

Global Headquarters
P.O. Box 6010
San Clemente, CA
USA 92674-6010
Phone: (949) 492 8170
Fax: (949) 492 8142
Email: info@surfrider.org
www.surfrider.org



February 6, 2013

Via email: STRATEGICPLANCOMMENTS@COASTAL.CA.GOV

California Coastal Commission
Executive Division
45 Fremont Street, Suite 2000
San Francisco, CA 94105

RE: Draft Strategic Plan 2013-2018

Dear Dr. Lester and Honorable Coastal Commissioners:

On behalf of Surfrider Foundation's 20 local Chapters throughout California and our 250,000 supporters, activists and members worldwide, we submit the following comments for the Draft California Coastal Commission Strategic Plan 2013-2018. The Surfrider Foundation (Surfrider) is a non-profit grassroots organization dedicated to the protection and enjoyment of our world's oceans, waves and beaches. Surfrider now maintains over 90 chapters worldwide and is fueled by a powerful network of activists.

FORWARD

Surfrider applauds the California Coastal Commission (CCC) for drafting a Strategic Plan that identifies salient coastal issues, requiring long-term planning. Considering the Strategic Plan is still draft, we are pleased with the content and approach and we hope to provide recommendations that will bolster the overall plan and improve long-term success. Surfrider understands the CCC operates on a limited budget and has restricted resources. Therefore, we tried to put forth realistic recommendations given your current budget, yet we also tried to provide more lofty goals because we believe the CCC is such a dynamic agency that you have the ability to achieve some of the recommendations that might seem out of reach. Of course, if CCC had more Staff, some of the recommendations put forth could be achieved more efficiently and quickly. Having said that, we encourage the CCC to actively pursue additional funds for your operating budget and Surfrider offers our support to help identify innovative measures that would increase your budget.

Before delving into specific recommendations we want to highlight the need for improved inter-agency planning. The CCC is in a unique position to work with other state agencies to implement important policies. We urge the CCC to create a specific plan of action to better cooperatively work with other agencies (specifically, the Ocean Protection Council, Department of Fish and Wildlife, State Land Commission, State Water Resources Control Board, and other entities) where there is overlap with implementing coastal policy. We understand that the California Department of Water Resources is currently updating their Water Management Plan, and including a section on "Near Coastal Issues" for the first time. We think the Coastal Commission could provide relevant and important information in that section of the Plan and encourage you to contact DWR.

In sum, we are generally supportive of immediate action to address the issues identified and prioritized in the Draft Strategic Plan. Our coast and ocean are under numerous threats and we strongly believe that the time to reverse past degradation of California's most precious assets is now. We want to assure the CCC that we are committed to assisting in achieving the goals set out in the Strategic Plan and look forward to cooperating on actions that will collectively result in holistic reforms of coastal and ocean management to protect this natural legacy for generations to come.

We offer our recommended edits, additions, and clarifications that will strengthen the Strategic Plan in the following areas:

- Maximize Public Access and Recreation
- Protect Coastal Resources
- Address Climate Change through Local Coastal Program Planning, Coastal Permitting, Inter-Agency Collaboration, and Public Education
- Strengthen the LCP Program
- Improve the Regulatory Process, Compliance, and Enforcement

GOAL ONE: MAXIMIZE PUBLIC ACCESS AND RECREATION

Beach access is sacred in California. Through the established common law Public Trust Doctrine,¹ the government is charged with acting in its sovereign capacity as trustee for the beneficial use and enjoyment of the public coastal lands. Furthermore, the California Constitution and Coastal Act ensure that the beach is held in trust for the public benefit and that the public has ample access to these coastal resources. There should be no such thing as a private beach in California.

Specifically, the California Coastal Commission is charged with upholding Section 4 of Article X of the California Constitution, which guarantees "maximum" beach access for all residents and visitors to our beloved California coastline.² Additionally, some of the strongest beach access laws in the nation are codified in the California Coastal Act of 1976 (Public Resources Code §30000, *et seq.*), Chapter 3, article 2. The Coastal Act was enacted, in part, to "maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners." Pub. Res. Code §30001.5(e). As the comprehensive program governing land use for the entire coast, the Commission must ensure universal access is uniformly protected along California's 1,100 miles of invaluable coastline.

It is the role of the California Coastal Commission to ensure that private actors and corrupt local government are not allowed to disparage or limit the inalienable rights of California

¹ Commenting on the Public Trust Doctrine, California jurisprudence cites to "[t]he approach with the greatest historical support holds that certain interests are so intrinsically important to every citizen that their free availability tends to mark the society as one of citizens rather than serfs...An allied principle holds that certain interests are so particularly the gifts of nature's bounty that they ought to be reserved for the whole of the populace." *Center for Biological Diversity v. FPL Group*, 166 Cal. App. 4th 1349 at fn 12 (2008).

² Article X, Section 4 of the California Constitution guarantees that "[n]o individual, partnership, or corporation, claiming or possessing the frontage or tidal lands of a harbor, bay, inlet, estuary or other navigable water in this State, shall be permitted to exclude the right of way to such water whenever it is required for any public purpose, nor to destroy or obstruct the free navigation of such water; and the Legislature shall enact such laws as will give the most liberal construction to this provision, so that access to navigable waters of this State shall always be attainable for the people thereof."

citizens and visitors to utilize the coast. The California Civil Code § 3479 defines a “public nuisance” as “anything which...obstructs passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin, or any public park, square, street or highway.” Ironically, local municipalities have used the term “public nuisance” in attempts to characterize and limit public access to the beach. The CCC must work diligently to thwart these and any efforts to limit and deny public beach access in a timely manner and should specifically address this duty of the CCC in the Strategic Plan.

The CCC should also be explicit in their commitment to prevent large developers and wealthy property owners from cutting off slices of the coast from public access. Public beach access opportunities are being shut down and gated off repeatedly up and down the coast. What was once a public trail to an otherwise inaccessible beach in San Mateo County is now a gated private driveway. In another example, a wealthy developer in Orange County erected locked gates on a central access in contravention of the specific requirement of the Coastal Development Permit. In order to uphold the Coastal Act’s beach access mandate, the Commission must act upon and enforce the public’s access rights in these vulnerable areas.

Specifically, the current CCC Strategic Plan is lacking in its failure to address rights to public viewshed of coastal resources. Surfrider Foundation promotes the rights of the public, including all recreational user groups, and members of the community to enjoy low-impact beach access, including the enjoyment of coastal aesthetics. The coastal viewsheds available in the state of California are part of what comprises the majesty of the coast; they are a highlight of the California Coastal Trail; and they should be addressed explicitly as an important resource to be protected for future generations of visitors to the California coast.

The CCC Strategic Plan should fully address meaningful beach access through necessary infrastructure such as parking, open beach access hours, and amenities that allow for enjoyment of the coast. In regards to public parking opportunities, the Commission must focus on offering meaningful and fair access opportunities for all segments of society. For example, many students and underprivileged citizens cannot afford \$20 for a one-day coastal parking pass that has been proposed in some instances. By having prohibitively high costs for coastal access, the Commission may, in fact, “price out” a significant portion of the population and deprive them of their day at the beach. Where fees are collected, the recovered funds should be used for purposes which are directly related to local coastal access, management, restoration, conservation, and preservation efforts.

Specifically, in regards to fees at State Beaches, the CCC should urge the Department of Parks and Recreation (DPR) to create a statewide plan that methodically lays out when and where fees will be instituted. It is concerning that the DPR has done a poor job of informing the public about fee increases and has implemented parking stations without proper LCP permits (as is the case in Mendocino). In addition to lack of public involvement, DPR’s plan to install numerous parking fees in Sonoma is lopsided. DPR would be installing 15 parking meters that would cover nearly 80% of state beaches in Sonoma. That means only 20% of parking at State Beach would be free. Clearly this is inconsistent with the Coastal Act’s goal of providing maximum public access.

Surfrider is sympathetic to the difficult economic situation of DPR and believe reasonable park fees may be necessary to maintain our parks and keep them open. However, Surfrider wants to ensure that all impacts associated with installing pay stations

are thoroughly evaluated, including, but not limited to: environmental impacts, signage, traffic analysis, socioeconomic implications, *maximum public access*, and other community concerns that are raised during a public process. *We urge the CCC to encourage the DPR to create a strategic plan for fee implementation that is equitable and ensures maximum public access to the coast.*

In terms balancing coastal ecological protection and beach access activity, we recommend the Strategic Plan provide clear measures to avoid potential tension between protection and access. For instance, the CCC Strategic Plan should describe the policy and guidelines for when these two values may become at odds. How will the Commission look for and encourage low-impact beach access? When are these scenarios possible?

In accordance with Coastal Act §30220 entitled “Protection of certain water-oriented activities”, the CCC Strategic Plan should articulate the policy and guidelines for protection of water-oriented recreational activities and the beaches that provide for such uses. For instance, beaches that provide access for water-oriented recreational activities should be protected for such uses, including waves for surfing, sustainable fisheries, swimming, environmental study, and general beach going.

In terms of public education, Surfrider Foundation agrees that the Coastal Commission has done an admirable job of making public beach access resources available on their website. This can be improved upon through additional resources procured through public involvement and the use of social media in such efforts. The Commission should strive to catalogue the existence and use of lesser known, informal, and other prescriptive use trails. This data could be used to protect access. The information stream can also be utilized to inform the public of access closures or limited recreation use.

Finally, the reality of climate change and sea level rise also threatens California’s beach access opportunities due to our eroding beaches and increasingly armored coasts. Beach access and recreation opportunities should be intensely protected, but when there is no opportunity to salvage beach access and recreation in the face of shoreline armoring, the Commission should devise a standardized and comprehensive mitigation plan for lost opportunities. In valuing the beach access and recreation opportunities, the Commission should fully account for and calculate all coastal tourism dollars that flow into local communities as a result of these opportunities. Additionally, the success of these proposed mitigation strategies should be evaluated and improved upon on a continuous basis.

In addition to these specific recommendations, we would like to share Surfrider’s policy on beach access.³

GOAL 2: PROTECT COASTAL RESOURCES

We strongly support many of the objectives in the draft Goal 2, and believe they qualify as some of the Commission’s highest priorities. However, the draft Strategic Plan could be greatly improved by language in the introductory section articulating how many of the goals are inter-connected. Management and protection of coastal resources through a multi-benefit set of objectives would ensure a more holistic and efficient approach to updated LCPs and guidance on CDPs issued by the Commission. Examples of objectives under Goal 2

³ <http://www.surfrider.org/pages/policy-on-beach-access>

that should be considered more holistically are included in the recommendations of the discrete Goal 2 objectives below.

Objectives 2.2.1-2.2.5

- **Integrated Water Management**

Many of the discrete goals listed under Goal 2 and Goal 3 can be best achieved through defining “integrated water management” in a manner that is consistent with numerous Coastal Act policies. While many of the elements of multi-benefit integrated water management are identified in the draft Strategic Plan, it fails to adequately identify the principles of integrated water management and how its practices could be implemented simultaneously to a site to achieve several of the Plan’s objectives, regardless of scale.

Comprehensive integrated water management is a multi-benefit set of practices that will achieve many of the goals articulated in the Strategic Plan. These “green infrastructure” practices should be included in updated LCPs, as well as implemented through CDPs issued by the Commission. Consistent with numerous goals in the Strategic Plan, the benefits of integrated water management projects include:

- Resolving otherwise intractable point and non-point source pollution;
- Critical habitat restoration (both on a micro and macro scale);
- Reducing unnecessary and wasted “embedded energy” in our current water management system;
- Dramatically reducing Southern California’s dependence on unsustainable imported water;
- Increasing sediment transport and natural beach replenishment;
- Introducing numerous climate adaptation benefits;
- Ensuring sustainable water supplies for human use and guaranteed in-stream flows for native wildlife (many of the listed species are threatened because of the loss of aquatic habitat).

First, Surfrider acknowledges that there has been a dramatic decrease in point source coastal water pollution over the past decades through the construction of improved treatment plants and implementation of water quality regulations. Despite these gains, there is the potential for additional significant environmental improvement by encouraging increased recycling of wastewater for both non-potable and potable use.

Further, support for, and development of, de-centralized recycled wastewater facilities would simultaneously address ocean pollution issues, water supply issues and the ecosystem impacts from over-drafting local and remote water sources. Locating package wastewater reclamation facilities higher in the watershed, adjacent to areas of high-demand, may allow a cumulative benefit of reducing the need for large gravity-fed coastal treatment plants, facilitating “managed retreat” and removing critical infrastructure from threats of sea level rise.

We can no longer afford to discharge partially treated wastewater into coastal

streams and the ocean. We desperately need to further develop wastewater recycling and reclamation. And it is important to note that we can dramatically reduce the “embedded energy” in our water through recycling wastewater – meeting the goals of climate change mitigation and adaptation. We need to capture wastewater in the watershed where it can be treated for specific re-use purposes, and located near-by the demand.

We believe these changes to our wastewater management can be implemented in Coastal Development Permits for development of new wastewater treatment capacity or repair of existing wastewater infrastructure.

Second, we are unaware of any data documenting a significant decrease in pollution from nonpoint sources – dry- and wet-weather urban and agricultural runoff. This remains a significant problem. Addressing these problems will require the implementation of a wide variety of pollution source controls and innovative new treatment solutions.

Some of these measures are beginning to be implemented through the Municipal Separate Storm Sewer System permits issued by the Regional Water Quality Control Boards or because of prohibitions on discharges to Areas of Special Biological Significance or other coastal areas deserving protection – such as the recently designated network of Marine Protected Areas. *The Coastal Commission can facilitate progress in the implementation of multi-benefit water management efforts through implementation of “integrated water management.”*

Further, Surfrider agrees that ongoing and future updates to LCPs, and enforcement of the Coastal Act, will help ensure that impacts to ocean and coastal resources from both point and non-point sources are adequately addressed.

Surfrider urges the CCC to analyze best management practices that could be addressed at a small and large scale to capture and treat the volume of water deposited on a property by a ¾ inch storm event, at a minimum:

1. **(Small development projects)** For any CDP application that increases impervious surfaces, CCC should require landscape retrofits that use native plants to provide habitat, and retention devices to absorb and filter runoff. This has the added benefits of watering plants with rainwater and thus decreasing potable water use, while increasing wildlife habitat. (The same practices can apply to mitigating dry-weather runoff.) *For sample criteria, please see Surfrider Foundation’s Ocean Friendly Gardens “Criteria”, under the “Resources” tab.*⁴
2. **(Large developments and public works projects)** For larger development projects with limited area for on-site landscape retrofits, CCC should require additional conditions be incorporated into CDPs to ensure that run off from the property be diverted into permeable bio-swales or other landscape features on public or private lands adjacent to streets (parkways), parking lots, etc. Also consider cutting parkway curbs and creating “bulb-outs” where parkways are not available (generally referred to as “green streets” projects).
3. **(Regional scale projects)** We encourage the CCC to work with local, State and

⁴ <http://www.surfrider.org/programs/entry/ocean-friendly-gardens>

federal flood control agencies to prioritize stormwater retention and treatment of water that is not absorbed and/or filtered through the systems noted above. Future flood control strategies should include stormwater capture, natural treatment, absorption and/or release back to a river or creek in a network of treatment wetlands before it reaches the ocean. We believe current Coastal Act policies, and federal consistency authority, allows the Commission to implement constructed wetlands and other solutions in lieu of maintenance and future addition of impervious flood channels that arguably violate Coastal Act policies regarding improvement of water quality, marine biological productivity and more.

This multi-stage, and multi-benefit strategy mimics the ecosystem services that have been lost to urban development, loss of open space and historical wetlands, as well as outdated flood control strategies. Integrated Water Management will, over time, restore and protect the natural resources that attract people to live, work and visit California – a critical part of California’s economic stability and quality of life envisioned in the Coastal Act.

We look forward to working with the Coastal Commission to better define the reforms needed to achieve the multiple benefits of integrated water management. As part of that commitment, we are interested in offering professional training and hands-on workshops for Commission staff to learn more about the practices and programs listed above.

- **Coastal Power Plants and Ocean Desalination**

First, it is important for us to recognize and express our appreciation for the Coastal Commission’s engagement and action to assist the State Water Resources Control Board adoption of the “Policy on Once-Through Cooling” (OTC Policy), and your continued participation in the implementation process. We believe the successful adoption of the OTC Policy allows the Coastal Commission to more strictly enforce Coastal Act policies on protection and restoration of marine life, as well as restoring water quality in the marine environment.

And importantly, we think the result of the OTC Policy may open opportunities for “managed retreat” of these otherwise coastal infrastructure projects. We are currently seeing opportunities where existing power plants located adjacent to the coast and estuaries are proposing to re-power their facilities with high-efficiency generators that no longer require “once-through cooling.” This means these critical infrastructure projects are no longer “coastal dependent” under the Coastal Act definition, and consequently provide an opportunity to relocate the facilities inland. **We strongly believe the State must take every opportunity to move structures in harm’s way off the coast if we are to simultaneously adapt to sea level rise and maintain our sandy beaches.** Difficult choices await us in the near future over what structures will require armoring and what will have to be moved out of harm’s way.

Large infrastructure facilities like power plants, wastewater treatment plants and highways will be the most difficult to protect without armoring large swaths of the coast – at the cost of losing sandy beaches. The Coastal Commission should clarify a

strong policy for moving these facilities off the coast whenever the opportunity arises.

Also, many of these facilities are located near existing wetlands and ESHA, presenting an opportunity for restoration and/or expansion of these critical habitats. In contrast, but equally important, moving existing power plants from urbanized areas offers similar opportunities for wetlands and other habitat construction in areas where limited natural resources still exist, and access to these natural places has long since been destroyed.

Nonetheless, ocean desalination proposals are already moving through the permitting process without similar guidance from the SWRCB.

Unfortunately, the two large facilities closest to completing not only the final permits, but also binding Water Purchase Agreements, are not designed to minimize the intake and mortality of marine life – as mandated in the Water Code section 13142.5(b) and several Chapter 3 policies in the Coastal Act. In fact, both these facilities plan to utilize the existing intake structures that are being abandoned by the adjacent power plant in compliance with the Policy on Cooling Water Intakes. These two facilities' proposals have not made any changes in site selection, design, technology or any other mitigation measures to minimize the intake and mortality of marine life in response to the Policy on Cooling Water adoption. Obviously, this undermines the goals and benefits of the Policy on Cooling Water Intakes.

But worse yet, these proposed desalination facilities will operate on a constant basis and withdraw massive volumes of water 24 hours a day, every day of the year. Just these two facilities alone, as proposed, would collectively withdraw over 430 million gallons every day – more than doubling the average daily withdrawal of the adjacent power plants' recent cooling water intake volumes. So they will not only reintroduce the marine life mortality from entrainment and impingement that was just prohibited from operation of the power plant, it is likely the long-term intake and mortality of marine life at these sites will dramatically increase. And given the proposal of approximately 20 desalination facilities on the California coast being developed, in comparison to the re-powering or retrofitting of 18 sporadically operated power plants – it is reasonable to predict that the cumulative intake and mortality of marine life statewide will increase despite the full enforcement of the Policy on Cooling Water Intakes. That cannot be interpreted as fair nor sound public policy.

A strict interpretation of the law, that was the basis for the Policy on Cooling Water Intakes, needs to be equally strict when developing performance standards for ocean desalination. In fact, because in the case of ocean desalination proposals we are not confronting the expense of retrofitting existing facilities, nor timing the implementation of the rules to avoid disrupting the public's reliance on the proposed facilities (as was the case with the power plants) – sound public policy dictates ensuring the best site, design, and technology be clearly articulated in enforceable statewide guidance before any facilities are constructed. But unfortunately, that's not what is currently happening.

Further, the science on the impacts from discharged brine on benthic habitats and marine life communities is not well known. The introduction of brine into the

marine environment has certain toxic effects on marine life. And the potential accumulation of brine on the seafloor can create hypoxia and dead zones in certain bathymetric depressions or areas of limited slope and current.

Finally, these facilities are being promoted without a thorough analysis of preferred alternatives for achieving a long-term sustainable balance of freshwater supply and demand that achieves multiple benefits to restoring and protecting our coast and ocean ecosystems, as well as coastal communities and economic stability.

As we noted above, taking immediate steps towards defining and implementing the reforms necessary to achieve “Integrated Water Management” will ensure multiple benefits to our coast and ocean and resolve some intractable problems like unabated non-point source pollution, flood attenuation, coastal habitat restoration, “embedded energy” reduction – while simultaneously ensuring local sustainable water supplies.

We strongly encourage the CCC to articulate a policy that ocean desalination will be considered an option of last resort before the Commission issues a CDP or reviews an appeal of a CDP issued by a local jurisdiction. A project proponent must be compelled to show that all other preferred alternatives for supplementing local water supplies have been fully implemented before an ocean desalination facility application is considered complete. And we encourage local jurisdictions to incorporate similar policies into their LCPs.

In conclusion, the current draft of the Strategic Plan includes information that, when viewed from a holistic reform perspective, silently advocates for multi-benefit integrated water management. As stated above, we encourage language in the introduction to Goal 2 and Goal 3 to make the linkage between numerous Objectives, and how elements on holistic “integrated water management” can best achieve those goals and objectives.

- **Beach fill/nourishment**

Beach fill projects are continuously evaluated on a case-by-case basis, though many of their impacts are similar, justifying the need for guidance. As experienced during the recent SANDAG project review CCC staff had unintentionally left out monitoring and protection of surfing resources from their analysis and recommendations. Standardized guidance for determining and minimizing potential surfing impacts from placed sand along beaches with both sandy and rocky nearshore environments should be established. Working with the surfing community, CCC should develop standard programs for monitoring impacts, similar to those utilized by Surfrider Foundation at the SANDAG project, and monitoring should be required of project applicants to ensure that all projects do not have unintentional negative repercussions.

Beach fill has several potential ecosystem impacts: burying existing habitat, changing the sand composition of the beach and clouding nearshore waters as the beach fill settles. By placing new fill material on the beach, beach fill buries existing ecosystems on the beach and in nearshore areas. This can disturb both the sand-

based ecological communities on the beach and the ecosystems immediately offshore, such as eel and surf grass and hardbottom reefs.

Several researchers have evaluated the short- and long-term impacts of beach fill projects on sandy shore and intertidal habitat, yet project reviews almost never include references to these studies or discussion of their implications, particularly those of Charles Peterson (see attached). In particular there is no standard for evaluating cumulative impacts to determine how repeated and widespread nourishments are altering natural systems.

Further, watershed mis-management impacts the coast and ocean from both increases in negative constituents (urban runoff, non-point pollutants, etc) and in reduction of positive constituents (sediment for beaches, etc.) Ironically, even sediment runoff can be listed as a pollutant if it is not properly managed.

Restoration of watershed ecosystem services through Integrated Water Management⁵ practices promote the resumption of natural sediment transport to the coast, and should be included or referenced in this section of the Strategic Plan. In addition, policies that reduce further impacts to sediment supply can be utilized. For example, the removal of dams in coastal watersheds that have starved our beaches of sand to the point where the reservoir no longer serves an important part of our water supply portfolio, will dramatically improve natural beach replenishment. Further, “managed retreat” will allow a more natural cycle of beach erosion and replenishment.

- **Beach Grooming**

Beach grooming may remove trash such as plastics and fishing gear that can be detrimental to wildlife, and may improve aesthetics for beachgoers and shoreline property owners. In particular, the removal of seaweeds may reduce unpleasant smells and various "pests" associated with these macrophytes. Nevertheless, recent studies have indicated that beach grooming may also be ecologically damaging. When seaweeds and seagrasses (wrack) are removed from the beach, an important component of the food chain is lost. Numerous species of crabs, crustaceans, and shorebirds all depend on these deposited 'macrophytes' for their food supply. Accordingly, regular grooming tends to reduce the biodiversity and biomass found on sandy beaches.

Additionally, beach grooming can remove significant quantities of sand and alter grain size. Because seaweeds help prevent the loss of finer sediments to the wind, groomed beaches tend to have a slightly coarser texture. Beach grooming can also repress natural features such as coastal dunes and the perennial grasses associated with them.

Dr. Jenifer Dugan of University of California, Santa Barbara has studied the effects of beach grooming on sandy beach habitats. Her studies have indicated that groomed beaches exhibit the following characteristics, as compared to natural beaches:

⁵ See above comments on “integrated water management”.

- Significantly lower diversity and abundance of wrack-associated animals
- Lower abundance of shorebirds
- Higher relative numbers of flies
- Lower numbers of native plants
- Coarser sand

Given the potential impacts associated with grooming, beach maintenance policies should be given prudent consideration by managers and the public. In many cases, it may be feasible to remove debris through hand raking and other less disruptive methods. And, in places where beach grooming programs are in place, 'wildlife friendly protocols' should be established to ensure that important ecological functions are not disrupted. An example is in San Diego, where beach grooming is only performed above the high tide line during grunion season so as not to disturb or kill grunion eggs deposited in the wet sand.

- **Marine renewable energy**

In recent years, numerous permit applications for wave energy projects off California have exposed the many challenges of accommodating a new use of the ocean while still ensuring protection of the nearshore ecosystem and existing human uses. Specific issues include the lack of coordination mechanisms between relevant agencies, communities, and stakeholder groups, as well as the absence of marine spatial planning for California's waters to effectively address trade-offs and minimize conflicts between sectors.

Surfrider encourages the CCC to work closely with other agencies to provide policy guidance on renewable ocean energy. We would like to stress that the focus of wave energy should be on smaller pilot projects, rather than commercial scale projects. It is imperative that the State takes a prudent approach until we learn more about the potential of various technologies and their associated impacts to the environment. We also urge the CCC to work with the OPC to ensure that renewable ocean energy development complies with the State's laws and legislative intent, and sufficiently addresses the perspectives of ocean stakeholders and coastal communities. Finally, we stress that the CCC urge the OPC and other agencies to include not only "commercial values", but also *spatial and economic data collection on intrinsic values of healthy ecosystems and non-consumptive recreational ocean use values when planning ocean energy projects.*

- **Marine Protected Areas**

California is the first state in the nation to implement a statewide network of Marine Protected Areas (MPAs). Surfrider urges the CCC to amend section 2.4.4 of the Strategic Plan to include policy guidance on avoiding impacts to MPAs and to develop tracking tools for projects that may have impacts on MPAs. We believe these tracking tools can help CCC identify foreseeable impacts from onshore and offshore projects—which in turn will allow CCC to investigate mitigation or deny projects that cause irreparable harm to MPAs. For example, the CCC recently reviewed a project to conduct seismic testing off the Central Coast near a complex of MPAs. While Surfrider is pleased the CCC denied the project, the process of identifying impacts to the MPA was time consuming for the environmental

community and we would have benefited from some type of tool or matrix that would have easily identified impacts to MPAs.

Another component of MPA management that we hope the CCC will analyze is the need to coordinate permitted uses in and around MPAs. During the establishment of MPAs, several issues regarding permit and regulatory requirements for activities in or around MPAs unfolded during the process. For example, beach nourishment, sediment management activities, and operation and maintenance of artificial structures were identified. We recommend the CCC urge the Department of Fish and Wildlife to create a timeline and guidance for potential maintenance activities, and also ensure that the Department authorizes any required federal, state, and local permits in a timely manner. The CCC, Department of Fish and Wildlife and other agencies should ensure that these maintenance activities are minimized and done with little to no impact on nearshore ecosystems.

Surfrider was pleased to see the CCC identified impacts to MPAs in relation to water quality and coastal development. Surfrider, in conjunction with other organizations, provided recommendations to State Water Resources Control Board (SWRCB) to initiate the process of designating Water Quality Protection Area status for MPAs. Surfrider suggests the CCC write a Resolution supporting the State Water Resources Control Board's adoption of a comprehensive designation of Water Quality Protection Area status for MPAs, under the authority in the Marine Managed Area Improvement Act. A simple resolution of support would provide additional assurance that this important addition to protection of relatively undisturbed ecosystems in MPAs is realized through an overlay of State Water Quality Protected Area status.

GOAL 3: ADDRESS CLIMATE CHANGE

The Coastal Commission is in a particularly strong position to assist and guide other state agencies in responding to climate change and sea level rise impacts along the coast. We are pleased that the Commission is pursuing guidance for planning and permitting to address the effects of climate change on coastal resources. It is critical that community planners make informed decisions when deciding how to react to rising sea levels. The wrong choices could lead down a path where beaches disappear, coastal aquifers are rendered un-usable for human consumption from seawater intrusion, coastal tourism and fisheries suffer or where billions of dollars are lost to storm-damaged and flooded properties.

In response to **Executive Order S-13-2008: the Climate Adaptation and Sea Level Rise Planning Directive**, the California Natural Resources Agency (CNRA), working through the state's Climate Action Team (CAT), released the State Climate Change Adaptation Strategy ⁶ in December 2009. Recognizing that climate change is already affecting California, and noting that almost half a million Californians will be at risk from sea level rise along bay and coastal areas, the report both summarizes the most recent science predicting potential climate change impacts and recommends response strategies. Members of the Climate Adaptation Working Group identified six priority strategies in addressing climate adaptation for state agencies, three of which relate specifically to sea-level rise:

⁶ <http://www.climatechange.ca.gov/adaptation/index.html>

- Strategy 3: State Agencies should prepare sea-level rise and adaptation plans to be completed by September 2010 and regularly updated, modified, and refined based on new information.
- Strategy 4: Support Local Planning for Addressing Sea-Level Rise Impacts by 2011, all coastal jurisdictions should begin development of amended Local Coastal Programs and general plans that include climate change impacts.
- Strategy 5: Complete a Statewide Sea-Level Rise Vulnerability Assessment Every Five Years

Guidelines for municipalities to update LCPs are needed in order to assure they fully analyze and plan for community impacts from sea level rise, erosion and coastal flooding. These analyses need to include both public and private infrastructure and determine true risks and costs associated with changing ocean levels for the foreseeable future. It is currently forecast that sea level rise rates will accelerate over the next century, reducing the efficacy of common erosion response actions like shoreline armoring or beach sand replenishment. The costs associated with those actions will soon far outweigh the value of the properties they are intended to protect. CCC guidelines should incorporate methods for fully evaluating all responses, including options for shoreline managed retreat and rolling easements.

It may become necessary to re-evaluate Coastal Act provisions which currently allow for shoreline armoring for any threatened structure, as this could eventually lead to complete loss of sandy beaches. As example the City of Solana Beach is attempting to incorporate sunset clauses and fees for new seawall construction to allow for future removal and return of coastal bluffs to natural processes. Also, see recent work by Dr. David Revell in the southern Monterey Bay, which demonstrated possible procedures for evaluating risks and future costs based on all possible erosion response options.

Some local communities facing especially severe erosion issues have begun to accept the fact that the sea can only be withheld for so long. The beachside community of Pacifica, for example, is in the process of buying up private property along the coast, and relocating coastal structures further inland. The same scenario is being played out at Surfer's Point in Ventura, with a managed retreat plan already in progress that will effectively relocate a parking lot and bike path. And maybe more significantly, the plan in Morro Bay to re-locate their wastewater treatment facility higher in the watershed not only exemplifies a "managed retreat" strategy for critical coastal infrastructure, but also implement wastewater recycling – an important component of "integrated water management." Some other states, namely Texas, Rhode Island, Maine, and South Carolina's coastal zones all benefit from a degree of rolling setbacks, a policy akin to managed retreat that allows private coastal property owners to develop their land, but prohibits the erection of seawalls and barriers once sea levels begin to threaten the structures.

Surfrider Foundation has developed a number of resources and recommendations to help planning efforts at the state and local levels. We recommend that coastal planning efforts focus on adaptation to changing conditions rather than simply "holding the line" and protecting all infrastructure and other development in place. These guidelines can help to drive proper decision-making as Local Coastal Plans are updated in the coming years to reflect science-backed sea level rise and climate change predictions. We strongly urge the CCC to consider the following when addressing climate change adaptation.

Essential Elements of Coastal Climate Change Adaptation Management Plans

1. **Proactive adaptation:** Approach recognizes the need to factor climate change into decisions affecting long-term susceptibility of systems to the impacts of climate change. Process requires assessing the vulnerability of natural and man-made systems, as well as weighing the costs/benefits of action vs. inaction. Alternatives should then be planned accordingly.
2. **Maximize ecosystem resilience to climate change:** The overall goal of adaptation is to reduce the risk of adverse environmental outcomes through activities that increase the resilience of ecological systems to climate change. EPA has defined resilience in this context as the amount of change or disturbance that a system can absorb without fundamentally shifting to a different set of processes or undergoing ecosystem re-structuring. It is therefore necessary for management plans to incorporate options that protect key ecosystem features, and focus management protections on structural characteristics, organisms, or areas that represent important underpinnings of the overall system.
3. **Dynamic management plans:** The uncertain nature of climate change and climate change impacts necessitates dynamic management systems that can accommodate and address such unpredictability. Management plans must have the ability to be flexible and responsive to sudden, and often times unforeseen, changes. Adaptive policies should therefore allow managers to focus not only on managing adaptation, but further be able to manage *change*. Dynamic management plans will also be able to incorporate new knowledge as it becomes available, and apply it to current management schemes.
4. **Establishment of current baselines, identify thresholds, and monitor for changes:** Understanding where thresholds have been exceeded in the past, and where they may be exceeded in the future, will allow managers to plan accordingly and avoid tipping points where possible. Managers must therefore establish current baseline conditions, model a range of possible climate change impacts and system responses, monitor actions and systems to detect changes in baseline conditions and determine efficacy of adaptive measures, and respond by implementing adaptation actions at appropriate scales and times.
5. **Identification of key vulnerabilities:** Assessment of coastal areas to determine which are most at risk and *why*, using the following criteria;
 - Key vulnerabilities of coastal areas:
 - Differences in exposure to impacts
 - Differences in sensitivity to impacts
 - Differences in adaptive capacity
 - Differences in socio-economic factors
 - Importance (major cultural/natural resource)
 - Factors influencing severity of impact(s):
 - Magnitude of impact(s)
 - Timing (short-term vs. long-term) of impact(s)
 - Persistence vs. reversibility of impact(s)
 - Likelihood vs. certainty of impact(s)
6. **Prioritizing Actions:** Adaptive actions should be prioritized based on the nature of the projected and/or observed impacts, as well as the vulnerability of the coastal area in question. Managers should utilize a systematic framework for priority setting, which would help managers catalog information, design strategies, allocate resources, evaluate progress, and inform the public. Priority setting should occur in

- an ongoing way to address changing ecological conditions and incorporate new information.
7. **Careful assessment of adaptation options:** Adaptation options should be chosen based on a careful assessment of their efficacy, risks, and costs.
 - Various options include: profit/opportunity options, win-win options , low-regret or no-regret options, options averting catastrophic risk, and/or options that avoid unsustainable investments.
 8. **Inclusion of short-term measures:** Management plans should include strategies that address short-term impacts and concerns, while long-term management plans are being developed.
 9. **Collaboration:** Management plans should encourage collaboration between various ecological managers, stakeholders, and levels of government, and include a system that fosters the exchange of ideas, information, resources, best practices, and lessons learned. Expanding collaboration has the potential to broaden both the spatial and ecological scope of potential adaptation options.
 10. **Recognition of potential barriers to implementation:** Management plans must recognize legal and social constraints, restrictive management procedures, limitations on human and financial capital, and information gaps, yet also view these barriers as potential opportunities. Management plans must therefore be flexible enough to work around particular barriers that may arise.
 11. **Outreach & Education:** In order to increase public awareness and expand community involvement, management programs should include outreach and educational tools and considerations.

Additional Resources for Climate Change Adaptation

NOAA's Coastal Resources Center has developed Roadmap for Adapting to Coastal Risk, ⁷an online, three-hour course where participants learn how to characterize community exposure to coastal hazards, and to assess how plans and policies already on the books can be used to jump-start adaptation strategies. Here are examples ⁸ of how the Roadmap is being used by communities in New York, Florida and Pennsylvania to address their risk and vulnerability issues associated with hazards and climate change.

The October 2011 report Federal Actions for a Climate Resilient Nation: ⁹*Progress Report of the Interagency Climate Change Adaptation Task Force* provides an update on actions in key areas of Federal adaptation, including: building resilience in local communities, safeguarding critical natural resources such as freshwater, and providing accessible climate information and tools to help decision-makers manage climate risks. This report follows the Task Force's October 2010 Progress Report ¹⁰to the President that recommended the Federal Government strengthen the Nation's capacity to better understand and manage climate-related risks.

A report *The State of Marine and Coastal Adaptation in North America: A Synthesis of Emerging Ideas* ¹¹was published by EcoAdapt in January 2011. The report, which is the

⁷ <http://www.csc.noaa.gov/digitalcoast/training/roadmap/training.html>

⁸ <http://www.csc.noaa.gov/digitalcoast/training/roadmap/discover>

⁹ http://www.whitehouse.gov/sites/default/files/microsites/ceq/2011_adaptation_progress_report.pdf

¹⁰ <http://www.whitehouse.gov/sites/default/files/microsites/ceq/Interagency-Climate-Change-Adaptation-Progress-Report.pdf>

¹¹ <http://ecoadapt.org/documents/marine-adaptation-report.pdf>

culmination of a nearly 18 month survey of marine and coastal climate change adaptation projects and initiatives in North America, summarizes climate impacts and provides summaries and examples of adaptation actions implemented throughout the United States, Canada, and Mexico.

GOAL 4: STRENGTHEN THE LCP PLANNING PROGRAM

LCPs are critical roadmaps for long-term coastal planning, and without them, the Coastal Act is rendered weak. Surfrider readily supports the completion of the LCP program. Not only would LCP completion help with CCC Staff's tight workload, but it would also provide congruity for implementing the Coastal Act on a statewide level—which we believe would increase compliance with the Act as a whole.

For Action 4.1.1 “identifying priority areas for LCP and ADC certification”, Surfrider suggests a clear metric be created to determine how these areas will be ranked and prioritized. We recommend the metric be based on the significance of coastal resources and/or the imminence of threats. For example, if there is an area where coastal erosion is significant, but armoring has not been completed, we recommend that area be prioritized for a LCP before a barrage of permits are filed to build sea walls.

In regards to Objective 4.2 “updating LCPs” Surfrider is aware that a large amount of certified LCP's are out of date and have been amended numerous times without a complete review. We strongly urge CCC to curtail any piecemeal approaches by encouraging municipalities/counties to spend copious time at the “beginning of their update process” to identify **all** areas of the LCP that need updating. We strongly encourage the CCC to ensure that LCPs are not being amended for “specific projects” such as new developments. Once **all** areas of updates have been identified and vetted, we suggest the most urgent updates be prioritized (similar to our recommendations to 4.1.1). Surfrider also recommends the CCC urge local governments to widely advertise LCPs hearings so local citizens have an opportunity to provide input. Finally, we encourage the CCC to explicitly remind local municipalities/counties to limit the influence of special interests while updating LCPs. While this may seem obvious, we believe governments would benefit from having such a reminder.

Surfrider supports objective 4.3 “provide and Maintain Certified LCPs Online”. Until a user-friendly library is created, we suggest the CCC create a webpage that simply links LCPs that are already online; and perhaps the “linked page” would be sufficient enough instead of creating a library of actual files.

GOAL FIVE: IMPROVE THE REGULATORY PROCESS, COMPLIANCE AND ENFORCEMENT

The Commission is woefully understaffed in the enforcement division and oftentimes is unable to discover or address the plentiful Coastal Act violations occurring up and down the coast. Oftentimes, illegal beach access blockades, unpermitted makeshift seawalls, water quality degradation and other egregious violations are reported by public citizens to the Commission. Even then, the Commission is often unable to effectively address the issue in a timely manner. Due to insufficient personnel and a small enforcement division, the Coastal

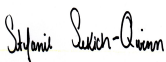
Commission has a backlog of nearly 2,000 cases.¹² All too often, citizens have no choice but to file private enforcement lawsuits for issues that are clearly under Coastal Commission purview. While the alternative of allowing citizen enforcement is an important one that should be sustained, the Coastal Commission is the agency expert on the substance of the Coastal Act and should be more diligent in enforcing its protections.

CONCLUSION

Surfrider greatly appreciates your consideration of our comments and we look forward to working with the CCC on our shared goal of protecting our coast. As outlined above, there are areas of the Strategic Plan where we would like to see more detail and focus. Outside of our policy recommendations, Surfrider strongly believes the CCC has the ability to implement robust policies **and** also bring together other resource agencies to coordinate actions and reform fragmented governance.

Surfrider stands ready to work with the CCC and other agencies to protect coastal resources not only for the sake of economic well-being, but also to ensure future generations inherit a sustainable coast and ocean.

Very truly yours,



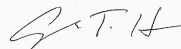
Stefanie Sekich-Quinn
California Policy Manager



Joe Geever
Water Programs Manager



Mark Rauscher
Coastal Preservation Manager



Angela Howe
Legal Director

¹² Senate Committee on Natural Resources & Water, *California Coastal Resources: California Coastal Act of 1976: enforcement: penalties, Bill no. SB 588*, 2011-2012 Regular Session, http://www.leginfo.ca.gov/pub/11-12/bill/sen/sb_0551-0600/sb_588_cfa_20110318_140036_sen_comm.html.