



PO Box 3156, Fremont, CA 94539
(510) 770 9764 www.cacoastkeeper.org

Humboldt
Baykeeper

July 2, 2011

Inland Empire
Waterkeeper

Ms. Nancy Sutley, Dr. John Holdren, and Members
National Ocean Council

Klamath
Riverkeeper

c/o Council on Environmental Quality
722 Jackson Place, NW
Washington, DC 20503

Monterey
Coastkeeper

Comments submitted electronically to WhiteHouse.gov/administration/eop/oceans/comment

Orange County
Coastkeeper

Re: National Ocean Council Strategic Action Plan for Water Quality (Objective 7)

Russian
Riverkeeper

Dear Chairs Sutley and Holdren and National Ocean Council Members:

San Diego
Coastkeeper

California Coastkeeper Alliance (CCKA) represents 12 Waterkeeper groups spanning the coast from the Oregon border to San Diego. The Alliance and its member Waterkeepers work daily to protect and enhance clean, abundant water flows throughout the state. On behalf of the Alliance, I am pleased to submit these comments on the “National Ocean Council Strategic Action Plan Outline for Objective 7: Water Quality and Sustainable Practices on Land” (SAP Outline).

San Francisco
Baykeeper

San Luis Obispo
Coastkeeper

Santa Barbara
Channelkeeper

The stated purpose of the SAP Outline is to “enhance water quality in the ocean, along our coasts, and in the Great Lakes by promoting and implementing sustainable practices on land.” In order to achieve this goal, the SAP Outline must identify more measurable, near-term actions, rather than “planning to plan.”

Santa Monica
Baykeeper

Ventura
Coastkeeper

A recent International Programme on the State of the Ocean (IPSO) report found that “[e]cosystem collapse is occurring as a result of ...[stressors including] chemical pollutants, agriculture runoff, [and] sediment loads,” as well as “nutrient run-off,” “pathogens,” “endocrine-disrupting chemicals,” and “increased uptake of plastics by fauna.”¹ Now is the time for immediate action and implementation. As described below, the SAP Outline should include legal changes, new research and funding increases in the areas of urban stormwater runoff, agricultural runoff, trash/marine debris, sanitary sewer overflows (SSOs), and beach monitoring.

¹ Rodgers, A.D. & Laffoley, D.d’A. International Earth System expert workshop on ocean stresses and impacts: Summary Report, 6-7 (2011).

I. THE SAP OUTLINE SHOULD INCLUDE ACTIONS THAT IMPLEMENT AND REVISE REGULATIONS, CODES, AND BEST MANAGEMENT PRACTICES TO ENSURE MEASUREABLE, REDUCTIONS IN URBAN RUNOFF, AGRICULTURAL RUNOFF, SANITARY SEWER OVERFLOWS, AND PLASTIC POLLUTION.

Polluted runoff (both urban stormwater and non-stormwater runoff such as agricultural runoff) is the most significant and widespread source of contamination of coastal waters. The Commission on Ocean Policy (COP) found that “[n]inety percent of impaired water bodies do not meet water quality standards at least in part because of nonpoint source pollution.”² Additionally, “millions of dollars are spent on treating the symptoms of stormwater pollution but much less is spent on efforts to control its causes.”³ The COP has found that “substantial enhancement of coastal water quality will require significant reductions in nonpoint source pollution.”⁴ The SAP Outline should include concrete, near-term actions that address these threats to coastal waters.

A. Update local codes and ordinances to promote LID projects.

Action Two of the SAP Outline calls for reducing “urban sources of excessive nutrients and sediments.”⁵ The Action clarifies that the desired outcome is to increase “adoption, through coordinated Federal and regional partner efforts, of low-impact development, green infrastructure, smart growth strategies, and other innovations.”⁶ While low impact development (LID) and smart growth strategies are pivotal in reducing stormwater runoff, simply coordinating efforts does not provide any *near-term measurable goals*. Action Two, Milestone Four should be revised to outline a process that would ensure that state governments update their codes and ordinances to enhance the use of LID to reduce pollution, increase water supplies, reduce flooding risks, and ensure stormwater permit compliance. For example, states that accept funding for model projects should be required to make associated regulatory updates uncovered by the projects’ results.

B. Market-based trading is not an effective tool against agricultural runoff.

Action One, Milestone Four recommends that federal and regional partners “[e]xplore ... **incentive-based ecosystem market programs** for nutrient and sediment reduction, and implement pilot projects”⁷ and “[e]ngage communities in developing innovative market-based mechanisms to provide cost-effective nutrient reduction strategies.”⁸ While we support the Council’s focus on agricultural runoff, we respectfully oppose market-based trading in theory and in practice. Incentive-based market programs are at odds with the spirit and purpose of the Clean Water Act (CWA), which is to eliminate pollutants from watersheds. A cap-and-trade approach that acknowledges some “acceptable” level of pollution is incompatible with that goal. From a practical perspective, non-point source monitoring does not exist, making it impossible and unwise to allocate pollution credits.

² U.S. Commission on Ocean Policy, *An Ocean Blueprint for the 21st Century: Final Report*, p. 213, available at http://oceancommission.gov/documents/full_color_rpt/14_chapter14.pdf (COP Report).

³ *Id.* at 217.

⁴ *Id.* at 204.

⁵ National Ocean Council, *Water Quality and Sustainable Practices on Land, Strategic Action Plan, Full Content Outline*, 3 (June 2011) (hereinafter “SAP Outline”).

⁶ *Id.*

⁷ *Id.* at 2.

⁸ *Id.* at 4.

Instead, the Council should direct federal agencies to establish regulatory programs to reduce nonpoint sources of pollution. The COP found that “[i]mprovements to the [nonpoint] programs should . . . require *enforceable best management practices* and other management measures throughout the United States . . .”⁹ and recommended that “[t]o ensure protection of coastal resources nationwide, Congress should provide authority under the Clean Water Act and other applicable laws for federal agencies to establish enforceable management measures for nonpoint sources of pollution”¹⁰ The Council should work with federal agencies to assign discharge limits and mandate enforceable best management practices (BMPs).

C. Best management practices.

A “primary objective” of the SAP Outline is to address opportunities for “[b]est management practices, use of conservation programs, and other approaches for controlling the most significant land- and ocean-based sources” of pollutants.¹¹ Supporting and implementing BMPs is an important tool to improve water quality. Action One, Outcome One utilizes this tool by focusing on BMPs to improve nutrient and sediment management in agriculture.¹² However, the SAP Outline contains weak language on this point. Action Five, Milestone 5 only *reviews* “existing best management and sustainable land practices to *highlight* successful remediation strategies.”¹³ The SAP Outline needs to go further than simply reviewing BMPs and highlighting success stories.

California’s waterbodies are severely polluted, largely from non-point source runoff such as agriculture. California surface water monitoring data collected on agriculture-related polluted runoff discharges revealed that toxicity to aquatic life was present at 63% of the sites monitored for toxicity, with over half toxic to more than one species.¹⁴ Additionally, pesticide water quality standards were exceeded in over half of the sites, many for multiple pesticides and human health standards for bacteria were violated at 87% of monitored sites.¹⁵ In order to effectively control non-point source pollution, the Council must incorporate stronger language on implementing BMPs into the SAP Outline. The SAP Outline should support the COP’s call for “enforceable best management practices,” both in state law and in the CWA for *all* sources of polluted runoff, and adopt specific tasks to implement the COP Report in each coastal state.¹⁶ Additionally, the SAP Outline should ensure the implementation of enforceable BMPs on all sources of polluted runoff – including irrigated agriculture – nationwide.

D. NPDES permits should contain a zero trash discharge.

One theme of the SAP Outline is to “[r]educe trash and marine debris in ocean, coastal, and Great Lakes waters to minimize impacts on natural and human environments.”¹⁷ Action 4, Milestone 3 aims to “[i]dentify the types of marine debris producing significant negative effects on the marine environment, and quantify these impacts to focus targeted prevention, removal, and mitigation efforts.”¹⁸ The SAP

⁹ COP Report at 218 (emphasis added).

¹⁰ *Id.* at 220 (emphasis added).

¹¹ SAP Outline, at 1.

¹² *Id.* at 2.

¹³ *Id.* at 8.

¹⁴ Central Valley Regional Water Quality Control Board, “2007 Review of Monitoring Data: Irrigated Lands Conditional Waiver Program” (13 July 2007), available at http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_land/monitoring/index.shtml (covering monitoring conducted May 2004 - Oct. 2006).

¹⁵ *Id.*

¹⁶ COP Report at 218 (emphasis added).

¹⁷ SAP Outline, at 1.

¹⁸ *Id.*

Outline should also call on the U.S. EPA to create a “Zero Trash Discharge” objective and compliance strategy to be incorporated into stormwater NPDES permits. This zero discharge compliance strategy should require full capture systems, which should be defined as any device or series of devices that traps all particles retained by a 2 mm mesh screen and has a design treatment capacity of not less than the peak flow rate (Q) resulting from a one-year, one-hour, storm in the sub-drainage area.

E. Regulate sanitary sewer overflows with Clean Water Act permits.

CCKA supports Council action to “[i]mprove use of and expand existing regulatory tools (e.g., Total Maximum Daily Loads (TMDLs), Combined Sewer Overflow (CSO) controls, waste and recycling management, stormwater management, Superfund) to reduce land-based sources of marine debris and trash.”¹⁹ However, the Council should provide further detail in the SAP Outline regarding the regulation of SSOs. The Council should support enhanced federal funding for upgrades to state’s coastal sewage treatment plants and collection systems, with a focus on retrofitting aging and overcapacity bay- and ocean-side systems and those systems that may be impacted by sea level rise. The Council should also aim to fill in gaps on research related to the impacts of septic systems on coastal waters, and work with states to apply that information to the development and adoption of regulations for septic systems. Finally, the Council should seek and apply funding to control beach contamination from coastal septic systems where its research indicates that such projects are a priority.

Whenever a sewage system operator spills raw sewage from sewer lines, manholes, pump stations or other sewage infrastructure into a waterway, it has discharged pollution from a point source into a water United States within the meaning of the CWA.²⁰ CWA regulations provide that “[a]ny person who discharges pollutants ... and does not have an effective permit . . . must submit a complete application” for an NPDES permit.²¹ Under this regulation, all Public Owned Treatment Works (POTWs) have a mandatory duty to apply for and obtain an NPDES permit regulating the discharge of pollutants to waters of the United States, including but not limited to SSOs from their collection systems. In order to meet the obligations imposed by the CWA and EPA regulations, the Council should outline a process for sewage collection system operators that discharge raw sewage to apply for and obtain NPDES permits.

II. THE SAP OUTLINE SHOULD FACILITATE THE COLLECTION OF NECESSARY INFORMATION TO EMPLOY AN INTEGRATED APPROACH TO NON-POINT SOURCE POLLUTION MANAGEMENT.

A. Low- energy, localized water.

If our water sources are not sustainable from an energy and climate change perspective, they will increasingly harm, rather than benefit, the ocean environment. The SAP Outline on “Water Quality and Sustainable Practices on Land”²² does not include actions that create low-energy, localized water supplies.

The Council should capitalize on the energy and environmental benefits of increasing stormwater capture and storage through low-impact development, by ensuring that the SAP Outline discourages energy-intensive and environmentally destructive water sources such as ocean desalination. In an August

¹⁹ SAP Outline, at 6.

²⁰ See 33 U.S.C. § 1362(14).

²¹ 40 C.F.R. section 122.21(a)

²² SAP Outline, at 1 (emphasis added).

2008 report,²³ the Los Angeles County Economic Development Corporation (LAEDC) ranked conservation and “local stormwater capture” as the area’s most cost-effective, energy efficient, relatively immediate water sources. By contrast, ocean desalination using current technology, which devastates sensitive near-shore ecosystems, ranked *lowest* on the list of water supply strategies in terms of greenhouse gas emission impacts.²⁴ The Scoping Plan for California’s landmark “AB 32” greenhouse gas emission reduction law promotes stormwater capture/reuse, conservation and recycling as energy-efficient alternatives that can create millions of acre-feet of “new,” local water supplies.

The SAP Outline should provide for the development of a thorough report on the coastal water-energy carbon nexus, including ocean desalination, with follow-up recommendations of tasks that will simultaneously: (a) reduce polluted runoff, (b) reduce demands on water supply, and (c) mitigate climate change by encouraging low-energy (and discouraging high-energy) sources of fresh water.

B. Impervious surfaces.

There is no Milestone in Action Two that identifies an action for addressing impervious surfaces. The SAP Outline should add a Milestone to conduct a federal survey of coastal land use and make recommendations as to how policies and programs, such as the U.S. Fish and Wildlife Service Coastal Program and National Coastal Wetlands Conservation Grant Program can be used to facilitate a measureable increase in acres of wetlands and coastal habitats restored and protected, *and* a measureable decrease in the amount of impervious surface area through conversion or retrofit.

C. Scientific research on synergistic effects of pesticides and other pollutants.

Since the 2004 release of the COP Report, significant new scientific research has been unveiled demonstrating that polluted runoff-caused contamination harms and kills fish even at low *and legal* concentrations. Most recently, a study by NOAA and Washington State University found that five of the most common pesticides used in California and the Pacific Northwest – diazinon, malathion, chlorpyrifos, carbaryl and carbofuran – act in “deadly synergy” by suppressing an enzyme that affects the nervous system of salmon.²⁵ Moreover, scientists noticed effects at lower pesticide levels when chemicals were applied in combinations. The scientists concluded that “[s]ingle-chemical risk assessments are likely to underestimate the impacts of these insecticides on salmon in river systems where mixtures occur.” This means that even if our existing water quality laws are implemented fully, they will fail to protect fish, because the standards on which they are based are too low.

Additional detail is needed in order to ensure the implementation of Action One, Milestone Three to “[d]evelop a focused research strategy to strengthen science and management tools to support water quality improvement decision-making.”²⁶ The SAP Outline should direct U.S. EPA and U.S. Fish and Wildlife Service to compile and augment scientific research on synergistic impacts of pesticides and other

²³ LAEDC, *Where Will We Get the Water? Assessing Southern California’s Future Water Strategies* (rev’d Aug. 14, 2008); available at http://www.laedc.org/sclc/studies/SCLC_SoCalWaterStrategies.pdf.

²⁴ Though these comments do not specifically address the Climate Change section, we urge the Governors to include in the Climate Change Work Plan a specific process for discouraging ocean desalination as a water supply source, at a minimum until all other conservation, stormwater capture, recycling and other energy-efficient and sustainable water sources have been exhausted.

²⁵ Laetz, Cathy, *et al.*, “The Synergistic Toxicity of Pesticide Mixtures: Implications for Risk Assessment and the Conservation of Endangered Pacific Salmon,” *Environmental Health Perspectives*, Vol, 117, No. 3 (March 2009), available at http://www.eenews.net/public/25/9960/features/documents/2009/03/03/document_gw_01.pdf. See also Goodman, Sara, “Mix of common farm pesticides deadly to salmon – study,” *New York Times* (March 3, 2009).

²⁶ SAP Outline, at 2.

key pollutants on coastal habitats, fish and wildlife (particularly salmon). Once agencies have collected and analyzed the scientific information, they should make recommendations for new standards as needed.

III. THE SAP OUTLINE SHOULD IDENTIFY ADEQUATE FUNDING TO PROMOTE BMPs IN STORMWATER MANAGEMENT, LID, AND STORMWATER CAPTURE AND REUSE.

A. Identification of LID funding.

U.S. EPA found that using LID methods, rather than traditional stormwater management controls, results in cost savings of between 15% and 80%. Despite 39 federal funding sources for watershed protection along coastal waters, there is no single funding source dedicated to the implementation of LID.²⁷ Thus, despite the number of resources, tools, and manuals that EPA has created and disseminated on the benefits of LID,²⁸ coastal states do not have the funding necessary to implement LID techniques.

The SAP Outline could be improved by specifying how agencies should promote “cost-effective stormwater controls, long-term control plans for combined sewers, and water quality-based effluent limits for other point sources” in Action Two, Outcome Two. The SAP Outline should direct U.S. EPA and other members of the Council to develop specific guidance on how coastal states can finance LID techniques to reduce coastal stormwater pollution, through existing funding sources, such as the Clean Water State Revolving Fund, and carve out a new pot of funding dedicated specifically for LID in coastal areas, with preference given to designated national marine sanctuaries and other marine protected and managed areas.

B. Real-time, affordable beach monitoring kits.

Action Five, Milestone Four aims to “enhance existing activities, including disease surveillance, environmental monitoring, organism and toxin detection, pollutant source tracking, watershed/waterbody modeling, and assessment of health risks related to environmental pollution.”²⁹ Action Five should also call for the development of *rapid indicator tests* to alert the public to beach contamination issues. The SAP Outline should ensure the development and release of increasingly fast – and affordable – tests during the planning period that will allow county environmental health officials, NGOs and citizen groups to monitor their beaches, alert the public immediately to problems, and quickly identify pollution sources. The Council should also work with the U.S. EPA, State and Regional Water Boards, Department of Public Health, local environmental health officers and others to identify and implement a sustainable funding stream to ensure regular monitoring, posting, and rapid electronic updates of beach pollution information.

C. More detailed strategies by the National Water Quality Monitoring Council

The SAP Outline sets a priority objective for “implementation of a comprehensive monitoring framework and integration with state monitoring programs based on the strategy developed by the National Water Quality Monitoring Council.”³⁰ CCKA applauds the Council for endeavoring to expand the scope of federal monitoring programs. Specifically, Action Seven, Milestone Five states “[e]xpend the scope of the National Water Quality Monitoring Network for U.S. Coastal Waters and their

²⁷ See U.S. Environmental Protection Agency, Catalog of Funding Sources for Watershed Protection, *available at* <http://cfpub.epa.gov/fedfund/search1.cfm>.

²⁸ U.S. Environmental Protection Agency, Low Impact Development, *available at* <http://www.epa.gov/owow/NPS/lid/>.

²⁹ SAP Outline, at 8.

³⁰ *Id.* at 1.

Tributaries to address the physical, chemical, and biological integrity of rivers and streams by leveraging the State/EPA National Aquatic Resource Surveys.”³¹ The SAP Outline should include additional detail by directing the National Water Quality Monitoring Council to: (a) clearly define goals that fulfill user needs and provide measures of management success, (b) find a core set of variables to be measured at all sites, (c) develop regional flexibility to measure additional variables where needed, (d) establish standard procedures and techniques.

CCKA respectfully requests that the SAP Outline include the above-described actions to protect water quality, in order to effectively ensure the good health of coastal and marine waters and affected habitat and life.

Thank you for your continued strong support and action for a vibrant coast and ocean.

Respectfully,



Sean Bothwell Policy Analyst
sbothwell@cacoastkeeper.org

³¹ *Id.* at 11.