have been tracked as part of the CZMAPMS reporting since FY07. Over the past two years, projects in 31 coastal communities were related to waterfront redevelopment. Public Access components of waterfront redevelopment projects often include repair of public piers, redesign or expansion of recreational boating marinas, or redevelopment of waterfront commercial/industrial space with access pathways to and along bulkheads.

(b) Funding Source: Commission staff time for regulatory work funded in part through federal 306 funds and other state, non-CZM monies.

(c) Outcomes & Effectiveness: Waterfront projects and LCP certifications, updates and amendments are reviewed and as appropriate modified to ensure maximum public access as required by the Coastal Act.

[22] Unpublished data obtained from Beach Watch Program 2/24/2010.

Public Access Education and Outreach

Both the Commission's Public Access and Public Education Units have created publications and websites that inform the public about the coastal resources available, and coastal activities in which they can be involved. (For information on Public Access Guides, see previous sections.)

1. Public Access and Education Websites

(a) Significant changes since last assessment: Since 2005 significant new information has been made available online to the public. This includes links to: (1) new easement maps for Broad Beach and Carbon Beach; (2) two new regional access guides; (3) updated information on the California Coastal Trail; (4) the December 2009 report on the Status of Vertical accessways in San Diego and Orange counties acquired by Coastal Commission actions between 1973 and 2009; (5) a multi-language fishing etiquette handbook; (6) coastal cleanup program information; (7) boater "Clean and Green" program; and (8) "Coastal Steward Stories."

(b) Funding Source: funded in part by federal 306 grant and other state non-CZM funds

(a) Outcomes & Effectiveness: These websites provide access to significant information and education materials for the general public, as well as for Coastal analysts in project review or LCP planning. Between August 2006 and mid-December 2009, the Commission's Public Education website had accumulated at least 326,241 "hits."

2. Other Public Education Program Accomplishments

(a) Significant changes since last assessment: Additional Public Education outreach events and accomplishments over the last five years include:

CoastWeeks Program – CoastWeeks is an annual three-week celebration of our coastal and water resources, which includes activities such as nature walks, festivals, restoration events, and more. Approximately 1,000 "CoastWeeks" calendar events (about 200 per year) were listed on-line between 2005 and 2009.

Coastal Stewardship Pledge Program - At least 1,067 persons took the Coastal Stewardship Pledge from January 2005 to mid-December 2009 to commit to taking individual actions to protect the coast and ocean.

Annual Amateur Photography Contest - At least 644 persons participated in the annual photography contest, and 2,531 photo entries were submitted, between 2005 and 2009. The winning photographs, along with numerous honorable mentions, are featured on the Coastal Commission's website (to see the latest winners and honorable mentions, go to www.coastal.ca.gov). The Commission has also used many of the winning photographs in publications and other educational pieces.

Waves, Wetlands, and Watersheds Guide - At least 4,428 hardcopies of the *Waves, Wetlands, and Watersheds* science activity guide were distributed to teachers between 2005 and mid-December 2009. Additionally, at least 33 Educator Workshops, using the Waves, Wetlands and Watersheds curriculum, were provided to 681 participants between 2005 and 2009.

Kids Ocean Day Adopt-a-Beach Cleanup - At least 36,249 students participated in

Kids Ocean Day Adopt-a-Beach events between 2005 and 2009. In 2009, approximately 7,000 students participated in the Kids' Ocean Day Adopt-A-Beach Cleanup program, held in six locations, including San Diego, Huntington Beach, Los Angeles, Monterey (with students from as far away as Fresno), San Francisco, and Humboldt.

Annual Coastal Art & Poetry Contest - At least 9,453 art and poetry contest entries were received from students in kindergarten through 12th grade between 2005 and 2009 as part of the Coastal Art & Poetry Contest. Following each contest, the winning and honorably mentioned pieces are exhibited at venues up and down the coast, including the Moorpark Art Festival, the Sanchez Art Center in Pacifica, Coyote Point Museum in San Mateo, the Muth Interpretive Center in Newport Beach, the Ford House Museum in Mendocino, and Cabrillo Marine Aquarium in San Pedro.

Whale Tail Grants Program - (described in Alternative Funding Sources or Techniques section, above)

Boating Clean and Green Program - (described in Chapter 7. "Ocean Resources")

(b) Funding Source: These public outreach activities are funded through a variety of state non-CZM funds (including California Environmental License Plate program funds, partnerships with Department of Boating and Waterways, and other State funds)

(c) Outcomes & Effectiveness: The various Public Education Program activities have resulted in increased public outreach and participation regarding the marine and coastal environments found along the California coast.

California Coastal Trail Planning

(a) Significant changes since last assessment: Based on tracking started in FY0809, at least 27 coastal development permits included some kind of CCT segment or link.

Commission mapping staff has actively coordinated with the State Coastal Conservancy and the Department of Parks and Recreation (DPR) in mapping existing coastal trail segments along the California coast.

(b) Funding Source: Commission staff time funded in part through federal 306 and 309 funds and other state, non-CZM monies

(c) (c) Outcomes & Effectiveness: The CCT is 50% completed.

Comprehensive Planning Through LCP Certifications and Updates

(a) The changes in 27 LCP planning items are reported under Cumulative and Secondary Impact and Special Area Management Plan sections of this report and Appendix F, pgs 19-31.

(b) Funding Source: funded in part through federal 306 funds and other state, non-CZM monies.

(c) Outcomes & Effectiveness: Policies were updated in at least 8 of the 27 planning items.

Alternative Transportation to and along the Coast

(a) Significant changes since last assessment: See Statutory, Regulatory or Legal System Changes, above.

3. Indicate if your state or territory has a printed public access guide or website. How current is the publication and/or how frequently is the website updated? Please list any regional or statewide public access guides or websites.

The Commission has both websites and public access guides. See previous descriptions in Comprehensive Access Management Planning and Education and Outreach sections.

For websites see: http://www.coastal.ca.gov/access/accndx.html.) This site was significantly updated in February 2007 and 2008.

The State Coastal Conservancy website (http://www.scc.ca.gov/index.php?cat=24) provides, among other things, a listing of SCC grant funding provided for public access and habitat related projects.

PRIORITY NEEDS AND INFORMATION GAPS

Using the table below, identify major gaps or needs (regulatory, policy, data, training, capacity, communication and outreach) in addressing each of the enhancement area objectives that could be addressed through the CMP and partners (not limited to those items to be addressed through the Section 309 Strategy). If necessary, additional narrative can be provided below to describe major gaps or needs.

Table 3.7. Priority Needs and Information Gaps – Public Access

Gap or need description	Type of gap or need (regulatory, policy, data, training, capacity, communication & outreach)	Level of priority (H,M,L)
Need to update and revise LCP Access Components to address new issues and to implement the CCT.	Regulatory and policy	H
Need to develop and implement policies, ordinances and other measures to protect public access and recreation areas from impacts of sea level rise.	Regulatory and policy	H
Need to add detail and refine access sites and attribute information from 3rd regional guide (Southern California) and upcoming 4th regional guide (North Central California) to Public Access Site Inventory.	Data gap; capacity; financial support	M
Need to integrate CCC mapping, regulatory and access databases.	Data gap, capacity; technical support; financial support	M
Need additional funding for comprehensive planning of California Coastal Trail, which will require coordination with SCC, DPR and regional transportation planning	Capacity, communication & outreach; financial support	M

Gap or need description	Type of gap or need (regulatory, policy, data, training, capacity, communication & outreach)	Level of priority (H,M,L)
agencies		
Use digital access inventory data to create publicly available, online version.	Capacity; technical support; communication & outreach	M
Develop and implement a public access and recreation survey specific to the coastal zone.	Data gap; capacity; technical support; financial support; communication & outreach	L
Develop options to ensure implementation of in lieu fee mitigation projects.	Data, capacity, & outreach	H

ENHANCEMENT AREA PRIORITIZATION

1. What level of priority is the enhancement area for the coastal zone (including, but not limited to, CZMA funding)?

High ___X__ Medium _____ Low _____

Briefly explain the level of priority given for this enhancement area.

Protecting and providing public access is one of the highest priorities in the Coastal Act. The Commission planning and regulatory program must continue to implement measures to ensure that public access is maximized.

2. Will the CMP develop one or more strategies for this enhancement area?

Yes ___X___ No _____

Briefly explain why a strategy will or will not be developed for this enhancement area.

The Strategy will focus on public access enhancements by (1) updating LCPs; (2) adapting to sea level rise to protect public resources; and (3) enhancing data and improving technology tools to increase ability of coastal planners to use new access information in coastal permitting and planning.

4. MARINE DEBRIS

SECTION 309 ENHANCEMENT OBJECTIVE

Reducing marine debris entering the Nation's coastal and ocean environment by managing uses and activities that contribute to the entry of such debris

RESOURCE CHARACTERIZATION

Purpose: To determine the extent to which problems and opportunities exist with regard to the enhancement objective.

1. In the table below, characterize the significance of marine/Great Lakes debris and its impact on the coastal zone.

Table 4.1. Impacts of Marine Debris in the Coastal Zone

Source of Marine Debris	Extent of source (H,M,L)	Type of impact (aesthetic, resource damage, user conflicts, other)	Significant changes since last assessment (Y or N)
Land Based – Beach/Shore Litter	H	Aesthetic, Resource Damage, User Conflict, Economic impact, Habitat impairment	Y
Land Based – Dumping	M	Aesthetic, Resource Damage	N
Land Based – Storm Drains and Runoff	H	Aesthetic, Resource Damage, User Conflict, Economic impact, Habitat impairment	Y
Land Based – Fishing Related (e.g. fishing line, gear)	M	Aesthetic, Resource Damage, Harm to wildlife/fisheries	N
Ocean Based – Fishing (Derelict Fishing Gear)	M	Aesthetic, Resource Damage, Harm to wildlife/fisheries	N
Ocean Based – Derelict Vessels	L	Aesthetic, Resource damage, User conflict	N
Ocean Based – Vessel Based (cruise ship, cargo ship, general vessel)	M	Aesthetic, Resource Damage, User Conflict, Economic impact, Habitat impairment	N
Hurricane/Storm	L	Aesthetic, Resource Damage, User Conflict, Economic impact, Habitat impairment	N
Other (please specify)			

2. If information is not available to fill in the above table, provide a qualitative description of information requested, based on the best available information.

The primary method for obtaining information about the quantity and composition of marine debris in California continues to be the annual Coastal Cleanup Day, during which volunteers collect data on what they pick up. Year after year, the most frequently found items remain largely the same, with cigarette butts topping the list and plastic debris making up close to 80% of the total amount of debris collected. The composition of debris removed on Coastal Cleanup Day over the past five years has remained fairly unchanged.

Volunteer participation in Coastal Cleanup Day, however, has grown immensely since the last assessment, showing a 60% increase over the last three years. The total number of volunteers in California topped over 80,600 in 2009 collecting over 1.3 million pounds of debris from almost 800 sites[23]. For comparison, Coastal Clean-up activities in 2005, during what had been the largest clean up event up to that point in time, included about 47,770 volunteers who together removed a total of over 881,000 pounds of debris from over 700 sites.

Derelict fishing gear continues to be a problem. The Gulf of the Farallones Marine Sanctuary recently launched a derelict crab pot identification and removal program. This, along with the SeaDoc Society's gear removal program, concentrated largely around the Channel Islands Marine Sanctuary, constitute the state's major responses to the challenge of derelict fishing gear.

3. Provide a brief description of any significant changes in the above sources or emerging issues.

<u>Land Based Beach/Shore Litter, Storm Drains and Runoff</u>

More than two-thirds of marine debris comes from land-based sources. Studies of the North Pacific Gyre indicate that the plastic debris in the ocean increases each year, and has increased dramatically in the past 10 years. Since plastic debris doesn't biodegrade, there is a cumulative effect over time.

However, since the last assessment, there have been significant changes in the preventative measures taken by local governments, specifically in and around the Los Angeles area as cities have responded to the TMDL (total maximum daily load)[24] finding for trash along the LA River and Ballona Creek. The value of these preventative measures is measurable, but the overall effect is less quantifiable as a significant portion of the debris flowing through these rivers is small enough (< 5mm) to not be covered by the regulations.

4. Do you use beach clean-up data? If so, how do you use this information?

Yes – Data from Coastal Clean-up Day and other beach cleanup events is posted on our public website. The beach clean-up data is also used as an educational tool by school groups. The "Waves, Wetlands and Watershed Activity Guide" has a beach cleanup component and includes a data card and ideas on how teachers can use the data in lessons. The data is also used to inform

[23] There were also 333 Adopt-A-Beach clean-up events in FY08/09.

[24] A TMDL (Total Maximum Daily Load) establishes the maximum amount of an impairing substance or stressor that a water body can assimilate and still meet federal and state water quality standards. Pollution from both point sources (e.g., residential, municipal, or industrial discharges) as well as non-point sources (e.g., residential, urban, or agricultural runoff) are included in the TMDL study

new laws or regulations. For example, California Coastal Cleanup Day data has been used in efforts statewide to control debris, such as a potential ban smoking on state beaches and bans or fees on use of plastic bags or polystyrene packaging in many cities.

MANAGEMENT CHARACTERIZATION

Purpose: To determine the effectiveness of management efforts to address those problems described in the above section for the enhancement objective.

1. For each of the management categories below, indicate if the approach is employed by the state or territory and if significant changes have occurred since the last assessment:

Table 4.2. Management Categories - Marine Debris

Management categories	Employed by state/territory (Y or N)	Employed by local governments (Y, N, Uncertain)	Significant changes since last assessment (Y or N)
Recycling requirements	Y	Y	Y
Littering reduction programs	Y	Y	Y
Wasteful packaging reduction programs	Y	Y	Y
Fishing gear management programs	Y	N	N
Marine debris concerns in harbor, port, marine, & waste management plans	Y	Y	Y
Post-storm related debris programs or policies	N	Y	N
Derelict vessel removal programs or policies	Y	Y	N
Research and monitoring	Y	Uncertain	N
Marine debris education & outreach	Y	Y	Y
Other (please specify)			

2. For management categories with significant changes since the last assessment provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference rather than duplicate the information.

(a) Characterize significant changes since the last assessment;

(b) Specify if it was a 309 or other CZM-driven change (specify funding source) or if it was driven by non-CZM efforts; and
(c) Characterize the outcomes and effectiveness of the changes.

Recycling Requirements

Other agencies in the state, rather than the CCMP, are responsible for waste reduction and recycling. The CCMP itself has not implemented many debris control programs. However, the coastal waters directly benefit from the activities of other agencies.

(a) Significant changes since last assessment: Since 2006 there have been increased efforts to expand recycling and control litter at the source. For example, a 6 year pilot program to create an in-store recycling program for the collection and recycling of plastic 'carry out' bags, (State Assembly Bill AB 2449) took effect in July 2007. Many local municipalities have increased the amount and type of plastics they recycle. (See **http://www.calrecycle.ca.gov/Recycle**). Requirements have been implemented to reduce packaging waste and the California Ocean Protection Council passed a resolution and implementation strategy calling for the creation of a system of Extended Producer Responsibility for reducing packaging waste. Various state and local agencies continue to carry out and expand on a variety of litter reduction activities and to consider expanded smoking bans. At least 23 cities statewide have some ban on polystyrene use. Some Marine Debris/Trash TMDLs are being implemented to ensure compliance with state water quality standards and may be monitored through the TMDL program.

(b) Funding Source: funded through state, non-CZM funds

(c) Outcomes & Effectiveness: The objective is to remove a significant amount of debris that would otherwise reach the ocean and to educate in order to reduce the generation of debris at its source. Recent studies by the California Integrated Waste Management Board show that only 3 percent of all single-use plastic bags are being recycled. According to the "Earth911" website, litter audits have shown that the polystyrene ban has not significantly reduced the total amount of litter collected. A 2008 audit shows that on an item-by-item basis, a 36 percent reduction in polystyrene litter was offset by an equal increase in coated paperboard. Nevertheless, such bans are seen as a step forward considering the complexity of recycling. Changing product and packaging design and using materials more effectively is expected to result in (1) increased recycling; (2) reduced greenhouse gas and other air emissions; (3) reduced toxic product components; and (4) increased energy efficiency.

Marine Debris Concerns in Harbor, Port, Marine, & Waste Management Plans:

(a) Significant changes since last assessment: Harbors, ports and marinas are implementing best management practices to reduce and remove marine debris such as trash and recycling bins, monofilament fishing line stations, trash skimmers as well as boat skimmers, handheld nets, and/or trash booms. Several marinas in the coastal zone are participating in the voluntary California Clean Marinas Program. The Clean Marinas Program is not a state-endorsed program, but rather is a marina-industry alliance that has developed a voluntary certification program. Commission Water Quality Unit staff have reviewed and commented on marina water quality BMPs proposed under the Clean Marinas California program. (See www.CleanMarinasCalifornia.org.)

(b) Funding Source: state non-CZM funds; Commission work funded by 310 federal grant and other non-CZM funding

(c) Outcomes & Effectiveness: Of the 153 marinas in the Coastal Zone, approximately 47 have been designated and certified as Clean Marinas. Effectiveness of program in actually improving marina water quality is unknown.

Marine Debris Education & Outreach:

California Coastal Commission continues to expand its marine debris cleanup and educational efforts throughout California, especially in the inland areas.

1. Boating Clean and Green Program

(a) Significant changes since last assessment: The Commission's Boating Clean and Green Program, a partnership with the Department of Boating and Waterways, continues to educate boaters and provide technical assistance to marinas and local governments to increase availability of environmental services for boaters.

- In 2009, the program developed and distributed 6,000 boater kits and conducting nine statewide "Dock Walker" volunteer trainings where more than 134 new volunteers were trained to conduct face-to-face boater education about clean and safe boating practices. The program also developed educational materials to promote clean and safe boating practices throughout the state. New resources include a booklet titled "The Environmental Boating Laws Every Recreational Boater Should Know", and a statewide list of locations where boaters and the general public can properly dispose of expired flares.
- In partnership with the Boat US Foundation, in 2008 the Boating Program launched an effort to set up 32 monofilament fishing line recycling stations in areas with the highest recreational fishing activity throughout the state. Over 172 pounds of fishing line have been collected this year.
- The Boating Program continued its two-year partnership with the Santa Monica Bay Restoration Foundation to install pollution prevention services at marinas in southern California, including two oil absorbent exchange centers in Long Beach – at the Alamitos Bay Marina fuel dock and the Shoreline fuel dock. The program also worked on improving the existing City of Los Angeles oil absorbent collection centers at the San Pedro and Wilmington marinas.
- In 2009, the Boating Program assisted the City and County of San Francisco Department of the Environment to implement a California Intergraded Waste Management Board Used Oil Grant. The main components of this partnership were to: 1) Establish four free oil absorbent exchange centers in San Francisco at Hyde Street Pier, San Francisco Marina, South Beach Harbor and Fisherman's Wharf and 2) develop 2,000 boater kits and 12,000 copies of the new San Francisco Bay Area Clean Boating Map.
- The Boating Program continued producing the northern California insert of the "Changing Tide" newsletter. The Changing Tide is the quarterly publication of the three chapters of the CCBN (California Clean Boating Network – a forum of

members of from the boating industry, government agencies, and environmental groups). In 2009, the Boating Program distributed 10,000 copies of three different issues. The Program also facilitates the quarterly meetings of two of the three chapters of the CCBN.

- The Boating Program completed its partnership with Contra Costa County in implementing the second phase of its marinas and boating program: the 'Keep the Delta Clean Program'. The second phase of this program included the direct installation of needed pollution prevention services (certified used oil collection centers, oil absorbent exchange centers, cigarette butt containers, recycling bins, pet waste stations and informational kiosk), at key marinas in the Delta region, in addition to a strong boater education program. To date, the estimated amounts of hazardous materials collected through the pollution prevention services mentioned above, are: 10,535 gallons of used oil (not including oil filters and oil absorbents); 6,390 pounds of used oil filters; 3,787 pounds of used oil absorbents; 1,126 pounds of oil absorbent polypropylene fiber recycled; 320 gallons of used oil reclaimed from used oil absorbents; 166 additional gallons of used oil reclaimed from used oil filters and 1,527 marine engine batteries collected.

(b) Funding Source: Funded through grant from California Department of Boating and Waterways, and other state non-CZM funding

(c) Outcomes & Effectiveness: The various activities described above served to further educate the public about clean and safe boating practices, increase the number of oil absorbent exchange centers, improve water quality, and remove hazardous materials that could otherwise harm the biological productivity of coastal waters.

2. Ocean Protection Council (OPC) Marine Debris Steering Committee

(a) Significant changes since last assessment: The OPC adopted a Marine Debris Implementation Strategy in November, 2008 and the Commission chairs the Steering Committee for this effort. In 2009, the Steering Committee focused on administrative actions such as information sharing and legislative efforts to support the full realization of this strategy.

(b) Funding Source: staff participation in the California Ocean Protection Council funded through 310 federal funds and other state non-CZM funds.

(c) Outcomes & Effectiveness: Improved interaction and communication between resource management and regulatory agencies, the scientific community and non-governmental organizations. .

3. West Coast Governors' Agreement on Ocean Health

(a) Significant changes since last assessment: The West Coast Governors' Agreement on Ocean Health was signed by the Governors of California, Oregon and Washington in September, 2006. The Commission staff chairs the Marine Debris Action Team, and co-chairs the Ocean Awareness and Literacy Action Team. In 2009, both teams issued draft strategies for public comment, and are in the process of refining and finalizing those plans based on comments received.

(b) Funding Source: staff participation in the California Ocean Protection Council funded through 310 federal funds and other state non-CZM funds.

(c) Outcomes & Effectiveness: Increased and improved collaboration and information exchange among resource management and regulatory agencies on policy and programmatic solutions to common challenges. The work of both Action Teams will result in work plans that can be adopted by the individual states to address the specific topics of each team, helping to create more comprehensive programs through regional governance on these issues.

PRIORITY NEEDS AND INFORMATION GAPS

Using the table below, identify major gaps or needs (regulatory, policy, data, training, capacity, communication and outreach) in addressing each of the enhancement area objectives that could be addressed through the CMP and partners (not limited to those items to be addressed through the Section 309 Strategy). If necessary, additional narrative can be provided below to describe major gaps or needs.

Table 4.3. Priority Needs and Information Gaps – Marine Debris

Gap or need description	Type of gap or need (regulatory, policy, data, training, capacity, communication & outreach)	Level of priority (H,M,L)
Need to evaluate ways the existing regulatory framework can further enhance marine debris prevention or removal.	Regulatory	M
Need to strengthen intergovernmental coordination on different aspects of marine debris management strategies.	Capacity & Outreach	M
Need for improved monitoring and specific, composition-based and site-specific marine debris data to better evaluate innovative marine debris policies.	Capacity, data, training	M

ENHANCEMENT AREA PRIORITIZATION

1. What level of priority is the enhancement area for the coastal zone (including, but not limited to, CZMA funding)?

High _____ Medium ___X___ Low _____

Briefly explain the level of priority given for this enhancement area.

Marine Debris continues to be an area of important engagement for the Coastal Commission especially given the significantly elevated profile of the issue since the last assessment. It is an area of substantial public involvement and a gateway to further participation in coastal stewardship issues. It has high value as a public education tool and California is making headway in developing innovative policies and actions to prevent and reduce marine debris.

2. Will the CMP develop one or more strategies for this enhancement area?

Yes _____ No ___X___

Briefly explain why a strategy will or will not be developed for this enhancement area.

A statewide strategy around marine debris was developed recently by the California Ocean Protection Council, in cooperation with the California Coastal Commission and is just beginning to be implemented. Given the recent activity around this effort, staff will focus on continued participation in this existing effort and will not propose a separate enhancement strategy.

5. CUMULATIVE AND SECONDARY IMPACTS

SECTION 309 ENHANCEMENT OBJECTIVE

Development and adoption of procedures to assess, consider, and control cumulative and secondary impacts of coastal growth and development, including the collective effect on various individual uses or activities on coastal resources, such as coastal wetlands and fishery resources.

RESOURCE CHARACTERIZATION

Purpose: To determine the extent to which problems and opportunities exist with regard to the enhancement objective.

Growth will Increase Pressures on Coastal Resources, Public Access and Recreation

As reported in the 2006 Assessment, as of January 1, 2005, California's population exceeded 36.8 million persons. As of January 1, 2009, the population increased by about 1.5 million or about 4% since January 1, 2005. It is now estimated at 38,293,000.[25] The Demographic Research Unit of the California Department of Finance projects that California will pass 40 million residents by 2012 and exceed 50 million by 2032 reaching to 60 million by 2050.[26] Urbanization and other development pressures on resources and access to the coast will also increase as a result of this growth.

Population in the 15 coastal counties increased by 3% since 2005, with the highest percentage of change in San Francisco (5%) and San Diego (4%) counties. In 2005 the population of coastal counties was estimated at 20,982,254 million. As of January 1, 2009, the population of the 15 coastal counties now total about 21,533,132, an increase of over one half million people. The coastal counties now account for about 56% of the total state population.[27] The more than 16.7 million persons that reside in the three southern coastal counties of Los Angeles, Orange and San Diego combined are about 43.6% of the total state population.

The population within coastal counties is expected to increase by an additional 9% (to 43.3 million) by 2020 and by 28% (to 51 million) by 2050.[28] The highest percentage of growth is

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[25] *State of California, Department of Finance, E-1 population Estimates for Cities, Counties and the State with Annual Percent Change — January 1, 2008 and 2009. Sacramento, California, May 2009. Accessed 12/3/09 at* http://www.dof.ca.gov/research/demographic/reports/estimates/e-1/2008-09/

[26] State of California, Department of Finance, *Population Projections for California and Its Counties 2000-2050,* Sacramento, California, July 2007. Accessed on 12/3/09 at http://www.dof.ca.gov/research/demographic/reports/projections/p-1/

[27] *State of California, Department of Finance, E-1 population Estimates for Cities, Counties and the State with Annual Percent Change — January 1, 2008 and 2009. Sacramento, California, May 2009.* Accessed on December 3, 2009 at http://www.dof.ca.gov/research/demographic/reports/estimates/e-1/2008-09/

[28] State of California, Department of Finance, *Population Projections for California and Its Counties 2000-2050,* Sacramento, California, July 2007. .Accessed on 12/3/09 at http://www.dof.ca.gov/research/demographic/reports/projections/p-1/

projected in the areas of the Commission's South Central, San Diego and North Coast Districts. The North Central District (which includes Sonoma, Marin, San Francisco and San Mateo counties) has the lowest population growth projections.

Development Activity Continues in Both Local and CCC Jurisdictions.

Since the last assessment in 2006, over 6,542 regulatory and planning items have been submitted to the Commission for review. The Commission has reviewed an estimated 6,990 post-certification notices of local coastal permits reported by local governments pursuant to certified LCPs.[29] These incremental decisions, when taken together, can represent significant changes to coastal resources. .

Much of the California coast has sensitive areas susceptible to cumulative impacts. The CCMP identifies the following as sensitive habitats: dunes, wetlands, riparian vegetation, tide pools, redwood and other forests, coastal scrub and sage, and grasslands.[30] As growth in California continues, these resources are more prone to adverse impacts, especially in areas where such resources have been seriously degraded in the past.

The overarching cumulative impact issue that the Commission is facing since 2005 is the continuing need to update LCPs to address cumulative impact issues, especially to address impacts from climate change. Addressing the impacts to public resources - shorelines, public beaches and trails, public recreational facilities and critical infrastructure – within LCPs is of paramount concern.

Examples of additional cumulative impacts identified through permit actions include:

- loss of public access, recreation and resources through incremental armoring of the coast;
- impacts to wetland resources from development and from runoff;
- impacts to public access through loss of affordable overnight accommodations;
- cumulative impacts to public access through increases in population demand and use;
- issues related to allocation of limited public services such as water and road capacity;
- impacts to urban-rural limit lines and associated impacts to agricultural lands; and
- drainage of polluted runoff into coastal waterways.

The statewide threats are evident in all six CCC districts (which include North Coast, North Central Coast, Central Coast, south Central Coast, South Coast, and San Diego), though the nature of the impacts varies with distinctions in resources and geography. Given the diversity of California's coastal zone, while the various regions in California experience different levels of threats, most, are related to the pressures of increased growth and urban development.

The following discussion highlights the major cumulative impact in various coastal regions.

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[29] Data derived from queries to Permit Tracking System, 12/3/09. Not all items submitted resulted in public hearings. Number includes items such as administrative permits, extensions, emergency permits and waivers, but even these administrative items represent minor development proposals and result in some level of Commission review. Number is estimate only as not all planning items may have been entered into the PTS.

[30] The Coastal Act Section 30107.5 defines "environmentally sensitive area" to mean areas where 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.

- In the North Central District (San Mateo/San Francisco/Marina and Sonoma) one of the highest priority issues in LCP planning is the cumulative impact to public access on major coastal access routes such as Highway One from potential increased traffic generated by proposed new development. Allocation of limited public services such as water resources also presents a major issue.
- Priority issues in the Central Coast District (Santa Cruz/Monterey/San Luis Obispo) include those related to loss of public recreational access and degradation of natural landforms due to armoring and erosion response; maintaining urban/rural boundaries; allocation of limited public services (e.g., water, sewer, and road capacity), including for priority uses; loss and fragmentation of sensitive habitat areas; non-rural and non-agricultural incursions into and adjacent to rural and agricultural lands; scale and character of built environment in significant public viewsheds; adequacy and availability of low-cost visitor-serving opportunities; resident-visitor conflict, primarily within urbanized areas; and providing public recreational access along largely developed immediate shoreline areas.
- In the urbanized South Coast region (LA and Orange Counties), priority issues focus on protecting public access and "priority uses" under the Coastal Act, including the cumulative loss of visitor-serving uses and affordable overnight accommodations, and obtaining access to the sea in heavily developed coastal areas, such as along the Malibu coast. The cumulative development on and along coastal bluffs, especially in the face of projected sea level rise, also presents a cumulative impact in the urban areas of the South Coast. In addition to avoiding the cumulative impacts from armoring of the bluffs and shoreline, the Commission needs to address the mitigation for loss of scenic resources, recreational shoreline and sand supplies. The urban areas of the South Coast Region also face increased pressure to develop adjacent to wetland areas and the cumulative hardening of wetland edges as a result of such development, which is a priority issue also seen elsewhere in the state.
- In San Diego County, cumulative impacts continue from new, large-scale development and redevelopment. This development impacts public access as it relates to road capacity, emphasizing the need for non-automobile and transit alternatives. Allocation of limited public services is also an issue, including increased demand for desalination facilities. Public scenic viewsheds are threatened due to the larger, bulkier structures which dominate natural landforms. There are also cumulative impacts to shoreline sand supply and available public beach areas resulting from construction of shoreline protective devices. Finally, there are cumulative impacts to natural open space areas and viewsheds from incremental brush/fuel management activities to protect existing development in wildland fire hazard areas

1. Identify areas in the coastal zone where rapid growth or changes in land use require improved management of cumulative and secondary impacts (CSI) since the last assessment. Provide the following information for each area:

Table 5.1. Cumulative and Secondary Impacts Resulting from Growth and Land Use Changes in the Coastal Zone.

Geographic area	Type of growth or change in land use	Rate of growth or change in land use [31] (% change, average acres converted, H,M,L)	Types of CSI
North Coast	Change in land use is represented through the number of CCC development applications submitted and notice of local permit actions reported.	Estimated Population growth in coastal counties increased about 2, 365 (1%) since July 1, 2005. There were 397 planning and regulatory items filed with the CCC and 1,184 local permit notices filed.	Climate change and sea level rise
North Central Coast	Change in land use is represented through the number of CCC development applications submitted and notice of local permit actions reported.	Estimated Population growth increased about 78,114 (3%) since July 1, 2005. There were 559 planning and regulatory items filed with the CCC and 164 local permit notices filed.	Climate change and sea level rise; Public access along major coastal access routes such as Highway One resulting from increased traffic generated by proposed new development. Allocation of limited public services, such as water resources.
Central Coast	Change in land use is represented through the number of CCC development applications submitted and notice of local permit actions reported.	Estimated Population growth increased about 26,707 (3%) since July 1, 2005. There were 492 planning and regulatory items filed with the CCC and 1,953 local permit notices filed.	Climate change and sea level rise ; Impacts to public access and coastal resources from shoreline armoring and erosion response; maintaining urban/rural boundaries; allocation of limited public services; impacts to sensitive habitat areas; impacts to rural and agricultural lands; impacts of development to significant public viewsheds; adequacy and availability of low-cost visitor-serving opportunities; resident-visitor conflict within urbanized areas; and maximizing access along largely developed shoreline areas.

[31] These data are from coastal counties which includes more than just coastal zone. Population figures for coastal zone not available.

Geographic area	Type of growth or change in land use	Rate of growth or change in land use [31] (% change, average acres converted, H,M,L)	Types of CSI
South Central Coast	Change in land use is represented through the number of CCC development applications submitted and notice of local permit actions reported.	Estimated Population growth increased about 36,442 (3%) since July 1, 2005. There were 1,535 planning and regulatory items filed with the CCC and 1,282 local permit notices filed.	Climate change and sea level rise. Impacts to public access and coastal resources from development. Cumulative impacts continue from new, large-scale development and redevelopment. Allocation of limited public services; Impacts of development on public scenic viewsheds; impacts to natural open space areas and viewsheds from incremental brush/fuel management activities to protect existing development in hazardous wildland fire areas
South Coast	Change in land use is represented through the number of CCC development applications submitted and notice of local permit actions reported.	Estimated Population growth increased about 285,337 (3%) since July 1, 2005. There were 2,605 planning and regulatory items filed with the CCC and 723 local permit notices filed.	Climate change and sea level rise; Public access and "priority uses" including the cumulative loss of visitor-serving uses and affordable overnight accommodations. Requirements for mitigation in the form of in-lieu fees or the direct provision of lower cost overnight accommodations as conditions of permits for the construction of new higher cost hotels or motels (as opposed to permit applications in the past where lower cost facilities were proposed to be demolished and replaced for either higher cost hotels or non-priority uses). Protecting public access is a continuing critical issue as local governments are considering or taking actions to close beaches or parking areas for either funding or public safety reasons. Renovation or redevelopment of boat harbors resulting in the cumulative loss of small boat slips and potential impacts to nesting and roosting habitat of herons and egrets in harbor areas. Cumulative development on and along coastal bluffs, and impacts from armoring the loss of scenic resources,

Geographic area	Type of growth or change in land use	Rate of growth or change in land use [31] (% change, average acres converted, H,M,L)	Types of CSI
			recreational shoreline and sand supplies. Impacts to wetland areas.
San Diego Coast	Change in land use is represented through the number of CCC development applications submitted and notice of local permit actions reported.	Estimated Population growth increased about 121,643 (3%) since July 1, 2005. There were 1,229 planning and regulatory items filed with the CCC and 1,289 local permit notices filed.	Climate change and sea level rise; cumulative impacts continue from new, large-scale development and redevelopment. Allocation of limited public services; Impacts of development on public scenic viewsheds; impacts to shoreline sand supply and available public beach areas resulting from construction of shoreline protective devices; impacts to natural open space areas and viewsheds from incremental brush/fuel management activities to protect existing development in hazardous wildland fire areas

2. Identify sensitive resources in the coastal zone (e.g., wetlands, waterbodies, fish and wildlife habitats, critical habitat for threatened and endangered species) that require a greater degree of protection from the cumulative or secondary impacts of growth and development. If necessary, additional narrative can be provided below to describe threats.

Table 5.2. Potential Cumulative and Secondary Threats to Sensitive Resources

Sensitive resources	CSI threats description	Level of threat (H,M,L)
Wetlands/Estuarine/Intertidal	Climate change and sea level rise; impacts from fill and from runoff	M
Beach/Shoreline/Dune Habitat	Climate change and sea level rise; impacts from adjacent development and shoreline armoring; impacts to public access (e.g. beach closures)	H
Riparian Habitat	Climate change and sea level rise; impacts from adjacent development and from runoff	M
Coastal bluff & blufftop	Climate change and sea level rise; impacts from shoreline erosion and subsequent armoring	H
Terrestrial ESHA	Climate change and sea level rise; impacts from encroaching development and from brush management for fire hazards	M
Rural and Agricultural Lands	Impacts from encroaching development; increased demand for remaining undeveloped lands	M

MANAGEMENT CHARACTERIZATION

Purpose: To determine the effectiveness of management efforts to address those problems described in the above section for the enhancement objective.

1. For each of the management categories below, indicate if the approach is employed by the state or territory and if significant changes have occurred since the last assessment:

Table 5.3. Management Categories - Cumulative and Secondary Impacts

Management Categories	Employed by state/territory (Y or N)	Significant changes since last assessment (Y or N)
Regulations	Y	Y
Policies	Y	Y
Guidance	Y	Y
Management Plans	Y	Y

Management Categories	Employed by state/territory (Y or N)	Significant changes since last assessment (Y or N)
Research, assessment, monitoring	Y	Y
Mapping	Y	Y
Education and Outreach	Y	Y
Other (please specify) Protected Open Space lands	Y	Y

2. For management categories with significant changes since the last assessment provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference rather than duplicate the information.

(a) Characterize significant changes since the last assessment;
(b) Specify if it was a 309 or other CZM-driven change (specify funding source) or if it was driven by non-CZM efforts; and
(c) Characterize the outcomes and effectiveness of the changes.

The Coastal Act specifically requires review of cumulative impacts; this concern is also implicit in many specific policies in the Coastal Act and LCPs. Generally, the CCMP controls cumulative impacts through the implementation of statewide resource protection policies at the local decision-making level, specifically through LCPs. However, LCPs are frequently amended and these amendments are often initiated for a particular development project, not for a programmatic change or policy modification. Project-driven amendments, which often seek to allow development projects that may not otherwise be permissible by the certified LCP, may result in cumulative impacts to resources.

Many LCPs are outdated, having been developed in the early 1980s, and have not yet been comprehensively updated. As a result they may no longer reflect current conditions or newer scientific information on coastal management and are unlikely to effectively address cumulative impacts. LCP updates are the means to incorporate land use and policy revisions to address cumulative and secondary impacts (CSIs) based on more updated information. In order to adequately consider cumulative impacts in updating Land Use Plans and policies, the Commission needs to provide more extensive technical assistance to local government staff.

As the state's projected population growth increases development pressures, CSIs will be increasingly addressed through actions taken by the Commission on coastal permit amendments and appeals of local decisions.

Regulations

The Commission's regulations—the California Code of Regulations section 13055 was revised in 2008 and incorporated coastal permit fee incentives for Green Building. See Climate Change Task Force discussion below under Education/Outreach.

Policies

a) Significant changes since last assessment: Since 2005 many LCPs have been certified or updated in whole or in part. (These are listed in the assessment for Special Area Management Plans; for more detail please refer to that section). And, hundreds of significant permit and appeals of locally approved permits have resulted in implementation of Coastal Act and LCP policies through new site development standards and modifications.

b) B) Funding Source: Staff regulatory work funded in part through 306 federal funds and other state, non-CZM funds.

c) Outcome and Effectiveness: The outcome of these planning amendments resulted in incorporating new or updated policies to address cumulative impacts and protection of resources. The outcome of these regulatory actions is better project siting and design to address cumulative impacts and protection of resources.

Guidance

The Commission developed policy and procedural guidance and other tools for updating LCPs.

1. Online Guide: UPDATING THE LCP-- A GUIDE FOR LOCAL PLANNERS. (LCP Update Guide - Volume I, April 2007)

(a) Significant changes since last assessment: This provided local and Commission staff with procedural guidance for revising LCPs to reflect new information and changed conditions related to policy issue areas (e.g., environmentally sensitive habitat areas, water quality, etc)

(b) Funding Source: funded using FY04 309 federal enhancement grant

(c) Outcomes & Effectiveness: LCP Update Guide Volume I was made available online in April 2007. Local governments can now use the on-line information and guidance in the Update Guide to amend LCP land use plan policies.

2. Development of the Commission staff internal information exchange tools.

(a) Significant changes since last assessment: The Commission developed more efficiently ways to collect and share information on Commission decisions to provide guidance to staff on policies and procedures to inform planning and regulatory actions.

(b) Funding Source: funded using FY04 309 federal enhancement grant

(c) Outcomes & Effectiveness: CCC staff has expanded capacity to research and incorporate information and best practices from recent CCC decisions into ongoing planning and regulatory actions.

3. Guidance for Protecting Access to Affordable Overnight Accommodations in the coastal zone.

The development of the workshop and guidance was addressed in the Chapter 3 Public Access Management Characterization section.

4. Procedural Guidance on Protecting Access to Lower Cost Visitor-Serving Accommodations

(a) Significant changes since last assessment: Based on the information from the workshop, staff is developing additional guidance to local government by compiling examples of Commission actions and setting forth a range of options to assure protection of affordable overnight accommodations in permit conditions and LCP policies. This guidance is expected to be completed in late 2010.

(b) Funding Source: funded using FY08 309 federal enhancement grant

(c) Outcomes & Effectiveness: Updated and revised measures and mitigation requirements are included in coastal permits and LCP Amendments.

5. Guide for Updating Implementation Plan to address Procedural improvements. (LCP Update Guide – Volume II)

(a) Significant changes since last assessment: When completed by July 2010, this will provide local and Commission staff with procedural guidance for revising LCPs to reflect new information and changed conditions related to procedural aspects of LCP Coastal Implementation Plans.

(b) Funding Source: funded using FY09 309 federal enhancement grant.

(c) Outcomes & Effectiveness: Local government staff will have access to information and guidance in the LCP Update Guide Volume II for future LCP amendments related to implementation of coastal permitting procedures.

6. Wetlands Program Change: Develop and implement guidelines to improve the protection of wetlands.

(a) Significant changes since last assessment: The CCC held a public workshop on the definition and delineation of wetlands in the coastal zone at the November 16, 2006 Commission meeting [see **WETLANDS WORKSHOP**]. A Wetland Delineation Workshop was also presented to Commission staff on January 17, 2007, and used to give presentations to Caltrans on 10/17/06, 1/18/08, and 3/24/09; and to an Elkhorn Slough Coastal Training Program class on 4/3/08.

(b) Funding Source: funded in part with CZMA funds and state non-CZMA funds.

(c) Outcomes & Effectiveness: The training increased the capacity of staff in reviewing and implementing measures through coastal permits. Workshop presentation and text materials have been made available to staff on our internal intranet web site.

Since it was originally developed over three years ago, there have been some wetland delineation procedural changes and an update is needed.

7. Guidance on updating wetland and ESHA buffers requirements to reflect newer scientific information;

(a) Significant changes since last assessment: During this period the Commission staff conducted numerous tasks to provide guidance on updating wetland and ESHA buffers, including:

- Completed ESHA assessment and mapping of the Monterey Pine ESHA that was part of the Commission review and action on an LCP amendment that included a proposal for development in the Monterey Peninsula area (LCP amendment MCO-LCPA 1-07). The LCP amendment staff report provided a written assessment of extant pine forest, potential impacts, and required protection and restoration measures for Del Monte Forest Monterey Pine Habitat. The LCP amendment was denied at hearing on June 13, 2007.
- Completed wetland and ESHA analysis in support of the Bolsa Chica project review in Orange County (CDP# 5-05-020, approved 4/13/2005). This provided written assessment of development impacts on the Bolsa Chica wetlands, foraging habitat, and ESHA habitat of the mesa; and
- Completed a compendium of statewide buffer and mitigation ratio policies as part of a development setback and mitigation ratios report, *'Policies in Local Coastal Programs Regarding Development Setbacks and Mitigation Ratios for Wetlands and other Environmentally Sensitive Habitat Areas."* This staff guidance document, presented in July 2008 training workshops to Commission staff, resulted in improving Commission staff's habitat knowledge and incorporated information into updating LCPs and permits for areas of special resource concerns.

(b) Funding Source: funded by 309 federal enhancement grant

(c) Outcomes & Effectiveness: Guidance on updating wetland and ESHA buffers has helped increase the Commission's capacity to better address the cumulative impacts to sensitive coastal habitats in permits and LCPs.

Management Plans

1. Newly Certified or Updated Local Coastal Programs.

This topic is discussed in Chapter 6 - Special Area Management Plans.

Research Assessment Monitoring

1. Developed and Implemented the CZMAPMS

(a) Significant changes since last assessment: As a condition of receiving federal funds from OCRM, the Commission is required to collect data and report on 25 performance measures (each with multiple questions) as part of the. Coastal Zone Management Agency Performance Measurement System (CZMAPMS). From FY 06 through FY 08 staff completed the development of methods, data collection processes and completed required reporting on performance measures in six topic areas: Government Coordination, Public Access, Habitat, Coastal Hazards, Coastal Water Quality, and Community Development/Coastal Dependent Uses.

Staff drafted a recommended framework for incorporating performance measurement into the Commission's programs and procedures, including suggestions for revisions to permit tracking system and data sharing agreements. Staff also designed and developed a prototype database tracking mechanism that links with data from the Commissions Permit

Tracking System, and which is now being used to collect information for some performance measures from Commission regulatory actions.

(b) Funding Source: From FY06 through FY08 funded in part by Section 309 enhancement grants and other state, non-CZM funds; from FY09 through FY2010 funded in part by Section 306 federal Grants and other state, non-CZM funds.

(c) Outcomes & Effectiveness: A database was developed to streamline data collection and reporting for many of the CZMA performance measures but gaps remain. Some of the data for context measures and for public access sites has been used to update the public access sites database and GIS data layers as part of the Commission's ArcIMS. However, there is not yet a complete mechanism for creating updated GIS layers from annual PMS data. Other GIS data collected and/or developed in the process of answering contextual measures such as acres available for public access, shoreline miles available, and habitat mapping have been made available to the mapping unit for use in developing the ArcIMS for general staff use. Steps to effectively update GIS data annually have not yet been developed.

2. Developed guidance and procedures to ensure permit conditions protecting coastal access and resources are being met.

(a) Significant changes since last assessment: During Fiscal Years 2006/2007 and 2007/2008, the Commission's Coastal Services Center Coastal Management Fellow completed a project that reviewed and analyzed coastal permit condition compliance, developed a prototype database for tracking the implementation of permit conditions and made recommendations for implementing a protocol and guidance for condition compliance and monitoring both new and old coastal development permits issued.

(b) Funding Source: funding by NOAA's Coastal Services Center Coastal Management Fellowship (which provides a two-year fellowship).

(c) Outcomes & Effectiveness: The lack of Commission resources precluded further implementation of this protocol.

Mapping

1. Developed and Implemented the Internet Mapping Service (IMS)/GIS Mapping for CZMAPMS/Information Management Enhancements

(a) Significant changes since last assessment: Data layers were created and collected and the Phase I of the IMS project was launched to staff in March 2009. The internet Mapping Service provides a number of important web accessible mapping and graphic tools to assist Commission staff in planning and regulatory work.

(b) Funding Source: funded by FY06 through FY2009 309 and 306 federal grants.

(c) Outcomes & Effectiveness: This mapping tool enabled Commission staff to more efficiently analyze site characteristics and attributes and to recommend project and policy improvements in the priority enhancement areas as part of the Commission's regulatory and planning program.

Education and Outreach

1. Climate Change Task Force and Workshops

(a) Significant changes since last assessment: In 2006, the Commission staff formed a staff Climate Change Task Force (CCTF) to enhance the Commission's knowledge and effectiveness in addressing climate change issues in Coastal Act regulatory and planning work. The CCTF acts by developing workshops, policy papers, and through participation and coordination with other multi-agency committees and task forces.

The Climate Change Task Force provided input to development of state policy and strategy for Climate Adaptation, the 2009 California Climate Adaptation Strategy at *http://www.climatechange.ca.gov/adaptation/count/click.php*. The climate adaptation strategy (CAS) was developed in direct response to Gov. Schwarzenegger's November 2008 Executive Order S-13-08 that directed the Natural Resources Agency to identify how state agencies can respond to rising temperatures, changing precipitation patterns, sea level rise, and extreme natural events.

The Commission also held public workshops on climate change issues in December 2006, December 2008, and April 2009. The workshops were designed to inform Commissioners, Commission staff, and the general public about the effects of global warming on coastal resources and how the Commission might address global warming in its regulatory and planning work.

In September 2008, Commission staff prepared a white paper on future climate research needs (http://www.coastal.ca.gov/climate/ccc_whitepaper.pdf) that would later be incorporated into a chapter on research needs in the March 2009 California Climate Action Team Draft Biennial Report (see http://www.energy.ca.gov/2009publications/CAT-1000-2009-003/CAT-1000-2009-003-D.PDF).

At the December 2008 workshop the CCTF presented a briefing on the Commission's involvement in climate change and global warming issues (See the briefing document).

At the April 2009 CCC meeting, the Commission staff held a public workshop on sea level rise, with presentations made by Philip Williams and Associates on coastal erosion response to sea level rise, and the Pacific Institute on the impacts of sea level rise on the California coast.

In September 2009 the NOAA Coastal Management Fellowship Program granted the Commission a post-graduate student fellow to work on climate change projects.

(b) Funding Source: funded in part by CZMA 306 grant funds, by the NOAA Coastal Services Center and in part through non-CZMA state funds.

(c) Outcomes & Effectiveness: The Task Force continues to increase education of the public, the Commission, and staff as to the Commission's role in addressing sea level rise and other climate change effects. The Commission now considers elements of the Climate Adaptation Strategy in carrying out its regulatory and planning program under the Coastal Act.

2. Climate Change Website

(a) Significant changes since last assessment: In 2007 and 2008 the CCTF developed a Climate Change page on the Commission's public website (http://www.coastal.ca.gov/climate/climatechange.html) which includes information useful for coastal development applicants, local governments, and the general public.

(b) Funding Source: funded in part by CZMA 306 grant funds and other non-CZMA state funds.

(c) Outcomes & Effectiveness: As of February 21, 2010, the website had 2,705 page views averaging about seven page views per day. The Commission staff believes this could increase if resources were available for more public outreach and for expanding web content.

3. New Green Building Incentives

(a) Significant changes since last assessment: Administrative regulations section 13055 was revised to include coastal permit fee incentives for Green Building projects - a 40% discount on application fees for projects certified by the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) at the "Gold" level, or an equivalent third party green building certification.

(b) Funding Source: funded in part by CZMA 306 grant funds and other state non-CZMA funds.

(c) Outcomes & Effectiveness: Unknown, as the Commission has not yet implemented tracking of these cases.

4. Public Access Guides

The Commission developed two new regional Public Access Guides (described in Chapter 3 "Public Access," above).

Protection of Open Space Lands

1. Implementation of Mitigation through Acceptance of Open Space and Conservation Easements

(a) Significant changes since last assessment: Open Space Offers to Dedicate Easements (OTDs) mitigation for the cumulative impacts of development must be accepted by a management entity to ensure permanent protection. From January 1 2006 through December 2009 163 OTDs have been accepted, thus permanently protecting at least 1,000 acres or more of conservation and open spaces lands.

(b) Funding Source: funded in part by 309 Enhancement grants in FY 05/06, and FY 06/07 and since then by other state, non CZMA funds.

(c) Outcomes & Effectiveness: A significant amount of conservation and open space lands have been protected to mitigate for the cumulative impacts of coastal development. Since 2006 at least 1,000 acres have been permanently protected as open space lands. Since the OTD program began in 1974, the Commission has protected over 3000 acres of sensitive lands (please note that only a small percentage—roughly 34% of the total OTD files---

contain acreage data so this figure greatly underestimates the amount of protected lands).

2. Evaluated Deed Restrictions to Protect Significant Conservation and Open Space Areas

(a) Significant changes since last assessment: On January 31, 2008, the Commission completed a pilot project and published a report titled: ***Monitoring Coastal Lands Protected by Open Space Deed Restrictions:*** *Administrative Draft: Analysis, evaluation and recommendations to improve implementation of deed restrictions as special conditions*. Because a significant amount of open space lands are protected as mitigation through Deed Restrictions (DRs) instead of easements, this pilot project recommended measures to identify and more consistently track these lands. The pilot project evaluated a subset of 109 open space DRs in Los Angeles County and developed a GIS data layer for use in the Commission's ArcIMS.

(b) Funding Source: funded using FY06/07 309 federal enhancement grant.

(c) Outcomes & Effectiveness: The Commission has lacked sufficient resources to implement any of the recommendations of this report and the project has had no effect on monitoring the resource protection measures.

3. Mapping of Open Space Protected Lands

(a) Significant changes since last assessment: The Commission continued to work on linking the database of the open space easements to a GIS identifying the location of protected open space lands in regions where location and parcel level data is available. All the properties with easements are mapped in the Santa Monica Mountains (in Los Angeles and Ventura counties) and in San Diego County on an as needed basis for major regulatory or planning efforts.

(b) Funding Source: funded by FY 05/06 and FY06/07 and by other state, non-CZMA funds.

(c) Outcomes & Effectiveness. A GIS map for the easements retired in the Santa Monica Mountains and San Diego is used to analyze coastal development permits and LCP amendments. Limited resources preclude further mapping.

PRIORITY NEEDS AND INFORMATION GAPS

Using the table below, identify major gaps or needs (regulatory, policy, data, training, capacity, communication and outreach) in addressing each of the enhancement area objectives that could be addressed through the CMP and partners (not limited to those items to be addressed through the Section 309 Strategy). If necessary, additional narrative can be provided below to describe major gaps or needs.

Table 5.4. Priority Needs and Information Gaps – Cumulative and Secondary Impacts

Gap or need description	Type of gap or need (regulatory, policy, data, training, capacity, communication & outreach)	Level of priority (H,M,L)

Gap or need description	Type of gap or need (regulatory, policy, data, training, capacity, communication & outreach)	Level of priority (H,M,L)
Need to expand monitoring of protected lands; need to develop outreach to managing entities; need to complete measures to assess lands protected by Deed Restriction and ensure condition compliance.	Data, capacity, communication and outreach	H
Need to assess cumulative impacts related to Climate change; need to assess and review LCPs to incorporate adaptation strategies	Regulatory , Policy, Communication and Outreach	H
Need for improved Information management to enhance LCP Planning; Need for more efficient access to digital planning and policy material; expansion of PTS tracking to LCP status and contents; improvements to data entry requirements	Data, Policy, Communication, Outreach	H
Need to enhance condition compliance; Need to expand resources to comprehensively track various in lieu fees for lower-cost accommodations, to determine best locations to spend funds, and to help ensure funds are spent appropriately and expeditiously	Regulatory, Policy, Capacity	H
Need to expand evaluation of policy implementation in all enhancement areas. Need for quantitative evaluation of priority policy implementation issues to develop more up-to-date policies, conditions, and mitigation measures	Regulatory, Policy, Capacity	H

While many LCP program changes have been implemented through amendments and permit appeals, future progress is impeded by lack of adequate Commission staff resources to provide technical assistance and lack of grant funding assistance to facilitate local planning efforts.

OTDs: As of January 1 2010, there are roughly 330 OTDS remaining to be accepted. At the Commission's current rate of about 40-50 OTDs accepted per year at current staffing levels it will require over 6 years to achieve acceptance of all outstanding OTDs. Additional staff resources are needed to accelerate acceptance and to make the information more readily available to analysts through GIS data layers.

And, the Commission is unable to identify and measure the location and amount of land protected through Conservation and Open Space Deed Restrictions. Such evaluation could help assess condition compliance and could also identify the potential for protected lands to help address need for habitat adaptation to climate change.

Some of the program needs from last 2006 Assessment and Strategy remain.

- LCP Amendments and comprehensive updates are the key mechanism for addressing CSIs. Currently the Commission lacks an effective means to monitor and evaluate the implementation of LCP Amendments.
- The Commission needs to improve its ability to electronically access certified LCPs and to track and evaluate the implementation of amendments to the LCPs.

- Improved access to easement information is needed to improve analysts' consideration of regional access needs as part of the regulatory program.
- The existing Transfer-of-Development Credit (TDC) and OTD ordinances need to be updated and integrated into a GIS and available as part of an Integrated Mapping Service.

ENHANCEMENT AREA PRIORITIZATION

1. What level of priority is the enhancement area for the coastal zone (including, but not limited to, CZMA funding)?

High ___X__ Medium _____ Low _____

Briefly explain the level of priority given for this enhancement area.

The Commission must continue efforts to incorporate adaptation policies for addressing impacts of climate change and sea level rise into Local Coastal Programs.

Commission staff must continue to implement policies derived from the specific recommendations of the various periodic reviews as well as emerging information and coastal management techniques through LCP updates and Amendments. The implementation measurements improve LCP policies and implementation ordinances, especially in addressing CSIs. However, in the absence of more periodic LCP reviews, more evaluation of specific targeted high priority policy issues is needed.

As growth in the coastal zone continues, pressure increases on the ability of the public to access the coast. Pressure is also increasing on the ability to protect and provide a wide range of adequate public recreation and visitor support facilities, including the California Coastal Trail. The Commission staff must develop new plan provisions and policy mechanisms to ensure maximum public access to the coast and provision of adequate support facilities so that cumulative development pressures will not result in conversion or loss of affordable facilities and access. And, the Commission and local government must assess and develop ways to protect shoreline resources and public access and trails in the face of projected sea level rise.

The Commission should continue its efforts to provide incentives for local governments to update and amend their LCPs, as Commission is still unable to require such changes; under the CCMP, a local government assumes responsibility for implementing the Coastal Act after certification of its LCP. Lack of funding to assist local governments in local coastal planning is a significant impediment. The Commission should continue to seek ways to increase funding to local governments.

Continued improvements to information management and retrieval in order to monitor effects of LCP Amendments and condition compliance and use comprehensive data in analyzing cumulative impacts continues to be a critical need. Continuing to expand the Commission's GIS and IMS capability is essential to better evaluate cumulative impacts, and assist in tracking and reporting national performance indicators.

2. Will the CMP develop one or more strategies for this enhancement area?

Yes ___X___ No _____

Briefly explain why a strategy will or will not be developed for this enhancement area.

The cumulative and secondary impacts of development in the coastal zone intersect with every other enhancement area in some way; therefore, it is critical that this enhancement area is included in the Strategy California will continue to have a burgeoning population, and the accompanying development with population growth keeps cumulative impacts at the forefront of coastal management concerns. The incremental nature of individual development decisions through the permit process means that the Commission must remain alert to these impacts.

6. SPECIAL AREA MANAGEMENT PLANNING

SECTION 309 ENHANCEMENT OBJECTIVE

Preparing and implementing special area management plans for important coastal areas

RESOURCE CHARACTERIZATION

Purpose: To determine the extent to which problems and opportunities exist with regard to the enhancement objective.

The Coastal Zone Management Act (CZMA) defines a Special Area Management Plan (SAMP) as "*a comprehensive plan providing for natural resource protection and reasonable coastal-dependent economic growth containing a detailed and comprehensive statement of policies; standards and criteria to guide public and private uses of lands and waters; and mechanisms for timely implementation in specific geographic areas within the coastal zone. In addition, SAMPs provide for increased specificity in protecting natural resources, reasonable coastal-dependent economic growth, improved protection of life and property in hazardous areas, including those areas likely to be affected by land subsidence, sea level rise, or fluctuating water levels of the Great Lakes, and improved predictability in governmental decision making."* Within California's Coastal Management Plan (CCMP), Local Coastal Programs (LCPs) are considered the equivalent of the CZMA Section 309(a)(6) definition of *Special Area Management Plans (SAMPs)* for important coastal areas. Under the California Coastal Act, local governments are required to complete LCPs (which should include: (a) land use plans, (b) zoning ordinances, (c) zoning district maps, and (d) within sensitive coastal resources areas, other implementing actions) that 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. In addition, the Commission continues to review and maintain special area plans for the four industrial ports, public works planning for special districts, including important State Park units, long range development plans for university properties, plans for the siting of energy facilities, and review of management plans for federal properties.

Local Coastal Programs (LCPs)

There are 75 different coastal jurisdictions to date. Coastal Act Section 30511(c) allows jurisdictions to submit LCPs in separate geographic units. The jurisdictions are currently divided into 128 geographic LCP planning segments. Of those, 92 segments have Commission-certified LCPs. The local governments having jurisdiction within the 92 certified segments issue coastal development permits (CDPs). Yet as these plans age (some were certified over 20 years ago), there is a great need to revise them and to keep them updated to reflect new information and up to date policies to guide the local regulatory program, especially to address newly emerging issues such as climate change.

Since July 2006, approximately 26 jurisdictions have initiated or completed partial or comprehensive updates to their LCPs. In these instances the LCPs have been amended to include revised and new policies and/or ordinances. Significant changes have occurred in the coastal zone. LCPs that contain outdated policies and standards for managing sensitive coastal resources are insufficient to guide coastal management and threaten the protection of fragile coastal land

and water areas. The Commission lacks sufficient staff resources to consistently participate in local planning task force meetings, and to provide assistance to local governments during these updates. Efforts to provide assistance through other means, such as the internet, have also languished due to lack of staff.

As of June 30, 2009, approximately 36 LCP segments of jurisdictions remain uncertified. In addition there are 42 geographic areas where issues pertaining to a specific geographic area remain unresolved and the Commission retains coastal development permit authority (referred to as ADCs, Areas of Deferred Certification). Assisting local governments in completing their LCPs and ADCs has been extremely difficult due to the Commission having lack of staff and limited technical and financial assistance.

Other Local and Regional Planning Efforts

In addition to LCPs, there are other local and regional planning efforts (such as Habitat Conservation Plans (HCPs), Natural Communities Conservation Plans (NCCPs) and Regional Transportation Plans (RTPs) that impact coastal development plans and permits. Staff involvement with these planning efforts is limited due to a lack of sufficient staff resources. Where SAMPs have been developed in the coastal zone as a result of cooperative efforts by the Commission staff, local governments, and other entities, the result has been that the resource protection plans reflect the LCP policies and ordinances of the jurisdiction and the plans are likely to be amended into the LCP. However, only a small majority of the plans have been incorporated into the LCP. This results in misinformation regarding development standards and allowable uses of land since the LCP is the statutorily binding planning document and vision for coastal resource management, public access and development in the coastal zone.

Reviews of some SAMPs have occurred through federal consistency authority. Since Jan 1, 2006 the Commission has reviewed 10 Consistency Determinations and 4 Negative Determinations for various Management Plans. For a list of actions, please see Table F2 in the Technical Appendix F. However, staff did not participate in many of these plan creations and the majority of the above listed special area management plans have not been incorporated into the existing certified LCPs.

Responding to Climate Change and Sea Level Rise

Since the last Assessment, the Commission has continued to build on efforts to incorporate climate change analysis and adaptation policies into the LCPs. The Commission continues to address potential sea level rise in considering shoreline armoring and to incorporate new scientific information into this analysis. The Commission was successful in receiving additional grants and another federal NOAA Fellow who is tasked with helping to further develop the Commission's guidance for addressing climate change, sea level rise, and other adaptation measures in LCPs, consistent with the Coastal Act and the 2009 California Climate Adaptation Strategy (CAS). Some LCP Amendments have included update sea level rise adaptation measures (City of Crescent City LCPA – CRC-MAJ-1-09, June 2009, and Del Norte County LCP Update – DNC-MAJ-2-03, Oct 2009). There remains a great need for more guidance and information on the best available adaptation practices. Because all LCPs function as special area management plans for important coastal areas, they need to be updated in order to be legally adequate at addressing the changes in coastal management.

1. Identify geographic areas in the coastal zone subject to use conflicts that can be addressed through special area management plans (SAMP). Also include areas where SAMPs have already been developed, but new issues or conflicts have developed that are not addressed through the current plan. If necessary, additional narrative can be provided below.

Table 6.1. Coastal Management Conflicts Addressed through LCPs

Geographic Area	Major conflicts	Is this an emerging or a long-standing conflict?
Regional and statewide shoreline	Climate change and sea level rise; impacts of shoreline armoring and of erosion	Both, a long standing issue under the Coastal Act, but with new science and new demands and issues being raised
Wetlands	Pressures to develop, unpermitted uses, and secondary impacts from adjacent development, impacts to buffers, and water quality. Need to develop adaptation measures to protect wetlands and to address migration of restoration areas in response to sea level rise"	Both, a long standing issue under the Coastal Act, but with new science and new demands and issues being raised
ESHA	Pressures from encroachment and impacts to buffers and water quality. Need to develop adaptation measures to protect resources and restoration areas from climate change impacts.	emerging
Agricultural Lands	Pressures to convert agricultural lands to urban development and impacts to agricultural viability from adjacent development. Impacts of secondary uses on agricultural lands (including potential alternative energy facilities such as wind turbines); impacts of large lot residential development of "monster homes" on agricultural lands and cumulative impact on agricultural viability.	both
Public Access	Protection of access mitigation required through Offers to Dedicate. Out of date LCP Public Access components that lack adequate policy and zoning provisions to implement the California Coastal Trail. Impacts on existing public access and public access routes such as Highway One from continued growth and development. Impacts to public access from development of shoreline armoring. Impacts to public	Both, a long standing issue under the Coastal Act, but with new science and new demands and issues being raised

Geographic Area	Major conflicts	Is this an emerging or a long-standing conflict?
	access from conversion of Visitor Serving commercial and overnight accommodations from lower- to higher-cost or to more privatized uses. Need to maximize public access through improved public education and outreach. Impacts to access and recreation facilities from sea level rise.	
Cumulative Impacts	Conflicts include: urban growth, urban/rural boundary, outdated water quality policies, agriculture, threats from hazards, especially sea level rise, impacts to public access beach habitat/ecology, wildlife, wetlands, and other ESHA, and scenic resources from development of shoreline armoring, impacts to access and low-cost visitor-serving accommodations from hotel conversions to private residential use, the cumulative impacts of conversion of lands designated for priority land uses under the Coastal Act to non priority uses, and the loss of open space mitigation if OTDs are not accepted.	Both, a long standing issue under the Coastal Act, but with new science and new demands and issues being raised
Hazards	LCPs lacking adequate delineations of bluff edge and setbacks to avoid future shoreline armoring. Lack of adequate mitigation for impacts of seawalls to address loss of beach sand supply and loss of recreational beach area. Need for updated LCP Policies to adapt to sea level rise	Both, a long standing issue under the Coastal Act, but with new science and new demands and issues being raised

MANAGEMENT CHARACTERIZATION

Purpose: To determine the effectiveness of management efforts to address those problems described in the above section for the enhancement objective.

1. Identify below any special management areas in the coastal zone for which a SAMP is under development or a SAMP has been completed or revised since the last Assessment:

Table 6.2. Special Area Management Plans Completed or Under Development.

SAMP title	Status (new, revised, or in progress)	Date approved or revised
See text below, and table in Appendix F		

As noted, the LCPs under the California Coastal Act are the Special Area Management Plans by which coastal policy is implemented at the local level. The report available on the Commission's website at LCP Status Summary Chart shows the status of LCPs for each of the 128 LCP segments, including the dates of Land Use Plan (LUP) and Implementation Plan (IP) approval, date of effective LCP certification, number of amendments submitted, and number of remaining uncertified areas.

Since July 2006 the Commission has reviewed roughly 332 LCP Amendments and other major planning items (LRDPs. PWPs, Port Master Plans). Of these, about 27 were significant updates and revisions to existing area plans. Table F3 in Appendix F outlines these major planning actions that certified new plans or significantly updated or revised existing plans and LCPs during this period.

2. For management categories with significant changes since the last assessment provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference rather than duplicate the information.

(a) Characterize significant changes since the last assessment (area covered, issues addressed and major partners);
(b) Specify if it was a 309 or other CZM-driven change (specify funding source) or if it was driven by non-CZM efforts; and
(c) Characterize the outcomes and effectiveness of the changes.

Local Coastal Plan Amendments

(a) Significant changes since last assessment: Since 2006, about 27 amendments were certified or plans updated in whole or in part. These updated LCPs provide new or updated land use designations, intensities and resource protection policies to implement policies of Chapter 3 of the Coastal Act. See LCP Status Chart (Table F1) in Appendix F.

(b) Funding Source: Commission staff work was funded in part by Section 306 federal funds and in part by state, non-CZMA funds.

(c) Outcomes & Effectiveness: Amended and/or updated LCPs incorporate policies and standards to address the Commission's priority enhancement areas, including updated hazards, wetlands and other ESHAs, cumulative impacts, etc. The policies and standards of any of the 332 LCP amendments, once effectively certified by the Commission, become standards for local government issuance of coastal development permits (CDPs). Commission staff monitors locally-issued coastal permits approved pursuant to certified LCPs and under certain circumstances can appeal the locally-issued CDP to ensure LCP implementation consistent with the Coastal Act.

PRIORITY NEEDS AND INFORMATION GAPS

Using the table below, identify major gaps or needs (regulatory, policy, data, training, capacity, communication and outreach) in addressing each of the enhancement area objectives that could be addressed through the CMP and partners (not limited to those items to be addressed through the Section 309 Strategy).

Table 6.3. Priority Needs and Information Gaps – Special Area Management Plans.

Gap or need description	Type of gap or need (regulatory, policy, data, training, capacity, communication & outreach)	Level of priority (H,M,L)
Need better mechanism to track status and content of local coastal plans	Data, capacity, financial and technical support	M
Need for enhanced procedures for condition compliance.	Regulatory, policy, data, training, capacity	H
Need to expand evaluation of policy implementation in all enhancement areas. Need for quantitative evaluation of priority policy implementation issues to develop more up-to-date policies, conditions, and mitigation measures	Regulatory, Policy, Capacity	H
Staff and Financial resources for Commission and for local government to update plans	Financial and technical support	H
Updating of older certified Plans to address new and emerging information	Policy, regulatory, Financial and technical support	H
Improved Communication with local partners	Training, Communication & Outreach, Financial and technical support	H
Increased training for coastal planners and local decision makers in LCP Planning	Training, Communication & Outreach	H

ENHANCEMENT AREA PRIORITIZATION

1. What level of priority is the enhancement area for the coastal zone (including, but not limited to, CZMA funding)?

High ___X__ Medium _____ Low _____

Briefly explain the level of priority given for this enhancement area.

The LCP planning program is an essential component of the Coastal Act. LCPs are key to local implementation of the state policies in Chapter 3 of the Act. Ensuring that the LCPs remain up to date and equipped to guide future development in a manner that protects and enhances coastal resources is a priority task for the Commission.

2. Will the CMP develop one or more strategies for this enhancement area?

Yes ___X___ No _____

Briefly explain why a strategy will or will not be developed for this enhancement area.

The policies of the Coastal Act are implemented at the local level through certified LCPs that detail the kinds, location and intensity of development and implementing ordinances. These plans need to be kept up to date to adequately manage coastal resources. Policy evaluation needs to continue to provide guidance for such revisions and updates and compliance with regulatory mitigation needs to be enhanced. A strategy to enhance this planning program is an important need.

7. OCEAN/GREAT LAKES RESOURCES

SECTION 309 ENHANCEMENT OBJECTIVE

Planning for the use of ocean resources

RESOURCE CHARACTERIZATION

Purpose: To determine the extent to which problems and opportunities exist with regard to the enhancement objective.

1. In the table below characterize ocean and/or Great Lakes resources and uses of state concern, and specify existing and future threats or use conflicts.

Table 7.1. Threats and Use Conflicts Related to Ocean Resources.

Resource or Use	Existing Threat or Use Conflict	Degree of Threat (H/M/L)	Anticipated Threat or Use Conflict
Habitat and living resources	General habitat and fisheries decline, water pollution	H	Point and nonpoint source pollution and habitat loss in watersheds and coastal areas
Water quality	Pollution from inland waterways	H	Watershed degradation from nonpoint source polluted runoff and industrial sources
Shoreline erosion	Development, river channelization, dam construction, shoreline armoring	H	Development activities, shoreline armoring
Marine mammals/other marine species	Impacts from anthropogenic sound	M	Impacts from anthropogenic sound
Ports and harbors	Dredge and fill, conflicts with habitat	H	Dredge and fill, conflicts with habitat; sea level rise
Vessel traffic; Commercial Tanker and Non-Tanker (e.g., container, cargo) Vessel Traffic , Tanker Vessel Traffic	Threat of oil spill impacts to marine and shoreline resources, wildlife, fisheries, public access, tourism, and recreation	M/H	Threat of oil spill impacts to marine and shoreline resources, wildlife, fisheries, public access, tourism, and recreation
Tourism and recreation	Unmet demand, user conflicts	M	Unmet demand, user conflicts

Resource or Use	Existing Threat or Use Conflict	Degree of Threat (H/M/L)	Anticipated Threat or Use Conflict
Coastal power plants	Ongoing impacts to marine species; unrealized opportunity to avoid or reduce impacts	M	Ongoing impacts to marine species; unrealized opportunity to avoid or reduce impacts
Desalination	High cost/energy demand, potential marine biological resource impacts due to intakes and discharges, potential growth-inducing effects	M	High cost and energy demand potential marine biological resource impacts due to intakes and discharges, potential growth-inducing effects.
Fiber optic cable project	Impacts to coast and ocean resources from installation of fiber optic cables	M	Hard bottom habitat destruction, whale entanglement, public access, water quality, fishing
Marine Protected Areas	Resource management, user conflicts with fishing communities	M	Resource degradation, user conflicts with fishing communities
Fisheries	Species depletion, user conflicts	L	Species depletion, user conflicts
Oil and gas; Coastal and offshore oil and gas development	Ongoing cumulative impacts to offshore resources and coastal communities; Threat of oil spill impacts to marine and shoreline resources, wildlife, fisheries, public access, tourism, and recreation	H	Oil spills, aging facilities, pollutant discharges, potential expansion of exploration/development; Threat of oil spill impacts to marine and shoreline resources, wildlife, fisheries, public access, tourism, and recreation
Oil spill response technology	Impacts to water quality and marine resources	L	Impacts to water quality and marine resources
Offshore Alternative energy development	Impacts to water quality and marine resources	M	New technologies that may increase demand for wave, tidal wind offshore development and conflicts with marine resource protection

2. Describe any changes in the resources or relative threat to the resources since the last assessment.

Water Quality

Inland and nearshore coastal waters are still affected by nonpoint source water pollution. Water quality, reduced flow volumes (whether from climatic changes – e.g., drought, or control structures – e.g., dams and reservoirs, and invasive species continue to cause declines in threatened and endangered fish species. Decreased federal funding for the Coastal Nonpoint Source Pollution Implementation Grants program has made it more difficult for the Commission to address these issues and provide local assistance to minimize nonpoint source pollution.

Oil Spill Prevention and Response

Oil spills from container and cargo ships (non-tank vessels) continue to pose a significant threat to the coastal zone resources of California, especially since the Los Angeles-Long Beach port complex is ranked #1 and the Port of Oakland is ranked #5 (from 1995-2009) in container port volumes in the United States. The November 7, 2007 Cosco Busan oil spill in San Francisco Bay (from the container ship M/V Cosco Busan) received much national attention. This oil spill (approximately 53,000 gallons) caused significant adverse impacts to the fisheries, sea birds and wildlife, wetlands, beaches, and rocky intertidal habits, as well to the economic and recreational resources, within the Bay and along the California coast (including Golden Gate National Recreation Area and Point Reyes National Seashore).

And, on December 7, 2008, an oil spill (840-1260 gallons) from Platform A (located in federal waters in the Santa Barbara Channel) had adverse impacts on seabirds, wildlife, and marine resources.

As follow-up for the "lessons learned" from these spills, the Commission staff participated in several interagency and public workgroups for improving oil spill prevention and response. See "Management Characterization, section 2, for specific actions taken.

On May 13, 2010 the Commission's Oil Spill Coordinator briefed the Commission on the Gulf of Mexico oil spill from the Deep Horizon Drilling Rig explosion that occurred on April 20, 2010. The briefing included potential issues related to oil spill prevention and response in California.

MANAGEMENT CHARACTERIZATION

Purpose: To determine the effectiveness of management efforts to address those problems described in the above section for the enhancement objective.

1. For each of the management categories below, indicate if the approach is employed by the state or territory and if significant changes have occurred since the last assessment:

Table 7.2. Management Categories - Ocean Resources

Management categories	Employed by state/territory (Y or N)	Significant changes since last assessment (Y or N)
Comprehensive ocean/Great Lakes management plan or system of Marine Protected Areas	Y	Y
Regional comprehensive ocean/Great Lakes management program	Y	Y
Regional sediment or dredge material management plan	Y	Y
Other (please specify) – Statewide sediment or dredge material management plan	Y	Y
Intra-governmental coordination mechanisms for Ocean/Great Lakes management	Y	Y
Single-purpose statutes related to ocean/Great Lakes resources	Y	N
Comprehensive ocean/Great Lakes management statute	Y	N
Ocean/Great Lakes resource mapping or information system	Y	Y
Ocean habitat research, assessment, or monitoring programs	Y	Y
Other – Water Quality Protection & Management Programs	Y	Y
Other (please specify) – Coastal Water Quality Monitoring Efforts	Y	Y
Public education and outreach efforts	Y	Y
Other (please specify) – Oil Spill Prevention and Response	Y	Y

2. For management categories with significant changes since the last assessment provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference rather than duplicate the information.

(a) Characterize significant changes since the last assessment;
(b) Specify if it was a 309 or other CZM-driven change (specify funding source) or if it was driven by non-CZM efforts; and
(c) Characterize the outcomes and effectiveness of the changes.

Comprehensive Ocean Management Plan or System of Marine Protected Areas.

The Commission's Coastal Management Program does not directly implement this program but participates through intergovernmental coordination.

(a) Significant changes since last assessment: Since 2006 the Commission staff participated in several state initiatives, including input to:

- the Department of Fish and Game planning and adoption of regulations for the Marine Protected Areas in 2006;
- federal designation of federal water MPAs in and around the Channel Islands National Marine Sanctuary;
- the Marine Life Protection Act (MLPA) Blue Ribbon Task Force and Central Coast and South Coast Regional Stakeholder Groups;
- the Joint Management Plan Review and update process for the Monterey Bay, Cordell Banks and Gulf of the Farallones National Marine Sanctuaries;
- the adoption of the Ocean Protection Council (OPC) Strategic Plan June 8, 2006; and
- development of the September 2006 West Coast Governors' Agreement on Ocean Health and July 2009 Action Plan that launched a regional collaboration to protect and manage the ocean and coastal resources along the West Coast. (See http://westcoastoceans.gov/.)

(b) Funding Source: Programs mainly driven by non-CZM efforts, but Commission staff participation funded in part with 306 grant monies.

(c) Outcomes & Effectiveness: A coordinated array of MPAs comprising 19% of state waters off of central and north central California (357 of 1,894 square miles) has been designated. Designation and implementation is ongoing and will be subject to monitoring and evaluation of individual marine protected areas and statewide marine protected area array. A report of November 2008 outlines the progress on achieving the objectives of the OPC Strategic Plan as of November 2008 at http://www.opc.ca.gov/strategic-plan/. The WCGA Action Plan includes recommended outcomes.

Regional Comprehensive Ocean Management Program

(a) Significant changes since last assessment: Several Joint Management Plans have been reviewed since 2006, including ones for Humboldt Bay, North Coast, and Central Coast,

as part of the National Marine Sanctuary Management Program review process (see Comprehensive Management Plan/MPA section, above)

(b) Funding Source: funded by state non-CZM funds

(c) Outcomes & Effectiveness: Unknown. Coastal Commission staff participates as resources allow. (See Comprehensive Management Plan/MPA section, above.)

Regional Sediment or Dredge Material Management Plan

The Commission's Coastal Management Program does not directly implement these programs but participates through intergovernmental coordination. (See also Hazards Section).

(a) Significant changes since last assessment: Since 2006 several regional sediment management groups continue program development on several plans, including:

- Southern Monterey Bay Sediment Management Plan; Environmental Document
- Solana Beach Sediment Management Plan
- SANDAG (San Diego Association of Governments) – Plan Development; Coastal Habitat Survey; Environmental Document
- BEACON (Beach Erosion Authority for Clean Oceans Network - which is developing a sediment management plan for the area from Point Conception in Santa Barbara County, to the Mugu submarine canyon south of Port Hueneme in Ventura County) – Plan Development; Environmental Document; Biota/ Habitat occurrence GIS layers
- Orange County- Plan Development
- SF Central Bay and Open Coastline – Provenance Study; CRSMP scoping
- Eureka Littoral cell –being scoped
- Northern Monterey Bay – being scoped

(b) Funding Source: Commission staff participation was funded in part with 306 grant monies but funding for these programs was other non-CZM funding.

(c) Outcomes & Effectiveness: Unknown. Because these are not Commission programs the Commission is not undertaking monitoring and evaluation.

Statewide Sediment or Dredge Material Management Plan

1. Statewide Sediment Management Plan

(a) Significant changes since last assessment: Since 2006 Commission staff has participated in and overseen development of several reports and tools related to the Statewide Sediment Management Plan, such as:

- Web-based Mapping Tool: Incorporates spatial data from CRSMPs and other spatial data relevant to Regional Sediment Management.
- Conceptual Plan to Capture/Reuse Coastal Sediments Lost to Submarine Canyons
- Tijuana Estuary Demonstration Project: First and Second Phase Sediment Placement

- Sources, Dispersal and Fate of Fine Sediment Supplied to Coastal California (aka Mud Budget)
- Development of Sand Budgets for California's Major Littoral Cells
- Beaches, Littoral Drift and Littoral Cells - Understanding California's Shoreline and Beach Nourishment
- Coastal Sediment Benefit Analysis Tool: prototype developed for San Diego County, used in Association of Monterey Bay Area Governments Coordinated Regional Sediment Management Plan (AMBAG CRSMP).

(b) Funding Source: Commission staff participation was funded in part with 306 grant monies but funding for these programs was other non-CZM funding.

(c) Outcomes & Effectiveness: Unknown. These reports and tools are in varying stages of implementation and because these are not Commission programs the Commission is not undertaking monitoring and evaluation.

Intra-Governmental Coordination Mechanisms for Ocean Management

(a) Significant changes since last assessment: Since 2006, staff has participated in a number of statewide and regional efforts to improve protection of California's resources from oil spills. These include:

- Regional Area Committees and Regional Oil Spill Response Plans to improve community preparedness for oil spill response;
- Volunteer Coordination During Oil Spill Response, including development of a San Francisco Bay Delta Area Committee planning document for the coordination and use of volunteers during a major oil spill;
- Review of Oil Spill Response Plans, oil spill mitigation measures for all proposed and existing oil and gas projects and Participation in Drills for Marine Facilities; and Oil Platform;
- Review of Best Achievable Technologies for Oil Spill Prevention and Response as part of a statewide taskforce formed in July 2009 to report to the California Legislature on California's use of state-of-the-art technologies in oil spill prevention and response;
- Development of Best Maritime Practices for Navigational Safety. Participation in Harbor Safety Committees (HSC) at San Diego, Los Angeles/Long Beach, Port Hueneme, San Francisco, Humboldt that in 2008 developed a set of Best Maritime Practices (BMPs) for improving navigation and pilotage practices, especially during inclement weather. Commission staff is working with the NOAA Office of Coast Survey to include the BMPs for each California port in the 2011 Coast Pilot update and to implement outreach programs to improve mariners' access to data from the Physical Ocean Real Time Systems (PORTS) and the Ocean Observing System (OOS) buoys offshore California;

- West Coast Regional Outreach through the Pacific States-British Columbia Oil Spill Task Force; and

- California Water & Land Use Partnership (CA WaLUP), a member of the National Nonpoint Education for Municipal Officials (NEMO) Network, which educates local land use decision makers about the relationship of land use to natural resource protection, with a focus on water resources.

More recently, in light of the April 2010 explosion and oil spill from the Deep Horizon rig in the Gulf of Mexico California will be monitoring the science and management information that is developed as a result of the response in the Gulf to evaluate potential improvements to oil spill prevention and response.

(b) Funding Source: Staff participation is funded the California's Oil Spill Administration Fund; CA WaLUP participation is funded in part with 310 and 319 grant monies and other state non-CZM funding.

(c) Outcomes & Effectiveness: The industry and government program improvements have been effective in improving oil spill prevention and response, but due to human factors and inclement weather events there will always remain a risk of oil spills and impacts to California's coastal resources. In 2008, the Commission in partnership with other CA WaLUP members sponsored four workshops and trainings (in south central coast, south coast, San Francisco Bay Area, and Monterey Bay Area) on resource based planning, LID and other subjects. At least 750 people participated. The Commission also worked with CA WaLUP partners to prepare information fact sheets on LID and supported a collaborative statewide training and education program to support implementation of LID throughout California.

Single-Purpose Statutes Related To Ocean Resources

(a) Significant changes since last assessment: New statutes were adopted and new policy or regulations initiated, but the Commission is not the agency designated to implement these programs. Commission staff participates through intergovernmental coordination. These efforts included:

- Enactment of the California Ocean Protection Trust Fund. (AB 1260 Chapter 374 Statues of 2006, October 10, 2007). Authorizes the Ocean Protection Council (OPC) to award grants and loans to DFG and the fishing industry for the development and implementation of sustainable fisheries management plans (FMPs) pursuant to the Marine Life Management Act of 1998;

- Development (with the State Water Resources Control Board (SWRCB) and many other state agencies) of the June 30, 2009 Draft Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling. The proposed policy would apply to 19 existing power plants and establishes technology-based standards to implement federal Clean Water Act section 316(b) and reduce the harmful effects associated with cooling water intake structures on marine and estuarine life. Workshops for public input were held December 2009;

- Reviewed and commented on many federal and state statutes and regulations related to protection of coastal resources through the improvement of oil spill prevention and

response, including: United States Coast Guard: Non-tank Vessel Response Plans and Other Vessel Response Plans. Proposed amendments to 33 CFR Parts 151, 155, and 160 [Docket No. USCG–2008–1070], California Tank Vessel and Non-tank Vessel Contingency Plan Regulations (14 CCR §§818.02(e)(3)(B) and 827.02(h)(2)(B)) that were amended on July 1, 2009 to require faster response times and higher spill recovery capability standards for on-water oil spill recovery in High Volume Ports and Santa Barbara Channel, and California Assembly Bill 2031, Hancock, (Stats. 2008, ch. 563, §§1-3, p. 3270-3272) that amended California Government Code §§8670.8, 8670.25.5, and 8670.8.3 to require training and certification of local government oil spill response managers and to provide oil spill boom equipment to enable local government to protect local resources in event of a spill.

(b) Funding Source: Programs funded by state non CZMA funds; Commission staff participation is funded in part through 306 funding and other state, non-CZMA funds.

(c) Outcomes & Effectiveness: Unknown. As the Commission is not responsible for implementing these programs it is not undertaking monitoring and evaluation

Ocean Resource Mapping or Information System

1. GIS/ArcIMS Mapping

(a) Significant changes since last assessment: The Commission continues to implement a GIS/ ArcIMS mapping system and update jurisdictional data layers for each of the 15 coastal counties. Data development for nine counties is complete. Transfer tasks associated with data sharing, technical review and concurrence with local governments on digital map adoption recommendations are ongoing. Following the review process, the completed digital jurisdictional maps will be reviewed by the Commission for adoption.

(b) Funding Source: funded in part through 309 grants and other state non-CZM funding

(c) Outcomes & Effectiveness: The Commission's IMS products, anticipated to be completed by the end of 2010, will provide parcel-scale digital jurisdiction boundaries, public access data and priority spatial data layers (e.g. wetlands and streams, the first public road paralleling the sea, coastal bluffs and beaches) for use in regulation, planning and evaluation. Future Commission adoption of the new digital jurisdiction maps will give the appropriate official standing to the interpretation of these boundaries, allowing local governments and others to use and make available consistent jurisdiction boundaries and avoid boundary disputes in LCP administration.

2. Tracking Regulatory Actions that include Water Quality Findings and Conditions

(a) Significant changes since last assessment: Beginning in FY0607, the Commission staff has been tracking water-quality related regulatory actions as part of Coastal Zone Management Agency Performance Measurement System (CZMA PMS). Commission staff designed a portion of the Indicators Database module to track information relative to water quality issues, potential project impacts, best management practices required and other mitigation measures necessary to ensure that approved projects are consistent with Coastal Act policies.

(b) Funding Source: funded in part through 306, 309, and 310 grants, and other non-CZM funding

(c) Outcomes & Effectiveness: While data collection enables compliance with required annual CZMAPMS reporting and five-year assessment reporting, it is unclear how the data collected can be used to analyze the variation in water quality issues and approaches used, and how such factors may vary across different coastal regions.

3. Seafloor Mapping Initiative

(a) Significant changes since last assessment: The Commission's Coastal Management Program does not directly implement this program but participates through intergovernmental coordination. In 2007 the Ocean Protection Council funded the California Seafloor Mapping Program (CSMP) to map and classify estuarine and marine geologic habitats.

(b) Funding Source: funded through various federal programs (including funding from NOAA National Ocean Service, Office of Coast Surveys; U.S. Geological Survey Coastal and Marine Geology Program; and American Recovery and Reinvestment Act) and other non-CZMA funds (including the State's 2006 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84)).

(c) Outcomes & Effectiveness: Unknown as project is not yet completed. According to OPC/Coastal Conservancy staff, the project has mapped approximately 80% of the open state waters (from 10m water depth to the 3 mile limit) at this time, with a few gaps between Monterey and Point Conception. Commission staff expects to use the data once collected and mapped to inform regulatory and planning efforts related to coastal development projects within the ocean and along the coast. Commission mapping staff also hopes to make the GIS data layers available to staff through the Commission's ArcIMS mapping site. Among other things, the data are expected to be useful in evaluation of potential offshore projects and offshore hazards, enable more effective regulation, improve maritime safety, and improve understanding of sediment transport.

Ocean Habitat Research, Assessment, or Monitoring Programs

See discussion in "Comprehensive Ocean Management Plan or System of Marine Protected Areas" section, above.

Water Quality Protection & Management Programs

1. Critical Coastal Areas Program

(a) Significant changes since last assessment: Between 2005 and 2009, Commission Water Quality Unit staff worked with the State Water Resources Control Board (SWRCB) and the San Francisco Estuary Institute (SFEI) to implement California's program for Critical Coastal Areas (CCAs) as required by CZARA (Coastal Zone Act Reauthorization Amendments of 1990) and California's Non-Point Source (NPS) Pollution Control Plan. The goal of the CCA program is to ensure that effective NPS pollution control management measures are implemented to protect or restore coastal water quality in CCAs.

Between 2005 and 2009, staff initiated a management program for five of the 101 designated CCAs as a pilot effort to coordinate with various local and governmental stakeholders. The five areas are:

1. Trinidad Head, in Humboldt County;
2. Sonoma Creek, in Sonoma County;
3. James Fitzgerald Marine Reserve, in San Mateo County;
4. Watsonville Sloughs, in southern Santa Cruz County; and
5. The Newport Complex of 3 CCAs in Orange County – Upper Newport Bay, Newport Beach Marine Life Refuge, and Irvine Coast Marine Life Refuge.

(b) Funding Source: Staff participation was funded in part with 310 and 319 grant monies and other state non-CZM funding (Proposition 50 - Water Quality, Supply and Safe Drinking Water Projects, Coastal Wetlands Purchase and Protection funds).

(c) Outcomes & Effectiveness: From 2005 until late 2008, significant progress was made in each of the CCA pilot watersheds, with primary emphasis on developing stakeholder and steering committee partnerships, completing comprehensive watershed assessments and priority action plans for NPS pollution reduction in the pilot areas. The SF Estuary Institute (SFEI) developed a number of tools for use in NPS pollutant load estimation, assessment of land use impacts on pollutants of concern, and baseline data collection for pilot watersheds. The pilot projects in Humboldt and Orange counties were able to complete much of the collection and analysis of baseline data, and the drafting of CCA Action plans. In the fall of 2008, work on the program, including work by CCC staff, ceased due to the state budget freeze that halted bond funded work. The Commission Water Quality Unit is currently seeking additional funding from various sources to restart the program.

Coastal Water Quality Monitoring Efforts

(a) Significant changes since last assessment: Since FY0607, the Commission staff has been tracking on-going volunteer based water-quality monitoring efforts as part of Coastal Zone Management Agency Performance Measurement System (CZMA PMS). Commission water quality staff helped to develop, implement and analyze data from several different water quality monitoring events, including First Flush, Snapshot Day and Urban Watch. First Flush serves to monitor water quality in numerous coastal creeks and discharge points following the first significant rainfall event each year. Snapshot Day is an annual event designed to monitor water quality on a single day each year at numerous coastal lagoons, creeks and beaches. The Urban Watch program monitors storm drain outfalls for common urban pollutants (e.g., detergent, chlorine and ammonia-nitrogen) monthly from June through the first significant rain – which is captured through the First Flush event.

(b) Funding Source: Commission staff participation is funded in part through 306, 309, and 310 grants, and other state non-CZM funding

(c) Outcomes & Effectiveness: Since first tracking this information in FY0607, Commission Water Quality staff has helped organize 67 water quality monitoring events, with water

quality sampling conducted at 779 sites. In FY0607, these events included over 296 participants. Staff participation in water quality monitoring programs is key in designing and keeping these programs going and in ensuring use of standard methods for data collection, analysis and reporting.

Public Education and Outreach Efforts

The Commission is involved in numerous public education and outreach efforts related to water quality and reducing non-point source pollution of coastal waters, though water-oriented and land-oriented education efforts. These include:

1. Boating Clean and Green Program

(a) Significant changes since last assessment: The Boating Clean & Green Program , a partnership with the Department of Boating and Waterways, educates boaters provides technical assistance to marinas and local governments and develops educational materials to promote clean and safe boating practices. Since 2006 the program published "The Environmental Boating Laws Every Recreational Boater Should Know", and a statewide list of locations where boaters and the general public can properly dispose of expired flares.

(b) Funding Source: funded by the state Department of Boating and Waterways

(c) Outcomes & Effectiveness: In 2009, the program developed and distributed 6,000 boater kits and conducting nine statewide "Dock Walker" volunteer trainings, where more than 134 new volunteers were trained to conduct face-to-face boater education about clean and safe boating practices.

In partnership with the Boat US Foundation, in 2008 the Boating Program launched an effort to set up 32 monofilament fishing line recycling stations in areas with the highest recreational fishing activity throughout the state. Over 172 pounds of fishing line have been collected this year.

2. Other Marina Water Quality Programs

(a) Significant changes since last assessment: Commission staff has coordinated with the Clean Marinas California Program, a marina/industry led alliance to develop a voluntary certification program designed to provide clean facilities to the boating community and protect the state's waterways from pollution through compliance with marina water quality best management practices[32]. Beginning in FY0607, the Commission staff has been tracking the number of marinas in the coastal zone that have been certified through the Clean Marinas California program as part of Coastal Zone Management Agency Performance Measurement System (CZMA PMS).

(b) Funding Source: Commission participation funded in part through federal 306, 309, and 310 grants, and other state non-CZM funding

(c) Outcomes & Effectiveness: As of 2010, the Clean Marinas California website indicates that 47 out of 153 marinas in the coastal zone have obtained a Clean Marina certification.

[32] For more information on the Clean Marinas California Program, go to http://www.cleanmarinascalifornia.org/

3. Public Education Programs - Educational Activities and Training Opportunities

(a) Significant changes since last assessment: Since 2006, Commission staff have provided or participated in many educational activities and training events including:

- Participated in televised address to Arcata City Council on Stormwater Pollution, and accepted City's "Proclamation in Recognition of National Pollution Prevention Week." (FY07)
- Hosted workshop on Construction Pollution Prevention BMPs (FY07)
- Hosted workshop on "Landscape Design with Stormwater in Mind" (FY07)
- Created two stormwater pollution posters that were displayed on the back of local Humboldt County public buses (FY07)
- Created a stormwater pollution education page that is included in the 2007 Humboldt County Phonebook (FY07)
- Hosted EPA Stormwater webcast: Balancing Water Quality and Smart Growth Goals (FY07)
- Hosted EPA Stormwater webcast: Stormwater as Infrastructure -- Tools For An Effective Post-Construction Program (FY07)
- Co-hosted Boating Clean and Green "Dock Walker" Trainings (FY07)
- Provided In-Service Teacher trainings focused on water quality (FY07, FY08)
- Provided training on Potential Effects of Oyster Mariculture on the Natural Resources of Drake's Estero for NAS Committee & Public (FY08),
- Provided training on Coordinating oil spill contingency requirements for CCC permits with OSPR state oil spill contingency plan regulations (FY08)

(b) Funding Source: Commission staff participation funded in part through 306, 309, and 310 grants, and other state non-CZM funding

(c) Outcomes & Effectiveness: Since FY0607, Commission Water Quality staff has provided or participated in at least 102 educational and training events that served at least 1,764 participants.

4. Marine Debris Programs

See Chapter 4, Marine Debris.

5. Water Quality Website

(a) Significant changes since last assessment: the Commission's public website has a section devoted to the many Commission Water Quality related programs discussed in this section.

Two areas of the website have been updated over the past five years, including a new

section on Low Impact Design (LID), added in 2008[33], and the Critical Coastal Areas section[34], updated in 2006.

(b) Funding Source: funded in part through federal 306 funds, and other state non-CZM funding

(c) Outcomes & Effectiveness: The updated website helps to educate staff, local government planners, and others on water quality, related Coastal Act policies and other state and federal water quality requirements. As such, it enhances staff capacity to process and plan for coastal development permits and LCP certifications, updates and amendments.

6. California Water & Land Use Partnership

See "Intra-Governmental Coordination Mechanisms for Ocean Management" section above

Oil Spill Prevention and Response

See "Intra-Governmental Coordination Mechanisms for Ocean Management" section above

PRIORITY NEEDS AND INFORMATION GAPS

Using the table below, identify major gaps or needs (regulatory, policy, data, training, capacity, communication and outreach) in addressing each of the enhancement area objectives that could be addressed through the CMP and partners (not limited to those items to be addressed through the Section 309 Strategy). If necessary, additional narrative can be provided below to describe major gaps or needs.

Table 7.3. Priority Needs and Information Gaps – Ocean Resources

Gap or need Description	Type of gap or need (regulatory, policy, data, training, capacity, communication & outreach)	Level of priority (H, M, L)
Support for integrating natural resource based planning into local land use decision making and local coastal plans including financial resources to provide technical assistance and training to Commission staff and local governments,	Training, capacity, communication & outreach	H
Training and assistance for integrating Ecosystem Based Management tools into planning and permitting processes at the state and local level.	Training, data, capacity, communication & outreach	M
Need to identify existing climate change and coastal related impacts.	Policy, Data, capacity, communication & outreach	H

[33] For Commission website on Low Impact Design workshops, go to: http://www.coastal.ca.gov/nps/lid_workshops.html
[34] For Commission website on Critical Coastal Areas Program, go to: http://www.coastal.ca.gov/nps/Web/cca_project.htm

Gap or need Description	Type of gap or need (regulatory, policy, data, training, capacity, communication & outreach)	Level of priority (H, M, L)
Need to improve data management capacity.	Data, training, capacity, communication & outreach (??)	H
Need an integrated permit tracking and land use management system, which enables permit info to be linked with GIS spatial representation of info.	Data, training, capacity, communication & outreach	H
Need improved coordination/communication between ongoing and potential research activities and policy needs.	Policy, data, capacity, communication & outreach	L
Need to continue work on policy development related to power plants, including nuclear plants and best available technologies. Need to update LCP policies and ordinances on power plants, water intake and discharge.	Policy, data, capacity, communication & outreach	M
Need to assess and evaluate science and management response from Gulf of Mexico oil spill for potential improvements to oil spill prevention and response measures in California	Regulatory, Policy, Data , Capacity, Communication	M

ENHANCEMENT AREA PRIORITIZATION

1. What level of priority is the enhancement area for the coastal zone (including, but not limited to, CZMA funding)?

High _____ Medium ___X___ Low _____

Briefly explain the level of priority given for this enhancement area.

Overall this area is of medium priority because in general the Commission addresses many ocean issues through intergovernmental coordination activities. However, the Ocean Resources components noted above as *High Priority* are those which the Commission can best address by program enhancements to the permit tracking system and information management, updating LCPs and addressing climate change.

2. Will the CMP develop one or more strategies for this enhancement area?

Yes _____ No ___X___

Briefly explain why a strategy will or will not be developed for this enhancement area.

Most Ocean and Water Quality activities are funded through other state and federal sources.

8. ENERGY & GOVERNMENT FACILITY SITING

SECTION 309 ENHANCEMENT OBJECTIVES

Adoption of procedures and enforceable policies to help facilitate the siting of energy facilities and Government facilities and energy-related activities and Government activities which may be of greater than local significance

RESOURCE CHARACTERIZATION

Purpose: To determine the extent to which problems and opportunities exist with regard to the enhancement objective.

1. In the table below, characterize the types of energy facilities in your coastal zone (e.g., oil and gas, Liquefied Natural Gas (LNG), wind, wave, Ocean Thermal Energy Conversion (OTEC), etc.) based on best available data. If available, identify the approximate number of facilities by type.

Table 8.1. Energy Facilities in the Coastal Zone.

Type of Energy Facility	Exists in CZ (# or Y/N)	Proposed in CZ (# or Y/N)	Interest in CZ (# or Y/N)	Significant changes since last assessment (Y or N)
Oil and gas facilities	Y	Y	Y	N, no new areas for oil and gas have been leased.
Pipelines	Y	Y	Y	N, no new pipeline corridors have been proposed.
Electric transmission cables	Y	Y	Y	Y, there may be undersea electrical cables associated with wave energy projects referenced below.
LNG	N	N	N	Y, but due to market changes, there are no LNG facilities proposed for California.
Wind	Y	Y	Y	Y, at least two possible large scale projects being considered within the coastal zone in Southern California.
Wave	N	Y	Y	Y, about 12 preliminary permits proposed or issued by FERC for potential wave energy projects in state waters.
Tidal	N	N	N	N
Current (ocean, lake, river)	N	N	N	N
OTEC	N	N	N	N

Type of Energy Facility	Exists in CZ (# or Y/N)	Proposed in CZ (# or Y/N)	Interest in CZ (# or Y/N)	Significant changes since last assessment (Y or N)
Solar	Y	Y	Y	Y, there is greater interest in residential, small-scale solar projects.

2. Please describe any significant changes in the types or number of energy facilities sited, or proposed to be sited, in the coastal zone since the previous assessment.

Oil & Gas Facilities

The background to the status of oil and gas leases from the last Assessment is detailed in Appendix G.

In July 2008, President George W. Bush lifted an executive moratorium to open more areas of the OCS – including Northern, Central and Southern California – that have been closed to leasing since 1991. Soon thereafter, Congress also passed legislation to lift the congressional moratorium on leasing in order to give states the option to recommend the opening of the OCS off their coasts to new leasing, exploration, and development. In January 2009, the U.S. Department of the Interior's (DOI) Minerals Management Service (MMS) issued a *Draft Proposed Outer Continental Shelf (OCS) Oil and Gas Leasing Program 2010-2015 – Considering Comments of Governors, Section 18 Factors and Alternative Energy Opportunities.* The Draft Proposed Program schedules one sale in the Northern California Planning Area, (the Point Arena Basin), and two in the Southern California Planning Area (the Santa Maria, Santa Barbara/Ventura, and Oceanside/Capistrano Basins). The Coastal Commission, along with the governor of California, has urged the DOI to remove from the proposed leasing program all areas identified for leasing offshore California. In March 2010, the DOI removed all California lease sales from the proposed leasing program through 2017.

LNG Facilities

In the last assessment, we described the significant interest in building and operating liquefied natural gas (LNG) facilities along the California coast or in federal waters. At that time, there were 3-4 LNG projects proposed to be sited in and offshore California. Commission staff co-chaired a California multi-agency LNG Working Group that met monthly between 2003 and 2008 (and which now meets occasionally). In April 2007, the Coastal Commission objected to a consistency certification submitted by BHP Billiton to construct and operate an LNG terminal, regasification facility, and pipeline system known as the "Cabrillo Port" project in federal waters offshore of Ventura County. The Commission found that although the project included mitigation measures that would allow it to conform to most of California Coastal Management Program's enforceable policies, the proposal was not consistent with the policies related to air quality, would not be mitigated to the maximum extent feasible to address its impacts to air quality, including its expected greenhouse gas emissions, and therefore would not be in the public welfare to approve such a project. Soon thereafter, due to various factors such as the economic downturn, an increase in domestic natural gas production, and changes in natural gas demand, LNG project proponents either withdrew their applications or put their applications on

indefinite hold. At this time, there are no LNG facilities proposed to be sited in or offshore of California.

Renewable Energy (Wind, Wave, Tidal, Current, and Solar) Facilities

Another change since the last assessment is the interest in building and operating renewable energy facilities within the coastal zone (both onshore and in State waters) and in federal waters. There are currently about a dozen proposed wave energy projects within the California coastal zone. Several have been issued preliminary permits by the Federal Energy Regulatory Commission (FERC). These preliminary permits are expected to lead to site specific research for determining the suitability of pilot or full-scale facilities. The Coastal Commission and other state agencies are participating in site-specific data collection for particular projects as well as marine spatial planning efforts focused on identifying locations that are suitable or not suitable for offshore renewable energy projects.

3. Does the state have estimates of existing in-state capacity and demand for natural gas and electric generation? Does the state have projections of future capacity? Please discuss.

According to the California Energy Commission, in 2008, the state of California had an electrical generation capacity of 14,630 megawatts, with an additional capacity of 2,072 megawatts under construction. These power plants produced 208,519 gigawatt hours of electricity to meet California's 2008 demand of 285,574 gigawatt hours. The remaining demand was supplied with imported power. Consumption is expected to grow 1.1% per year from 2010-2018, with peak demand increasing by 1.2% per year over the same period. California produces about 810 million cubic feet per day of natural gas, comprising about 13% of the state's demand of approximately 6,230 million cubic feet per day. In-state production of natural gas is expected to decrease, possibly to 700 million cubic feet per day by 2020 (11% of current demand).

4. Does the state have any specific programs for alternative energy development? If yes, please describe including any numerical objectives for the development of alternative energy sources. Please also specify any offshore or coastal components of these programs.

Executive Order S-14-08 increased California's renewable energy goals to 33% by 2020. The Renewables Portfolio Standard requires retail sellers to increase renewable energy as a percentage of their retail sales to 20% by 2010. Public utilities are required to implement the same standard but have more flexibility with targets and timelines. California's 33% goal for renewable energy use would likely include some as-of-yet undetermined amount of wave energy and/or offshore wind energy.

5. If there have been any significant changes in the types or number of government facilities sited in the coastal zone since the previous assessment, please describe.

No changes since the last assessment.

MANAGEMENT CHARACTERIZATION

Purpose: To determine the effectiveness of management efforts to address those problems described in the above section for the enhancement objective.

1. Does the state have enforceable policies specifically related to energy facilities? If yes, please provide a brief summary, including a summary of any energy policies that are applicable to only a certain type of energy facility.

The California Coastal Act includes several policies that apply specifically to energy facilities, including Sections 30260, 30261, 30262, 30263, 30264, 30265 and 30265.5. Section 30260 encourages coastal-dependent industrial facilities to locate or expand within existing sites but allows for the development of new sites if alternative locations are infeasible or more environmentally damaging, to do otherwise would adversely affect the public welfare, and adverse environmental effects are mitigated. Section 30261 encourages multi-company use of existing and new tanker facilities and provides design specifications for new tanker facilities. Section 30262 includes policies regulating oil and gas development, ensuring such development is safe and environmentally responsible. Section 30263 provides that new or expanded refineries or petrochemical facilities shall be permitted if alternative locations are not acceptable, there is a public need, adverse environmental effects are mitigated, the site is acceptable visually, seismically and environmentally, and appropriate buffers are included. Section 30264 governs the siting and construction of thermal electric generating plants. Sections 30265 and 30265.5 include policies governing offshore oil transport and refining. For specific policy language, please see http://www.coastal.ca.gov/coastact.pdf.

In addition to the Coastal Act, some Local Coastal Programs (LCPs) include policies related to energy facilities. The LCPs of some jurisdictions, like Monterey County and the City of Oxnard, that have coastal power plants within their borders, contain specific policies governing the operation, maintenance, and potential expansion of those plants. Other LCPs, like the ones for San Luis Obispo and Santa Barbara counties, include specific policies related to oil and gas development. Commission staff is beginning to work with local governments to include alternative energy policies as part of an ongoing LCP update process.

The policies discussed above apply only to energy facilities in the coastal zone. The California Energy Commission maintains a list of energy policies applicable to the entire state of California.

2. Please indicate if the following management categories are employed by the State or Territory and if there have been significant changes since the last assessment:

Table 8.2. Management Categories - Energy Facilities in the Coastal Zone.

Management categories	Employed by state/territory (Y or N)	Significant changes since last assessment (Y or N)
Statutes or regulations	Y	Y – The state's Global Warming Solutions Act (AB32) of 2006 established a need for increased renewable energy sources, including offshore renewables (see below).

Management categories	Employed by state/territory (Y or N)	Significant changes since last assessment (Y or N)
Policies	Y	Coastal Act policies regarding Industrial development last amended in 2006 (CA Section 30265 amended by Ch 294, Stats. 2006)
Program guidance	Y	Y – Several initiatives on efficient and comprehensive review of renewable energy planning and projects (see below).
Comprehensive siting plan (including SAMPs)	Y	Not aware of any comprehensive LCP updates of energy policies at this time.
Mapping or GIS	N	At the federal level, MMS and NOAA are developing resource maps.
Research, assessment or monitoring	N	Not aware of any efforts at this time.
Education and outreach	N	Not aware of any efforts at this time.
Other -Marine Spatial Planning	Y	Several marine spatial planning efforts are underway, including one focused on renewable offshore energy (see below).

3. For management categories with significant changes since the last assessment provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference rather than duplicate the information.

(a) Characterize significant changes since the last assessment;
(b) Specify if it was a 309 or other CZM-driven change (specify funding source) or if it was driven by non-CZM efforts; and
(c) Characterize the outcomes and effectiveness of the changes.

<u>Statutes or Regulations</u>

<u>1. Reducing Greenhouse Gas Emissions from Electrical Generation.</u>

(a) Significant changes since last assessment: The State of California and the California Public Utility Commission (CPUC) have adopted numerous greenhouse gas laws, regulations and policies in order to address greenhouse gas emissions from electricity generation sources[35]. One of the key requirements is AB32 – The California Global Warming Solutions Act of 2006 – that requires the California Air Resources Board (CARB) to promulgate regulations to reach the 2020 goal of reducing greenhouse gas emissions to 1990 levels. The regulations are to go into effect in 2012. In order to achieve AB32's stated goal of reducing greenhouse emissions to 1990 levels by 2020, CARB is in the process of developing regulations for all major contributing source

[35] As described in Appeal A-4-OXN-07-096 for Southern California Edison 45-megawat peaker power plant

categories, including the electricity industry. CARB will determine the quantity of emission reductions that will be allocated to each contributing emission segment (transportation, electricity, manufacturing, etc.) and individual emission company or source, as well as setting forth the regulatory mechanisms by which these reductions will be implemented. For the electricity sector, CARB is developing a program that will reduce CO2 emissions on a system-wide basis in order to ensure that all emissions created to serve California's load are captured and that all generating sources, regardless of ownership or location, are being treated uniformly and equitably. CARB is currently developing a Scoping Plan that will provide a blueprint on how AB32 will be implemented (i.e., command and control measures and market-based programs). In a recent decision (D.08-03-018), the CPUC recommended to CARB that a cap-and-trade system be used to reduce greenhouse gas emissions from the electricity sector, with sources being required to purchase at least a certain portion of the credits.

(b) Funding Source: Legislative changes funded though state non- CZM funds.

(c) Outcomes & Effectiveness: The net effect is that greenhouse gas emissions from power plant facilities would be capped and may be required to be reduced as directed by CARB to meet the State's greenhouse gas reduction goals.

Program Guidance

1. Alternative Energy Projects

(a) Significant changes since last assessment: The Commission has seen a significant increase in alternative energy projects over the past five years, and anticipates that this trend will continue, in part due to greenhouse gas emission reduction targets in the state's Global Warming Solutions Act of 2006 (AB 32). For example, for the period 2006-2009, the Commission received approximately 182 permit applications for projects involving solar power installations and approximately 10 permit applications for wind power installations. This represents an increase of more than 100% from the previous 5-year period. The vast majority of these permit applications are for small scale installations for a single family dwellings, but does include some larger scale public and private installations. The Commission has begun developing guidance for review of coastal permits for small scale renewable energy technologies.

Additionally, as noted above, there are about a dozen offshore wave energy projects being considered in California, and Commission staff is involved in determining both site-specific requirements and general guidance related to offshore renewable energy development. Initiatives include a Memorandum of Understanding between California resource agencies and FERC on how to coordinate state and federal permit review, participation in a workshop on "Marine Spatial Planning for Renewable Energy on the West Coast", sponsored by NOAA, MMS, the West Coast Governors' Agreement on Ocean Health, and the Nature Conservancy, involvement in the federal Department of Energy's development of a Siting Handbook for offshore hydrokinetic energy projects, new regulations developed by the MMS for renewable energy projects on the Outer Continental Shelf, and site-specific projects at several locations along the California coast. Commission staff is also working with other state and federal agencies to determine the information necessary for permit review and regulatory compliance.

(b) Funding Source: funded in part through federal 306 CZM and state non-CZMA funding

(c) Outcomes & Effectiveness: Unknown at this time as initiatives are fairly recent. The intended outcome of the initiatives on offshore renewable energy is to develop an efficient and comprehensive review process for proposed projects.

PRIORITY NEEDS AND INFORMATION GAPS

Using the table below, identify major gaps or needs (regulatory, policy, data, training, capacity, communication and outreach) in addressing each of the enhancement area objectives that could be addressed through the CMP and partners (not limited to those items to be addressed through the Section 309 Strategy). If necessary, additional narrative can be provided below to describe major gaps or needs.

Table 1.9. Priority Needs and Information Gaps – Coastal Energy Facilities.

Gap or need description	Type of gap or need (regulatory, policy, data, training, capacity, communication & outreach)	Level of priority (H,M,L)
Need increased staff resources to develop and implement the above-referenced initiatives.	Capacity – additional staff needed to adequately participate in ongoing policy development and interagency coordination.	M
Need for training and information resources on alternative energy technologies	Training, Capacity, Communication, Outreach	M

ENHANCEMENT AREA PRIORITIZATION

1. What level of priority is the enhancement area for the coastal zone (including, but not limited to, CZMA funding)?

High _____ Medium ___X___ Low _____

Briefly explain the level of priority given for this enhancement area.

While more staff resources and training to increase staff capacity are needed for this program area, energy issues will be of medium priority compared with some other issues facing the commission in the immediate future such as addressing information technology improvements and sea level rise. At the same time the information improvements and updating of LCPs will indirectly help improve implementation of Coastal Act energy policies.

2. Will the CMP develop one or more strategies for this enhancement area?

Yes _____ No ___X___

Briefly explain why a strategy will or will not be developed for this enhancement area.

Most energy siting activities are funded through other state sources. A specific energy siting strategy is not an agency priority for section 309 enhancement funding, although projects to provide guidance on permit review and updates to LCPs is part of the overall strategies for Special Area Management Plans and Cumulative and Secondary Impacts.

9. AQUACULTURE

1. SECTION 309 ENHANCEMENT OBJECTIVE

Adoption of procedures and policies to evaluate and facilitate the siting of public and private aquaculture facilities in the coastal zone, which will enable States to formulate, administer, and implement strategic plans for marine aquaculture

RESOURCE CHARACTERIZATION

Purpose: To determine the extent to which problems and opportunities exist with regard to the enhancement objective.

1. Generally characterize the private and public aquaculture facilities currently operating in your state or territory.

Table 9.1. Impacts and Use Conflicts Associated with Aquaculture Facilities.

Type of existing aquaculture facility	Describe recent trends	Describe associated impacts or use conflicts
Shellfish (oyster, abalone, clam, scallop, mussel)	Stable	Habitat transformation/loss (i.e. use of eelgrass areas for oyster culture); naturalization of cultured introduced species; release of invasive species from contaminated seed or cultch; spatial and resource competition with native species (birds, marine mammals, fish, invertebrates);
Finfish	Stable	Adverse effects on genetic diversity of wild population through escape of hatchery fish created from limited broodstock population; impacts to benthos beneath net pens from deposition of organic waste; harvest of low trophic level fish species to feed farmed fish; attraction of predatory birds and marine mammals; release of chemicals and antibiotics for disease and parasite control.

Much of California's aquaculture development is comprised of commercial farming of freshwater fish, and is sited outside of the coastal zone. Within the coastal zone, in both freshwater and marine systems, the major aquaculture activities include commercial farming of oysters, abalone, and mussels. To a lesser degree, clams and scallops are also farmed. Currently, the only marine finfish aquaculture operation within the coastal zone is the California Department of Fish and Game (CDFG) supervised Ocean Resources Enhancement and Hatchery Program for white sea bass operated by Hubbs Seaworld Research Institute in partnership with the California Department of Fish and Game (CDFG). This program consists of a hatchery facility and over a dozen grow-out pens located in protected bays and harbors throughout southern California.

The State's ability to address aquaculture issues in the coastal zone through State and local statutes, regulations, and guidelines, et cetera, is as follows:

- CDFG promotes aquaculture in the state and may grant leases on state tide and submerged lands for the purpose of commercial aquaculture development.

- Aquaculture projects are regulated under the California Environmental Quality Act.
- The California Coastal Act regulates the offshore components of aquaculture projects.
- The onshore components of an aquaculture project in the coastal zone are regulated under either the Coastal Act or a local government's certified local coastal program, depending on their specific location.
- The Regional Water Quality Control Boards have regulatory authority over discharges into state waters, under federal Clean Water Act standards. Application of standards differs from region to region.
- The California Department of Health Services regulates the harvesting of bivalve shellfish for human consumption under the Health and Safety Code.
- The California Office of Spill Prevention and Response investigates possible seafood contamination if alternative oil spill response technologies are used near aquaculture facilities.

Aquaculture, while listed as a priority coastal dependent use in the Coastal Act, may raise conflicts with other uses and coastal resources that are also provided with specific protection through the chapter three policies of the Coastal Act. Specifically, marine aquaculture operations may adversely affect native habitats and the biological productivity of coastal waters as well as other uses of the coastal zone, such as:

- Public access to and along the shoreline;
- Public recreational activities (e.g., sea kayaking, recreational fishing, diving, ecotourism);
- Commercial fishing (when placed within working harbors, marinas or active offshore fishing grounds); and
- Scenic and visual resources.

Local Coastal Programs (LCPs) developed by local governments and certified by the Coastal Commission may offer an additional level of planning and permitting guidance for onshore aquaculture development that is more relevant for the specific area covered by an LCP. Nevertheless, each LCP incorporates the Coastal Act as a foundation and remains consistent with its core policies.

In practice, evaluation and coastal development permit review of aquaculture development proposals requires a detailed project specific analysis to resolve potential policy conflicts and ensure consistency with the Coastal Act. Commission staff has made use of such analysis in recent years to establish appropriate mitigation and permit conditions for the state's largest oyster aquaculture operation in Humboldt Bay, to begin the process of bringing an unpermitted shellfish farm in the Point Reyes National Seashore into compliance with the Coastal Act and to facilitate permitting and the development of adequate environmental safeguards for a white sea bass fishery enhancement program operated by CDFG and the Hubbs Seaworld Research Institute in San Diego.

Additionally, in the past year, large-scale finfish aquaculture in federal offshore waters has also attracted growing interest in California. Commission staff is currently reviewing a proposal to place a fish farm within federal waters approximately five miles offshore of San Diego.

MANAGEMENT CHARACTERIZATION

Purpose: To determine the effectiveness of management efforts to address those problems described in the above section for the enhancement objective.

1. For each of the management categories below, indicate if the approach is employed by the state or territory and if significant changes have occurred since the last assessment:

Table 1.7. Management Categories - Aquaculture

Management categories	Employed by state/territory (Y or N)	Significant changes since last assessment (Y or N)
Aquaculture Regulations	Y	Y
Aquaculture policies	Y	Y
Aquaculture program guidance	Y	Y
Research, assessment, monitoring	Y	Y
Mapping	N	Not aware of any efforts at this time
Aquaculture education & outreach	Y	Y
Other (please specify)		

2. For management categories with significant changes since the last assessment provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference rather than duplicate the information.

(a) Characterize significant changes since the last assessment;
(b) Specify if it was a 309 or other CZM-driven change (specify funding source) or if it was driven by non-CZM efforts; and
(c) Characterize the outcomes and effectiveness of the changes.

<u>Aquaculture Regulations</u>

<u>1. Passage of Sustainable Oceans Act (SB201) in 2006</u>

(a) Significant changes since last assessment: On May 26, 2006, California became the first state to enact stringent environmental standards for marine finfish aquaculture. According to a National SeaGrant Law Center summary (aqua.ucdavis.edu/News/PDFs/CA_Aquaculture.pdf), the Sustainable Oceans Act, SB201, requires the California Department of Fish and Game (CDFG) to administer leases for marine finfish farming in state waters and mandates that the State Water Resources Control Board (SWRCB) and regional water boards monitor water quality surrounding aquaculture operations. Under SB201, CDFG is authorized to lease state water bottoms or

the water column for periods not to exceed 5 years, and under strict terms to ensure that operations do not unreasonably disrupt wildlife or harm the environment. Regular monitoring of water quality is required during operation of the lease, and baseline benthic habitat and community assessments are required prior to lease authorization and during operation of the lease.

(b) Funding Source: Legislative changes are funded by state non-CZMA funds.

(c) Outcomes & Effectiveness: CDFG is now responsible for reviewing applications, authorizing leases, and evaluating water quality and benthic habitat assessments to ensure that finfish aquaculture activities protect marine habitats in these lease areas. By regulating marine finfish aquaculture, California's Sustainable Oceans Act of 2006 is expected to provide water quality and habitat protection of the marine water column and ocean bottom habitats.

Aquaculture Policies

Programmatic EIR on Aquaculture

(a) Significant changes since last assessment: The Sustainable Oceans Act also directs the CDFG to develop an environmental impact report about coastal marine shellfish and finfish aquaculture projects. The report is expected to provide a framework for managing marine finfish aquaculture in a sustainable manner that considers environmental impacts.

(b) Funding Source: funded by non-CZM funds through the Ocean Protection Council.

(c) Outcomes & Effectiveness: The Programmatic Environmental Impact Report currently being developed, will provide a comprehensive review of environmental impacts of aquaculture and can be used in adopting regulations and implementing CEQA requirements.

Aquaculture Program Guidance

(a) Significant changes since last assessment: Commission staff is contributing to the development of a guidance document outlining the existing regulatory framework for aquaculture in California and describing the relevant permitting and regulatory agencies and their roles.

(b) Funding Source: funded in part through federal 306 CZM funds and other state non-CZM funding.

(c) Outcomes & Effectiveness: Once completed, the guidance document will facilitate and streamline the review and permitting of aquaculture activities by providing applicants and aquaculture industry members with a comprehensive description of relevant regulatory agencies, authorities, review processes and contact information.

Research, Assessment, Monitoring

Shellfish and Finfish Aquaculture

(a) Significant changes since last assessment: CDFG staff continues their assessment, monitoring and evaluation of existing shellfish and finfish aquaculture operations. The

Commission's staff may participate in review and comments on these aquaculture lease applications and operations. Additionally, CDFG and the Hubbs Seaworld Research Institute are conducting ongoing research into the effectiveness of the enhancement program, the potential effects on the genetic diversity of the wild population from continual releases of hatchery raised fish, and the effects of food pellet and fecal matter deposition on substrate and infaunal invertebrate communities beneath juvenile fish grow-out pens. Commission staff is reviewing this research and continues to participate in meetings of the advisory panel for the white sea bass enhancement program.

(b) Funding Source: Commission staff participation is funded in part through federal 306 funds and other state non-CZM funding.

(c) Outcomes & Effectiveness: Research and data collected by this program will help inform the review of future marine finfish development proposals and may facilitate the development of mitigation measures and best management practices.

Aquaculture Education and Outreach

Aquaculture Development Committee

(a) Significant changes since last assessment: The Commission's staff has participated in a reconvening of the Aquaculture Development Committee (ADC) to increase communication between the aquaculture industry, federal and state agencies and environmental organizations.

(b) Funding Source: staff participation is funded in part through federal 306 CZM and other state non-CZM funding. Funding for the ADC Coordinator is provided by the state and the aquaculture industry.

(c) Outcomes & Effectiveness: Participation of Commission staff on the Aquaculture Development Committee has facilitated a greater level of dialogue between state and federal agencies, environmental organizations and aquaculture industry representatives that has resulted in a clearer understanding of the regulatory process, environmental concerns and potential impacts and current and future industry trends.

PRIORITY NEEDS AND INFORMATION GAPS

Using the table below, identify major gaps or needs (regulatory, policy, data, training, capacity, communication and outreach) in addressing each of the enhancement area objectives that could be addressed through the CMP and partners (not limited to those items to be addressed through the Section 309 Strategy). If necessary, additional narrative can be provided below to describe major gaps or needs.

Table 9.3. Priority Needs and Information Gaps - Aquaculture

Gap or need description	Type of gap or need (regulatory, policy, data, training, capacity, communication & outreach)	Level of priority (H,M,L)
none		

ENHANCEMENT AREA PRIORITIZATION

1. What level of priority is the enhancement area for the coastal zone (including, but not limited to, CZMA funding)?

High _____ Medium _____ Low __X___

Briefly explain the level of priority given for this enhancement area.

Substantial progress has been made in recent years to develop and establish a management and regulatory framework that will help provide for the sustainable growth of this industry and provides a solid foundation for the consideration and analysis of future aquaculture projects. For the most part, the regulations and standards that exist, the species currently being cultivated and the methods of cultivation and harvest that are employed most commonly appear to adequately minimize and/or mitigate the potential use conflicts and adverse environmental impacts associated with shellfish aquaculture.

Given this progress the level of priority for this enhancement area is low.

2. Will the CMP develop one or more strategies for this enhancement area?

Yes _____ No ___X___

Briefly explain why a strategy will or will not be developed for this enhancement area.

As noted above given progress made in this area the existing regulatory and management framework, is adequate for considering the siting and ongoing operations of marine aquaculture facilities in the coastal zone.

STRATEGY

CALIFORNIA COASTAL COMMISSION
SECTION 309 STRATEGY FOR FY 2011 – 2015

STRATEGY OVERVIEW

The Commission's CZMA 309 Enhancement Strategy for FY 2011-2015 consists of three separate but complimentary strategies: (1) Enhancing Local Coastal Plan (LCP) Program Implementation; (2) Improving Condition Compliance; and (3) Integrating Climate Change into Coastal Permitting and LCP Planning. These strategies will result in program changes in the five high priority enhancement areas identified in the Assessment: Special Area Management Planning (also considered LCPs), Cumulative and Secondary Impacts, Coastal Hazards, Public Access, and Wetlands.

The strategy for *Enhancing LCP Program Implementation* will continue to build on the Commission's recent efforts to improve communication with local governments, with a special focus on improving the LCP update and amendment process. A core component of this strategy will be scoping and developing a pilot project for a "Digital LCP Library." This project will begin development of an online LCP Library for the seventy-five local coastal jurisdictions in California to maximize the ability of the public to learn about and use the LCP program, and to improve LCP implementation by the Commission and local governments.

This strategy will also pursue development of improved information management systems for the LCP program, in order to improve tracking of individual LCPs, identify priority policy updates, and increase opportunities for knowledge transfer across jurisdictions, such as LCP guidance or templates for LCP enhancements. The LCP Program Implementation strategy will also continue to support development of LCP policy guidance in enhancement areas with identified needs including Public Access, Wetlands, and Coastal Hazards. Working with the League of Cities and California State Association of Counties will continue to be an important part of this strategy as resources allow.

The strategy for *Improving Condition Compliance* will concentrate on data management and analysis features associated with an improved information management system to ensure that the Commission's regulatory decisions to protect coastal resources are fully implemented. Our efforts to complete program changes in this area also support recommendations made by the Office of Coastal Resource Management (OCRM) in our 2008 Coastal Zone Management Act (CZMA) Section 312 evaluation.

This condition compliance strategy will address the cumulative and secondary impacts of approved development in the coastal zone. For example, the current 309 strategy has supported research and evaluation of the Commission's efforts to assure adequate lower-cost overnight accommodations which will support policy guidance to better protect against the cumulative loss of existing accommodations and provide new accommodations to meet this critical need in California. In this next five year strategy, the Commission will focus on researching and evaluating compliance with Commission actions that protect public access, sensitive lands, and

other in-lieu fee programs, such as those addressing impacts to beach sand supply from shoreline structures. Two major projects that implement this strategy are to: (1) modernize and upgrade our existing permit tracking system and (2) evaluate the feasibility of implementing recommendations made by our 2006 Coastal Fellow to improve condition compliance, responding to another recommendation from our 312 evaluation.

Finally, *Integrating Climate Change into Coastal Permitting and LCP Planning* directly addresses identified needs in Coastal Hazards, Public Access, and Wetlands, as well as SAMPs and will complement work done under the Enhancing LCP Implementation strategy. Updating LCPs and the Commission's regulatory program to address global sea level rise is a high priority. Sea level rise will continue to exacerbate shoreline erosion hazards that the Commission must address in coastal development proposals; and, it will directly affect public beach access and recreation resources, particularly as we respond to coastal hazards with shoreline structures that adversely affect coastal biological resources. Other elements of adaptation will be analyzed under this strategy, such as a project to evaluate the impacts of shoreline protective devices, as well as tasks that evaluate how to minimize green house gas emissions through our regulatory and planning work.

Note: The description of each of the three strategies follows a pre-set format that the Commission is required to follow according to OCRM's guidelines.

Table 1. Five-Year Budget Estimate by Strategy

Strategy Title	Year 1 Funding	Year 2 Funding	Year 3 Funding	Year 4 Funding	Year 5 Funding	Total Funding
1)Enhancing LCPs	$122,400	$144,900	$189,900	$189,900	$189,900	**$837,000**
2) Improving Condition Compliance	$112,500	$67,500	$45,000	$45,000	$45,000	**$315,000**
3) Integrating Climate Change	$135,500	$157,500	$135,000	$135,000	$135,000	**$697,500**
Total Funding	**$369,900**	**$369,900**	**$369,900**	**$369,900**	**$369,900**	**$1,849,500**

Note: Table 1 is an estimate of funding levels for each Strategy Area; however, the Commission expects that allocations for Years 2 – 5 will likely change in the grant applications for each of those fiscal years.

STRATEGY (1): ENHANCING THE LCP PROGRAM IMPLEMENTATION

I. Issue Area: Special Area Management Planning

The proposed strategy or implementation activities will support the following priority (high or medium) enhancement area(s) (check all that apply):

- ☐ Aquaculture
- ☑ Cumulative and Secondary Impacts
- ☐ Energy & Government Facility Siting
- ☑ Wetlands
- ☑ Coastal Hazards
- ☐ Marine Debris
- ☐ Ocean/Great Lakes Resources
- ☑ Public Access
- ☑ Special Area Management Planning

II. Program Change Description

A. *The proposed strategy will result in, or implement, the following type(s) of program changes (check all that apply):*

- ☐ A change to coastal zone boundaries;
- ☑ New or revised authorities, including statutes, regulations, enforceable policies, administrative decisions, executive orders, and memoranda of agreement/understanding;
- ☑ New or revised local coastal programs and implementing ordinances;
- ☐ New or revised coastal land acquisition, management, and restoration programs;
- ☑ New or revised Special Area Management Plans (SAMP) or plans for Areas of Particular Concern (APC) including enforceable policies and other necessary implementation mechanisms or criteria and procedures for designating and managing APCs; and,
- ☑ New or revised guidelines, procedures and policy documents which are formally adopted by a state or territory and provide specific interpretations of enforceable CZM program policies to applicants, local government and other agencies that will result in meaningful improvements in coastal resource management.

B. Description:

Local Coastal Programs play a foundational role in coastal management in California; once certified by the Commission, they provide the standard by which local governments review their coastal development permits. Many LCPs, however, are increasingly out of date and lack appropriate policies to address current land use issues. Many LCPs have been amended multiple times in various ways, making it difficult for users to track all the materials that make up the currently certified version. Many LCPs are still maintained in paper copy and are not easily accessible. Although some LCPs may be available in digital format, this is not universal, nor is there a central clearinghouse for certified LCPs.

To address these challenges, this strategy includes tasks that will lead to the enhancement of LCPs through a pilot project to explore new filing requirements for LCP submittals and amendments to maintain and update digital LCPs, as well as potentially new procedural guidance to staff on how to develop and maintain full access to the complete and currently certified digital LCPs. This strategy also includes research and analysis of emerging priority issues to develop guidelines, procedures and policy documents that will increase Commission and local government staff capacity and resources in regulation and planning across all enhancement areas.

More specifically, the policy, procedural and technical changes of completed under this strategy will:

- Help local governments revise and update LCP policies and ordinances across the priority enhancement areas;
- Assist in the analysis and evaluation of policies, permit and spatial data to enhance SAMP/LCP planning;
- Develop procedural ways to improve the planning and regulatory review of LCPs updates and amendments from local government; and
- Increase access to information useful to updating LCPs.

As outlined above, there is a need for a system that would provide access to updated and accurate LCPs to the Commission, local government, stakeholders and the general public. There is also an on-going need to facilitate LCP implementation through readily accessible plan documents. Accessibility to digital documents will facilitate efficient application of LCP requirements to local development projects, provide for easier evaluation of LCP amendments, including updates, and promote stronger public understanding of California's coastal management program.

Consequently, key steps to new LCP requirements and guidance will be:

- Initiate development of a digital LCP library;
- Development of procedural and policy changes to support electronic LCP submittal and amendments;
- Building on past outreach efforts with local governments to prioritize emerging issues of importance, conducting research and analysis on those issues, and developing guidance documents for updating ordinances and LCPs to address them.

While there are State regulations regarding the methodology and contents of LCPs (among other things), LCPs must include a land use plan component (LUP) with applicable development and resource protection policies; an implementation plan (IP) with zoning maps and zoning ordinances, and a public access component), there are no regulations that require LCPs to use a standard format. Thus, many of the currently certified LCPs were developed over time by different local governments, using many different formats.

Both LCP documentation and implementation of LCP policies can be enhanced through the development of an electronic LCP submittal and amendment process. Establishing procedures for electronic submittals and amendments would enable better documentation and storage of these items. Documents would also be accessed more systematically and efficiently for updates and changes.

A digital LCP library would help to ensure that staff from the Commission and local government is working from the most current and complete certified versions of the LCP. Systematic attention to creating and maintaining a digital LCP library will also facilitate easier review of LCP documents leading to better policy evaluation and thus, improvements to policies and ordinances statewide. The effort of developing the digital LCP library may also result in new provisions for LCP update policy guidance.

While we do not intend to propose a single standard format for LCPs, we can begin to standardize the way in which any future changes to complete certified versions of LCPs are tracked, updated and maintained. For example, with digital documents, amended language can be inserted electronically (showing underline and strikethrough, as appropriate) instead of attaching physical pages to the end of the documents where they may be missed.

Program changes resulting from this effort are likely to include new filing requirments for LCP submittal and amendments that will enable us to build and update digital LCPs, as well as potentially new procedural guidance to staff on how to develop and maintain full access to the complete and currently certified digital LCPs.

This strategy also builds on efforts begun in 2009 to improve communication with local governments concerning LCP implementation through collaborative discussions with the League of Cities (LOC), the California State Association of Counties (CSAC) and other local government representatives. This will also help to address OCRM's recommendations to the Commission in the 2008 Section 312 Evaluation that suggest that such efforts might include projects such as:

> *…creating templates for use in the LCP process, putting LCPs and plans on the CCC's website, or developing procedures to accommodate defined minor changes when the Coastal Commission and staff could rely on local government hearings and information.*

Implementing this strategy will:

- help local governments revise and update LCP policies and ordinances across the priority enhancement areas;
- develop ways to improve the planning and regulatory review process for local government;
- analyze and evaluate policies, permit and spatial data to enhance SAMP/LCP planning; and
- develop ways to increase access to information useful to updating LCPs.

III. Need(s) and Gap(s) Addressed

The California Coastal Act (the Act) is the keystone for coastal management in the state of California. Chapter 3 of the Act spells out the standards of coastal resource planning and management policies in areas such as public access, protection of wetland and other environmentally sensitive habitats, marine resources, and development. The Act has been incorporated into the federally-approved CCMP under CZMA.

The Coastal Act establishes the enforceable policies of LCPs certified by the Commission as the principal implementation mechanism for coastal resource management above the mean high tide in California. The Commission is involved in local government permitting and planning functions by: 1) reviewing local policy and implementing ordinance changes; 2) monitoring local coastal development permit actions; and 3) analyzing and processing proposals where the local decision has been appealed, in the Commission's original jurisdiction areas, and in areas without currently certified LCPs. Even though most of the state's local jurisdictions have certified LCPs, the Commission still issues over a thousand permits annually in its retained jurisdiction, and reviews thousands of local coastal permit decisions. Since January 1, 2006, the Commission staff has reviewed over 6,400 notices of locally issued coastal development permits (CDPs), of which 4,000 were appealable to the Commission.

There are 128 LCP segments, with 92 currently certified segments, and 36 uncertified segments. Many of the currently certified LCPs contain multiple components. Access to this information is challenging for several reasons. First, LCPs are structurally complex, often comprised of a number of individual documents, including Land Use Plans (LUP), Local Implementation Plan (LIP), zoning ordinances and zoning maps, as well as other ordinances, special area plans and/or special resource management plans that may be incorporated by reference. Second, as most LCPs were certified in the 1980s and may be amended numerous times, it can be difficult to ensure that staff are working with the most complete and up-to-date version of the certified LCP, LUP or LIP.

Third, in some cases, local staff and Commission staff may have to compile decades old documents and may not agree on what constitutes the complete LCP. Finally, once compiled, hardcopy materials can sometimes be difficult to maintain and make available to various staff located in different offices. As a result, better access to LCP policy information in digital format will facilitate information sharing more effectively and identify LCPs in need of updating more efficiently. It is necessary to take a phased approach to compiling a digital LCP library and implementing steps that ensure that the library can grow more complete over time.

The digital LCP component of this strategy addresses needs identified in the 309 Assessment including (See Special Area Management Planning Priority Needs and Information Gaps Table 2.5 and Table 5.4 Priority Needs and Information Gaps):

1. The need for various improved tools and techniques to maximize use of digital data in LCP development and permit review and to improve communication with local government;
2. The need to develop tools, techniques and training to share information and best practices across all enhancement areas;
3. The need for research and development of policy and regulatory guidance for mitigating the cumulative impacts of development including new and reconstructed shoreline protective devices in light of sea level rise.

Another essential component in any effort to strengthen LCP implementation is improved communication of Commission staff and Commissioners with the major stakeholders in the process: local government planners, locally elected officials, and the public. Building on efforts begun in 2009, the objectives of this strategy are to develop new guidance, new and/or revised guidelines, procedures and policy documents that provide specific interpretations of enforceable

CCMP and Coastal Act policies that will result in certifying new or updating older LCPs, and more effective implementation of currently certified LCPs. The strategy also builds on efforts begun in 2009 to improve coordination with the LOC and CSAC to find ways to improve the LCP process.

The Assessment also identifies the need to continue to update LCPs and implement measures to ensure that they adequately address new and emerging policies such as those related to climate change adaptation, across all five priority areas. New technical assistance - access to policy guidance, templates, model policies and spatial data- are needed to achieve enhancements in the high-priority management areas. The projects cited in this strategy are of the types and topics that the Commission could undertake in order to have a better understanding of how to implement changes through land use planning and development. The types of guidance and management tools described could be used by local government and Commission staff in review of coastal development permits and LCP updates and will ultimately strengthen LCP policies and ordinances and coastal development permit conditions in order to attain the goals of the chapter 3 Coastal Act resource protection policies.

Each high priority area in the Assessment highlights policy guidance and other evaluation measures as a significant need for enhancement of the program. For example:

1. The need to ensure that LCPs include updated policies and ordinances to address the State Climate Adaptation Strategy;
2. In the hazards and access areas, the need for research and development of policy and regulatory guidance for valuing the loss of public beach recreation resulting from shoreline protective devices;
3. The need to implement measures to ensure that in-lieu fee mitigation programs are fully implemented;
4. The need to ensure consistent application of wetland definition and protective policies contained in the Coastal Act and delineation methods in updating LCPs, reviewing permits, and collecting evaluation data;
5. The need for guidance on updating public access and recreation policies of LCPs to address impacts of sea level rise on public access and recreation resources;
6. The SAMPs assessment discusses the need for amendments and comprehensive updates to LCPs to improve the effectiveness of their resource protection policies and improved training for coastal planners and decision makers to enhance the LCP program.

Development of guidance, templates and mechanisms to share best practices and evaluation data will provide an effective and efficient way to improve the program. Program improvements will result as revised policies are carried out through coastal development permits (CDP), and LCP certifications, updates and amendments.

IV. Benefit(s) to Coastal Management

A digital LCP library will provide more effective technical assistance to local governments, Commission staff, stakeholders, and the public by facilitating better, more efficient, and more cost effective access to existing LCPs. It will also showcase the best examples of new policies

and ordinances to address emerging issues. Such information sharing will result in improved policies in updated LCPs.

Continued evaluation and development of guidance for updating LCPs will strengthen a key vehicle for implementing coastal management at the local level. Over time, implementation of such policy improvements may result in reducing the number of appeals of local permit decisions processed by the Commission and allow for improved and more effective coastal resource management.

V. Likelihood of Success

There is strong support to improve digital access to Commission certified policies and ordinances to guide LCP updates. At a local government workshop in August 2009, comments underscored the value of existing LCP Update guidance accessible on the web. In all areas of resource planning and management, better access to quality digital information is needed. While this strategy and available resources may not result in digitization of all 92 certified LCP segments in the near term, it will result in development of the design and management framework, set out the plan to build the digital clearinghouse and begin building the digital clearinghouse with initial priority LCPs. There is also strong support for providing additional technical assistance in policies and procedures to enhance the LCP Program as was outlined in the local government workshop in August 2009 and supported by OCRM's Section 312 Evaluation findings.

VI. Strategy Work Plan

Total Year(s): 1-5 (FY 2011-FY 2015)

Total Budget: $837,000

Final Outcomes: Recommendations for possible updates to the California Code of Regulations and/or CCC administrative procedures with regards to filing requirements for electronic LCP submittals, amendments and updates; and (2) Guidance and other tools**,** including possible sample language for revised LCP policies and procedures for Public Access, Wetlands, Hazards and Cumulative Impact needs identified through the planning and regulatory program.

Final Products: (1) Protocol for Building and Maintaining Digital LCP Library, including: (a) Problem Assessment and Alternatives Analysis, (b) completion of Pilot Project with draft Protocol/Guidance for implementing and maintaining digital LCPs, (c) list of priorities for compiling and making digital LCPs accessible, and (d) the ability to access a limited number of priority LCPs in digital format,

It is important to note that under the FY 2009 and 2010 309 work program, Commission staff established a Local Government Communication Initiative that included working with a Local Government Working Group (the "Working Group") to identify priority topics for LCP Updates and to identify gaps in LCP guidance. Commission staff anticipate that the product of this project will be new LCP Guidance documents and/or tools to share best practices of local governments to address one or more priority topics that may be generated from the Working Group. The Working Group has not yet developed these priorities; however, as described in (2)

above, this strategy builds on the prior work because it is not likely that all priorities can be addressed in one fiscal year grant. In addition, the need for additional policy and procedural guidance will be ongoing as priorities may change and new issues emerge over the next five years of this strategy. The specific priorities for such guidance will be more specifically developed as part of each fiscal year grant application.

Task 1: <u>The Digital LCP Library and Changes to LCP Filing and Procedures</u>

Year 1 - Problem Identification and scope of work

1. Assess the current status and format of certified LCP Documents. Categorize the existing state of LCP documents as to completeness, recent update existing digital format, LCP segments that may be the most current or the most out of date, and LCP segments that may be undergoing current updates or preparing new submittals for certification.
2. Identify data/file storage and retrieval structure obstacles and needs. Coordinate with Information Technology (IT) staff as to format/ needs for maintaining digital LCPs with respect to capacity/servers, CCC internal directory/access, web access etc.
3. Address conversion of LCPs to digital format. Evaluate options to address conversion of existing LCPs to digital format that can be edited and maintained. Identify possible incentives for those jurisdictions that currently do not have digital LCP components to compile complete LCP documents in digital format.
4. Research changes to regulations for filing requirements of LCP submittals, amendments and updates. Research any regulatory changes that might be necessary to require that digital documentation be submitted as part of any LCP submittal.
5. Evaluate options for building and maintaining access to digital LCPs either through a centralized library or in district offices and required staffing. Survey local government staff and Commission staff for ways to make access most functional.

Outcomes: Problem Assessment and Alternatives Analysis

Budget: $81,000

Year 2 – Initiate Pilot Project

1. Based on Assessment in above tasks, develop a draft protocol for identifying, collecting verifying maintaining, storing and accessing a digital LCP.

2. Initiate a pilot project to compile and make available access to one or two digital LCPs using either Malibu LCP, which the Commission drafted, or another LCP that has recently had a comprehensive update certified, such as the City of Fort Bragg LCP, City of Carmel, or City of Newport Beach.

3. Identify information management needs related to potential file size/type constraints/challenges, file collection and storage, and other potential unforeseen challenges.

4. Based on the Assessment in Task 1 and Pilot in Task 2, develop recommendations and procedural guidance for phasing in and maintaining digital LCPs.

Outcome: Draft Protocol and Procedural Guidance for Implementing and Maintaining Digital LCPs

Budget: $90,000

Years 3-5 –Compile access to Digital LCPs. Implement recommendations developed in Task 2. Establish priorities for compiling digital LCPs statewide. Collect digital documentation for the remaining priority LCP segments based on digital data availability. Initiate changes to LCP filing requirements.

Outcome(s): List of priorities for compiling the digital LCPs and making them accessible through a digital LCP library, access to a limited number of priority LCPs in digital format, and recommendations for modifying the California Code of Regulations and/or CCC administrative procedures with regards to filing requirements for LCP submittals, amendments and updates.

Budget: $380,700
(Total Budget Task 1: $551,700)

TASK 2: LCP Policy Enhancements

Year(s): 1-5 (FY 2011-FY 2015)
Description of activities: Improve communication and coordination with local government staff and authorities in order to encourage and facilitate updating LCPs (SAMPs). Develop and implement guidelines, procedures and policy documents that will increase Commission and local government staff capacity and resources in regulation and planning across all enhancement areas.

A. Expand outreach mechanisms to local governments through the Local Government Working Group. In consultation with this Group, identify priority problems, policy and procedural issues. This could also include policy issues related to the update of one or more specific LCPs or issues related to streamlining the LCP amendment process.
B. For priority issue areas identified, collect and analyze data and identify and assess alternative policies or procedures to address the problem. Evaluate permit and appeal decisions, and develop ways to convey findings to local governments in order to inform LCP updates.
C. Develop recommended solutions including models for updated policies ordinances or procedures for updating LCPs.
D. Develop online and other forms of educational materials and training modules to assist local governments in implementing LCPs and increasing coordination and staff capacity.

The topic of such priority policy analysis (identified in the 309 Assessment) to inform LCP updates could include developing guidance and updated policies and ordinances and procedures to:

<u>Wetlands</u>

1. Identify and delineate wetlands, to include Coastal Act wetland and *Environmental Sensitive Habitat Areas* (ESHA) definitions and to include policies/ordinances that provide for site-specific assessments of ESHA based on the existing conditions of a site

and on current scientific knowledge of the functions and rarity of species and habitats; develop guidance to place site specific required biological surveys in an ecosystem context that takes into account potential for climate change adaptation;

2. Improve the collection, review and analysis of wetland assessment and monitoring data and developing communication and data sharing tools to increase access to information for permit analysis and LCP plan development;

3. Update LCP development policies and ordinances that manage nonpoint source pollution, including incorporation of Low Impact Development (LID) techniques;

4. Incorporate ecosystem and watershed-based planning into LCPs; develop guidance for establishing, protecting and enhancing Critical Coastal Areas;

5. Manage beach wrack and other components of beach ecology based on current scientific information;

6. Address prevention of wetland and ESHA impacts in transportation corridor expansion projects and fuel modification activities, by increasing conservation easements and by encouraging community groups to take on restoration projects;

Hazards

7. Develop and evaluate existing regional sand mitigation in-lieu fee programs to provide a systematic approach to mitigate for the loss of beach sand resulting from the construction of new shoreline protective works or from major repairs to existing shoreline protective works that increase the design life of the protective works; adjust and/or develop new programs as necessary to ensure that in-lieu fee programs fully implement funding in a manner that accomplishes permit conditions and program goals;

8. Address impacts to sand supply; develop methods for valuing the loss of public beach recreation due to shoreline protective devices (e.g., recreational valuation mitigation guidelines);

9. Re-evaluate and possibly modify the Commission's definition of "bluff edge" in the statewide interpretive guidelines for further clarity;

Public Access

10. Implement the California Coastal Trail (CCT) and update LCPs to require planning for and implementation of the CCT; improve mechanisms to share best practices on updating LCP public access components, with emphasis on implementation of the CCT, and adaptation to climate change;

11. Prepare and distribute new public access and coastal resource guides, such as: (a) the fourth and final volume of the "Exploring the California Coast" guidebook to include information on coastal accessways, parks, and natural and historical coastal resources for the Central Coast region (San Francisco to Monterey County); and (b) an updated

statewide Coastal Access Guide, which describes public beaches, accessways, and recreational facilities in all 15 of the state's coastal counties;

12. Develop LCP guidance for: (a) updating public access and recreation components; and (b) planning and implementation of the CCT;

13. Improve analysis of traffic and alternative transportation impacts and capacity of staff to evaluate models and impacts;

14. Protect scenic views, including, but not limited to, views from the ocean, scenic highways and corridors, and other public places;

15. Implement "Guidance on Protecting Affordable Access to Visitor Facilities and Overnight Accommodation" developed under prior strategy; conduct regional/subregional assessments/mapping of lower-cost overnight accommodations and determine how best to monitor change over time to improve implementation of Public Resources Code (P.R.C.) 30213;

16. Quantify Commission implementation of vertical access easements through data collection and assessment, evaluate condition compliance and use the information collected to update LCP Public Access component objectives and implementation measures;

17. Evaluate public access sites/facilities and develop web based tools to enhance public access in specific geographic areas or for types of coastal access and recreation, such as a searchable website with maps and descriptive text about the approximately 1,300 coastal accessways, parks, and recreational facilities available to the public;

<u>Cumulative Impacts</u>

18. Research current land use planning and agricultural protection techniques to further protect coastal agricultural resources by directing new development to urban areas, and develop guidance on implementing techniques. Make agricultural easement information available on the web, develop agricultural conservation guidance resulting from the Commission's Agricultural Task Force, and refine and share agricultural easement tools and develop recommendations for application;

19. Improve land use planning techniques that address emerging development impacts on protection of rural lands, for example the effects of large scale rural housing, intergenerational housing, etc.;

20. Evaluate all current in-lieu fee mitigation programs and implementation of program revisions to ensure mitigation is fully achieved;

21. Conduct regional plans and/or assessments to address specific evaluation questions, such as cumulative impacts of Monterey pine forest removal, vegetation removal for fuel

management, small lot development, development on coastal dunes, water allocation programs in areas with overdraft, etc. Conduct evaluations as part of completing LCPs or LCP Updates.

Outcome(s): Guidance and other tools, including possible model language, for revised LCP policies and procedures for Access, Wetlands, Hazards and Cumulative Impact needs identified through the Assessment and the Commission's planning and regulatory work.

Budget: $285,300

VII. Fiscal and Technical Needs

A. Fiscal Needs:

The 309 Strategy funding will help to develop the initial phases of the Digital LCP Library. Additional funding may be pursued to complete full digitization.

B. Technical Needs:

The strategy for the Digital LCP Library will require coordination and integration with efforts to upgrade and expand the Commission's Coastal Data Management System (discussed further in Strategy (2), Improving Condition Compliance) and website management. Depending on the design of the digital LCP library, additional software or information consulting may be required.

STRATEGY (2): IMPROVING CONDITION COMPLIANCE

I. Issue Area(s)

The proposed strategy or implementation activities will support the following **priority** (high or medium) enhancement area(s) as identified in the 2010 Assessment:

- ☑ **Special Area Management Planning**
- ☑ **Wetlands**
- ☑ **Coastal Hazards**
- ☑ **Public Access**
- ☑ **Cumulative and Secondary Impacts**
- ☐ Aquaculture
- ☐ Energy & Government Facility Siting
- ☐ Marine Debris
- ☐ Ocean/Great Lakes Resources

II. Program Change Description

A. Type of Program Changes:

- ☐ A change to coastal zone boundaries;
- ☑ New or revised authorities, including statutes, regulations, enforceable policies, administrative decisions, executive orders, and memoranda of agreement/understanding;
- ☑ New or revised local coastal programs and implementing ordinances;
- ☐ New or revised coastal land acquisition, management, and restoration programs;
- ☑ New or revised Special Area Management Plans (SAMP) or plans for Areas of Particular Concern (APC) including enforceable policies and other necessary implementation mechanisms or criteria and procedures for designating and managing APCs; and,
- ☑ New or revised guidelines, procedures and policy documents which are formally adopted by a state or territory and provide specific interpretations of enforceable CZM program policies to applicants, local government and other agencies that will result in meaningful improvements in coastal resource management.

B. Description - Improving Condition Compliance

The strategy for enhancing condition compliance will be based on projects that carry out program changes through procedural and technical upgrades to improve permit and project condition compliance tracking, ensure better compliance monitoring, and ultimately provide the types of evaluation tools necessary to verify that the Commission's regulatory decisions are fully implemented. Improvements to information management processes are essential for carrying out such efforts. Development of adequate information management tools and enhancing staff capacity to use such tools for tracking, monitoring and analyzing permit compliance and effectiveness are key steps to carrying out the strategy. Also, improved data collection and analysis, as well as monitoring and enforcement, are fundamental to the ability to adequately understand, evaluate and address cumulative and secondary impacts, and will ultimately broaden the agency's monitoring and evaluation capacity across all enhancement areas. Implementing

this strategy will result in new internal staff policies or guidance for condition compliance monitoring and data management procedures. This procedural program changes will ultimately result in meaningful improvements in coastal resource management in that they facilitate better enforcement of permit conditions, thus less violations and damages to the coastal environment.

The projects that the Commission will undertake for this strategy will contribute to the modernization and upgrade of the agency's Permit Tracking System (PTS), including steps to improve condition compliance through improved database functionality, data management capacity and procedures, and links to a geospatial interface. The upgraded system will also incorporate functionality from several other existing stand-alone databases such as the database currently used to track performance measures. Once operational, a new Coastal Data Management System will necessitate procedural program changes, including new administrative procedures for analysts and staff training to implement the new system.

In addition, the Commission will continue to research and evaluate compliance with Commission actions that are intended to protect public access, sensitive lands, and other emerging policy issues, such as the effectiveness of mitigation programs for addressing impacts to beach sand supply from shoreline structures. In addition to addressing the Cumulative and Secondary Impacts Enhancement Area, this strategy will support identified needs in the areas of SAMPs, Public Access, Wetlands, and Coastal Hazards.

The first task in this strategy - to produce new procedural guidance and procedures to implement a new information management system - will enhance the ability of staff to undertake the second part of the strategy - to improve condition compliance and evaluate effectiveness of policies, mitigation requirements, and procedures across all enhancement areas. Such improved condition compliance and evaluation tools, techniques, and capacity inform revisions to the regulatory and planning program, such as updated permit conditions, new LCP policies, ordinances or procedures and guidance for condition compliance monitoring. As a result, these types of program changes will lead to improved protection of coastal resources at full implementation.

III. Need(s) and Gap(s) Addressed

The 309 Assessment identifies a number of priority needs related to condition compliance that this strategy is intended to address. These include:

- The need to improve condition compliance monitoring and assessment of the effectiveness of mitigation related to protection of public access, wetlands and other cumulative impacts; identify and incorporate best practices in wetland mitigation conditions. (See Wetlands Priority Needs and Information Gaps Table 1.9);
- The need to integrate various databases to improve condition compliance and evaluation, for example, in-lieu fee and other mitigation measures. (See Priority Needs and Information Gaps – Public Access Table 3.7);
- Improved evaluation of policy implementation, to address cumulative impact mitigation related to all enhancement groups (See Priority Needs and Information Gaps – Cumulative and Secondary Impacts Table 5.4);
- Evaluation of existing conditions and development of guidance for new conditions to address climate change impacts related to hazards and public access, including, for

example, compliance with Commission's existing permit conditions on landscaping (See Priority Needs and Information Gaps – Coastal Hazards Table 2.5).

In addition, OCRM recognized the critical nature of the Commisson's statewide permit tracking system in its latest Section 312 Evaluation of the CCMP (2008). OCRM found that the Commission system is "outdated, extremely labor intensive to access, and increasingly inadequate for the Commission's data management needs…" and that "the system's capacity to track resource monitoring data and to retrieve and analyze archival data on permit decisions is also limited and inefficient." As a result, the Evaluation included a program suggestion for the Commission to "continue to look for funding sources to implement long overdue upgrades to [the agency's] permit tracking system and make the system compatible with the agency's spatial data system."

IV. Benefit(s) to Coastal Management

A comprehensive data management system that allows staff to evaluate the effectiveness of past coastal management decisions is essential to enhancing the program. Access to statewide regulatory and spatial data through the upgraded system will facilitate improved monitoring of condition compliance and will provide tools to improve analyses of permit and LCP actions that could lead to development of guidance for developing future permit conditions and LCP planning. The data captured through this effort and beyond will provide the information necessary for both identifying issues and developing successful guidance to address critical issues, particularly concerning cumulative and secondary impacts of development. Furthermore, improved information management systems will be an invaluable asset to the agency, not only for the improved ability to assess our coastal management performance, but also in developing new ways to evaluate and apply lessons learned to policy development and implementation.

V. Likelihood of Success

The likelihood of successful program changes is high. Program changes pursued under this strategy will result in new and/or revised regulatory requirements, procedural changes, and changes to LCP policies and ordinances as they can be implemented through Commission review of LCP Amendments and coastal permits. Program changes will also be carried out through new or revised procedural guidance. And, as noted in the Strategy document, program changes in this strategy address some key findings found in OCRM's 2008 Section 312 Evaluation of the Coastal Commission's CCMP and also from ideas voiced by local government officials in the August 2009 workshop on "Improving the LCP Process." At that workshop, the public and local governments commented on a need for improvements to the Commission's information systems. Several comments noted communication and participation among all stakeholders could improve by making better use of technology. To begin to accomplish its communication goals, the Commission will need to enhance its information management systems. Discussion at the workshop also highlighted suggestions to increase local assistance and provide a better understanding of what is expected by the Commission. Effective monitoring and analysis of mitigation and policy implementation is critical to providing such local assistance guidance. As a result, the likelihood of success at implementing the enhancements in this strategy is high.

VI. Strategy Work Plan

Total Years: 5

Total Budget: $315,000

Final Outcome(s) and Products: See Outcomes discussed below.

Year 1-2 (FY 2011 – FY 2012):

A. Revise internal Commission procedures regarding coastal development permits and LCP data management and tracking tools:

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1. Provide input to the assessment and design of a new Coastal Data Management System, which will replace the existing PTS. Identify features, functionality/tools needed for CZMA Performance Measurement System (PMS) and statewide analysis of local and state coastal permits and LCP Planning actions. Assist with identifying key elements of other statewide databases that should be carried forward in the upgraded system.

2. Identify measures to strengthen permit compliance tracking and evaluation tools. This may include adding functionality and taking preliminary measures to implement electronic filing, improvements to deed restriction tracking, and/or new spatial data layers. Assist with conducting pilot testing of the new database system as it becomes operational.

3. Work with IT and other key Commission staff to develop training materials, revised policies or develop guidance documents to fully implement the new system.

Year 3 (FY 2013)

B. Use the new Coastal Data Management System to evaluate effectiveness of permit conditions and LCP policy implementation.

Based on priority enhancement issues from Assessment related to Public Access, Wetlands and Cumulative Impacts, staff will collect data to evaluate issues that results in policy evaluation and guidance to incorporate into revised permit conditions. Policy evaluation projects may continue in subsequent fiscal years of the work plan. Potential compliance projects that address access, wetlands or cumulative impact issues could include any of the following:

1. Evaluate current in-lieu fee mitigation programs and implementation of program revisions to ensure mitigation is fully achieved.

2. Develop more efficient tools to provide timely transfer of knowledge on new/key CCC actions/policy direction, “best examples”, etc.; expand Commission staff information exchange, especially for priority resource or enhancement areas like ESHA and Hazards.

3. Develop procedures to improve condition compliance and monitoring, such as new or revised permit conditions, templates and guidance for drafting permit conditions,

improved tracking tools, measures to increase staff's capacity to monitor permit requirements, and new policies or procedures to enhance compliance coordination and feedback capacity.

4. Conduct regional plans and/or assessments to address specific evaluation questions, such as cumulative impacts of Monterey pine forest removal, vegetation removal for fuel management, small lot development, development on coastal dunes, water allocation programs in areas with overdraft, etc.

Year 4/FY 2014:

Continue priority compliance evaluation.

Year 5/FY 2015:

A. Develop improvements to condition compliance; evaluate the effectiveness of permit conditions and LCP policies across all enhancement areas:

1. Utilize condition compliance effectiveness information obtained from the database improvements and subsequent analyses in prior years to inform fundamental program change recommendations to improve compliance. Such recommendations may include: changes to general emergency and regular permit language; changes to standard and special condition templates, guidance for special condition use and specific content (such as use of performance bonds and post-issuance submittal requirements) to improve condition compliance across all enhancement areas.

B. Continue priority compliance evaluation

Outcome(s): (1) Statewide procedural guidance or other mechanisms (i.e. administrative procedures) to ensure consistent permit and LCP data collection and implementation of a new Coastal Data Management System; (2) enhancements to regulatory policies and procedures that strengthen condition compliance; and (3) evaluation that results in updated policies in LCPs and conditions in permits and other regulatory procedures addressing cumulative impacts across all enhancement areas.

VII. Fiscal and Technical Needs

A. Fiscal Needs:

The Commission's overall budget is not sufficient to fully staff all required program responsibilities under the Coastal Act and all needed program enhancements. Since 2006, the Commission has requested additional funds from the California State Legislature through the budget process. In the last five years, the Commission received additional state funding only to supplement increases in operating expenses. The Commission has succeeded in increasing available funding through other sources, however. In March 2008, the Commission amended its regulations to raise fees for coastal development permit applications.

The Commission also receives additional grant awards through the federal Coastal Impact Assistance Program (CIAP) and through NOAA Coastal Fellowship Program, which support the work of the CCMP. The Coastal Services Center also provides in-kind technical support for projects such as the ARC IMS-GIS project.

Finally, the Commission will receive funding through NOAA's 2010 competitive grant award for Modernizing and Improving State Coastal Management Information Management Systems. This grant of approximately $175,000 will be used to fund an outside consultant to complete the initial design and scoping of the new Coastal Data Management System database. The 309 enhancement funds would be used initially to support staff time in gathering feedback from staff on the database function and design during the database testing phase, as well as for staff time support development of system implementation materials, policy and procedural guidance for staff to use the system for condition compliance monitoring and analysis.

B. Technical Needs:

Commission staff are highly qualified with appropriate skills and technical expertise, but there are not sufficient numbers for program needs. Since 2006, the Commission has been forced to rely upon unpaid internships, research fellows, and special grant funds to supplement additional program staffing needs. As discussed in Section VI, the Commission continues to request funds through the state budget process and other grant sources.

In addition, funding for IT improvements and continued development of technical expertise continues to be a critical need. State funding cutbacks have resulted in the layoff of essential IT staff and significant delays in upgrading essential desktop and network systems which have affected basic operations. Most importantly, the Commission has been unable to secure funding to assist in the major update and revision of the PTS, a critical component of the agency's information management and tracking of regulatory decisions. In 2009, the Commission obtained a significant number of replacement desktop computers for staff use by acquiring older hardware recycled from other agencies. Also in 2009, the Commission received a one-time funding increase to replace approximately two-thirds of the agency's desktop computers and key network hardware.

To date, no additional funding has been secured for critical upgrades of Commission's PTS; however, as mentioned above, the Commission will receive funds through NOAA's competitive grant award program to upgrade our existing information management system. The Commission will also seek funding from other grant and private funding sources to complete implementation of this project.

STRATEGY (3): INTEGRATING CLIMATE CHANGE INTO COASTAL PERMITTING AND LOCAL COASTAL PROGRAM (LCP) PLANNING

I. Issue Area(s)

The proposed strategy or implementation activities will support the following **priority** (high or medium) enhancement area(s) as identified in the 2010 Assessment:

- ☑ **Special Area Management Planning**
- ☑ **Wetlands**
- ☑ **Coastal Hazards**
- ☑ **Public Access**
- ☑ **Cumulative and Secondary Impacts**
- ☐ Aquaculture
- ☐ Energy & Government Facility Siting
- ☐ Marine Debris
- ☐ Ocean/Great Lakes Resources

II. Program Change Description

A. Type of Program Changes:

- ☐ A change to coastal zone boundaries;
- ☑ New or revised authorities, including statutes, regulations, enforceable policies, administrative decisions, executive orders, and memoranda of agreement/understanding;
- ☑ New or revised local coastal programs and implementing ordinances;
- ☐ New or revised coastal land acquisition, management, and restoration programs;
- ☑ New or revised Special Area Management Plans (SAMP) or plans for Areas of Particular Concern (APC) including enforceable policies and other necessary implementation mechanisms or criteria and procedures for designating and managing APCs; and,
- ☑ New or revised guidelines, procedures and policy documents which are formally adopted by a state or territory and provide specific interpretations of enforceable CZM program policies to applicants, local government and other agencies that will result in meaningful improvements in coastal resource management.

B. Description:

The strategy Integrating Climate Change into Coastal Permitting and LCP Planning will contribute to the Commission's overall efforts to incorporate adaptation measures in our coastal management program, and will begin with a focus on addressing accelerating sea level rise in the Commission's regulatory and planning activities. The Commission has a long history of considering sea level rise in its planning and regulatory decisions; however, accelerated sea level rise resulting from climate change poses significant new risks and challenges that will require a new way of thinking about sea level rise. The Commission's authority through permitting, certifying LCPs, approving updates and amendments to existing LCPs, and overseeing LCP

implementation provides a unique opportunity for California to both address and mitigate the anticipated impacts from climate change on coastal resources, like sea level rise.

The primary means by which staff anticipate incorporating adaptation strategies for sea level rise into our program is by:

- providing technical guidance for using sea level rise planning estimates, specific to geographic regions of the coast (e.g., north coast region, south Monterey Bay Region, Ventura County coast) and at various time horizons (i.e. 5 - 15 yr, 25 yr, 50 yr) for use by Commission staff and local governments in their planning/permitting;
- developing example language for policies and ordinances to address sea level rise and accompanying impacts (i.e., increased storm surge and intensity/frequency of storm events) in updates or amendments to LCPs; and
- providing case study examples of LCPs (or elements of) that already address or include strategies to address sea level rise.

Recognizing that many local governments, nonprofits and academic institutions have made significant headway in planning for sea level rise, the activities conducted under this strategy will include review of local government policies and ordinances for best practice examples, public meetings, workshops, and developing other means of information sharing (i.e., website discussion boards, email communications, print materials) to exchange information and help to educate the public.

Commission staff gathered and currently maintains an extensive internal library of climate science resources, including information on sea level rise. In addition, the Commission's Senior Coastal Engineer works closely with scientists at other state, federal and local agencies and academia to stay abreast of the latest information on sea level rise and other climate change issues. The Commission recognizes the need to collaborate with other agencies and academia to use the most current information to inform the technical guidance and planning information that we will develop under this strategy. To that end, we will also collaborate with other State agencies, including the Ocean Protection Council and Energy Commission's Public Interest Research Program, in developing sea level rise estimates as part of implementing the State's Adaptation plan and to ensure consistency with partner agencies. The Commission will also look to the relevant federal agencies – specifically NOAA's Coastal Service Center and Climate Program Office, and the U.S. Geological Survey and other Department of Interior (DOI) agencies at DOI's Regional Landscape Conservation Centers – to obtain the latest information on climate change scenarios, downscaled data from Global Climate Models for use at the regional and state level, and necessary habitat for migration corridors, This work will be the primary focus of years 1 through 3 of the 5-year Strategy.

In years 4 and 5, the strategy work will become more targeted on (1) sea level rise impacts to sensitive habitats and existing protected lands, and (2) addressing the impacts of shoreline protective devices on habitat and public access to determine appropriate mitigation for approving this type of development. This strategy will also support the Commission's collaborative efforts to develop statewide guidance to protect critical ecosystems, existing development and future investments working with other state agencies.

While the focus of this strategy will be on integrating climate adaptation strategies into our coastal management program, work under this strategy will also include tasks/projects related to

mitigating green house gas (GHG) emissions through permitting and planning. Although the Commission has already included incentives for green building for permit applicants, Commission staff recognize the need and opportunity to reduce GHG emissions in permitting and planning through Coastal Act policies that require concentrated development, reductions in energy consumption and vehicle miles traveled, and encourage public transportation and pedestrian-oriented development. This work will also be conducted in years 4 and 5 of the strategy work plan and involve coordination with other state agencies working on reduction of GHG emissions.

III. Needs and Gaps Addressed

California's coast and ocean resources represent vital economic, environmental, recreational, and aesthetic values to the people of California, the nation and the world. The state's coastal resources and populations are extremely vulnerable to impacts of climate change: sea level rise, coastal erosion and flooding, and increased storm frequency and intensity. Many of these impacts already occur and will occur with greater frequency as sea levels rise and the climate continues to change. As the agency with regulatory authority to oversee development along our coasts, it is imperative that the Commission select sea level rise estimates based on best available science and provide policy guidance and planning tools to integrate adaptation measures into our coastal management program. Although the State of California recently completed a statewide Climate Adaptation Strategy, Commission staff, local governments and state agency partners could benefit from coordinated and consistent, geographically-focused sea level rise estimates for planning and comprehensive policy guidance on a variety of adaptation issues.

The Assessment also highlights the need to integrate climate change information and adaptation measures in our planning and regulatory work as a high priority need or information gap in six of the nine enhancement areas. The needs that are identified include:

- For Wetlands - Ensuring all LCPs have updated wetland protection policies to include climate change adaptation measures, such us updated wetland buffer provisions;
- For Coastal Hazards – Supporting completion of mapping sea level related erosion from the City of Santa Barbara to the Mexico border (adding to the Oregon to Santa Barbara mapping that has already been done); conducting pilot studies for local coastal planning to address climate change and sea level rise; and updating LCPs to address the potential range of sea level rise rates relative to hazards and project alternatives analyses;
- For Public Access – Developing and implementing policies, ordinances, and other measures to protect public access and recreation areas from the impacts of sea level rise;
- For Cumulative and Secondary Impacts – Developing regulatory guidance on climate change for LCP updates;
- For SAMP – Updating older certified LCPs and other plans to address new and emerging information (such as climate change, sea level rise, etc.);

- For Ocean Resources – Identifying existing climate change and coastal related impacts for policy development, improving staff capacity and outreach to local governments, and other stakeholders

IV. Benefit to Coastal Management

Integrating climate adaptation strategies into permitting, planning, and LCPs will tremendous benefit to the CCMP. The Commission is currently addressing climate change impacts, especially as it pertains to sea level rise estimates in local planning and permit decisions, on a case-by-case basis. Completion of this strategy will provide clear and consistent guidance for Commission staff, local governments, prospective permit applicants, and others which will facilitate greater efficiency and effectiveness in permitting and planning decisions. While different geographic regions along the coast may have different factors to evaluate in their planning and permitting, the policy guidance will provide tools and resources to inform those decisions, thus minimizing the likelihood of permit appeals and conflicts over LCP amendments or updates.

V. Likelihood of Success

It is very likely that the Commission will complete a program change to address adaptation to climate change, with primary focus on sea level rise, in our planning and permitting activities. In 2007, the Commission established an internal Climate Change Task Force (CCTF) to begin addressing how climate change will impact the Commission's permit and planning activities. Since then, the CCTF has been working to better understand the impacts of climate change and to apply this information in our decision-making. The CCTF staff played a significant role in developing the state's Climate Adaptation Plan for the Coast and Ocean Section and is equipped to use this knowledge in developing agency-specific guidance and information. Commission staff are also part of or contribute to numerous working groups and some regional collaborative planning efforts that will contribute and benefit from this work. Addressing sea level rise in particular is one the highest priorities for staff and Commissioners.

VI. Strategy Work Plan

Total Years: FY 2011 – FY 2015

Total Budget: $697,500

Final Outcome(s) and Products: (1) Sea level rise (SLR) estimates for use in planning and regulatory work, policy guidance for permitting, planning and LCPs, including sample language; (2) enhanced tracking and development of a protected/restricted lands spatial data layer for use in ARCIMS; (3) tools for monitoring of protected lands and guidance for easement holders and property owners; and (4) guidance document(s) for permit conditions related to mitigation for shoreline armoring, and climate impacts to sensitive habitats, sand supply and public access/recreation sites/areas.

Task 1/Phase 1 (FY 2011 – FY 2013) – Sea Level Rise Policy Guidance

A. Evaluate current research, data and modeling; conduct initial outreach with local government working group to share information, assess what their data and policy gaps may be or information they may have to assist our analysis

B. Identify and evaluate possible techniques or alternatives for addressing sea level rise for existing or new development within the coastal zone, including public access and recreational infrastructure. This may include, but not be limited to, such mechanisms as:

1. Setbacks
2. Setting buffer areas
3. Clustered development
4. Building restrictions
5. Rolling easements

C. LCP Assessments

1. Identify LCPs that include certified updated policies and or ordinances to address sea level rise and other climate change impacts. Compile provisions into a digital inventory.
2. Research and identify other states that have implemented sea level rise provisions in their local coastal programs (or equivalent). Compile examples where applicable.
3. Evaluate LCPs that are in the process of being updated or amended and incorporate language on SLR policies and ordinances specific to those areas; develop methodology and approach for assisting other local governments in updating their LCPs over time

D. With information collected in B, develop guidance for permitting, planning and LCPs, including sea level rise estimates. Permit guidance may provide such tools as templates for sample site analysis and permit condition language. Planning guidance may provide sample policies and sample ordinance language. Prepare policy guidance documents and Sea Level Rise estimates for presentation and possible adoption by Commission.

E. Outreach and Regional Coordination - In cooperation with local governments, conduct joint outreach meetings in various regions to engage the public, possible project applicants and other stakeholders about how policy guidance and SLR estimates will be implemented in local planning and permitting decisions.

Outcome(s): Sea level rise estimates for use in planning and regulatory work, policy guidance for permitting, planning and LCPs, including sample language.

Budget: $292,500

Task 2/Phase 2: (FY 2013 – FY 2014) – Protected Lands Evaluation for Habitat Connectivity, Adaptation Planning, and Resource Monitoring

The California Climate Adaptation Strategy notes that as a result of increasing temperatures:

"Species that cannot adapt in their existing communities may, over time, shift in their ranges if appropriate habitat is available, accessible, and if their behavioral characteristics allow. If they are unable to shift their ranges, they face the threat of local extirpation, if not extinction….Species that have the capacity to shift their ranges will require movement corridors that are not blocked by natural landscape features or human development. Planning to maintain natural corridors in anticipation of predicted climate changes should be factored into future local and regional habitat conservation planning efforts."(California Natural Resources Agency, 2009 California Climate Adaptation Strategy, pg. 45-46.)

Other sections of the Climate Adaptation Strategy also note the need to create a large scale well connected, sustainable system of protected areas across the state (Ibid, pg 55). While this system is described as being large scale to support the maintenance of ecological processes and entire ecosystem function and populations of target species, the report also notes:

"It is a fair assumption that larger reserves generally have greater carrying capacity and built-in connectivity between included habitats, however, the potential contribution of a mosaic of smaller interconnected reserves is significant, with increased attention to the biodiversity value of intervening working landscapes; in many places, such a network may be the only feasible alternative left due to habitat fragmentation." (Ibid, pg. 57).

In the coastal zone, LCPs will be part of implementing the state's Climate Adaptation Strategy and any other land use planning for adaptation. In updating the LCPs it will be important to identify the nature and location of lands that have already been protected through easement or deed restriction that could possibly contribute to species migration by providing habitat connectivity. The Department of Fish and Game (DFG) is beginning to map and develop plans for large scale reserves. This information will be helpful for LCP planning purposes to frame future open space reserves; however, the Commission's needs this type of information at parcel based scale, and therefore, more applicable to scale of permit decisions.

This project will create a spatial data layer for the Commission's new ARC IMS tool to identify opportunities to provide habitat for species migration and habitat connectivity. It is envisioned that the data layer will be part of the Commission's ArcIMS system and allow analysts easier access to information to inform permit and plan analysis. The project will be accomplished through this preliminary work plan:

A. Identify protected resource lands that may help implement state climate adaptation strategy measures. Initiate steps to implement recommendations of the 2007 Deed Restriction Report (funded under Section 309 in FY 2006) to improve protected lands tracking through enhanced databases and new spatial data layers.

B. Analyze location and nature of protected lands for ability to contribute to open space network to inform LCP updates and permit analysis.

C. Coordinate with other state and local agencies to analyze potential for open space network to address habitat adaptation.

D. Develop a framework and directions for outreach to easement holders and property owners to enhance monitoring and enforcement.

Although the information contained in this data layer will be available to other agencies, it is not expected to support to the DFG effort because it is at a different scale. It will compliment the DFG mapping effort and add specificity to the regional scale. Local government planners may be able to use both the DFG and the Commission staff's information to better plan where to designate open space lands to facilitate adaptation and habitat corridors in LCPs. Commission planners can use the information to evaluate whether LCPs adequately protect significant habitat and recreation areas consistent with the Coastal Act. It may also be useful in condition compliance and enforcement analysis.

At this time, it is not possible to estimate the total number of LCPs that the Commission would work with when the data layer is complete. The Commission reviews roughly 70 LCP Amendments in a given year and could review several LCP updates. An exact number will only be available when the data layer is completed and the Commission staff can evaluate which LCP planning efforts are underway at that time.

Outcome(s): (1) Enhanced tracking and development of a protected/restricted lands spatial data layer for use in ARCIMS; (2) Assessment of existing restricted lands for the potential to develop open space network to help address habitat adaptation and guidance for permits and for LCP Updates; (3) Tools for monitoring of protected lands and guidance for easement holders and property owners.

Budget: $180,000

Task 3/Phase 3 (FY 2014 – FY 2015) – Analysis of Shoreline Armoring Devices

California's coastline already contains numerous shoreline armoring devices to protect structures in place prior to the passage of the Coastal Act in 1972. The impacts of these structures can be observed locally in the abrupt shoreline changes between armored and unarmored properties. On an individual basis, we know that armoring disrupts the beach ecology and often exacerbates coastal erosion on adjacent properties; but the cumulative impacts of shoreline protective devices on beach ecology, sediment supply and other natural processes is not well understood.

As sea level rise accelerates, more and more development, both public infrastructure and private, will be subject to coastal flooding and impacted by coastal erosion. The Commission anticipates an increasing number of permit applications will be coming forward for seawalls and other shoreline protective devices. Consequently, staff needs to better understand the cumulative impacts of these armoring structures and what, if any, alternatives can be used and the appropriate mitigation actions/requirements that adequately offset the adverse impacts of them. The Commission already has mapped most locations of existing permitted shoreline protective devices along the coast. Therefore, this project will consist of:

A. Evaluating the cumulative impacts of shoreline armoring on beach ecosystems, including specific coastal habitats, threatened and endangered species, sand supply, and public access/recreation through reviewing literature, field visits and working with the Commission's Ecologist and Senior Coastal Engineer.
B. Developing recommendations for conducting permit analysis, crafting future LCP policies on sea walls and possibly drafting permit conditions that seek to minimize the adverse impacts of shoreline protective devices, propose alternative means to protect structures, and require adequate mitigation for unavoidable impacts from these structures.
C. Converting recommendations into a guidance document for use by staff in evaluating shoreline armoring projects and LCP policies on protecting development.

Outcome(s): Guidance document for permit conditions related to mitigation for shoreline armoring, and impacts to sensitive habitats, sand supply and public access/recreation sites/areas.

Budget: $225,000

VII. Fiscal and Technical Needs

A. Fiscal Needs:

The 309 funding is not sufficient to carry out the entirety of the proposed strategy; however, the Commission is seeking a 2011 – 2013 Coastal Management Fellow to continue the climate change work of our 2009 – 2011 Coastal Management Fellow. In addition, the Commission's internal CCTF will be a part of this project which will contribute state funding in the form of staff time to work on elements of this strategy. Finally, the Commission is working to secure funding through the CIAP that would contribute to this strategy. Additional funding may be pursued through other grant sources if necessary.

B. Technical Needs:

Coordination and collaboration with other state agencies, local governments, non-profits and the academic sector are critical to gaining the knowledge and expertise to implementing sound policy and planning guidance to address climate change in our permitting and planning work. This effort will require constant attention to the evolving science. Staff members from the Commission (i.e. Senior Coastal Engineer, Geologist, Senior Ecologist and Staff Ecologist) are and will continue to work closely with colleagues and peers as well as participate on state and regional technical working groups. Their efforts along with the efforts of coastal planners to take advantage of numerous information resources made available through NOAA, the National Academy of Science SLR study, and other sources will ensure that work under this strategy is informed by the best available science.

APPENDICES

The Appendices provide additional background information on Commission programs, and other data to supplement the resource characterization provided in the Assessment for the nine enhancement areas.

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APPENDIX A. ACRONYMNS AND ABBREVIATIONS USED

C.A.	– California Coastal Act of 1976
CalEMA	– California Emergency Management Agency
Caltrans	– California Transportation Agency
CBREP	– Community-Based Restoration and Education Program
CCC	– California Coastal Commission
CCMP	– California Coastal Management Program
CCTF	– Climate Change Task Force
CDFG	– California Department of Fish and Game
CGS	– California Geologic Survey
CIAP	– Coastal Impact Assistance Program
CIP	– Coastal Implementation Plan
CRAM	– California Rapid Assessment Method
CSMW	– Coastal Sediment Management Workgroup
CZ	– Coastal Zone
CZB	– Coastal Zone Boundary
CZM	– Coastal Zone Management
CZMAPMS	– Coastal Zone Management Act Performance Measurement System
DOI	– Department of the Interior
GGNRA	- Golden Gate National Recreation Area
FEMA	– Federal Emergency Management Administration
LCP	– Local Coastal Plan
LIDAR –	– "Light Detection and Ranging" mapping system/data
MMS	– Marine Mineral Service
NA	– Not Applicable
NASA	– National Aeronautic and Space Administration
NOAA	– National Oceanic and Atmospheric Administration
NWI	– National Wetland Inventory
RSM	– Regional Sediment Management Plan
SAMP	– Special Area Management Plan
SCC	– State California Coastal Conservancy
SCCWRP	– Southern California Coastal Water Research Project
SF	– San Francisco
SFEI	– San Francisco Estuary Institute
SLR	– Sea Level Rise
SWRCB	– State Water Resources Control Board
USACOE	– United States Army Corps of Engineers
USAID	– United States Agency for International Development
USEPA	– United States Environmental Protection Agency
USGS	– United States Geological Survey

APPENDIX B. WETLANDS

RESOURCE CHARACTERIZATION

Estimated Historic Wetland Extent

While historic wetland acreage numbers are not available for the coastal zone, previous published reports have cited that approximately 91% of California's wetland acreage present before European settlement has been lost.[1]

Current Wetland Extent

Significant work is being done to map and measure wetland resources statewide but this effort is not confined to just the coastal zone. Because of the varying study boundaries of the different efforts it is not yet possible to segregate just the acreages within the jurisdictional coastal zone. Therefore the Commission's reported estimates are based on National Wetland Inventory mapping. Table B1 summarizes the NWI mapped wetland types located within the mainland coastal zone boundary (CZB). The acres provided are, based on the NWI GIS data layer clipped to the CZB, and do not include the Farallones or Channel Islands, or deepwater offshore area. As shown in Table B1 below, the total amount of wetlands in the coastal zone mainland is 144,719 acres. This is about 4% of the total 3,570,220 acreage of NWI wetlands mapped throughout the state of California[2]

Table B1. Current Extent of National Wetland Inventory (NWI) Wetland Habitats within the California Coastal Zone Boundary (CZB)

NWI Wetland Type	Acres in CZB
Estuarine and Marine Deepwater	33,541
Estuarine and Marine Wetland	40,633
Freshwater Emergent Wetland	33,589
Freshwater Forested/Shrub Wetland	18,873
Freshwater Pond	2,677
Lake	4,701
Other	372
Riverine	10,333
Grand Total	**144,719**

[1] Dahl, T.E. 1990. Wetland losses in the United States 1780's to 1980's. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.

[2] Based on summary of wetland habitat acreage (which by the NWI classification includes sub-tidal or open water, intertidal or flats, and vegetated wetland habitats) courtesy of T. Dahl, MDB, September 2008.

Perennially Tidal Estuarine Wetland Assessment

Figure B1 shows the distribution of each of the major estuarine habitat types within each of the defined regions established by the Southern California Coastal Water Research Project (SCCWRP) Demonstration Project report. [3]

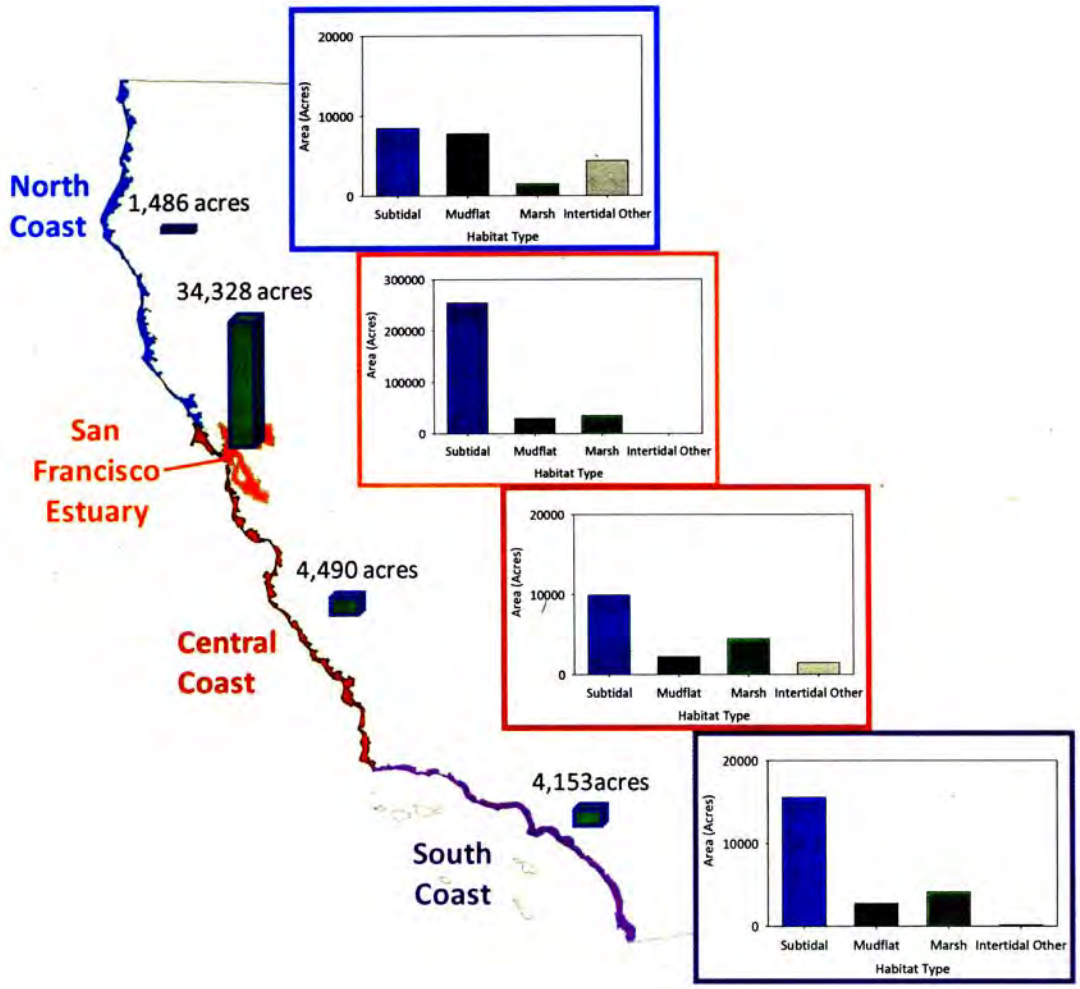


Figure B1 Graphic (taken from 2008 SCCWRP Demonstration Project Figure 6-3) depicting the relative abundance of perennially tidal estuarine wetland habitat in the four coastal regions identified by SCCWRP. Bars along the shoreline show relative abundance, while inset graphs show abundance relative to the other perennially tidal estuarine habitat types (subtidal, mudflat, marsh and intertidal other) within each region. Intertidal other represents reefs, aquatic beds, and rocky shorelines. Note different Y-axis for SF Bay region.

The State Wetland Monitoring Program

[3] California's Wetland Demonstration Program Pilot: A Final Draft Project Report for Review by the California Resources Agency; Southern California Coastal Water Research Project (SCCWRP); Technical Report 572; December 2008.

The statewide wetland monitoring program is being implemented with other state and regional partners (including SWRCB, SCCWRP and SFEI) and supported through USEPA. A complete guidance document regarding the intended application of the three-tiered framework was completed by Wetland Demonstration Program (WDP) partners in 2008. This work resulted in the drafting of the California Wetland Demonstration Program Pilot Final Draft Report (Dec 2008), which provided much of the source data necessary to complete the 2009 State of the State Wetland Report. The State of the State Wetland Report focused on two main wetland types (riverine and perennially tidal coastal estuaries). Commission staff assisted in developing the statewide monitoring program and took the lead in implementing planning and field assessment efforts on the Central Coast region. However, work focusing on seasonally tidal coastal estuaries (i.e., coastal lagoons) has yet to be completed.

The 2009 State of the State Wetlands Report does provide a suggested framework for agency use of wetland tools for measuring performance of the California's "Wetland no-net-loss" policy. These tools include:

1) Standardized statewide wetland and riparian habitat mapping methodologies, with perennially tidal estuarine wetland and riparian inventory data available for all of California;
2) The California Rapid Assessment Method (CRAM), plus a "field to PC" data management tool for CRAM data;
3) Conceptual approaches and phase I for implementation of probability-based surveys; and
4) Standardized data transfer formats to collect and share statewide data among agencies and the public on projects that impact wetland and riparian habitat quantity and quality (a.k.a. "project tracking").

California Rapid Assessment Method - CRAM

In the last three years, the State Wetland Monitoring Program has devoted significant resources to developing the California Rapid Assessment Method (CRAM). CRAM provides the second level (rapid assessment) of the three tier monitoring process defined by the USEPA. CRAM is a low-cost assessment of the overall condition of a wetland, based on four visible attributes: (1) Landscape Context (landscape connectivity and natural buffer); (2) Hydrology (water source, hydroperiod, and hydrologic connectivity); (3) Physical Structure (complexity of marsh topography and physical patch types); and (4) Biological Structure (wetland plant community structure).

CRAM results are intended for use in conjunction with other tools to support management decisions related to wetlands resources. For example, for: (1) pre-project surveys; (2) surveys following an action to document post-project conditions; (3) periodic surveys at mitigation or enhancement sites to document the changes that occur on the site through time; and (4) periodic surveys of wetlands in managed areas to monitor trends.

The CRAM information is being used by other non CZMA state regulatory, planning and conservation agencies to track the status and trends of wetlands, streams and associated riparian areas. The California Wetland Monitoring Strategy draft guidance document will

soon presented to the State Water Quality Monitoring Council for adoption. Application of the CRAM tool related to the Commission's regulatory and planning efforts has yet to be determined. However, so far, the CRAM assessment tool has been used to assess at least 90 wetlands within the coastal zone.

Statewide "Wetland Tracker" Geographic Information System

Project tracking is essential in order to evaluate the California's "no net loss" wetlands policy. Thus an essential element of the State Wetland Monitoring Program is to track the effects of all projects (e.g., development projects which fill or degrade wetlands, as well as restoration, enhancement, and compensatory mitigation projects) on wetland extent and condition. In October 2006, the San Francisco Bay Regional Water Quality Control Board (SF Bay RWQCB, a state agency) and the San Francisco Estuary Institute (SFEI) began a pilot program using a publicly available, web-based information management system called the "Wetland Tracker."

The statewide "Wetland Tracker" is a user-friendly Google Earth interface that allows users to view standardized sets of data and maps and to share data among agencies and the public on wetland and riparian habitats and related projects within a region. Each region's "Wetland Tracker" contains a project list, interactive map, project information pages, file upload capabilities, and list of project files and web links, if available. A new version of Wetland Tracker (v.2.0.0) was released in June 2008 (for more information on the Wetland Tracker, see: www.wetlandtracker.org).

One of the WDP milestones is to establish project tracking databases in the Central Coast and South Coast based on the model in San Francisco Bay. Currently, the California Wetland Tracker includes 315 restoration and mitigation projects in three regions: 265 projects in the San Francisco Bay Area (most of which lie outside of the coastal zone), 144 Central Coast projects, and 36 South Coast projects.

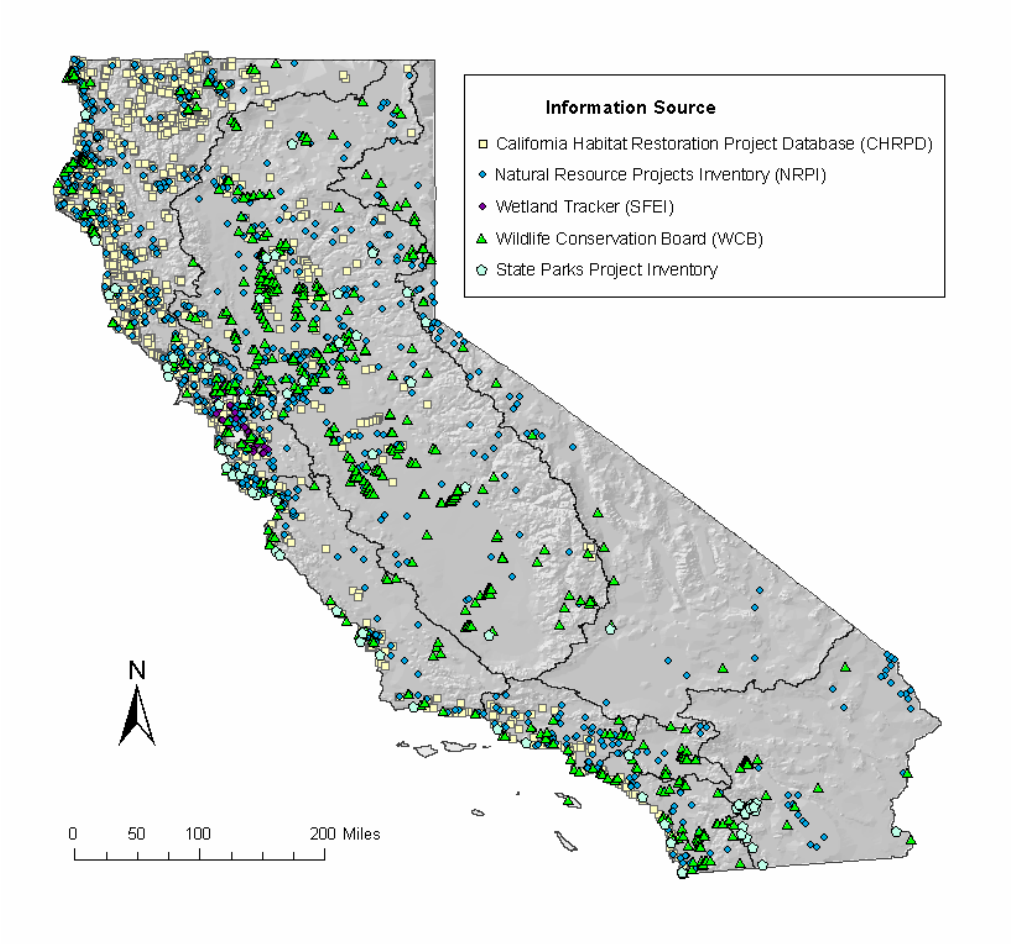
The Wetland Tracker has many potential applications. Agencies with permitting authority over development projects that may impact wetlands (e.g., Army Corps of Engineers, California Department of Fish and Game, State Lands Commission, and Coastal Commission) have the responsibility to document how permittees have complied with the conditions of the permit. Currently there are few state agencies that have agreed to integrate the Wetland Tracker into their procedures. Agencies are limited by staffing resources, as well as some legal constraints, reporting requirements to state and federal entities that are difficult to modify, and a limited understanding of how this tool could benefit their agencies primary mission. As a result, adoption of these standard tools is uncertain and more education on these programs is needed.

While the Commission currently uses its own in-house permit tracking system and the Indicators database to collect information on habitat restoration projects, among other things, application of the "Wetland Tracker" for the Commission's regulatory and planning efforts has yet to be determined.

Statewide Wetland and Riparian Restoration Projects

As described in the 2009 State of the State's Wetlands (SOS Wetlands) report[4], much of the restoration work conducted throughout California is done through voluntary programs and conservation groups. Some of the larger groups along the coast include the San Francisco Bay Joint Venture, the Pacific Coast Joint Venture, the Southern California Wetland Recovery Project, the Central Coast Wetlands Group, and a newly established group of wetland managers working on the north coast. As can be seen in Figure B2, below, many of these programs include restoration projects located outside the coastal zone.

Figure B2. 2006 Distribution of Wetland and Riparian Restoration Projects throughout California.



[4] The California Natural Resources Agency: State of the State's Wetlands – 10 Years of Challenges and Progress – Public Review Draft; October 2009.

Wetland Education and Outreach

The Commission sponsors the Community-Based Restoration and Education Program (CBREP). Since the last assessment, CBREP has continued to distribute its high school curriculum, titled "Our Wetlands, Our World" (OWOW). The OWOW curriculum is aligned to the State Science Content Standards, and focuses on the history and ecology of the Upper Newport Bay; the effects of urbanization, invasive species and loss of biodiversity; and the importance of restoration and stewardship. In 2009, CBREP began distributing OWOW activity kits to allow teachers to borrow materials needed for each activity, and to support use of the curriculum in the classroom and out in the field at the Upper Newport Bay. CBREP also continued to distribute "Digging In: A Guide to Community-Based Habitat Restoration." The Guide explains the basic steps of information gathering, site selection, project implementation, monitoring, maintenance, and working with volunteers. In 2009, staff held workshops to introduce the Guide and connect local groups conducting community-based restoration in Santa Barbara, Long Beach, and Oakland.

APPENDIX C. COASTAL HAZARDS

Examples of Updated LCP Policies since 2006

The Commission approved the Crescent City LCP amendment with modifications requiring that future development must conform to results of potential risks analyses for flooding and tsunami assuming a range of 3 to 6 foot sea level rise, and include a margin of safety for wave attack. Permanent residential units would also be prohibited below maximum wave run-up zone. Commission modifications also required sea level rise evaluation based on best available scientific information.

Building on Crescent City's recently adopted LCP amendment, Del Norte County updated its LCP policies and development ordinances to address sea level rise and tsunami risks. The Commission approved suggested modifications for tsunami risks that will: provide use of inundation mapping; set the floor elevation of all new permanent residences created through land divisions to be one foot of freeboard above the maximum credible run-up elevation taking into account sea level rise rates of 3 to 6 feet per century; provide that all such structures containing permanent residential units shall use resilient designs to withstand wave strike by tsunami taking into account sea level rise; and approval of safety and evacuation plans in the approval of new development within historic or mapped inundation areas. The modifications also include hazards sensitivity analysis for Sea Level Rise of 3 to 6 feet per century for near shore residential and commercial sites and critical facilities sites using a minimum sea level rise of 4.5 ft per century.

However, these amendments do not take effect until and unless the Amendment in effectively certified by the Commission pursuant to the Coastal Act and California Code of Regulations.

APPENDIX D. PUBLIC ACCESS

Public Access Demand

The following table includes specific details regarding surveys that measured public demand, in some way. Surveys conducted between 2000 and 2006.

Table D1. Surveys Regarding Public and Recreational Access to and along the California Coast

Survey Title (Source)	Year	Number of respondents	Number responding that public access to the coast for recreation is adequate or better.	Survey Type & Methods	Geographic Coverage
Californians and the Environment (Public Policy Institute of California)	2006	2003	841; Most surveys did not specifically ask this question. The number reported is based only on response to the 2006 PPIC survey, which found that 42% (or 841) of 2003 respondents think that 'limited public access' is 'not a problem' whereas 33% found it to be 'somewhat of a problem', and 20% found it to be a 'big problem.' Because other surveys did not specifically ask this question, the value reported may not accurately reflect the general public's opinion regarding satisfaction with access to the coast for	random telephone survey	statewide
California Boating Needs Assessment (California Department of Boating and Waterways)	2002	3,893 telephone survey respondents; 124 written survey respondents		random telephone survey of registered motorboat owners and written survey of non-motorized boat owners	statewide
Public Opinion and Attitudes for Outdoor Recreation (California State Parks)	2002	2,512 telephone survey respondents; 610 mail-in survey respondents		telephone and mail-in surveys	statewide

Survey Title (Source)	Year	Number of respondents	Number responding that public access to the coast for recreation is adequate or better.	Survey Type & Methods	Geographic Coverage
			recreation.		
GGNRA (Origin-destination survey, including perceived traffic congestion, and purpose or activity in Marin and SF Bay area)	2001-2002	4,000	No new numbers available for FY0607	Public survey of persons visiting five different park sites polled during peak, shoulder, and off-peak seasons.	Marin and San Francisco Bay area (regional roadway system serving parklands in GGNRA).
Overcrowding and the Demand for beaches in Southern California (California Department of Boating and Waterways)	2001	220		one-time random survey of beachgoers at several So Cal Beaches	Southern California - Ventura, Santa Barbara, Los Angeles, Orange and San Diego Counties

Survey Title (Source)	Year	Number of respondents	Number responding that public access to the coast for recreation is adequate or better.	Survey Type & Methods	Geographic Coverage
Southern California Beach Valuation Project	2000-2001	900	No new numbers available for FY0607	telephone interviews/internet diary surveys; surveyed 900-member panel of beach goers and non-beach goers about beach use over six 2-month periods to capture seasonality of use, and then tested random utility models to predict changes in total use and substitution across sites in response to changes in site characteristics (e.g., beach closure due to oil, sewage, or chemical spills, etc.)	Los Angeles and Orange County beaches

State, County, and Non-Profit Lands Considered Generally Available for Public Use

The numbers provided above for State/County/Local Parks and acres available for public use are a rough approximation of state, local and non-profit lands considered generally available for public access within the California coastal zone, based on the Statewide California Protected Areas Database, version 1.2 (CPAD 2009). CPAD 2009 was designed to inventory lands that have been protected for public use through fee ownership. While efforts are being made to obtain and include all easements and deed restricted lands that provide for public access on privately owned lands as well, the 2009 CPAD data set does not yet include such information. The CPAD dataset also does not necessarily include all open space easement (OSE)/Offer to Dedicate (OTD) areas required by Coastal Commission permit conditions and maintained by the Commission in its OSE OTD database. Thus the 2009 CPAD data does not fully account for all protected open space in the coastal zone; it does however provide the best available data compiled at this point in time to look at the distribution and extent of publicly accessible lands in the coastal zone.

Table D2. Number of Units and Acres of Federal, State, and Other Public Lands Generally Considered Publicly Accessible in the California Coastal Zone. (From California Protected Areas Database (CPAD 2009))

Agency Level	Data	Access Availability			Public Access Acres Available Total
		OA	RA	UA	
Federal	Number of Units	68	9	3	80
	Acres	152,754	79,307	45	232,106
State	Number of Units	217	8	14	239
	Acres	155,174	2,088	2,097	159,359
County	Number of Units	186	4	10	200
	Acres	12,612	4,238	726	17,577
City	Number of Units	558	5	8	571
	Acres	15,208	46	309	15,563
Special District	Number of Units	109	5	6	120
	Acres	10,975	2,551	54	13,581
Nonprofit	Number of Units	61	26	5	92
	Acres	41,836	56,503	123	98,462
Unknown	Number of Units	3	1		4
	Acres	142	5		147
Total Count of Accessible Units		1202	58	46	1306
Total Sum of Acres		388,701	144,739	3,355	536,795

The 2009 CPAD "Units" GIS data layer was used by Commission mapping staff and clipped to the coastal zone boundary, and area of Units within the coastal zone recalculated within the ArcGIS program. The CPAD "Units" data layer represents aggregations of parcels (or "holdings") that are known under one common name – e.g., a State or regional park may have many individual parcels, which together make up one unit known under one common name. Publicly available lands were then calculated for those areas with access availability codes of OA (open access with no restrictions); RA (for units with restricted access, requires a permit or other permission); and UA (for units where the level of access availability is currently unknown, and so presumed for our purposes as accessible until confirmed otherwise). Figure D1 below shows the distribution of Federal, State and other publicly owned lands in the Coastal Zone. Table D2, and Figure D2, which follow, show the distribution, and access availability by County. (Figures D1 and D2, and Tables D2 and D3 are all based on CPAD 2009 data clipped to the Coastal Zone boundary.)

Figure D1. Federal State and Other Public Lands
Generally Considered Publicly Accessible in the California Coastal Zone.

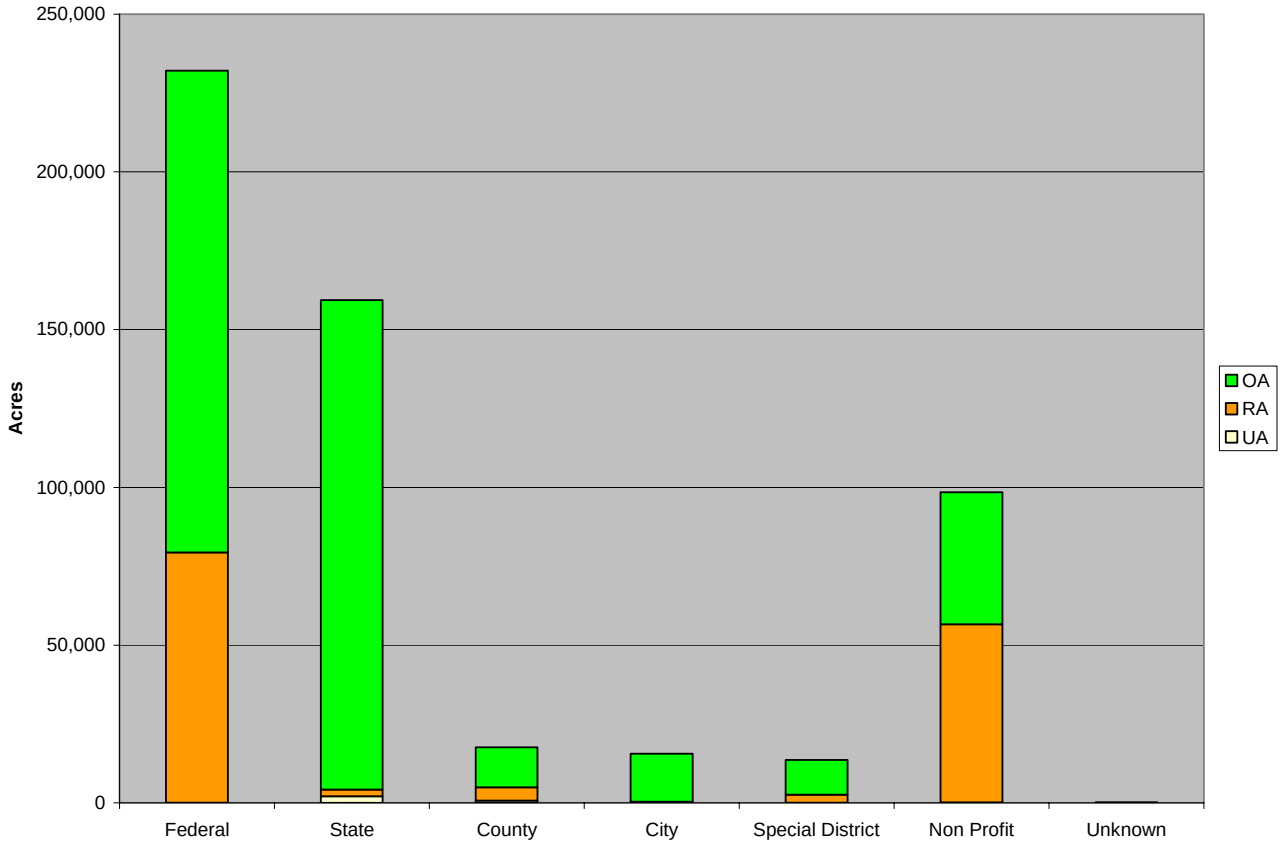
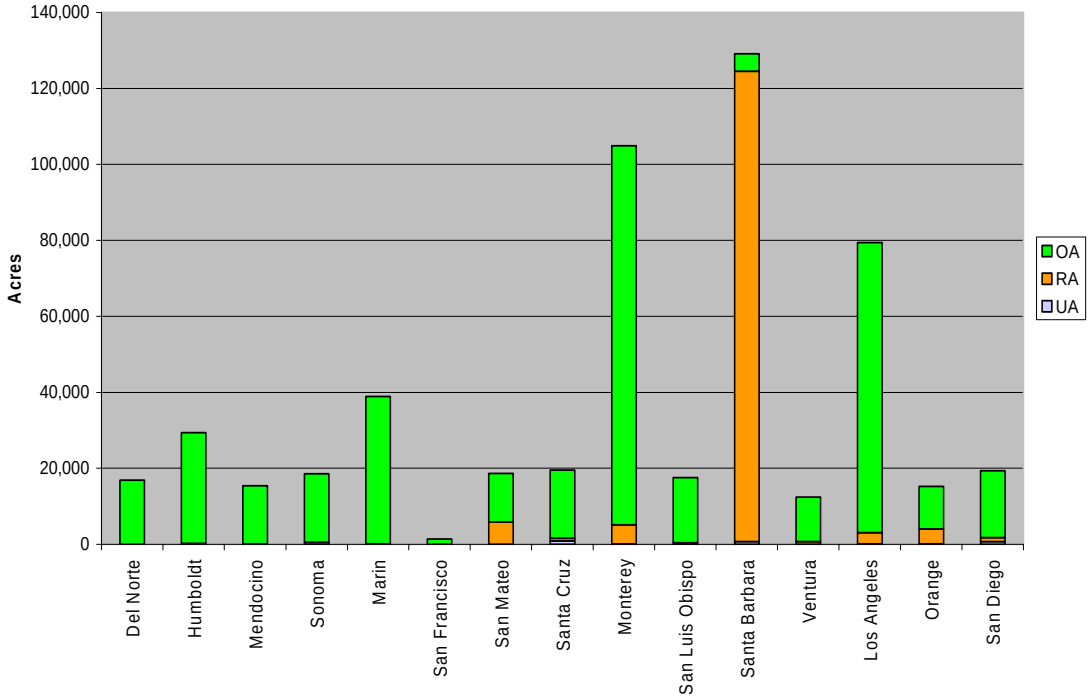


Table D3. Distribution by County of Federal, State and Other Public Lands Generally Considered Publicly Accessible in the California Coastal Zone.

County	Acres of Public Access by Availability Code			Public Access Acres Available Total
	OA	RA	UA	
Del Norte	16,902			16,902
Humboldt	29,194		223	29,417
Mendocino	15,312		114	15,426
Sonoma	17,960	552		18,512
Marin	38,827	48	47	38,922
San Francisco	1,355			1,355
San Mateo	12,815	5,847		18,662
Santa Cruz	17,942	715	877	19,534
Monterey	99,799	5,098	37	104,934
San Luis Obispo	17,097		436	17,533
Santa Barbara	4,617	123,863	682	129,162
Ventura	11,698	699		12,398
Los Angeles	76,334	2,962	111	79,407
Orange	11,230	3,916	105	15,251
San Diego	17,620	1,038	722	19,379
Grand Total	388,701	144,739	3,355	536,795

Figure D2. Distribution by County of Federal, State and Other Public Lands Generally Considered Publicly Accessible in the California Coastal Zone.



California Beach Water Quality Monitoring Program

With regards to water quality monitoring programs, the following information has been excerpted from the State Water Resources Control Board website (www.swrcb.ca.gov).

> *…California has some of the most popular beaches in the country. Over 150 million day visits are generated by tourists and residents annually to swim, wade, surf, and dive at California Beaches. Beach visitors spend over $10 billion each year in California.*
>
> *…California beaches are monitored in accordance with AB411 (Statues of 1997) the Beach Bathing Water Quality Standards and Public Notification Program (Beach Regulation and Guidance). Under the AB411 program, California requires public health agencies to monitor beaches with 50,000 annual beach visitors and potential sources of fecal pollution at least weekly … from April 1 though October 31st. These requirements exceed Federal regulations. Most county public health programs monitor many more sites than required by AB411. In southern California and in San Francisco, monitoring occurs year round…*
>
> *The State Water Resources Control Board [SWRCB] is responsible for collecting all California beach water quality monitoring data and submitting this data to US EPA annually by January 1st of each year.*
>
> *The data is generated by the individual county health programs that collect, analyze and report the data. The counties are responsible for public health warnings (when collected samples exceed one of the three fecal indicator bacteria) and beach closures (when untreated sanitary sewer wastewater is projected to impact beach water quality). The county health agencies are required to report each month's data to the [SWRCB] by the 15th of the following month.*
>
> *The county agencies inform the public on a daily basis about the water quality at its beaches. They do this through public phone hotlines, county or third party websites, and press releases. Earth 911 (http://earth911.com/clean-boating-information/beaches911com/) and Heal the Bay (http://www.healthebay.org/) are third parties which collect the county data and post it to the web either daily or weekly.*
>
> *The [SWRCB] Beach Watch database houses the historical county data. This database can be found at: http://beachwatch.waterboards.ca.gov/ There are reports of historical data regarding the posting and advisory information available to the public. [The SWRCB] provide[s] reports and access to the historical water quality monitoring data.*

These data sources have been used to provide the numbers of beach miles with beach monitoring programs and average beach-mile days closed reported in the Public Access chapter, Table 3.3.

With regards to posting water quality information, State law (AB1946) requires that beaches that fail to meet certain bacteriologic standards established by the State Department of Health Services to, at a minimum, post the beach with conspicuous warning signs to inform the public of the nature of the problem and the possibility of risk to public health. It also requires an annual

survey documenting all beach postings and closures due to threats to the public health that occurred during the preceding calendar year, and to publish annually a statewide report documenting the beach posting and closure data provided to the board by the health officer for the preceding calendar year.

California beaches are monitored in accordance with AB411 (Statutes of 1997) the Beach Bathing Water Quality Standards and Public Notification Program (Beach Regulation and Guidance). The State Regional Water Quality Control Board (SWRCB) is responsible for collecting all California beach water quality monitoring data [including monitoring conducted by city and county health departments] and submitting this data to US EPA annually by January 1st of each year. Beach postings (for times when beach water quality levels exceed bacterial contaminant levels) and closures (due to vessel or sewer/wastewater spills) are required based on state law AB1946.

The State Water Resources Control Board faces increasing obstacles to implementing adequate beach monitoring with local partners throughout the state. As described in the SWRCB website[5]:

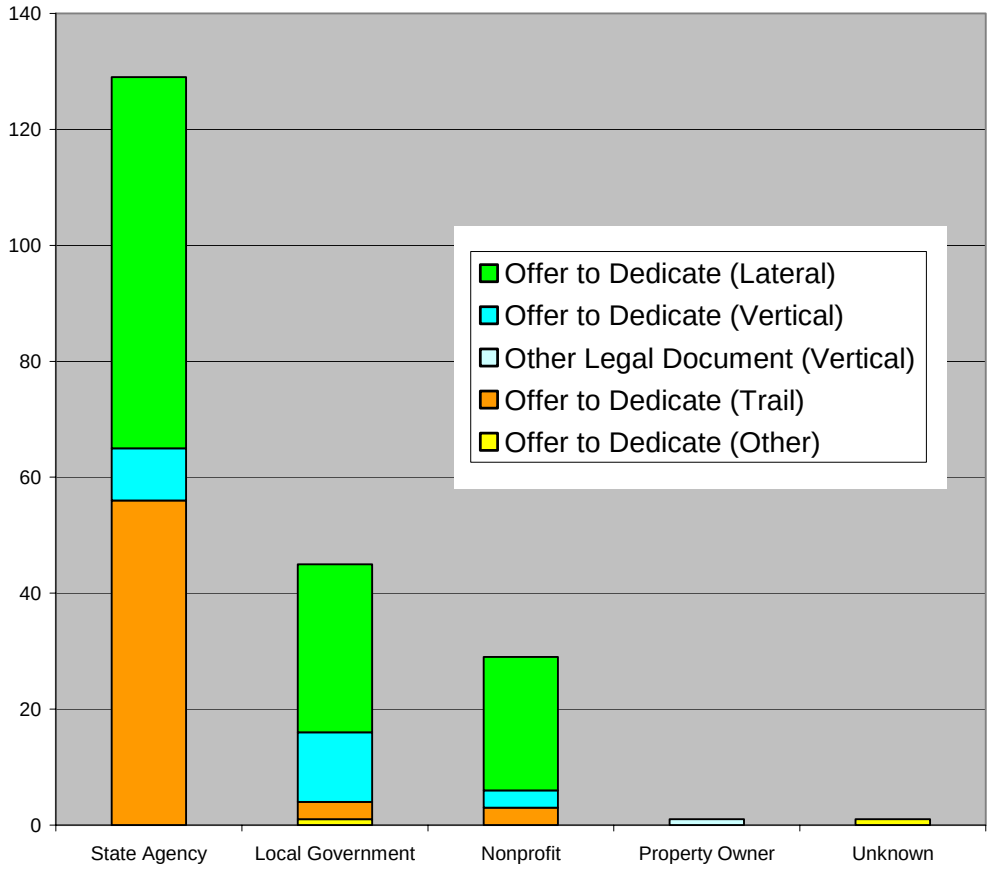
> *In September 2008, as a result of the state budget crisis and severe shortfall in state revenues, the Governor used his line item veto authority to remove, among other things, the $984,000 Beach Safety Program from Department of Public Health's (DPH) budget for 2008/2009. The Beach Safety Program is the DPH Beaches and Recreational Water Program. These are the funds used by DPH for the AB411 grants to local agencies to run their beach water quality monitoring programs from April 1st through Oct 31st each year (the highest months of swimming activity)*
>
> *The [SWRCB] has made several attempts to find alternative funding for the AB411 program (without funding the extent of beach water quality monitoring will be much reduced from historical levels). The first attempt was through [the] Division of Financial Assistance to utilize some remaining Proposition 50 bond funds for the two fiscal years 2008-2009 and 2009-2010. This process has not succeeded to date because the State of California's fiscal emergency precluded any bond funding becoming available since December 2008. The [SWRCB] has attempted to review options perhaps available through the Federal Stimulus to provide extra SRF program funds. This process is currently underway.*

Public Access Acquisition Programs or Policies

As described in the Chapter 3, Public Access Management characterization section, significant new access has been acquired through acceptance of easement offers (commonly referred to as offers to dedicate, or OTDs). Figure D3 shows the distribution of public access OTDs accepted between 2005 and 2009.

[5] State Water Resources Control Board Beach Water Quality Program website: http://www.waterboards.ca.gov/water_issues/programs/beaches/beach_water_quality/

Figure D3. Distribution of Public Access OTDs Accepted 2005 through 2009



Comprehensive Access Management Planning

The Public Access Site Inventory establishes a 2005 baseline inventory, to which new sites created after 2005 can be added. The Public Access Site Inventory uses data from the 2003 Coastal Access guide6 and 2005 regional access guide for Northern California7 to establish a 2005 baseline inventory of existing sites. Additional details on baseline sites and sites created since 2005 were obtained from the regional guide for south central California (including Monterey, San Luis Obispo, Santa Barbara, and Ventura counties) published after 2005 (see description of guides published since 2006 in Management Characterization section 3). The Public Access Site Inventory spreadsheet contains each site as a separate record, with columns containing numerous associated attributes (e.g., relating to facilities available, environmental setting, recreational activities available, historic and cultural features, etc). The spreadsheet has been designed to identify existing sites established prior to 2005 (the baseline inventory), track improvements to existing sites, and allow inclusion of new sites that result from CCC regulatory

[6] California Coastal Access Guide. (includes all 15 coastal counties) Published by University of California Press, 2003. Compiled and edited by California Coastal Commission.

[7] Experience the California Coast: A Guide to Beaches and Parks in Northern California. (Includes Del Norte, Humboldt, Mendocino, Sonoma, and Marin counties). Published by University of California Press, 2005. Compiled by California Coastal Commission;.

activities and other means (e.g., Federal, state, and local acquisitions; openings of earlier non-profit acquisitions; enhancements in signage or facilities, etc).

Conservancy Operation and Maintenance Activities

The Conservancy projects help to maintain public access on key coastal trails. .As described in the SCC website[8], in June 2008 only two grants for public access related projects included operation and maintenance funding:

> *The SCC granted $24,000 to the Redwood Coast Land Conservancy to assist with operation and maintenance of the Gualala Bluff segment of the California Coastal Trail in Gualala (Mendocino County). The funding supports the work of a large number of volunteers who have been maintaining the popular trail, which offers panoramic ocean views directly behind the town's commercial district.*
>
> *The SCC awarded $10,000 to the Moat Creek Managing Agency to operate and maintain public access improvements at Moat Creek Beach and along the Moat Creek segment of the California Coastal Trail south of Point Arena (Mendocino County). The sites were created as part of an early and successful Conservancy effort to reduce the density of the Whiskey Shoals subdivision for the protection of scenic natural and recreational lands.*

These funds primarily from State resource bond acts approved by voters in 2000, 2002 and 2006.

[8] Information on operation and maintenance projects obtained from State Coastal Conservancy website (http://www.scc.ca.gov/index.php?p=64&more=1&c=1&tb=1&pb=1#more64).

APPENDIX E. CUMULATIVE AND SECONDARY IMPACTS

Data from the California Dept of Finance Reports provides changes and projections for population of coastal counties as compiled below.

Table E1 – Population Projections for Coastal Counties (Data from California Department of Finance reports.)

Coastal County	Population Estimates for Coastal Counties					Population Increase over 2005	% increase over 2005	Population Projections			Projected % increase over 2009		
	July 1 2005	July 1, 2006	July 1, 2007	July 1, 2008	January 1, 2009			2020	2040	2050	2020	2040	2050
Del Norte County	28,938	29,014	29,301	29,401	29,547	609	2%	36,077	49,029	56,218	22%	66%	90%
Humboldt County	131,531	131,883	132,184	132,690	132,755	1,224	1%	142,167	150,121	152,333	7%	13%	15%
Mendocino County	89,404	89,237	89,612	90,051	90,206	802	1%	102,017	121,780	134,358	13%	35%	49%
Sonoma County	476,193	477,290	480,712	484,547	486,630	10,437	2%	546,151	676,179	761,177	12%	39%	56%
Marin County	252,276	253,638	255,774	257,522	258,618	6,342	3%	260,305	287,153	307,868	1%	11%	19%
San Fran City/Co	808,801	817,154	829,848	842,625	845,559	36,758	5%	844,466	858,532	854,852	0%	2%	1%
San Mateo County	721,281	724,945	732,643	742,251	745,858	24,577	3%	761,455	807,587	819,125	2%	8%	10%
Santa Cruz County	260,464	262,032	264,674	267,541	268,637	8,173	3%	287,480	318,413	333,083	7%	19%	24%
Monterey County	421,043	421,071	424,787	429,083	431,892	10,849	3%	476,642	584,878	646,590	10%	35%	50%
San Luis Obispo County	262,744	264,796	267,162	270,046	270,429	7,685	3%	293,540	338,760	364,748	9%	25%	35%
Santa Barbara County	419,016	421,041	425,203	429,109	431,312	12,296	3%	459,498	509,920	534,447	7%	18%	24%
Ventura County	811,934	818,200	824,041	830,343	836,080	24,146	3%	956,392	1,135,684	1,229,737	14%	36%	47%
Los Angeles County	10,190,347	10,232,453	10,273,083	10,347,437	10,393,185	202,838	2%	11,214,237	12,491,606	13,061,787	8%	20%	26%
Orange County	3,056,518	3,070,696	3,094,872	3,125,756	3,139,017	82,499	3%	3,520,265	3,849,650	3,987,625	12%	23%	27%
San Diego County	3,051,764	3,076,068	3,114,843	3,161,477	3,173,407	121,643	4%	3,550,714	4,241,399	4,508,728	12%	34%	42%
sum of all coastal counties	**20,982,254**				**21,533,132**	**550,878**	**3%**	**23,453,426**	**26,422,731**	**27,754,726**	**9%**	**23%**	**29%**

APPENDIX F. SPECIAL AREA MANAGEMENT PLANNING

The status of all LCP segments by District is as follows.

Table F1. Summary of the Status of LCPs by Jurisdiction (through June 30, 2008)

* = incorporated into the CCMP by OCRM Note: Some adopted suggested modifications as reported may have expired.

	LAND USE PLAN					IMPLEMENTATION								
SEGMENT	**None filed**	**Denied**	**Cert. w/ modifications**	**Certified**	**Total**	**None filed**	**Denied**	**Cert. w/ modifications**	**Cert. -not yet issuing permits**	**Eff. cert & issues. permits**	**Total**	**No. of amendments submitted[9]**	**ADCs remaining**	**Date of effective certification**
North Coast District														
Del Norte County												**85**	**1**	
County*				**X**						**X**				**10/12/83**
Harbor*				**X**						**X**				**8/27/87**
Lopez Creek*				**X**						**X**				**12/8/87**
Pt. St. George	**X**					**X**								
Crescent City*				**X**						**X**		**12**	**1**	**3/10/83**
McNamara-Gillispie*				**X**						**X**				
Humboldt County												**38**	**3**	
Northcoast*				**X**						**X**				**1/10/86**
Trinidad Area*				**X**						**X**				**1/10/86**
McKinleyville*				**X**						**X**				**1/10/86**
Humboldt Bay*				**X**						**X**				**1/10/86**
Eel River*				**X**						**X**				**1/10/86**
South Coast*				**X**						**X**				**1/10/86**
Trinidad (City)*				**X**						**X**		**8**	**1**	**2/5/80**
Arcata				**X**						**X**		**18**		**10/10/89**
Eureka*				**X**						**X**		**18**		**7/26/84**
Mendocino County												**42**		
Balance County*				**X**						**X**				**9/10/92**
Town				**X**						**X**				**11/14/96**
Pygmy Forest	**X**					**X**								
Fort Bragg*				**X**						**X**		**11**		**7/4/83**
Point Arena				**X**						**X**		**14**		**12/3/81**
TOTAL	**2**	**0**	**0**	**18**	**20**	**2**	**0**	**0**	**0**	**18**	**20**	**246**	**6**	

[9] Major and minor amendments, withdrawals, incomplete and pending items all counted as separate submittals.

	LAND USE PLAN					IMPLEMENTATION								
SEGMENT	**None filed**	**Denied**	**Cert. w/ modifications**	**Certified**	**Total**	**None filed**	**Denied**	**Cert. w/ modifications**	**Cert. -not yet issuing permits**	**Eff. cert & issues. permits**	**Total**	**No. of amendments submitted[9]**	**ADCs remaining**	**Date of effective certification**
North Central Coast Area														
Sonoma County				**X**						**X**		**28**		**12/2/81**
Marin County												**25**	**1**	**6/3/81**
South (Unit I)*				**X**						**X**				**5/5/82**
North (Unit II)*				**X**						**X**				
San Fran City/Co*				**X**						**X**		**1**		**3/14/86**
Olympic Club	**X**					**X**								
Daly City*				**X**						**X**				**3/14/84**
Pacifica				**X**						**X**		**21**	**2**	**6/7/94**
Half Moon Bay				**X**						**X**		**16**		**4/10/96**
San Mateo County*				**X**						**X**		**46**		**4/1/81**
TOTAL	**1**	**0**	**0**	**8**	**9**	**1**	**0**	**0**	**0**	**8**	**9**	**137**	**3**	

	LAND USE PLAN					IMPLEMENTATION								
SEGMENT	**None filed**	**Denied**	**Cert. w/ modifications**	**Certified**	**Total**	**None filed**	**Denied**	**Cert. w/ modifications**	**Cert. -not yet issuing permits**	**Eff. cert & issues Permits**	**Total**	**No. of amendments submitted**	**ADCs remaining**	**Date of effective certification**
Central Coast District														
Santa Cruz County				**X**						**X**		**117**		**1/13/83**
Santa Cruz (City)				**X**						**X**		**43**	**1**	**5/9/85**
Capitola				**X**						**X**		**33**		**4/13/90**
Watsonville				**X**						**X**		**5**		**11/15/88**
Monterey County*												**32**	**3**	
North County*				**X**						**X**				**1/12/88**
Del Monte Forest				**X**						**X**				**1/12/88**
Carmel Area				**X**						**X**				**1/12/88**
Big Sur Coast				**X**						**X**				**1/12/88**
Marina*				**X**						**X**		**8**		**12/17/82**
Sand City				**X**						**X**		**10**	**1**	**3/14/84**
Seaside				**X**		**X**								
Monterey (City)												**6**		
Laguna Grande			**X**			**X**								
Del Monte Beach				**X**		**X**								
Harbor				**X**		**X**								
Cannery Row				**X**		**X**								
Skyline				**X**		**X**								
Pacific Grove				**X**		**X**						**1**	**1**	
Carmel (City)				**X**						**X**		**5**		**10/14/04**
San Luis Obispo County				**X**						**X**		**56**	**2**	**7/8/87**
Morro Bay				**X**						**X**		**28**		**10/24/84**
Pismo Beach				**X**						**X**		**28**		**4/13/84**
Grover Beach*				**X**						**X**		**6**		**2/9/84**
TOTAL	**0**	**0**	**1**	**21**	**22**	**7**	**0**	**0**	**0**	**15**	**22**	**378**	**8**	

	LAND USE PLAN					IMPLEMENTATION								
SEGMENT	**None filed**	**Denied**	**Cert. w/ modifications**	**Certified**	**Total**	**None filed**	**Denied**	**Cert. w/ modifications**	**Cert. -not yet issuing permits**	**Eff. cert & issues permits**	**Total**	**No. of amendments submitted**	**ADCs remaining**	**Date of effective certification**
South Central Coast District**														
Santa Barbara County				**X**						**X**		**89**	**1**	**8/11/82**
Guadalupe (City)				**X**						**X**				**5/9/91**
City of Goleta	**X**					**X**								
Santa Barbara City*												**25**		
City*				**X**						**X**				**11/12/86**
Airport/Goleta Sl.				**X**						**X**				**12/11/91**
Carpinteria*				**X**						**X**		**40**		**1/6/82**
Ventura County				**X**						**X**		**26**		**10/26/83**
San Buenaventura*				**X**						**X**		**33**		**2/23/84**
Oxnard				**X**						**X**		**16**		**4/10/85**
Port Hueneme*				**X**						**X**		**24**		**11/28/84**
L.A.Co. /Malibu Mtns.				**X**		**X**						**1**		
Malibu (City)				**X**						**X**		**10**		**9/13/02**
TOTAL	**1**	**0**	**0**	**11**	**12**	**2**	**0**	**0**	**0**	**10**	**12**	**264**	**1**	

	LAND USE PLAN					IMPLEMENTATION								
SEGMENT	**None**	**Denied**	**Cert. w/ modifications**	**Certified**	**Total**	**None**	**Denied**	**Cert. w/ modifications**	**Cert. -not yet issuing permits**	**Eff. cert & issues permits**	**Total**	**No. of amendments submitted**	**ADCs remaining**	**Date of effective certification**
South Coast District														
Los Angeles County														
Marina Del Rey/Ballona.				**X**						**X**		**4**		**12/13/90**
Playa Vista "A"	**X**					**X**								
Sta.Catalina Is.				**X**						**X**		**1**		**1/9/90**
Los Angeles (City)												**1**		
Pacific Palisades	**X**					**X**								
Venice				**X**		**X**								
Playa Vista				**X**		**X**								
Del Rey Lagoon		**X**					**X**							
Airport/Dunes		**X**					**X**							
San Pedro				**X**		**X**								
Santa Monica				**X**		**X**							**2**	
El Segundo*				**X**						**X**		**1**		**2/4/82**
Manhattan Beach				**X**						**X**		**19**		**5/12/95**
Hermosa Beach				**X**		**X**						**6**		
Redondo Beach												**12**	**1**	
Area One				**X**						**X**				**9/11/03**
Area Two				**X**		**X**								
Torrance			**X**			**X**								
Palos Verdes Estates				**X**						**X**		**1**		**12/12/91**
Rancho Palos Verdes*				**X**						**X**		**3**		**4/27/83**
Long Beach*				**X**						**X**		**66**	**1**	**7/22/80**
Avalon*				**X**						**X**		**4**	**1**	**5/21/81**
Orange County												**17**		
N/Sunset Bch.				**X**						**X**				**10/27/83**
N/Bolsa Chica (**IP set aside by court decision)				**X**		**X****								

	LAND USE PLAN					IMPLEMENTATION								
SEGMENT	**None**	**Denied**	**Cert. w/ modifications**	**Certified**	**Total**	**None**	**Denied**	**Cert. w/ modifications**	**Cert. -not yet issuing permits**	**Eff. cert & issues permits**	**Total**	**No. of amendments submitted**	**ADCs remaining**	**Date of effective certification**
N/Sta.Ana River	**X**					**X**								
N/Sta.Ana Hts.		**X**				**X**								
Newport Coast*				**X**						**X**				**1/14/88**
Aliso Viejo*				**X**						**X**				**9/29/83**
S/Emerald Bay*				**X**						**X**				**9/13/89**
Seal Beach			**X**			**X**								
Huntington Beach*				**X**						**X**		**41**	**1**	**3/13/84**
Costa Mesa	**X**					**X**								
Newport Beach				**X**		**X**						**22**		
Irvine City*				**X**						**X**		**1**		**3/3/82**
Laguna Beach				**X**						**X**		**37**	**4**	**1/13/93**
Aliso Viejo	**X**					**X**								
Laguna Niguel*				**X**						**X**		**3**		**11/14/90**
Dana Point*				**X**						**X**		**16**		**9/13/89**
San Clemente				**X**				**X**				**6**	**1**	
TOTAL	**5**	**3**	**2**	**27**	**37**	**16**	**2**	**1**	**0**	**18**	**37**	**261**	**11**	

	LAND USE PLAN					IMPLEMENTATION								
SEGMENT	**None**	**Denied**	**Cert. w/ modifications**	**Certified**	**Total**	**None**	**Denied**	**Cert. w/ modifications**	**Cert. -not yet issuing permits**	**Eff. cert & issues permits**	**Total**	**No. of amendments submitted**	**ADCs remaining**	**Date of effective certification**
San Diego District														
San Diego County				X					X			4		
Oceanside*				X						X		12		3/11/86
Carlsbad												105	5	
Agua Hedionda				X		X								
Mello I				X						X				9/30/80
Mello II				X						X				6/18/81
W.Batiquitos Lg/ Sammis				X						X				11/1/85
E. Batiquitos Lag/ Hunt				X						X				4/14/88
Carlsbad Village.Redev.Area				X						X				12/8/87
Encinitas				X						X		26		5/11/95
Solana Beach	X					X								
Del Mar				X						X		2		9/11/01
San Diego (City)												90		
North City*				X						X			8	7/13/88
La Jolla*				X						X				7/13/88
Pacific Beach*				X						X				7/13/88
Mission Beach*				X						X				7/13/88
Mission Bay			X			X								
Ocean Beach*				X						X				7/13/88
Peninsula*				X						X				7/13/88
Centre City*				X						X				7/13/88
Barrio Logan*				X						X				7/13/88
Otay Mesa*				X						X				7/13/88
Tijuana River V.*				X						X				7/13/88
Border High*				X						X				7/13/88
Coronado*				X						X		23		1/11/84
National City*				X						X		5		4/9/91
Chula Vista				X						X		9		9/27/85
South Bay Is.				X					X					
Imperial Beach*				X						X		32		9/26/84

	LAND USE PLAN					IMPLEMENTATION								
SEGMENT	**None**	**Denied**	**Cert. w/ modifications**	**Certified**	**Total**	**None**	**Denied**	**Cert. w/ modifications**	**Cert. -not yet issuing permits**	**Eff. cert & issues permits**	**Total**	**No. of amendments submitted**	**ADCs remaining**	**Date of effective certification**
TOTAL	**1**	**0**	**1**	**26**	**28**	**3**	**0**	**0**	**2**	**23**	**28**	**308**	**13**	
STATEWIDE TOTALS	**10**	**3**	**4**	**111**	**128**	**31**	**2**	**1**	**2**	**92**	**128**	**1594**	**41**	

Table F2: Special Area Management Plans (SAMPs) Reviewed through Federal Consistency Authority Since 2006

FC #:	APPLICANT:	LOCATION:	PROJECT:	ACTION:
CD-083-05	U.S. Forest Service	Immediately south of Bixby Creek, Big Sur, Monterey County	General consistency determination for special use and other activities at the Brazil Ranch, Los Padres National Forest	Conditional
ND-117-05	National Park Service	Mori Point, Golden Gate National Recreation Area, Pacifica, San Mateo Co.	Mori Point Trail and Restoration Plan	Concur
ND-006-06	National Park Service	Marin, San Francisco, and San Mateo Counties	Fire Management Plan for Golden Gate National Recreation Area	Concur
CD-036-06	National Oceanic and Atmospheric Administration	Channel Islands National Marine Sanctuary	Draft Management Plan	Conditional
CD-044-06	National Marine Fisheries Service	offshore waters statewide	Amendment 18 to Pacific Coast Groundfish Fishery Management Plan	Concur as ND
CD-066-06	Bureau of Land Management	Point Arena, Mendocino County	Resource Management Plan for Stornetta Public Lands	Concur
CD-069-06	U.S. Fish and Wildlife Service	Lanphere Dunes Unit of Humboldt Bay National Wildlife Refuge	Public Access Plan for Ma-le'l Dunes Cooperative Management Area	Concur
ND-070-06	U.S. Fish and Wildlife Service	San Diego Bay National Wildlife Refuge, San Diego Co.	Comprehensive Conservation Plan for Sweetwater Marsh and South San Diego Bay Units	Concur
CD-009-07	National Oceanic and Atmospheric Administration	Cordell Bank National Marine Sanctuary, offshore Marin Co.	Draft Management Plan	Concur
CD-010-07	National Oceanic and Atmospheric Administration	Gulf of the Farallones National Marine Sanctuary, offshore Marin and San Francisco Counties	Draft Management Plan	Conditional
CD-011-07	National Oceanic and Atmospheric Administration	Monterey Bay National Marine Sanctuary, offshore Marin through San Luis Obispo Counties	Draft Management Plan	Conditional
CD-012-07	National Marine Fisheries Service	offshore waters statewide	Marine Mammal Health and Stranding Response Program	Concur
CD-23-09	National Park Service	Marin Headlands, Marin County	Transportation Management Plan	Concur
ND-031-09	U.S. Fish and Wildlife Service	Humboldt Bay National Wildlife Refuge Complex	Final Comprehensive Conservation Plan	Concur

Table F3. Major Special Planning Area Updates and Revisions – 2006-2009

	LCP AMENDMENT	SUMMARY DESCRIPTION	DATE OF ACTION	ACTION
1	Santa Cruz County LCP Amendment No. MAJ-SCO-1-04	Countywide zoning changes	August 10, 2006	Approved with Suggested Modifications
2	City of Point Arena LCP Amendment No. PTA-MAJ-1-01 Certification Review	Comprehensive LCP Update	September 15, 2006	Concurrence
3	San Luis Obispo County LCP Amendment No. SLO-MAJ-1-05 Part 1	Update of San Luis Bay Area Plan to revise plan for Port San Luis Harbor District	November 16, 2006	Approved with Suggested Modifications
4	County of San Luis Obispo LCP Amendment No. SLO-MAJ-1-05 Part 1 Certification Review	Port San Luis Harbor District Master Plan	October 12, 2007	Concurrence
5	City of Santa Cruz LCP Amendment No. STC-MAJ-1-06	Citywide Creeks and Wetlands Management Plan	October 12, 2007	Approved with Suggested Modifications
6	County of San Luis Obispo LCP Amendment No. SLO-MAJ-1-06 Part 1 Certification Review	Cambria and San Simeon Acres Community Plans	December 13, 2007	Concurrence
7	City of Fort Bragg LCP Amendment No. FTB-MAJ-1-6 (LCP Update).	Comprehensive update of certified land use plan and implementation plan	August 2008	Concurrence
8	City of Dana Point LCP Amendment No. DPT-MAJ-4-06 (Town Center) Certification Review.	Update of LCP for Town Center	September 2008	Concurrence
9	City of Laguna Beach LCP No. LGB-MAJ-1-07C Certification Review.	Update of LCP Implementation Plan	October 2008	Concurrence
10	San Luis Obispo County LCP Amendment No. SLO-MAJ-2-04 Part 2 (Estero Area Plan Update) Certification Review.	Update of Estero Area Plan	January 2009	Concurrence
11	San Luis Obispo County LCP Amendment No. SLO-MAJ-2-04 Part 3 (Partial CZLUO Update) Certification Review.	Amending multiple sections of LCP Implementation Plan	January 2009	Concurrence

	LCP AMENDMENT	SUMMARY DESCRIPTION	DATE OF ACTION	ACTION
12	University of California at Santa Cruz (UCSC)'s Coastal Long Range Development Plan (CLRDP) Certification Review	Certification of the University of California at Santa Cruz (UCSC)'s Coastal Long Range Development Plan (CLRDP) (providing for an expanded Marine Science Campus on the University's 100-acre Terrace Point property at the western border of the City of Santa Cruz),	January 2009	Concurrence
13	City of Huntington Beach LCP Amendment No. HNB-MAJ-1-07B.	Amend the Implementation Plan (IP) portion of the Local Coastal Program (LCP) by incorporating changes made by the City over the last few years (2001 - 2007). Changes proposed include: streamline the City's entitlement process; modify affordable housing requirements to be consistent with current State requirements; modify provisions to comply with the Religious Land Use and Institutionalized Persons Act (RLUIPA) of 2000; changes proposed to Section 231.20 Bicycle Parking and Section 231.18 relating to parking controls and privacy gates, Huntington Beach, Orange County	April 2009	Approved with Suggested Modifications
14	City of Malibu LCP Amendment No. MAL-MAJ-1-08 (Santa Monica Mountains Conservancy and Mountains Recreation and Conservation Authority)	LCP amendment "override" to add or modify land use policies and development standards for and related to a Malibu Parks Public Access Enhancement Plan Overlay	June 2009	Approved with Suggested Modifications
15	City of Carlsbad LCP Amendment No. 3-07A (Village Area Master Plan)	amend Village Area Master Plan and Design Manual (LUP) to clarify/update development standards and implementing policies (IP) in the Village Area Redevelopment segment of the certified LCP	June 2009	Approved with Suggested Modifications
16	City of San Diego LCP Amendment No. 3-08A (6th Update of the Land Development Code).	Amend LCP Implementation Plan to change verbiage, clarify intent, remove duplication and correct minor errors in multiple sections of the certified Land Development Code.	June 2009	Approved
17	City of Redondo Beach RDB-MAJ-2-08 (Area 2 Certification)	Amend its certified Land Use Plan and Implementation Plan in order to certify the remaining uncertified area (Area 2) of the Redondo Beach Coastal Zone and the eliminate the current geographic segmentation of the Coastal Zone in conjunction with these amendments	July 2009	Approved with Suggested Modifications
18	County of Del Norte LCP Amendment No. DNC-MAJ-2-03.	Comprehensive update of certified land use plan and implementation plan	October 2009	Approved with Suggested Modifications

	LCP AMENDMENT	SUMMARY DESCRIPTION	DATE OF ACTION	ACTION
19	City of Newport Beach LCP Amendment No. NPB-MAJ-1-07 (Land Use Changes) Certification Review.	Certification of NPB-MAJ-1-07 (which amends the certified Land Use Plan (LUP) by: (a) changing the land use classification and density/intensity system currently used in the LUP and LUP maps to reflect the new system adopted in the City General Plan's Land Use Element Update; (b) changes land use designation of 55 sites involving several hundred properties in the coastal zone; and (c) revises and adds policies addressing land uses, site design, building volume, mass, clustering, setbacks, architecture, and nonconformities).	October 2009	Concurrence
20	Dana Point LCP Amendment DPT-MAJ-1-08 (Dana Point Harbor Revitalization Plan (LUP only)	Amend the Local Coastal Program Land Use Plan to incorporate the proposed Dana Point Harbor Revitalization Plan (replacing sections of the Dana Point Specific Plan relevant to the Dana Point Harbor (1986 LCP), in Dana Point Harbor, Orange County	October 2009	Approved with Suggested Modifications
21	San Luis Obispo County LCP Amendment SLO-MAJ-2-07 Part 2 (Framework for Planning) Certification Review.	Certification of SLO-MAJ-2-07 Part 2 (changing language in the LCP's Framework for Planning associated with the County's Parks and Recreation Element	November 2009	Concurrence
22	City of San Buenaventura LCP Amendment No. SBV-MAJ-1-08.	Amend LCP by adding the Midtown Corridors Development Code (Main Street and Thompson Boulevard) policies and implementation measures	November 2009	Approved with Suggested Modifications
23	City of San Buenaventura LCP Amendment No. SBV-MAJ-2-08	Amend the Land Use Plan and Implementation portions of certified LCP to replace the 1993 Downtown Specific Plan policies and implementation measures with the 2007 Downtown Specific Plan.	November 2009	Approved with Suggested Modifications
24	City of Carlsbad LCP Amendment No. 3-07A (Village Master Plan and Design Manual) Certification Review.	Certification of LCP Major Amendment 3-07A (to clarify/update development standards and implementing policies (IP) in the Village Area Redevelopment segment)	November 2009	Concurrence
25	UCSB Notice of Impending Development (NOID) No. 4-09 (Main Campus Infrastructure Renewal Project).	Notice of Impending Development by University of California at Santa Barbara for replacement/new installation of various infrastructure- natural gas, potable water, sewer, and storm drain utility lines and stormwater treatment; restoration/enhancement of upland habitat area bicycle path improvements; on Main Campus of the University of California at Santa Barbara, Santa Barbara County	December 2009	Approved

	LCP AMENDMENT	SUMMARY DESCRIPTION	DATE OF ACTION	ACTION
26	San Mateo County LCP Amendment No. SMC-MAJ-1-07 (Midcoast Update)	Update of land use plan (LUP) and implementation plan (IP) for the urban Midcoast area (El Granada, Miramar, Moss Beach, Montara, Princeton-by-the-Sea)	December 2009	Approved with Suggested Modifications
27	San Mateo County LCP Amendment No. SMC-MAJ-1-04-A (Midcoast Design Standards)	Amend the LUP and IP to establish new design standards for single-family and duplex development in the urban Midcoast (El Granada, Miramar, Moss Beach and Montara).	December 2009	Approved with Suggested Modifications

APPENDIX G. ENERGY & GOVERNMENT FACILITY SITING

Background on Oil and Gas

The 2006 Assessment discussed the dispute between the Coastal Commission and the U.S. Department of the Interior (DOI) Minerals Management Service (MMS) regarding the MMS's refusal to comply with the requirements of the federal Coastal Zone Management Act (CZMA) with respect to the granting of 36 federal oil and gas lease suspensions (i.e., lease extensions). The federal government, over a period of years between 1968 and 1984, had granted these 36 leases to private entities to explore and develop oil and gas resources in the outer continental shelf (OCS) off the California coast. In 2001, the district court held in State of California v. Norton that approval of the lease suspensions by the MMS is subject to consistency review by California under the CZMA. On appeal, the U.S. Court of Appeals for the Ninth Circuit affirmed the district court judgment. In 2005, the Coastal Commission objected to ten consistency determinations for the 36 lease suspension requests based on lack of information. The "lack of information" objection was the result of a disagreement between the Coastal Commission and the MMS over whether the MMS was to provide a more detailed analysis of the long-term effects of post-suspension exploration, development and production activities that are reasonably foreseeable results of the MMS's approval of the lease suspensions. Subsequently, the owners of the 36 leases filed suit in the Court of Federal Claims claiming that the federal government had taken actions over the years that had the effect of preventing the lessees from continuing exploratory and other activities on the leased properties. The Court of Federal Claims agreed with the leaseholders and held that they were entitled to a restitutionary award as damages for a breach of contract. The Court of Appeals for the Federal Circuit affirmed the decision of the Court of Claims. The federal government has since awarded restitution to the lessees in the amount of the funds that had been paid for the leases at the time the leases were executed. Because the federal government bought them back, these 36 leases no longer exist.

APPENDIX H. RESPONSE TO PUBLIC COMMENTS

Response to Public Comments on the 2010 Assessment and Strategy
(Please see complete copies of comment letters following the responses)

Summary of Public Comments and Commission Response

The Commission received public comments from three organizations: Californians for Property Rights, the California Farm Bureau, and the California Cattlemen's Association. All three comment letters expressed discontent with the Commission's role in land use decision-making along the coast especially with respect to regulation of agricultural lands and agricultural uses. The organizations request more local control and local autonomy in land use policy applications, such as LCP updates and amendments. They also request voluntary compliance with public access and open space easements, which are often required as conditions for coastal development permits. To a lesser extent, the comments requested clarification and documentation of specific information in the Wetlands and Public Assess sections in the Assessment portion.

Commission staff has tried to respond to all the main points of the comments submitted; however, there are some comments that address issues that relate more directly to past projects, Commission actions or other concerns with Commission procedures that do not directly address components of CZMA 309 Enhancement Grant program for which this Assessment and Strategy is required. While we have considered all the comments and have attached the full copies of all comment letters, we have provided direct responses only to those comments that are most applicable to the 2010 Assessment and Strategy.

July 23 2010 Comments from California Cattlemen's Association (CCA)

1. Comments include that "*it is vital that policies put forward by the Commission not conflict with current farming and ranching activities and maintain the economic viability of agriculture in and around California's coastal regions*."

Response: The Coastal Act contains strong polices to protect agricultural and timber land and production in the coastal zone (see Coastal Act sections 30240 through 30243). Protection of agriculture is one of the priorities in the Coastal Act, and the Commission is required to make decisions consistent with the Coastal Act policies and/or the applicable LCP. Coastal Act Section 30222 states:

> 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.

2. "*CCA would strongly urge the Commission to recognize the critical role local communities play in the development and implementation of land use policies impacting agricultural areas. Correspondingly, CCA supports the ability of local governments to maintain control and*

autonomy to craft land use policies based on the historic knowledge of agriculture and the need to protect both agriculture and coastal resources."

Response: Please see response to the California Farm Bureau comments 5 and 6.

3. The CCA recommends the Commission "*adopt a formal process to consult with state – but most importantly – local agricultural groups when adopting LCPs or other regulations."*

Response: As local governments initiate updates to their LCPs, it is incumbent on both the local government and the Commission staff to conduct outreach to the agricultural community as well as other coastal groups. The Commission, along with local governments, is committed to public engagement in the LCP process; however, with the Commission's extremely limited resources, adoption of a formal process beyond that currently present in the Coastal Act and the California Code of Regulations is not feasible. We recognize that Commission staff should try to expand outreach whenever possible; to that end, Commission staff is currently making greater pro-active efforts to improve consultation and communication with local governments and community groups.

4. *"In Section 3, Table 3.1 the Commission refers to the restriction of public access because of "missed opportunities" to allow public access under easements. While some farmers and ranchers chose to sell conservation or access easements, this should remain entirely voluntary and terms and conditions of the easement should be mutually agreed upon between both the buyer and seller of an easement. Furthermore, the Commission should make every effort to ensure that LCPs and other regulations adopted pursuant to the California Coastal Act protect private property rights and do not inadvertently result in trespassing on private property."*

Response: When the Commission reviews LCPs, permits and appeals it must review the projects for conformance with the applicable standard—the Coastal Act or the certified LCP. Depending on the specific case, project conditions or suggested policy modifications—including ones that address compliance with agricultural protection or public access policies-- are often required to ensure such conformance. As a result, mitigation to address unavoidable adverse impacts to public access may be required, such as requiring the project proponent to record an access easement on the property. The Commission also acts consistent with section 30010 of the Coastal Act that addresses the protection of private property rights.

<u>July 21, 2010 Comments from California Farm Bureau Federation (CFBF)</u>

5. "*Respect Limits to the State's Authority and the Powers of Local Government. The Farm Bureau believes authority of the CCC relative to agriculture and agricultural practices should be rescinded and that authority returned to local government*."

6. *"With respect to the Commission's current responsibilities, Farm Bureau believes that local governments, familiar with the local agricultural history and the agricultural practices specific to their county or region, should determine the agricultural-related policies contained in their respective Local Coastal Programs (LCPs) The Commission should respect this local process and not intervene to weaken any protections for agricultural resources."*

Response to Comments 5 and 6: The LCP process in the Coastal Act is shared coastal management responsibility involving the Commission, local government and the statewide public. The Commission, local government and the public may not always reach agreement, and sometimes the different perspectives and policy concerns of the Commission and local governments will conflict; however, the result of policy changes, LCP amendments and the like, are required to be consistent with the Coastal Act. In some cases, local governments may submit policies or approve coastal development permits that weaken or cause adverse impacts to agricultural activities along the coast. The Commission therefore is responsible for ensuring that changes to LCP agricultural policies requested by local governments still remain consistent with the protective agricultural policies of the Coastal Act.

7. *"Local elected officials understand far better than the Commission or its staff the needs of their own constituents. Local elected officials, with the input of its constituents, are charged with making those policy choices that best suit the needs of their communities, while at the same time respecting the fundamental rights of their landowning constituents. However, in an effort to formulate a Local Coastal Program, local agencies rely heavily on the input from the Commission even when that input may not be entirely helpful. For example, Marin County, with a rich and significant agriculture industry, has been encouraged by Coastal Commission staff to adopt policies from the recently updated Malibu Local Coastal Program. This is problematic for several reasons, least of all because commercial agriculture within the City of Malibu is practically nonexistent. Each California county is unique and not often amenable to a "one-size-fits-all" approach to coastal zone planning. Please consider reducing this practice in the future."*

Response: The LCP update process in the Coastal Act and California Code of Regulations respects the role of local government to develop an LCP or LCP Amendment that is reviewed by the Commission for conformance with the Coastal Act. Frequently the process of amending and updating LCPs is a long process that involves significant negotiations between Commission and local staffs, with the Commission often providing feedback and examples of already certified language that local governments may adapt to their local circumstances. The CFBF states that Commission staff encouraged Marin County to adopt policies from the Malibu LCP. This may be a misunderstanding of the process of communication between staffs to provide assistance. Local governments often ask Commission staff to provide language examples from other certified LCPs to assist in their policy development, and in response, Commission staff often give examples of language in other LCPs that may be relevant. This sharing of sample policy language also responds in part to requests from Commission staff have heard from local government staff, decision makers, the California League of Cities and the California State Association of Counties (CSAC) for more communication and more and earlier input and guidance.

8. *"Local Communities Should Lead in the Local Coastal Program Update Process. Farm Bureau also believes that the lead agency in the Local Coastal Program Update process should be, in fact as well in theory, the affected local community. Local communities should be the lead in implementing and updating their LCPs. The Commission should not mandate or recommend LCP policies that are not specifically required by the Coastal Act, or LCP policies that are*

otherwise inconsistent with those of local jurisdictions. It should also not mandate or recommend LCP policies that are inconsistent with a viable and diversified local agricultural base."
(Note: A similar comment was made by CCA).

Response: The Commission does not initiate LCPs (except in extremely limited circumstances such as if requested by a local government (Coastal Act section 30500), directed to by special legislation, or pursuant to Coastal Act section 30515). Under the Coastal Act local jurisdictions are responsible for developing and implementing LCPs with the Commission retaining limited permit and appeal jurisdiction (Coastal Act section 30519 and 30603). When reviewing LCPs the Commission reviews all policies, not just agriculture policies, to determine conformance with the Coastal Act or LCP. In some cases the Commission must address competing policies and standards and do so in a full public hearing process. As such, local communities, in fact, are the lead in implementing and updating their LCPs

9. "The Commission Should Develop a Process to Meet with Local Agricultural Representatives ***…****it is imperative that the Commission meet with agricultural representatives and recommend specific policies that are appropriate for the jurisdiction. This approach will not only ensure that the recommendations are valid and reasonable, but will also reduce the likelihood of legal challenges. We recommend that the Commission formalize such a process, meeting with agricultural representatives on a regular basis"*

Response: The Commission's limited resources preclude adoption of a formalized meeting process. As resources allow, the Commission staff is trying to improve early communication in the LCP process and, in addition, has held workshops specific to agricultural issues. The Coastal Commission staff sponsored two Coastal Agricultural Protection Workshops with participation of agricultural interests on November 30, 2005 and January 18, 2007. The workshops examined the topic of affirmative agricultural easements and subsequently in October 2007 Commission staff posted meeting summaries and reference material on our website to aid other local communities with this information. Please visit our website under the Agriculture topic at http://www.coastal.ca.gov/la/topics.html

10. "*Public Access, Conservation and Open Space Objectives Should be Met Through Voluntary Mechanisms**.*** *Farm Bureau is specifically concerned with recommendations for preserving agricultural land through mandatory agricultural easements. Farm Bureau certainly supports voluntary agricultural easements, and any recommendations from the Coastal Commission should ensure these easements are voluntary and not a requirement of the Coastal Act. Furthermore, while the specific amount of land to be preserved depends on a number of factors (soil quality, water availability, etc.), any suggested preservation ratio should be proportional to the impact (i.e., acre per acre). This, in fact, is a basic constitutional constraint on any involuntary exaction, and Farm Bureau believes the Commission must be mindful of the constitutional constraints set forth in Nollan v. California Coastal Commission and the recent Sterling v. California Coastal Commission when pursuing its public access, conservation and open space objectives."*

Response: Please see response to Comment 4.

<u>July 19, 2010 Comments from Californians for Property Rights</u>

11. *"Cease Recommending that Counties Adopt Policies not Required by the Coastal Act" --- "LCP Update Guides" published by the Commission, often recommend that counties incorporate a number of policies that are not required by the Coastal Act. Specifically, the April 3, 2007 Agricultural Resources LCP Update Guide ("the Guide") contains very specific recommendations for the alleged purpose of preserving the agricultural economy and agricultural resources."*

Response: LCPs are reviewed by the Coastal Commission for conformance with the California Coastal Act. The LUP Update Guide is a tool which offers guidance and examples but is not regulation. As noted on pages 2-3 of the Introduction the Commission specifically acknowledges the need to address local circumstances:

> ***Local Context Matters***
> *As explained above, this guide is intended to highlight recent policy concerns in core Coastal Act issue areas. It does not cover all topics that should be addressed in LCP Update; additional publications are planned on such topics as updating the procedural components of LCPs. In addition, because resource conditions and other local circumstances differ from region to region, and by community, specific questions about what should be addressed in a specific LCP Update should be directed to the appropriate Commission District Office. Phone numbers for each District office are provided below. For more contact information go to: http://www.coastal.ca.gov/address.html*
> *(LCP Update Guide April 3, 2007).*

12. *"WORKSHOP--… The League belief is that "Local self-governance is the cornerstone of democracy." League minutes of that historic meeting indicated that "the Local Coastal Program process needs to be more consistent, be reviewed using common standards and have a more predictable timeline." and that LCP's are more detailed than is required by the Coastal Act, and that The Coastal Act calls for maximum public participation. Participants expressed concern that local public input is not always taken into consideration by CCC staff. The CCC staff makes changes to an LCP in a staff report to the CCC, yet those changes have never been vetted or discussed by the local public. Additionally, many local jurisdictions have tremendous public involvement in the process of preparing their LCP- this should be considered by the CCC in the approval process*."

Response: Some other comments made at the workshop offered different perspectives. The full discussions from the workshop, including comments and perspectives from the Coastal Commissioners on the statewide responsibilities and consideration of public participation, as well as comments from the public, can be found at: http://www.cal-span.org/cgi-bin/archive.php?owner=CCC&date=2009-08-12

13. *"Highlights of Program Enhancements 2006-2010, page 5, Please provide more details and references, with a full accounting of all federal and enhancement grant monies as allocated to specific projects and products. A full and complete disclosure would help the public and NOAA better understand federal and program enhancement accomplishments over the past five years. Businesses, and even our own government, use balance sheets and income statements to assess*

how they are doing. Similarly, if the CCC simply showed monies received, allocations to projects, resulting products, then it could provide a much clearer assessment of what was accomplished over the past five years. In addition, public access to the resulting information would also be enhanced, for example, GIS or digital LCP data or details on Offers to Dedicate easements."

Response: As directed by OCRM, the Assessment and Strategy was completed in conformance with guidelines for content and format and such extensive details are not required within the scope of the guidelines. While a summary below outlining funding amounts for the past five years will be added to the final Assessment, if additional information on grant projects is desired, completed grant applications are available for review upon request.

The Commission was awarded the following grants:

Grant Year	309 Funding Amount ($)
FY 2006	$411,000
FY 2007	$411,000
FY 2008	$411,000
FY 2009	$411,000
FY 2010(IN PROGRESS)	$411,000

14. *" Documentation, Validation, and Definitions --Page 2, The Preface asserts "Coastal Commission studies and program changes funded by Enhancement Grants over the years have documented:" and then the Preface lists eight areas with NO documentation. As one example, one area is "A diminution of affordable overnight accommodations along the coast for the general visiting public;" Yet no listing of overnight accommodations is presented, or if accommodations are in the coastal zone, or if they are west of highway 1, nor is the definition for "affordable" presented. How can the Commission continually oppose infrastructure and then lament the "diminution of affordable overnight accommodations?"*
Recommendation—Please provide appropriate references with supporting details to validate said assertions of documentation for all eight areas."

Response: Page 2 is a summary of the information presented in the Assessment and further information is included in the complete Assessment. Please refer to the full document.

15. *" Extent, Status, and Trends of Wetlands in the Coastal Zone. Pages 7-8 Table 1.1 This table ascribes trends in acreage very loosely based on Commission regulatory actions from FY0607 through FY 0809, with no specifics or actions cited.*
Recommendation-- Provide specific details and actions on wetlands from said Commission regulatory actions and the effect on wetlands or delete chart."

Response: As directed by OCRM, the Assessment and Strategy was completed in conformance with guidelines for content and format and such extensive details are not required within the scope of the guidelines.

16. " *Current Extent of National Wetland Inventory (NWI) Wetland Habitats within the California Coastal Zone Boundary (CZB) Page 9 Table 1.2 This chart appears to be based on a report by Dahl, T. E. from 1990 with no means presented to further identify or access said report or the additional summary from T. Dahl in September 2008.*
Recommendation— Provide valid and accessible current references with detailed documentation for Wetland Inventories or delete chart."

Response: Footnote 3 identifies the source and gives complete reference to the document mentioned. We have added an html link to the referenced document so that readers can easily access the referenced report.

17. *"Cumulative acres of habitat restored or protected- 2004-2010. Page 15, Table 1.5 provides cumulative acres for 2004-2010 while citing vague "data" from California State Coastal Conservancy for FY2003- 2008*
Recommendation— Delete chart or provide valid current references and specifics with appropriate definitions, such as for "fish habitat/passage, habitat restoration or enhancement, Oceans, watersheds, and wetlands."

Response: OCRM Guidance requests this information in the aggregate. More detailed information may be available from the State Coastal Conservancy.

18. "*Management Categories – Wetlands, Page 16, table 1.7 Why is this chart necessary? Why not merely state that All twelve Categories are employed by the state or territory AND that all have had significant changes since the last assessment.*
Recommendation – Delete chart or explain how delineation of 12 management subcategories serves the stated purpose "To determine the effectiveness of management efforts to address those problems described in the above section for enhancement objective."

Response: As directed by OCRM, the Assessment and Strategy was completed in conformance with guidelines for content and format and this chart is mandated in the format presented.

19. "Management *Categories – Wetlands Pages 17-21 Eight of the twelve management categories for wetlands are discussed, yet four were not. Why no discussion on Wetland Policies related public infrastructure funding, Wetland Mitigation Programs and Policies, Wetland creation Programs and Policies, and Wetland Acquisition Programs?*
Recommendation – Provide discussion and changes since last assessment for the four missing Management Categories."

Response: Corrections have been made so that every management characterization category in Table 1.7 is covered.

20. "Coastal *Hazards – Fire Hazards, page 27 and page 31 Special Area Management Plans. The HTML reference to CALFIRE , http://frap.fire.ca.gov/projects/hazard/fhz.html. is very useful, however it is in the interest of this report to reconcile the differences for fire safety from CALFIRE with the limitations by CCC for ESHA (Environmentally Sensitive Habitat Areas) so*

that land owners and coastal communities can protect the sensitive habitats and their own property especially along the Wildland-Urban Interface.
Recommendation—Reconcile and mitigate any policy differences between CCC and CALFIRE and publish a consistent policy to landowners and communities for fire protection and for ESHA protection in the Coastal Zone. This is a very huge issue."

Response: The Coastal Commission attempts to resolve such issues in its case by case review of projects and in review of LCPs.

21. " *Public Access, Summary of Public Access Availability in the Coastal Zone, Table 3-3, pages 38-44. This informative table is all in aggregate for 1100 miles of coast in the Coastal Zone, yet management and specific policies are mostly within each unique LCP.*
Recommendation – Provide a breakout of acres, miles of shoreline, number of Fed, state, county, and local parks, boat access points, scenic vistas, from the aggregate so that data for each metric within the 128 Local Coastal Programs is available to the public."

Response: As directed by OCRM, the Assessment and Strategy was prepared in conformance with guidelines for content and format and such detail is not required. Should the commenter desire additional information along these lines, the Commission's Coastal Access guides provide a more comprehensive listing and location of such facilities.

22. "Public *Access, Management Characterization, Table 3.4, page 45.*
See Comments from Wetlands—Management Categories above."

Response: This comment is incorrect. The text following Table 3.4 at pages 47 through 54 addresses all Public Access management characterizations for which a "Yes" was reported for Significant Changes since last Assessment, in the format required by OCRM guidance.

23. "Strategy for FY2011 – *2015, page 117-118. A digital LCP library will be very helpful in cataloging resources, policies, Land Use Plans and Implementation Plans IF key data management and analysis principles are followed. The digital upgrade should include integrated GIS across all 128 Local Coastal Plans and provide web browser interfaces to allow the public to access vital information. Abide by the Coastal Act, with public access.*
Recommendation – Elected officials within the 128 LCP have considerable resources to apply to this endeavor. It would be very dumb for the CCC to budget to do something that may already exist or is underway within local governments of the respective LCP. The CCC should work with the CCIG and local governments to attempt and achieve consistencies between the 128 Local Coastal Plans in data management and analysis and policies in an annual workshop."

Response: Comment noted. The Commission has established a working group with members of the League of Cities and CSAC that meets quarterly. Coordination with local government will be key, although it is unlikely the Commission will have the resources to do the extent of work as recommended or envisioned by the commenter, nor is it envisioned that GIS would be integrated under this project. Linking to GIS data layers could be considered under a future phase of this project and would require significant resources. .

24. *"Strategy –Program Change Description, page 119-129. It is folly to presume that the CCC can implement the Digital LCP Library concept without extensive collaboration with elected officials, and many agencies, and existing resources in the Coastal Zone.*
Recommendation – The CCC should work closely with elected officials and numerous agencies to build a system integrated with existing and evolving county and municipal Digital Asset Management systems."

Response: Please See Response to Comment 23.
25. "Publish minutes for each public meeting with detailed information available online. The live streaming videos and/or archived videos do not sufficiently capture the detailed decisions of staff and Commissioners. Maximize Public Participation per the Coastal Act."

Response: Draft Minutes are already available on the Commission's website on each Commission agenda when scheduled for adoption. For example see agenda item September 15, 2010 item 33 at http://www.coastal.ca.gov/mtgcurr.html Past minutes are available through past agendas located here: http://www.coastal.ca.gov/meetings/mtgpast.html

26. *"Require the CCC to hold an annual meeting with the Coastal Cities Issues Group (CCIG) of the League of California Cities, who are primary partners/customers for the CCC. CPR believes that the CCIG is a key organization chartered and concerned with determining development policies per the Coastal Act and local LCPs, yet the Commissioners have only met with the CCIG once in 33 years. These annual meetings would address major issues of the CCIG, such as their concerns that the Local Coastal Plan processes need to be more consistent, to be reviewed using common standards, and to have a more predictable timeline."*

Response: The Commission has established a working group with members of the League of Cities and CSAC that meets quarterly.

27. There are a number of comments made in the July 19, 2010, letter from Californians for Property Rights that comment on matters related to Commission operations and procedures on appeals, to term limits, to the Pledge of Allegiance and to the state Constitution.

Response: These comments do not address the 309 Assessment and Strategy.

- PUBLIC COMMENT LETTERS RECEIVED START ON FOLLOWING PAGE –

Californians for Property Rights, Box 282, Moss Beach, CA 94038
Phone 650-563-9508 Email texterry@pacbell.net
Website: www.californiansforpropertyrights.org (or www.c4pr.org)
"Property rights are civil rights"

July 19, 2010

Michelle Jesperson, Federal Programs Manager
California Coastal Commission

45 Fremont Street, Suite 2000
San Francisco, CA 94105 (415) 904-5200
mjesperson@coastal.ca.gov

SUBJECT—Comments on the California Coastal Commission (CCC) 2011-2015 Updated Assessment and Strategy for the California Coastal Management Program

Dear Ms. Jesperson,

Thank you for the opportunity to provide public comments in accordance with the Coastal Zone Management Act (CZMA) and the Federal NOAA requirements.

Californians for Property Rights (CPR) is an educational, public benefit, tax-exempt, non-profit (501c3). Our mission is to educate the public regarding their private property rights as well as constitutional property rights. CPR facilitates public education and assists with information exchange regarding contemporary issues, processes and actions that may affect said rights, as in the 128 Local Coastal Plans (LCP) in the Coastal Zone.

CPR monitors the CCC and is continually contacted by coastal landowners suffering from the heavy hand of the Commission. The LCP process is broken, and the CCC deserves much of the blame for demanding unfunded mandates, urging policies that risk litigation, and by continually usurping the authority of elected county and municipal officials. More collaboration is needed from the CCC with fewer dictates. Note the attached CPR letter to the San Mateo County Supervisors regarding the Midcoast LCP.

The California Farm Bureau Federation (CFBF) in a letter to the CCC on August 7, 2009, asked the CCC to *"Respect Limits to the State's Authority and the Powers of Local Governments."* ***The Farm Bureau stated:"We believe the authority of the California Coastal Commission relative to agriculture and agricultural practices should be rescinded and that authority returned to local government." (Rev. 2003) California Farm Bureau Federation 2009 Policies – No. 133".*** *Section 30512.2(a) of the Coastal Act clearly states: "****[T]he commission is not authorized by any provision of this division to diminish or abridge the authority of a local government to adopt and establish, by ordinance, the precise content of its land use plan."***

The CFBF went on to request the CCC to **"Cease Recommending that Counties Adopt Policies not Required by the Coastal Act" ---"*LCP Update Guides*"** published by the Commission, often recommend that counties incorporate a number of policies that are *not* required by the Coastal Act. Specifically, the April 3, 2007 Agricultural Resources LCP Update Guide ("the Guide") contains very specific recommendations for the alleged purpose of preserving the agricultural economy and agricultural resources."

Directors----

Don Bacon, Mary Bordi, John Donovan, Dale Dunham, Terry Gossett, Judy Grote, George Muteff, Nina Pellegrini, Marta Sehnal

GENERAL COMMENTS

WORKSHOP--For the first time in the history of the California Coastal Commission (CCC), a workshop was held in San Francisco on August 12, 2009 for the purpose of Improving the Local Coastal Planning (LCP) Process, between Commissioners and elected officials from the Coastal Cities Issues Group (CCIG) of the League of California Cities. The mission of the League of Cities is "To restore and protect local control for cities through education and advocacy in order to enhance the quality of life for all Californians. " **The League belief is that "Local self-governance is the cornerstone of democracy." League minutes of that historic meeting indicated that "the Local Coastal Program process needs to be more consistent, be reviewed using common standards and have a more predictable timeline**." and that **LCP's are more detailed than is required by the Coastal Act**, and that **The Coastal Act calls for maximum public participation. Participants expressed concern that local public input is not always taken into consideration by CCC staff. The CCC staff makes changes to an LCP in a staff report to the CCC, yet those changes have never been vetted or discussed by the local public.** Additionally, many local jurisdictions have tremendous public involvement in the process of preparing their LCP- this should be considered by the CCC in the approval process.

Highlights of Program Enhancements 2006-2010, page 5, Please provide more details and references, with a full accounting of all federal and enhancement grant monies as allocated to specific projects and products. A full and complete disclosure would help the public and NOAA better understand federal and program enhancement accomplishments over the past five years. Businesses, and even our own government, use balance sheets and income statements to assess how they are doing. Similarly, if the CCC simply showed monies received, allocations to projects, resulting products, then it could provide a much clearer assessment of what was accomplished over the past five years. In addition, public access to the resulting information would also be enhanced, for example, GIS or digital LCP data or details on Offers to Dedicate easements.

SPECIFIC COMMENTS

Documentation, Validation, and Definitions --Page 2, The Preface asserts "Coastal Commission studies and program changes funded by Enhancement Grants over the years have

documented:" and then the Preface lists eight areas with NO documentation. As one example, one area is "A diminution of affordable overnight accommodations along the coast for the general visiting public;" Yet no listing of overnight accommodations is presented, or if accommodations are in the coastal zone, or if they are west of highway 1, nor is the definition for "affordable" presented. How can the Commission continually oppose infrastructure and then lament the "diminution of affordable overnight accommodations?"
Recommendation—Please provide appropriate references with supporting details to validate said assertions of documentation for all eight areas.

Extent, Status, and Trends of Wetlands in the Coastal Zone. Pages 7-8 Table 1.1 This table ascribes trends in acreage very loosely based on Commission regulatory actions from FY0607 through FY 0809, with no specifics or actions cited.
Recommendation-- Provide specific details and actions on wetlands from said Commission regulatory actions and the effect on wetlands or delete chart.

Current Extent of National Wetland Inventory (NWI) Wetland Habitats within the California Coastal Zone Boundary (CZB) Page 9 Table 1.2 This chart appears to be based on a report by Dahl, T. E. from 1990 with no means presented to further identify or access said report or the additional summary from T. Dahl in September 2008.
Recommendation— Provide valid and accessible current references with detailed documentation for Wetland Inventories or delete chart.

Cumulative acres of habitat restored or protected- 2004-2010. Page 15, Table 1.5 provides cumulative acres for **2004-2010** while citing vague "data" from California State Coastal Conservancy for **FY2003- 2008**
Recommendation— Delete chart or provide valid current references and specifics with appropriate definitions, such as for "fish habitat/passage, habitat restoration or enhancement, Oceans, watersheds, and wetlands."

Management Categories – Wetlands , Page 16, table 1.7 Why is this chart necessary? Why not merely state that All twelve Categories are employed by the state or territory AND that all have had significant changes since the last assessment.
Recommendation – Delete chart or explain how delineation of 12 management subcategories serves the stated purpose "To determine the effectiveness of management efforts to address those problems described in the above section for enhancement objective."

Management Categories – Wetlands Pages 17-21 Eight of the twelve management categories for wetlands are discussed, yet four were not. Why no discussion on Wetland Policies related public infrastructure funding, Wetland Mitigation Programs and Policies, Wetland creation Programs and Policies, and Wetland Acquisition Programs?
Recommendation – Provide discussion and changes since last assessment for the four missing Management Categories.

Coastal Hazards – Fire Hazards , page 27 and page 31 **Special Area Management Plans**. The HTML reference to CALFIRE , http://frap.fire.ca.gov/projects/hazard/fhz.html. is very useful, however it is in the interest of this report to reconcile the differences for fire safety from

CALFIRE with the limitations by CCC for ESHA (Environmentally Sensitive Habitat Areas) so that land owners and coastal communities can protect the sensitive habitats and their own property especially along the Wildland-Urban Interface.
Recommendation—Reconcile and mitigate any policy differences between CCC and CALFIRE and publish a consistent policy to landowners and communities for fire protection and for ESHA protection in the Coastal Zone. This is a very huge issue.

Public Access, **Summary of Public Access Availability in the Coastal Zone**, Table 3-3, pages 38-44. This informative table is all in aggregate for 1100 miles of coast in the Coastal Zone, yet management and specific policies are mostly within each unique LCP.
Recommendation – Provide a breakout of acres, miles of shoreline, number of Fed, state, county, and local parks, boat access points, scenic vistas, from the aggregate so that data for each metric within the 128 Local Coastal Programs is available to the public.

Public Access, Management Characterization, Table 3.4, page 45.
See Comments from Wetlands—Management Categories above.

Strategy for FY2011 – 2015**, page 117-118. A digital LCP library will be very helpful in cataloging resources, policies, Land Use Plans and Implementation Plans IF key data management and analysis principles are followed. The digital upgrade should include integrated GIS across all 128 Local Coastal Plans and provide web browser interfaces to allow the public to access vital information. Abide by the Coastal Act, with public access.**
Recommendation – **Elected officials within the 128 LCP have considerable resources to apply to this endeavor. It would be very dumb for the CCC to budget to do something that may already exist or is underway within local governments of the respective LCP. The CCC should work with the CCIG and local governments to attempt and achieve consistencies between the 128 Local Coastal Plans in data management and analysis and policies in an annual workshop.**

Strategy –Program Change Description**, page 119-129. It is folly to presume that the CCC can implement the Digital LCP Library concept without extensive collaboration with elected officials, and many agencies, and existing resources in the Coastal Zone.**
Recommendation **– The CCC should work closely with elected officials and numerous agencies to build a system integrated with existing and evolving county and municipal Digital Asset Management systems.**

Recommendations for Reform of the CCC

Publish minutes for each public meeting with detailed information available online. The live streaming videos and/or archived videos do not sufficiently capture the detailed decisions of staff and Commissioners. Maximize Public Participation per the Coastal Act.

Publish annually a listing of those projects which were appealed, type of project (residential, commercial, etc) and a complete listing of who appealed by name. CPR believes that a few people are appealing the majority of projects and are misusing the system including filing frivolous appeals. CCC should not allow Executive Director to have Commissioners sign blank appeals and then use at his discretion. CCC should require more than two Commissioners to file an appeal, possibly 4 or 5. Review the role of Organization of Regional Coastal

Advocates (ORCA) and its interactions with the CCC, especially regarding ethics and the possibility of conflict of interest, as ORCA is currently being directed by a sitting Commissioner, Sara Wan .

Publish a detailed listing by project and appeal on the total costs for each including all costs borne by other agencies such as the attorney general's office and other funding sources such as private foundations, individuals, etc. CPR believes in open and transparent government and if the CCC is proud of its work and the work of its less than arms length sister organizations (Sierra Club is a good example) it should publish it.

Publish a detailed listing of all appeals, the costs, the outcome, and the cycle time, year to date. CPR believes that CCC policies and actions are having a chilling effect on Coastal residential development in violation of the State Housing Element, and on the building of affordable homes or agricultural housing or structures in the coastal zone.

Introduce term limits for Commissioners. CPR believes that the Commission should evolve with the times and allow fresh perspectives to prevail on the Commission to better reflect the current public issues and the legislative intent of the Coastal Act. Some Commissioners have been on the CCC for 33 years, as has the Executive Director!

Introduce term limits on the Executive Director and impose limits on the extent of powers of the Executive Director. The J. Edgar Hoover-style entrenchment of personal power, with all the inevitable attendant abuses and inefficiencies does not serve the Coastal Act or the people of California well. It is important to note that the power of the Commission and Executive Director is subservient to the US and California Constitutions.

The Coastal Commission should Pledge Allegiance to the Flag of the United States at the beginning of each of their public meetings. A simple statement of allegiance may help remind the Commissioners that they are bound by the Constitution of these United States and that of California. All elected officials representing the 128 Local Coastal Plans in California Pledge Allegiance at the beginning of each public meeting, and furthermore…

The California Constitution provides in Article XX, Section 3 that " Members of the Legislature, and all public officers and employees, executive, legislative, and judicial, except such inferior officers and employees as may be by law exempted, shall, before they enter upon the duties of their respective offices, take and subscribe the following oath or affirmation:

"I, _____, do solemnly swear (or affirm) that I will support

and defend the Constitution of the United States and the Consti-

tution of the State of California against all enemies, foreign
and domestic**;…"**

Require the CCC to hold an annual meeting with the Coastal Cities Issues Group (CCIG) of the League of California Cities, who are primary partners/customers for the CCC. CPR believes that the CCIG is a key organization chartered and concerned with determining development policies per the Coastal Act and local LCPs, yet the Commissioners have only met with the CCIG once in 33 years. These annual meetings would address major issues of the CCIG, such as their concerns that the Local Coastal Plan processes need to be more consistent, to be reviewed using common standards, and to have a more predictable timeline.

As the above concrete examples, comments, and recommendations demonstrate the public rightly perceives the Commission as often acting as judge, jury and executioner, without sufficient checks on its powers and procedures, lacking the transparency and public participation that would better serve all parties, including the Commission itself.

Respectfully yours,

Terrence D Gossett
President
Californians for Property Rights

CC:
Governor Arnold Schwarzenegger
Senate Rules Committee, Senator Steinberg, Senator Aanestad
Speaker of the Assembly, John Perez,
Attorney General, Jerry Brown
Legislative Analyst's Office
Pacific Legal Foundation
California Farm Bureau Federation

Californians for Property Rights, Box 282, Moss Beach, CA 94038
Phone 650-563-9508 Email texterry@pacbell.net
Website: www.californiansforpropertyrights.org (or www.c4pr.org)
"Property rights are civil rights"

April 12, 2010

Subject: MidCoast Local Coastal Program Update

Honorable Supervisors:

While respectfully disagreeing with your Board on a number of specific Local Coastal Program Update policy recommendations during this long process, Californians for Property Rights (CPR) acknowledges that you and County Staff have consistently taken a balanced and reasonable approach. In particular your willingness to cooperate and make compromises with the Coastal Commission and Staff has been undeniable. Unfortunately, it is also undeniable that your good-faith negotiations were rejected on all points by the Coastal Commissioners on Dec 10, 2009, signaling that the Commission considers all of the remaining differences to be non-negotiable. The message from the Commissioners was clear: they are no longer negotiating with you, and expect that you will accede to their position on all points. As the facts summarized in your Executive Memo cannot hide, the Commission's stance is patently unreasonable and injurious to the MidCoast. In the regrettable absence of alternatives for further good-faith negotiations, CPR recommends that you reject the Commission demands and retain the existing LCP.

Planning Staff has accurately described to you the unworkable and unfair policies, unfunded mandates, increased workloads, and risks of litigation which would result from acquiescing to Commission demands. To briefly list some of the most unreasonable positions: prohibitions against new wells in the Midcoast urban area–especially in the inexplicable decades-long absence of available public water connections–would deprive hundreds of vacant property owners of any reasonable use of their land; the lot retirement scheme would inhibit and discourage desirable infill development; denial to permits-in-process of the policies in place at the time of their application would constitute *ex post facto* law; and finally, policies intended to onerously restrict public works improvements are a dangerous attempt to stop growth through retardation of essential public systems and services.

Thank you for your efforts to protect and improve the MidCoast.

Respectfully submitted,

Terrence D. Gossett
President
Californians for Property Rights

Directors----

Don Bacon, Mary Bordi, John Donovan, Dale Dunham, Terry Gossett, Judy Grote, George Muteff, Nina Pellegrini, Marta Sehnal

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July 23, 2010

Michelle Jesperson
Federal Programs Manager
California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105

Via email: mjesperson@coastal.ca.gov

RE: *Comments on 2010 Updated Assessment and Strategy for the California Coastal Management Program*

Dear Ms. Jesperson,

The California Cattlemen's Association (CCA) appreciates the opportunity to comment on the 2010 Updated Assessment and Strategy for the California Coastal Management Program (CCMP). CCA represents ranchers and beef producers who are ardent stewards of the land and California's natural and coastal resources. Collectively, CCA members provide millions of acres of wildlife habitat and protect vast open spaces all the while providing a safe and reliable food supply for California, the nation and the world.

First and foremost, livestock grazing on California's coastal rangelands is an essential piece of sustaining local and rural economies. Maintaining active livestock grazing is also essential to preserving,a nd in many cases, enhancing the ecology of coastal rangelands. Grazing is a highly effective range management tool widely respected and used to reduce invasive species, fuel loads and maintain habitat for wildlife. Ranchers are committed to working as part of their natural surroundings to ensure that the land provides the necessary resources in future years to preserve wildlife habitat, open space, water quality and grazing.

Farmers and ranchers have been actively engaged in land use planning efforts in the coastal zone and have previously expressed concern about specific policies put forward by the California Coastal Commission (Commission) that may economically harm agricultural production within these areas. It is vital that policies put forward by the Commission not conflict with current farming and ranching activities and maintain the economic viability of agriculture in and around California's coastal regions.

Furthermore, CCA would strongly urge the Commission to recognize the critical role local communities play in the development and implementation of land use policies impacting agricultural areas. Correspondingly, CCA

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LIKELY

PAUL CAMERON
FEEDER COUNCIL VICE CHAIR
BRAWLEY

supports the ability of local governments to maintain control and autonomy to craft land use policies based on the historic knowledge of agriculture and the need to protect both agriculture and coastal resources.

While the Commission may assist in the development of Local Coastal Programs (LCPs), CCA asks that the Commission provide the flexibility to enable local governments' to serve as the primary or lead entity when developing LCPs. By serving as the lead entity, local governments will know best how to protect agriculture and ensure that planning efforts are consistent with short and long-term land use goals.

Local governments are ultimately administered by elected officials responsible to constituents of their communities. As such, CCA believes local governments serving as the lead entity will provide a more effective framework for farmers, ranchers and citizens of coastal communities to influence land use planning efforts that have the potential to impact their businesses, livelihood and communities.

Where the Commission is currently responsible for engaging in the development of LCPs in accordance with state law, CCA strongly encourages the Commission to respect and actively address the concerns raised by farmers and ranchers. Agricultural organizations such as CCA and the California Farm Bureau Federation are associated with county organizations that provide a readily accessible mechanism to connect with local agricultural producers. CCA would encourage the Commission to take advantage of already existing state and local agricultural organizations and adopt a formal process to consult with state - but most importantly - local agricultural groups when adopting LCPs or other regulations.

In Section 3, Table 3.1 the Commission refers to the restriction of public access because of "missed opportunities" to allow public access under easements. While some farmers and ranchers chose to sell conservation or access easements, this should remain entirely voluntary and terms and conditions of the easement should be mutually agreed upon between both the buyer and seller of an easement. Furthermore, the Commission should make every effort to ensure that LCPs and other regulations adopted pursuant to the California Coastal Act protect private property rights and do not inadvertently result in trespassing on private property.

Once again, CCA appreciates the opportunity to comment on the CCMP and would urge the Commission to continue to actively engage farmers and ranchers operating within coastal zones and thoroughly address their concerns relative to the adoption of LCPs or the update of the CCMP. Should you have any questions, please don't hesitate to contact me directly.

Sincerely,

Justin Oldfield

Justin Oldfield
Director of Regulatory Affairs

CALIFORNIA FARM BUREAU FEDERATION
NATURAL RESOURCES AND ENVIRONMENTAL DIVISION
2300 RIVER PLAZA DRIVE, SACRAMENTO, CA 95833-3293 · PHONE (916) 561-5655 · FAX (916) 561-5691

July 21, 2010

Via First-Class Mail & Email
mjesperson@coastal.ca.gov

California Coastal Commission
ATTN: MICHELLE JESPERSON
45 Fremont Street Suite 2000
San Francisco, CA 94105

Re: Comments on Public Review Draft - 2010 Updated Assessment and Strategy for the California Coastal Management Program

Dear Commissioners:

The California Farm Bureau Federation ("Farm Bureau") would like to provide its comments on the Public Review Draft of the 2010 Updated Assessment and Strategy for the California Coastal Management Program.

Farm Bureau is a non-governmental, non-profit, voluntary membership California corporation whose purpose is to protect and promote agricultural interests throughout the state of California and to find solutions to the problems of the farm, the farm home and the rural community. Farm Bureau is California's largest farm organization, comprised of 53 county Farm Bureaus currently representing approximately 81,000 members in 56 counties. Farm Bureau strives to protect and improve the ability of farmers and ranchers engaged in production agriculture to provide a reliable supply of food and fiber through responsible stewardship of California's resources.

As the Commission is aware, Farm Bureau has been consistently monitoring land use planning processes in the coastal zone, and has previously expressed concerns about the scope of efforts undertaken under the California Coastal Management Program (CCMP). Farm Bureau recognizes the importance of California's coastal resources, and believes that a viable agricultural industry within the coastal zone is a critical resource for California's future. Generally speaking, Farm Bureau believes that public policy with respect to coastal resources is best formulated and executed at the local level, and that collaborative and voluntary efforts are most likely to yield lasting success in management of those resources.

1. Respect Limits to the State's Authority and the Powers of Local Government

As a long-term policy goal, Farm Bureau believes that the authority of the California Coastal Commission relative to agriculture and agricultural practices should be rescinded and that authority returned to local government. With respect to the Commission's current responsibilities, Farm Bureau believes that local governments, familiar with the local agricultural history and the agricultural practices specific to their county or region, should determine the agricultural-related policies contained in their respective Local Coastal Programs (LCPs). The Commission should respect this local process and not intervene to weaken any protections for agricultural resources.

Farm Bureau further believes that local governments should be encouraged to maintain their autonomy to craft policies with respect to agriculture that will serve as the means to accomplish Coastal Act legislation. Section 30500(c) of the Coastal Act expressly states that **"[t]he precise content of each local coastal program shall be determined by the local government."** Of course, consultation with and approval by the Commission is required. *But,* the Commission's role is strictly limited to ensuring that an LCP is consistent with the Coastal Act. Section 30512.2(a) of the Act clearly states: **"[T]he commission is not authorized by any provision of this division to diminish or abridge the authority of a local government to adopt and establish, by ordinance, the precise content of its land use plan."**

The reasoning behind the language in the statute is sound. Local elected officials understand far better than the Commission or its staff the needs of their own constituents. Local elected officials, with the input of its constituents, are charged with making those policy choices that best suit the needs of their communities, while at the same time respecting the fundamental rights of their landowning constituents. However, in an effort to formulate a Local Coastal Program, local agencies rely heavily on the input from the Commission even when that input may not be entirely helpful. For example, Marin County, with a rich and significant agriculture industry, has been encouraged by Coastal Commission staff to adopt policies from the recently updated Malibu Local Coastal Program. This is problematic for several reasons, least of all because commercial agriculture within the City of Malibu is practically nonexistent. Each California county is unique and not often amenable to a "one-size-fits-all" approach to coastal zone planning. Please consider reducing this practice in the future.

2. Local Communities Should Lead in the Local Coastal Program Update Process

Farm Bureau also believes that the lead agency in the Local Coastal Program Update process should be, in fact as well in theory, the affected local community. Local communities should be the lead in implementing and updating their LCPs. The Commission should not mandate or recommend LCP policies that are not specifically required by the Coastal Act, or LCP policies that are otherwise inconsistent with those of local jurisdictions. It should also not mandate or recommend LCP policies that are inconsistent with a viable and diversified local agricultural base.

3. The Commission Should Develop a Process to Meet with Local Agricultural Representatives

Through the LCP Update Program, the Commission often recommends that counties incorporate policies with respect to agricultural resources. These recommendations must be designed with input from the people most knowledgeable about preserving the agricultural economy and agricultural resources – namely, California's farmers and ranchers. Since Counties rely on the Commission's recommendations, it is imperative that the Commission meet with agricultural representatives and recommend specific policies that are appropriate for the jurisdiction. This approach will not only ensure that the recommendations are valid and reasonable, but will also reduce the likelihood of legal challenges. We recommend that the Commission formalize such a process, meeting with agricultural representatives on a regular basis.

4. Public Access, Conservation and Open Space Objectives Should be Met Through Voluntary Mechanisms

Farm Bureau is specifically concerned with recommendations for preserving agricultural land through mandatory agricultural easements. Farm Bureau certainly supports voluntary agricultural easements, and any recommendations from the Coastal Commission should ensure these easements are *voluntary* and not a requirement of the Coastal Act. Furthermore, while the specific amount of land to be preserved depends on a number of factors (soil quality, water availability, etc.), any suggested preservation ratio should be proportional to the impact (i.e., acre per acre). This, in fact, is a basic constitutional constraint on any involuntary exaction, and Farm Bureau believes the Commission must be mindful of the constitutional constraints set forth in *Nollan v. California Coastal Commission* and the recent *Sterling v. California Coastal Commission* when pursuing its public access, conservation and open space objectives.

Thank you for your consideration of our concerns. If Farm Bureau can provide any further information or clarification, please do not hesitate to contact us. We look forward to addressing with you in the future our other concerns regarding agriculture land uses within the coastal zone.

Sincerely,

Christian C. Scheuring
Managing Counsel

cc: Marin County Farm Bureau