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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

VIA ELECTRONIC MAIL: opc.comments@scc.ca.gov

Re: Comments on Ocean Protection Council “Revised Draft Strategic Plan”

Dear Secretary Laird and Council Members:

On behalf of Earth Law Center, I welcome the opportunity to submit these comments on the Ocean Protection Council’s (OPC) “Revised Draft Strategic Plan” (Strategic Plan). Earth Law Center is a non-profit organization that advances legal rights for ecosystems and species to exist, thrive and evolve.

The Strategic Plan provides a critical opportunity for the OPC to lead the nation in the adoption and implementation of science-based, holistic, ocean law and policy, at a time when the nation’s coast and oceans face increasingly grave threats. The actions that the OPC takes now will either set the state and the nation on a path to sustainability, or will delay needed action to prevent potentially irreversible damage to ecosystems, species and humans alike.

In brief, we ask that the OPC amend the draft Strategic Plan to:

- Articulate the OPC’s commitment and strategy to advance an evolution in ocean law and policy that parallels our evolution in scientific understanding about the coastal and marine environment and the impacts of our interactions with it;
- Describe the OPC’s commitment and strategy to recommend specific new legal and policy approaches to the area of “coastal and ocean impacts from land,” in particular to advance ecosystems’ and species’ rights to clean water and adequate flows; and
- Detail strategies to monitor and report on the health of ocean and coastal systems holistically, rather than in a piecemeal manner and/or tied solely to media-specific regulatory metrics, in order to better inform the next evolutions in law and policy needed to ensure the long-term viability of the ocean and coast.

We provide below further information and specific suggested language for inclusion in the draft Strategic Plan related to these three recommended areas of change. We urge the OPC to adopt these recommendations, particularly in light of the Strategic Plan’s mission to ensure “healthy, resilient and productive ocean and coastal ecosystems for the benefit of current and future generations.”

BACKGROUND

Despite achieving some notable successes, current environmental laws have been unable to prevent increasingly grave ecological challenges such as accelerating climate change,¹ depleted inland waterways,² disappearing species,³ and vanishing natural habitats.⁴ One key reason is that our overarching legal and governance systems – including those systems ostensibly granting “rights” to corporate actors – drive society away from ecological health far faster than can be controlled by our environmental laws. Such overarching legal and governance systems treat the natural world as property that can be exploited and degraded, rather than as an integral ecological partner with its own rights to exist and thrive. Because our environmental laws are premised on the acceptance of these overarching legal and governance systems, they fail to stem the ongoing tide of natural system degradation.

Understanding the genesis of our existing regulatory models helps elucidate alternative modes of action. Our current legal, governance and economic systems came of age during an explosive era of scientific advancement that began in the sixteenth century, an era that has provided undeniably valuable insights into the workings of the world that continues to this day. However, along with these advancements came the growing misperception that humans can and should “manage” nature successfully for human benefit. For example, at the turn of the 20th century, the first Chief of the United States Forest Service, Gifford Pinchot, firmly established the rapidly growing nation’s “conservation ethic” as “the art of producing from the forest whatever it can yield for the service of man.”⁵ Rather than self-management, we turned to “environmental management” as a solution to the dilemma of feeding our growing appetites within the limits of the natural world, as if the environment itself were at fault for not meeting our desires fully.

The assumption regarding humans’ superior relationship to a servile environment illustrated by Pinchot’s “conservation ethic” is now so ingrained that it is rarely even noticed, let alone challenged. Our laws focus on the rights and needs of people to flourish, but they pay relatively little attention to the same rights on the part of the inextricably intertwined natural world. They assume that the environment will be protected if humans take from it a little less, and

¹ See, e.g., collected documents at <http://www.opc.ca.gov/2010/12/climate-adaptation-and-sea-level-rise/>. See also Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.), “Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change” (Cambridge University Press, Cambridge, UK and New York, NY, USA) (2007); available at: http://www.ipcc.ch/publications_and_data/ar4/wg1/en/contents.html.

² See, e.g., Gleick, Peter H., Pacific Institute, “The World’s Water Volume 7: The Biennial Report on Freshwater Resources” (Island Press, Washington D.C.) (2012); see <http://www.worldwater.org/> for more information.

³ See, e.g., Tremblay-Boyer, Laura, Didier Gascuel, Reg Watson, Villy Christensen, and Daniel Pauly, “Modelling the effects of fishing on the biomass of the world’s oceans from 1950 to 2006,” *Marine Ecology Progress Series*, 442: 169–185 (Dec. 5, 2011) (90% decrease in marine predators since the 1950s); available at: http://www.int-res.com/articles/meps_oa/m442p169.pdf. See also Rockström, Johan *et al.*, “A safe operating space for humanity,” *Nature*, 461: 472-475 (Sept. 24, 2009); available at: <http://www.environment.arizona.edu/files/env/profiles/liverman/rockstrom-etc-liverman-2009-nature.pdf>.

⁴ See, e.g., “Biological Opinion and Conference Opinion on the Long-Term Operations of the Central Valley Project and State Water Project: Endangered Species Act Section 7 Consultation” (June 4, 2009), available at: <http://www.swr.noaa.gov/ocap.htm> (finding that operation of the Central Valley Water Project and State Water Project “is likely to destroy or adversely modify the designated critical habitats of” Chinook salmon, steelhead, and North American green sturgeon).

⁵ Pinchot, Gifford, *The Training of a Forester*, p. 13 (J.B. Lippincott Co., Philadelphia) (1914).

a little less quickly. But this simply slows, never stops, the downward slide – a trend that does not bode well for humans either.

The current “conservation ethic” continues to rest on an assumption of humans apart from, and attempting to control, an environment managed for its “resources.” This assumption can and must evolve to recognize our integrated partnership with surrounding ecosystems and species, a partnership that we continue to harm by our destruction of its component elements. A new, operative assumption of humans working with, rather than dominating, nature could serve as the basis for larger law and governance systems that *themselves* drive positive ecological and societal change – rather than rely on tangential environmental policies to attempt that task in vain. Necessary governance changes include not only such steps as reconsideration of corporate personhood,⁶ but also the establishment of legal rights for ecosystems and species to exist, thrive and evolve.

Similarly, our current economic systems, which circumscribe the natural world’s worth to the status of “resources” to be used for the benefit of humans, base measurement of positive economic growth on the increased taking and use of forests, waterways, minerals, species, and other elements of the environment.⁷ A transformation of our economic systems is correspondingly needed to both reward actions that slow such takings and to discourage actions that accelerate them.

INCORPORATE INTO THE OPC STRATEGIC PLAN A STRATEGY TO EVOLVE LAW AND POLICY THAT PARALLELS ADVANCEMENTS IN SCIENTIFIC UNDERSTANDING

The Newtonian, cause-and-effect science that grounds our governance systems enables the continued misperception that humans can effectively “manage” the natural world for its “resources” as if we were separate from, and above, a servile environment. Modern science, however, increasingly belies past assumptions about the linearity of how the world works and calls for a corresponding evolution in law and governance.

For example, ecological science – an infant discipline when Gifford Pinchot pronounced the nation’s conservation ethic – demonstrates the complex connectedness of natural systems and humans’ impacts on them.⁸ Similarly, modern disciplines such as systems theory and quantum mechanics further illustrate that our actions are connected and reverberate in ways that we are just beginning to comprehend. In light of such current advancements, it is increasingly evident that our media-specific, cause-and-effect regulatory system – which, again, is premised on the overarching assumption of domination over ecosystems and species – must similarly evolve to reflect both the lessons of modern science. Paraphrasing Leopold, we must behave based on the

⁶ See, e.g., Move to Amend, www.movetoamend.org, Community Environmental Legal Defense Fund, www.celdf.org, and Ultimate Civics, www.ultimatecivics.org.

⁷ See, e.g., Speth, Gus, “Towards a New Economy and a New Politics,” *Solutions*, 1 (5): 33-41 (May 2010); available at: <http://www.thesolutionsjournal.com/node/619>. See also more generally the New Economics Institute, <http://neweconomicsinstitute.org/>.

⁸ “The outstanding scientific discovery of the twentieth century is not television, or radio, but rather the complexity of the land organism.” Leopold, Aldo, “The Round River – A Parable,” *A Sand County Almanac, and Sketches Here and There* (1948).

fact that not only does each cog and wheel have its place and importance, but that we ourselves are also cogs and wheels, rather than the driver of the machine.

The Strategic Plan appropriately champions its ongoing work to promote scientific research and calls for incorporating up-to-date scientific findings into “management decisions.” (Strategic Plan, pp. 8-11.) What is missing, however, is a corresponding commitment to supporting a parallel evolution of the law itself⁹ to reflect the ongoing evolution in science; *i.e.*, as opposed to merely applying the science to the existing, flawed legal, governance and economic structures. In other words, the law too must evolve to reflect the science of humans’ closely integrated partnership with ecosystems and species, and move away from the misguided hubris of domination.

Legal rights to exist, thrive and evolve are an important element of this evolution in law and governance. Rights go hand-in-hand with responsibilities, and are the tools by which entities exercise their particular responsibilities. For example, by recognizing the right to the pursuit of happiness in our Constitution, we protect human freedoms necessary to exercise our responsibilities to ensure our own well-being, that of our family and friends, and that of our community and country at large. Similarly, by recognizing a river’s right to flow, we acknowledge its freedom to exercise its responsibilities to provide habitat, to support species that in turn maintain other ecosystems and species, to offer life-giving water for drinking, and to support human needs *that are consistent with* allowing the river to exercise these other responsibilities fully.

Just as it has been a national leader in championing cutting-edge ocean science, so too should the OPC embrace the role of championing cutting-edge law that reflects modern science. Simply pasting science onto existing regulatory structures misses the proverbial forest for the trees. The California Ocean Protection Act¹⁰ states that the OPC *shall* identify and recommend to the Legislature changes in state law and policy to effectuate COPA’s goals, and to make similar recommendations for needed changes in federal law and policy.¹¹ This core element of COPA is currently missing in the Strategic Plan, is needed to meet COPA’s mission, and is central to advancing OPC’s “strategic approaches” of “lead[ing] the development and refinement of policies” and of “spurring innovation” by “develop[ing] new tools or approaches” that improve ecosystem health. (Strategic Plan, p. 6.)

Accordingly, we request that an Issue 4¹² be added the OPC’s Strategic Plan at the bottom of page 11, under “Science-Based Decision Making,” as follows:

⁹ Public Resources Code § 35615(a)(6) and § 35615(b) (OPC mandate to recommend necessary changes in state and federal law).

¹⁰ *Id.* §§ 35500 *et seq.*

¹¹ *Id.* § 35615(a)(6) and § 35615(b).

¹² If this new Issue 4 is added, the numbering for each of the other Issue areas and corresponding Objectives would correspondingly shift forward.

A. SCIENCE-BASED DECISION-MAKING

...

Issue 4 [NEW]. Promoting an Evolution of Law and Governance to Reflect Science

Our coast and ocean are currently protected by an environmental regulatory system that evolved in an era of scientific understanding predating the ecological science advancements of the last forty years. The system's effectiveness is limited by its differentiated focus on the separate elements of ecosystems – mammals, fish, water quality, freshwater flows, habitats, etc. – rather than on the overarching integration of the systems. Moreover, our laws are constrained by their acceptance of the core underlying assumption that the environment can and should be manipulated to maximize human benefit, even up to and over the edge of environmental destruction (*e.g.*, fish catches are allowed up to “maximum sustainable yields,” pollution is permitted until there is a “reasonable potential” to violate water quality standards, coastal land developments are justified even where there is a “significant” environmental impact, etc.). Science has increasingly shown such assumptions to be false, with evidence provided by growing depletion of fish populations, contamination of waterways, and disappearance of coastal habitats.

Modern ecological science, systems theory, and other scientific advances now support alternative strategies and underlying premises that acknowledge the holistic environment as an invaluable partner in our collective survival and well-being, rather than as a servant to be dominated with its basic survival needs a shifting afterthought.

Our laws should evolve to reflect modern science. Legal rights that protect the health of ecosystems and species must be developed to appropriately protect the integrity of our collective partnerships and ensure our mutual well-being. For example, if water rights are the method by which waterway flows are to be determined, then waterways themselves must also hold rights to the water flows they need to be healthy and to support species that are important to the overall resiliency of the coast and ocean.

The California Ocean Protection Act¹³ states that the OPC “shall” identify and recommend to the Legislature changes in state law and policy to effectuate COPA’s goals, and to make similar recommendations for needed changes in federal law and policy.¹⁴ The OPC’s strategic approach to advancing its ocean governance vision supports this mandate by calling for “innovative ways to integrate scientific expertise into its decisions, priorities, and opportunities.” (Strategic Plan, p. 6.) Consistent with its mandates and vision, as well as its historic and planned leadership on evolving marine and coastal science, the OPC similarly incorporates into this Strategic Plan actions that will lead the nation in evolving ocean and coastal law in a manner reflective of modern science.

¹³ Public Resources Code §§ 35500 *et seq.*

¹⁴ *Id.* § 35615(a)(6) and § 35615(b).

Objective 4.1¹⁵ [NEW]: Develop, recommend and promote specific changes in law and governance that reflect modern scientific understanding of the relationships among humans and coastal and marine ecosystems.

Proposed Actions

- Work with partners in the Legislature (including but not limited to the Senate Office of Research, Office of Legislative Counsel, and relevant committees), administrative agencies, and OST to examine existing environmental and other laws and make appropriate recommendations for needed changes in state and federal law and policy to ensure ocean and coastal ecosystem health consistent with modern science, including but not limited to changes in law to reflect the rights of coastal and marine ecosystems and species to exist, thrive and evolve.
- Work with partners in the Legislature, administrative agencies, and OST to make appropriate law and policy recommendations that describe the regulatory mechanisms for implementing legal rights for ecosystems and species. Examples may include methodologies for holding, exercising, and enforcing the rights, and procedures for using science to assess what the environment needs to exercise its rights and responsibilities.
- Work with partners in the Legislature, administrative agencies, and OST to make appropriate law and policy recommendations regarding the phase-out of environmentally harmful market subsidies that block achievement of healthy marine and coastal and environments, and the associated development of alternative incentives that reward environmentally restorative and protective actions.

INCORPORATE INTO THE OPC STRATEGIC PLAN A STRATEGY TO EVOLVE LAW AND POLICY IN THE AREA OF “COASTAL AND OCEAN IMPACTS FROM LAND”

Articulation in the Strategic Plan of the OPC’s commitment to an evolution in law and governance that parallels the evolution in modern science will help advance necessary recommendations for needed changes in law and policy. Focusing this effort on a particular, substantive policy area will help demonstrate how this evolution would work in practice.

While a number of policy areas identified in the Strategic Plan could lend themselves to this task, we propose a focus on applying the concept of legal rights for ecosystems and species to the Strategic Plan’s “Coastal and Ocean Impacts from Land” issue area. Numerous scientific studies demonstrate that land-based actions that impact waterway flow, even as far inland as California’s Central Valley, can significantly affect the health of coastal and ocean ecosystems.

¹⁵ As an aside, the numbering system for the Objectives in the Strategic Plan should be corrected to be consistent throughout the document. For example, Objectives are numbered 1.1 – 1.3 in the Science section (Section A.), with the last numeral reflecting the Issue area. By contrast, the Objectives are numbered 4.1 – 5.1 in the following Climate section (Section B.), with the first numeral reflecting the number of the Issue area and the second numeral reflecting the number of the Objective. The latter system allows for numbering of more than one Objective per Issue area; the former does not. Accordingly, we recommend that the Strategic Plan follow the numbering system in the Climate section, which would label the first Objective of Issue 4 as “Objective 4.1.”

For example, NOAA’s National Marine Fisheries Service found in 2009 that long-term operation of the Central Valley Water Project and State Water Project “are likely to jeopardize the continued existence” of federally listed endangered Sacramento River winter-run Chinook salmon, threatened Central Valley spring-run Chinook salmon, threatened Central Valley steelhead, threatened Southern Distinct Population Segment (DPS) of North American green sturgeon, and even Southern resident killer whales. NMFS further concluded that the operation of the Central Valley Water Project and State Water Project “is likely to destroy or adversely modify the designated critical habitats of” these Chinook salmon and steelhead species, as well as proposed critical habitat for the North American green sturgeon.¹⁶ Each of these marine and anadromous species has an interest under the Endangered Species Act in avoiding extinction and ensuring minimum essential habitat. *In addition*, each of these species has an inherent right to exist, thrive, and evolve – rights that the OPC should protect through clear, decisive implementation of its mandate to identify and recommend needed changes in law.

The Strategic Plan states that “[t]he unique role for the Ocean Protection Council will be to continue to advance effective management to reduce the impacts of land based activities on the ocean.” (Strategic Plan, p. 19.) The Plan then identifies water pollution, marine debris and sediment management as the priority land-based threats for purposes of focused OPC coordination, information sharing and “development of policy recommendations.” (Strategic Plan, p. 20.) Two observations arise in light of this list and the need to protect ecosystem and species rights. First, from a substantive perspective, water pollution and sediment management are important – but without water, species and habitats cannot exist or thrive. Land-based actions to construct dams and other flow obstructions, to otherwise divert water, and to use water in unreasonable and wasteful ways that impact the health of marine and anadromous species, among other actions, all significantly impact the health of ocean and coastal ecosystems and their inhabitants. “Water flows” accordingly should also be a focus of this portion of the Strategic Plan, in addition to water pollution, marine debris and sediment management.

Second, from a process perspective, the Strategic Plan fails to address implementation of the OPC’s mandate to identify and recommend to the Legislature changes in state law and policy to effectuate COPA’s goals, and to make similar recommendations for needed changes in federal law and policy.¹⁷ The proposed actions to conduct workshops, and to suggest improvements to other agencies’ policies, fall short of meeting this mandate.¹⁸ Given the dire threats to the continued existence of key anadromous and marine species and habitats, the OPC can and must go further. We urge the OPC to make affirmative recommendations for necessary changes in the *law* that advance the rights of species and ecosystems, and that thereby ensure “healthy, resilient and productive ocean and coastal ecosystems for the benefit of current and future generations.”¹⁹ (Strategic Plan, p. 3.)

¹⁶ Letter from Rodney McInnis, NOAA-NMFS, to Donald Glaser, U.S. Bureau of Reclamation, Transmitting “Biological Opinion and Conference Opinion on the Long-Term Operations of the Central Valley Project and State Water Project: Endangered Species Act Section 7 Consultation” (June 4, 2009); available at: <http://www.swr.noaa.gov/ocap.htm>.

¹⁷ Public Resources Code § 35615(a)(6) and § 35615(b).

¹⁸ See Strategic Plan, p. 21, Objective 9.1 (limiting the OPC’s stated role to integrating ocean and coastal considerations into existing water policies such as the DWR “California Water Plan” and SWRCB “Ocean Plan”).

¹⁹ The OPC notes that there are in fact sufficient funds to “help identify targeted studies or policy recommendations to ensure that protection of the ocean is integrated into the state’s approach to water management.” Strategic Plan, p. 20.

There may be some hesitancy to take the step of recommending changes in water law in light of the October 2010 White Paper, “Towards Improving the Ocean Protection Council,” which cautioned against the OPC “standing alone” and failing to “be responsive to” agency “constraints.”²⁰ However, pushing the envelope on ocean and coastal law is one of the main reasons that the OPC was created. The OPC must lead the state toward meeting our collective ocean and coastal protection goals – particularly where those goals are impeded by ineffective laws and/or policies. Without a focus on leading state agencies to achieve greater ecosystem protection, the OPC becomes merely a vessel for coordinated science, allocation of potential bond funding, and ocean-themed comments on other agencies’ work. Certainly these are helpful roles, but they do not in any sense create the desired ocean *leadership* in the style of the recommendations of the Pew Oceans Commission and U.S. Commission on Ocean Policy reports, which provided the genesis for COPA. Embracing this leadership role should be one of the overarching themes of the Strategic Plan, and is essential to effective implementation of efforts to address coastal and ocean impacts from land. Indeed, even the White Paper concluded that the structure and mandate of the OPC means that it “can be more visionary in its approach to policy issues.”²¹ The OPC should accept and act on this important role through actions visionary in both substance and process.

Accordingly, we request that the following amendments be made to Objective 9.1, with the above information added as background material as needed (particularly with respect to flows):

Objective 9.1: Ensure that California’s water management ~~minimizes system~~ advances the health of downstream ~~harm to~~ ocean and coastal ecosystems and species and protects their right to exist, thrive and evolve. ~~resources.~~

Proposed Actions

- **In coordination with Legislative partners, the State Water Board, DWR, Department of Fish and Game, and others, identify and recommend changes in state and federal water law and policy to create a water management regime that protects the rights of ocean and coastal ecosystems and species to exist, thrive and evolve. Special consideration should be given to developing recommendations for necessary changes in state and federal law to grant**

²⁰ Available at: http://www.opc.ca.gov/webmaster/ftp/pdf/docs/OPC_Eval_Final.pdf. For example, the White Paper characterizes as a “risk” those situations where the OPC is “standing alone” on a policy position, effectively discouraging the OPC from taking certain positions solely because they are different from the status quo. White Paper, p. 3.4. We would argue that it is precisely the OPC’s job to be open to taking such positions. Further, the White Paper adds that the OPC should “[u]nderstand, and be responsive to, agency needs, limitations, and constraints.” *Id.*, p. 3.10. The purpose of COPA is not to make regulatory agencies’ work easy. The purpose of COPA is to protect and enhance the health of ocean ecosystems. In some, if not many, cases, implementation of COPA may require changes in laws and agency operations that will be periodically difficult to accomplish in the short-term. To assert its leadership role effectively, though, the OPC must sometimes take such positions, regardless of whether they are perceived as making oversight agencies’ work easier at the current time. Indeed, the White Paper notes correctly that the “hats” that the OPC “can (and should) wear” include “bully pulpit,” which implies taking a stand that not every entity may be happy with. *Id.*, p. 3.15. In fact, this “bully pulpit” role has prompted some of the OPC’s greatest successes to date, including its work on once-through cooling. The Strategic Plan should embrace the OPC’s leadership role and not shy away from necessary recommendations and actions solely because they may change the status quo or cause short-term agency discomfort.

²¹ *Id.*

water rights to rivers and other waterways, and to incorporate water flows into water quality laws, regulations, and permit systems, with citizen oversight to further advance stewardship.

- In coordination with Legislative partners, the State Water Board, DWR, Department of Fish and Game, and others, develop law and policy recommendations that describe the regulatory mechanisms for implementing water rights for waterways and the incorporation of flows into water quality laws, regulations, and permit systems, with a focus on protecting downstream marine and coastal ecosystems. Examples of such regulatory mechanisms may include methodologies for holding, exercising, and enforcing the water rights and permit conditions, and procedures for using science to assess what the waterways need to exercise their rights and responsibilities.
- Work with appropriate agencies to ensure that impacts on ocean and coastal resources are adequately addressed and integrated in the state’s water management policies and plans. Important near-term opportunities include the 2013 update to the *California Water Plan* spearheaded by the Department of Water Resources and the ongoing revision to the *California Ocean Plan* led by the State Water Resources Control Board.
- Conduct workshops or fund studies to advance management, improve understanding, and identify opportunities to improve policies to reduce land-based impacts to the ocean related to nutrient pollution, HABs, urban runoff, altered flows, or other issues.
- Support efforts to improve understanding of or reduce the impacts of water pollution on MPAs and other critical ocean resources, including through recommendations regarding implementation of controls on pollution into overlapping Areas of Special Biological Significance.

DETAIL ADDITIONAL ACTIONS TO MONITOR AND REPORT ON THE HEALTH OF OCEAN AND COASTAL SYSTEMS HOLISTICALLY

To implement its mission to ensure “healthy, resilient, and productive ocean and coastal ecosystems for the benefit of current and future generations,” the OPC should prioritize development of a foundational and evolving scientific understanding of the overall, holistic health of coastal and ocean ecosystems. Monitoring and assessment programs largely tend to focus on media-specific elements of ecosystem health. In order to make and evolve recommendations regarding law and policy that best protect ecosystems, systemic assessments of environmental health need to be conducted and disseminated.

Information on chemical parameters, toxicity, biological objectives, flows, habitat, species, land and marine uses, and other parameters need to be compiled and analyzed in an integrated fashion in order to assess and provide regular updates on overall ecosystem health. Consideration of cumulative and synergistic effects also must be incorporated into this effort to obtain an accurate estimate of system health as a whole. Finally, consideration needs to be given to how marine, coastal, estuarine, and inland systems are connected and impact each other, in order to make the most appropriate recommendations on actions needed to protect environmental health.

Accordingly, we request that the following, new Objective be added to Issue 3, with the above information added as background material as needed:

A. SCIENCE-BASED DECISION-MAKING

...

Issue 3. Developing Strategies – and Building Institutional Capacity – to Incorporate Scientific Information into Management Decisions

...

Objective 3.2²² [NEW]: Advance integrated monitoring and data reporting that presents a holistic assessment of overall ocean and coastal ecosystem health.

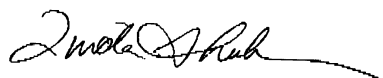
Proposed Actions

- In partnership with OST, U.S. EPA’s Healthy Watersheds Initiative,²³ the California Water Quality Monitoring Council, the MPA Monitoring Enterprise, and others, work toward development of integrated indicators that identify the overall health of coastal and marine ecosystems, including consideration of cumulative and synergistic impacts. Missing but needed data should be identified and a process for obtaining such missing data recommended. Application to specific ecosystems on a pilot basis should be pursued for completion before the end of the current Strategic Planning process.
- Advance the development of an analytical process to integrate and analyze data to create a holistic definition of “healthy” coastal and marine ecosystems, as well as a process to apply this definition to the assessment of coastal and marine ecosystems.
- Convene an inter-organizational ocean ecosystem workgroup to develop an integrated ocean internet portal as one of the theme-based portals under the *My Water Quality* site at <http://www.waterboards.ca.gov/mywaterquality>.²⁴

* * *

Thank you for the opportunity to submit these comments. If you have any questions, please do not hesitate to contact me. I look forward to working with the OPC to ensure the long-term health and resiliency of California’s coast and ocean.

Sincerely,



Linda Sheehan, Executive Director
lsheehan@earthlaw.org

²² As noted above, the numbering system for the Objectives in the Strategic Plan should be corrected to be consistent throughout the document. If the Plan follows the numbering system in the Climate section, which we recommend, then the second Objective in Issue 3 should be labeled “Objective 3.2.”

²³ http://water.epa.gov/polwaste/nps/watershed/hwi_action.cfm.

²⁴ See Letter from Jonathan Bishop and Dale Hoffman-Floerke, California Water Quality Monitoring Council, to John Laird, Ocean Protection Council, “OPC Draft Strategic Action Plan – Need for Coordination with the California Water Quality Monitoring Council” (Sept. 12, 2011), available at: http://www.opc.ca.gov/webmaster/ftp/pdf/public_comment/20110912_CAWQMC.pdf.