

EPA Response to NY DOS’s CZMA Objection to EPA’s Designation of the Eastern Long Island Sound Dredged Material Disposal Site (November 4, 2016)

I. Introduction

The New England Office of the United States Environmental Protection Agency (“EPA”) is designating a dredged material disposal site in the eastern region of Long Island Sound (the “Sound” or “LIS”) under Sections 102(c) and 106(f) of the Marine Protection, Research, and Sanctuaries Act (“MPRSA”). 33 U.S.C. §§ 1412(c) and 1416(f). *See also* 40 C.F.R. §§ 228.4(e). The site will be named the Eastern Long Island Sound Disposal Site (the “ELDS”).

In connection with proposing designation of the ELDS, and in accordance with Section 307(c)(1) of the Coastal Zone Management Act (“CZMA”), 16 U.S.C. § 1456(c)(1), EPA determined that the designation would be consistent to the maximum extent practicable with the enforceable policies of New York’s Coastal Management Program (the “New York CMP”). In accordance with Section 307(c)(1)(C) of the CZMA, 16 U.S.C. § 1456(c)(1)(C), EPA submitted a written CZMA consistency determination to the New York Department of State (“NY DOS”) on July 20, 2016 (the “July 2016 Consistency Determination”). In response, on October 3, 2016, NY DOS sent EPA a written objection to EPA’s consistency determination (the “Objection”). NY DOS argues that the proposed designation of the ELDS would not be consistent to the maximum extent practicable with the enforceable policies of the New York CMP.

It is important to understand that in response to public comments received on the proposed site designation, EPA made certain adjustments to the site designation for its final action (*e.g.*, moved the site boundaries to the west). These changes may obviate or reduce some or all of NY DOS’s objections to the disposal site. If so, NY DOS may ultimately be able to agree that the final designation of the ELDS is consistent with the New York CMP to the maximum extent practicable.¹

Taking into account the changes EPA made for the Final Rule, EPA has reviewed and considered NY DOS’s Objection. EPA disagrees with the Objection and concludes that its final action is consistent to the maximum extent practicable with New York’s CMP. As a result, EPA is proceeding with the ELDS site designation without making further revisions attributable to the Objection. EPA’s assessment of the above-discussed issues is set forth in this document and even more detailed discussion of the technical issues is provided in the Final Rule and the FSEIS, including the Responses to Comments.

¹ EPA Region 1’s efforts to discuss these changes with NY DOS personnel before now were unavailing. When the Region called to initiate such a discussion, NY DOS personnel indicated they could not discuss the matter with the Region. NY DOS did request contact information for an attorney at EPA, but after EPA provided this information, no one representing NY DOS or the larger state government contacted EPA’s attorney.

II. Background

A. *Law and Regulations Applicable to Dredged Material Disposal Site Designations*

The MPRSA is the primary federal law governing EPA's designation of the ELDS. MPRSA § 102(c), 33 U.S.C. § 1412(c), directs EPA to designate ocean disposal sites for dredged material. Such designations are subject to, among other things, the requirements of MPRSA § 102(c) and EPA regulations promulgated at 40 C.F.R. §§ 228.4, 228.5 and 228.6.

Dredged material disposal into waters *landward* of the baseline from which the territorial sea is measured ("baseline") is typically regulated under Section 404 of the Clean Water Act ("CWA"), 33 U.S.C. § 1344, while the MPRSA generally only applies to dredged material disposal into waters *seaward* of the baseline—*i.e.*, "ocean waters" under the MPRSA. *See* 33 U.S.C. § 1402(b). Although the waters of Long Island Sound lie *landward* of the baseline, both the CWA and the MPRSA apply to dredged material disposal in the Sound. Section 106(f) of the MPRSA § 106(f), 33 U.S.C. § 1416(f), specifically dictates that in addition to other provisions of law, the requirements of the MPRSA apply to dredged material disposal in Long Island Sound for (a) federal projects, and (b) non-federal projects involving more than 25,000 cubic yards (cy) of material.² MPRSA § 106(f) has been interpreted also to apply the MPRSA's disposal site authorization provisions to the waters of Long Island Sound because dredged material disposal under the MPRSA is governed by the provisions of MPRSA section 103(b), which provides for location of disposal sites. Thus, MPRSA § 106(f) makes Long Island Sound the *only* water body lying landward of the baseline for which dredged material disposal is subject to the MPRSA's comparatively stringent requirements for sediment testing, sediment quality, disposal site authorizations, and site management and monitoring.

Under MPRSA §§ 103(a)-(e), 33 U.S.C. §§ 1413(a)-(e), each proposed project involving the ocean disposal of dredged material must be separately authorized by the U.S. Army Corps of Engineers ("USACE"), subject to EPA review and concurrence. Permits and authorizations from the USACE are also subject to various other types of federal and state review (*e.g.*, federal consistency review under the CZMA; Endangered Species Act ("ESA") consultation; essential fish habitat consultation under the Magnuson-Stevens Fishery Conservation and Management Act ("MSFCMA"); and water quality review under CWA § 401, 33 U.S.C. § 1341, etc.).

Pursuant to the MPRSA, the various phases of dredged material undergo rigorous analytic testing protocols before the material can be deemed suitable for placement at an approved site. Prior to dredging, samples of the sediment proposed for ocean disposal is subjected to a variety of testing protocols (*e.g.*, chemistry, toxicity, bioaccumulation) and must satisfy specific criteria in EPA's ocean dumping regulations at 40 C.F.R. Part 227. Suitability for open-water disposal is determined based on whether the various phases (liquid, suspended particulate, and solid) of the material satisfy criteria related to its physical characteristics, toxicity, bioaccumulation potential, and water quality effects. *See, e.g.*, 40 C.F.R. §§ 227.5 and 227.6. If the material does not satisfy

² Non-federal dredged material disposal projects involving 25,000 cubic yards of material or less are, instead, regulated under Section 404 of the CWA. *See* 40 C.F.R. § 230.2(b).

each of these regulatory criteria, then the material is deemed unsuitable for open-water disposal and cannot be placed into waters subject to the MPRSA.³

EPA's Ocean Dumping Criteria regulations provide specific and limited exceptions (or exclusions) from the MPRSA's detailed testing requirements for dredged material when the material meets specific criteria that make it highly unlikely that the material would be contaminated. These criteria are commonly referred to as the "Exclusionary Criteria." Thus, the regulations provide as follows:

(b) Dredged material which meets the criteria set forth in the following paragraphs (b)(1), (2), or (3) of this section is environmentally acceptable for ocean dumping without further testing under this section:

(1) Dredged material is composed predominantly of sand, gravel, rock, or any other naturally occurring bottom material with particle sizes larger than silt, and the material is found in areas of high current or wave energy such as streams with large bed loads or coastal areas with shifting bars and channels; or

(2) Dredged material is for beach nourishment or restoration and is composed predominantly of sand, gravel or shell with particle sizes compatible with material on the receiving beaches; or

(3) *When:* (i) The material proposed for dumping is substantially the same as the substrate at the proposed disposal site; and

(ii) The site from which the material proposed for dumping is to be taken is far removed from known existing and historical sources of pollution so as to provide reasonable assurance that such material has not been contaminated by such pollution.

(c) When dredged material proposed for ocean dumping does not meet the criteria of paragraph (b) of this section, further testing of the liquid, suspended particulate, and solid phases, as defined in §227.32, is required.

40 C.F.R. § 227.13(b) and (c). Application of the Exclusionary Criteria does not threaten harm from dredged material disposal at open-water sites because sediment testing may be avoided only under the limited circumstances specified in the regulations, and when these circumstances apply, the material is unlikely to be contaminated.

In addition, dredged material cannot be authorized for open-water disposal under the MPRSA unless a need for such open-water disposal has been determined. Specifically, for open-water

³ This prohibition is subject to the narrow waiver provision of MPRSA § 103(d), 40 C.F.R. Part 225, but to EPA's knowledge, the Army Corps of Engineers has never initiated this waiver process since it was enacted over 40 years ago. Additional restrictions on any future use of the waiver process have been applied to the CLDS and the WLDS and are also being applied to the ELDS. *See* 40 C.F.R. § 228.15(b)(4)(vi)(K) (disposal of dredged materials at the sites under a waiver not allowed unless 30 days prior to requesting the waiver, the New England or New York District of the USACE provides written notice to the Governors of Connecticut and New York and the North Atlantic Division of the USACE).

disposal, there must be a prior determination that there is no other practicable alternative for managing the dredged material that would cause less adverse environmental effects or risks. *See, e.g.,* 40 C.F.R. §§ 227.1(b), 227.2(a)(1), 227.14, 227.15, and 227.16. Thus, designation of a disposal site under the MPRSA only makes the site *available* as a *possible* management option for dredged material that has been determined to be suitable for open-water disposal and for which no environmentally preferable, practicable alternative means of managing the material is available.

Furthermore, MPRSA § 102(c)(3), 33 U.S.C. § 1412(c)(3), requires that EPA and the USACE develop Site Management and Monitoring Plans (“SMMPs”) for all dredged material disposal sites designated under the statute. If monitoring or other information indicates unacceptable adverse impacts to the marine environment from use of a site, then that data and information would enable EPA to modify the conditions under which the site may be used or even close the site. *See* MPRSA § 102(c)(2) and (3); 40 C.F.R. §§ 228.3(a), 228.7, 228.8, 228.11.

B. Designation of the Central and Western Long Island Sound Disposal Sites

While EPA is designating the ELDS as an open-water dredged material disposal site to serve the eastern region of Long Island Sound, this action is related to EPA’s earlier designations of the Central and Western Long Island Sound Disposal Sites (the “CLDS” and “WLDS,” respectively) to authorize open water disposal of dredged materials from locations in the central and western regions of the Sound, respectively. Understanding the CLDS and WLDS site designations is necessary to understand the designation of the ELDS within the larger context of dredged material management for the entire Long Island Sound. In addition, a detailed description of the site use restrictions applicable to the CLDS and WLDS, and the process by which they were developed, is provided here because EPA adopts the same site use restrictions for the ELDS and it is helpful to understand the genesis of those site use restrictions.

In 2005, EPA designated the CLDS and WLDS under the MPRSA for potential use for the placement of suitable dredged material. *See* 70 Fed. Reg. 32498-32520 (June 3, 2005) (Final Rule) (“EPA’s 2005 Final Rule”). 40 C.F.R. 228.15(b)(4) and (b)(5)(2006). In designating the CLDS and WLDS, EPA applied the MPRSA’s site designation criteria. *See* 40 C.F.R. §§ 228.4, 228.5, and 228.6. EPA’s designations of the CLDS and the WLDS also satisfied the requirements of other federal laws, such as the ESA, MSFCMA, CZMA, and CWA. (The CZMA issues will be discussed in greater detail below.) In addition, EPA conducted its evaluation of the CLDS and WLDS designations consistent with the requirements of the National Environmental Policy Act (“NEPA”).⁴ EPA published its Final Environmental Impact Statement in support of the site designations in March 2004 (the “2004 FEIS for CLDS and WLDS”). EPA’s evaluations of alternatives and site designations did not address the eastern region of Long Island Sound, noting that supplemental work would be done to consider the eastern Sound. *See* 70 Fed. Reg.

⁴ EPA disposal site designation evaluations under the MPRSA are “functionally equivalent” to NEPA reviews and, as a result, are not as a matter of law subject to NEPA analysis requirements. Nevertheless, as a matter of policy, EPA voluntarily uses NEPA procedures when evaluating the potential designation of ocean dumping sites. *See* 63 Fed. Reg. 58045 (October 29, 1998) (Notice of Policy and Procedures for Voluntary Preparation of National Environmental Policy Act Documents).

32509 (discussing EPA’s Notice of Intent explaining its plan for addressing the different regions of the Sound).

As part of the regulatory process for the proposed CLDS and WLDS designations, EPA determined that the proposed designations were fully consistent with the enforceable policies of New York’s and Connecticut’s respective coastal zone management programs (“CMPs”). On March 4, 2004, EPA sent NY DOS its determination with regard to the New York CMP, as refined by the State’s Long Island Sound Coastal Management Program and certain Local Waterfront Revitalization Programs (“EPA’s 2004 CZMA Consistency Determination”).⁵

NY DOS sent EPA a letter on June 3, 2004, formally objecting to EPA’s determination concerning the New York CMP (“NY DOS’s 2004 CZMA Consistency Objection”). NY DOS asserted both (1) that EPA had provided insufficient information to support a consistency determination and (2) that, based on the information provided, the site designations were inconsistent with the enforceable policies of the New York CMP. NY DOS also alleged that EPA’s proposed site designations would be inconsistent with certain requirements of the MPRSA. At that time, EPA reviewed and considered NY DOS’s 2004 CZMA Consistency Objection, but ultimately disagreed with NY DOS’ arguments and conclusions.⁶ EPA maintained that the site designations, as proposed, were consistent to the maximum extent practicable with the enforceable policies of the New York CMP. In an effort to avoid litigation over the disagreement, however, and in recognition of the federal and state agencies’ shared commitment to protecting Long Island Sound’s natural resources consistent with applicable law, the interested agencies—including EPA, USACE, the National Oceanic and Atmospheric Administration (“NOAA”), NY DOS, the New York Department of Environmental Conservation (“NY DEC”), and the Connecticut Department of Environmental Protection (“CT DEP”)⁷—engaged in lengthy negotiations to determine whether there was a way to proceed with the dredged material disposal site designations, while also addressing NY DOS’s concerns under the CZMA. In the end, the agencies reached an agreement under which EPA completed the disposal site designations, but included a number of restrictions on site use to address NY DOS’s concerns. With these restrictions included, NY DOS withdrew its objection to EPA’s CZMA consistency determination by letter dated May 13, 2005.

The restrictions on the use of the CLDS and WLDS adopted as part of EPA’s 2005 Final Rule are codified at 40 C.F.R. §§ 228.15(b)(4) and (5). Some of these restrictions merely reiterate generally applicable requirements of the MPRSA regulations (*e.g.*, no material may be placed at the sites unless it satisfies the sediment quality criteria of 40 C.F.R. Part 227, Subpart B). Other of the restrictions were crafted specifically for the CLDS and WLDS but are the type of use

⁵ EPA also submitted a consistency determination to the State of Connecticut, concluding that the proposed designations were consistent to the maximum extent practicable with the enforceable policies of Connecticut’s CMP. *See* 15 C.F.R. § 930.36(e)(1). Connecticut concurred with EPA’s determination.

⁶ *See, e.g.*, Memorandum, from Mel Cote, et al., to File. “Responses to Issues Raised in New York Department of State’s June 3, 2004, Letter Objecting Under the Coastal Zone Management Act to Proposed Dredged Material Disposal Site Designations by EPA Region I” (May 19, 2005) (EPA 2005 CZMA Responses); 70 Fed. Reg. 32511 (“EPA continues to hold the view that the site designations without the additional restrictions would still be consistent with the enforceable policies of New York’s CMP.”).

⁷ CT DEP has since been renamed and reconfigured as the Connecticut Department of Energy & Environmental Protection (“CT DEEP”).

restrictions typically created for any designated ocean dredged material disposal site (*e.g.*, providing specific coordinates to identify the boundaries of the disposal sites; only allowing placement at the site of material dredged from waters in the general vicinity of the site).

Still other use restrictions were unique to the CLDS and WLDS. For example, long-term use of the sites was conditioned on, among other things, the USACE's completion of a regional Dredged Material Management Plan for Long Island Sound (the "DMMP") that would assess regional dredging needs and sediment management options and would recommend standards and procedures for achieving the goal of reducing or eliminating dredged material disposal in the Sound. In addition, the restrictions required that EPA, upon completion of the DMMP, would modify the site use restrictions for the CLDS and WLDS consistent with the procedures and standards recommended in the DMMP for reducing or eliminating open-water disposal of dredged material in the Sound.

A related restriction in the site designations obligated EPA to conduct an annual review of progress toward completion of the DMMP. EPA has complied with the review requirement by producing an annual report on or about the anniversary of the effective date of the site designations (July 5, 2005), and making the report available to the general public. Yet another restriction that was intended to ensure progress toward reducing or eliminating open-water disposal in Long Island Sound pending completion of the DMMP required the formation of an interagency Long Island Sound Regional Dredging Team ("RDT"). The RDT was established in 2005 and has since reviewed all federal dredging projects, and private projects involving more than 25,000 cy, to ensure a thorough effort to identify practicable alternatives to open-water disposal and to ensure the pursuit of such alternatives. In addition to information on the status of the DMMP, the EPA annual report included information on RDT deliberations conducted in the preceding year, and on the quantity of dredged material and its final placement or disposal location. *See* 70 Fed. Reg. 32518-32519 (June 3, 2005) (40 C.F.R. §§ 228.15(b)(4)(vi)(C) and (G)). Taken together, the site use restrictions were intended both to support the goal of reducing or eliminating the placement of dredged material at sites in the waters of Long Island Sound and to ensure that when the designated sites are used for ocean disposal, such use occurs appropriately. Whether or not the RDT deliberations were the primary reason for this result, data from the annual reports covering dredging conducted from 2005 through 2014 documented a 35 percent reduction in the average annual amount of dredged material disposed of at open-water disposal sites in Long Island Sound as compared with the average annual amount disposed from 1982-2004. The use restrictions did not, however, mandate the termination of open-water disposal of dredged material within Long Island Sound.

USACE was the lead agency responsible for developing the DMMP for Long Island Sound, but USACE coordinated its effort with EPA, NOAA, agencies from New York and Connecticut, and other stakeholders. USACE also prepared a Programmatic EIS ("PEIS") under NEPA in support of the DMMP. Building on the information in EPA's 2004 site designation EIS, the DMMP developed detailed estimates of dredging and dredged material management needs, investigated and identified possible alternatives to open-water disposal for managing dredged material, and considered and identified procedures and standards for future dredged material disposal in order to reduce or eliminate the placement of dredged material at disposal sites in the waters of Long Island Sound.

On January 11, 2016, USACE completed the final DMMP and supporting Final PEIS. The finalization action represented the culmination of a lengthy public review and comment process in which USACE received and responded to public comments on a draft of the DMMP and the Draft PEIS. EPA was a cooperating agency in the preparation of the PEIS for the DMMP.

Under the restrictions in the site designations, EPA was obligated, within 60 days of the DMMP's completion, to propose amendments to the CLDS and WLDS site designation regulations in order to incorporate procedures and standards consistent with those recommended in the DMMP. *See* 70 Fed. Reg. 32498, 32519 (June 3, 2005) (codified at 40 C.F.R. §§ 228.15(4)(b)(vi)(C) and (G), *amended by* 81 Fed. Reg. 44220 (July 7, 2016)). Accordingly, on February 10, 2016, EPA issued a proposed rule to invite public review and comment on the proposed amendments to the site designations. 81 Fed. Reg. 7055-7063 (February 10, 2016) (EPA's February 2016 Proposed Rule). Also on February 10, 2016, EPA submitted to NY DOS its determination that its proposed action would be consistent to the maximum extent practicable with the enforceable policies of the New York CMP.

The February 2016 Proposed Rule included procedures and standards for use of the designated sites and/or practicable alternatives to disposal of material at the sites. In some cases, requirements from the existing regulations were retained, but with respect to other aspects of the site use EPA proposed new requirements. In all respects, the amendments were designed to be consistent with the recommendations of the DMMP and the requirements of applicable law, though the Proposed Rule also addressed matters beyond the recommendations of the DMMP. Collectively, the proposed amendments to the regulations were developed to serve the goal of reducing or eliminating the open-water disposal of dredged material in the waters of Long Island Sound.

On March 25, 2016, NY DOS submitted its comments on the February 2016 Proposed Rule to EPA.⁸ NY DOS's comments called for revisions to the proposed amendments that would, among other things, "establish additional procedures and standards that will result in clear, staged reductions in open water disposal of dredge material over time." EPA discussed the issues with NY DOS, as well as with USACE, CT DEEP, NY DEC and other interests, in an effort to determine whether the regulatory amendments could be adjusted in light of the comments received, in order to produce final amendments that all parties would find acceptable.

Following these discussions, on April 25, 2016, NY DOS issued EPA a "Conditioned Concurrence" letter under the CZMA ("NY DOS Conditioned Concurrence"). As the NY DOS Conditioned Concurrence explained, NY DOS did not concur with EPA's determination that its proposed regulatory amendments were, in the form proposed by EPA, consistent to the maximum extent practicable with New York's CMP. NY DOS did, however, propose conditions that "if accepted and included in the EPA amended rule for the CLDS and WLDS designations, would provide for this conditional concurrence to be considered as a concurrence." NY DOS Conditioned Concurrence, pp. 6-7. NY DOS further stated that "[i]f the conditions are not

⁸ Including NY DOS's comments, EPA received a total of 119 individual sets of comments on the Proposed Rule from federal and state agencies, municipalities, elected officials, and members of the public. The comments represented a wide range of views, some supporting the proposed amendments, others requesting revisions to them, and still others calling for a prohibition on all open-water placement of dredged material in Long Island Sound.

accepted and fully implemented, this conditional concurrence shall be treated as an objection.”
Id.

EPA adjusted the regulatory amendments consistent with the conditions specified in the NY DOS Conditioned Concurrence and based upon EPA’s consideration of public comments submitted on the February 2016 Proposed Rule. As previously instructed by NY DOS, EPA considered the Conditioned Concurrence to be converted to a Concurrence, and EPA issued its Final Rule on July 7, 2016 (“EPA’s July 7, 2016 Final Rule”). 81 Fed. Reg. 44220–44230 (July 7, 2016) (Final Rule). By email and letter dated July 18, 2016, NY DOS confirmed that the final site use restrictions satisfied the conditions of NY DOS’s conditional concurrence. *See* Letter from Gregory L. Capobianco, NY DOS, to Melville P. Coté, Jr., of EPA (July 18, 2016).

As published in EPA’s July 2016 Final Rule for the CLDS and WLDS, EPA’s final site designation regulations:

1. Specify the location, size and depth of the CLDS and WLDS disposal sites (*see* 40 C.F.R. §§ 228.15(b)(4)(i)-(iii) and 228.15(b)(5)(i)-(iii)).
2. Specify that the designated sites are only for placement of dredged material (*see* 40 C.F.R. §§ 228.15(b)(4)(iv) and 228.15(b)(5)(iv)).
3. Specify that, consistent with MPRSA § 106(f), the designations and restrictions for these sites apply only for material from federal projects, including USACE projects, and private projects involving more than 25,000 cubic yards of material (*see* 40 C.F.R. §§ 228.15(b)(4)(vi) and 228.15(b)(5)(vi)).
4. Restrict disposal at these sites to dredged material from Long Island Sound and its vicinity (*see* 40 C.F.R. §§ 228.15(b)(4)(vi)(A) and 228.15(b)(5)(vi)).
5. Specify that “the goal of these conditions is to reduce or eliminate open-water disposal of dredged material in Long Island Sound” (*see* 81 Fed. Reg. 44229 (new 40 C.F.R. §§ 228.15(b)(4)(vi) and 228.15(b)(5)(vi))).
6. Specify that disposal must comply with the terms of the most recent approved SMMP for each site (*see* 40 C.F.R. §§ 228.15(b)(4)(vi)(B) and 228.15(b)(5)(vi)).
7. Specify that disposal is limited to dredged material that complies with the Ocean Dumping Regulations (*e.g.*, sediment quality criteria) (*see* 81 Fed. Reg. 44229 (redesignating 40 C.F.R. § 228.15(b)(4)(vi)(J) as 228.15(b)(4)(vi)(H) and new 40 C.F.R. §§ 228.15(b)(4)(vi)(C)(3)(i) and 228.15(b)(5)(vi))).
8. Prohibit disposal during specified weather conditions that would create a heightened risk of spillage of dredged material during transit (*see* 81 Fed. Reg. 44229 (redesignating 40 C.F.R. §§ 228.15(b)(4)(vi)(L) as 40 C.F.R. § 228.15(b)(4)(vi)(J) and 228.15(b)(5)(vi))).
9. Prohibit disposal under a waiver of requirements by EPA under 33 U.S.C. § 1413(d) unless, among other things, the USACE first gives 30 days advanced notice to the Governors of Connecticut and New York that it will be seeking a waiver (*see* 81 Fed. Reg. 44229 (redesignating 40 C.F.R. §§ 228.15(b)(4)(vi)(K) as 40 C.F.R. § 228.15(b)(4)(vi)(I) and 228.15(b)(5)(vi))).
10. Provide that nothing in the regulations precludes EPA from designating other dredged material disposal sites, or amending the CLDS and/or WLDS designations, as long as any such action is carried out through a separate rulemaking in accordance with applicable law. In addition, nothing in the site designations is to be interpreted to restrict EPA’s authorities under the MPRSA or the implementing regulations, or to

- restrict EPA's authority to amend the regulations. (*See* 81 Fed. Reg. 44229 (redesignating 40 C.F.R. § 228.15(b)(4)(vi)(N) as 40 C.F.R. § 228.15(b)(4)(vi)(K))).
11. Include new restrictions building on the Regional Dredging Team (RDT) process specified in 40 C.F.R. §§ 228.15(b)(4)(vi)(I), footnote 3 and 228.15(b)(5)(vi) of the 2005 Final Rule, and which allow placement of dredged material at the designated sites only if, after full consideration of recommendations provided by the RDT, the USACE finds (and the EPA does not object to such finding), based on a fully documented analysis (*see* 81 Fed. Reg. 44229 (40 C.F.R. §§ 228.15(b)(4)(vi)(C) and 228.15(b)(4)(vi))), that for a given dredging project:
- a. There are no practicable alternatives (as defined in 40 CFR 227.16(b)) to open-water disposal in Long Island Sound, and that any available practicable alternative to open water disposal will be fully utilized for the maximum volume of dredged material practicable (*see* 81 Fed. Reg. 44229 (40 C.F.R. §§ 228.15(b)(4)(vi)(C)(1) and 228.15(b)(4)(vi)));
 - b. Determinations relating to paragraph (b)(4)(vi)(C)(1) of this section will recognize that any alternative to open-water disposal may add additional costs (*see* 81 Fed. Reg. 44229 (40 C.F.R. §§ 228.15(b)(4)(vi)(C)(2) and 228.15(b)(4)(vi)));
 - c. Disposal of dredged material at the designated sites pursuant to this paragraph (b)(4) shall not be allowed to the extent that a practicable alternative is available (*see* 81 Fed. Reg. 44229 (40 C.F.R. §§ 228.15(b)(4)(vi)(C)(2) and 228.15(b)(4)(vi))); and
 - d. The following standards for different dredged material types have been appropriately considered (*see* 81 Fed. Reg. 44229 (40 C.F.R. §§ 228.15(b)(4)(vi)(C)(3)(i)-(iii) and 228.15(b)(4)(vi))):
 - i. *Unsuitable Materials*. As already mentioned above, open-water disposal shall be limited to dredged sediments that comply with the Ocean Dumping Regulations;
 - ii. *Suitable sandy material*. Suitable coarse-grained material, which generally may include up to 20 percent fines when used for direct beach placement, or up to 40 percent fines when used for nearshore bar/berm nourishment, should be used for beach or nearshore bar/berm nourishment or other beneficial use whenever practicable. If no other alternative is determined to be practicable, suitable coarse-grained material may be placed at the designated sites; and
 - iii. *Suitable fine-grained material*. This material typically has greater than 20 to 40 percent fine content and, therefore, is not typically considered appropriate for beach or nearshore placement, but has been determined to be suitable for open-water placement by testing and analysis. Materials dredged from upper river channels in the Connecticut, Housatonic and Thames Rivers should, whenever possible, be disposed of at existing Confined Open Water sites, on-shore, or through in-river placement. Other beneficial uses such as marsh creation, should be examined and used whenever practicable. If no other alternative is determined to be practicable, suitable fine-grained material may be placed at the designated sites.

12. Include new restrictions calling for contaminant source reduction efforts to control sediment entering waterways so as to reduce the need for maintenance dredging of harbor features and facilities by reducing shoaling rates. The regulations indicate that federal, state and local agencies tasked with regulating discharges into the watershed should continue to exercise their authorities under various statutes and regulations in a continuing effort to reduce the flow of sediments into state waterways and harbors. (*See* 81 Fed. Reg. 44229 (40 C.F.R. §§ 228.15(b)(4)(vi)(D) and 228.15(b)(5)(vi))).
 13. Impose new restrictions again building on the RDT process created by 40 C.F.R. §§ 228.15(b)(4)(vi)(I), footnote 3 and 228.15(b)(5)(vi) of the 2005 Final Rule. The new restrictions both continue the RDT *and* create a “Steering Committee” to work in concert with the RDT. As stated in the new regulations, the Steering Committee will:
 - ... consist[] of high-level representatives from the states of Connecticut and New York, EPA, USACE, and, as appropriate, other federal and state agencies. The Steering Committee will provide policy-level direction to the Long Island Sound Regional Dredging Team (LIS RDT) and facilitate high-level collaboration among the agencies critical to promoting the development and use of beneficial alternatives for dredged material. State participation on the LIS RDT and Steering Committee is voluntary. The Steering Committee is charged with: establishing a baseline for the volume and percentage of dredged material being beneficially used and placed at the open-water sites; establishing a reasonable and practicable series of stepped objectives, including timeframes, to increase the percentage of beneficially used material while reducing the percentage and amount being disposed in open water, and while recognizing that the amounts of dredged material generated by the dredging program will naturally fluctuate from year to year; and developing accurate methods to track the placement of dredged material, with due consideration for annual fluctuations. The stepped objectives should incorporate an adaptive management approach while aiming for continuous improvement. When tracking progress the Steering Committee should recognize that exceptional circumstances may result in delays in meeting an objective. Exceptional circumstances should be infrequent, irregular, and unpredictable. It is expected that each of the member agencies will commit the necessary resources to support the LIS RDT and Steering Committee’s work, including the collection of data necessary to support establishing the baseline and tracking and reporting on the future disposition of dredged material. The Steering Committee may utilize the LIS RDT, as appropriate, to carry out the tasks assigned to it. The Steering Committee, with the support of the LIS RDT, will guide a concerted effort to encourage greater use of beneficial use alternatives, including piloting alternatives, identifying possible resources, and eliminating regulatory barriers, as appropriate.
- 81 Fed. Reg. 44229 – 44230 (40 C.F.R. § 228.15(b)(4)(vi)(E)).

14. Impose new restrictions regarding the RDT (*see* 81 Fed. Reg. 44230. (40 C.F.R. §§ 228.15(b)(4)(vi)(F)(1)-(4) and 228.15(b)(5)(vi))) which specify, among other things, that:
 - a. The goal of the Long Island Sound Regional Dredging Team (LIS RDT), working in cooperation with, and support of, the Steering Committee, is to reduce or eliminate wherever practicable the open-water disposal of dredged material.
 - b. The RDT will review dredging projects and make recommendations as described in paragraph (vi)(C) above. The RDT will report to the USACE on its review of dredging projects within 30 days of receipt of project information. Project proponents should consult with the RDT early in the development of those projects, to ensure that alternatives to open-water placement are fully considered.
 - c. The RDT will also assist the Steering Committee in: establishing a baseline for the volume and percentage of dredged material being beneficially used and placed at the open water sites; establishing a reasonable and practicable series of stepped objectives, including timeframes, to increase the percentage of beneficially used material while reducing the percentage and amount being disposed in open water, recognizing that the volume of dredged material generated by the dredging program will naturally fluctuate from year to year; and developing accurate methods to track and report on the placement of dredged material, with due consideration for annual fluctuations.
 - d. The RDT will, in coordination with the Steering Committee, serve as a forum for: continuing exploration of new beneficial use alternatives to open-water disposal; matching the availability of beneficial use alternatives with dredging projects; exploring cost-sharing opportunities; and promoting opportunities for beneficial use of clean, parent marine sediments often generated in the development of CAD cells.
 - e. The RDT will assist USACE and EPA in continuing long-term efforts to monitor dredging impacts in Long Island Sound, including supporting USACE's DAMOS (Disposal Area Monitoring System) program and related efforts to study the long-term impacts of open-water placement of dredged material.
 - f. The geographic scope of the RDT includes all of Long Island Sound and adjacent waters landward of the seaward boundary of the territorial sea (three-mile limit) or, in other words, from Throgs Neck to a line three miles seaward of the baseline across western Block Island Sound.
 - g. The RDT shall be comprised of representatives from the states of Connecticut and New York, EPA, USACE, and, as appropriate, other federal and state agencies, as appropriate. As previously noted, state participation on the RDT is voluntary.
 - h. Specific details regarding the RDT's structure (e.g., chair, committees, working groups) and process shall be determined by the RDT and may be revised as necessary to best accomplish the team's purpose.
15. Impose new restrictions stating that if the volume of open-water disposal of dredged material, as measured in 2026, has not declined or been maintained over the prior ten

years, then any party may petition EPA to do a rulemaking to amend the restrictions on the use of the sites. (*See* 81 Fed. Reg. 44230 (40 C.F.R. § 228.15(b)(4)(vi)(G) and 40 C.F.R. § 228.15(b)(5)(vi))).

While the DMMP and associated PEIS identified potential alternatives to open-water disposal for some amount of dredged material from the waters of Long Island Sound, these reports also make clear that currently identified and available practicable alternatives to open-water disposal (*e.g.*, beneficial use alternatives, upland disposal options, and confined in-water disposal alternatives) will not provide sufficient capacity, either individually or collectively, for the management of the entire amount of material expected to be dredged from the western, central, and eastern regions of Long Island Sound over the 30-year planning horizon. In light of this projected capacity insufficiency and other factors, EPA designated the CLDS and WLDS with the revised site use restrictions, and proceeded to evaluate the eastern region of the Sound.

Ultimately, decisions about whether particular dredged material can and should be placed at an open-water disposal site, or whether a practicable alternative is available for handling it in another way (*e.g.*, upland disposal or beneficial reuse, such as beach nourishment), would be made on a fact-specific, case-by-case basis, taking into account both the characteristics of the specific dredged material in question and the range of management options available for it. That said, EPA concluded that the procedures and standards in the site use restrictions for the CLDS and WLDS are well-designed to minimize the amount of material disposed at these open-water sites. The revised standards and procedures will promote the identification and use of alternative methods of managing dredged material. Moreover, the new and enhanced procedures will bolster the regulatory foundation for a timely and ongoing collaborative state and federal inter-agency process geared to minimizing open-water disposal of dredged material.

As mentioned above, NY DOS concurred that the revised site use restrictions for the CLDS and WLDS represented consistency to the maximum extent practicable with the enforceable policies of the approved New York CMP. When NY DOS proposed conditions in its Conditioned Concurrence on April 25, 2016, it explained that:

[t]he Department is setting forth the following conditions in accordance with 15 C.F.R. § 930.4 that, if included in the EPA amended rule, would lead to the clear staged reduction of open-water disposal at CLDS and WLDS and allow the project to be found consistent with the LIS CMP. These conditions, as identified in DOS's comment on the proposed EPA rule amendments, address the shortcomings of the DMMP and EPA's proposed amendments, as well as DOS's concerns for achieving the 2005 Final Rule's goal of measurable, staged reductions in open-water disposal of dredged materials in Long Island Sound

EPA adopted revised site use restrictions based in part on NY DOS's proposed conditions and issued EPA's July 7, 2016 Final Rule for the CLDS and WLDS. As stated above, on July 18, 2016, NY DOS confirmed that EPA's site designations, including the revised site use restrictions, satisfied the conditions in NY DOS's Conditioned Concurrence with EPA's determination under the CZMA that the site designations are consistent to the maximum extent practicable with the enforceable policies of the New York CMP.

C. Background Concerning the Proposal to Designate the ELDS

On October 16, 2012, EPA published in the Federal Register a Notice of Intent to prepare a Supplemental Environmental Impact Statement (“SEIS”) for the Designation of Dredged Material Disposal Site(s) in Eastern Long Island Sound (77 Fed. Reg. 63312). Over the next several years, EPA worked on the SEIS and related matters, while also working on the possible designation of dredged material disposal sites in the central and western regions of the Sound.

On April 27, 2016, EPA published a proposed rule in the Federal Register which formally proposed designation of the ELDS, informed the public of the proposed action and sought public review and comment on it. 81 Fed. Reg. 24748-24767 (April 27, 2016) (the “April 2016 Proposed Rule”). In support of the April 2016 Proposed Rule, EPA also published a “Supplemental Environmental Impact Statement for the Designation of Dredged Material Disposal Site(s) in Eastern Long Island Sound, Connecticut and New York (Draft) (April 2016)” (the “DSEIS”).

While proposing designation of the ELDS, EPA’s April 2016 Proposed Rule also indicated that EPA was considering the possibility of designating one or two additional dredged material disposal site alternatives – specifically, the Niantic Bay Disposal Site (“NBDS”) and the Cornfield Shoals Disposal Site (“CSDS”). *See* 81 Fed. Reg. 24748, 24749. EPA explained that the NBDS and CSDS both satisfied MPRSA site designation criteria and could individually or together potentially be designated as either a substitute for, or a complement to, the ELDS.

EPA’s proposal called for the same site use restrictions proposed as part of EPA’s designation of the CLDS and WLDS to be applied to the ELDS. *See* 81 Fed. Reg. 44229-44230 (July 7, 2016) (40 C.F.R. §§ 228.15(b)(4) and 228.15(b)(5)); 81 Fed. Reg. 24767 (proposed 40 C.F.R. § 228.15(b)(6)). Consistent with the terms of 40 C.F.R. § 228.15(b)(4)(vi), the purpose of these site use restrictions would be to reduce or eliminate the disposal of dredged material in the waters of Long Island Sound.

EPA also explained that designation of a disposal site does not actually authorize any dredged material to be placed at the site. Site designation merely makes the site available as a potential management option (*i.e.*, ocean disposal of dredged material) under appropriate circumstances. Any proposal to place dredged material in the waters of Long Island Sound will be subject to a case-specific permitting review. Placement of dredged material at the ELDS, or any designated disposal site, could only be authorized if the materials are deemed suitable for marine disposal—according to the sediment analyses required under EPA regulations—and only if no practicable alternatives to marine disposal are available. These requirements are expressly stated in the regulations.

EPA held a 60-day public comment period for the April 2016 Proposed Rule and the DSEIS, which was subsequently extended an additional 21 days. *See* 81 Fed. Reg. 41925 (June 28, 2016). During the comment period, EPA hosted two public hearings in New York on May 25, 2016, and two in Connecticut on May 26, 2016, to provide the public additional opportunity to submit comments. The comment period ended on July 18, 2016.

EPA received a large number of comments on the April 2016 Proposed Rule and the DSEIS. These comments expressed a plethora of views, ranging from calls to designate multiple dredged material disposal sites in the eastern Sound; to full support for EPA’s preferred alternative to

designate only the ELDS; to support for EPA’s proposal with certain adjustments; to opposition to designation of any site in the eastern Sound; to a call for an end to all dredged material disposal anywhere in Long Island Sound. On July 18, 2016, NY DOS and NY DEC (collectively, the “New York agencies”) submitted a joint comment letter on the April 2016 Proposed Rule and DSEIS (the “July 18, 2016 NY DOS/NY DEC Comments”).

The July 18, 2016 NY DOS/NY DEC Comments make a variety of points. They indicate that “[a]s a state with considerable water dependent uses and navigation infrastructure, New York recognizes the need for, and is fully supportive of, dredging for maintaining these types of activities.” July 18, 2016 NY DOS/NY DEC Comments, p. 1. They also emphasize New York’s commitment to “working with all partners to secure a path forward for achievable, measurable reductions in open water disposal over time,” *id.* (emphasis added), and note that the state demonstrated this commitment by NY DOS’s recent concurrence under the CZMA with EPA’s amended Final Rule designating the CLDS and WLDS, “which includes updated policies and procedures intended to meet this goal, and is subject to the additional restrictions agreed to by all Agencies involved.” *Id.* The New York agencies’ letter further points out, with implicit approval, that the “[t]he proposed rule for eastern LIS contains the same restrictions as those contained within the Final Rule for CLDS and WLDS, with the same ultimate goal of the reduction in open water disposal over time.” *Id.*

The July 18, 2016 NY DOS/NY DEC Comments also: (a) indicate the state’s opposition to designation of the proposed ELDS, (b) argue that no disposal site is needed in the eastern region of the Sound because the existing WLDS, CLDS, and Rhode Island Sound Disposal Site (“RISDS”) have adequate capacity to handle material from the eastern Sound, and (c) express concern that designating a site in the eastern Sound could impede progress toward the goal of reducing or eliminating open water disposal of dredged material in the Sound. Yet, the New York agencies do not express opposition to a site being designated in the eastern Sound. Instead, they indicate that the state “recognize[s] the importance of providing stakeholders with a range of options for management of dredged material in LIS.” July 18, 2016 NY DOS/NY DEC Comments, p. 1. As a result, they recommend that EPA designate the NBDS and the New London Disposal Site (“NLDS”) (as a “remediation site”), and they suggest that such a “combination of alternative approaches still allows reasonable options for disposal, while reducing the overall impacts on LIS resources and uses as a result of disposal.” *Id.* at 2.⁹

On July 20, 2016, and pursuant to Section 307(c)(1)(C) of the CZMA, 16 U.S.C. § 1456(c)(1)(C), EPA submitted to NY DOS the “EPA Region 1 Determination of Federal Action’s Consistency with Enforceable Policies of New York’s Coastal Zone Management Program (July 20, 2016)” (the “July 2016 Consistency Determination”). *See also* Letter from Kenneth Moraff of EPA to Jeffrey Zappieri of NY DOS (July 20, 2016) (transmitting the July 2016 Consistency Determination). In this submission, EPA documented its determination that the proposed designation of the ELDS would be consistent to the maximum extent practicable with the enforceable policies of the New York CMP, as it has been refined for local conditions by the Long Island Sound Coastal Management Program (“LIS CMP”) and the Local Waterfront

⁹ The July 18, 2016 NY DOS/NY DEC Comments also present a variety of specific technical comments.

Revitalization Program (“LWRP”) of the Town of Southold, New York.¹⁰ EPA also submitted CZMA consistency determinations to the States of Connecticut and Rhode Island, both of which have since concurred with EPA’s determinations.

On August 4, 2016, New York Governor Andrew Cuomo sent a letter to President Barack Obama, EPA Administrator Gina McCarthy, and EPA Region 1 Regional Administrator H. Curtis Spalding indicating that the State of New York was opposed to *any* dredged material site being designated in the eastern region of Long Island Sound (the “August 4, 2016, Governor Cuomo Letter”). This letter pronounced that no disposal site was needed in the eastern Sound. Furthermore, the Governor indicated that New York would “initiate legal action” to try to block any site from being designated for open-water disposal of dredged material in the eastern Sound. The Governor opined that the WLDS, CLDS, and RISDS had adequate disposal capacity to obviate the need for the ELDS.

Following the end of the public comment period on the April 2016 Proposed Rule and the DSEIS, EPA spent considerable time reviewing and considering the public comments that it received and other relevant, related developments. This work led EPA to make certain noteworthy changes to the proposed action. These changes are reflected in the Final Rule. First, EPA decided to designate the ELDS and not to designate the NBDS or CSDS,¹¹ thus, in effect, reducing the number of authorized sites in the eastern Sound from two to one. Second, EPA decided to shift the boundaries of the ELDS to the west so that the site would be entirely outside of the submarine transit corridor into the Thames River, the existing NLDS, and New York state waters, as well as farther from Fishers Island. Third, EPA also adjusted the boundaries of the ELDS to exclude two hard-bottom areas that have the potential to provide relatively more valuable marine habitat. These modifications to the site boundaries reduced the area of the ELDS from two square nautical miles (nmi²) to approximately 1.3 nmi², and the capacity of the site from approximately 27 mcy to 20 mcy. These changes were supported by an updated assessment of the disposal capacity needed for a site designated in the eastern Sound conducted by the USACE at EPA’s request in direct response to comments on the Proposed Rule.

Finally, having tailored the site use restrictions in collaboration with NY DOS and others throughout the designation and CZMA review process for the central and western sites, EPA also adjusted the terms of the site use restrictions to be applied to the ELDS to reflect such modifications. *See* 81 Fed. Reg. 44229-44230 (July 7, 2016) (40 C.F.R. §§ 228.15(b)(4) and 228.15(b)(5)). Consistent with the terms of 40 C.F.R. § 228.15(b)(4)(vi), the purpose of the site use restrictions is to reduce or eliminate the disposal of dredged material in the waters of Long Island Sound. The site use restrictions establish procedures and standards to foster and facilitate achieving this goal, and specifically include procedures that promote the development and use of practicable beneficial use options through the activities of the RDT and Steering Committee. NY DOS was directly involved in the development of these site use restrictions and concurred that they were

¹⁰ Throughout the rest of this document, when EPA refers to the New York CMP, it will by definition include the LIS CMP and the Town of Southold’s LWRP, unless the text indicates otherwise. This makes sense because NY DOS indicates that the LIS CMP and the Southold LWRP are considered part of the New York CMP for the purpose of reviewing projects in the area of Long Island Sound near to Southold.

¹¹ EPA also decided not to designate the NLDS, or any part of the NLDS. Thus, the NLDS and CSDS are scheduled to close by operation of law on December 23, 2016.

satisfactory under the New York CMP for the CLDS and WLDS designations. Applying these site use restrictions to the ELDS makes good sense because they apply equally as well to the eastern region of Long Island Sound, and because applying the restrictions to the eastern Sound ensures that the entire Sound will be covered by the same regulatory regime applied by the same federal and state agencies. This will contribute to providing a rational, predictable, and consistent regulatory regime to the public.

NY DOS's response to EPA's July 2016 Consistency Determination was due on October 3, 2016.¹² NY DOS responded by objecting to EPA's CZMA consistency determination. NY DOS documented its objection in a letter dated October 3, 2016, from New York Secretary of State Rossana Rosado to Kenneth Moraff of EPA Region 1.¹³ On October 6, 2016, three days after the response deadline, NY DOS sent EPA an email transmitting a "Corrected" version of its October 3, 2016 letter. The new version included a number of changes from the version submitted on October 3, 2016. NY DOS did not, however, re-date the document, which was still dated October 3, 2016.

NY DOS's objection focused on the terms of EPA's April 2016 Proposed Rule and the DSEIS. It did not consider the changes that EPA has made for the Final Rule and the FSEIS. To some extent, this is an unavoidable byproduct of the relative timing of various steps in the regulatory process: EPA was required to render its consistency determination under the CZMA before taking final action and NY DOS had to issue its response before EPA's final action. That said, EPA personnel attempted to initiate discussions with NY DOS during August and September 2016 regarding potential modifications to the Proposed Rule that EPA was considering in light of public comments, but, as mentioned farther above, NY DOS would not discuss the matter with EPA.

EPA has fully reviewed and considered the October 6, 2016, version of the Objection submitted by NY DOS to EPA (the "Objection"). Having considered the arguments presented by NY DOS in the Objection, EPA concludes that these arguments are unfounded. Moreover, having considered the Objection, the Region concludes under 15 C.F.R. § 930.43(d)(1) and (2) that designation of the ELDS, as specified in the Final Rule, is in all respects consistent to the maximum extent practicable with the enforceable policies of New York's CMP, as refined by the Long Island Sound CMP and any relevant LWRPs. EPA has documented its determination for the record in this "EPA Response to NY DOS's CZMA Objection to EPA's Designation of the Eastern Long Island Sound Dredged Material Disposal Site" (November 4, 2016) ("EPA's Response"), and, in accordance with 15 C.F.R. § 930.43(e), EPA has notified the NY DOS of

¹² By letter dated September 16, 2016, from Gregory Capobianco of NY DOS to Melville P. Coté, Jr., of EPA Region 1, NY DOS indicated that it would elect to take a 15-day extension of time for responding to the Region's July 2016 Consistency Determination, and that the response would be due on October 3, 2016. This extension is authorized pursuant to 15 C.F.R. § 930.41(b) ("Federal agencies shall approve one request for an extension period of 15 days or less.").

¹³ On October 3, 2016, NY DOS initially submitted to Region 1 a version of the state's Objection signed by Secretary of State Rosado but which included on every page the header: "DRAFT AGENCY DOCUMENT – NON-FINAL." Later on October 3, 2016, NY DOS sent Region 1 a second version of the Objection to Consistency Determination to replace the first document. The new version made a number of changes including, but not limited to, removing the "Draft Agency Document" header.

EPA's intent to proceed with the ELDS designation. *See* November 4, 2016, Letter from Kenneth Moraff, EPA Region 1, to Rossana Rosado, Secretary of State, NY DOS.

EPA currently expects the Final Rule to be published in the Federal Register during the week of November 7, 2016. The Final Rule specifies that it will become effective 30 days after publication in the Federal Register. EPA will provide or make available to NY DOS this Response to NY DOS's CZMA Objection, the Final Rule and the Final Supplemental Environmental Impact Statement (the "FSEIS") supporting the designation of the ELDS.

Finally, under 15 C.F.R. § 930.43(d) and 930.44, EPA considered whether to seek mediation assistance from the National Oceanic and Atmospheric Administration ("NOAA") or the Secretary of Commerce to address this CZMA dispute with NY DOS, but the Region has decided against it. In the Objection (at p. 56), NY DOS warns that a "mediation process may be lengthy." EPA agrees with this assessment and rather than taking on additional delay, EPA finds that is necessary to proceed with the site designation process at this point. EPA has been working to designate needed dredged material disposal sites for a very long time, and this particular project began in 1999 with scoping hearings under the National Environmental Policy Act. Moreover, the existing NLDS and CSDS sites will close by operation of law on December 23, 2016, and EPA is not acting to designate those sites (which also are opposed by NY DOS). Therefore, unless designation of the ELDS goes forward, there will be no EPA-designated dredged material disposal site in the eastern Region of Long Island Sound. This could pose a threat both to safe navigation in the eastern Sound, whether for recreational, commercial, or military and public safety purposes, and could result in less than optimal environmental protection if dredged material requires management under emergency conditions. Furthermore, as noted previously, on August 4, 2016, the Governor of New York wrote to EPA and threatened legal action to block the designation of any dredged material disposal site in the eastern region of Long Island Sound. Since that time, EPA has contacted NY DOS to discuss the site designation, but NY DOS has been unwilling to discuss the matter. Under these circumstances, EPA has decided that the most reasonable course of action requires finalization of the Proposed Rule rather than pursuit of the above-mentioned mediation opportunities through the Department of Commerce.

III. Analysis of NY DOS's Objection to EPA's CZMA July 2016 Consistency Determination

EPA has carefully considered the Objection submitted by NY DOS, and concludes that policy arguments set forth in the Objection are unavailing and fail to demonstrate any inconsistency between EPA's proposal to designate the ELDS and New York's CMP. In its Objection, NY DOS states that:

based on the information that has been provided, DOS objects to EPA's consistency determination on the grounds that the proposed action is not consistent to the maximum extent practicable with the enforceable policies of the Long Island Sound Coastal Management Program (LIS CMP) and the Town of Southold Local Waterfront Revitalization Program (LWRP), each of which is a component of the New York State Coastal Management Program (CMP). EPA's

Proposed Rule designating permanent open water disposal sites in eastern Long Island Sound is inconsistent with LIS CMP and Southold LWRP Policies # 5 (water quality), # 6 (ecosystem protection), # 8 (hazardous waste management), # 10 (water dependent uses) and # 11 (living marine resources).

Objection, p. 1. As discussed above, NY DOS makes this determination based on the April 2016 Proposed Rule, while presumably also considering the July 2016 Final Rule for the CLDS and WLDS sites, which was completed prior to NY DOS's Objection and which included the site use restrictions to be applied to the ELDS, as well as to the CLDS and WLDS. EPA stands by its analysis in the July 2016 Consistency Determination and disagrees that designation of the ELDS as set forth in the April 2016 Proposed Rule would have been inconsistent with the New York CMP.

That said, EPA has made a number of important changes to the ELDS site designation in response to public comments on the Proposed Rule. These changes are described above and further reduce any possibility of adverse effects on New York's coastal zone that could indirectly result from the ELDS site designation. EPA recognizes, as discussed above, that NY DOS did not consider all of these changes in formulating its Objection. (NY DOS did, however, consider the updated site use restrictions.) EPA will evaluate the question of consistency with the New York CMP in light of the terms of the designation specified in the Final Rule because these are the terms that will govern the ELDS going forward. EPA is hopeful that when NY DOS considers the changes to the ELDS designation for the Final Rule, it will concur with EPA's determination and rationale.

NY DOS's Objection identifies the specific policies of the LIS CMP and the Southold LWRP with which it believes the ELDS site designation is inconsistent. EPA disagrees that the site designation is inconsistent with these policies and will discuss each of them separately below. Before doing so, however, EPA addresses a number of overarching points important to this analysis.

A. General Points

1. Periodic Dredging is a Necessity

Over time, the movement and accretion of silt and sand in the waters of Long Island Sound, and rivers tributary to the Sound, leads to the buildup of sediment on the bottom of these waters. The resulting buildup can interfere with navigation and the berthing and docking of vessels. This, in turn, can threaten public safety and interfere with marine commerce and recreation, and can even impact national defense-related activities due to the need for adequate navigation channels and berthing areas for U.S. Navy and Coast Guard vessels that use these waters. Therefore, it is periodically necessary to dredge Long Island Sound's navigational channels, port and docking areas, marinas, tributary rivers and other areas requiring vessel access. (The need for dredging is not unique to Long Island Sound; it is a necessity for waterways all over the Nation.)

NY DOS also recognizes the importance of periodic dredging to preserve safe navigation and berthing of vessels. In the July 18, 2016 NY DOS/NY DEC Comments on the April 2016 Proposed Rule and DSEIS, the state agencies wrote that "[a]s a state with considerable water

dependent uses and navigation infrastructure, New York recognizes the need for, and is fully supportive of, dredging for maintaining these types of activities.”

Furthermore, the need for dredging brings with it a concomitant need for environmentally sound dredged material management. Whether or not EPA designates the ELDS, the need for dredging and environmentally sound dredged material management remain. Not designating a site in the eastern region of Long Island Sound would neither obviate the need for dredging nor automatically create environmentally sound alternatives for handling material that is dredged. Without good options for managing dredged material, such as the designation of the ELDS, one of two undesirable results would occur. Either dredging would be blocked and public safety, economic activity, recreation and even national security could suffer, or dredging would go forward and problems would arise from the ways that the material is managed. EPA designation of an open-water disposal site balances and safeguards various ecological and societal needs, all of which are integral to the health and functioning of Long Island Sound, its ecosystems, and the people who rely on it for their livelihoods or for recreation.

2. A Dredged Material Disposal Site is Needed in Eastern Long Island Sound¹⁴

EPA’s task in this instance was to decide whether or not to designate an open-water disposal site in the eastern region of the Sound to provide an environmentally sound dredged material management option for suitable material when practicable alternatives to open-water disposal are not available. In other words, EPA did not prejudge that a site should or must be designated in the eastern region of the Sound. Indeed, EPA considered a variety of alternatives that involved refraining from designating a site in the eastern Sound.

EPA has decided to designate the ELDS, however, because there is a need for a site in the eastern region of the Sound and the ELDS satisfies the applicable site designation criteria and will provide an environmentally sound dredged material management option for projects from the eastern Sound that need to use it. NY DOS reached a contrary conclusion, arguing in the Objection, as well as in the July 18, 2016 NY DOS/NY DEC Comments on the April 2016 Proposed Rule and DSEIS, that the WLDS and CLDS have adequate capacity to handle all the material from both their own regions and the eastern Sound. NY DOS argues, therefore, that those sites should be used instead of designating the ELDS. EPA disagrees.

Disposal capacity at the WLDS and CLDS does not obviate the need for the ELDS. USACE projected in the DMMP that dredging in Long Island Sound would generate approximately 52.9

¹⁴ NY DOS, in their Objection Letter, argue that EPA did not adequately establish that there is a “need” to designate an additional open-water disposal site in the eastern Sound. Objection, pp. 12, 28. This argument is two-pronged. It first claims that there is sufficient capacity for the projected disposal needs in existing designated open-water disposal sites as well as other beneficial use and upland alternatives. Second, NY DOS claims that EPA based its determination of “need” primarily on cost, which is impermissible under the Ocean Dumping Act. EPA’s determination of “need” is grounded in both scientific data and in the law and regulations, as discussed at length throughout this section. These arguments are also directly addressed in EPA’s Response to Comments. *See, e.g.*, FSEIS, App. J - Responses to Comments, Comment/Response ##5 and 9 (EPA responding to New York Governor Cuomo’s objections based on similar, if not identical arguments relating to determination of “need”).

mcy of material over the 30-year planning horizon, with approximately 30.3 mcy from the western and central regions and 22.6 mcy from the eastern region. Of the 52.9 mcy, approximately 3.3 mcy of material are projected to be unsuitable for open-water disposal. *See* 81 Fed. Reg. 24750, 24750 (Apr. 27, 2016); *see also* FSEIS, App. J - Responses to Comments, Comment/Response #5 and #9. This leaves approximately 49.6 mcy of material that could potentially need to be placed at an open-water disposal site. Of this 49.6 mcy of material projected to be suitable for open-water disposal, 15.2 mcy are projected to be sand that could potentially be used for beneficial uses, such as beach nourishment, while 34.4 mcy is projected to be fine-grained material. While EPA expects that beneficial uses, or some other upland management option, will be found for some amount of the sand, and possibly even for some amount of the fine-grained material, there is no guarantee, and it is impossible to be sure precisely how much will be managed in this way.

As noted in the Proposed Rule and DSEIS, the CLDS and WLDS are each estimated to have a disposal capacity of about 20 mcy. This 40 mcy of capacity is not enough to take the entire 49.6 mcy of material that *could* require open-water disposal. Moreover, the CSDS and NLDS sites will close by operation of law on December 23, 2016. With regard to disposal capacity that may be at the RISDS, that site was designated in 2005 to serve the dredging needs of the Rhode Island and southeastern Massachusetts region. Planning for the RISDS did not include accommodating material from eastern Long Island Sound.

As part of its consideration of, and response to, comments asserting that no disposal site is needed in the eastern region of Long Island Sound, and comments urging that the size of any site be reduced or minimized, EPA asked the USACE to revisit its estimate of the dredged material disposal capacity needs in the eastern Sound and, as appropriate, to prepare a more refined estimate. Although the estimates from the DMMP reflected substantial analysis and public input, the USACE agreed to reassess the capacity needs in coordination with EPA. The USACE undertook this analysis and projected that a disposal capacity of approximately 20 mcy (based on water volume below a depth of 59 feet [18 meters] and slope calculations, with a buffer zone) would likely be sufficient. *See* FSEIS, App. J - Responses to Comments, Comment/Response #5.

This revised estimate reflects a variety of factors, some of which involve an unavoidable degree of uncertainty. These factors include the following: the specific dredging projects currently projected within the region (including possible “improvement projects” to further deepen channels or berthing areas); how much of each type of material (i.e., sand, suitable and unsuitable fine-grained material) is estimated to be generated by each project; how much of this material is estimated to require open-water disposal; the possibility of increased future dredging needs caused by larger-than-normal storms; and a “bulking factor” of approximately 10 percent for fine-grained sediment. More specifically, the revised projected disposal capacity need of approximately 20 mcy is based on the need to accommodate projections of approximately 12.5 mcy of suitable fine-grained sediment from maintenance dredging; 2.8 mcy of suitable fine- and course-grained sediment from potential improvement (deepening) dredging projects; 1.8 mcy of fine-grained, shoal material resulting from extreme storm events; 1.1 mcy of sand (recognizing that beach nourishment may not be a practicable alternative for all 9.1 mcy of the projected sand); and 160,000 cy for the excavation of CAD cells (to receive material unsuitable for open-water disposal in Long Island Sound). These amounts were then combined for a total of 18,364,500 cy; with a bulking factor of approximately 10 percent of the total, all of which

combine to bring the total to about 20 mcy. The “bulking factor” assumes that dredged material that is collected and then placed at a disposal site is relatively unconsolidated and, thus, will require more capacity when it is placed at a disposal site than it occupied when it was in a consolidated state on the seafloor prior to dredging. (Over the long term, this material is likely to substantially re-consolidate.)

It is also worth noting that USACE reduced the earlier DMMP estimate for eastern Sound dredged material disposal capacity needs by approximately 1.0 mcy for material expected to be dredged from the Guilford Harbor area. The USACE had earlier anticipated that this material would go to the CSDS site. Since EPA is not designating the CSDS and that site will close in December 2016, USACE now expects this material to be sent to the CLDS if it requires open-water disposal. The DMMP showed that Guilford and other harbors in that vicinity were closer to the CSDS than to other sites, but with removal of CSDS from consideration, Guilford Harbor is actually closer to the CLDS than to the ELDS. Therefore, this 1.0 mcy of material is not included in the revised estimate of needed disposal capacity for the eastern Sound.

Furthermore, it must be understood that estimates of the amounts of material of different types needing to be managed in the future are unavoidably imperfect. The actual amount of material that will require management could be higher (or lower) over the 30-year planning horizon. This is especially evident when unpredictable events, such as large storms and possible improvement dredging projects, are considered. Therefore, EPA deems it reasonable and prudent to designate sites to ensure adequate disposal capacity is available for all the projected material, recognizing that all the capacity may not be needed in the future. Indeed, as per the site use restrictions, EPA will be continuously working with others to find beneficial use options for dredged material in order to minimize the amount of disposal capacity that is used, and otherwise work towards the overarching goal to reduce or eliminate open-water disposal in the Sound. Yet, the precise rate at which beneficial use options will develop is uncertain, which was well understood by NY DOS when it worked with EPA and others to develop the site use restrictions for the CLDS and WLDS, which now apply to the ELDS as well. *See* FSEIS, App. J - Responses to Comments, Comment/Response #9.

Beyond the question of disposal capacity, when EPA took into account overall environmental effects, environmental and safety risks, logistical difficulties, and the expense of using such distant sites, EPA concluded that the CLDS, WLDS, and RISDS would not reasonably serve the needs of the eastern Long Island Sound region. A key consideration in EPA’s determination that a designated site is needed in eastern Long Island Sound is that going outside the region would involve far longer transit distances from dredging centers in the eastern Sound. For example, the approximate distances from New London Harbor to the CLDS is 34.7 nmi, to the RISDS is 44.5 nmi, and to the WLDS is 59.7 nmi. These longer trips would result in greater energy use, increased air emissions, increased risk of spills, and greater cost (FSEIS, Section 2.1). In addition to increased fuel use and air emissions associated with longer travel distances, lengthier trips might require larger scows with more powerful towing vessels, which would further increase fuel consumption and air emissions. Longer haul distances would also increase the amount of time needed to complete a dredging project, resulting in an extended period of disruption to the areas being dredged and other logistical difficulties associated with needing to complete dredging projects within the limited “environmental windows” that are set to restrict when dredging may be carried out in and around Long Island Sound to protect marine life during dredging activity.

Finally, longer haul distances also would increase the cost both to taxpayers and private entities of completing dredging projects. Using the CLDS, WLDS, or RISDS would greatly increase the transport distance for, and duration of, open-water disposal for dredging projects from the eastern Long Island Sound region. This, in turn, would greatly increase the cost of such projects. It could also render certain dredging projects too expensive to conduct. For example, maintenance dredging of the U.S. Navy Submarine Base berths planned for 2016-2020 is expected to generate about 75,000 cy of suitable material; the estimated cost of disposal at the ELDS is \$31/cy for a total cost of \$2,325,000, while disposal at the CLDS is estimated at \$64/cy for a total of \$4,800,000. An improvement (deepening) project to accommodate a larger class of submarine planned for 2017-2025 is expected to generate about 350,000 cy; the estimated cost of disposal at the ELDS is \$26/cy for a total cost of \$9,100,000, while disposal at the CLDS is estimated at \$57/cy for a total of \$19,950,000 (USACE, 2016b). Thus, the longer haul distance more than doubles the cost to the public to dredge the same project. As stated above, EPA is *not* designating the ELDS solely in order to make dredging less expensive, but it would be irrational to ignore that reducing the cost of necessary dredging is another of the many benefits of designating the ELDS, a site which EPA has determined to be environmentally sound, instead of relying on more distant sites.

From all this, it is clear that EPA has considered the question of whether already existing disposal sites might be appropriate for receiving material from the eastern Sound and have not shied away from relying upon such sites for planning purposes when it is reasonable to do so, such as for Guilford Harbor. It is not reasonable to do so for all the material from the eastern Sound, however, and EPA continues to conclude that a site in the eastern Sound—specifically, the ELDS—is needed. Moreover, EPA reduced the area of the ELDS site in light of several factors, including the USACE’s reduced estimate of needed disposal capacity. Thus, EPA concludes that the ELDS is needed, but that a smaller site will be sufficient. Accordingly, EPA has designated a smaller site than was proposed.

Thus, not having an appropriate open-water disposal site in the eastern part of the Sound would be problematic for at least five primary reasons:

- necessary dredging could be blocked or delayed, thus hampering and threatening the safety of recreational, commercial, and military navigation and berthing;
- dredged material might need to be hauled longer distances for placement at open-water sites outside the eastern region of the Sound, which would be more costly, use more energy, generate greater air emissions from dredged material transport, and generally increase the risk of vessel accidents due to the greater distances being travelled, *see* 81 Fed. Reg. 24749 (detailing distances from Saybrook Outer Bars at the mouth of the Connecticut River to the nearest designated dredged material disposal sites in other parts of Long Island Sound); *see also* EPA’s April 2016 DSEIS, p. 5-18;
- in the absence of an EPA-designated site, USACE might be forced to use its site selection authority to specify a new site(s) for shorter-term use, which over time could lead to a proliferation of disposal areas in the eastern part of Long Island Sound, and would be contrary to Congress’s preference for concentrating any placement of dredged material at EPA-designated sites, as indicated by MPRSA § 103(b), 33 U.S.C. § 1413(b) (the USACE “shall, to the maximum extent feasible, utilize the recommended sites designated by the Administrator...” for dredged material disposal);

- SMMPs are not developed for USACE-selected sites, whereas SMMPs are required for EPA-designated sites under the requirements of MPRSA § 102(c)(3), 33 U.S.C. § 1412(c)(3), and they provide enhanced management for open-water disposal sites; and
- relying on multiple short-term site selections would maximize the resource demands on regulatory agencies and the public because site selection procedures and associated NEPA reviews would have to be undertaken every time another site selection was needed.

EPA designation of the ELDS provides an open-water disposal option in the eastern portion of Long Island Sound that is both needed, addresses the abovementioned concerns, is consistent with the MPRSA and its regulations, and is consistent to the maximum extent practicable with New York’s CMP.

3. Designation of the ELDS Will Have No Direct Effects on New York’s Coastal Zone

Designating the ELDS will have no *direct* effects on any resource or use of the coastal zones of New York because EPA designation of a dredged material disposal site does not actually authorize the placement of dredged material at the site. *See* 15 C.F.R. §930.11(g) (“direct effects ... result from the activity and occur at the same time and place as the activity ...”). Designation only makes the site *potentially* available to receive dredged material and no material may be placed at the site unless such placement is first specifically authorized by the USACE.

Even after the ELDS is designated, any proposal to place dredged material at the site will have to go through a separate case-specific review. Disposal of the dredged material can only be authorized *if* the sediments are analyzed and found suitable for open-water disposal under the rigorous sediment quality criteria of EPA’s regulations and if it is found that there is a need to manage the material in this manner. 40 CFR 227.1(b), 227.2, 227.3, 227.5, and 227.6; 40 CFR Part 227, subparts B and C; *see supra* Section II(A) (discussion of background and relevant law and regulations applicable to EPA’s proposed action). Open-water disposal is not needed when there are practicable alternative management methods available that would have less adverse environmental effects under 40 C.F.R. § 227.15 and 227.16(b). Not only is this “need for open-water disposal” criterion in the underlying MPRSA regulations, but EPA has expressly incorporated it into the site use restriction regulations applicable to the ELDS, CLDS and WLDS. *See* 40 C.F.R. § 228.15(b)(4)(vi)(C)(1) (incorporated for the ELDS by 40 C.F.R. § 228.15(b)(6)).

Moreover, the site use restrictions in the regulations include procedures and standards developed to minimize the need for open-water disposal. EPA’s site use restrictions are designed to promote and facilitate identification and use of non-open-water disposal alternatives. In their July 18, 2016, NY DOS/NY DEC Comments on the April 2016 Proposed Rule and DSEIS, the New York agencies indicated the state’s goal was to “secure a path forward for achievable, measurable reductions in open water disposal over time.” They also indicated that the procedures and standards adopted for the CLDS and WLDS were an acceptable means to that end.

4. Designation of the ELDS May Indirectly Affect New York's Coastal Zone

Designating the ELDS may potentially have *indirect* effects on New York's coastal zone. Under NOAA's CZMA regulations, "indirect (cumulative and secondary) effects ... [are effects that] result from the activity and are later in time or farther removed in distance, but are still reasonably foreseeable." 15 C.F.R. § 930.11(g). Designation of the ELDS or another alternative could result in indirect effects *at the disposal site* because it is "reasonably foreseeable" that once a site has been designated, later federal actions will approve placement at the site of at least some sediment dredged from the waters of both states.¹⁵ Placing material at the site will have at least some type of environmental effect as material travels through the water column and lands on the seafloor. (The character of these environmental effects is discussed in more detail farther below.)

This is not to say that without designation of the ELDS, there would be no effects on the waters of Long Island Sound from dredged material management. Regardless of whether the ELDS is designated, the need for dredging and dredged material management would remain and an alternative site in the eastern Sound, such as the NBDS, could be designated or selected by the USACE. *See* 33 U.S.C. § 1413(b); 40 C.F.R. § 228.15(b)(4)(vi)(N). This could lead to indirect effects at one or more different disposal sites. If no alternative sites are either selected or designated in the eastern region of the Sound, however, then either necessary dredging will not occur or dredged material will have to be hauled to more distant dredged material disposal sites.¹⁶ *See* DSEIS, pp. ES-18 to ES-19, 5-18 to 5-28. In the former case, navigational safety and marine commerce and recreation would suffer. In the latter case, greater haul distances would mean greater adverse environmental and economic effects, such as increased fuel use, increased air emissions, greater risk of accidents, and greater project costs.¹⁷ In both cases, coastal zone interests could be adversely affected.

EPA concludes that while designating the ELDS would have indirect effects at the disposal site(s), those effects would not be significant. While there is no way to know in advance the amount or precise characteristics of any dredged material that would be placed at a designated site, material will only be authorized for placement at a designated site if there are no practicable alternative management methods available that will have less adverse environmental effects. In addition, the material would have to be tested and found to satisfy the MPRSA's strict sediment quality criteria in 40 C.F.R. Part 227, Subpart B, before it could be authorized for placement at

¹⁵ Such future disposal is reasonably foreseeable in light of the DMMP's projections that alternatives to open-water disposal cannot accommodate all the dredged material that will need to be managed over the next 30 years.

¹⁶ It should be noted here that EPA finds that without an open-water disposal site in the eastern region of Long Island Sound, some needed dredging will *not* be able to proceed. This is because both the DMMP and EPA's analysis conclude that other currently identified viable methods of dredged material management (*e.g.*, disposal at other sites, beneficial use, upland disposal, or confined in-water disposal facilities) do not presently have sufficient capacity to handle the material from all needed dredging projects over the next 30 years and some projects would likely become too expensive to carry out. *See* 81 Fed. Reg. 24750; *see also* FSEIS, App. J - Responses to Comments, Comment/Response #5 and #9.

¹⁷ Again, EPA is not designating the ELDS because it will make dredging projects less costly. EPA is simply recognizing that having identified a need for an open-water disposal option and an environmentally sound location for an open-water disposal site, a detriment of refusing to designate that site and forcing projects to haul sediments longer distances for disposal at other locations would be that those projects will be made more expensive for no good reason. Moreover, some projects might not be able to proceed due to higher project costs.

the site. These criteria prohibit the placement at a designated site of material that is toxic or causes the bioaccumulation of toxins. *See* 40 C.F.R. §§ 227.3, 227.5 and 227.6.

Any suitable material placed at the site will travel rapidly to the seafloor and will not disperse horizontally through the water column and away from the site. *See* 81 Fed. Reg. 24748, 24758 (Apr. 27, 2016). Moreover, placing dredged material at the ELDS will not adversely affect water quality beyond temporarily raising water column turbidity in the areas of the disposal site during initial mixing. EPA has found that the ELDS is a “containment site,” meaning that material placed there will remain there. Containment sites keep any impacts of disposal focused in one area and are optimal for site management and monitoring by EPA and the USACE.

The dredged material placed at a designated site will also have only minor effects on the benthic habitat within the disposal sites. *See* DSEIS, pp. 5-46 to 5-48. This is because, as stated above, any material disposed at the ELDS must satisfy EPA’s sediment quality criteria from 40 C.F.R. Part 227, Subpart B. Moreover, although placing the material at a site would somewhat alter the seafloor and would smother some benthic organisms, extensive research shows that areas receiving dredged material are quickly recolonized by resident benthic organisms. As discussed in the USACE’s PEIS in support of the DMMP, which cites Germano et al., 2011, “although short-term impacts and long-term changes in habitat due to sediment type and elevation of the seafloor have occurred [at the disposal sites], there is no evidence of long-term effects on benthic processes or habitat conditions.” In addition, environmental effects would not be significant because the ELDS does not encompass natural resource areas of particular heightened sensitivity. *See* 81 Fed. Reg. 24748, 24754-24755. Placement of dredged material at the ELDS also would not have significant adverse effects on aquatic organisms transiting the sites because of restrictions on the type of material that could be placed there. Any effects of dredged material disposal would be further limited by the fact that placement of material at the ELDS could only occur during the limited months when dredging is allowed (typically only from October to April). *See* 81 Fed. Reg. 24748, 24756 (discussing “environmental windows” or “time-of-year restrictions” for dredging).

Designation of the ELDS could also have indirect effects on coastal uses because use of waters over the disposal site—such as for boating or fishing—would be precluded during times when dredged material is being placed at the site. Yet, any such effects would be insignificant for several reasons. First, the disposal site only occupies a small area within Long Island Sound, and boaters and fishers could easily avoid the site when necessary. Second, any interference with other uses of the waters near the disposal site would only be temporary and episodic and would only occur during a limited part of the year due to the use of “environmental windows” that restrict dredging activities to certain times of the year. Third, considering its modified boundaries, the ELDS is not located in major shipping lanes or navigation corridors or particularly important areas for fishing, shellfish harvesting, or boating. *See* 81 Fed. Reg. 24748.

Finally, in the July 2016 Consistency Determination, EPA also considered whether designation of the ELDS would have adverse *indirect* effects on New York coastal resources at dredging sites or transit routes from dredging sites to the disposal site. If one took the view that by providing a disposal site, the site designation enables dredging to take place, then, one might find that such action, therefore, cause indirect effects at dredging sites and along transit routes to the disposal site. However, after due consideration, EPA concluded that no such effects of any significance would occur as a result of the site designation. Consistent with this conclusion, NY

DOS's Objection raises no concerns about indirect effects at dredging sites or upon transit routes to the ELDS from such sites.

B. The Site Designation is Consistent with the Enforceable Policies of New York's CMP

In this section and its sub-parts, EPA identifies each of the specific coastal management policies that NY DOS claims are inconsistent with the Proposed Rule and addresses NY DOS's corresponding arguments. The policies are extracted from the LIS CMP and the Southold LWRP. Both EPA and NY DOS agree that the only LWRP relevant here is Town of Southold's.

Both EPA's July 2016 Consistency Determination and NY DOS's Objection focused on the same policies from the LIS CMP and the Southold LWRP. EPA found the proposed site designation consistent with these specific policies, but NY DOS disagreed in a number of respects. As this section demonstrates, EPA has considered NY DOS's arguments, but finds the final designation of the ELDS is consistent to the maximum extent practicable with all of the relevant policies.

Before discussing the potentially relevant individual policies of New York's CMP, EPA addresses two general points. First, as stated in EPA's July 2016 Consistency Determination, while EPA acknowledges that NY DOS had informed EPA in a letter dated January 15, 2016, that all the LIS CMP policies that the state referenced are "enforceable policies," it does not appear to EPA that the policies at issue here are, in fact, "enforceable policies" under the CZMA. NOAA's regulations under the CZMA explain that:

[t]he term "enforceable policy" means State policies which are legally binding through constitutional provisions, laws, regulations, land use plans, ordinances, or judicial or administrative decisions, by which a State exerts control over private and public land and water uses and natural resources in the coastal zone," 16 U.S.C. § 1453(6a), and which are incorporated in a management program as approved by OCRM either as part of program approval or as a program change under 15 CFR part 923, subpart H. An enforceable policy shall contain standards of sufficient specificity to guide public and private uses. Enforceable policies need not establish detailed criteria such that a proponent of an activity could determine the consistency of an activity without interaction with the State agency. State agencies may identify management measures which are based on enforceable policies, and, if implemented, would allow the activity to be conducted consistent with the enforceable policies of the program. A State agency, however, must base its objection on enforceable policies.

15 C.F.R. § 930.11(h). The New York CMP policies at issue here do not "contain standards of sufficient specificity to guide public and private uses." The language is, instead, vague and general. It provides neither clear guidance nor fair notice of what is expected in order to achieve consistency with the policies.

EPA recognizes that the NOAA regulations state that "[e]nforceable policies need not establish detailed criteria such that a proponent of an activity could determine the consistency of an activity without interaction with the State agency ...," but the policies at issue not only do not provide detailed criteria, they do not provide any specific or objective criteria at all. This is

doubly problematic given that NY DOS has been unwilling to discuss the site designation proposal with EPA since early August 2016. The sort of vague language present in the policies at issue here appears to be an invitation to arbitrary regulation.

In any event, NOAA's regulations also indicate that the federal agency "should give consideration to management program provisions which are in the nature of recommendations" (as opposed to enforceable policies). EPA has, in fact, carefully considered all the relevant policies and concludes that designating the ELDS is consistent with them to the maximum extent practicable.

Second, while it is not clear that a separate discussion of the Southold LWRP is necessary under the New York CMP in this case, EPA provided a separate discussion in its July 2016 Consistency Determination. This discussion satisfies any requirement that may apply under the CZMA. In its April 25, 2016, Conditioned Concurrence with EPA's designation of the CLDS and WLDS, NY DOS explained (at p. 3) that:

[i]n addition to the enforceable coastal policies of the LIS CMP, it is noted that there are several Local Waterfront Revitalization Programs (LWRPs) adjacent to the planning area for the DMMP that would be affected by the proposed amendments to the site designations. Generally, the policy numbers and objectives of each LWRP mirror those of the Long Island Sound CMP. This coastal policy analysis is inclusive of the LIS CMP and LWRPs.

Thus, NY DOS considered that its discussion of the relevant policies of the LIS CMP also covered the policies of the LWRPs and the state provided no separate, specific discussion of the LWRPs. Based on this approach by NY DOS, EPA explained in the July 2016 Consistency Determination that a separate discussion of the Southold LWRP was not required. Nevertheless, EPA went on to specifically discuss the Southold LWRP in the July 2016 Consistency Determination (pp. 47-49), "just to be doubly sure of the adequacy of this determination." July 2016 Consistency Determination, p. 48.

Now in the Objection (p. 15), NY DOS reverses course and argues that the LIS CMP and Southold LWRP deserve independent analysis despite the largely identical content. NY DOS states that:

[i]n its consistency determination, EPA provided a cursory discussion of the consistency of designating one or more open-water disposal site in eastern Long Island Sound with the Southold LWRP generally. EPA did not address the specific local policies. Despite its failure to perform an LWRP policy analysis, EPA broadly concluded that the proposed designation is consistent to the maximum extent practical with the LWRP's enforceable coastal policies. By contrast, DOS carefully considers both the LIS CMP and the LWRPs policies in the policy analysis section below.

Yet, contrary to these statements, EPA's consistency determination both considered the policies of Southold's LWRP policies within the discussion of the LIS CMP policies to the extent that the former mirror the latter, just as NY DOS originally had indicated should be done, and EPA also

provided separate analysis of the LWRP policies. July 2016 Consistency Determination, pp. 47-49. Not only was EPA's consideration of the LWRP not cursory, but it was more detailed and specific than NY DOS's analysis of the LWRP in the Objection.

1. Designation of the ELDS is Consistent to the Maximum Extent Practicable with LIS CMP Policies 5 and 5.3 and Southold LWRP Policies 5, 5.1, 5.2 and 5.3

NY DOS's Objection argues that designation of the ELDS by EPA would not be consistent with either LIS CMP Policies 5 and 5.3, or Southold LWRP Policies 5, 5.1, 5.2, and 5.3 (hereinafter "Water Quality Policies"). These policies read as follows:

Policy 5 Protect and improve water quality and supply in the Long Island Sound coastal area.

Sub-Policy 5.3 Protect and enhance the quality of coastal waters.

Protect water quality based on physical factors (pH, dissolved oxygen, dissolved solids, nutrients, odor, color, and turbidity), health factors (pathogens, chemical contaminants, and toxicity), and aesthetic factors (oils, floatables, refuse, and suspended solids). Protect water quality of coastal waters from adverse impacts associated with excavation, fill, dredging, and disposal of dredged material.

Southold LWRP Policy 5 Protect and improve water quality and supply in the Town of Southold.

Sub-Policy 5.1 Prohibit direct or indirect discharges that would cause or contribute to contravention of water quality standards.

A. Restore the Town of Southold's water quality by limiting major sources of surface water quality impairment.

3. Remediate existing contaminated sediment and limit the introduction of new contaminated sediment in order to reduce loading of toxic materials into surface waters.

Sub-Policy 5.2 Minimize non-point pollution of coastal waters and manage activities causing nonpoint pollution.

A. Minimize non-point pollution of coastal waters using the following approaches, which are presented in order of priority.

2. Reduce pollutant loads to coastal waters by managing unavoidable nonpoint sources and by using appropriate best management practices as determined by site characteristics, design standards, operational conditions, and maintenance programs.

Sub-Policy 5.3 Protect and enhance quality of coastal waters.

A. Protect water quality based on an evaluation of physical factors (pH, dissolved oxygen, dissolved solids, nutrients, odor, color and turbidity), health factors (pathogens, chemical contaminants, and toxicity), and aesthetic factors (oils, floatables, refuse, and suspended solids).

C. Protect water quality of coastal waters from adverse impacts associated with excavation, fill, dredging, and disposal of dredged material.

Generally, these policies focus on “protect[ing] and improv[ing] water quality and supply in the Long Island Sound coastal area.” LIS CMP, Policy 5. Policy 5.3 of the LIS CMP and the Southold LWRP more specifically speak to protecting water quality against “adverse impacts associated with excavation, fill, *dredging*, and *disposal of dredged material*.” LIS CMP, Policy 5.3 (emphasis added); *see also* Southold LWRP, Policy 5.3.¹⁸ Southold Policy 5.1.A.3 calls for limiting the introduction of “new contaminated sediment in order to reduce the loading of toxic materials into surface waters.”

As stated in its July 2016 Consistency Determination, EPA has determined that its proposed action is consistent to the maximum extent practicable with the Water Quality Policies. NY DOS disagrees and argues that EPA failed to conduct a sufficient scientific assessment of the potential impacts on water quality and failed to adequately consider alternatives to open-water disposal at the ELDS. These failures, according to NY DOS, preclude EPA from having sufficient information to conclude that the proposed action is consistent with the Water Quality Policies. As EPA details below, however, NY DOS’s arguments are unfounded.

To begin with, as indicated above, it is not clear to EPA that the above-cited Water Quality Policies of the LIS CMP and the Southold LWRP are “enforceable policies” of the New York CMP. Under NOAA regulations, “[a]n enforceable policy shall contain standards of sufficient specificity to guide public and private uses.” 15 C.F.R. § 930.11(h). Yet, the Water Quality Policies use only general, broad terms and do not provide specific standards to guide public and private uses. They call for water quality to be “protected” but do not define this term or provide criteria for determining when this broad objective has been achieved. These sorts of general standards are, as stated above, a potential invitation to arbitrary regulation and help to explain how NY DOS can, on one hand, broadly attack designation of the ELDS and the entire practice of placing suitable dredged material at designated disposal sites within Long Island Sound, while, on the other hand, it recommends designation of the NBDS and the NLDS (as a remediation site) and urges use of the CLDS, WLDS, and RISDS to receive dredged material from eastern Long Island Sound.

¹⁸ In its analysis, NY DOS pointed to Southold LWRP Policies 5, 5.1, 5.2 and 5.3 but did not provide any separate analysis or discussion of them. NY DOS presumably felt, as discussed farther above, that the Southold LWRP water quality policies tracked the LIS CMP water quality policies and that discussing the latter was sufficient without a separate, explicit discussion of the LWRP policies. Following NY DOS’s lead, EPA also largely takes this approach in this Response. Thus, the reasoning set forth above with regard to the LIS CMP policies also applies to the Southold policies. That said, EPA did specifically consider and assess its consistency with the water quality-related policies of the Southold LWRP. These policies include Southold Policy 5, which tracks the language of the LIS CMP exactly, and also Policies 5.1 and 5.2, which address direct and indirect discharges and non-point source pollution. Also identified is Southold Policy 5.3, which uses language identical to that of LIS CMP Policy 5.3.

Nevertheless, EPA has fully considered the Water Quality Policies and determined that designation of the ELDS is consistent with them to the maximum extent practicable. EPA reiterates and adheres to the rationale previously set forth in the Consistency Determination. July 2016 Consistency Determination, p. 35-37. Furthermore, as explained in the FSEIS and the Final Rule, EPA has taken into account the water quality ramifications of designating the ELDS and has determined that water quality will be protected upon designation and use of the site, subject to the specified site use restrictions.

At this time, EPA is only designating the site to provide an open-water disposal option for suitable material from future dredging projects that may need to use the site. This has no direct effect on water quality. Future decisions about actual dredged material disposal projects may have implications for water quality, but those projects can only be assessed when they are proposed.

Turning to the methods by which projects are assessed, EPA's MPRSA regulations dictate that after consideration of the "release zone" and "initial mixing" under 40 CFR 227.28 and 227.29, "no permit will be issued when the dumping will result in a violation of applicable water quality standards." 40 CFR 227.1(d). In addition, the regulatory process provided under Section 401(a)(1) and (2) provide additional assurance that state water quality standards are protected, both in the state's waters that include a dredged material disposal site (*see* CWA § 401(a)(1)) and in the waters of a nearby state whose water quality might be affected as a result of disposal in the other state (*see* CWA § 401(a)(2)). Thus, designation of the ELDS will be consistent to the maximum extent practicable with LIS CMP Policy 5.3 and Southold Policies 5.1 and 5.3.

Southold Policy 5.2 deals with the control of "nonpoint source pollutant discharges" and is not implicated by the ELDS site designation. To the extent that it is at all relevant to designation of the ELDS, the designation is consistent to the maximum extent practicable with it because the site use restrictions applicable to the ELDS call for local authorities to continue programs for reducing pollutant and sediment loading to waters of, and waters tributary to, the Sound. *See* 40 CFR 228.15(b)(4)(vi)(D) ("Source Reduction Efforts").

LIS CMP Policy 5.3 and Southold LWRP Policy 5.3 call for water quality to be protected in light of physical factors, health factors, and aesthetic factors. Designation of the ELDS is consistent to the maximum extent practicable with these policies, however, for several reasons. First, as stated above, EPA's site designation only provides an open-water disposal option for future projects that may need it and have sediments that are suitable for open-water disposal. Second, as EPA has explained, the sediment suitability criteria in EPA's MPRSA regulations require the assessment of physical, health and aesthetic factors, as mentioned in LIS CMP Policy 5.3 and Southold LWRP Policy 5.3. *See* 40 CFR 227.1(b), 227.2, 227.3, and 40 CFR Subparts B, C, D and E. Therefore, the site designation is consistent with these policies.

EPA recognizes that NY DOS's Objection raises concern that under 40 CFR 227.13, sediments may at times be exempt from more detailed testing. Yet, dredged material is only "excluded" from more detailed testing when specific criteria (the so-called "Exclusionary Criteria") are met that provide solid grounds for determining that the material will not be contaminated. *See* 40 CFR 227.13(b). Thus, these longstanding regulatory criteria implicitly take the appropriate factors (i.e., physical, health, and aesthetic) into account in a reasonable way and do not undermine the protectiveness of the MPRSA regulations.

Adequacy of EPA's Scientific Assessment

EPA's determination that the proposed action is consistent with the LIS CMP is based on extensive analysis of available scientific data and existing literature relating to water quality in LIS throughout the past century. However, despite EPA's efforts, NY DOS asserts that EPA has insufficient scientific information from which to make a determination. NY DOS claims that the DSEIS failed to account for several narrow, scientific issues, but EPA finds that each of these objections are plainly contradicted by the DSEIS and supporting documentation.

First, NY DOS claims that the DSEIS does not take into account the history or legacy of dumping in LIS and does not include scientific documentation of the chemical composition of the bottom of the Sound. Objection, p. 43. NY DOS then reasons that these omissions prevent EPA from considering the residual toxicity levels in future disposed sediments. *Id.* This line of argument is incorrect.

EPA, in its DSEIS and its consistency determination, was fully aware of the history of dredging in LIS. The decision to designate the ELDS is, in fact, is based on consideration of past, present, and future dredging and dredged material management that has been and remains integral to the LIS economy and ecology. The DSEIS may not directly reference the "legacy" of past dredging and dumping, but it assesses LIS' complex ecology and certainly acknowledges past and present open-water disposal sites within the Sound. Moreover, much of the data analyzed was collected over the course of decades, and highlights historical trends in the Sound.¹⁹ Finally, in many instances, EPA specifically assessed the impacts of past dredging in the Sound. DSEIS, at 5-85 (discussing EPA's analysis of MPRSA site selection criteria pursuant to 40 C.F.R. 228.6(a)(7), in which EPA examined the existence and effects of current and previous discharges and dumping in the area near each of the alternative sites (including cumulative effects)).

Next, NY DOS claims that the DSEIS lacked discussion of the chemical composition of the bottom of the Sound and therefore prevented EPA from adequately assessing residual toxicity risks. NY DOS asserts that these failures further cloud EPA's view of the impacts on water quality resulting from the proposed action. A review of the DSEIS, however, demonstrates that the chemical composition of the bottom of eastern LIS was carefully examined in the 2015 sediment survey²⁰ and also discussed in Appendix G of the DSEIS, entitled Physical and

¹⁹ To support the proposed action, EPA reviewed several of the same studies that it reviewed during the CLDS and WLDS designation process (*e.g.*, studies developed by the Ocean Society, NOAA, USGS, USACE, and EPA), and also requested records and additional information from USACE on historically used sites in LIS to support the DSEIS. Dredged material has been disposed of at open-water sites in LIS since at least the 1870s. According to data, from the 1950s through the early 1970s, approximately nineteen (19) open-water disposal sites were active in the Sound (Dames and Moore, 1981). Since the early 1980s, dredged material has been placed predominantly at four disposal sites in Long Island Sound: WLDS, CLDS, CSDS, and NLDS. In addition, EPA analyzed this legacy of disposal activities in the Sound through information and data collected through the DAMOS program and the LIS DMMP (*see* USACE, 2014; USEPA, 2015a), as well as through the Oceanic Society (1982).

²⁰ Information obtained during the 2015 sediment survey was also included in the FSEIS, Appendix B, Section 4.7, and reads: "Sediment chemistry data were obtained in eastern Long Island Sound to determine background conditions in eastern Long Island Sound. Specifically, sediments were sampled in eastern Long Island Sound at 35 stations and analyzed for metals (copper, mercury, lead, zinc, cadmium, chromium) and organic compounds (polycyclic aromatic hydrocarbons [PAHs], pesticides, polychlorinated biphenyls [PCBs]), and total organic carbon

Chemical Properties of Sediments in Eastern Long Island Sound. In addition, the Biological Characterization of the Eastern Long Island Sound Dredged Material Disposal Sites report, included as Appendix E to the DSEIS, specifically addresses the question of toxicity in the sediments at ELDS, the Niantic Bay site, and the Cornfield Shoals site. *See* Tetra Tech, Inc. 2014. Biological Characterization of the Eastern Long Island Sound Dredged Material Disposal Sites. Final Report. Task Order N62470-08-D-1008-WE11. Prepared For Naval Facilities Engineering Command Mid-Atlantic and U.S. Environmental Protection Agency by Tetra Tech, Inc., May 2014. Finally, the DSEIS includes Appendix F, the New London Disposal Site and Vicinity Sediment-Profile and Plan-View Imaging Survey, conducted as part of the DAMOS program²¹; this report includes extensive examination of the sediment at the ELDS and Niantic Bay site, specifically the composition and biological conditions of sediments within those sites. Carey, D. A.; Bellagamba Fucile, E. 2015. Data Summary Report of the New London Disposal Site and Vicinity Sediment-Profile and Plan-View Imaging Survey, September 2014. U.S. Army Corps of Engineers, New England District, Concord, MA, 45. In addition to the studies and reports attached to the DSEIS, the DSEIS itself synthesizes this data and thoroughly discusses the potential impacts on water quality as a result of dumping dredged material at the proposed site. *See* DSEIS, pp. ES-10 to ES-17; FSEIS, App. J - Responses to Comments, Comment/Response #2 and #10.

NY DOS's broad accusations that EPA failed to examine sufficient data and information falter in light of the foregoing. Thus, EPA has analyzed a significant amount of data relating to the history of dumping in LIS and the chemical and biological composition of the seafloor of eastern Long Island Sound. This data is more than adequate to support EPA's conclusion that water quality will not be adversely affected by designating the ELDS and that the proposed action is consistent with the Water Quality Policies to the maximum extent practicable.

Cumulative Impacts Analysis

In addition to arguing that the analysis of sediment composition was inadequate, NY DOS also complains that the DSEIS does not include an analysis of cumulative impacts based on designation of the ELDS plus the use of *all dredged disposal sites* in LIS. NY DOS claims that "nowhere in the DSEIS is there an analysis of the cumulative effects of multiple dredging projects and the dumping of dredged material at multiple sites across the Sound on water quality, sediment quality, and natural resources." Objection, at 43. Again, NY DOS's argument is incorrect.

EPA openly acknowledges in the DSEIS the importance of assessing cumulative impacts of the proposed site designation, and includes an entire section to address this point. DSEIS, Section 5.7; *see also* FSEIS, App. J - Responses to Comments, Comment/Response #15. EPA specifically analyzed cumulative impacts within the "entire Long Island Sound," which included effects from "dredged material disposal events within the Sound, namely at the two designated dredged material disposal sites within western and central Long Island Sound (WLDS and

concentrations (TOC)." (UCONN and Louis Berger, 2015). *See also*, FSEIS, App. J - Responses to Comments, Comment/Response #27.

²¹ The DAMOS report also acknowledges the use of historical data and past trends in LIS when analyzing sediment in the proposed sites, which further supports the finding that EPA has relied upon historical trends in making its consistency determination.

CLDS), and other, unrelated activities such as shipping, recreation, and fishing that occur on or near Long Island Sound.” DSEIS, at 5-91. This assessment included examination of cumulative effects within the following sub-categories: sediment quality; *water quality*; benthic invertebrates; fish; commercial and recreational shellfish; marine and coastal birds, marine mammals, and reptiles; endangered and threatened species; bioaccumulation; socioeconomic resources; and air quality and noise. Additionally, within this comprehensive analysis were examinations of hypoxia problems and declining lobster populations across the Sound and whether dredged material disposal could be a contributor to these problems. EPA concluded that it was not. FSEIS, App. J - Responses to Comments, Comment/Response #17.

Based upon extensive scientific and other data,²² EPA found that there would be no significant adverse cumulative impacts from the proposed action, including impacts on water quality. As EPA explained in Responses to Comments for the FSEIS and Final Rule:

EPA also assessed biological (and other types of) information to consider both the cumulative impacts and systemic effects, if any, on Long Island Sound. EPA’s assessment is based on over 40 years of monitoring data on chemistry, toxicity, bioaccumulation, benthic health, and bathymetry to assess physical, chemical and biological changes at the NLDS and CSDS. It also was based on an evaluation of the potential effects of designating the ELDS, NBDS, CSDS, or other site alternatives. Given that EPA has not found significant adverse effects from past disposal at the NLDS or CSDS, and did not find that significant adverse effects would result from the future placement of suitable material at the ELDS, it is not surprising that EPA did not find significant adverse cumulative impacts from the proposed action.

FSEIS, App. J - Responses to Comments #15, p. 51.

In support of their cumulative impact argument, NY DOS complains that EPA did not discuss water quality trends and data, particularly bioavailability as it relates to toxins in the Sound. Objection, at 43.²³ This alleged absence is puzzling, however, because EPA directly addresses

²² See, e.g., Fredette, T.J. and G.T. French. 2004. Understanding the physical and environmental consequences of dredged material disposal: history in New England and current perspectives. *Marine Pollution Bulletin* 49: 93–102; Fredette, T.J., P.G. Kulberg, D.A. Carey, R.W. Morton, and J.D. Germano. 1993. Twenty five years of dredged material disposal site monitoring in Long Island Sound: A long-term perspective. In: Van Patten, M.S. (ed.), *Proceedings of the Long Island Sound Research Conference, October 23-24, 1992*, New Haven, CT. Publication No. CT-SG-93-03, Connecticut Sea Grant Program; Lopez, G., D. Carey, J.T. Carlton, R. Cerrato, H. Dam, R. DiGiovanni, C. Elphick, M. Frisk, C. Gobler, L. Hice, P. Howell, A. Jordaan, S. Lin, S. Liu., D. Lonsdale, M. McEnroe, K. McKown, G. McManus, R. Orson, B. Peterson, C. Pickerel, R. Rozsa, S.E. Shumway, A. Siuda, K. Streich, S. Talmage, G. Taylor, E. Thomas, M. Van Patten, J. Vaudrey, G. Wikfors, C. Yarish, and R. Zajac. 2014. *Biology and Ecology in Long Island Sound*. In: J.S. Latimer et al. (eds.), *Long Island Sound. Prospects for the Urban Sea*. Springer Series on Environmental Management (doi: 10.1007/978-1-4614-6126-5_6), p. 285–480.

²³ NY DOS also cites two studies for the proposition that climate change will exacerbate the effects of dredging activities by remobilizing sediment-bound toxins, and that climate change must therefore be considered in EPA’s cumulative impact analysis. One of the studies concludes that warming water has effects on populations of zooplankton in LIS, and therefore, that climate change influences the biota of the Sound. The second article summarizes data tracking coastal bird species and the composition of coastal plants and trees in response to coastal flooding events. See Objection, at 44 n.132. These articles do not include any analysis demonstrating a relationship

bioaccumulation and bioavailability in section 5.2.4 of the DSEIS. *See also* FSEIS, App. J - Responses to Comments #20. EPA notes that several scientific studies “demonstrate[] that some dredged material may result in short-term, spatially limited increases in the bioavailability of compounds at or near dredged material mounds, although these studies did not find adverse impacts to organisms from dredged material disposal.” DSEIS, pp. 5-11. EPA further emphasizes that any small effects will be closely monitored by EPA and the USACE, and any appropriate changes or adjustments to site use restrictions will be made. If necessary, EPA and the USACE will modify the SMMPs for any site at which impacts have been identified. Therefore, should unanticipated effects emerge — *e.g.*, increased bioavailability and bioaccumulation — EPA and USACE will take actions to mitigate and eliminate them. Furthermore, the sediment quality criteria in EPA’s regulations limit the materials that may be authorized for open-water disposal (40 C.F.R. Part 227). These criteria are designed to screen out dredged materials that may pose a risk to human or ecological receptors. This provides yet another level of protection from contaminants entering the Sound and resulting in bioaccumulation.

NY DOS also identifies the practice of subaqueous “capping” (i.e., using relatively cleaner material to cover relatively less clean material and, thus, isolate the latter from the environment) as a potential risk to water quality and seems to suggest both that EPA plans to use capping in association with the proposed action and that EPA fails to take into account the potential risks and adverse effects of relying on capping. NY DOS further states that capping is prohibited under the Ocean Dumping Act.

It appears that NY DOS has a misguided understanding of EPA’s proposed site designation. While the MPRSA does not explicitly prohibit “capping,” as EPA has articulated in the past, the MPRSA regulations clearly dictate that only “suitable” material may be placed at an open-water disposal site regulated under the MPRSA. If the sediment or material does not satisfy the criteria set forth in the regulations, and therefore is not suitable, then it cannot be placed at a designated or selected site and a proposal to “cap” the material with cleaner material does not change that. Thus, for example, EPA would not approve of the disposal of toxic sediments at the ELDS on the grounds that it could later be capped with cleaner material. Accordingly, EPA has not proposed capping at the ELDS and the proposed site designation is consistent to the maximum extent practicable with the New York CMP from this perspective.

Analysis of Alternatives to Designating ELDS as an Open-water Disposal Site

Finally, NY DOS argues that EPA’s proposed action contravenes the Water Quality Policies because EPA failed to adequately assess alternatives to open-water disposal that pose reduced risks to water quality. Objection, p. 45. This line of argument by NY DOS is incorrect in two fundamental respects.

First, neither the Water Quality Policies nor the CZMA or its implementing regulations require that alternatives must be evaluated. *See* 15 CFR 930.39. If the proposed federal activity is

between climate change and open water disposal in LIS, and furthermore, do not even hint at the assertion that climate change increases or has an effect on bioavailability and sediment dispersal. NY DOS’s argument is not grounded in science or fact. Moreover, it fails to acknowledge EPA’s thorough review of the chemical and biological composition of sediments on the bottom of the sound. The DSEIS, as mentioned above, has numerous discussions of sediment composition and its impacts on biota and water quality. *See* FSEIS, Section 5.7.2 (discussing the connection between climate change and designation of an open-water disposal site in LIS).

consistent with the enforceable policies of the state's coastal zone management program, that is enough without the need to evaluate additional alternatives. EPA has correctly determined that designation of the ELDS is consistent to the maximum extent practicable with New York's CMP, which sufficiently satisfies the CZMA, without requiring an alternatives analysis.

Second, in this case, EPA *did* undertake an extensive alternatives evaluation within the context of developing an SEIS under NEPA as part of its decision-making process.²⁴ EPA will briefly summarize its thorough alternatives analysis. In the DSEIS, EPA considered several different alternatives: open-water disposal at various sites within the eastern Long Island Sound region (*i.e.*, Eastern Long Island Sound Alternative, New London Alternative, Cornfield Shoals Alternative, and Niantic Bay Alternative), other open-water alternatives within other regions of Long Island Sound and outside of Long Island Sound, alternatives to open-water disposal (*i.e.*, upland disposal alternatives; beneficial uses such as beach nourishment, nearshore berms, and redevelopment; containment facilities; and treatment technologies), and variations on the "No Action Alternative" (*i.e.*, courses of action that would be followed if EPA decided not to designate a disposal site in the eastern Sound). EPA reviewed extensive scientific data and other relevant information to assess and compare each of the abovementioned alternatives.²⁵ Particularly relevant to the current discussion of the Water Quality Policies, EPA explored the water impacts of each of the alternatives throughout the DSEIS, and provided direct comparison through text and tables included in the DSEIS. *See* DSEIS, Table 5-9 (comparing the impacts of each action and no action alternatives, including a specific category for water quality); DSEIS, pp. 5-45 to 5-46; DSEIS, pp. 5-33 to 5-40 (water quality effects at the action alternatives); DSEIS, Section 5.4 (summarizing the impacts of the No Action Alternative); DSEIS, Section 4.7 (outlining the water quality—turbidity, nutrients, dissolved oxygen, pathogens, metals, and organic compounds—in the water column of Long Island Sound and Block Island Sound and for three alternative disposal sites). Ultimately, EPA conducted an extensive alternatives analysis to support its decision-making.

Moreover, it must also be noted that EPA's proposed action only designates ELDS as a site that is available as an option for the placement of suitable dredged material for which there is no practicable alternative management method available with less adverse environmental effects. The existing legal and regulatory mechanisms in conjunction with the Proposed Rule establish a strong framework for fostering the development and use of alternatives to open-water disposal in LIS. Thus, alternatives will be considered on a project-specific basis going forward.

As demonstrated above and in EPA's original Consistency Determination, the proposed action is consistent to the maximum extent practicable with the Water Quality Policies; EPA concludes that its DSEIS and Proposed Rule are based upon sufficient information to support the

²⁴ NEPA documents may be used to support a CZMA consistency determination. That does not, however, transform the alternatives analysis requirement of NEPA into a requirement of the CZMA. "[A] Federal agency's federal consistency obligations under the Act are independent of those required under NEPA." 15 C.F.R. § 930.37.

²⁵ Since the Proposed Rule was published in the Federal Register, EPA asked USACE to reassess the disposal capacity needs in the next 30 years, in coordination with EPA. The USACE undertook this analysis and projected that a disposal capacity of approximately 20 mcg (based on water volume below a depth of 59 feet (18 meters) and slope calculations, with a buffer zone) would likely be sufficient. This total is 2.6 mcg less than the initial estimate. The new disposal capacity estimate does not change EPA's determination that a new site designation is the preferred option under the circumstances.

conclusion that placing dredged material at the ELDS site “would not adversely affect water quality beyond temporarily raising water column turbidity in the areas of the disposal site during initial mixing” and further that even these temporary, slight effects would be minimized by the continued careful regulation of dredging activities under the MPRSA. *See* EPA July 2016 Consistency Determination, pp. 21, 22.

2. Designation of the ELDS is Fully Consistent with New York CMP Policies 6 and 6.1 and Southold LWRP Policies 6 and 6.1

NY DOS also argues that EPA’s proposed action is inconsistent with Policies 6 and 6.1 of the LIS CMP and the Southold LWRP. These policies seek to protect and restore the quality and function of the LIS and Southold ecosystem (hereinafter “Ecosystem Policies”). NY DOS quotes these Policies as follows:

Policy 6 Protect and restore the quality and function of the Long Island Sound ecosystem.

Sub-Policy 6.1 Protect and restore ecological quality throughout Long Island Sound

Avoid significant adverse changes to the quality of the Long Island Sound ecosystem as indicated by physical loss, degradation, or functional loss of ecological components. Avoid fragmentation of natural ecological communities and maintain corridors between ecological communities. Maintain structural and functional relationships between natural ecological communities to provide for self-sustaining systems. Avoid permanent adverse change to ecological processes. Reduce adverse impacts of existing development when practical. Mitigate impacts of new development; mitigation may also include reduction or elimination of adverse impacts associated with existing development.

Southold LWRP Policy 6 Protect and restore the quality and function of the Town of Southold ecosystem.

Sub-Policy 6.1 Protect and restore ecological quality throughout the Town of Southold.

A. Avoid adverse changes to the Long Island Sound and the Peconic Bay ecosystems that would result from impairment of ecological quality as indicated by:

2. Degradation of ecological components

Degradation occurs as an adverse change in ecological quality, either as a direct loss originating within the resource area or as an indirect loss originating from nearby activities. Degradation usually occurs over a more extended period of time than physical

loss and may be indicated by increased siltation, changes in community composition, or evidence of pollution.

3. Functional loss of ecological components

Functional loss can be indicated by a decrease in abundance of fish or wildlife, often resulting from a behavioral or physiological avoidance response. Behavioral avoidance can be due to disruptive uses that do not necessarily result in physical changes, but may be related to introduction of recreational activities or predators. Timing of activities can often be critical in determining whether a functional loss is likely to occur. Functional loss can also be manifested in physical terms, such as changes in hydrology.

B. Protect and restore ecological quality by adhering to the following measures.

- 1. Maintain values associated with natural ecological communities. Each natural ecological community has associated values which contribute to the ecological quality of the Town of Southold. These values should be assessed on a case-by-case basis.*
- 3. Avoid fragmentation of ecological communities and maintain corridors to facilitate the free exchange of biological resources within and among communities.*
- 4. Maintain ecological integrity of particular locales by maintaining structural and functional attributes, including normal variability, to provide for self-sustaining systems.*
- 5. Avoid permanent adverse change to ecological processes.*

The language of Policies 6 and 6.1 of the Southold LWRP track the language of LIS CMP Policies 6 and 6.1 exactly. The explanatory comments to the Ecosystem Policies state goals such as “avoid[ing] significant adverse changes to ecosystem quality by physical loss, degradation, or functional loss of ecological components;” avoiding fragmentation of ecological communities; maintaining structural and functional relationships; avoiding permanent changes to ecological processes; and mitigating impacts of new development and existing development. LIS CMP, Policy 6.1. The explanatory comments for Southold Policies 6 and 6.1 align with the LIS CMP goals listed above.

NY DOS again does not separately discuss Southold LWRP Policies 6 and 6.1. Evidently, NY DOS regards the LIS CMP and Southold LWRP policies to overlap. Presumably, the LIS CMP policies apply across the Sound, while the matching policies from the Southold LWRP apply in the more limited area to which the Southold LWRP properly applies. Therefore, although EPA considered LIS CMP Policies 6 and 6.1 and Southold LWRP Policies 6 and 6.1 separately, EPA will treat them in largely the same manner and address them in a single discussion, as did NY DOS

Again, it is not clear to EPA that the above-cited Ecosystem Policies of the LIS CMP and the Southold LWRP are “enforceable policies” of the New York CMP. These policies again use only general, broad terms and do not provide specific standards to guide public and private uses. They call for ecosystems to be “protected” and “restored” but do not define these terms or provide criteria for determining when these broad objectives have been achieved.

Nevertheless, EPA has fully considered the Ecosystem Policies and determined that designation of the ELDS is consistent with them to the maximum extent practicable. As explained in the FSEIS and the Final Rule, EPA has taken into account the ecosystem protection and restoration ramifications of designating the ELDS and has determined that ecosystem of Long Island Sound, including that of the Town of Southold, will be protected upon designation and use of the site subject to the specified site use restrictions.

EPA maintains its position that the proposed action is consistent to the maximum extent practicable with New York's Ecosystem Policies. NY DOS, on the other hand, claims that EPA's Consistency Determination is founded upon an improper assessment of ecosystem impacts, and therefore the determination itself is inaccurate and invalid. The crux of NY DOS's argument is that when EPA examined potential impacts to the LIS ecosystems from the ELDS designation, it failed to account for "reasonably foreseeable effects of bioavailability of contaminants from dumping dredged material into Long Island Sound," and also failed to address "legacy and new contamination . . . from the perspective of open water disposal acting as a system stressor that contributes to compromising ecosystem function." Objection, p. 47. NY DOS also asserts that "Long Island Sound water quality impairment should be viewed from a perspective of environmental degradation (and ecosystem collapse) and is best addressed from this perspective." *Id.*, p. 46. Essentially, NY DOS faults EPA for not using NY DOS's favored "systems approach" to examine ecosystem impacts, and then states that EPA also did not adequately account for cumulative impacts on Long Island Sound ecosystems. NY DOS states that using a systems approach, Policy 6.1 "requires a reduction in adverse impacts resulting from existing stressors, when practical, as well as mitigation of impacts from new stressors." *Id.*

This argument is not based in law, regulation, or fact. Failure to apply the particular "systems approach" desired by NY DOS does not violate the New York CMP or the CZMA, and it does not equate to a finding that EPA did not sufficiently evaluate the impacts that designation of ELDS might have on the ecological quality and functioning of the Sound. Although EPA did not use NY DOS's vocabulary or terminology to specify the "ecosystem state/regime" of LIS and did not identify particular "stressors," EPA's analysis very much comports with the goals and evaluation contemplated in a resilience or "systems approach."²⁶ In fact, the DSEIS clearly demonstrates that EPA considered a significant amount of scientific data and other literature to assess the LIS ecosystem, taking into account LIS's history. As discussed at length above, cumulative impact assessment was an important aspect of EPA's DSEIS, and it included examination of data from over forty years of monitoring that related to numerous aspects of LIS.

Most relevant to the Ecosystem Policies are the aspects of EPA's analysis relating to chemistry, toxicity, bioaccumulation, benthic health, aquatic organism impacts, and bathymetry, all of which contribute to the assessment of possible physical, chemical, and biological changes if the site is designated.²⁷ EPA also assessed biological (and other types of) information to consider both the cumulative impacts and systemic effects, if any, on Long Island Sound. EPA's

²⁶ NY DOS itself implies that a "systems approach" is essentially a more structured method for conducting a cumulative impact analysis. *See* Objection, p. 38.

²⁷ Benthic analyses within the NLDS and the ELDS indicate good quality habitats for benthic organisms. DSEIS, pp. 4-84 to 4-87. The data shows rapid recovery of benthic organisms within the disposal sites after the initial effects of sediment placement. This further supports the finding that the benthic health at the proposed site will not be adversely affected by EPA's proposed site designation.

assessment is based on over 40 years of monitoring data on chemistry, toxicity, bioaccumulation, benthic health, and bathymetry to assess physical, chemical and biological changes at the NLDS and CSDS. It also was based on an evaluation of the potential effects of designating the ELDS, NBDS, CSDS, or other site alternatives. Given that EPA has not found significant adverse effects from past disposal at the NLDS or CSDS, and did not find that significant adverse effects would result from the future placement of suitable material at the ELDS, it is not surprising that EPA did not find significant adverse cumulative impacts from the proposed action. EPA also considered issues such as the cumulative effect on bottom depths that would result from future disposal at the proposed disposal sites. This was part of the reason that EPA decided not to designate the NLDS (*i.e.*, that in light of past disposal at the site, there was not much remaining disposal capacity at the site before the disposal mounds might interfere with navigation). In addition, among the systemic, cumulative effects that EPA considered were questions about hypoxia and the health of lobster populations in the Sound.

As part of its “systems approach” argument, NY DOS proclaims that designation of the ELDS will cause numerous “reasonably foreseeable, and avoidable, cumulative effects [that] would exacerbate the Sound ecosystem's exposure to additional contamination,” and yet provides no scientific facts or support for this claim. NY DOS poses this claim against the backdrop of its declaration that the ecosystem is in a state of “ecosystem collapse.” While Long Island Sound clearly faces environmental challenges, conditions have been improving in many regards, and EPA would not characterize the Sound this way. NY DOS’s baseless conjecture cannot rebut EPA’s comprehensive, documented cumulative impact analysis of LIS and the Eastern Sound.

It is also worth noting that these Ecosystem Policies have a provision encouraging the mitigation of impacts of new development by reducing or eliminating adverse impacts associated with existing development. LIS CMP, Policy 6.1. EPA’s proposed action to designate only the ELDS also ultimately results in the closure of other historical sites, namely the NLDS and CSDS. Therefore, this action mitigates any potential minor impacts of the designation by eliminating any impacts at the two historical sites. This will reduce the number of open-water disposal sites in the eastern Sound, which is not only consistent with the Ecosystem Policies, but affirmatively supports these policies. In addition, application of the sediment quality criteria in EPA’s MPRSA regulations, coupled with techniques such as the application of strict environmental “dredging windows,” assure that significant adverse environmental effects will not occur at the ELDS. This conclusion is supported by the data demonstrating the recovery of areas used for past dredged material disposal.

Finally, NY DOS’s arguments here appear overstated when one considers that NY DOS urges that dredged material from the eastern region of Long Island Sound should not be placed at the ELDS, but should instead be sent to the CLDS or WLDS (not to mention the RISDS), and that NY DOS earlier indicated a willingness to support designation of the NBDS and the NLDS (as a remediation site).

3. Designation of the ELDS is Consistent to the Maximum Extent Practicable with LIS CMP Policies 8 and 8.1 and Southold LWRP Policies 8 and 8.3

NY DOS argues that EPA’s designation of the ELDS is not consistent with LIS CMP Policies 8, 8.1, and 8.3 as well as Southold LWRP Policies 8 and 8.3, all of which relate to solid waste and

hazardous waste and substance management (hereinafter “Waste Policies”). These policies and accompanying explanatory text read as follows:

Policy 8 Minimize environmental degradation in the Long Island Sound coastal area from solid waste and hazardous substances and wastes.

Sub-Policy 8.1 Manage solid waste to protect public health and control pollution.

Sub-Policy 8.3 Protect the environment from degradation due to toxic pollutants and substances hazardous to the environment and public health.

Plan for proper and effective solid waste disposal prior to undertaking major development or activities generating solid wastes. Manage solid waste by: reducing the amount of solid waste generated, reusing or recycling material, and using land burial or other approved methods to dispose of solid waste that is not otherwise being reused or recycled. Prevent the discharge of solid wastes into the environment by using proper handling, management, and transportation practices.

Prevent release of toxic pollutants or substances hazardous to the environment that would have a deleterious effect on fish and wildlife resources. Prevent environmental degradation due to persistent toxic pollutants by: limiting discharge of bioaccumulative substances, avoiding resuspension of toxic pollutants and hazardous substances and wastes, and avoiding reentry of bioaccumulative substances into the food chain from existing sources.

Southold LWRP Policy 8 Minimize environmental degradation in Town of Southold from solid waste and hazardous substances and wastes.

Sub-Policy 8.3 Protect the environment from degradation due to toxic pollutants and substances hazardous to the environment and public health.

A. Prevent release of toxic pollutants or substances hazardous to the environment that would have a deleterious effect on fish and wildlife resources. The Town’s Site Plan application process will determine whether proposed land use activities will involve toxic substances. Protection measures to prevent their release to the environment, particularly fish and wildlife resources, will be determined during the environmental review. Further, the dredging of toxic material from underwater lands and the deposition of such material shall be conducted in the most mitigative manner possible so as not to endanger fish and wildlife resources, in either the short or long term.

- B. Prevent environmental degradation due to persistent toxic pollutants by:*
- 1. limiting discharge of bio-accumulative substances,*
 - 2. avoiding re-suspension of toxic pollutants and hazardous substances and wastes, and avoiding reentry of bio-accumulative substances into the food chain from existing sources.*

In essence, these policies seek to “[m]inimize environmental degradation in the Long Island Sound coastal area from solid waste and hazardous substances and wastes,” LIS CMP Policy 8, “manage solid waste to protect public health and control pollution,” LIS CMP Policy 8.1, and protect Long Island Sound from degradation resulting from toxic pollutants and hazardous substances, LIS CMP 8.3. Southold LWRP Policies 8 and 8.3 track the language of LIS’s policies 8 and 8.3 exactly, but the LWRP’s explanatory language varies slightly. Most importantly, in the explanatory language accompanying Southold LWRP Policy 8.3, the Town states, “the dredging of toxic material from underwater lands and deposition of such material shall be conducted in the most mitigative manner possible so as not to endanger fish and wildlife resources, in either the short or long term.” Southold LWRP, Policy 8.3(A), Section III-33.

In EPA’s view, the Waste Policies do not apply to EPA’s designation of the ELDS. These policies focus on solid waste and hazardous wastes and substances, and NY DOS concedes that the State of New York does not regulate dredged material as a solid waste, unless it is being managed at an upland location. Objection, p. 50. EPA also does not regulate dredged material placed in the water under solid waste management laws. Such placement of dredged material is, instead, regulated under the MPRSA and Section 404 of the Clean Water Act. 33 USC 1344. Therefore, EPA’s designation of an open-water disposal site in Long Island Sound does not implicate the Waste Policies.

While the selection of upland management or disposal methods for a particular dredged material disposal project could implicate those policies—and EPA’s site use restrictions will promote the development and use of practicable alternatives to open-water disposal, which could involve upland disposal—decisions about how to handle the dredged material from any particular project, and whether an upland disposal option should be used, will be based on a case-specific review and will have to satisfy all applicable legal requirements. Furthermore, hazardous or toxic materials or wastes are not allowed to be placed at an EPA-designated open-water dredged material disposal site under EPA’s sediment quality criteria. *See* 40 CFR 227.5 and 227.6.

Even if one assumes that the Waste Policies are applicable to EPA’s designation of the ELDS, it is not clear to EPA that these policies constitute enforceable policies of New York’s CMP. The vagueness and generality of the standards in the Waste Policies do not provide “standards of sufficient specificity to guide public and private uses.” 15 C.F.R. § 930.11(h). Nevertheless, EPA considered the Waste Policies and has determined that even if these policies apply to EPA’s designation of the ELDS and are enforceable policies of the New York CMP, EPA’s action is consistent with them to the maximum extent practicable.

NY DOS argues that EPA’s proposed action is inconsistent with these policies because designation of this site would “allow varied and continuing impairments to Long Island Sound from solid wastes and toxic pollutants and substances hazardous to the environment and public health.” Objection, p. 51. Even putting aside that EPA’s site designation does not authorize the

placement of solid wastes or toxic or hazardous materials and wastes at the ELDS, or anywhere else, this conclusion is unsupported. NY DOS bases its argument on what it alleges is EPA's failure to address, develop and implement alternatives to open-water disposal of dredged materials. NY DOS also bolsters its claim with accusations that EPA and USACE use inadequate and outdated methodologies and approaches that do not properly determine toxicity levels in dredged material prior to open-water disposal of such material. Finally, NY DOS states that EPA's cumulative impact analysis was in violation of the MPRSA and that the impact analysis also lacked discussion of all relevant adverse impacts including bioavailability and bottom currents. Objection, p. 47. EPA disagrees with NY DOS's arguments and maintains, as set forth in its July 2016 Consistency Determination, that its action is consistent with the Waste Policies to the maximum extent practicable. Each of NY DOS's specific arguments will be discussed below.

Again, the Waste Policies are focused on "solid waste" and hazardous and toxic waste, and NY DOS alleges that the site designation would allow impairments to the environment of Long Island Sound from "solid wastes and toxic pollutants." Yet, as stated above, the State of New York does not regulate dredged material as a solid waste, unless it is managed at upland sites. Objection, p. 50. Furthermore, dredged material that is toxic or that would qualify as a hazardous waste would not be allowed to be placed at the ELDS under EPA's MPRSA regulations. *See* 40 CFR Part 227. Therefore, to the extent that the Waste Policies apply at all to the designation of the ELDS, EPA's action would be consistent with them.

EPA's site use restrictions supporting the development and use of beneficial use alternatives, ensuring safe transport of dredged material to the ELDS when open-water disposal is needed, and preventing the discharge of substances that could that could cause harm from bioaccumulation, are all consistent with the Waste Policies to the extent that these policies apply at all. *See* 40 CFR 228.15(b)(4)(vi), 228.15(b)(6), and 227.6.

Alternatives Analysis

NY DOS again claims that EPA's analysis of alternatives to open-water disposal was insufficient and therefore cannot support a determination that designation of the ELDS is consistent with the Waste Policies under the CZMA. EPA disagrees with this claim. As stated above, the DSEIS and FSEIS include extensive analysis of both open-water disposal and non-open-water disposal alternatives. These alternatives are analyzed based on numerous metrics and relies on scientific studies and data. *See, e.g.*, DSEIS, Table 5-9 (comparing the impacts of each action and no action alternatives); DSEIS, Section 5.4 (summarizing the impacts of the No Action Alternative); DSEIS, Section 4.6 (discussion of sediment quality throughout the Sound and in the three proposed open-water disposal sites); DSEIS, Section 4.7 (discussion of water quality in the water column of Long Island Sound and Block Island Sound and for the three alternative disposal sites).

NY DOS points to the consideration of beneficial use alternatives as being most significantly deficient in EPA's DSEIS, the July 2016 Consistency Determination, and in the DMMP.²⁸ Yet,

²⁸ NY DOS also mounts an attack on the consistency and legality of EPA's selection of the preferred site on the grounds that this selection is based upon the USACE "Federal Standard." EPA's use and inclusion of the "Federal Standard" in this rulemaking, according to NY DOS, justifies "the use of open water disposal as the solution for

this is incorrect for a few key reasons. First, the DSEIS, in Section 5.4, addresses the potential impacts associated with the No Action Alternative(s). The No Action Alternative includes several scenarios that could result if the proposed action does not go into effect, and the Fourth Scenario identified is the “[d]evelop[ment] and utiliz[ation of] appropriate land-based or beneficial use alternatives.” DSEIS, pp. 5-19 to 5-23 (describing Scenario 4 and all the categories of potential impacts resulting from the scenario). Therefore, EPA specifically assessed beneficial use options in the DSEIS and FSEIS (as did the USACE in the DMMP) based on the best available information, and EPA concluded that there was not yet sufficient capacity in beneficial use or land-based disposal sites to accommodate sediment from all the needed dredging in the region over the next thirty years. DSEIS, p. 5-19.²⁹

In addition, EPA has not *rejected* beneficial use alternatives. Open-water disposal will be used to the extent that practicable alternatives do not exist, but the site use restrictions for the ELDS, including the RDT process, will promote the development and use of beneficial use options, and this, in turn, will tend to minimize open-water disposal. In the July 18, 2016, NY DOS/NY DEC Comments on the DSEIS and Proposed Rule, NY DOS and NY DEC characterized the site use restrictions as “secur[ing] a path forward for achievable, measurable reductions in open water disposal over time.” NY DOS had earlier concurred that these site use restrictions were consistent with the enforceable policies of the New York CMP in the context of the CLDS and WLDS site designations.

Next, EPA’s Consistency Determination under the CZMA, as stated previously, does not require a discussion of all possible alternatives and each alternative’s consistency pursuant to the CZMA. Instead, EPA must demonstrate that the selected alternative is consistent with New York’s CMP. EPA has satisfied this obligation.

NY DOS also argues that selection of the ELDS and disqualification of the other alternatives was based solely on cost, which it argues is impermissible. NY DOS’s review of EPA’s DSEIS and

dredged material disposal for the next 30 years,” by always putting cost first when analyzing alternative methods of disposal or beneficial use alternatives. Objection, p. 27. Essentially, NY DOS argues that by using USACE’s standard, EPA primarily looked at cost to: 1) establish need for designation of an open-water disposal site in the eastern Sound; 2) select the ELDS as the preferred option, and 3) incorporate the use of non-open-water disposal into future disposal projects. These assertions are incorrect, and a complete understanding of the manner in which the USACE applies the “Federal Standard” to its dredging projects and the way in which this standard affected EPA’s current proposal demonstrates this to be so. In NY DOS’s argument related to the “Federal Standard,” Objection, pp. 26-27, 50, it oversimplifies and therefore misunderstands the standard and its effects on the ELDS site designation. Rather than include a lengthy, complex discussion of the standard here, EPA refers to the Responses to Comments document that accompanies the Final Rule. Response #2 explains, in detail, how the “Federal Standard” is related to this rulemaking and how USACE used the standard in the DMMP. *See* FSEIS, App. J - Responses to Comments, Response/Comment #2. In sum, the “Federal Standard” referenced in this rulemaking, while it does use cost as a point of analysis, *does not* circumvent or violate the MPRSA or its implementing regulations. *See* 40 C.F.R. § 227.15(c) (identifying cost as a factor when determining “need”). Therefore, EPA’s action here comports with the law, and more importantly, use of the “Federal Standard” does not provide an alternatives analysis that is lacking such that it would render the proposed action inconsistent with the policies of New York’s CMP.

²⁹ NY DOS also argues, in conjunction with its alternatives argument, that EPA did not demonstrate the need for an additional site beyond the CLDS and WLDS. Yet, EPA has well explained in the DSEIS and FSEIS, as well as the Proposed Rule and the Final Rule, why a site in the eastern Sound is needed. *See also* FSEIS, App. J - Responses to Comments, Comment/Response #5 and #9.

its discussion of alternatives misrepresents the complex balancing process that EPA utilized in deciding to designate ELDS. The cost of the various options was but one of the many factors examined in assessing alternatives and selecting the preferred alternative. In the context of this decision-making process, failing to consider the cost implications of the various alternatives would have been irrational. As the DSEIS clearly states, EPA's selection is based upon the following rationale:

[t]he ELDS satisfies the MPRSA site selection criteria and, properly monitored and managed as described in the SMMP, use of this site would not unreasonably degrade or endanger human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities. Furthermore, disposal at this site in a manner consistent with the restrictions imposed on the site with regard to disposal locations, time periods for disposal, and types of material to be disposed, as well as any other conditions consistent with the procedures and standards recommended by the LIS DMMP, would mitigate any potential adverse impacts to the environment to the greatest extent practicable.

...

In addition, the New London Alternative (and therefore also the ELDS) would avoid the substantial adverse socioeconomic impacts for the eastern Long Island Sound region that would be associated with the No Action Alternative.

DSEIS, p. 5-104. This reasoning includes, but is not limited to, discussion of environmental effects, need, capacity, health impacts, and socioeconomic effects. While NY DOS attempts to construe language in the DSEIS to state that cost was the sole dispositive factor in analyzing alternatives, it glosses over hundreds of pages of analysis in the DSEIS, FSEIS, the Proposed Rule and the Final Rule, which evaluate the alternatives according to the varied criteria applicable under NEPA, the MPRSA, and common sense. These criteria include, but are far from limited to, cost.

Cumulative Impact Analysis

NY DOS also argues that EPA did not conduct a sufficient cumulative impact analysis, as required by the ODA. NY DOS argues that EPA failed to consider all adverse impacts of open-water disposal that are specifically implicated under the Waste Policies. Yet, as stated above, the Waste Policies do not apply to EPA's designation of an open-water disposal site for dredged material. Furthermore, and as stated above, EPA has conducted a rigorous cumulative impact analysis that takes into account benthic health, bioaccumulation, bioavailability, as well as the hydrology and currents of LIS.

According to NY DOS, bottom currents will disperse fine sediments and clays into other parts of the Sound, thereby exacerbating other adverse effects of dredging. Yet, NY DOS's assertions are not supported by any data or scientific explanation; instead, they are unsupported conjecture. EPA, on the other hand, has conducted extensive research to determine the effects of bottom and near-bottom currents and the possible transport of dredged material throughout the Sound. EPA acknowledges that such currents would likely transport material placed in some locations, but this is not the case at the ELDS. EPA discussed the distinction between "containment sites" and "dispersive sites," and based on site-specific data, EPA found the ELDS to be a containment site

“where dredged material would remain on the seafloor, similar to conditions at the existing NLDS.” DSEIS, p. 5-33.³⁰

EPA and USACE also conduct extensive monitoring at existing disposal sites, and will do so for the ELDS, to track the bottom currents, bottom stress, and sediment stability, and to determine whether sediment transport is likely to occur within or outside the disposal sites. *See* DSEIS, p. 5-29 (describing the FVCOM Model and the LTFATE Model and how they analyze sedimentation and erosion); *see also* DSEIS, Table 5-7, p. 5-39; DSEIS, pp. 5-45 to 5-46; FSEIS, App. J - Responses to Comments, Comment/Response #22. Specifically, surveys conducted through the DAMOS program demonstrate that dredged material disposal at the NLDS for the past ten years has been stable in normal conditions and also in years with large coastal storms. DAMOS 182 (AECOM 2010). The years of data produced and reviewed by EPA clearly demonstrate that sediment transport from the ELDS will not harm human or environmental health by adversely affecting water quality or the benthic environment in the Sound.

Inadequate and Outdated Methodologies

NY DOS also claims that EPA and USACE use inadequate and outdated testing methodologies and analytical approaches to determine toxicity.³¹ Objection, p. 49. While NY DOS states that EPA’s methods were incorrect, it does not provide alternative, better methodologies. In fact, the only criticism of EPA’s methodology specified is the suggestion that EPA has made “inadequate efforts” to determine sub-lethal and long term effects on fish and shellfish species. Contrary to this suggestion, however, sub-lethal and long term effects were examined by EPA, as the DSEIS demonstrates. For example, Section 5.2.4 specifically addresses bioaccumulation and the impacts of certain contaminants in the tissues and habitats of fish and shellfish. DSEIS, pp. 5-10 to 5-11.

In addition, toxic contamination has been thoroughly addressed by EPA in the DSEIS. After examining significant scientific data related to the toxicity and contamination of sediments at the proposed sites, EPA concluded that “sediments in the open waters of Long Island Sound are generally not toxic to benthic organisms. The toxicity tests during the 2013 benthic survey demonstrated that contaminants and physical conditions at the alternative sites do not elicit a toxic response to exposed organisms. These direct observations, combined with the comparisons

³⁰ “Containment areas have physical and geological features that restrict movement of bottom sediments from the area to surrounding areas. Containment areas would, for example, include topographical depressions in the seafloor or other locations where peak bottom current velocities are too low to resuspend sediment.” DSEIS, p. 3-24 n.1.

³¹ In EPA’s Responses to Comments, EPA clearly explains that their testing methodologies and procedures are drawn from federal regulations and agency guidance documents, such as the “Green Book.” “Despite their publication dates, the guidance provided in the Testing Manual for the Evaluation of Dredged Material Proposed for Ocean Disposal (Green Book, EPA and USACE, 1991) and the Inland Testing Manual (EPA and USACE, 1998) is valid and protective of the environment.” *See* FSEIS, App. J - Responses to Comments, Comment/Response #25 (regarding the “Green Book” manual concerning sediment testing methodologies). Furthermore, “Green Book” testing and methodologies were used to support designation of the central and western open-water disposal sites. NY DOS did not find the “Green Book” methodology to create inconsistency for the purpose of the CZMA during that rulemaking process. In fact, in their Conditioned Concurrence, NY DOS does not mention the “Green Book” at all, and does not find that the “Green Book” analytical approach provided insufficient or inadequate data from which to determine consistency with the NY CMP Waste Policies. NY DOS does not identify a sound basis here for finding fault with EPA’s use of the Green Book.

of sediment chemistry to ERL and ERM values, support the conclusion that sediments at the alternative sites are generally not toxic.” DSEIS, p. 4-61; *see also* FSEIS, App. J - Responses to Comments, Comment/Response #25(1)(4). This undoubtedly evinces an adequate effort to assess the potential existence of toxic materials and their effects on species in the Sound.

In addition, EPA repeats that the existing regulations do not allow the disposal of toxic material at the sites. Rigorous physical, chemical, and biological testing and analysis of sediments is conducted prior to *any authorization to dredge*, and this analysis requires testing for numerous contaminants of concern, including PCBs.³² *See* 40 C.F.R. Part 227, Sub-Part B (criteria related to toxicity and bioaccumulation). As clearly stated in the Final Rule, and as the MPRSA and EPA’s ocean dumping regulations provide, sediments that do not pass these tests are considered “unsuitable” and shall not be disposed of at the site.³³ What’s more, EPA’s extensive cumulative impacts analysis, as discussed at length throughout this document, looks at past and long-term trends with respect to sediment composition, water quality, bioaccumulation, and many other parameters. (It is also worth pointing out that sediment quality has generally been improving over time due to factors such as improved surface water pollution control.) This assessment clearly contradicts NY DOS’s assertion that the methodology fails to take into account long-term effects on fish and shellfish.

Southold LWRP Language

NY DOS also references Southold’s LWRP, quoting the following language related to dredged material disposal:

[d]eposition of the dredged material from this [federal navigation] channel to the NLDS is of concern because of the extent of the material, (millions of cubic yards), its contaminated nature, and its location relative to physically dynamic, biologically diverse and heavily fished waters. Since 1981 and 1990, the *Ocean Dumping Act* (ODA) has been in effect in Long Island Sound. However, the NLDS has not been formally designated as an approved disposal site in accordance with that act. It is the Town’s position that the New London site does not meet the criteria set forth in the ODA, and therefore should be closed to future depositions of dredged material. The standards of the ODA ought to be upheld, not circumvented by federal agencies.

³² NY DOS also briefly argues that PCBs in existing sediments on the bottom of the Sound in or near open water disposal sites pose a threat to species and ecosystem health, and therefore must be taken into account in EPA’s cumulative impact analysis. They go on to complain that EPA failed to do so. However, the data shows otherwise. The DSEIS specifically discusses the potential presence of PCBs in sediments at the alternative sites:

The surface sediment collected during the 2015 sediment chemistry survey was analyzed for 22 PCB congeners. PCBs were only detected above the analytical reporting limit at three stations (two at the NLDS, and one at the CSDS). None of the detected concentrations exceeded the ERM value for total PCBs. Only the total PCB concentration in Sample L-17 (55.9 µg/kg), located at the NLDS, exceeded the ERL value (22.7 µg/kg).

DSEIS, p. 4-60. Thus, PCBs were directly addressed, and the science demonstrates that they do not pose a threat at the proposed sites.

³³ EPA has previously explained how the “Exclusionary Criteria” in 40 CFR 227.13 are used and further support the protectiveness of the sediment testing regime applicable under 40 CFR Part 227.

Objection, p. 51 (quoting Southold LWRP, Section II-K, p. 26). First, this language is not found in any policy directives, but instead is included in a separate section of the LWRP, which identifies issues of interest for Southold and includes observations related to these issues. It does not constitute a legally enforceable policy within the meaning of the CZMA and EPA is not required to ensure that its action is consistent with the language quoted above. That said, EPA considered this language and will respond to it.

EPA is designating the ELDS. The NLDS will close by operation of law on December 23, 2016. Therefore, to the extent that this language recommends closure of the NLDS, the EPA's Proposed Rule is entirely consistent with that recommendation. Because the ELDS no longer includes any part of the historical NLDS site, there is no conflict. Additionally, even if the ELDS did include a portion of the NLDS, EPA's site designation would be consistent to the maximum extent practicable with Southold's recommendation because the town complains that the NLDS never went through the MPRSA site designation process, but EPA is now designating the ELDS under that MPRSA process.

4. EPA's Designation of the ELDS is Consistent with LIS CMP Policies 10 and 10.6 and Southold LWRP Policies 10 and 10.5, Which Seek to Protect Water-Dependent Uses and Promote Beneficial Use of Dredged Material

NY DOS next argues that EPA's proposed action is inconsistent with certain New York CMP policies related to the protection of LIS's water dependent uses (hereinafter "Water-Dependent Use Policies"). These policies read as follows:

Policy 10 Protect Long Island Sound's water-dependent uses and promote siting of new water-dependent uses in suitable locations.

Sub-Policy 10.6 Provide sufficient infrastructure for water-dependent uses.

Use suitable dredged material for beach nourishment, dune reconstruction, or other beneficial uses. Avoid placement of dredged material in Long Island Sound when opportunities for beneficial reuse of the material exist. Allow placement of suitable dredged material in nearshore locations to advance maritime or port-related functions, provided it is adequately contained and avoids negative impacts on vegetated wetlands and significant coastal fish and wildlife habitats. Avoid shore and water surface uses which would impede navigation.

Southold LWRP Policy 10 Protect Southold's water-dependent uses and promote siting of new water-dependent uses in suitable locations.

Sub-Policy 10.5 Provide sufficient infrastructure for water-dependent uses.

A. Provide adequate navigation infrastructure. Dredging is an essential activity but with costs and impacts that require it to be undertaken only to the extent necessary to meet the current and future needs of water-dependent uses of the Town of Southold. The Town of Southold will work in cooperation with New York State, Suffolk County, the Village of Greenport and private owners of water-dependent uses to:

5. Avoid placement of dredged material in Long Island Sound when upland alternatives exist.

6. Put clean dredge material to beneficial use for either beach nourishment or dune reconstruction.

Sub-Policy 10.6 Promote efficient harbor operation.

C. Promote efficient harbor operation in the waters off Fishers Island.

5. Maintain the chemical, physical and biological integrity of the island's surrounding waters and harbors and their dependent habitats.

LIS CMP Policies 10 and 10.6 focus primarily on protecting water-dependent uses, the proper siting of such uses, and requiring sufficient infrastructure for water-dependent uses. The explanatory language for LIS CMP Policy 10.6 urges the use of “suitable dredged material for beach nourishment, dune reconstruction, or other beneficial uses,” and also that placement of dredged material in LIS be avoided when opportunities for beneficial reuse exist. LIS CMP, at 85. Southold LWRP Policies 10 and 10.5 are identical to LIS CMP Policies 10 and 10.6, respectively. In addition, in the explanatory language for Southold LWRP Policy 10.5, Southold states that “[d]redging is an essential activity but with costs and impacts that require it to be undertaken only to the extent necessary to meet the current and future needs,” and that the town will work with state, municipal, and private entities to put “clean dredge material to beneficial use for either beach nourishment or dune reconstruction” and avoid placing dredged material in LIS when upland alternatives exist. Southold LWRP, Section 3 – 49. In addition, NY DOS also points to Southold LWRP Policy 10.6, which seeks to promote efficient harbor operation around Fishers Island, while maintaining the chemical, physical and biological integrity of the island’s waters and habitat.

The above-mentioned policies are geared to supporting water-dependent uses around Long Island Sound and, with respect to Southold’s LWRP, around the Town of Southold. The explanatory language indicates that NY DOS and Southold also want to promote the beneficial use of dredged material *when possible*, as well as avoid uses that would impede navigation and maritime functions.

It is not clear to EPA that the Water-Dependent Use Policies constitute enforceable policies of New York’s CMP. The vagueness and generality of the standards in these policies do not provide

“sufficient specificity to guide public and private uses.” 15 C.F.R. § 930.11(h). Nevertheless, EPA considered these policies and has again determined that even if they are enforceable policies of the New York CMP, EPA’s action is consistent with them to the maximum extent practicable.

Indeed, EPA’s designation of the ELDS is not only consistent with the Water-Dependent Use Policies, but it embodies them as a whole. EPA’s action designates a site for open-water disposal of dredged material for use only when practicable alternatives to open-water disposal are not available. Moreover, the site use restrictions, including the RDT process, are designed to promote the identification and use of dredged material management alternatives to open-water disposal. EPA’s action, therefore, supports and facilitates dredging to support water-dependent uses around Long Island Sound, such as safe navigation and berthing of all types of vessels and the maritime use of ports and marinas in and around LIS, even as it promotes the beneficial use of dredged material when practicable.

The site use restrictions applicable to the ELDS were thoroughly addressed in EPA’s July 2016 Consistency Determination:

[a]s EPA indicated in the April 2016 Proposed Rule for the ELDS, EPA intends the final rule for the ELDS to apply the final CLDS/WLDS restrictions to the ELDS (or any other site designated to serve the eastern region of Long Island Sound). See 81 Fed. Reg. 24763-24764. These restrictions incorporate standards and procedures based on the Long Island Sound Dredged Material Management Plan (LIS DMMP) and are intended to strengthen the existing process for identifying and promoting the development of potential practicable alternatives to open-water disposal for managing dredged material. As a result, these standards and procedures are intended to reduce or eliminate open-water dredged material disposal in the Sound over time.

July 2016 Consistency Determination, p. 17; *see also id.*, pp. 9-13 (outlining the existing regulatory requirements and the requirements enacted through designation of the CLDS and WLDS that provide mechanisms for ensuring alternatives to open-water disposal are considered and utilized prior to open-water disposal). The terms of the ELDS designation will not only help to ensure safe navigation and berthing for vessels in the Sound, but they will also promote the use of alternatives to open-water disposal on a project specific basis and ensure that such alternatives – including beach nourishment, dune reconstruction and other upland options – are utilized insofar as they are practicable and available. NY DOS found the site use restrictions consistent to the maximum extent practicable with the New York CMP in the context of the designation of the CLDS and WLDS. There is no reason that these procedures and standards are not equally consistent with New York’s CMP in the context of the ELDS designation, and NY DOS’s (incorrect) arguments challenging the technical merits of the ELDS provide no such reason.

NY DOS urges that there are upland management alternatives that could take the place of the ELDS but has not itself identified specific, sufficient, available alternatives. At the same time, to the extent that practicable alternatives for particular projects emerge in the future, the regulatory process governing dredged material management will require such practicable alternatives to be used. Thus, designation of the ELDS is consistent with the Water-Dependent Use Policies to the maximum extent practicable.

NY DOS argues, however, that the proposed action is inconsistent with these policies because EPA did not adequately address beneficial reuse options in the Proposed Rule and supporting documents. Yet, as discussed at length in EPA's July 2016 Consistency Determination as well as in this document, EPA has thoroughly evaluated alternatives to open-water disposal, including beneficial use options. EPA's evaluation considers numerous factors, including, but not limited to, cost. *See* DSEIS, pp. 5-103, 5-19 to 5-28.

NY DOS additionally argues that EPA has not demonstrated the need for an eastern site designation and that the DMMP indicates that existing designated sites (*i.e.*, the CLDS, WLDS and RISDS) have the capacity to receive all the dredged material from the entire Long Island Sound for the next thirty years. EPA disagrees with this argument and has explained the reasons for its disagreement previously in this document.

In the Objection, p. 23 n. 76, NY DOS also suggests that:

... one alternative site that is available to and capable of receiving dredged materials from Long Island Sound is the innovative sediment decontamination facility in New York Harbor, which converts contaminated sediments into clean by-products. This alternative is already in use for one important nearby harbor, and could, if properly considered, eliminate the need for designation of an open water disposal site at ELDS and indeed, future use of the newly designated sites at WLDS and CLDS.

Yet, this suggestion makes little sense. The New York Harbor decontamination facility is presumably used for *contaminated* sediments, whereas the ELDS is for *suitable* sediments. Contaminated sediments will not be placed at the ELDS. Therefore, the sediment decontamination facility would not take the place of the ELDS. Furthermore, all the problems that arise from relying on distant disposal sites already noted would also apply to the notion of transporting dredged material from the eastern Sound for processing at the New York Harbor facility.

In addition, NY DOS points to a list of "Confined Disposal Facility" ("CDF") and "Confined Aquatic Disposal" ("CAD") options as providing sufficient disposal capacity to eliminate the need for the ELDS and complains that EPA rejected these options in favor of the ELDS. Objection, p. 23. NY DOS took the list of CDF and CAD facilities from the DMMP (Table 5-35). It could be that NY DOS misunderstands the table from the DMMP and incorrectly thought that each of these facilities was in existence and was available to receive dredged material from the eastern Sound. In fact, the listed CDF options primarily or entirely represent *potential* facilities that are not yet in existence and may never be, given the challenges to implementation. EPA considered these options and had sound reasons for rejecting them as replacements for the ELDS. Also, as EPA explained in the DSEIS, CDFs and CAD cells are *not* beneficial use options. In the DSEIS, EPA discussed many of the difficulties and possible detriments of relying on such facilities (*e.g.*, environmental impacts to subtidal habitat, potential permitting difficulties, high costs). DSEIS, Chapter 3.2.5. Problems with relying on these options are also identified in Chapter 5 of the DMMP. Regarding CDF and CAD options, EPA rejected these options taking the place of an open-water site, concluding as follows in the DSEIS:

[a]lthough sufficient capacity could be created, island and shoreline CDFs are costly to construct and maintain and may also have environmental impacts. Over the long term, CDFs may become viable options as part of coastal resiliency efforts, assuming there would be significant cost-sharing from the federal government, state governments, and/or the municipalities that would benefit from such options.

DSEIS, p. 3-21. Going forward, under the site use restrictions applicable to the ELDS, if particular CDFs or CAD cells become available practicable alternatives to open-water disposal, then those options will be pursued.

It is also important to note that the Water-Dependent Use Policies do not mandate beneficial use or other types of upland alternatives. They recognize the importance of dredging to support water-dependent activities and only urge that beneficial use of the material be implemented when the dredged material is suitable for such uses and appropriate options are available. Beneficial use is not mandatory for all dredged material and the policies do not require that upland alternatives must be created or expanded to accept dredged material. Thus, designation of the ELDS and its accompanying site use restrictions perfectly align with, and help to achieve the goals of, the Water-Dependent Use Policies by encouraging and requiring beneficial use and upland alternatives when practicable.

NY DOS finally argues that EPA failed to assess or inadequately assessed current vessel uses in eastern LIS and potential conflicts arising from disposal activities in this area. This deficiency, according to NY DOS, precludes EPA from determining if recreational or commercial users are affected by the proposed action. This claim is unfounded. In the DSEIS, EPA analyzed current commercial and recreational uses of the eastern Sound and also directly addressed commercial navigation and traffic in the Sound. Section 4.15 of the DSEIS focuses on “the socioeconomic environment (commercial and recreational fisheries, shipping and navigation, recreational activities and beaches, parks and natural areas, historical and archaeological resources, and other human uses).” Within this section, EPA assesses commercial navigation and traffic, as well as recreational activities and beach use both throughout LIS and at the open-water disposal site alternatives. DSEIS, Section 4.15.2, 4.15.3. The analysis thoroughly explains the multitude of socioeconomic uses of the sound and Figure 4-48 and Figure 4-49 directly address NY DOS’s argument regarding vessel use. Collectively, these figures depict marine transportation routes, anchorage areas, density of commercial vessel traffic throughout the Sound, and recreational boating density. DSEIS, Figure 4-48, p. 4-147 (depicting navigation and commercial vessel traffic); *see also* DSEIS, Figure 4-49, p. 4-152 (depicting recreational boat traffic). These Figures also show the level of vessel traffic throughout the Sound and indicate where the site alternatives would be. Moreover, Section 5.4.10 of the DSEIS synthesizes the description of the socioeconomic environment of the Sound and analyzes the potential effects on this environment as a result of the proposed action.

Based upon these Figures and other data informing EPA’s understanding of the navigation and recreational patterns in the Sound, EPA determined that:

[t]he potential impacts to commercial finfishing would be minimal because the alternative sites are not prime finfish or shellfish habitats. Impacts to recreational fishing would be minimal as well and likely would not differ between the

alternative sites. Commercial shipping and navigation would not be impacted as the shallowest disposal depth permitted at a designated site would be 59 feet (18 m), and any interference during disposal operations would be mitigated through appropriate site management practices and notice to mariners. Disposal activities are not expected to adversely impact the recreational activities, beaches, parks, and natural areas associated with any of the three alternative sites. There are no pipelines or cables located within the boundaries of any of the alternative sites.

DSEIS, pp. 5-66 to 5-67.³⁴ At the same time, in response to public comments, EPA shifted the eastern boundary of the ELDS farther west to fully avoid the submarine transit corridor to the Thames River. EPA thoroughly assessed the vessel traffic, in conjunction with numerous other socioeconomic factors throughout the DSEIS. EPA has correctly determined that its proposed action is consistent with the Water-Dependent Use policies, which not only promote beneficial use, but also promote efficient harbor operation.

EPA's designation of the ELDS is consistent with Southold LWRP Policy 10.6 to the maximum extent practicable because providing an open-water disposal option in the eastern Sound will, if anything, help to support necessary dredging to maintain efficient harbor operation around Fishers Island. At the same time, the site use restrictions applicable to the ELDS will ensure that practicable alternatives to open-water disposal are used when they are available to manage dredged material. Finally, designation of the ELDS is consistent with Southold LWRP Policy 10.6 in that it will support maintenance of the physical, chemical and biological integrity of the waters and habitat around Fishers Island. First, the final ELDS delineation has moved the site boundaries westward, farther from Fishers Island and entirely outside of the NLDS and New York state waters. Second, the ELDS is a containment site and material placed there will not have significant effects on the waters and habitat around Fishers Island. Third, only dredged material that is suitable for open-water disposal—meaning it satisfies the sediment quality criteria in EPA's MPRSA regulations at 40 CFR Part 227—will be eligible to be placed at the ELDS.

5. EPA's Designation of the ELDS Is Consistent to the Maximum Extent Practicable with LIS CMP Policies 11 and 11.1 and Southold LWRP Policies 11, 11.1 and 11.2, All of which are Intended to Promote Sustainable Use of Living Marine Resources

The final set of CMP policies addressed by NY DOS in the Objection, aim to promote sustainable use of living marine resources in LIS and Southold (hereinafter "Marine Resources Policies"). These policies read as follows:

Policy 11 Promote sustainable use of living marine resources in Long Island Sound.

³⁴ EPA also received comments relating to its consideration of vessel traffic and navigation, and in its response, reiterated the relevant analysis in the DSEIS, and concluded that the "ELDS . . . would cause minimal interference with vessel traffic and associated vessel operations in the area." FSEIS, App. J - Responses to Comments, Comment/Response #17.

Sub-Policy 11.1 Ensure the long-term maintenance and health of living marine resources.

Ensure that commercial and recreational uses of living marine resources are managed in a manner that: results in sustained useable abundance and diversity of the marine resource; does not interfere with population and habitat maintenance and restoration efforts; uses best available scientific information in managing the resources; and minimizes waste and reduces discard mortality of marine fishery resources. Ensure that the management of the state's transboundary and migratory species is consistent with interstate, state-federal, and interjurisdictional management plans. Protect, manage, and restore sustainable populations of indigenous fish, wildlife species, and other living marine resources. Foster occurrence and abundance of Long Island Sound's marine resources by: protecting spawning grounds, habitats, and water quality; and enhancing and restoring fish and shellfish habitat, particularly for anadromous fish, oysters, and hard clams.

Southold LWRP Policy 11 Promote sustainable use of living marine resources in Long Island Sound, the Peconic Estuary and Town waters.

Sub-Policy 11.1 Ensure the long-term maintenance and health of living marine resources.

A. Ensure that commercial and recreational uses of living marine resources in the Town of Southold are managed in a manner that:

- 1. places primary importance on maintaining the long-term health and abundance of marine fisheries,*
- 3. does not interfere with population and habitat maintenance and restoration efforts,*
- 4. uses best available scientific information in managing the resources.*

C. Foster the occurrence and abundance of the Town's marine resources through:

- 1. protection of spawning grounds, habitats, and water quality,*
- 2. enhancement and restoration of fish and shellfish habitat.*

Sub-Policy 11.2 Provide for commercial and recreational use of the Town of Southold's finfish, shellfish, crustaceans, and marine plants.

C. Protect the public health and the marketability of marine and fishery resources by:

4. maintaining and improving water quality of fishery and marketable marine resources to protect public health.

It is not clear to EPA that these policies constitute enforceable policies of New York's CMP. The vagueness and generality of the standards in the Marine Resources Policies do not provide "standards of sufficient specificity to guide public and private uses." 15 C.F.R. § 930.11(h). Nevertheless, EPA considered these policies.

Assuming that they are enforceable policies of the New York CMP, the Marine Resources Policies are, at most, only tangentially related to EPA's designation of the ELDS. These policies are primarily related to encouraging sustainable use of living marine organisms (*e.g.*, sustainable harvesting of fish and shellfish). Regulation of the harvesting of marine life has nothing to do with EPA's designation of a dredged material disposal site.

That said, the explanatory language supporting the LIS CMP and Southold LWRP policies also urges steps to "[f]oster occurrence and abundance of Long Island Sound's marine resources by protecting spawning grounds, habitats, and water quality; and enhancing and restoring fish and shellfish habitat" Therefore, these policies could be implicated by the ELDS designation to the extent that it raises issues about water quality and/or habitat effects. EPA already has explained, however, that the ELDS designation will have no significant adverse effects on either water quality or marine habitat. As a result, the designation will be consistent with the Marine Resources Policies to the maximum extent practicable.

NY DOS argues that EPA's proposed action is not consistent with the Marine Resources Policies because EPA failed to adequately consider ecosystem stressors in LIS and this failure "invalidates its ability to determine the range of subsequent potential effects on ecosystem function necessary to sustain the Sound's marine resources." Objection, p. 56. NY DOS's argument is, in turn, based on several more narrow claims relating to its technical and scientific analysis, and each will be discussed below.

Consistent with EPA's dredged material disposal site selection criteria, *see* 40 CFR 228.5(a), (b) and (d), and 228.6(a)(2), (8) and (9), in selecting the ELDS, EPA directly considered the question of habitat effects and concluded that the site would not have significant adverse effects on marine habitat. This analysis is presented in the Proposed and Final Rules, as well as in the DSEIS and FSEIS. Furthermore, after further analysis in response to comments on the Proposed Rule and the DSEIS, EPA re-delineated the boundaries of the ELDS to exclude two rocky, hard-bottom areas that could provide relatively higher quality habitat for marine organisms. In addition, as discussed in the Final Rule and the FSEIS, EPA successfully completed consultations with NOAA under both the ESA and the EFH provisions of the MSFCMA. Thus, EPA remains confident that designation of the ELDS is consistent with the Marine Resources Policies to the maximum extent practicable.

Re-Colonization and Ecosystem Effects

NY DOS specifically takes issue with EPA's discussion of re-colonization and its ability to demonstrate healthy and adaptive ecosystems. NY DOS suggests that EPA dismisses any negative impacts on marine ecosystems as a result of dredging solely because re-colonization occurs, and that this dismissal renders its consistency determination improper. This suggestion

presents a misleading caricature of EPA's comprehensive analysis of benthic and marine species effects in LIS. NY DOS correctly states that EPA acknowledges potential short-term effects to benthic communities and marine ecosystems as a result of dredged material disposal. *See* DSEIS, p. ES-13. EPA's analysis does not stop at that point, however; EPA then examines numerous scientific studies and concludes that "the effects on benthic communities of disturbance (including dredged material disposal) indicate that the benthic habitats at a site would eventually be recolonized by a functioning infaunal community," DSEIS, p. ES-13, and further that "over time, sediments within disposal sites recover and develop biological communities that are healthy and able to support species typically found in the ambient surroundings. There is no evidence of long-term effects on benthic processes or habitat conditions." DSEIS, p. 5-8 (citing Fredette and French, 2004; Germano et al., 2011).

Despite EPA's thoroughly reasoned conclusions, NY DOS points to potential adverse effects from dredged material disposal related to bioaccumulation and toxicity and complains that EPA finds the occurrence of re-colonization to be proof that bioaccumulation and toxicity are not issues (or are acceptable). NY DOS's reasoning is flawed. While EPA notes that re-colonization demonstrates the benthic community's ability to continue to thrive and remain healthy, it does not, however, suggest that toxicity or bioaccumulation of toxins is acceptable. EPA's sediment quality criteria are applied to prevent the placement at open-water sites of sediments that fail toxicity or bioaccumulation tests. *See* 40 CFR 227.6. Furthermore, EPA thoroughly addresses bioaccumulation risks and analyzes toxicity and contaminants on the bottom of the Sound and in the alternative sites.³⁵ As discussed at length above, existing sediment at the proposed site is not toxic or hazardous. The DSEIS clearly articulates this conclusion:

[a]vailable data for the Long Island Sound region indicate that sediments in the open waters of Long Island Sound are generally not toxic to benthic organisms. The toxicity tests during the 2013 benthic survey demonstrated that contaminants and physical conditions at the alternative sites do not elicit a toxic response to exposed organisms. These direct observations, combined with the comparisons of sediment chemistry to ERL and ERM values, support the conclusion that sediments at the alternative sites are generally not toxic."

DSEIS, p. 4-61; *see also* DSEIS, Section 5.2.4, pp. 5-10 to 5-11 (discusses bioaccumulation and the impacts of certain contaminants in the tissues and habitats of fish and shellfish). Thus, EPA does not find that re-colonization at the proposed site means that other adverse effects are acceptable; on the contrary, EPA does find that re-colonization indicates a healthy benthic community and that other testing and monitoring ensure that the sediments and water column providing a habitat for such community is also healthy. EPA's understanding and analysis of the marine ecosystems in the ELDS provide a sufficient foundation from which to determine that the proposed action is consistent with the Marine Resources Policies.

In addition to the comprehensive analysis of benthic health, bioaccumulation, and toxicology, EPA also has discussed, in the DSEIS and FSEIS, several other ways in which dredged material

³⁵ Contrary to NY DOS's assertion, EPA did consider bioturbation potentially resulting from re-colonization at the proposed site. DSEIS, Section 5.3.3; *see also* FSEIS, App. J - Responses to Comments, Comment/Response #23. After analyzing the water quality and sediment analyses, EPA concludes that "any 'loosening' effects of bioturbation are minimal" and that the sediment mounds at NLDS have remained stable despite bioturbation by the infauna, for many years. FSEIS, App. J - Responses to Comments, Comment/Response #23.

disposal is regulated to minimize any possible adverse effects to the marine environment. For example, any potential impacts of dredging and dredged material disposal on fish and benthic organisms are limited by restrictions placed on the times of year when dredging can occur, which are based on recommendations from federal and state fisheries management agencies. DSEIS, p. 5-50; *see also* DSEIS, p. ES-15 (“dredging is prohibited from June 1 to September 30 of any year to protect shellfish and finfish populations during their spawning season (except for nearshore placement of sandy dredged material, as stated above); these time-of-year restrictions would further reduce potential impacts on all listed species.”). In addition, sediment quality and water quality requirements applicable to dredged material disposal further prevent significant adverse effects on marine organisms and habitat.

On a related note, NY DOS argues that EPA has failed to assess the potential effects that subaqueous capping may have on re-colonization of benthic organisms and other species at the site. As discussed previously, however, capping of unsuitable sediments will not be allowed at the proposed site. Therefore, the issue of “capping” does not alter EPA’s analysis.

Finally, without any scientific support or data, NY DOS concludes that dumping in the proposed site over the course of 30 years, with inadequate recovery time between dumping events, will “result in cumulative effects over time that lead to a slow and steady increase in risk to the ecological health of the Sound.” Objection, p. 55. NY DOS’s argument here is divorced from reality. In fact, there typically is significant time between dumping events over the years due to the irregularity of dredging activities because of budget constraints and other considerations, the use of dredging windows, and the use of upland management options when practicable. NY DOS’s suggestion otherwise is complete conjecture and speculation. EPA, on the other hand, has extensively studied the effects on the ecological health of the Sound, and bases its conclusion on both science and facts. As a result, EPA concludes that its proposed action would be in harmony with maintaining the health of marine resources, and is consistent to the maximum extent practicable with the Marine Resources Policies.

Cumulative Effects

NY DOS once more argues that EPA’s cumulative effects analysis is deficient because it fails to address the impact of repeated disposal activities at the proposed sites. As discussed above, EPA has conducted a thorough cumulative impact analysis that includes assessment of historical and future trends in the Sound as well as analysis of many parameters from toxicity to benthic health to recreational effects.³⁶ The cumulative impact analysis has been discussed at length previously in this document and that discussion need be repeated here.

NY DOS also contends that the DAMOS monitoring program does not provide adequate information to assess cumulative effects and that the revised SMMP for the ELDS does not include details sufficient to satisfy section 102(c) of the ODA. 33 U.S.C. § 1412(c). Objection, p. 55. NY DOS, however, does not identify any of the specific details claimed to be missing from

³⁶ For example, USEPA’s Environmental Monitoring and Assessment Program (EMAP) monitored and assessed the *status and trends* of national ecological resources from 1990 to 2006. Field work for this program included the collection of sediments for evaluating potential toxicity. The EMAP National Coastal Database (USEPA, 2010) houses these historical monitoring data. Between 1990 and 2006, 360 sediment toxicity tests (10-day *Ampelisca abdita* whole sediment amphipod survival) were conducted on the sediments of Long Island Sound, its coastal bays, and contributing rivers. This is just one example of the type of scientific and technical data relied upon by EPA to assess legacy and future trends in the Sound.

either the DAMOS monitoring or the SMMP. NY DOS also does not present contrary data to demonstrate significant adverse cumulative effects.

EPA's Final SMMP associated with the proposed action satisfies all applicable conditions or requirements set forth in section 102(c) of the ODA. The relevant provisions of section 102(c) provide the following:

(3) Dredged material disposal sites. In the case of dredged material disposal sites, the Administrator, in conjunction with the Secretary, shall develop a site management plan for each site designated pursuant to this section. In developing such plans, the Administrator and the Secretary shall provide opportunity for public comment. Such plans shall include, but not be limited to—

(A) a baseline assessment of conditions at the site;

(B) a program for monitoring the site;

(C) special management conditions or practices to be implemented at each site that are necessary for protection of the environment;

(D) consideration of the quantity of the material to be disposed of at the site, and the presence, nature, and bioavailability of the contaminants in the material;

(E) consideration of the anticipated use of the site over the long term, including the anticipated closure date for the site, if applicable, and any need for management of the site after the closure of the site; and

(F) a schedule for review and revision of the plan (which shall not be reviewed and revised less frequently than 10 years after adoption of the plan, and every 10 years thereafter).

33 U.S.C. § 1412(c)(3). All six criteria listed above are addressed in the SMMP. *See* FSEIS, Appendix I (hereinafter "SMMP"). The baseline assessment is included in section 4.0 of the SMMP. SMMP, pp. 11-26. The program for monitoring is outlined and described in section 6.0. SMMP, pp. 27-35. Next, special management practices and conditions for the ELDS are clearly set forth in section 3.1. SMMP, pp. 9-10. Discussion of the quantity of disposal material, and the presence, nature, and bioavailability of contaminants in the material is discussed in section 7.0. SMMP, pp. 34-35. Section 7.0 also addressed the anticipated use of the site. SMMP, pp. 34-35. Finally, in section 8.0, EPA establishes the schedule for review and revision of the plan to occur "annually as part of the annual agency planning meeting and [also to] coordinate with other state and federal agencies periodically." SMMP, p. 35. All relevant requirements under Section 102(c) of the MPRSA are met. Therefore, the SMMP does not render EPA's cumulative impacts analysis deficient, and does not create inconsistency between EPA's proposed action and the Marine Resources Policies.

Climate Change Effects

NY DOS lastly argues that the proposed action is inconsistent with the Marine Resources Policies because EPA inadequately addressed climate change as an ecosystem stressor. NY claims that the chemistry of the system in LIS is changing as a result of climate change, and that

these changes result in new risks, threats, and vulnerabilities that must be taken into account, and ultimately that given the uncertainties posed by climate change, open-water disposal in LIS should be avoided. Objection, pp. 55-56. NY DOS is arguing, in effect, that because the climate is changing and we cannot be sure of all the ramifications of this change, designating the ELDS is inconsistent with the Marine Resources Policies. This logic does not hold.

EPA recognizes and acknowledges climate change and the designation of the ELDS is consistent with that recognition. NY DOS points to numerous studies that demonstrate the impacts of climate change on oceans and coastal waters, generally. More specifically, NY DOS points to studies suggesting that increased water temperatures and lower water pH could “activate” contaminants in bottom sediments. Yet, NY DOS does not provide any specific information to suggest that this will be a problem at the ELDS. The ELDS has been re-delineated to exclude any portion of the NLDS, and the ELDS was not used for past dredged material disposal. Therefore, even if activation of contaminants placed at sites in the past was a serious concern, it is not a concern at the ELDS.

Furthermore, NY DOS points to the uncertainties associated with climate change effects and argues that EPA has not taken into account these uncertainties, which may result in increased stress or ecological risks in LIS. Yet, EPA has evaluated the uncertain risks posed by climate change, (FSEIS, Section 5.7.2), and its proposed action is capable of taking into account unforeseen changes or uncertainties surrounding climate change and its potential effects on the Sound. Specifically, there are management procedures in place that ensure that EPA and USACE monitor disposal sites and any changes or adjustments to site use restrictions suggested by that monitoring can be made. EPA and USACE will modify the SMMP for any site at which impacts have been identified. Therefore, as mentioned previously, should climate change create unanticipated effects—*e.g.*, hypoxia, algal blooms—EPA and USACE will take actions to mitigate and eliminate them. In addition, the site use restrictions governing use of the ELDS (as well as the CLDS and WLDS) call for the states of New York, Connecticut, and Rhode Island, as well as other federal agencies, through the RDT and Steering Committee, to discuss projects in LIS, which will provide further opportunity for discussion of any emerging climate change issues and the creation of mitigation plans to manage such issues.

EPA does not dispute the science establishing the reality of climate change. EPA also recognizes the potential ocean-wide impacts from sea level rise, ocean warming, acidification, wind stress, and Greenhouse Gas emissions. EPA has taken climate change into effect in its assessment (*e.g.*, factoring in concern over greater air emissions that would be associated with longer barge trips if distant disposal sites were relied upon to serve the eastern Sound; factoring into the dredged material disposal capacity needs assessment the possibility that more extreme storms will generate a need for more dredging; factoring into the decision to designate only the ELDS in the eastern Sound the fact that coastal resiliency needs may create a greater demand for dredged materials to use in beneficial ways that will reduce open-water disposal over time). *See* FSEIS, Section 5.7.2.

Therefore, the proposed action is consistent to the maximum extent practicable with the Marine Resources Policies because the monitoring and management framework are capable of identifying unanticipated effects, due to climate change or other factors, and the agencies will be positioned to address any such effects to ensure successful long-term maintenance of the health and use of marine resources in the Sound.

In conclusion, EPA sufficiently analyzed “system stressors” and the range of effects on marine ecosystems in the Sound. EPA relied upon extensive scientific data and other literature to conclude that designation of ELDS would not have harmful effects on fish or benthic communities and therefore is consistent to the maximum extent practicable with the Marine Resources Policies.

D. Conclusion

As EPA explained in its July 2016 Consistency Determination, dredging *and* environmentally sound dredged material management are both needed within Long Island Sound to ensure safe navigation for marine-based recreation, commerce, and military activities, and to protect the Long Island Sound environment. EPA’s decision-making is guided by these twin imperatives. Although NY DOS’s Objection makes no mention of it, the LIS CMP and the Southold LWRP also recognize these two imperatives, meaning that they not only call for environmental protection but they also call for facilitating dredging needed to support important public uses of the waters of Long Island Sound. EPA considered and discussed all of these policies in the July 2016 Consistency Determination (*see* pp. 29-31 (discussion of various LIS CMP “Policy Recommendations”), 34, 42-43). EPA has carefully considered NY DOS’s Objection, but concludes that its final action designating the ELDS is consistent to the maximum extent practicable with all of the relevant policies of New York’s CMP.