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Via Email: opc.comments@scc.ca.gov

January 16, 2012

John Laird, Secretary for Natural Resources Chair
California Ocean Protection Council
California Natural Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

RE: Revised Draft Ocean Protection Council Strategic Plan

Dear Chairman Laird and Honorable Ocean Protection Council Members:

On behalf of the Surfrider Foundation and its 20,000 members in California, we thank you for the opportunity to comment on the Revised Draft Ocean Protection Council Strategic Plan. The Surfrider Foundation is a non-profit grassroots organization dedicated to the protection and enjoyment of our world's oceans, waves and beaches. Surfrider Foundation now maintains over 90 chapters worldwide and is fueled by a powerful network of activists.

Before directly commenting on the Strategic Plan, we would first like to acknowledge your efforts to streamline ocean governance. Balancing the unique needs of California while taking into account the objectives of the National Ocean Policy is a laudable goal. Surfrider believes the OPC is working toward the functions outlined in the California Ocean Protection Act, which calls for the OPC to identify necessary reforms of not only mismanagement of our natural resources, but the fragmented governance that is the root cause of many of the most intractable problems.

Surfrider is confident that with continued focus the OPC can reduce fragmented governance within the State and improve coordination between local, state and federal agencies. Surfrider supports OPC's vision and we believe your leadership has the potential to continue leading California to the forefront of environmental protection—making our state a role model for the global community.

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 also ensure the OPC that we are committed to assisting in achieving the goals set out in the Strategic Plan and look

forward to cooperating in discreet actions that will collectively result in holistic reforms of coastal and ocean management to restore and 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:

- Section B: Climate Change
- Section C: Sustainable Fisheries and Marine Ecosystems
- Section D: Coastal and Ocean Impacts from Land
- Section F: Existing and Emerging Ocean Uses

SECTION B: CLIMATE CHANGE

Issue 4: Impacts to Coastal Communities by Storms, Erosion, and Sea Level Rise

Surfrider Foundation agrees with the goal of reducing risk to communities from coastal storms and shoreline erosion. It is critical that state and local agencies have, and understand, the most current information on global warming, and the predicted impacts from climate change, in order to make proper decisions in the management of the coast and ocean. Successful adaptation to sea level rise, habitat and wildlife protection, changing precipitation, and more will rely on the availability of this information as well as proper guidance for implementing risk-reduction strategies.

Historically the response to shoreline erosion threats has often included armoring of the coast, leading to a narrowing of the public sandy beach. Unfortunately the primary law addressing this, the CA Coastal Act, specifically allows the use of armoring solutions where private and public structures are threatened, often to the detriment of adaptation strategies that may be more in the public interest. We encourage you to provide guidance to local, State and federal government agencies, particularly the California Coastal Commission, to utilize alternative strategies that better maintain the integrity of natural systems to replenish sediment transport and deposition, while allowing the protection of critical public infrastructure. It may be necessary to alter existing laws or regulations to ensure that decision-makers have the full range of adaptation strategies at their disposal and are not implored to go directly to shoreline armoring solutions.

Sea Level Rise will result in changing weather patterns and precipitation, and extreme storm events. These inevitable results of climate change are going to increase the vulnerability of coastal communities to damage from floods. We are also concerned that, without immediate reform, our current urban stormwater systems will continue to impede the transport of sediment, and result in even greater beach erosion than we are currently experiencing. Without immediate adaptation efforts, the results will not only be exacerbated threats to coastal property, but the eventual loss of sand beaches in California.

We want to highlight that one of the solutions to this imminent threat is fully implementing “integrated water management.” Advancing policies and implementation strategies for Low Impact Development¹, “green infrastructure”² projects, and networks of treatment wetlands will, among multiple benefits, restore natural ecosystem services for attenuating flood damage. All of these tools in the integrated water management toolbox are designed to capture stormwater before it accumulates in existing stormwater conveyance systems and flood control projects, mimicking and partially restoring the ecosystem services of capturing flood waters in surface and groundwater storage. In the drier climates of Southern California, it is also important to note that groundwater recharge to full holding capacity through implementation of these “urban watershed restoration” strategies, in combination with Indirect Potable Reuse to replenish and keep our coastal groundwater basins full, will ensure in-stream flows during prolonged dry periods, and consequently restore the natural process of sediment deposition.

The Draft Strategic Plan makes note of this threat to sediment transport and effective “sediment management” in Section D, “Coastal and Ocean Impacts from Land”, page 20, para 4. With that language in mind, *we strongly encourage the OPC to document the benefits of Integrated Water Management in the multiple strategies for addressing flood attenuation and natural beach replenishment in adapting to inevitable sea level rise. We also encourage “managed retreat” for development at risk of damage from coastal erosion and sea level rise. These should be priority actions in any guidance to decision-makers.*

SECTION C: SUSTAINABLE FISHERIES AND MARINE ECOSYSTEMS

Issue 6: Supporting Sustainable Fisheries

Many Surfrider Foundation members are fishers who are dedicated to preserving special places under the authority and implementation of the Marine Life Protection Act, as well as ensuring sustainable fishery management plans based on ecosystem approaches under the authority of the Marine Life Management Act. In fact, we believe these laudable goals work hand-in-hand³.

We very much agree with the discussion in the preamble language in Issue 6 about the potential benefits of collaborative research between academic institutions, the Department of Fish and Game, and members of the fishing community. We think these collaborative research efforts will simultaneously:

- contribute to a collection of more diverse and robust data on the assessment of fish populations;

¹ The use of the term “Low Impact Development” in this context should not be limited to guidance for rain water capture on new development, but should include similar, if not identical guidance for retrofitting existing development. For reference, please see: <http://www.surfrider.org/programs/entry/ocean-friendly-gardens>

² We include “green streets”, green parking lots”, and “green roofs” in the definition of “green infrastructure.”

³ See e.g., The Nearshore Fishery Management Plan that provides an adaptive management approach in the FMP to account for the fishery benefits from the implementation and maturity of the newly designated marine reserves.

- overcome the misunderstanding, and resultant distrust of the fishing community in the science used to develop fishery management plans and Marine Protected Area management and adaptation;
- supplement the income of commercial fishers that have been marginally displaced from implementation of the MLPA.

With this in mind, *we encourage an additional “Proposed Action” that identifies working with academic researchers, the Department of Fish and Game and representatives of the fishing and environmental communities to recommend guidelines and funding opportunities for collaborative research with the fishing and diving communities.*

Issue 8: Leveraging Investments and Realizing Benefits of the State’s Marine Protected Areas

Surfrider Foundation has been heavily involved with the Marine Life Protection Act (MLPA). Over the course of several years we have worked with diverse groups of people (including: commercial and recreational fishermen, divers, surfers, kayak fishermen, environmental activists and beach goers) to ensure a network of new Marine Protected Areas (MPAs) was effectively designed and implemented.

As MPAs were being developed in the Central Coast, the North Central Coast and the South Coast, Surfrider Foundation: engaged our diverse membership by conducting extensive outreach; participated in “one-on-one” meetings with stakeholders; conducted community forums to discuss map recommendations; attended all of the public hearings held during the two-year process; and created our own map that reflected the views we heard during our outreach.

Considering this extensive outreach and communication work Surfrider conducted, we have a good understanding of what needs to take place during the implementation of the MLPA. We support the OPC’s work to effectively advance MPA management, enforcement, monitoring, education, and outreach across a broad range of public and private entities. Surfrider provides recommendations for the following areas identified by OPC:

- MPA management
- Enforcement
- Monitoring
- Education

MPA Management: OPC’s leadership will be critical in order to support a strong regulatory framework and simultaneously support key agencies/municipalities working on the MLPA. Surfrider greatly supports OPC’s efforts to coordinate MLPA implementation with other ocean management agencies to improve management effectiveness. We understand the Department of Fish and Game is tasked with several roles and might not have all the resources to conduct cooperative

management with local municipalities; however any additional support provided by OPC to local municipalities, NGOs and others will certainly augment long-term success of MPAs. The OPC can guide coordination between the Department of Fish and Game, local municipalities that have MPAs within their community, and other government and non-government entities to develop guidance on enforcement, monitoring and MPA management.

Another component of MPA management that needs attention is coordination of permitted uses of MPAs. During the establishment of MPAs in the South Coast, 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 for specific MPAs while the Regional Stakeholder Group created the maps.

We recommend the OPC help the Department of Fish and Game 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 OPC, Department of Fish and Game and other agencies should ensure that these maintenance activities are minimized and done with little-to-no impact on nearshore ecosystems.

Finally, we strongly support all the Proposed Actions under Objective 7.2. In particular, we want to highlight the importance of strict water quality protections for the new MPAs. Taking every step possible to reduce pollution reaching the MPAs is both consistent with the mandates in the MLPA to maintain these areas as relatively undisturbed ecosystems, and ensuring the full ecological benefits of the areas. Also water quality protection is consistent with, and critical to, the goal of encouraging non-extractive recreational use of the areas – that is, human health protections for divers, swimmers, surfers and other water-contact sports.

We are aware of the SWRCB efforts to initiate a process to designate Water Quality Protection Area status for MPAs. Nonetheless, we are concerned there will be opposition by dischargers. So a Resolution from the OPC supporting the State Water Resources Control Board's adoption of a comprehensive designation of Water Quality Protection Area status for every MPA, under the authority in the Marine Managed Area Improvement Act, would provide additional assurance that this important addition to protection of relatively undisturbed ecosystems in MPAs is realized.

Further, we want to highlight that the benefits of Integrated Water Management to MPA management. The adoption of LID ordinances, “green infrastructure” projects and recycled wastewater will result in dramatic improvements to maintaining relatively undisturbed ecosystems within the MPAs – as explained in greater detail in our comments below on Objective 9.1.

We feel that it was an unfortunate outcome of the South Coast MPA designation process that certain areas were considered undesirable for MPA designation, and/or were granted special exceptions in the implementation regulations for certain MPAs, solely based on existing discharges. We feel this highlights the need for heightened water quality protections statewide. Frankly, it should be considered an embarrassment and challenge to the State to do a better job enforcing the laws protecting our coast and ocean from point and non-point pollution. These problem areas can best be resolved by starting the implementation of integrated water management strategies in areas adjacent to the newly implemented MPAs.

We recommend the Strategic Plan include some language indicating a research and planning strategy to implement a full suite of integrated management tools in areas adjacent to MPAs as “pilot projects” to demonstrate the multiple benefits on integrated water management.

Also, the newly designated MPAs are not the only important nearshore marine environments deserving of heightened water quality protection. Our long established Areas of Special Biological Significance (ASBS) have been poorly enforced and continue to suffer degradation from unabated non-point polluted discharges. We encourage the OPC to include the goal of coordinating efforts to identify persistent violations of ASBSs, and encourage the use of integrated water management tools to bring our ASBSs into compliance.

Finally, it is important to understand that the placement of the MPAs was based on the best science available to ensure that these individual MPAs acted as a network of “source and sink” areas for the distribution of offspring between MPAs. Obviously, any marine life mortality to early life stages of marine life from entrainment in seawater intakes would undermine the stated “network benefits” that influenced the placement of the array of MPAs.

We therefore encourage language in this section on “Realizing the Benefits of MPAs”, as well as Section D, Issue 12 on “Desalination and Once Through Cooling”, that the importance of identifying the best site, design and technology for ocean desalination facilities, and strict adherence to minimizing the intake and mortality of marine life, is inherently connected to the future success of the newly designated network of MPAs.

MPA Enforcement: Surfrider has interacted with a few municipalities and we know additional guidance from the State will enhance the enforcement work of local municipalities and wardens. If feasible, Surfrider would suggest the OPC and the Department of Fish and Game conduct a symposium, or provide supplemental instruction, for local municipality staff, lifeguards, State Park Rangers, Fish and Game Wardens and other interested stakeholders to review regulations of MPAs, definitions of fish species, boundaries, and how to manage infractions. Local municipality staff and lifeguards would benefit from having a coordinated approach with the State to ensure enforcement is effective and standardized.

MPA Monitoring: Surfrider wants to acknowledge the significance of OPC's commitment to monitoring and funding entities that partake in biological monitoring. Adaptive management was written into the MLPA and will be a critical component to MPA success. Adaptive management is only valuable if there is appropriate baseline data and ongoing assessments of ecosystems. At the end of a 5-year assessment, it will be critical that the OPC play a major role in coordinating data collected by MPA Monitoring Enterprise, Reef Check, universities, etc. In addition to coordinating monitoring data collection efforts, we think it is important to add language in the Strategic Plan clearly committing the OPC to ensure that these monitoring efforts are based on proven monitoring protocols and that the data collected will be used to inform future adaptive management decisions.

MPA Education and Outreach: There is a great need to proactively educate local communities, ocean users, and the general public about new MPAs. In order for MPAs to be successful in the long run, they must be ingrained into the fabric of local communities. In addition, we believe that compliance requires public outreach to ensure ocean users understand and respect new regulations.

Surfrider Foundation is very pleased the OPC aims to support outreach coordination of MLPA partners. Given that the State has limited resources during this hard economic time, we encourage OPC to work cooperatively with appropriate local, state and federal agencies, tribal governments, private foundations, NGOs, educators, and other relevant entities to facilitate development and implementation of a coordinated public education strategy about MPAs.

We recognize the California Department of Fish and Game (DFG) has limited resources. But again, we strongly suggest that both OPC and DFG work with municipalities and communities in order to raise public awareness and ultimately build a universal sense of stewardship for the new MPAs.

SECTION D: COASTAL AND OCEAN IMPACTS FROM LAND

Surfrider agrees that there has been dramatic decrease in **point source** coastal water pollution through the construction of 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. 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, as well as contributing to "managed retreat" and removing critical infrastructure from threats of sea level rise.

We are unaware of any data documenting a decrease in pollution from **non-point sources** (dry weather urban runoff and stormwater). This remains a significant problem. Addressing these problems will require the implementation of a wide variety of source control, low impact development, and 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. The OPC can facilitate progress in this area by supporting the work of the State Water Resources Control and the Regional Water Quality Control Boards to strengthen regulations and enforce existing restrictions.

Further, Surfrider agrees that ongoing and future updates to the California Water Plan and the California Ocean Plan are appropriate avenues for the OPC to work to ensure that impacts to ocean and coastal resources from both point and non-point sources are adequately addressed.

Another area regarding ocean protection that the OPC could potentially assist in is the fragmented and under-funded beach water quality monitoring programs. These programs, implemented under AB 411 and the federal BEACH Act, have suffered from a severe cut in state funding in recent years and vary considerably from county to county in terms of the number of sample locations, the frequency of sampling, and the length of the sampling period. Recent legislation (SB 482) has attempted to address these problems by providing an increased, stable source of funding and meetings are scheduled in the near future to review county beach monitoring programs. The OPC could facilitate and fund a coordinated effort by the State Board and the County Health Departments to ensure that consistent programs are implemented and maintained.

Issue 9: Downstream Impacts

Objective 9.1

We are disappointed to see the deletion of specific attention to “Integrated Water Management” from your August “Draft Five Year Strategic Plan.” Integrated Water Management is an extremely difficult goal to achieve without the assistance and focused attention of the Ocean Protection Council in coordinating the efforts of multiple agencies with diverse and segmented legal authorities and mandates. In fact, the advancement of multi-benefit and holistic water management reform a “poster child” case for OPC’s mandate to coordinate the actions of multiple agencies to achieve the goals of restoring and protecting our coast and ocean.

We believe the language in Issue 9, Objective 9.1, marginally leaves open the opportunity to ensure Integrated Water Management is properly defined and fully implemented.

Comprehensive integrated water management should include:

- model LID ordinances for new development in every local jurisdiction,
- expanding on-going freshwater conservation programs by water supply agencies with incentives to include retrofitting existing landscapes with native vegetation (for micro-habitat benefits as well as reducing or

eliminating the use of fertilizers, herbicides and pesticides), and incentives to dramatically reduce polluted run-off through rainwater capture and infiltration design elements;

- the excess water that does runoff properties should also be diverted into bio-swales adjacent to streets, parking lots and other large impervious surfaces;
- remaining stormwater that is not infiltrated and/or partially treated through these natural systems noted above should be captured and released in a network of treatment wetlands before it reaches the ocean.

This multi-stage rainwater harvesting strategy mimics the ecosystem services that have been lost to urban development, loss of open space and historical wetlands, and outdated flood control strategies.

Further, we can no longer afford to discharge partially treated wastewater into coastal streams and the ocean. We desperately need to develop wastewater recycling and reclamation. And it is important to note that we can dramatically reduce the “embedded energy” in our water supply management by de-centralizing our wastewater treatment and recycling facilities. We need to capture wastewater in the watershed where it can be treated for specific re-use purposes, and located near-by the demand.

The current Draft Strategic Plan provides a limited overview of what benefits could result from thorough and comprehensive integrated water management implementation. And the current draft, as well as the first draft, fall short in identifying the multiple federal, state and local agencies that will all have to coordinate and cooperate to achieve the maximum benefits from integrated water management. The diversity and scope of agencies that need to be included in the integration of water resource management ranges from local planning departments and water supply agencies, to federal agencies including the Army Corps of Engineers and US EPA, as well as numerous state agencies besides the Department of Water Resources and the State Water Resources Control Board. The identification of these two agencies in the August draft of the Strategic Plan dramatically understated the scope of the cooperation that is necessary to achieve a paradigm shift in water management.

But just as importantly, the economic and environmental benefits should not be understated. These multi-benefit projects and reforms to current fragmented management include, but are not limited to:

- resolving otherwise intractable point and non-point source pollution,
- critical habitat restoration,
- 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 (much of the listed species are threatened because of the loss of aquatic habitat),
- and more.

In brief, Integrated Water Resources 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,

We look forward to working with the OPC to better define:

- the reforms needed to achieve the multiple benefits of integrated water resource management,
- what actions need to be taken by what agencies,
- what studies are still necessary to make recommendations that will conform to differing site-specific watershed characteristics,
- and how a set of recommendations and incentives might overcome institutionalized “fragmented governance” of water resource management.

We recognize that this effort will take a long time to come to full fruition. So we also look forward to working with the OPC to ensure broad public support for integrated water management by clearly identifying and defining, as well as “painting a picture”, of what the long-term benefits to coastal communities will be. We also look forward to working with OPC to draft a timeline for implementing immediate, interim and long-term projects, and discrete milestones for completing full integrated water management in the near future. Further, we look forward to recruiting academic institutions already working on pieces of this puzzle to coordinate and assist the State in documenting the tools in this complex reform effort, as well as the costs and beneficial returns on investment. Finally, we look forward to encouraging and organizing non-governmental organizations, environmental philanthropic foundations, and business interests to coordinate these efforts for all our mutual benefits.

In conclusion, we are disappointed with the limited and poorly defined commitment to prioritizing integrated water management in the latest draft of the Strategic Plan. We would have preferred to see “Issue 6: Integrated Water Policy” from the August 2011 draft of the Strategic Plan left in the current draft, and expanded with language summarizing the comments we have provided on this section above. Barring that, we would appreciate a response to these comments assuring us that the changes in the draft have not altered the OPC’s commitment to start tackling the difficult, but critical issue of Integrated Water Resources Management.

Issue 10: Marine Debris

Considering that land-based marine debris comprises up to 80% ⁴of all the trash in our oceans, we are encouraged by the fact that OPC is continuing to pursue the

⁴ http://www.opc.ca.gov/webmaster/ftp/pdf/opc_ocean_litter_final_strategy.pdf

important work of curbing this type of ocean pollution. Surfrider has long supported the work of OPC on marine debris --including your adoption of two resolutions, the completion of two scientific studies, and the development of a marine debris implementation strategy.

While strategy and data is important, direct action in curbing marine debris is imperative. Therefore Surfrider supports OPC's focus on directly reducing plastics and trash that enter the environment through support of source-reduction activities such as single-use bag bans and phasing out of expanded polystyrene foam take out ware.

The Surfrider Foundation has been diligently working on marine debris for several years through our Rise Above Plastics (RAP)⁵ program that was started by the San Diego Chapter and has now taken on worldwide significance. Our Rise Above Plastics Mission is to reduce the impacts of plastics in the marine environment by raising awareness about the dangers of plastic pollution and by advocating for a reduction of single-use plastics and the recycling of all plastics.

Surfrider strongly supports the OPC reconvening the Marine Debris Steering Committee to coordinate statewide efforts to reduce trash in the ocean and immediately begin working with agencies and stakeholders to execute the priority actions identified in the OPC's 2008 *Implementation Strategy to Reduce and Prevent Ocean Litter*. As mentioned before, there is a sense of urgency to implement the strategies that have already been identified.

Surfrider cannot overstate enough how important it is for the State to implement a statewide trash policy that holistically encompasses all sources of marine debris. Specifically, Surfrider would support a statewide trash policy that:

- Prohibits floatable, solid, suspended, and settleable materials in amounts that adversely affect beneficial uses of waters of the state;
- Creates a statewide numeric water quality objective of "zero trash." This would be consistent with the approach taken by the both the Los Angeles Regional Water Quality Control Board and the San Francisco Regional Water Quality Control Board with implementation of trash TMDL;
- Encourages trash prevention by using technical tools (remove trash from entering the waterways through screening and prevention processes);
- Actively pursues public outreach and education regarding litter.

In addition to adopting a thorough statewide trash policy, Surfrider strongly suggests the OPC encourage local plastic bag ordinances as a step towards that goal.

Surfrider has worked on numerous bans around the country and we recommend two options for ordinances.

⁵ See: <http://www.surfrider.org/programs/entry/rise-above-plastics>

1.) An ordinance to ban plastic bags and place a 5 to 25 cent fee on paper bags. This is the most effective way to drastically cut back on plastic bag usage.

2.) An ordinance to place 5 to 25 cent fee on all carryout bags (plastic, paper, etc). Both of these options are intended to encourage the use of “re-usable” grocery bags that can become standard practice over time.

The OPC should identify and encourage ordinances that have regulatory teeth and make it clear to decision-makers that resolutions or ordinances that are non-binding should be avoided. In terms of OPC’s goal to collaborate with a broad array of stakeholders to reduce packaging and other products that contribute to marine debris we strongly suggest OPC pursue extended producer responsibility efforts. Surfrider believes producers should be helping find solutions to marine debris and have the resources to contribute to creative solutions if they are compelled to do so or provided incentives to cooperate.

Issue 11: Sediment Management

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 Management 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. We strongly encourage the OPC to include language in the Strategic Plan for research and draft guidance to implement these suggestions in a suite of efforts to reform current sediment management.

SECTION E: EXISTING AND EMERGING OCEAN USES

Issue 12: Desalination and Once-Through Cooling

First, it is important for us to recognize and express our appreciation for the OPC’s engagement and action in passing a resolution on Once-Through Cooling (OTC). We believe that guidance was successful at not only jump-starting the State Water Resources Control Board’s (SWRCB) development of their Policy on Cooling Water Intakes that had stalled for several years. But the performance standards ultimately

adopted in the final Policy were undoubtedly influenced by the OPC's Resolution on OTC.

Nonetheless, ocean desalination proposals are already moving through the permitting process without similar guidance from either the OPC or 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). 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 re-introduce some 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 the site 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. Therefore, we encourage the OPC to consider and pass a Resolution as soon as possible that ensures the State Water Resources Control Board adopt a Policy on Ocean Desalination that is as protective, if not more protective of all marine life as their recently adopted Policy on Cooling Water Intakes. The Resolution should clearly prohibit the continued use of open ocean intakes that were just prohibited for use by power plants, as well as set standards for eliminating the withdrawal of seawater for "in-plant dilution" and ensure the best technologies for brine and other waste disposals minimize all impacts

to marine ecosystems. While future guidance and assistance by OPC outlined in Objectives 12.1 and 12.2 will also help guide both the SWRCB and DWR, we feel an OPC Resolution is necessary immediately to ensure that the proposed facilities nearing development are not allowed to undermine the benefits to marine ecosystems recently achieved through implementation of the Policy on Cooling Water Intakes.

Further, 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. Ocean desalination does not promote implementation of multi-benefit integrated water management. In fact, the foreseeable need to develop local and reliable freshwater supplies for human consumption can be a motivating force to begin the transformation to integrated water management. Turning to ocean desalination as a first resort to water supply alternatives will not only undermine this drive towards integrated water management, but the expense of developing and operating ocean desalination facilities will consume the financial resources necessary to incentivize numerous fragmented agencies to work together to achieve the goals of integrated water management.

While the current draft of the Strategic Plan includes information that substantiates our advocacy for integrated water management as the preferred approach to resolving the pressing need to reform our pending and foreseeable water supply crises, the Plan fails to identify the necessity to prioritize the State’s limited allocation of time and resources towards the promotion of the preferred alternative – multi-benefit integrated water management.

Therefore, we recommend language be inserted into the Strategic Plan that clearly articulates a policy that ensures the Department of Water Resources’ “Water Plan Update”, as well as wholesale and retail water agencies’ “Urban Water Management Plans”, prioritize investment in “green infrastructure” projects and recycled wastewater prior to planning or developing ocean desalination. Given the multiple ecosystem and economic benefits of integrated water management, as compared to the adverse impacts on marine ecosystems and excessive energy demands of ocean desalination – State policy should clearly define ocean desalination as an option of last resort and only permitted after the multi-benefit alternatives have been fully implemented.

As stated above, we look forward to working with the OPC, federal, State and local agencies, as well as other entities, to develop a cooperative work plan to identify the long-term vision of integrated water management, as well as the immediate, interim and longer-term investments of time and money to see this sustainable and preferable future come to fruition.

Issue 13: Marine Renewable Energy

The Surfrider Foundation supports Objective 13.1: Anticipate and address regulatory issues, policy development, and information needs associated with the development of marine renewable energy through coordination activities and other means. In recent years, the 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. We believe that the OPC's three proposed actions to achieve Objective 13.1 can help address both of these needs as renewable ocean energy development moves forward in California.

The first proposed action: Lead the development of statewide regulatory guidance for pilot and test hydrokinetic developers, is particularly appropriate given the nascent stage of the industry. Surfrider Foundation suggests that focusing on smaller pilot projects, rather than commercial scale projects, is a more prudent approach until we learn more about the potential of various technologies and their associated impacts to the environment. The second proposed action: Continue to implement the MOU between California and FERC, and facilitate other coordination strategies with the Bureau of Ocean Energy Management and other federal entities, is also much needed.

The MOU provides a valuable framework to help ensure that renewable ocean energy development in California complies with the state's laws and standards, and sufficiently addresses the perspectives of ocean stakeholders and coastal communities. Finally, we support the third proposed action: Improve access to information for marine renewable energy siting, planning, and regulatory processes. Improved access to information will assist governments agencies, NGOs, stakeholders, and the public in supporting ocean planning and project permitting to ensure potential impacts to the environment and existing uses are minimized to the full extent possible.

The Surfrider Foundation is interested in helping to support the Ocean Protection Council's efforts to foster responsible renewable ocean energy development in California. We are willing to participate in the California Marine Renewable Energy

Group and urge OPC to help develop a robust policy framework for the permitting and licensing of projects in state waters. We also encourage OPC to conduct spatial and economic data collection on non-consumptive recreational ocean use so that impacts to these uses (and related socioeconomic benefits) can be minimized—Surfrider is willing to assist with these efforts. Finally, we support participation of recreational users and members of the public in project planning and permitting processes and where possible, Surfrider can help facilitate this engagement.

CONCLUSION

Again, we generally agree with the goals and objectives outlined in the Strategic Plan. Surfrider Foundation believes you have chosen issues that are salient to our state and that need immediate action. 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 urges the OPC to seize the opportunity to exercise leadership that will truly help coordinate the actions of multiple agencies, and accomplish critical reforms of fragmented governance that will improve overall coastal and ocean management.

Considering that California's ocean economy employs more than 14 million people and contributes more than \$700 billion⁶ to the overall state economy, it is incumbent upon the OPC and other agencies to protect ocean resources not only for the sake of economic wellbeing, but to ensure future generations inherit a sustainable ocean.

Surfrider greatly appreciates your thoughtful consideration of our comments and we look forward to working with the OPC to bring our shared goal of protecting our coast and ocean to fruition.

Sincerely,



Stefanie Sekich-Quinn
Surfrider Foundation
California Policy Manager

⁶ National Ocean Economics Program Coastal Economy Market Data: www.oceaneconomics.org