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OCEAN PROGRAM

WATER QUALITY AND SUSTAINABLE PRACTICES ON LAND
STRATEGIC ACTION PLAN COMMENT
April 29, 2011

FIVE KEY ACTIONS FOR THE WATER QUALITY STRATEGIC ACTION PLAN

The **Environmental Law Institute (ELI) Ocean Program**[1] submits this comment to highlight key opportunities for meeting the Environmental Protection Agency's statutory obligations under the Clean Water Act and the National Oceanic and Atmospheric Administration's statutory obligations under the Coastal Zone Management Act. These recommended actions would build on the national ocean policy, stewardship principles, and water quality national priority objectives and utilize the water quality strategic action plans (SAPs) and accompanying information established in response to Executive Order 13547, "Stewardship of the Ocean, Our Coasts, and the Great Lakes."[2]

Specifically, this comment focuses on how the Water and Sustainable Practices on Land SAP (Water Quality SAP) can inform and support implementation of existing statutory and regulatory obligations.

Table 1. Summary of Actions to include in the Water Quality SAP

1. **Near-Term Action:** Incorporate Ocean Policy EO and Water Quality SAP objectives into planned stormwater rulemaking.
2. **Medium-Term Action:** Update ocean discharge criteria.
3. **Medium-Term Actions:** Improve coastal water-quality standards and develop ocean TMDLs.
4. **Medium- to Long-Term Action:** Improve Coastal NPS Programs under CWA § 319 and CZMA § 6217 with renewed efforts and dedicated implementation funding.
5. **Near-Term Action:** Ensure that all strategic action plans are appropriately integrated.

According to Executive Order 13547 (Ocean Policy EO), it is now the national policy to "protect, maintain, and restore the health and biological diversity of ocean, coastal, and Great Lakes ecosystems

[1] ELI's comment is based on several years of research focused on law and policy mechanisms to implement ecosystem-based management for the oceans, including coastal and marine spatial planning. For more information, *see* ENVIRONMENTAL LAW INSTITUTE (ELI) AND CENTER FOR OCEAN SOLUTIONS, COASTAL AND MARINE SPATIAL PLANNING: LEGAL CONSIDERATIONS (2010); ELI, MARINE SPATIAL PLANNING IN U.S. WATERS: AN ASSESSMENT AND ANALYSIS OF EXISTING LEGAL MECHANISMS, ANTICIPATED BARRIERS, AND FUTURE OPPORTUNITIES (2009) (included here as an appendix); ELI, OCEAN AND COASTAL ECOSYSTEM-BASED MANAGEMENT: IMPLEMENTATION HANDBOOK (2009); ELI, EXPANDING THE USE OF ECOSYSTEM-BASED MANAGEMENT IN THE COASTAL ZONE MANAGEMENT ACT (2009). Additional information and reports are available at http://www.eli.org/Program_Areas/ocean_projects.cfm.

[2] Executive Order 13547, Stewardship of the Ocean, Our Coasts, and the Great Lakes (July 19, 2010).

and resources."[3] To achieve this national ocean policy, President Obama has established a new National Ocean Council and mandated all federal agencies to: implement the national ocean policy, the stewardship principles, and the national priority objectives; participate in the coastal and marine spatial planning process; and comply with certified coastal and marine spatial plans "… to the fullest extent consistent with applicable law."[4] This Ocean Policy EO incorporates by reference the detailed final recommendations developed by the precursor Interagency Ocean Policy Task Force (Task Force).[5]

In developing nine Strategic Action Plans to support implementation of the national priority objectives, the National Ocean Council is to "identify specific and measurable near-term, mid-term, and long-term actions, with appropriate milestones, performance measures, and outcomes to meet each [national priority] objective."[6]

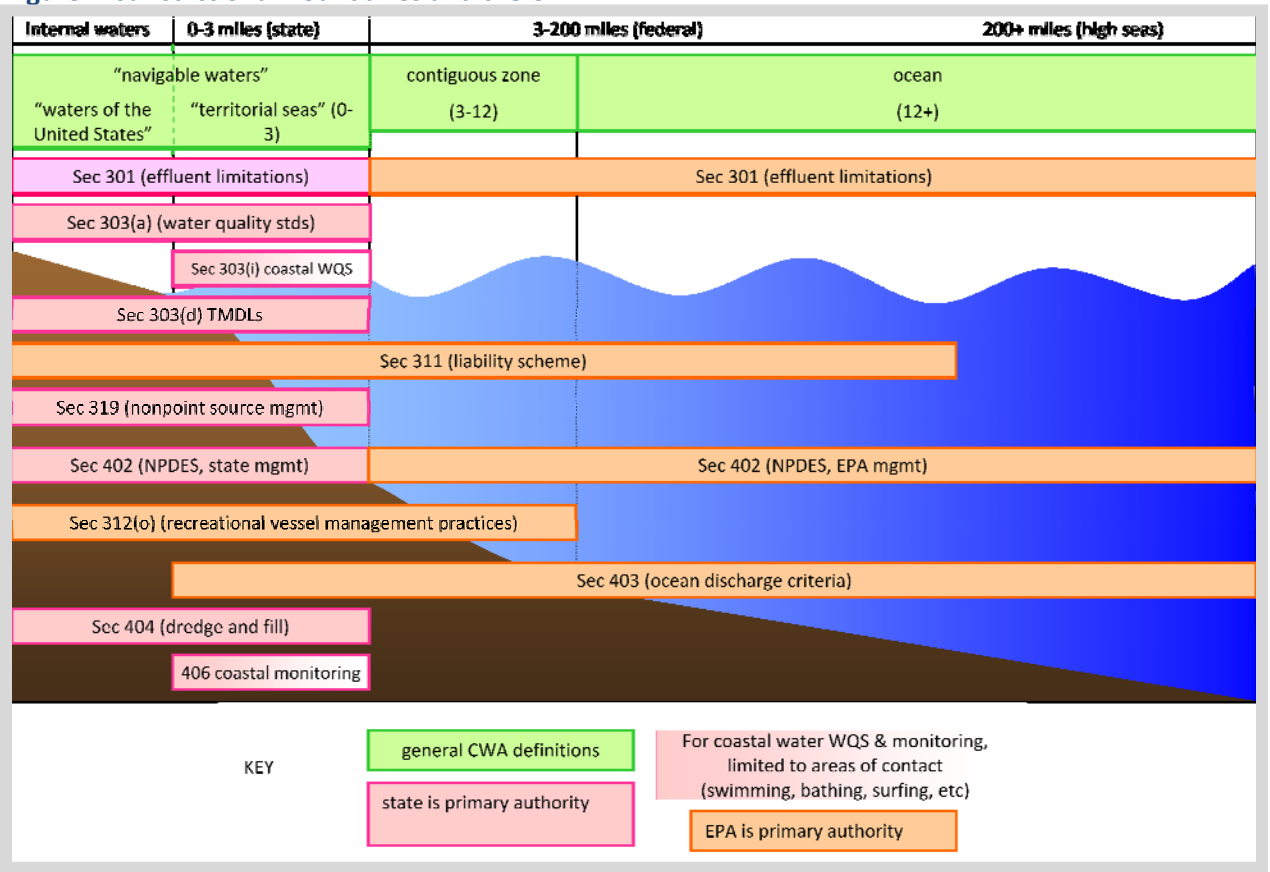
To achieve the Water Quality National Priority Objective, the Task Force recommended development of an SAP to "[e]nhance water quality in the ocean, along our coasts, and in the Great Lakes by promoting and implementing sustainable practices on land."[7] Among other required elements, the Task Force called for this Water Quality SAP to address "[t]he relative contributions of significant land-based sources of pollutants, sediments, and nutrients to receiving coastal waters and ways to address them, including recommendations of how to integrate and improve existing land-based conservation and pollution programs."[8] It also calls for "[b]est management practices, use of conservation programs, and other approaches for controlling the most significant land-based sources of nutrients, sediments, pathogens, toxic chemicals, solid waste, marine debris, and invasive species."[9] Therefore, the key focus of the Water Quality SAP is decreasing land-based sources of marine pollution.

The Clean Water Act (CWA) is the chief federal law designed to address land-based sources of marine pollution, along with the **Coastal Zone Management Act (CZMA)**, which creates a grant-based program to support state efforts to address nonpoint sources of coastal pollution.[10] These laws and the institutions that implement them are the primary federal mechanisms available to satisfy the requirements of the Water Quality SAP. Therefore, many of the Water Quality SAP's near-term, mid-term, and long-term actions should be designed to improve the existing legal, regulatory, and management framework under the CWA and CZMA.

Authority for addressing point and nonpoint sources of ocean pollution under the Clean Water Act varies depending on the specific provisions in the statute. Figure 1 provides an overview of the key regulatory elements of the CWA and how they apply to the ocean.

[3] Executive Order 13547, § 2.
[4] *Id.* § 6.
[5] *Id.* § 1.
[6] Interagency Ocean Policy Task Force, Final Recommendations of the Interagency Ocean Policy Task Force 7 (July 19, 2010).
[7] *Id.* at 38.
[8] *Id.* at 39.
[9] *Id.*
[10] Other important laws designed to address pollution are those related to accidental spills, including the Oil Pollution Act and the Comprehensive Environmental Response, Compensation and Liability Act.

Figure 1. Jurisdictional Boundaries and the CWA



Because the Water Quality SAP focuses specifically on land-based sources of ocean pollution, this comment likewise focuses on land-based point sources and nonpoint sources (excluding pollution derived from at-sea activities). Some key types of land-based point source discharges into the marine environment include: captured and discharged stormwater from urban environments; discharge from publicly-owned treatment works; and industrial dischargers (e.g. pulp mills, refineries, seafood processors, and desalination plants).[11]

[11] Environmental Protection Agency [hereinafter EPA], Table 1: Types of NPDES Permitted Ocean Dischargers, *at* http://water.epa.gov/aboutow/owow/programs/criteriatable1.cfm.

RECOMMENDED WATER QUALITY SAP ACTIONS

1. **Near-Term Action: Incorporate Ocean Policy EO and Water Quality SAP objectives into planned stormwater rulemaking, including:**

   - Stormwater Regulations Revision to Address Discharges from Developed Sites[12]
     Status: September 2011, Notice of proposed rulemaking expected
   - NPDES Permit Requirements for Municipal Sanitary and Combined Sewer Collection Systems, Municipal Satellite Collection Systems, Sanitary Sewer Overflows, and Peak Excess Flow Treatment Facilities.[13]
     Status: November 2011, Notice of proposed rulemaking expected

For both of these rules under development, the Water Quality SAP action could specifically:

- Call for completion of the final rules in the next year to 18 months;
- Ensure that these rules explicitly recognize EPA's responsibility in implementing the Ocean Policy EO including ocean policy, stewardship principles and specific objectives of the Water Quality SAP; and
- Call for inclusion of explicit language geared at improving the water quality of coastal waters with these rules.

One of the most significant sources of land-based ocean pollution is urban runoff. When urban runoff is collected in a stormwater system, the stormwater discharged into the ocean is considered a point source and therefore subject both to the National Pollution Discharge Elimination System **(**NPDES) requirements and the ocean discharge criteria. When stormwater runs directly from the watershed to the sea, it is a non-point source.[14]

EPA regulates three types of stormwater discharges: (1) municipal separate storm sewer systems (MS4s) with different requirements based on size; (2) construction activities for sites greater than one acre; and (3) industrial activities.[15] Despite the particular impacts of stormwater on the marine environment, "[n]one of the EPA's regulatory pronouncements for the stormwater permit program contain any special provisions for stormwater discharges into the marine waters."[16]

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[12] EPA, Stormwater Regulations Revision to Address Discharges from Developed Sites [hereinafter Revised Stormwater Regulations] *at* http://yosemite.epa.gov/opei/RuleGate.nsf/byRIN/2040-AF13?opendocument (last visited April 27, 2011).

[13] EPA, NPDES Permit Requirements for Municipal Sanitary and Combined Sewer Collection Systems, Municipal Satellite Collection Systems, Sanitary Sewer Overflows, and Peak Excess Flow Treatment Facilities [hereinafter SSO Rulemaking], *at* http://yosemite.epa.gov/opei/rulegate.nsf/byRIN/2040-AD02?opendocument (last visited April 27, 2011)

[14] For a discussion of nonpoint source pollution, *see infra* notes 34-47 and accompanying text.

[15] EPA, Stormwater Program, *at* http://cfpub.epa.gov/npdes/home.cfm?program_id=6.

[16] Robin Kundis Craig, *Urban Runoff and Ocean Water Quality in Southern California: What Tools Does the Clean Water Act Provide?*, 9 Chap. L. Rev. 313, 352 (2006) To provide a sense of the magnitude of the problem, Kundis Craig summarizes an EPA report on the pollutants:

> urban runoff picks up and carries with it a number of kinds of pollutants that impair ocean water quality, including: sediment, which can decrease light penetration and smother coastal ecosystems such as coral reefs; nutrients, which can cause plankton blooms, known as harmful algal blooms, and ultimately lead to decreased dissolved oxygen levels; oxygen-demanding substances, such as decaying organic matter, which also lead to decreases in dissolved oxygen

EPA is already engaged in stormwater rulemaking, but no draft rules are available yet.[17] First, EPA is revising developed-site stormwater regulations.[18] In response to a 2008 National Research Council report reviewing the stormwater program and recommending improvements, the agency is considering establishing requirements for managing stormwater discharge from new and re-developed sites and potentially expanding the scope of the municipal separate storm sewer systems (S4).[19]

Second, EPA is revising its sanitary sewer overflow regulations.[20] EPA is developing a proposed rulemaking, including addressing operation and maintenance requirements and a prohibition on sanitary sewer overflows and a potential new regulatory framework for applying NPDES permit conditions.

These ongoing rulemakings provide an opportunity to develop regulations in compliance with the Ocean Policy EO requirements related to the Water Quality NPO. For example, to support the Water Quality NPO, EPA could develop more stringent stormwater rules, or expand the breadth of the stormwater regulations to cover additional sources in order to better address urban runoff that impacts coastal waters. For both of these regulations under development, the Water Quality SAP could specifically:

- call for completion of the regulatory process in the next year to 18 months;
- ensure that this regulation explicitly recognizes EPA's responsibility in implementing the Ocean Policy EO including stewardship principles and specific objectives of the Water Quality SAP; and
- call for inclusion of explicit language geared at improving the water quality of coastal waters with this regulation.

Also, EPA is in the process of developing several other relevant regulations that could provide opportunities to insert language relevant to the Ocean Policy EO. In addition to the possible regulatory changes discussed in this comment, other potentially relevant regulations in the pre-proposal phase include:[21]

- Criteria and Standards for Cooling Water Intake Structures (includes regulation of "plants using less than 50 MGD of cooling water, new offshore oil and gas facilities, and all existing manufacturing facilities")
- Development of Best Management Practices for Recreational Boats under Section 312(*o*) of the Clean Water Act (includes recreational boats in state waters and the contiguous zone)
- [NPDES] Permit Regulations for New Dischargers and the Appropriate Use of Offsets with regard to Water Quality Permitting (examining the use of offsets and options for addressing new dischargers in impaired waters prior to and after TMDL development).

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levels; pathogens and disease-causing organisms, which lead to beach closures; road salts (in areas of the country with snow), which can result in toxic concentrations of chlorine; hydrocarbons from oil products, which can kill marine organisms; heavy metals such as copper, lead, chromium, and zinc, which are often toxic; and other toxic pollutants.

Id. at 323.

[17] For more information, *see* http://cfpub.epa.gov/npdes/stormwater/rulemaking.cfm.

[18] EPA, Revised Stormwater Regulations, *supra* note 12.

[19] *Id.*

[20] EPA, SSO Rulemaking, *supra* note 13.

[21] EPA, *Rulemakings by Phase: Pre-Proposal*, *at* http://yosemite.epa.gov/opei/RuleGate.nsf/content/phasespre.html?opendocument (last visited Jan. 4, 2011).

- Revisions to the National Oil and Hazardous Substances Pollution Contingency Plan; Subpart J Product Schedule Listing Requirements (EPA is considering changes to the dispersant effectiveness and toxicity requirements and is considering changes to 40 CFR 110.4 which addresses the use of dispersants).
- Water Quality Standards for the State of Florida's Estuaries and Coastal Waters (EPA is required by consent decree to develop numeric nutrient water quality criteria for Florida estuaries and coastal waters by August 2012).

2. Medium-Term Action: Update ocean discharge criteria.

In order to support the Water Quality NPO, EPA could revive its efforts to develop new ocean discharge criteria. The prior proposed rule, which was withdrawn, included elements that still resonate today. Some of these described by Kundis Craig (2001) include the following:

- Definition of a 3-200 mile "use" as "Healthy Ocean Waters."
- Creation of discharge criteria based on the above use.
- Establishment of "special ocean sites" that would limit new discharges, and would encourage states to adopt areas as "no discharge zones"[22]

Such discharge criteria could inform land-based dischargers who are introducing pollutants into the marine environment.

Ocean Discharge Criteria offer another opportunity to achieve water quality objectives in accordance with the Ocean Policy EO and Water Quality SAP. In addition to the NPDES program laid out in CWA Section 402, Section 403 sets forth additional requirements for NPDES permits for discharges to the territorial sea, contiguous zone, and ocean, and calls for EPA to establish ocean discharge criteria.[23] In accordance with this section, EPA may permit a point source discharge to these waters only if it determines that the discharge will not result in "unreasonable degradation of the marine environment." Unreasonable degradation is defined by regulation as:

> (1) Significant adverse changes in ecosystem diversity, productivity and stability of the biological community within the area of discharge and surrounding biological communities,
> (2) Threat to human health through direct exposure to pollutants or through consumption of exposed aquatic organisms, or
> (3) Loss of esthetic, recreational, scientific or economic values which is unreasonable in relation to the benefit derived from the discharge.[24]

EPA determines whether a discharge will cause unreasonable degradation of the marine environment based on ten factors set forth in the regulations.[25] If EPA determines that the discharge will not cause

[22] Kundis Craig & Miller, *supra* note 23 at 26-29 (2001).
[23] 33 U.S.C. § 1343(a); For a thorough discussion of ocean discharge criteria, *see* Robin Kundis Craig & Sarah Miller, *Ocean Discharge Criteria and Marine Protected Areas: Ocean Water Quality Protection Under the Clean Water Act*, 29 B.C. Envtl. Aff. L. Rev. 1 (2001).
[24] 40 C.F.R. § 125.121.
[25] 40 C.F.R. § 125.122(a).

unreasonable degradation after any necessary permit conditions have been applied, it may issue the permit. Conversely, if the agency determines that the discharge will cause unreasonable degradation even with permit conditions, or that there is insufficient information to determine whether unreasonable degradation will occur, it may not permit the discharge. Notably, if the discharge complies with state water quality standards for that pollutant, it is presumed not to cause unreasonable degradation of the marine environment.[26]

Despite an attempt in the early 2000s, EPA has not updated ocean discharge criteria since 1980, and as currently written, the criteria provide limited guidance for dischargers. Therefore, the ocean discharge criteria could be a target for improvement consistent with the Water Quality SAP. One advantage of building from this provision is that EPA has sole authority to regulate all ocean discharges in accordance with the ocean discharge criteria. In other words, the agency has the ability to regulate ocean point source discharges in all ocean waters.

3. Medium-Term Actions: Improve coastal WQS and develop ocean TMDLs.

The Water Quality national priority objective fits squarely within the framework of the Clean Water Act's water quality standard (WQS) and Total Maximum Daily Load (TMDL) requirements that apply in the coastal region out to three miles from shore (i.e. state waters).[27]

To date, there has been limited focus by states and EPA to fully develop ocean WQS, identify impaired ocean waters, and develop large marine ecosystem (LME)-scale ocean TMDLs. The Water Quality SAP and subsequent actions can help fill this gap with the following three actions:

i. Through the development of *Water Quality Standards Regulatory Clarifications*, EPA is currently proposing changes to WQS regulations, noting that the existing regulations have been in place since 1983. According to EPA, "The proposed rule will provide clarity in the following six key areas: 1) antidegradation, 2) Administrator's determination, 3) uses, 4) variances; 5) triennial review scope and requirements, and 6) updating regulation to reflect court decisions. EPA expects to publish a proposed rule in the Federal Register in summer 2011."[28] EPA could include Water Quality SAP objectives as part of this WQS update.

ii. EPA could update or develop additional ocean-specific guidance or regulations to encourage and facilitate the development of more comprehensive ocean WQS and TMDL programs, including the development of LME-scale TMDLs.[29]

iii. States and EPA could focus on preventing pollution in "threatened waters" to drive a more proactive and prevention-based response.

[26] 40 C.F.R. § 125.122(b).
[27] Clean Water Act, §§ 303; USC §§ 1313.
[28] EPA, *Rulemakings by Phase: Pre-Proposal*, *at* http://yosemite.epa.gov/opei/RuleGate.nsf/content/phasespre.html?opendocument (last visited Jan. 4, 2011).
[29] To date, EPA has the following ocean guidance related to WQS and TMDLs: Nutrient Criteria Technical Guidance Manual: Estuarine and Coastal Marine Waters (2001); , Estuarine and Coastal Marine Waters: Bioassessment and Biocriteria Technical Guidance (2000); EPA, Questions and Answers on Ocean Acidification and the Clean Water Act 303(d) Program (Nov 15, 2010) (developed as part of the settlement requirement with the Center for Biological Diversity: *CBD v. EPA*, No. 2:09-cv-00670-JCC (W.D. Wash. 2010)).

Water quality standards (WQS) "define the goals for a waterbody by designating its uses, setting criteria to protect those uses, and establishing provisions such as antidegradation policies to protect waterbodies from pollutants."[30] If technology-based NPDES permit limits fail to meet applicable water quality standards, the permits must be revised to incorporate the WQS. If a state's effluent limitations are not stringent enough to achieve the applicable WQS, states must develop **total maximum daily loads (TMDLs),** which provide a mechanism for bringing impaired waters into compliance with WQS. Specifically, TMDLs are developed for water bodies that are impaired due to one or more pollutants. They are planning documents that provide an analysis of the sources of pollutant(s), and create a budget of the amount of pollutants that various sources can contribute to the total allowable load.

California provides an example of how WQS and TMDLs work in practice.
California's designated ocean uses (excluding bays and estuaries) are for "industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture; preservation and enhancement of designated Areas of Special Biological Significance (ASBS); rare and endangered species; marine habitat; fish migration; fish spawning and shellfish harvesting."[31] California establishes bacterial, physical, and chemical pollutant criteria based on these uses. For example, the water-contact standard for coliform bacteria is less than 10 coliform bacteria per milliliter (with allowance for occasional increased loads), and the standard applies to the area from shore to 1,000 feet or the 30-foot depth contour (whichever is farther).[32] Beyond the nearshore, this standard does not apply.

Under the TMDL provision, CWA § 303(d), California has 1,883 impaired water bodies.[33] While there is no oceanwide TMDL, several TMDLs have oceanic components. For example, in San Diego County, several TMDLs specifically relate to the bays, estuaries, and the ocean, including the following:

- Shelter Island Yacht Basin Dissolved Copper TMDL;
- Beaches and Creeks in San Diego Region Bacteria TMDLs;
- Baby Beach at Dana Point Harbor and Shelter Island Shoreline Park at San Diego Bay Bacteria TMDLs;
- San Diego Bay Marine Sediment TMDLs (six locations);
- TMDLs for Impaired Lagoons, Adjacent Beaches, and Agua Hedionda Creek (impairments include nutrients/eutrophication, sedimentation/siltation, total dissolved solids, and bacteria);
- Tijuana River Valley (including the estuary and focused on sedimentation and trash); and
- Los Penasquitos Lagoon (focused on sediment).

These TMDLs cover a range of pollutants including copper, bacteria, sediments, nutrients, total dissolved solids and trash. In addition to these TMDLs, San Diego County has several TMDLs that relate specifically to freshwater waterbodies that ultimately empty into the ocean.

[30] EPA, Water Quality Standards, at http://water.epa.gov/scitech/swguidance/waterquality/standards/index.cfm (last visited Dec 27, 2010).
[31] State Water Quality Resources Control Board, Water Quality Control Plan: California Ocean Plan 3 (2001), *available at* http://water.epa.gov/scitech/swguidance/waterquality/standards/upload/2003_12_15_standards_wqslibrary_ca_ca_9_wqcp_waters.pdf (last visited Dec. 27, 2010).
[32] *Id.* at 4.
[33] State Water Resources Control Board, Total Maximum Daily Load Program, *at* http://www.waterboards.ca.gov/water_issues/programs/tmdl/background.shtml#current (last visited Dec 27, 2010).

As the 2003 EPA nonpoint source (NPS) guidance points out, the NPS program largely focuses on waters identified as impaired under Section 303(d) of the CWA. However, very few TMDLs exist that relate to the ocean, and those that do target bays, estuaries, and river mouths rather than open ocean waters or large marine ecosystems (LMEs). The need to address NPS pollution in coastal waters throughout the ecosystem, and the fact that the CWA Section 319 NPS program specifically targets water bodies designated as impaired provide added reasons for reviewing the condition of coastal waters for impairment and developing TMDLs for entire large marine ecosystems.

While terrestrial watershed-based TMDLs should address many of the same problems that would be identified in a large marine ecosystem TMDL (i.e. an ocean TMDL), some impairments may be better characterized by a regional ocean assessment. For example, the cumulative effects of plastic pollution, entering from land-based sources into the ocean, has created impacts on the scale of oceanic gyres. This could be better understood and appreciated if a single TMDL were developed to analyze the problem and consider potential region-wide solutions at the regional scale. Further, ocean TMDLs could bring unknown challenges to light. For example, ocean noise pollution, toxic pollutants from antifouling agents used to keep ships free from barnacles and other encrusting organisms, or invasive species traveling in ballast water are specifically ocean issues, which would not be addressed by a focus on terrestrial water bodies alone.

Therefore, the Water Quality SAP could create an action for EPA to update the 2003 guidance with new guidance that better reflects the need to minimize pollution inputs into the ultimate receiving waters: the oceans and coasts. Also, the national coastal and marine spatial planning SAP or the regional CMSP programs could adopt a region-based approach to ocean and coastal water quality, with or without new EPA guidance.

4. Medium- to Long-Term Action: Improve Coastal NPS Programs under CWA § 319 and CZMA § 6217 with renewed efforts and dedicated implementation funding.

One potential Water Quality SAP action could be to renew efforts to ensure that all state coastal NPS programs move from conditional to fully approved programs and to ensure that states are fully implementing approved programs. Another potential Water Quality SAP action could be to establish commitments from the agencies with relevant funding programs to specifically and permanently dedicate funding to support implementation of coastal NPS programs.

Clean Water Act Section 319 addresses nonpoint source pollution (NPS pollution). NPS pollution is one of the greatest modern impacts to ocean and coastal ecosystems, as well as freshwater ecosystems. Instead of creating a regulatory program for NPS pollution, the CWA establishes an incentive-based system. In particular, Section 319 enables states, territories, and tribes to obtain grant money for NPS activities.[34] All states have approved programs, and EPA provides around $200 million annually in grant money under this program.[35]

[34] CWA § 319; *See also* EPA, Clean Water Act Section 319, *at* http://www.epa.gov/owow_keep/NPS/cwact.html.
[35] EPA, Clean Water Act Section 319(h) Grant Funds History, *at* http://water.epa.gov/polwaste/nps/319hhistory.cfm (last visited April 24, 2011).

The most recent EPA guidance and grant guidelines for Section 319 are from 2003.[36] According to these guidelines, funding is provided as (1) base funds allowing the states broad leeway in use of the funds; (2) 20% of the base funds for use in NPS TMDL development; (3) incremental funds targeting watershed-based plans to address NPS impairments in Section 303(d)-listed waters; and (4) 20% of incremental funds for use in developing NPS TMDLs, watershed plans to implement NPS TMDLs, and watershed-based plans in 303(d)-listed waters. These guidelines place an added emphasis "on watershed-based planning and on restoring impaired waters through developing and implementing TMDLs, [and] represent the current state of the art in fashioning watershed-based solutions to prevent and remedy water quality problems."[37] The 2003 guidance points out that EPA has been working to strengthen the watershed-based approach—an approach it characterizes as following four principles: "(a) Diverse, well integrated partnerships; (b) a specific geographic focus; (c) action driven by environmental objectives and by strong science and data; and (d) coordinated priority setting and integrated solutions."[38]

Coastal NPS pollution regulation under the Coastal Zone Management Act. CZMA Section 6217 is another grant-based program to help coastal states develop coastal nonpoint source programs. Specifically, Section 6217 targets NPS pollution from six sources: forestry, agriculture, urban areas, marinas, hydromodification, and loss of wetlands and riparian areas. In order to obtain funds under this program, states are required to develop a coastal NPS program that protects coastal waters, identifies land uses that may contribute significantly to coastal water degradation, identifies critical coastal areas, implements management measures needed to achieve and maintain water quality standards and protect designated uses, provides technical assistance to local governments and the public, provides opportunities for public participation, establishes mechanisms for administrative coordination among state agencies and local officials, and proposes changes to the coastal zone boundary if need be.[39]

The development of coastal NPS programs has been a challenge. The original timeline, and the one still required by the statute, called for states to create coastal NPS programs by 1996 or risk losing incrementally more funding each year through 1999, with a potential total loss of 30% of CZMA funding by 1999 and each year thereafter.[40] Because of the difficulty in establishing coastal NPS programs with enforceable policies, however, NOAA and EPA relaxed the implementation requirements with the creation of new guidance.[41] Currently coastal states have coastal NPS programs that are approved or conditionally approved by NOAA and EPA (Table 2). While most states have fully approved programs, twelve states representing a majority of the U.S. coastline do not yet have fully approved programs. Only one state in the Gulf of Mexico, Florida, has a fully approved program.

[36] 68 Fed. Reg. 60653 (Oct 23, 2003)
[37] *Id.* at 60654.
[38] *Id.* at 60655
[39] 16 U.S.C. § 1455b(b) (1990).
[40] *Id.* at § 1455b(c)(3). As stated in the law, "If the Secretary finds that a coastal State has failed to submit an approvable program as required by this section, the Secretary *shall* withhold for each fiscal year until such a program is submitted a portion of grants otherwise available to the State…" *Id.* (emphasis added). Based on this requirement, it would seem that EPA and NOAA are out of compliance with the statute by allowing states additional time to develop programs without withholding funding.
[41] NOAA & EPA, Flexibility for State Coastal Nonpoint Programs [hereinafter Flexibility Guidance] (1995); NOAA & EPA, Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance for Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) 5 (1998).

Table 2. Coastal NPS Program Approval Status[42]

Fully Approved Programs			Conditionally Approved Programs	
American Samoa	Maryland	Northern Mariana Islands	Alabama	Michigan
California	Massachusetts	Pennsylvania	Alaska	Mississippi
Connecticut	Minnesota	Puerto Rico	Georgia	Ohio
Delaware	New Hampshire	Rhode Island	Hawaii	Oregon
Florida	New Jersey	South Carolina	Indiana	Texas
Guam	New York	Virgin Islands	Louisiana	Washington
Maine	North Carolina	Wisconsin		

One of the major challenges that the Coastal NPS Program faces is **dedicated funding**. As originally conceived, the coastal NPS program provided a small amount of funding to states (with an accompanying 1:1 matching requirement) to support development of a coastal NPS program, but not funding to implement it. [43] In 1994, Michael Donahue, Executive Director of the Great Lakes Commission, testified that, although Congress originally appropriated $1.8 million for program development, the annual cost of compliance with the coastal NPS program requirements was between $390-590 million.[44] The intent was that once developed, other programs and funding opportunities could support implementation of the coastal NPS programs including those funds managed by EPA, USDA, the Army Corps of Engineers and other agencies.[45] While Congress did appropriate money to fund implementation for a brief period of time the funding needed, this lasted only for four years (Table 3).

Table 3. NOAA Coastal Nonpoint Pollution Control Program Funding History[46]

Fiscal Year	Pres. Request	Appropriation
FY 92	0 M	2.0 M
FY 93	2.0 M	1.9 M
FY 94	1.9 M	4.0 M
FY 95	4.0 M	5.0 M
FY 96	8.0 M	0 M
FY 97	2.6 M	0 M
FY 98	1.0 M	1.0 M
FY 99	6.0 M	4.0 M
FY 00	6.0 M	2.5 M
FY 01[1]	4.5 M	10 M
FY02[1]	10 M	10 M
FY03[1]	10 M	10 M
FY04[1]	10 M	9.5 M
FY05[1]	0 M	3.0 M
FY06[1]	0 M	3.0 M
FY07[1]	0 M	0 M
FY08[1]	0 M	3.9 M
FY09[1]	0 M	3.9 M

[42] NOAA, Coastal Nonpoint Program Approval Findings, *at* http://coastalmanagement.noaa.gov/nonpoint/pro_approve.html#Alaska (last visited April 25, 2011).
[43] Personal communication, April 25, 2011 (on file with author).
[44] Andrew Solomon, *Comment: Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990: Is There Any Point?*, 31 Envtl. L. 151, 161 (2001).
[45] Personal communication, April 25, 2011 (on file with author).
[46] NOAA, personal communication, April 25, 2011 (on file with author);

Fiscal Year	Pres. Request	Appropriation
FY10[1]	0 M	0 M

[1]From FY92-FY00, Congress appropriated funding for states to develop their Coastal Nonpoint Pollution Control Programs. Since FY01, Congress has appropriated funds for program implementation. In addition to the amounts listed above, EPA provided $1M towards the program in FY98. In FY99 and FY00, NOAA provided an additional $4M each year to the states for implementation through CMZA section 306 and 309 grants.

SOURCE: NOAA, 2011

Another major federal law that relates to NPS pollution is the Farm Security and Rural Investment Act (Farm Bill), which includes funding programs to address NPS pollution from agriculture.[47] These and other funding laws are not explored in this comment, but will be critical to the success of the Water Quality SAP.

5. Near-Term Action: Ensure that all strategic action plans are appropriately integrated.

In addition to the Water Quality SAP, the NOC is developing strategic action plans for eight other priority objectives. These are: (1) Coastal and Marine Spatial Planning; (2) Inform Decisions and Improve Understanding; (3) Coordinate and Support; (4) Resiliency and Adaptation to Climate Change and Ocean Acidification; (5) Regional Ecosystem Protection and Restoration; (6) Ecosystem-Based Management; (7) Changing Conditions in the Arctic; and (8) Ocean, Coastal, and Great Lakes Observations, Mapping, and Infrastructure. As a "foundational principle", the concepts, objectives, and actions taken to effectively implement the Water Quality SAP may inform, influence, or affect implementation of the other national priority objectives. The NOC should, accordingly, ensure that all strategic action plans are appropriately aligned and integrated.

For example, one major way to address ocean and coastal water quality is to prevent further degradation by protecting and preserving healthy and threatened water bodies. Furthermore, the CWA Section 319 nonpoint source program largely focuses on restoring impaired water bodies that are listed under CWA Section 303(d). The mechanisms to address these challenges and the challenges themselves should also be addressed under the Regional Ecosystem Protection and Restoration SAP.

[47] For example, the Environmental Quality Incentives Program provides funding for NPS pollution. *See* 68 Fed. Reg. 60653, 60657 (Oct 23, 2003)

ADDITIONAL INFORMATION: Tools, Boundaries, and Institutions

Potential CWA mechanisms to address ocean and coastal pollution from:

- Direct point source discharge from land into ocean
- Indirect point source discharge into freshwater to ocean
- Nonpoint source discharge into ocean

Tool	Direct	Indirect	NPS
NPDES	Revise permit regs	Revise permit regs	N/A
WQS	Improve guidance	Improve guidance	N/A
TMDL	LME-scale ocean TMDLs and/or guidance	LME-scale ocean TMDLs and/or guidance	Create plan to address NPS w/ TMDL
ODC	Revise ODC	N/A	N/A
NPS	N/A	N/A	Improve implementation & secure dedicated funding

Clean Water Act: Target and Tools

Target	CWA Tool(s)
Urban & suburban development	NPDES stormwater permits (MS4 & industry), NPS program, TMDLs, ocean discharge criteria
Agriculture & forestry	WQS, TMDLs, NPS programs
Animal feedlots	NPDES CAFO permits,[48] WQS, TMDLs, NPS programs
Nutrients	WQS, TMDLs, NPS programs
Sediments	WQS, TMDLs, NPS programs
Pathogens	Coastal WQS, NPS programs
Toxic chemicals	WQS, NPDES
Solid waste	NPDES
Marine debris	WQS, TMDLs, NPS programs
Invasive species	NPDES, TMDLs

[48] *But see Nat'l Pork Producers Council v EPA*, No. 08-61093 (5th Cir. 2011), partially vacating EPA's concentrated animal feedlot rules.

CWA Tools, Boundaries and Institutions

Tool	Boundary	Institution
NDPES (point source permitting)	0-3 3-200	State EPA
WQS (designated uses + criteria) **TMDL** (pollutant load limits for impaired waters)	0-3	State
Recreational vessels (best management practices)	0-12	EPA
Coastal WQS (fecal coliform WQS for contact areas)	<3	State
NPS (grants, tech support, etc for NPS program)	0-3	State
Liability (accidental discharges)	0-200	EPA/CG
Ocean Discharge Criteria (applies to NPDES permits)	0-200	EPA

CWA definitions

- Navigational waters
  - Waters of the US (internal)
  - Territorial Seas (0-3 miles)
  - Contiguous zone (3-12 miles)
  - Ocean (3+ miles)