6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 228

[FRL–xxxx-xx-Region 1]

Ocean Disposal; Proposed Designation of a Dredged Material Disposal Site in Eastern Region of Long Island Sound; Connecticut

AGENCY: Environmental Protection Agency (EPA)

ACTION: Proposed rule

SUMMARY: The Environmental Protection Agency (EPA) today proposes to designate one dredged material disposal site, the Eastern Long Island Sound Disposal Site (ELDS) located offshore from New London, Connecticut, for the disposal of dredged material from harbors and navigation channels in eastern Long Island Sound in the states of Connecticut and New York. This action is necessary to provide a long-term, open-water dredged material disposal site as an alternative for the possible future disposal of such material.

The proposed action is described in a Draft Supplemental Environmental Impact Statement (DSEIS) that also is being released today for public comment. The DSEIS is

ED_001437C_00001243-00001

considered supplemental because it updates and builds on analyses that were conducted for the 2005 Long Island Sound Environmental Impact Statement that supported the designation of the Central and Western Long Island Sound dredged material disposal sites. The DSEIS recommends designation of the ELDS as the preferred alternative from the range of options considered. This disposal site designation is subject to various restrictions designed to support the goal of reducing or eliminating the disposal of dredged material in Long Island Sound.

While EPA is currently proposing to designate the ELDS as its preferred alternative, EPA also has concluded, based on the analysis in the DSEIS, that two other alternatives, the Niantic Bay and Cornfield Shoals disposal sites (NBDS and CSDS), or portions thereof, could potentially be designated in addition to, or instead of, the ELDS. EPA is not currently recommending the NBDS and CSDS as preferred alternatives, but is inviting public comments on the option of designating one or both of these sites instead of, or as a complement to, the ELDS.

DATES: Comments must be received on or before June 24, 2016. EPA will hold four public hearings to receive comments on the proposed rule. The first two will be held on May 25, 2016, from 1:00 – 3:00 at the Suffolk County Community College Culinary Arts Center, 20 East Main St., Riverhead, NY, 11901, and from 5:30 – 7:30 p.m. at the Mattituck-Laurel Library, 13900 Main Rd., Mattituck, NY, 11952. The second two will be held on May 26, 2016, from 1:00 – 3:00 p.m. and from 5:00 – 7:00 p.m. at the University of Connecticut – Avery Point, Academic Building, Room 308, 1084 Shennecossett Rd, Groton, CT, 06340. Registration will begin 30 minutes before each of the four hearings.

ED_001437C_00001243-00002

ADDRESSES: Written comments should be sent to ELIS@epa.gov.

FOR FURTHER INFORMATION CONTACT: Ms. Jean Brochi, U.S. Environmental Protection Agency, New England Regional Office, 5 Post Office Square, Suite 100, Mail Code: OEP06-1, Boston, MA 02109-3912, telephone: (617) 918-1536, fax number: (617) 918-0536; e-mail address: Brochi.Jean@epa.gov or ELIS@epa.gov.

Public Review of Documents: The file supporting this proposed designation is available for inspection at the following locations:

In person. The Proposed Rule and the DSEIS, which includes the SMMP for the ELDS, as well as the U.S. Army Corps of Engineers' Dredged Material Management Plan (DMMP) and Programmatic Environmental Impact Statement (PEIS) are available for inspection at the EPA Region 1 Library, Five Post Office Square, Boston, MA, 02109.

Electronically. You may also review and/or obtain electronic copies of these documents and various other supporting documents from EPA's website: https://www.epa.gov/ocean-dumping/dredged-material-management-long-island-sound#Eastern Long Island Sound

SUPPLEMENTARY INFORMATION: Organization of this document. The following outline is provided to aid in locating information in this preamble.

ED_001437C_00001243-00003

I. Background

II. Purpose and Need

III. Potentially Affected Entities

IV. Disposal Site Descriptions

A. Eastern Long Island Sound Disposal Site

B. Niantic Bay Disposal Site

C. Cornfield Shoals Disposal Site

V. Compliance with Statutory and Regulatory Authorities

A. Marine Protection, Research, and Sanctuaries Act and Clean Water Act

B. National Environmental Policy Act

C. Coastal Zone Management Act

D. Endangered Species Act

E. Magnuson-Stevens Fishery Conservation and Management Act

VI. Restrictions

VII. Proposed Action

VIII. Supporting Documents

IX. Statutory and Executive Order Reviews

I. Background

Section 102(c) of the Marine Protection, Research, and Sanctuaries Act of 1972 (MPRSA), as amended, 33 U.S.C. 1412, gives the Administrator of EPA the authority to designate sites where ocean disposal may be permitted. On October 1, 1986, the Administrator delegated the authority to designate ocean dredged material disposal sites to the Regional Administrator of the

ED_001437C_00001243-00004

Region in which the sites are located. The preferred alternative site, ELDS, and the other two alternatives, NBDS and CSDS, are all located within Connecticut state waters, which is within the area assigned to EPA Region 1, *see* 40 CFR 1.7(b)(1); therefore the designation of one or more of these sites is being proposed pursuant to the EPA Region 1 Administrator's delegated authority.

EPA regulations (40 CFR 228.4(e)(1)) promulgated under the MPRSA require, among other things, that EPA designate ocean disposal sites by promulgation in 40 CFR 228. Designated ocean disposal sites are codified at 40 CFR 228.15.

The primary authorities that govern the aquatic disposal of dredged material in the United States are the MPRSA, 33 U.S.C. 1401 *et seq.*, and the Clean Water Act of 1972, 33 U.S.C. 1251 *et seq.* (CWA). While the CWA does not apply specifically to an EPA designation of a long-term dredged material disposal site under the MPRSA, future federal and non-federal projects involving dredged material disposal in Long Island Sound will require both a section 404 permit as well as a State Water Quality Certification pursuant to section 401 of the CWA. In 1980, the MPRSA was amended to add Section 106(f) to the statute. 33 U.S.C. 1416(f). This provision is commonly referred to as the "Ambro Amendment," named after its author, Congressman Jerome Ambro. MPRSA section 106(f), 33 U.S.C. 1416(f), was itself amended in 1990. Under this provision, the disposal of dredged material in Long Island Sound from both federal projects (i.e., projects carried out by the USACE Civil Works Program or the actions of other federal agencies) and from non-federal projects generating more than 25,000 cubic yards of material must satisfy the requirements of both CWA section 404 and the MPRSA. Disposal from non-federal projects

ED_001437C_00001243-00005

generating less than 25,000 cubic yards of material, however, are subject only to CWA section 404.

This rule proposes to designate the ELDS for open-water disposal of dredged material. While EPA is currently proposing the designation of the ELDS as its preferred alternative, EPA also has concluded, based on the analysis in the DSEIS, that two other alternatives, the Niantic Bay and Cornfield Shoals disposal sites (NBDS and CSDS), or portions thereof, could potentially be designated in addition to, or instead of, the ELDS. All three sites are described in detail in section IV, Disposal Site Descriptions.

EPA has conducted the disposal site designation process consistent with the requirements of the MPRSA, the National Environmental Policy Act (NEPA), the Coastal Zone Management Act (CZMA), and other relevant statutes and regulations. The site designations are intended to be effective for an indefinite period of time.

It is important to understand that the designation of a dredged material disposal site by EPA does not by itself authorize the disposal at that site of dredged material from any particular dredging project. For example, designation of the ELDS would only make that site available to receive dredged material from a specific project if no environmentally preferable, practicable alternative for managing that dredged material exists, and if analysis of the dredged material indicates that it is suitable for open-water disposal. *See* 40 CFR 227.1(b), 227.2 and 227.3; 40 CFR Part 227, Subparts B and C.

ED_001437C_00001243-00006

Thus, each proposed dredging project will be evaluated on a case-by-case basis to determine whether there are practicable, environmentally preferable alternatives to open-water disposal (i.e., whether there is a need for open-water disposal). In addition, the dredged material from each proposed disposal project will be subjected to MPRSA and/or CWA sediment testing requirements to determine its suitability for possible open-water disposal at an approved site. Alternatives to open-water disposal that will be considered include upland disposal and beneficial uses such as beach nourishment. If environmentally preferable, practicable disposal alternatives exist, open-water disposal will not be allowed. EPA also will not approve dredged material for open-water disposal if it determines that the material has the potential to cause unacceptable adverse effects to the marine environment or human health. The review process for proposed disposal projects is discussed in more detail below and in the DSEIS.

Dredged material disposal sites designated by EPA under the MPRSA are subject to detailed management and monitoring protocols to track site conditions and prevent the occurrence of unacceptable adverse effects. EPA and the USACE typically share responsibility for the management and monitoring of these disposal sites. The management and monitoring protocols for the ELDS are described in the Site Management and Monitoring Plan (SMMP) that is incorporated in the DSEIS as Appendix I. *See* 33 U.S.C. 1412(c)(3). EPA is authorized to close or limit the use of these sites to further disposal activity if their use causes unacceptable adverse impacts to the marine environment or human health.

II. Purpose and Need

As described in the DSEIS, the purpose of EPA's proposed action is to determine whether

ED_001437C_00001243-00007

one or more environmentally sound open-water dredged material disposal sites should be authorized for future long-term use in the eastern Long Island Sound region and, if so, to designate the site or sites accordingly and consistent with applicable law. The need for this effort derives from the following facts: (1) there are currently no disposal sites designated for long-term use in the eastern Long Island Sound region; (2) the two currently used sites in this region are only authorized for use until December 23, 2016; (3) periodic dredging is necessary to maintain safe navigation and marine commerce, and dredged material disposal is necessary when practicable alternative means of managing the material are not available; (4) EPA determined, based on the evaluation of projected dredging needs over a 30-year planning horizon and alternatives to open-water disposal conducted for the USACE's DMMP, that there are dredging and dredged material disposal/handling needs that exceed the available disposal/handling capacity in the eastern region of Long Island Sound; and (5) the MPRSA requires an EPA designation for any long-term dredged material disposal site.

In addition, the closest designated sites outside the eastern Long Island Sound region (and outside the "Zone of Siting Feasibility," or ZSF, which is discussed in Section 1.3 of the DSEIS), are the Central Long Island Sound Disposal Site (CLDS) and the Rhode Island Sound Disposal Site (RISDS), which are 29.9 nautical miles (nmi) and 51.4 nmi, respectively, from the Saybrook Outer Bars at the mouth of the Connecticut River. The Saybrook Outer Bars is the southernmost project in the Connecticut River dredging center, which is the largest dredging center in the eastern Long Island Sound region. The Western Long Island Sound Disposal Site (WLDS) is even farther to the west than the CLDS, lying 58.4 nmi from the Connecticut River dredging center (DMMP, Section 5.3).

ED_001437C_00001243-00008

While the CLDS, WLDS, and RISDS have all been determined to be environmentally sound sites for receiving suitable dredged material, proposing to use any of them for suitable dredged material from the eastern region of Long Island Sound would be problematic and EPA would consider them to be options of last resort. Indeed, EPA does not consider the WLDS to be a truly viable option for eastern Long Island Sound material given how distant it is and given the fact that if material was being hauled long distance to the west from the eastern region of the Sound, the material would be taken to the CLDS and not hauled even farther to the WLDS. At the same time, using the CLDS or RISDS (not to mention the WLDS) 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 and would likely render many dredging projects too expensive to conduct, thus threatening safe navigation and interfering with marine recreation and commerce. Furthermore, the greater transport distance would also be environmentally detrimental in that it would entail greater energy use, increased air emissions, and increased risk of spills and short dumps (DSEIS, Section 2.1). Regarding air emissions, increased hauling distances may require using larger scows with more powerful tug boats, which would use more fuel and cause more emission of air pollutants.

As determined by the USACE through the development of its recently completed Long Island Sound Dredged Material Management Plan (DMMP), and described in the DSEIS (Section 2.3 and Tables 2-2 and 2-3), dredging in eastern Long Island Sound is projected to generate approximately 22.6 million cubic yards (mcy) of dredged material over the next 30 years, including 17.9 mcy from Connecticut ports and harbors and 4.7 mcy from ports and

harbors in New York. Of the total amount of 22.6 mcy, approximately 13.5 mcy are projected to be fine-grained sediment that meets MPRSA and CWA standards for aquatic disposal (i.e., "suitable" material), and 9.1 mcy are projected to be coarse-grained sand that also meets MPRSA and CWA standards for aquatic disposal (i.e., also "suitable" material). In addition, the DMMP estimates that approximately 80,900 cy of material from eastern Long Island Sound will be fine-grained sediment that does not meet MPRSA and CWA standards for aquatic disposal (i.e., "unsuitable" material).

Although Rhode Island is included in the ZSF for an eastern Long Island Sound dredged material disposal site – the ZSF is described later in section V, Compliance with Statutory and Regulatory Authorities – the volume of material estimated to come from two Rhode Island dredging centers (Block Island and South-Central/Southeast Washington County) located within the ZSF in Rhode Island is not included in the total amount of material estimated to come from the eastern portion of the Sound. This is because these dredging centers are closer to the RISDS. In addition, most of the dredged material from these two dredging centers is sand and will end up being used beneficially to nourish beaches.

The DMMP also estimates the total dredging needs for the entire Long Island Sound region at 52.9 mcy, meaning the central and western regions are projected to generate approximately 30.3 mcy of dredged material over the 30-year planning horizon (DMMP, Section 4.7 and Table 4.1). Of the total of 30.3 mcy, 20.9 mcy are projected to be fine-grained sediment that meets MPRSA and CWA standards for aquatic disposal (i.e., "suitable" material), 6.1 mcy are projected to be course-grained sand that also would be suitable for open-water disposal, and 3.3

ED_001437C_00001243-00010

mcy is projected to be fine-grained sediment unsuitable for open-water disposal. This leaves a total of 27 mcy of dredged material that could be suitable for open-water disposal, although EPA expects most, if not all, of the 6.1 mcy of sand would be used beneficially. The combined capacity of the CLDS and WLDS is approximately 40 mcy, which is enough to handle the 27 mcy from those regions. Those sites, however, neither have the capacity nor were intended also to meet the dredging needs of the eastern Long Island Sound region, which, as stated above, has been estimated to be approximately 22.6 mcy of suitable material (which, when added to the 27 mcy of suitable material from the central and western regions, amounts to a total of 49.6 mcy of suitable material from all of Long Island Sound). Furthermore, the distances from mouth of the Connecticut River to the CLDS and WLDS are 29.9 nmi and 58.4 nmi, respectively. Thus, both sites are outside the ZSF for the eastern Long Island Sound Region and for the reasons discussed above, neither would be a viable as a long-term solution for dredged material from the eastern Long Island Sound region, even if the CLDS could conceivably be used for material from the eastern Sound in an emergency situation.

The DMMP also included a detailed assessment of alternatives to open-water disposal and determined that, while all the sand generated in this region should be able to be used beneficially to nourish beaches, there are not practicable alternatives to open-water disposal with sufficient capacity to handle the projected volume of fine-grained sediment. As described in section VI, Restrictions, and in the proposed rule itself, there will be restrictions on the use of all Long Island Sound dredged material disposal sites that are designed to facilitate and promote the use of practicable alternatives to open-water disposal whenever available, but one or more designated open-water disposal sites are needed in eastern Long Island Sound.

ED_001437C_00001243-00011

EPA designation of a long-term dredged material disposal site(s) provides environmental benefits. First, when use of a site under the USACE short-term site selection authority is due to expire, designation by EPA is the only way to authorize continued use of that site, even if the site is environmentally suitable or even environmentally preferable to all other sites. With the NLDS and CSDS closing in December 2016, EPA's site designation studies were designed to determine whether or not these or any other sites should be designated for continued long-term use. Congress has directed that the disposal of dredged material should take place at EPA-designated sites, rather than USACE-selected sites, when EPA-designated sites are available (*see* MPRSA 103(b)). Thus, Congress has identified a preference for use of EPA-designated sites.

MPRSA criteria for selecting and designating sites require EPA to consider previously used disposal sites or areas, with active or historically used sites given preference in the evaluation (40 C.F.R. § 228.5(e)). This preference is intended to concentrate the effects, if any, of disposal practices to small, discrete areas that have already received dredged material, and avoid distributing any effects over a larger geographic area. Finally, EPA designated sites require a SMMP that will help ensure environmentally sound monitoring and management of the sites.

Periodic dredging of harbors and channels and, therefore, dredged material management, are essential for ensuring safe navigation and facilitating marine commerce. This is because the natural processes of erosion and siltation result in sediment accumulation in federal navigation channels, harbors, port facilities, marinas, and other important areas of our water bodies. Unsafe navigational conditions not only threaten public health and safety, but also pose an

ED_001437C_00001243-00012

environmental threat from an increased risk of spills from vessels involved in accidents. Navigation safety is a regulatory requirement for such agencies as the USACE and U.S. Coast Guard.

Economic considerations also contribute to the need for dredging (and the environmentally sound management of dredged material). There are a large number of important navigation-dependent businesses and industries in the eastern Long Island Sound region and Block Island Sound, ranging from shipping (especially the movement of petroleum fuels and the shipping of bulk materials), to recreational boating-related businesses, marine transportation, commercial and recreational fishing, interstate ferry operations, and military navigation, such as that associated with the U.S. Naval Submarine Base in New London. These businesses and industries contribute substantially to the region's economic output, the gross state product (GSP) of the bordering states and tax revenue. Continued access to harbors, berths, and mooring areas is vital to ensuring the continued economic health of these industries, and to preserving the ability of the region to import fuels, bulk supplies, and other commodities at competitive prices. In addition, preserving navigation channels, marinas, harbors, berthing areas, and other marine resources, improves the quality of life for residents and visitors to the eastern Long Island Sound region by facilitating recreational boating and associated activities, such as fishing and sightseeing.

Finally, maintaining these marine areas (i.e., navigation channels, harbors, berthing areas) also is important for homeland security and public safety, as they support the operation of the U.S. Naval Submarine Base and USCG facilities in the region, as well as other governmental entities that operate on the waters of Long Island Sound.

ED_001437C_00001243-00013

III. Potentially Affected Entities

Entities potentially affected by this proposed action are persons, organizations, or government bodies seeking to dispose of dredged material in waters of eastern Long Island Sound, subject to the requirements of the MPRSA and/or the CWA and their implementing regulations. This proposed rule is expected to be primarily of relevance to: (a) private parties seeking permits from the USACE to transport more than 25,000 cubic yards of dredged material for the purpose of disposal into the waters of eastern Long Island Sound; (b) the USACE for its own dredged material disposal projects; and (c) other federal agencies seeking to dispose of dredged material in eastern Long Island Sound. Potentially affected entities and categories of entities that may seek to use the proposed dredged material disposal site and would be subject to the proposed rule include:

Category	Examples of potentially affected entities
Federal government	USACE (Civil Works Projects), and other federal agencies
State, local, and tribal governments	Governments owning and/or responsible for ports, harbors, and/or berths, government agencies requiring disposal of dredged material associated with public works projects.
Industry and general public	Port authorities, shipyards and marine repair facilities, marinas and boatyards, and berth owners.

This table is not intended to be comprehensive, but rather provides a guide for readers regarding the types of entities that could potentially be affected should the proposed rule become a final rule. EPA notes that nothing in this proposed rule alters the jurisdiction or authority of

ED_001437C_00001243-00014

EPA, the USACE, or the types of entities regulated under the MPRSA and/or CWA. Questions regarding the applicability of this proposed rule to a particular entity should be directed to the contact person listed in the preceding FOR FURTHER INFORMATION CONTACT section.

IV. Disposal Site Descriptions

This rule proposes to designate the ELDS for open-water disposal of dredged material for several reasons. First, unlike the other two alternatives (i.e., Cornfield Shoals and portions of the Niantic Bay site), the entire ELDS is a containment site, which would support effective management and monitoring. Second, the NLDS, a part of which makes up part of the ELDS, has been used for dredged material disposal for over 35 years, and monitoring of the site has determined that past and present management practices have been successful in minimizing short-term, long-term, and cumulative impacts to water quality and benthic habitat. Third, designating the ELDS, which includes a portion of the NLDS, would be consistent with USEPA's ocean disposal regulations, which indicate a preference for designating disposal sites in areas that have been used in the past, rather than new, relatively undisturbed areas (40 CFR 228.5(e)). Finally, the capacity of the ELDS is approximately 27 million cy (based on water volume below 59 feet [18 m]), which would be sufficient to meet the dredging needs of the eastern Long Island Sound region for the next 30 years and beyond.

While EPA is currently proposing the designation of the ELDS as its preferred alternative, EPA also has concluded, based on the analysis in the DSEIS, that two other alternatives, the Niantic Bay and Cornfield Shoals disposal sites (NBDS and CSDS), or portions thereof, could potentially be designated in addition to, or instead of, the ELDS. The Niantic Bay alternative,

ED_001437C_00001243-00015

located just to the west of the existing NLDS, contains an area that was historically used (i.e., the NBDS), which is a criterion in the regulations. It also has a capacity of up to 27 million cy (based on water volume below 59 feet [18 m]), which is sufficient to meet the dredging needs of the eastern Long Island Sound region. However, the Niantic Bay site is predominately a transitional area, with a containment area in the northeastern corner, and the remainder of the site being dispersive. EPA is not recommending this site as a preferred alternative at this time primarily because it is not fully a containment site, as is the ELDS site.

The CSDS, located in the western part of eastern Long Island Sound, has been used for dredged material disposal for over 30 years. Because the site is located in a highly dispersive environment, disposal there has been limited to certain types of sediment (e.g., sandy material). Monitoring of the site has determined that past and present management practices have been successful in minimizing short-term, long-term, and cumulative impacts to water quality and benthic habitat from dredged material disposal. Designation of this site in addition to one of the other alternatives would provide a disposal site on both ends of eastern Long Island Sound, which could reduce travel time for tugs/scows transporting dredged material for disposal at the CSDS. This, in turn, could reduce costs and further minimize any risks of spills or short dumps. Due to the high energy and dispersive nature of the area, the site has unlimited capacity, but disposal at the site would be restricted to only certain types of sediments, such as sand, consistent with past practice.

Despite these considerations, EPA does not currently recommend designating the CSDS. Given the site's dispersive characteristics, EPA concludes that the CSDS would not be

ED_001437C_00001243-00016

appropriate to designate as the sole disposal site in eastern Long Island Sound. *See* 40 C.F.R. § 228.6(a)(5) and (6). Furthermore, EPA is not proposing to designate the Cornfield Shoals site even as a limited complement to one or more other sites because of the growing opportunities for sand and other dredged sediments to be beneficially used, such as for beach nourishment.

The following site descriptions are based on information in section 3.4.3 of the DSEIS and other support documents. Specifically, Figures 3-9 and 3-10 in the DSEIS show the locations of the sites, and Table 3-8 provides corner coordinates.

A. *Eastern Long Island Sound Disposal Site*

The ELDS alternative is located to the south of the mouth of Thames River estuary, approximately halfway between Connecticut and New York. The ELDS encompasses approximately the western half of the existing New London Disposal Site (NLDS), along with Sites NL-Wa and NL-Wb, which are adjacent areas immediately to the west of the NLDS (s*ee* DSEIS, Figure 3-9). The dimensions of the ELDS, which combines these three areas, are 1 x 2 nautical miles (nmi), for a total size of 2 square nautical miles (nmi^2). The closest upland points to the ELDS are Goshen Point, Connecticut, approximately 1.2 nmi (2.2 km) to the north, and Fishers Island, New York, approximately 1.4 nmi (2.6 km) to the southeast. The following are descriptions of the three areas that together would comprise the ELDS.

1. New London Disposal Site

The NLDS is located in the eastern part of the eastern Long Island Sound region and has been used for dredged material disposal since 1955 (SAIC, 2001b). This active open-water

ED_001437C_00001243-00017

dredged material disposal site was previously selected by the USACE using their site selection authority under MPRSA 103(b), 33 U.S.C. 1413(b). The statute limits the use of USACE-selected sites to two five-year periods, 33 U.S.C. 1413(b), but Congress extended the period of use of the NLDS by five additional years by Public Law on December 23, 2011 (PL-112-74, Title I, Sec 116).

The center of the NLDS is located 3.1 nmi (5.4 km) south of Eastern Point in Groton, Connecticut. The site has an area of 1 nmi^2 (3.4 km^2) centered at 41°16.306' N, 72°04.571' W (NAD83); corner coordinates are presented in Table 3-8. Water depths in the site range from approximately 46 to 79 feet (14 to 24 m). Most of the site is located within Connecticut waters, while a small portion in the southeastern corner of the site is located in New York state waters. However, this rule proposes to include only the western half of the NLDS, which would exclude the portion of the site that is in New York waters.

Approximately 5.4 mcy (4.1 million m^3) were disposed at the NLDS between 1955 and 1976. A total of approximately 3.5 mcy (2.6 million m^3) of dredged material have been placed at this location since it was formally selected in 1982. The dredged materials mounds on the seafloor result in an uneven seafloor within the site; the dredged material deposits can rise as much as 16 to 20 feet (5 to 6 m) above the surrounding seafloor.

The USGS mapped the sediment at the NLDS as predominantly sand, while sediments in the northernmost part of the site were mapped as gravelly. NUSC (1979) described the sediment at the site as generally fine sand. Much of the surface sediment at the site consists of placed

dredged material. Sediment sampled by the DAMOS program at locations approximately 0.5 nmi (1 km) to the east and west of the NLDS consisted of silt/clay and very fine silty sand, which may reflect pre-disposal sediment textures at the NLDS.

2. Site NL-Wa

Site NL-Wa is immediately to the west of the NLDS and also has an area of 1 nmi^2 (3.4 km^2). Water depths range from approximately 45 feet (14 m) in the north, to 100 feet (30 m) in the south. The site consists of mostly sandy areas, but also an area of boulders and rocks in the northern part of the site (WHG, 2014). This boulder area may be a lag deposit of a glacial moraine. The water depth in parts of the boulder area is shallower than 59 feet (18 m).

3. Site NL-Wb

Site NL-Wb is immediately to the west of Site NL-Wa and has an area of 0.5 nmi^2 (1.7 km^2). Water depths across the site range from approximately 59 feet (18 m) in the north, to 95 feet (28 m) in the south. The site consists of an extension of the sandy areas of Site NL-Wa. The southwestern corner of Site NL-Wb contains an area of bedrock and boulders; this area is an extension of a larger area with a similar substrate further to the south. The bedrock appears as parallel ridges of dipping, layered rock that can be correlated to bedrock on shore. The bedrock area within Site NL-Wb also contains some sand waves. Bartlett Reef is located approximately 0.5 nmi (0.9 km) to the west of the western boundary of the site.

B. Niantic Bay Disposal Site

The NBDS alternative is located to the south of Niantic Bay, between the Connecticut and Thames Rivers (DSEIS, Figure 3-9). It consists of the historic NBDS and Site NB-E immediately to the east. The NBDS alternative includes areas that were used historically for dredged material disposal, but it has not been used since at least 1972.

The northern edge of the alternative site is located approximately 0.6 nmi (1.1 km) from Black Point (southwestern corner of Niantic Bay) and 1.6 nmi (3.0 km) from the Millstone Nuclear Power Station (southeastern corner of Niantic Bay). The Niantic Bay alternative has an area of 2.8 nmi^2, with a length of 2.08 nmi and a width of 1.33 nmi. Water depths at the site range from approximately 60 to 130 feet (18 to 40 m). The site is located entirely within Connecticut waters.

1. Niantic Bay Disposal Site (historic)

The NBDS was used historically for the disposal of dredged materials between 1969 and 1972, when a total of 176,000 cy (135,000 m^3) of dredged material was disposed at this location. The site, however, has not been used for many years and it is not currently an active disposal site. Sediments at the site mostly consist of sand to the north and northwest and gravelly sediment with patches of gravel in the remainder of the area. There is a boulder area in the north-central part of the site and scour depressions in the south. The southeastern corner of the site abuts a bedrock area. The historic NBDS has an area of approximately 1.8 nmi^2 (6.2 km^2).

2. Site NB-E

ED_001437C_00001243-00020

Water depths at Site NB-E range from 43 feet (13 m) in the north to 230 feet (70 m) in the southeast. Surface sediments at the site are generally similar to sediments at the NBDS. The southwestern corner of Site NB-E contains a bedrock area, which is an extension of an exposed area of dipping bedrock layers to the south of the site. Site NB-E has an area of 1.0 nmi^2 (3.4 km^2). Bartlett Reef, a bedrock shoal, is located approximately 0.5 nmi (1 km) to the east of the site.

C. Cornfield Shoals Disposal Site

The CSDS alternative consists entirely of the active CSDS, which is located in the westernmost part of eastern Long Island Sound, approximately halfway between the states of Connecticut and New York (Figure 3-10). Like the NLDS, the CSDS was selected by the USACE using its site selection authority, and use of the site was then further extended by Congress on December 23, 2011 (PL-112-74, Title I, Sec 116). An estimated 1.2 mcy (0.95 million m^3) were disposed at the site between 1960 and 1976, and an additional 1.7 mcy (1.3 million m^3) between 1982 and 2013.

The center of the site is located 3.3 nmi (6.1 km) south of Cornfield Point in Old Saybrook, Connecticut. The site has an area of 1 nmi^2 (3.4 km^2) centered at 41°12.6858' N, 72°21.4914' W (NAD83). The water depth is around 150 feet (50 m). The site is located mostly within Connecticut waters, with only approximately 17 percent in New York state waters.

Bottom currents generally move in an ENE-WSW direction. The seafloor around the CSDS is relatively flat, with longitudinal ripples and other bedforms that suggests that this area is

sediment-starved. The site is classified as erosional/non-depositional in the DSEIS. The surface of the seafloor at the CSDS consists predominantly of gravel and gravelly sediment. Gravelly sediment consists of a mixture of 50 to 90% sand, silt and clay, with the remaining fraction consisting of gravel.

V. Compliance with Statutory and Regulatory Authorities

In proposing to designate a dredged material disposal site for the eastern portion of Long Island Sound, EPA has conducted the dredged material disposal site designation process consistent with the requirements of the MPRSA, NEPA, CZMA, the Endangered Species Act (ESA), the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), and any other applicable legal requirements.

A. Marine Protection, Research, and Sanctuaries Act

Section 102(c) of the MPRSA, as amended, 33 U.S.C. 1412(c) *et seq.*, gives the Administrator of EPA authority to designate sites where ocean disposal of dredged material may be permitted. *See* also 33 U.S.C. 1413(b) and 40 CFR 228.4(e). The statute places no specific time limit on the term for use of an EPA-designated disposal site. Thus, EPA site designations can be for an indefinite term and are generally thought of as long-term designations. EPA may, however, place various restrictions or limits on the use of a site based on the site's capacity to accommodate dredged material or other environmental concerns. *See* 33 U.S.C. 1412(c).

Section 103(b) of the MPRSA, 33 U.S.C. 1413(b), provides that any ocean disposal of dredged material should occur at EPA-designated sites to the maximum extent feasible. In the

ED_001437C_00001243-00022

absence of an available EPA-designated site, however, the USACE is authorized to "select" appropriate disposal sites. In 1992, Congress amended MPRSA section 103(b) to place maximum time limits on the use of USACE-selected disposal sites. Specifically, the statute restricted the use of such sites to two separate five-year terms. There are no EPA-designated dredged material disposal sites in the eastern portion of Long Island Sound and past open-water disposal of dredged material from projects subject to MPRSA requirements under section 106(f) has been conducted in this area of Long Island Sound at sites used pursuant to the USACE site selection authority. The two active USACE-selected sites, the NLDS and CSDS, will no longer be available after December 23, 2016, however, when their Congressionally-authorized term of use expires.

The Ocean Dumping Regulations, *see generally* 40 CFR Subchapter H, prescribe general and specific criteria at 40 CFR 228.5 and 228.6, respectively, to guide EPA's choice of disposal sites for final designation. EPA regulations at 40 CFR 228.4(e)(1) provide, among other things, that EPA will designate any disposal sites by promulgation in 40 CFR part 228. Ocean dumping sites designated on a final basis are promulgated at 40 CFR 228.15. Section 102(c) of the MPRSA, 33 U.S.C. 1412(c), and 40 CFR 228.3 also establish requirements for EPA's ongoing management and monitoring, in conjunction with the USACE, of disposal sites designated by EPA to ensure that unacceptable, adverse environmental impacts do not occur. Examples of such management and monitoring include the following: regulating the times, rates, and methods of disposal, as well as the quantities and types of material that may be disposed; conducting pre- and post-disposal monitoring of sites; conducting disposal site evaluation and designation

studies; and, if warranted, recommending modification of site use and/or designation conditions and restrictions. *See* also 40 CFR 228.7, 228.8, 228.9.

Finally, a disposal site designation by EPA does not actually authorize any dredged material to be disposed of at that site. It only makes that site available as a possible management option if various other conditions are met first. Use of the site for dredged material disposal must be authorized by the Corps under MPRSA section 103(b), subject to EPA review, and such disposal at the site can only be authorized if: (1) it is determined that there is a need for open-water disposal for that project (i.e., that there are no practicable alternatives to such disposal that would cause less harm to the environment); and (2) the dredged material satisfies the applicable environmental impact criteria specified in EPA's regulations at 40 CFR Part 227. *See* 40 CFR 227.1(b), 227.2 and 227.16. Furthermore, the authorization for disposal is also subject to review for compliance with other applicable legal requirements, which may include the ESA, the MSFCMA, the CWA (including any applicable state water quality standards), NEPA, and the CZMA. The following describes EPA's evaluation of the ELDS, NBDS, and CSDS alternatives pursuant to the applicable site evaluation criteria, and its compliance with site management and monitoring requirements.

EPA undertook its evaluation of whether to designate any dredged material disposal sites in the eastern Long Island Sound region pursuant to its authority under MPRSA section 102(c) in response to several factors. These factors include the following:

- The determination by EPA, based on the evaluation of projected dredging needs over the 30-year planning horizon and alternatives to open-water disposal conducted for the USACE's

DMMP, that the potential alternatives to open-water disposal do not provide sufficient capacity to accept the quantity of dredged material expected to be generated over the next 30 years in the region;

- The prohibition on use of the NLDS and CSDS disposal sites after December 23, 2016, pursuant to the USACE site selection authority under MPRSA section 103(b) and the five-year extension provided by Congress under Public Law-112-74, Title I, Sec 116.
- The understanding that in the absence of an EPA-designated disposal site or sites, any necessary open-water disposal would either be stymied, despite the importance of dredging for ensuring navigational safety and facilitating marine commercial and recreational activities, or the USACE would have to undertake additional short-term site selections, perhaps many of them, in the future;
- The clear Congressional preference expressed in MPRSA section 103(b) that any open-water disposal of dredged material take place at EPA-designated sites, if feasible;
- The fact that the two closest EPA-designated sites outside the eastern Long Island Sound region, the CLDS and RISDS, do not have the capacity to accept the quantity of suitable dredged material estimated to be generated from the eastern region of Long Island Sound, which was not anticipated when these sites were designated in 2005, and the additional fact that the two sites are 29.9 nmi and 51.4 nmi respectively from the Connecticut River dredging center, which would significantly increase transportation costs and project durations, while also increasing energy use, air emissions, and the risk of spills or short-dumps; and

- EPA's policy view that it is generally environmentally preferable to concentrate any open-water disposal at sites that have been used historically and at fewer sites, rather than relying on the selection of multiple sites to be used for a limited time, *see* 40 CFR 228.5(e).

EPA's evaluation considered whether there was a need to designate one or more disposal sites for long-term dredged material disposal, including an assessment of whether other dredged material management methods could reasonably be judged to obviate the need for such designations. Having concluded that there was a need for open-water disposal sites, EPA then assessed whether there were sites that would satisfy the applicable environmental criteria to support a site designation under MPRSA section 102(c). The MPRSA and EPA regulations promulgated thereunder impose a number of requirements related to the designation of dredged material disposal sites. These include procedural requirements, specification of criteria for use in site evaluations, and the requirement that a SMMP must be developed for all designated sites. As discussed below, EPA complied with each of these requirements in proposing to designate the ELDS.

1. Procedural Requirements

MPRSA sections 102(c) and 103(b) indicate that EPA may designate ocean disposal sites for dredged material. EPA regulations at 40 CFR 228.4(e) specify that dredged material disposal sites will be "designated by EPA promulgation in this [40 CFR] part 228 …." EPA regulations at 40 CFR 228.6(b) direct that if an EIS is prepared by EPA to assess the proposed designation of one or more disposal sites, it should include the results of an environmental evaluation of the

ED_001437C_00001243-00026

proposed disposal site(s), the Draft EIS (DEIS) should be presented to the public along with a proposed rule for the proposed disposal site designation(s), and that a Final EIS (FEIS) should be provided at the time of final rulemaking for the site designation. EPA has complied with all procedural requirements related to the publication of this proposed rule and associated DSEIS. The Agency has prepared a thorough environmental evaluation of the recommended alternative site being proposed for designation, the other two alternative sites still being considered, and other courses of action (including the option of not designating open-water disposal sites). This evaluation is presented in the DSEIS (and related documents) and this proposed rule.

2. Disposal Site Selection Criteria

EPA regulations under the MPRSA identify four general criteria and 11 specific criteria for evaluating locations for the potential designation of dredged material disposal sites. *See* 40 CFR 228.4(e), 228.5 and 228.6. The evaluation of the ELDS with respect to the four general and 11 specific criteria is discussed in detail in the DSEIS and supporting documents and is summarized below. The evaluation of the NBDS and CSDS with respect to the criteria also is discussed in detail in the DSEIS and supporting documents, but is not discussed in detail below because EPA is not currently proposing to designate these sites.

General Criteria (40 CFR 228.5)

As described in the DSEIS, and summarized below, EPA has determined that the ELDS, NBDS, and CSDS satisfy the four general criteria specified in 40 CFR 228.5. This is discussed in Chapter 5 and summarized in Table 5-9, "Summary of Impacts for Action and No Action Alternatives," of the DSEIS.

ED_001437C_00001243-00027

i. Sites must be selected to minimize interference with other activities in the marine environment, particularly avoiding areas of existing fisheries or shellfisheries, and regions of heavy commercial or recreational navigation (40 CFR 228.5(a)).

EPA's evaluation determined that use of the ELDS would cause minimal interference with the aquatic activities identified in the criterion. The site is not located in shipping lanes or any other region of heavy commercial or recreational navigation. In addition, the site is not located in an area that is important for commercial or recreational fishing or shellfish harvesting. EPA used Geographic Information System (GIS) software to overlay the locations of various uses and natural resources of the marine environment on the disposal site location and surrounding areas (including their bathymetry). Analysis of this data indicated that use of the site would have minimal potential for interfering with other existing or ongoing uses of the marine environment in and around the ELDS, including lobster harvesting or fishing activities. In addition, the western half of the ELDS has been used for dredged material disposal for many years (as the NLDS) and not only has this activity not significantly interfered with the uses identified in the criterion, but mariners in the area are accustomed to use of this site. Finally, time-of-year restrictions (also known as "environmental windows") imposed to protect fishery resources will typically limit dredged material disposal activities to the months of October through April, thus further minimizing any possibility of interference with the various activities specified in the criterion. The NBDS and CSDS also meet this criterion for largely the same reasons.

ii. Sites must be situated such that temporary perturbations to water quality or other environmental conditions during initial mixing caused by disposal operations would be reduced to normal ambient levels or to undetectable contaminant concentrations or effects before reaching any beach, shoreline, marine sanctuary, or known geographically limited fishery or shellfishery (40 CFR 228.5(b)).

EPA's analysis concludes that the ELDS satisfies this criterion. First, the site is a significant distance from any beach, shoreline, marine sanctuary (in fact, there are no federally-designated marine sanctuaries in Long Island Sound), or known geographically limited fishery or shellfishery. Second, the site will be used only for the disposal of dredged material determined to be suitable for open-water disposal by application of the MPRSA's ocean dumping criteria. *See* 40 CFR part 227. These criteria include provisions related to water quality and account for initial mixing. *See* 40 CFR 227.4, 227.5(d), 227.6(b) and (c), 227.13(c), 227.27, and 227.29. Data evaluated during development of the DSEIS, including data from monitoring conducted during and after past disposal activities, indicates that any temporary perturbations in water quality or other environmental conditions at the site during initial mixing from disposal operations will be limited to the immediate area of the site and will neither cause any significant environmental degradation at the site nor reach any beach, shoreline, marine sanctuary, or other important natural resource area. The NBDS and CSDS also meet this criterion for the same reasons.

iii. The sizes of disposal sites will be limited in order to localize for identification and control any immediate adverse impacts, and to permit the implementation of effective monitoring and

surveillance to prevent adverse long-range impacts. Size, configuration, and location are to be determined as part of the disposal site evaluation (40 CFR 228.5(d)).

EPA has determined, based on the information presented in the DSEIS, that the ELDS, NBDS, and CSDS alternatives are sufficiently limited in size to allow for the identification and control of any immediate adverse impacts, and to permit the implementation of effective monitoring and surveillance to prevent adverse long-range impacts. The maximum combined size of the three sites is approximately 5.8 nmi2, which is just 0.015 (1.5 percent) of the approximately 370 nmi^2 surface area of the eastern Long Island Sound region (the ZSF excluding Block Island Sound), and just 0.0043 (less than one-percent) of the surface area of the entire Long Island Sound.

The long history of dredged material disposal site monitoring in New England through the DAMOS program, and specifically at active and historic dredged material disposal sites in Long Island Sound, provides ample evidence that these surveillance and monitoring programs are effective at determining physical, chemical, and biological impacts at sites of the size of the options considered in this case. As noted in the DSEIS and Appendix D, the historically used part of the ELDS (the western half of the NLDS) and CSDS also were investigated by EPA within the last ten years as part of the side-scan sonar survey in eastern Long Island Sound, a monitoring method that can be replicated in the future.

All three alternative sites are identified by specific coordinates spelled out in the DSEIS, and the use of precision navigation equipment in both dredged material disposal operations and

monitoring efforts will enable accurate disposal operations and contribute to effective management and monitoring of the sites. Detailed plans for the management and monitoring of the ELDS are described in the SMMP (Appendix I of the DSEIS).

Finally, as discussed herein and in the DEIS, EPA has tailored the boundaries of each of the alternative sites in light of site characteristics, such as local currents and bottom features, so that the area and boundaries of the sites are optimized for environmentally sound dredged material disposal operations.

iv. EPA will, wherever feasible, designate ocean dumping sites beyond the edge of the continental shelf and other such sites that have been historically used (40 CFR 228.5(e)).

EPA evaluated sites beyond the edge of the continental shelf and historical disposal sites in Long Island Sound as part of the alternatives analysis conducted for the DSEIS. The continental shelf extends about 60 nmi seaward from Montauk Point, New York, and a site located on the continental slope would result in a transit of approximately 80 nmi from New London. This evaluation determined that the long distances and travel times between the dredging locations in eastern Long Island Sound and the continental shelf posed significant environmental, operational, safety, and financial concerns, rendering such options unreasonable. Environmental concerns include increased risk of encountering endangered species during transit, increased fuel consumption and air emissions, and greater potential for accidents in transit that could lead to dredged material being dumped in unintended areas.

As described in the Disposal Site Descriptions section, the ELDS, NBDS, and CSDS all encompass the footprints of historically used sites. To the extent that the site boundaries have been adjusted to include adjacent areas outside of the existing sites, EPA has concluded that these adjustments will be environmentally beneficial, as discussed in the DSEIS. For example, rather than propose designation of the existing NLDS, the eastern half of which is at capacity and nearing depths that could lead to scouring of the sediment by surface currents and storms, EPA is proposing a new ELDS that encompasses the western half of the existing NLDS along with two adjacent areas immediately to the west of the NLDS. These two adjacent areas have been determined to be containment areas by physical oceanographic modeling. Long-term monitoring of the three alternative sites, or at least the historically used parts of them, has shown minimal adverse impacts to the adjacent marine environment and rapid recovery of the benthic community in the disposal mounds. While there are also other historically used disposal sites in eastern Long Island Sound, the analysis in the DSEIS concludes that the ELDS, NBDS, and CSDS are the preferable locations. Thus, designation of the ELSD, NBDS, and/or CSDS would be consistent with this criterion.

a. Specific Criteria (40 CFR 228.6)

In addition to the four general criteria discussed above, 40 CFR 228.6(a) lists eleven specific factors to be used in evaluating the impact of using the site(s) for dredged material disposal under the MPRSA. Compliance with the eleven specific criteria is discussed below. It is also discussed in detail in Chapter 5 and summarized in Table 5–13, "Summary of Impacts at the Alternative Sites," of the DSEIS.

ED_001437C_00001243-00032

i. Geographical Position, Depth of Water, Bottom Topography and Distance From Coast (40 CFR 228.6(a)(1)).

Based on analyses in the DSEIS, EPA has concluded that the geographical position (i.e., location), water depth, bottom topography (i.e., bathymetry), and distance from coastlines of the ELDS (and part of the NBDS) will facilitate containment of dredged material within site boundaries, and reduce the likelihood of material being transported away from the site to adjacent sea floor areas. As described in the preceding Disposal Sites Description section and in the above discussion of compliance with general criteria iii and iv (40 CFR 228.5(c) and (d)), all three sites (ELDS, NBDS and CSDS) are located far enough from shore and are in deep enough water to avoid adverse impacts to the coastline.

The ELDS and northeastern portion of the NBDS are containment areas, so disposal of dredged material there is expected to stay in those sites and not cause adverse effects to the adjacent seafloor areas. The CSDS and remaining portions of the NBDS are dispersive, so any dredged material disposed there would not be expected to stay within the site boundaries. However, disposal site monitoring, ambient water quality monitoring, and fisheries surveys have not documented any adverse impacts from the use of the CSDS since the early 1980s. The closest points of land to the ELDS are Goshen Point, Connecticut, approximately 1.2 nmi (2.2 km) to the north, and Fishers Island, New York, approximately 2 nmi (3.2 km) to the southeast, in water depths ranging from approximately 45 feet (14 m) in the north to 100 feet (30 m) in the south. The northern edge of the NBDS alternative is located approximately 0.6 nmi (1.1 km) from Black Point (southwestern corner of Niantic Bay) and 1.6 nmi (3.0 km) from the Millstone

ED_001437C_00001243-00033

Nuclear Power Station (southeastern corner of Niantic Bay). Water depths at the site range from approximately 60 to 130 feet (18 to 40 m). The center of the CSDS is 3.3 nmi (6.1 km) south of Cornfield Point in Old Saybrook, Connecticut, and the water depth at the site is around 150 feet (50 m).

As discussed in the DSEIS, long-term monitoring of disposal sites in Long Island Sound has indicated that creating mounds above a depth of 46 feet (14 meters) can result in material being removed from the mounds by currents. All three sites are of a sufficient depth to allow the disposal of the amount of material that is projected over the 30-year planning horizon without exceeding this depth threshold. As discussed in the DSEIS, the entire ELDS and the northeastern part of the NBDS are containment areas and, as a result, EPA expects material placed at these sites to remain there. As a result, any short-term impacts from dredged material placement will be localized and this, together with other regulatory requirements described elsewhere in this document, will facilitate prevention of any adverse impacts at the sites.

The CSDS alternative and a part of the NBDS, however, are dispersive areas from which dredged material disposed there would likely be eroded over time. This material would then be dispersed in the water column and transported predominantly toward the west. As a result, past disposal at the CSDS has been limited to certain types of sediments (i.e., sandy material). If the NBDS were designated, similar restrictions would likely be appropriate regarding any use of the dispersive areas of the site. Monitoring of the CSDS has determined that past and present management practices have been successful in minimizing short-term, long-term, and cumulative impacts to water quality and benthic habitat from dredged material disposal. EPA expects that

similar results would follow from using the dispersive portions of the NBDS with similar restrictions.

ii. Location in Relation To Breeding, Spawning, Nursery, Feeding, or Passage Areas of Living Resources in Adult or Juvenile Phases (40 CFR 228.6(a)(2)).

EPA considered the proposed ELDS and the other two sites in relation to breeding, spawning, nursery, feeding, and passage areas for adult and juvenile phases (i.e., life stages) of living resources in Long Island Sound. From this analysis, EPA concluded that, while disposal of suitable dredged material at the ELDS, NBDS, or CSDS would cause some short-term, localized effects, overall it would not cause adverse effects to the habitat functions and living resources specified in the above criterion. As previously noted, the maximum combined size of the three sites is approximately 5.8 nmi2, which is just 0.015 (1.5 percent) of the approximately 370 nmi^2 surface area of the eastern Long Island Sound region (the ZSF excluding Block Island Sound), and just 0.0043 (less than one-percent) of the surface area of the entire Long Island Sound.

Generally, there are three primary ways that dredged material disposal could potentially adversely affect marine resources. First, disposal can cause physical impacts by injuring or burying less mobile fish, shellfish, and benthic organisms, as well as their eggs and larvae. Second, tug and barge traffic transporting the dredged material to a disposal site could possibly collide or otherwise interfere with marine mammals and reptiles. Third, contaminants in the dredged material could potentially bioaccumulate through the food chain. However, EPA and the

other federal and state agencies that regulate dredging and dredged material disposal impose requirements that prevent or greatly limit the potential for these types of impacts to occur.

For example, the agencies impose "environmental windows," or time-of-year restrictions, for both dredging and dredged material disposal. This type of restriction has been a standard practice for more than a decade in Long Island Sound, and New England generally, and is incorporated in USACE permits and authorizations in response to consultation with federal and state natural resource agencies (e.g., NMFS). Dredged material disposal in Long Island Sound is generally limited to the period between October 1 and April 30 to avoid time periods when any threat of effects on aquatic organisms would be greater. Indeed, environmental windows are often set depending on the location of specific dredging projects in relation to certain fish and shellfish species. For example, dredging in nearshore areas where winter flounder spawning occurs is generally prohibited between February 1 and April 1; dredging that may interfere with anadromous fish runs is generally prohibited between April 1 and May 15; and dredging that may adversely affect shellfish is prohibited between June 1 and September 30. These environmental windows, in effect, serve to further restrict periods during which dredged material disposal would occur.

Another benefit of using environmental windows is that they reduce the likelihood of dredged material disposal activities interfering with marine mammals and reptiles. While there are several species of marine mammal or reptile, such as harbor porpoises, long-finned pilot whales, seals, and sea turtles, that either inhabit or migrate through Long Island Sound, most of them either leave the Sound during the winter months for warmer waters to the south or are less

active and remain near the shore. There also are many species of fish (e.g., striped bass, bluefish, scup) and invertebrates (e.g., squid) that leave the Sound during the winter for either deeper water or warmer waters to the south, thus avoiding the time of year when most dredging and dredged material disposal occurs. The use of environmental windows has been refined over time and is considered an effective management tool to minimize impacts to marine resources.

Dredged material disposal will, however, have some localized impacts to fish, shellfish, and benthic organisms, such as clams and worms, that are present at a disposal site (or in the water column directly above the site) during a disposal event. The sediment plume may entrain and smother some fish in the water column, and may bury some fish, shellfish, and other marine organisms on the sea floor. It also may result in a short-term loss of forage habitat in the immediate disposal area, but the DAMOS program has documented the recolonization of disposal mounds by benthic infauna within 1–3 years after disposal and this pattern would be expected at the sites evaluated in the DSEIS. As discussed in the DSEIS (section 5.2.2), over time, disposal mounds recover and develop abundant and diverse biological communities that are healthy and able to support species typically found in the ambient surroundings. Some organisms may burrow deeply into sediments, often up to 20 inches, and are more likely to survive a burial event.

To further reduce potential environmental impacts associated with dredged material disposal, the dredged material from each proposed dredging project will be subjected to the MPRSA sediment testing requirements set forth at 40 CFR part 227 to determine its suitability for open-water disposal. Suitability for open-water disposal is determined by testing the proposed dredged

ED_001437C_00001243-00037

material for toxicity and bioaccumulation and by quantifying the risk to human health from consuming marine organisms that are exposed to dredged material and its associated contaminants using a risk assessment model. If it is determined that the sediment is unsuitable for open-water disposal – that is, that it may unreasonably degrade or endanger human health or the marine environment – it cannot be disposed at disposal sites designated under the MPRSA. *See* 40 CFR 227.6. Therefore, EPA does not anticipate significant effects on marine organisms from dredged material disposal at the sites under evaluation.

EPA also is complying with the ESA by consulting with the NMFS and U.S. Fish and Wildlife Service (USFWS) concerning EPA's conclusion that the designation of the ELDS, NBDS, or CSDS would not likely adversely affect federally listed species under their respective jurisdictions or any habitat designated as critical for such species. Additionally, EPA consulted with NMFS under the MSFCMA on potential impacts to essential fish habitat (EFH). NMFS determined that the use of environmental windows and the stringent testing requirements were sufficient steps to minimize any impacts to EFH and did not offer additional conservation recommendations. Further details on these consultations are provided in the DSEIS and the section below describing compliance with the ESA and MSFCMA.

EPA recognizes that dredged material disposal causes some short-term, localized adverse effects to marine organisms in the immediate vicinity of each disposal event. But because dredged material disposal would be limited to suitable material at the 1-3 small sites under consideration here (see above regarding compliance with general criteria (40 CFR 2285(e)), and during only several months of the year, EPA concludes that designating ELDS, NBDS, or CSDS

ED_001437C_00001243-00038

would not cause unacceptable or unreasonable adverse impacts to breeding, spawning, nursery, feeding, or passage areas of living resources in adult or juvenile phases. There is no evidence of long-term effects on benthic processes or habitat conditions.

iii. Location in Relation to Beaches and Other Amenity Areas (40 CFR 228.6(a)(3)).

EPA's analysis concludes that the ELDS, NBDS, and CSDS all satisfy this criterion. All three sites are far enough away from beaches, parks, wildlife refuges, and other areas of special concern to prevent adverse impacts to these amenities and, as previously noted, there are no marine sanctuaries in Long Island Sound. As previously described, the ELDS, NBDS, and CSDS are 1.2 nmi (2.2 km), 0.6 nmi (1.1 km), and 2.8 nmi (5.2 km) from the nearest shore, respectively, and none of the sites is closer than 1.7 nmi (3.2 km) to public beaches in either Connecticut or New York. Based on modeling results that are presented in section 5.5.3 of the DSEIS, and past monitoring of actual disposal activities, this distance is beyond any expected transport of dredged material due to tidal motion or currents. As noted above, any temporary perturbations in water quality or other environmental conditions at the sites during initial mixing from disposal operations will be limited to the immediate area of the sites and will not reach any beach, parks, wildlife refuges, or other areas of special concern.

Thus, EPA does not anticipate that the use of the ELDS, NBDS, or CSDS would cause any adverse impacts to beaches or other amenity areas.

iv. Types and Quantities of Wastes Proposed To Be Disposed of, and Proposed Methods of Release, Including Methods of Packing the Waste, if Any (40 CFR 228.6(a)(4)).

ED_001437C_00001243-00039

The typical composition of dredged material to be disposed at the sites is expected to range from predominantly "clay-silt" to "mostly sand." This expectation is based on data from historical dredging projects from the eastern region of Long Island Sound. For federal dredging projects and private projects generating more 25,000 cubic yards of dredged material, EPA and the USACE will conduct sediment suitability determinations applying the criteria for testing and evaluating dredged material under 40 CFR 227 and further guidance in the "Regional Implementation Manual for the Evaluation of Dredged Material Proposed for Disposal in New England Waters" (EPA, 2004), and the material would have to satisfy these suitability criteria before it could be authorized for disposal under the MPRSA. Private dredging projects generating up to 25,000 cubic yards will continue to be regulated under CWA section 404. The requirements under the MPRSA and the CWA are discussed in detail in the DSEIS.

The ELDS, NBDS, and CSDS would receive dredged material that is transported by either government or private contractor hopper dredges or oceangoing bottom-dump barges ("scows") towed by tugboat. Both types of equipment release the material at or very near the surface, which is the standard operating procedure for this activity. The disposal of this material will occur at specific coordinates marked by buoys and will be placed so as to concentrate material from each disposal project. This concentrated placement is expected to help minimize bottom impacts to benthic organisms. In addition, there are no plans to pack or package dredged material prior to disposal.

Furthermore, it should be emphasized that the three alternative sites are only being considered for the disposal of dredged material; disposal of other types of material will not be allowed at these sites. It also should be noted that the disposal of certain other types of material is expressly prohibited by the MPRSA and EPA regulations (e.g., industrial waste, sewage sludge, chemical warfare agents, insufficiently characterized materials) (33 U.S.C. 1414b; 40 CFR 227.5).

As previously discussed, dredging in eastern Long Island Sound is projected to generate approximately 22.6 million cubic yards (mcy) of dredged material over the next 30 years, including 17.9 mcy from Connecticut ports and harbors and 4.7 mcy from ports and harbors in New York. Of the total amount of 22.6 mcy, approximately 13.5 mcy are projected to be fine-grained sediment that meets MPRSA and CWA standards for aquatic disposal (i.e., "suitable" material), and 9.1 mcy are projected to be course-grained sand that also meets MPRSA and CWA standards for aquatic disposal (i.e., also "suitable" material). Even if none of the sand is used beneficially, which is highly unlikely given the high demand for this resource, the maximum quantity of dredged material that may possibly be disposed of at one or more of the three alternatives is approximately 22.6 mcy, and EPA expects that increased efforts to develop and use practicable alternatives to open-water disposal will reduce that amount significantly. Since the estimated capacity of the ELDS, NBDS, and CSDS is 27 mcy, 27 mcy, and unlimited respectively, there is more than sufficient capacity even if only ELDS or one of the other two alternatives is designated for long-term use. (As previously stated, EPA is not considering designating the CSDS alone because it is a dispersive site.) For all of these reasons, no

significant adverse impacts are expected to be associated with the types and quantities of dredged material that may be disposed at the sites.

v. Feasibility of Surveillance and Monitoring (40 CFR 228.6(a)(5)).

Monitoring and surveillance are expected to be feasible at all three sites, although the ELDS and the northeast portion of the NBDS would be most conducive to monitoring because they're containment sites and material disposed there is expected to stay there. The ELDS, NBDS, and CSDS are all readily accessible for bathymetric and side-scan sonar surveys and the NLDS portion of the ELDS and the CSDS have been successfully monitored by the USACE over the past 35 years under the DAMOS program. Upon designation of a site or sites, monitoring would continue under the DAMOS program in accordance with the most current approved Site Management and Monitoring Plan (SMMP) for each site. A draft SMMP has been developed only for the ELDS at this time, since it is EPA's preferred alternative, but EPA will develop SMMPs for any other sites that may be designated following a similar format. As a containment site, the ELDS is conducive to the type of monitoring most commonly conducted at dredged material disposal sites, including side-scan sonar, sediment profile imaging, and sediment grab sampling. The draft SMMP for the ELDS is included as Appendix I of the DSEIS.

While the CSDS and transitional part of the NBDS can be monitored, they are more dispersive sites, which means that currents take dredged sediments away from the sites over time. Therefore, it is not possible to accurately track the fate of material placed at these sites. As explained above, that is why use of the CSDS has been limited over the years to receiving

ED_001437C_00001243-00042

sediments from non-industrial harbors and channels, like the mouth of the Connecticut River. EPA is not currently proposing to designate the NBDS or CSDS, but if that changes after consideration of public comments, EPA would prepare an SMMP for public review and comment in conjunction with a proposal to designate the site. The SMMPs are subject to review and updating at least once every ten years, if necessary, and may be subject to additional revisions based on the results of site monitoring and other new information. Any such revisions will be closely coordinated with other federal and state resource management agencies and stakeholders during the review and approval process and will become final only when approved by EPA, in conjunction with the USACE. *See* 33 U.S.C. 1413 (c)(3).

vi. Dispersal, Horizontal Transport and Vertical Mixing Characteristics of the Area, Including Prevailing Current Direction and Velocity, if Any (40 CFR 228.6(a)(6)).

Although the interactions of bathymetry, wind-generated waves, and river and ocean currents in Long Island Sound are complex, the ELDS, NBDS, and CSDS are located in areas that are generally calm except during storms. (Dredging and dredged material disposal would not be conducted during storm events. See e.g., 40 CFR 228.15(b)(4)(vi)(L)). Consistent with this, past monitoring during disposal operations at the NLDS (in the vicinity of the proposed ELDS), NBDS, and CSDS revealed minimal drift of sediment out of the disposal site area as it passed through the water column.

Conditions are more complicated at the seafloor within the alternative disposal sites. Disposal site monitoring has confirmed that peak wave-induced bottom current velocities are not

sufficient to cause significant erosion of dredged material placed at either the ELDS or the containment portions of the NBDS. As noted above, physical oceanographic monitoring and modeling has indicated that the ELDS and portions of the NBDS are depositional locations that collect, rather than disperse, sediment. For these reasons, EPA has determined that the dispersal, horizontal transport, and vertical mixing characteristics, as well as the current velocities and directions at the ELDS and within portions of the NBDS are appropriate to support their designation as dredged material disposal sites.

As discussed above, EPA also has determined that the CSDS and portions of the NBDS are dispersive sites with bottom currents that would likely move dredged material away from the site to surrounding areas. Therefore, EPA does not currently favor designating these sites, but they could be designated for limited use for the placement of suitable sediments with similar characteristics to native sediments in the general vicinity of the sites. This is how the CSDS was used in the past. EPA is interested in receiving comments concerning the option of designating the CSDS for such limited use.

vii. Existence and Effects of Current and Previous Discharges and Dumping in the Area (Including Cumulative Effects) (40 CFR 228.6(a)(7)).

As previously described in the Disposal Sites Descriptions section, the portion of the ELDS that was used historically as the NLDS has received approximately 8.9 mcy (6.7 million m^3) since 1955. The NBDS is not currently an active disposal site, but it was used between 1969 and

ED_001437C_00001243-00044

1972, when a total of 176,000 cy (135,000 m^3) of dredged material was disposed at this location. The CSDS has received an estimated 2.9 mcy of dredged material (2.25 million m^3) since 1960.

Until the passage of the CWA in 1972, dredged material disposal was not a heavily regulated activity. Since 1972, open-water disposal in Long Island Sound has been subject to the sediment testing and alternatives analysis provisions of section 404 of the CWA. With passage of the Ambro Amendment in 1980 (which was further amended in 1990), dredged material disposal from all federal projects and non-federal projects generating more than 25,000 cubic yards of material became subject to the requirements of both CWA section 404 and the MPRSA. The result of these increasingly stringent regulatory requirements for dredged material disposal, combined with the reduction in contaminants entering waterways from other Clean Water Act programs, is that there has been a steady, measurable improvement in the quality of material that has been allowed to be placed at the NLDS portion of the ELDS and CSDS over the past 35 years.

The NLDS portion of the ELDS and CSDS both have been used on a consistent basis since the early 1980s pursuant to the USACE's short-term site selection authority under section 103(b) of the MPRSA (33 U.S.C. 1413(b)). Since then, disposal operations at these sites have been carefully managed and the material disposed there has been monitored. In EPA's view, past use of these sites generally makes them preferable to more pristine sites that have either not been used or have been used in the more distant past. *See* 40 CFR 228.5(e). Continuing to use existing sites, as long as they have remaining capacity, rather using a multitude of sites, helps to limit or concentrate the footprint of dredged material disposal on the seafloor of Long Island Sound.

While the effects of placing suitable dredged material at a disposal site are primarily limited to short-term physical effects, such as burying benthic organisms in the location where the material is placed, EPA regards it to be preferable to concentrate such effects in particular areas and leave other areas untouched as much as possible.

That said, EPA's evaluation of data and modeling results indicates that past disposal operations have not resulted in unacceptable or unreasonable environmental degradation, and that there should be no such adverse effects in the future from the projected use of any of the three sites, although it would be easier to determine this at the ELDS and the containment portion of the NBDS, since the material is expected to stay at those sites and could be monitored. As part of this conclusion, discussed in detail in the DSEIS, EPA found that there should be no significant adverse cumulative environmental effects from using these sites on a long-term basis for dredged material disposal in compliance with all applicable regulatory requirements regarding sediment quality and site usage.

viii. Interference With Shipping, Fishing, Recreation, Mineral Extraction, Desalination, Fish and Shellfish Culture, Areas of Special Scientific Importance and Other Legitimate Uses of the Ocean (40 CFR 228.6(a)(8)).

In evaluating whether disposal activity at the sites could interfere with shipping, fishing, recreation, mineral extraction, desalination, fish or shellfish culture, areas of scientific importance, and other legitimate uses of the ocean, EPA considered both the effects of placing dredged material on the bottom of the Sound at the ELDS, NBDS, and CSDS and any effects

ED_001437C_00001243-00046

from vessel traffic associated with transporting the dredged material to the disposal sites. From this evaluation, EPA concluded there would be no unacceptable or unreasonable adverse effects on the considerations noted in this criterion. Some of the factors listed in this criterion have already been discussed above due to the overlap of this criterion with aspects of certain other criteria. Nevertheless, EPA will address each point below.

The ELDS is the only site in close proximity to significant shipping activity. The eastern boundary of the proposed ELDS is one-half mile west of the eastern boundary of the current NLDS; this shift to the west would move the disposal site out of about half of the Submarine Transit Corridor into New London Harbor, further reducing the potential for conflicts between the disposal site and submarine traffic. Vessel traffic generated by disposal activity is expected to be similar to that which has occurred over the past 20-30 years, which has not interfered with other shipping activity. Moreover, research by EPA and the USACE concluded that after disposal at any of the three sites, resulting water depths will be sufficient to permit navigation in the area without interference. (And by providing an open-water alternative for dredged material disposal in the absence of environmentally preferable, practicable alternatives, the sites are likely to improve and facilitate navigation in many of the harbors, bays, rivers and channels around eastern Long Island Sound.)

EPA also carefully evaluated the potential effects on commercial and recreational fishing for both finfish and shellfish (including lobster) of designating the ELDS, NBDS, and CSDS for dredged material disposal and concluded that there would be no unreasonable or unacceptable adverse effects. As discussed above in relation to other site evaluation criteria, dredged material

disposal will only have short-term, incidental, and insignificant effects on organisms in the disposal sites and no appreciable effects beyond the sites. Indeed, since past dredged material disposal has been determined to have no significant adverse effects on fishing, the similar projected levels of future disposal activities at the designated sites also are not expected to have any significant adverse effects.

Four main reasons that EPA concluded that no unacceptable adverse effects would occur from placing dredged material at the site alternatives are discussed below. First, as discussed above, EPA has concluded that any contaminants in material permitted for disposal – having satisfied the dredged material criteria in the regulations that restrict any toxicity and bioaccumulation – will not cause any significant adverse effects on fish, shellfish, or other aquatic organisms. Because both the ELDS and portions of the NBDS are containment areas, dredged material disposed at those sites is expected to remain there. If the CSDS and/or dispersive portion of the NBDS were to be designated, EPA would restrict the types of material to be placed at those sites, as discussed above.

Second, as also discussed above, the disposal sites do not encompass any especially important, sensitive, or limited habitat for the Sound's fish and shellfish, such as key spawning or nursery habitat for species of finfish. Numerous studies and data reviewed by EPA and the USACE indicate that there is low potential for any future incremental risk from the placement of dredged sediments at the three alternative sites, either in the long- or short-term.

Third, while EPA found that a small number of demersal fish (e.g., winter flounder), shellfish (e.g., clams and lobsters), benthic organisms (e.g., worms), and zooplankton and phytoplankton could be lost due to the physical effects of disposal (e.g., burial of organisms on the bottom by dredged material and entrainment of plankton in the water column by dredged material upon its release from a disposal barge), EPA also determined that these minor, temporary adverse effects would be neither unreasonable nor unacceptable. This determination was based on EPA's conclusion that the numbers of organisms potentially affected represent only a minuscule percentage of those in eastern Long Island Sound, and on DAMOS monitoring that consistently documents the rapid recovery of the benthic community in an area that has received dredged material. In addition, any physical effects will be further limited by the relatively few months in which disposal activities could be permitted by the environmental window (or time-of-year) restrictions.

Fourth, EPA has determined that vessel traffic associated with dredged material disposal will not have any unreasonable or unacceptable adverse effects on fishing. As explained above, environmental window restrictions will limit any disposal to the period between October 1 and April 30, and often to fewer months depending on species-specific restrictions for each dredging project, each year. Moreover, there is generally far less vessel traffic in the months when disposal would occur due to the seasonal nature of recreational boating and commercial shipping. There currently are no mineral extraction activities or desalinization facilities in the eastern Long Island Sound region with which disposal activity could potentially interfere. Energy transmission pipelines and cables are located near the sites, but none are within their boundaries. No finfish aquaculture currently takes place in Long Island Sound and the only form

ED_001437C_00001243-00049

of shellfish culture in the area, oyster production, occurs in nearshore locations far enough away from the three alternative sites that it should not be impacted in any manner by this proposed action. Finally, none of the disposal site options are in an area of special scientific importance; in fact, areas with such characteristics were screened out very early in the alternatives screening process. Accordingly, depositing dredged material at any of the three sites will not interfere with any of the activities described in this criterion or other legitimate uses of Long Island Sound.

ix. The Existing Water Quality and Ecology of the Sites as Determined by Available Data or by Trend Assessment or Baseline Surveys (40 CFR 228.6(a)(9)).

EPA's analysis of existing water quality and ecological conditions at the site in light of available data, trend assessments and baseline surveys indicates that use of the designated disposal sites will cause no unacceptable or unreasonable adverse environmental effects. Considerations related to water quality and various ecological factors (e.g., sediment quality, benthic organisms, fish and shellfish) have already been discussed above in relation to other site selection criteria, and are discussed in detail in the DSEIS and supporting documents. In considering this criterion, EPA took into account existing water quality and sediment quality data collected at the disposal sites, including from the USACE's DAMOS site monitoring program, as well as water quality data from the Department of Energy and Environmental Protection's (CT DEEP) Long Island Sound Water Quality Monitoring Program. As discussed herein, EPA has determined that placement of suitable dredged material at the disposal site alternatives should not cause any significant adverse environmental effects to water quality or to ecological conditions at the disposal sites. EPA and the USACE have prepared a draft SMMP for

ED_001437C_00001243-00050

the ELDS to guide future monitoring of site conditions (DSEIS Appendix I), and would prepare SMMPs for the NBDS and/or CSDS if either of them were to be designated.

x. Potentiality for the Development or Recruitment of Nuisance Species in the Disposal Sites (40 CFR 228.6(a)(10)).

Monitoring at disposal sites in Long Island Sound over the past 35 years has shown no recruitment of nuisance (invasive, non-native) species and no such adverse effects are expected to occur at the ELDS, NBDS, or CSDS in the future. EPA and the USACE will continue to monitor EPA-designated sites under their respective SMMPs, which include a "management focus" on "changes in composition and numbers of pelagic, demersal, or benthic biota at or near the disposal sites" (section 6.1.5 of the SMMP, Appendix I of the DSEIS).

xi. Existence at or in Close Proximity to the Sites of Any Significant Natural or Cultural Feature of Historical Importance (40 CFR 228.6(a)(11)).

There are no natural features of historical importance in the ELDS, NBDS, or CSDS, and the cultural resources that have the greatest potential for being impacted in eastern Long Island Sound are shipwrecks. As discussed in the DSEIS, a review of submerged vessel reports in the NOAA and Connecticut State Historic Preservation Office (CT SHPO) shipwreck databases indicate that there are three charted shipwrecks within 0.5 nmi (0.9 km) of the alternative sites. One of these charted shipwrecks is located within Site NL-Wa of the ELDS; this wreck was also identified by the side-scan sonar survey. The side-scan sonar survey identified two additional

wrecks within the 0.5-nm (0.9-km) perimeter outside of the NBDS. None of these known shipwrecks are currently considered to be of historical significance. Consultation with the New York Office of Parks, Recreation and Historic Preservation (OPRHP; acts as the NY SHPO) revealed that there are no submerged vessels or historic resources within the portion of the CSDS that is located in New York State waters.

As additional side-scan sonar surveys are conducted at the disposal sites in the future under the SMMPs, and if potential shipwrecks are identified, EPA will take appropriate action in cooperation with federal and state historic preservation officials in response to any significant cultural resources. The CT SHPO also determined that there are no known aboriginal artifacts at the ELDS, NBDS, or CSDS. EPA coordinated with Indian tribes in Connecticut, Rhode Island, and New York throughout the development of the DSEIS and the tribes did not identify any important natural, cultural, spiritual, or historical features or areas within any of the three disposal sites under consideration.

In summary, there are no historic or archaeological resources within the NBDS or CSDS, and while the NL-Wa portion of the ELDS contains a shipwreck near its southern boundary, this wreck is not considered to be of historical significance. Nevertheless, any impacts to that wreck from dredged material disposal could be minimized by establishing a 164-foot (50 m) avoidance buffer surrounding the shipwreck and appropriate site management, which accommodates both the minimum buffer of 30 m recommended by the CT SHPO, and the 40-50 m minimum buffer applied by the NY OPRHP.

ED_001437C_00001243-00052

3. Disposal Site Management (40 CFR 228.3, 228.7, 228.8 and 228.9)

The ELDS, NBDS, and CSDS would be subject to specific management requirements to ensure that unacceptable adverse environmental impacts do not occur. Examples of these requirements include: (1) restricting the use of the sites to the disposal of dredged material that has been determined to be suitable for ocean disposal following MPRSA and/or CWA requirements in accordance with the provisions of MPRSA section 106(f), as well as to material from waters in the vicinity of the disposal sites; (2) monitoring the disposal sites and their associated reference sites, which are not used for dredged material disposal, to assess potential impacts to the marine environment by providing a point of comparison to an area unaffected by dredged material disposal; and (3) retaining the right to limit or close these sites to further disposal activity if monitoring or other information reveals evidence of unacceptable adverse impacts to the marine environment. As mentioned above, dredged material disposal will not be allowed when weather and sea conditions could interfere with safe, effective placement of any dredged material at a designated site. In addition, although not technically a site management requirement, disposal activity at the sites will generally be limited to the period between October 1 and April 30, but often less depending on environmental windows to protect certain species, as described above.

EPA and the USACE have managed and monitored dredged material disposal activities at the CSDS and the historically used portion of the ELDS since the early 1980s. Site monitoring has been conducted under the USACE's DAMOS disposal site monitoring program. In accordance with the requirements of MPRSA section 102(c) and 40 CFR 228.3, EPA and the USACE have developed a draft SMMP for the ELDS, and are prepared to do so for the NBDS and/or CSDS if

a decision is made to propose either for designation. The draft SMMP is incorporated in the DSEIS as Appendix I and is available for review and comment. The SMMP describes in detail the specific management and monitoring requirements for the ELDS. With respect to site monitoring, the SMMP builds on the USACE's DAMOS monitoring program, which will continue to provide the backbone of the site monitoring effort.

B. National Environmental Policy Act

The NEPA, 42 U.S.C. 4321 *et seq.*, requires the public analysis of the potential environmental effects of proposed federal agency actions and reasonable alternative courses of action to ensure that these effects, and the differences in effects among the different alternatives, are understood. The goal of this analysis is to ensure high quality, informed decision-making, to facilitate avoiding or minimizing any adverse effects of proposed actions, and to help restore and enhance environmental quality. *See* 40 CFR 6.100(a) and 1500.1(c) and 1500.2(d)–(f). NEPA requires public involvement throughout the decision-making process. *See* 40 CFR 6.400(a) and 40 CFR 1503 and 1501.7, 1506.6.

Section 102(c) of NEPA, 42 U.S.C. 4321 *et seq.*, requires federal agencies to prepare an EIS for major federal actions significantly affecting the quality of the human environment. An EIS should assess: (1) the environmental impact of the proposed action; (2) any adverse environmental effects that cannot be avoided should the proposal be implemented; (3) alternatives to the proposed action; (4) the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity; and (5) any irreversible and irretrievable commitments of resources that would be involved in the proposed

ED_001437C_00001243-00054

action should it be implemented. The required content of an EIS is further described in regulations promulgated by the President's Council on Environmental Quality (CEQ). *See* 40 CFR 1502.

EPA disposal site designation evaluations conducted under the MPRSA have been determined to be "functionally equivalent" to NEPA reviews, so that they are not subject to NEPA analysis requirements as a matter of law. Nevertheless, as a matter of policy, EPA voluntarily uses NEPA procedures when evaluating the potential designation of ocean dumping sites. *See* 63 FR 58045 (Notice of Policy and Procedures for Voluntary Preparation of National Environmental Policy Act Documents, October 29, 1998). While EPA voluntarily uses NEPA review procedures in conducting MPRSA disposal site designation evaluations, EPA also has explained that "[t]he voluntary preparation of these documents in no way legally subjects the Agency to NEPA's requirements" (63 FR 58046).

In this case, EPA has prepared a Draft Supplemental EIS (DSEIS) to evaluate the possibility of designating one or more open-water disposal sites to serve the eastern Long Island Sound region. As previously noted, the DSEIS is considered supplemental because it updates and builds on the analyses that were conducted for the 2005 Long Island Sound Environmental Impact Statement that supported the designation of the Central and Western Long Island Sound disposal sites. As part of the NEPA process, federal agencies prepare a public record of decision (ROD) at the time of their final decision on any action for which an FEIS has been prepared. If EPA decides to proceed with this proposed action after full consideration of public comments, the Agency will publish a final rule (in conjunction with the FEIS) that will serve as the ROD for the

ED_001437C_00001243-00055

site designation. *See* 40 CFR 1505.2 and 1506.4 (the ROD may be integrated into any other agency document prepared in carrying out its action). In addition, EPA will also publish a Responses to Comments document in conjunction with publication of a FSEIS and final rule. The Responses to Comments will identify and respond to comments received on the DSEIS and proposed rule. EPA's use of NEPA procedures to evaluate this proposed action is further described below.

Consistent with its voluntary NEPA policy, as described and referenced above, EPA has followed the NEPA process and undertaken NEPA analyses as part of its decision-making process for the disposal site designations. EPA published a Notice of Intent to prepare an EIS, held public meetings regarding the scope of issues to be addressed by the SEIS, and has now published a DSEIS for public review and comment. The DSEIS, entitled, "Draft Supplemental Environmental Impact Statement for the Designation of Dredged Material Disposal Site(s) in Eastern Long Island Sound, Connecticut and New York," assesses and compares the effects, including the environmental effects, of designating dredged material disposal sites in eastern Long Island Sound, and of various alternative approaches to managing dredging needs, including the "no action" alternative (i.e., the alternative of not designating any open-water disposal sites). *See* 40 CFR 1502.14.

1. Third-Party Contracting

EPA is the agency authorized by the MPRSA to designate dredged material disposal sites and is responsible for the DSEIS. However, EPA does not receive appropriations to support disposal site designation studies, so the state of Connecticut and U.S. Navy provided funding to

hire contractors to carry out the studies, support the public participation program, and help to produce the DSEIS, all with participation and close supervision by EPA. CEQ regulations state that an EIS can be prepared by a contractor under contract to and paid directly by the applicant (i.e., a "third-party contract"). 40 CFR 1506.5(c); Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, 46 Fed. Reg. 18026, 18031 (1981). The contractor answers to the federal agency preparing the EIS (in this case, the EPA), not the applicant, for preparing an EIS that meets the requirements of the National Environmental Policy Act (NEPA). 40 CFR 1506.5(c).

Because EPA is ultimately responsible for the SEIS, the Agency worked closely with the state of Connecticut and the U.S. Navy to select the contractors and then maintained close involvement with production of the SEIS and control over its analyses and conclusions. Connecticut and the U.S. Navy are not "applicants" because they are not applying directly for the disposal site designation. Nevertheless, because Connecticut and the U.S. Navy have expressed past support for designating one or more dredged material disposal sites in the eastern region of Long Island Sound, EPA followed the third-party contracting method described in 40 CFR 1506.5 to ensure the impartiality of the EIS.

Under the third-party contracting method, EPA must be involved in the selection of the contractor, furnish guidance and participate in the preparation of the EIS, and independently evaluate the EIS prior to approval. *See* 40 CFR 1506.5(c). The third-party contracting process used by EPA requires the third party (or parties) to pay for the contractor's services while EPA retains control of and supervisory authority over the analysis. *See* 66 Fed. Reg. 15527, 15531

ED_001437C_00001243-00057

(2001). While EPA retains final control over the selection of the contractor, applicants are allowed some input. Id. Once a contractor is selected, EPA and the applicant enter into a Memorandum of Understanding (MOU) outlining a general timeframe for the completion of the EIS and defining the scope of the EIS. Id. If EPA determines more information is needed, the MOU may be amended or EPA can complete the analysis itself. Id. The applicant and the contractor also enter into an agreement. Id. Additionally, the contractor must sign a disclosure statement for EPA declaring that it has no financial or other interest in the outcome of the project. Id.; 46 Fed. Reg. at 18031; 40 C.F.R. 6.604(g)(3)(ii).

The Connecticut Department of Transportation (CT DOT) was the lead agency for the state with regard to preparation of the DSEIS, with technical assistance provided by the CT DEEP. CT DOT, with extensive input from EPA and CT DEEP, selected as its primary contractor the University of Connecticut, in large part due to its expertise in physical oceanography. The university selected as its subcontractor the Louis Berger Group (LBG). EPA worked in close partnership with CT DOT to ensure both that all project components carried out through third-party contracting would meet federal statutory and regulatory requirements, and that CT DOT's contractors were qualified to support public participation and other necessary processes under NEPA and the MPRSA, including scoping and site screening.

The U.S. Navy also provided funding specifically to support biological and other environmental studies in support of the SEIS. The Navy, with extensive input from EPA and CT DEEP, selected as its contractor Tetra Tech due to its expertise in biological resources studies and risk assessment.

ED_001437C_00001243-00058

2. Cooperating Agencies

The USACE was a "cooperating agency" in the development of the DSEIS because of its knowledge concerning the region's dredging needs, its technical expertise in monitoring dredged material disposal sites and assessing the environmental effects of dredging and dredged material disposal, its history in the regulation of dredged material disposal in Long Island Sound and elsewhere, and its ongoing legal role in regulating dredging, dredged material disposal and the management and monitoring of disposal sites. Other cooperating agencies were NMFS, CT DEEP, CT DOT, New York Department of State (NY DOS), New York Department of Environmental Conservation (NY DEC), and Rhode Island Coastal Resources Management Council (RI CRMC). To take advantage of expertise held by other entities, and to promote strong inter-agency communications, EPA also coordinated with the U.S. Fish and Wildlife Service; the Mashantucket (Western) Pequot Tribal Nation, Mohegan Tribe, Eastern Pequot Tribal Nation, and Paucatuck Eastern Pequot Indians (in Connecticut); the Narragansett Indian Tribe (in Rhode Island); the Shinnecock Indian Nation (in New York), and, as previously discussed, the CT SHPO and NY OPRHP.

Throughout the SEIS development process, EPA communicated with the cooperating federal and state agencies and tribes to keep them apprised of progress on the project and to solicit input. EPA conducted approximately ten interagency meetings and teleconferences between October 2012 and January 2016 to review progress and get feedback, and EPA was in regular contact with representatives of these agencies throughout the SEIS process.

ED_001437C_00001243-00059

3. Public Participation

Consistent with the public participation provisions of the NEPA regulations, EPA conducted an extensive public participation program throughout the development of the DSEIS as described in detail in Chapter 7 and Appendix A of the DSEIS.

4. Zone of Siting Feasibility

As one of the first steps in the SEIS process, EPA, in cooperation with other federal and state agencies delineated a "Zone of Siting Feasibility" (ZSF). The ZSF is the geographic area from which reasonable and practicable open-water dredged material disposal site alternatives should be selected for evaluation. EPA's 1986 site designation guidance manual describes the factors that should be considered in delineating the ZSF and recommends locating open-water disposal sites within an economically and operationally feasible radius from areas where dredging occurs. Other factors to be considered include navigational restrictions, political or other jurisdictional boundaries, the distance to the edge of the continental shelf, the feasibility of surveillance and monitoring, and operation and transportation costs. In 2012, consistent with the guidance and in cooperation with the other agencies, EPA established the ZSF to include the eastern region of Long Island Sound, with a western boundary consisting of a line from Mulberry Point in Guilford, CT, to Mattituck Point in Mattituck, NY, a southern boundary from Montauk Point to the southern tip of Block Island, and an eastern boundary from the northern tip of Block Island due north to the Rhode Island shoreline.

5. Draft Supplemental Environmental Impact Statement

ED_001437C_00001243-00060

The DSEIS evaluates whether – and if so, which – open-water dredged material disposal sites should be designated in the eastern region of Long Island Sound. The DSEIS describes the purpose and need for any such designations, evaluates several alternatives to this action, including the option of "no action" (i.e., no designation). From this evaluation, EPA concludes that designation of the ELDS under the MPRSA is the preferred alternative.

The purpose of this designation is to provide a long-term, open-water dredged material disposal site as a potential option for the future disposal of such material. The action is necessary because periodic dredging and dredged material disposal is unavoidably necessary to maintain safe navigation and marine commerce in Long Island Sound. As previously noted, dredging in eastern Long Island Sound is projected to generate approximately 22.6 million cubic yards (mcy) of dredged material over the next 30 years, including 17.9 mcy from Connecticut ports and harbors and 4.7 mcy from ports and harbors in New York. Of the total amount of 22.6 mcy, approximately 13.5 mcy are projected to be suitable, fine-grained sediment, and 9.1 mcy are projected to be suitable, coarse-grained sand. In addition, the DMMP estimates that approximately 80,900 cy of material from eastern Long Island Sound will be fine-grained sediment that does not meet MPRSA and CWA standards for aquatic disposal (i.e., "unsuitable" material).

With the USACE's DMMP as its primary source, EPA evaluated potential alternatives to open-water disposal in Long Island Sound but determined that they are not sufficient to meet the regional dredging needs. In accordance with EPA regulations, use of alternatives to open-water disposal will be required for dredged material management when they provide a practicable,

ED_001437C_00001243-00061

environmentally preferable option for the dredged material from any particular disposal project. *See* 40 CFR 227.16. When no such practicable alternatives exist, however, EPA's designation of the ELDS will provide an open-water disposal site as a potential management option for dredged material regulated under the MPRSA that has been tested and determined to be environmentally suitable for open-water disposal. Sediments found to be unsuitable for open-water disposal will not be authorized for placement at a disposal site designated by EPA under the MPRSA and will have to be managed in other ways.

EPA's initial screening of alternatives, which involved input from other federal and state agencies, local governments, academic institutions, and the public, led to the determination that the open-water disposal sites were the most environmentally sound, cost-effective, and operationally feasible options for the full quantity of dredged material expected to be found suitable for open-water disposal over the 30-year planning horizon. Regardless of this conclusion, in practice, each individual dredging project will be analyzed on a case-specific basis and open-water disposal of dredged material at a designated site would only be authorized when there is a need for such disposal (i.e., there are no practicable, environmentally preferable alternatives). *See* 40 CFR 227.2(a)(1), 227.16(b). EPA analyzed alternatives for the management of dredged material from navigation channels and harbors in eastern Long Island Sound. This analysis was informed by the DMMP and evaluated several different potential alternatives, including open-water disposal sites, upland disposal, beneficial uses, sediment treatment, and the no-action alternative. From this analysis, EPA determined that at least one open-water disposal site, such as the ELDS, was necessary to provide sufficient capacity to meet long-term dredged material disposal needs in the eastern Long Island Sound region, in the event that practicable

alternatives to open-water disposal are not available for all the material. Again, EPA's analysis also acknowledged that options for dredged material management other than open-water disposal might be identified and required for specific dredged material disposal projects in the future.

EPA also evaluated several open-water disposal site alternatives other than the ELDS, NBDS, and CSDS. This evaluation considered multiple factors, such as reasonable distances to transport dredged material, the potential for adverse effects on important natural resources, and other measures that might indicate incompatibility for use as a disposal site. Specific factors evaluated included: the sensitivity and value of natural resources; geographically limited habitats; fisheries and shellfisheries; shipping and navigation lanes; physical and environmental parameters; and economic and operational feasibility. The analysis was carried out in a tiered process in which some options were "screened out" at an earlier stage based on certain factors, while other options were retained for further evaluation. The final tier involved a detailed analysis of the no-action alternative and the following three open-water alternative sites: ELDS, NBDS, and CSDS. Based on this analysis, designating the ELDS as an open-water dredged material disposal site was identified as the preferred alternative, but we are soliciting public comments on the other two alternative sites (NBDS and CSDS). A management and monitoring strategy was developed for the ELDS and is set forth in the SMMP for the site.

C. Coastal Zone Management Act

The CZMA, 16 U.S.C. 1451 *et seq.*, authorizes states to establish coastal zone management programs to develop and enforce policies to protect their coastal resources and promote uses of those resources that are desired by the state. These coastal zone management programs must be approved by the Department of Commerce's National Oceanic and Atmospheric Administration

(NOAA), which is responsible for administering the CZMA. Sections 307(c)(1)(A) and (C) of the CZMA require federal agencies to provide relevant states with a determination that each federal agency activity, whether taking place within or outside the coastal zone, that affects any land or water use or natural resource of the state's coastal zone, will be carried out in a manner consistent to the maximum extent practicable with the enforceable policies of the state's approved coastal zone management program. EPA's compliance with the CZMA is described below.

Based on the evaluations presented in the DSEIS and supporting documents, and a review of the federally approved Connecticut and New York coastal zone programs and policies, EPA has determined that designation of the ELDS, and/or the NBDS and CSDS for open-water dredged material disposal under the MPRSA would be consistent to the maximum extent practicable with the enforceable policies of the coastal zone management programs of Connecticut, New York, and Rhode Island. EPA will provide a written determination to that effect to each of the three states within the statutory and regulatory mandated timeframes.

In EPA's view, there are several broad reasons why the proposed designation of the ELDS would be consistent with the applicable, enforceable policies of both states' coastal zone programs. First, the designation is not expected to cause any significant adverse impacts to the marine environment, coastal resources, or uses of the coastal zone. Indeed, EPA expects the designation to benefit uses involving navigation and berthing of vessels by facilitating needed dredging, and to benefit the environment by concentrating any open-water dredged material disposal at a small number of environmentally appropriate sites designated by EPA and subject

ED_001437C_00001243-00064

to the previously described SMMP, rather than at a potential proliferation of USACE-selected sites. Second, designation of the sites does not actually authorize the disposal of any dredged material at the sites, since any proposal to dispose dredged material from a particular project at a designated site will be subject to case-specific evaluation and be allowed only if: (a) the material satisfies the sediment quality requirements of the MPRSA and the CWA; (b) no practicable alternative method of management with less adverse environmental impact can be identified; and (c) the disposal complies with the site restrictions for the site. (EPA is proposing a number of restrictions on the potential use of the ELDS in today's Proposed Rule. *See* Proposed 40 CFR 228.15(b)(6)). These restrictions are described and discussed in the next section of the preamble. Third, the designated disposal site(s) will be managed and monitored pursuant to a SMMP and if adverse impacts are identified, use of the sites will be modified to reduce or eliminate those impacts. Such modification could further restrict, or even terminate, use of the sites, if appropriate. *See* 40 CFR 228.3, 228.11.

On December 22, 2015, as suggested by NOAA guidance on federal consistency determinations, EPA sent letters to NY DOS and CT DEEP (1) identifying EPA's effort to prepare a DSEIS to assess whether to propose designation of one or more dredged material disposal sites in the eastern portion of Long Island Sound, and (2) requesting information from each state concerning their respective coastal zone management programs to assist EPA with its federal consistency determination. On March 11, 2016, EPA sent a similar letter to the State of Rhode Island Coastal Resources Management Council. All three states responded in writing to EPA's letters and provided the most current information on their respective coastal management programs.

ED_001437C_00001243-00065

D. Endangered Species Act

Under section 7(a)(2) of the ESA, 16 U.S.C. 1536(a)(2), federal agencies are required to ensure that their actions are "not likely to jeopardize the continued existence of any endangered species or result in the destruction or adverse modification of habitat of such species, which is determined * * * to be critical ***." Depending on the species involved, a federal agency is required to consult with the NMFS and/or USFWS if the agency's action "may affect" an endangered or threatened species or its critical habitat (50 CFR 402.14(a)). Thus, the ESA requires consultation with NMFS and/or USFWS to adequately address potential impacts to threatened and endangered species that may occur at the proposed dredged material disposal alternative sites from any proposal to dispose dredged material.

To comply with the ESA, EPA has coordinated with NMFS and USFWS and will request consultation concurrent with the release of the draft SEIS. EPA has determined that the designation of a disposal site will not result in adverse impacts to threatened or endangered species, species of concern, marine protected areas, or essential fish habitat. In addition, the USACE would coordinate with the NMFS and USFWS for individual permitted projects to further ensure that impacts would not adversely impact any threatened or endangered species.

E. Magnuson-Stevens Fishery Conservation and Management Act

The 1996 Sustainable Fisheries Act amendments to the MSFCMA, 16 U.S.C. 1801 *et seq.*, require the designation of essential fish habitat (EFH) for federally managed species of fish and shellfish. The goal of the these amendments is to ensure that EFH is not adversely impacted by

ED_001437C_00001243-00066

fishing or other human activities, including dredged material disposal, and to further the enhancement of these habitats, thereby protecting both ecosystem health and the fisheries industries. Pursuant to section 305(b)(2) of the MSFCMA, federal agencies are required to consult with NMFS regarding any action they authorize, fund, or undertake that may adversely affect EFH. An adverse effect has been defined by the Act as, "[a]ny impact which reduces the quality and/or quantity of EFH [and] may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey, reduction in species' fecundity), site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions" (50 CFR 600.810(a)).

EPA is coordinating with NMFS to ensure compliance with the EFH provisions of the MSFCMA and has prepared an essential fish habitat assessment in compliance with the Act. EPA will incorporate any conservation recommendations from NMFS or explain why it has not done so in its final action.

VI. Restrictions

EPA proposes to restrict use of the ELDS in the same manner that it has restricted use of the CLDS and WLDS. The existing site use restrictions for the CLDS are detailed in 40 CFR 228.15(b)(4)(vi) and are incorporated for the WLDS by the cross-references in 40 CFR 228.15(b)(4)(vi) and 228.15(b)(5)(vi). Similarly, EPA is proposing to apply to the ELDS the same restrictions as are applied to the CLDS and WLDS by including simple cross-references to those restrictions in the new proposed regulations at 40 CFR 228.15(b)(4) and 228.15(b)(6)(vi).

ED_001437C_00001243-00067

While EPA is planning for the restrictions applicable to the CLDS and WLDS to also be applied to the ELDS, it also should be understood that EPA is currently proposing amendments to the CLDS/WLDS restrictions. Specifically, on February 10, 2016, EPA published in the Federal Register (81 FR 7055) a proposed rule to *amend* the restrictions on the CLDS and WLDS. EPA is currently considering public comments received on the proposed regulatory amendments.

EPA has proposed amendments to the CLDS/WLDS restrictions in order to incorporate new standards and procedures for the use of those sites consistent with the recommendations of the Long Island Sound DMMP completed by the USACE on January 11, 2016. The DMMP identifies a wide range of alternatives to open-water disposal and recommends standards and procedures to help determine whether and which of these alternatives should be pursued for particular dredging projects. The goal of EPA's proposed regulatory amendments based on these standards and procedures is to reduce or eliminate the open-water disposal of dredged material in Long Island Sound wherever practicable.

The DMMP addresses dredging and dredged material management issues for *all* of Long Island Sound, including the eastern portion of the Sound. Therefore, EPA concludes that it makes sense to apply site use restrictions based on the DMMP to the ELDS as well as to the CLDS and WLDS. Again, it is intended that these restrictions will help to reduce or eliminate dredged material disposal in the Eastern portion of Long Island Sound as well as in the Central and Western portions. That said, no final decisions have been made about final restrictions for

ED_001437C_00001243-00068

the ELDS and such final decisions will only be made after EPA considers public comments received on this proposed rule and other relevant information.

In order to understand the nature of the site use restrictions that EPA is considering for the ELDS, reviewers of this proposed rule for the ELDS should review the site use restrictions in 40 CFR 228.15(b)(4)(vi), as cross-referenced in proposed 40 CFR 228.15(b)(6)(vi). Reviewers can also review the regulatory amendments that EPA has proposed for 40 CFR 228.15(b)(4)(vi). *See* 81 FR 7055. EPA is currently considering public comments submitted on these proposed amendments and, as explained above, EPA expects that the amendments, including any changes made to them based on public comments, will ultimately be applied to the ELDS, as well as to the CLDS and WLDS. This expectation is, however, subject to EPA considering the final amendments to the restrictions for the CLDS and WLDS, public comments received on this proposed rule for the ELDS, and other relevant information. The proposed restrictions on site use are summarized below.

A. Standards

The proposed restrictions provide that disposal at the site shall be allowed only if there is no practicable alternative to open-water disposal and that any practicable alternative will be fully utilized for the maximum volume of dredged material practicable. EPA recognizes that an alternative to open-water disposal may add additional costs. The decision regarding whether there is a "practicable alternative" will continue to be made on a case-by-case basis, in connection with the permitting process. The term "practicable alternative" is defined in 40 CFR 227.16(b) of the EPA's ocean disposal regulations as an alternative which is "available at

ED_001437C_00001243-00069

reasonable incremental cost and energy expenditures, [and] which need not be competitive with the costs of ocean dumping, taking into account the environmental benefits derived from such activity, including the relative adverse environmental impacts associated with the use of alternatives to ocean dumping."

The following standards for the disposal of dredged material, by type of material, are derived from the DMMP. These proposed restrictions do not make decisions about the suitability of any particular dredged material for open-water disposal or any other type of management. Each dredging project will have to go through project-specific permitting evaluations.

1. Unsuitable Material

"Unsuitable fine-grained materials" are those determined by physical, chemical and biological testing to be unsuitable for unconfined open-water placement. Accordingly, EPA's proposed rule specifies that unsuitable fine-grained materials shall not be disposed of at the designated sites.

2. Sandy Material

"Sandy material" in Long Island Sound is coarse-grained material of generally up to 20 percent fines when used for direct beach placement, or up to 40 percent fines when used for nearshore bar/berm nourishment. Clean sandy material should be used for beach or nearshore bar/berm nourishment whenever practicable. Sandy material has a high value as nourishment or in other coastal resiliency applications, and recent experience is that state and local governments, as well as property owner groups, are willing to fund the additional cost for such material even

ED_001437C_00001243-00070

where there is no other federal project authority to assist in that cost. As long as beach or nearshore placement is a practicable alternative, project proponents will need to identify and secure funding for any needed non-federal cost-sharing. Accordingly, the proposed restriction specifies that coarse-grained material should be used for beach or nearshore bar/berm nourishment, or other beneficial use whenever practicable.

3. Suitable Fine-Grained Material

"Suitable fine-grained material" in Long Island Sound is typically clay and silty material of more than 20 to 40 percent fines that is not suitable for beach or nearshore placement, yet is determined through testing and analysis to be suitable for open-water placement. Although the most likely cost-effective and environmentally acceptable method of placement of this material is at open-water disposal sites, EPA proposes that every proposed project will continue to have to exhaust the possibility for a practicable alternative to open-water disposal. More specifically, for materials dredged from upper river channels in the Connecticut, Housatonic and Thames Rivers, whenever practicable, the one existing Confined Open Water site, and on-shore or in-river placement, should be used for such projects.

The proposed restrictions specify that 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 site.

4. Source Reduction

ED_001437C_00001243-00071

Efforts to control sediment entering waterways can reduce the need for maintenance dredging of harbor features and facilities by reducing shoaling rates. Reducing sediment loads could help reduce the volumes dredged in each maintenance operation as well as reduce the frequency of maintenance. In addition, efforts to prevent introduction of contaminants into the watershed (e.g., multi-sector and municipal stormwater permits, measures to control nonpoint agricultural runoff) can result in reduced contaminant levels in sediments that can increase the range of options available to beneficially use those sediments. Continued source reduction efforts for both sediment and contaminants will assist in further reducing the need for open-water placement of dredged material in Long Island Sound. The EPA expects that federal, state and local agencies tasked with regulating those discharges into the watersheds tributary to Long Island Sound will exercise their authority under various statues and regulations in a continuing effort to reduce the flow of sediments and contaminants into state waterways and harbors.

B. Procedures

The Long Island Sound Regional Dredging Team (RDT) was formed to identify practicable alternatives to open-water disposal and recommend their use for projects proposed while the USACE was preparing the DMMP. EPA proposes to include restrictions that redefine the role of the RDT to ensure that the Standards described above are utilized in evaluating proposed dredging projects in Long Island Sound. EPA proposes restrictions that make explicit the RDT's purpose, geographic scope, membership, structure and general process as described below.

1. Purpose of the Long Island Sound Regional Dredging Team (LIS RDT)

ED_001437C_00001243-00072

The primary purpose of the LIS RDT is to reduce or eliminate wherever practicable the open-water disposal of dredged material in Long Island Sound. The LIS RDT will accomplish this by reviewing all proposed dredging projects subject to MPRSA (namely all federal projects and non-federal projects that generate greater than 25,000 cubic yards) to assess whether there are practicable alternatives to open-water disposal, by recommending that any available alternative(s) to open-water disposal be utilized for the maximum volume of dredged material practicable, and to provide documented findings and recommendations to USACE on these points so that the USACE and the EPA can consider the LIS RDT's recommendations. The LIS RDT should review the alternatives analysis for all projects submitted to help ensure that available alternatives as described in the DMMP for each harbor and dredging center have been thoroughly evaluated and are implemented where practicable. While the LIS RDT will conduct project reviews and make submissions and recommendations to the USACE, the LIS RDT will not supplant the regulatory obligations or authorities of participant agencies under the MPRSA, CWA, CZMA or other applicable laws.

Other purposes of the LIS RDT include: serving as a forum for continuing exploration of new beneficial use alternatives to open-water disposal; promoting the use of such alternatives; and suggesting approaches for cost-sharing opportunities. For example, the LIS RDT could further investigate and develop opportunities for approving and funding long-term regional Confined Disposal Facilities which could accommodate suitable and unsuitable dredged material and provide environmental and social benefits such as parkland and habitat once filled and closed.

ED_001437C_00001243-00073

The LIS RDT and its member agencies should also assist USACE and EPA in continuing a number of long term activities to continue the environmentally sound implementation of dredging and dredged material management in Long Island Sound. These activities include supporting USACE's dredged material tracking system, supporting USACE's DAMOS (Disposal Area Monitoring System) program and related efforts to study the long-term impacts of open-water placement, and promoting opportunities for beneficial use of clean, parent marine sediments often generated in the development of CAD cells.

2. Geographic Scope

The geographic range of the LIS RDT will include all of Long Island Sound and adjacent waters landward of the seaward edge of the territorial sea (three mile limit) or, in other words, from Throgs Neck to a line three miles east of the baseline across western Block Island Sound. These boundaries would encompass all harbors and areas included in the DMMP except Block Island. The WLDS, CLDS, and ELDS would all be within the RDT's purview.

3. Membership

The LIS RDT should include representatives from affected federal and state government organizations. EPA anticipates that federal participation would include EPA Regions 1 & 2; the New England and New York Districts and the North Atlantic Division of the USACE and the National Oceanic and Atmospheric Administration. EPA encourages the participation of the U.S. Navy, the U.S. Coast Guard and the U.S. Fish & Wildlife Service. EPA expects that the states of Connecticut, New York and Rhode Island would be participants through their environmental agencies, coastal zone management programs and relevant port authorities. EPA requests that, to

ED_001437C_00001243-00074

the extent possible, member organizations will provide sufficient funding to enable their active participation in the LIS RDT.

4. Structure and Process

EPA proposes that the specific details for structure (e.g., chair, committees, working groups) and process (e.g., how projects come before the LIS RDT, coordination with other entities) be left for the LIS RDT to determine and allowed to evolve as best accomplishes the team's purpose.

The LIS RDT is encouraged to establish and maintain cooperative working relationships with other Long Island Sound-based organizations (e.g., the Long Island Sound Study's Science and Technical Advisory Committee, non-governmental organizations, relevant university-based programs) so that relevant scientific, program and policy information is effectively shared and resources are leveraged to the maximum extent.

VII. Proposed Action

EPA is proposing this rule to designate the ELDS for the purpose of providing an environmentally sound, open-water disposal option for possible use in managing dredged material from harbors and navigation channels in eastern Long Island Sound and its vicinity in the states of Connecticut, New York, and Rhode Island. Without this dredged material disposal site designation, there will be no open-water disposal site available in the eastern region of Long Island Sound after December 23, 2016. In developing the DMMP, described previously in several sections, the USACE conducted a "dredging needs" assessment that estimated that a total

ED_001437C_00001243-00075

volume of 22.6 mcy of dredged material that from the eastern region of Long Island Sound over the 30-year planning horizon.

The site designation process has been conducted consistent with the requirements of the MPRSA, CWA, NEPA, CZMA, and other applicable federal and state statutes and regulations. The basis for this federal action is further described in a DSEIS that identifies EPA designation of the ELDS as the preferred alternative. The DSEIS also is being released for public comment in conjunction with the publication of this proposed rule. Upon completion of the public comment period and EPA's consideration of all comments received, EPA will publish a final Supplemental Environmental Impact Statement (FSEIS) specifying a preferred alternative, and a final rule that will serve as EPA's Record of Decision (ROD) in the NEPA process.

The ELDS is subject to management and monitoring protocols to prevent the occurrence of unacceptable adverse environmental impacts. These protocols are spelled out in a SMMP for the site. The SMMP is included as Appendix I to the DSEIS. Under 40 CFR 228.3(b), the Regional Administrator of EPA Region 1 is responsible for the overall management of this site. As previously explained, the designation of these disposal sites does not constitute or imply EPA's approval of open-water disposal at either site of dredged material from any specific project. Disposal of dredged material will not be allowed at the ELDS until the proposed disposal operation first receives proper authorization from the USACE under MPRSA section 103. In addition, any such authorization by the Corps is subject to EPA review under MPRSA section 103(c), and EPA may condition or "veto" the authorization as a result of such review in accordance with MPRSA section 103(c). In order to properly obtain authorization to dispose of

ED_001437C_00001243-00076

dredged material at the ELDS disposal site under the MPRSA, the dredged material proposed for disposal must first satisfy the applicable criteria for testing and evaluating dredged material specified in EPA regulations at 40 CFR part 227, and it must be determined in accordance with EPA regulations at 40 CFR part 227, subpart C, that there is a need for open-water disposal (i.e., that there is no practicable dredged material management alternative to open-water disposal with less adverse environmental impact). In addition, any proposal to dispose of dredged material under the MPRSA at the designated site will need to satisfy all the site Restrictions included in the final rule as part of the site designations. *See* 40 CFR 228.8 and 228.15(b)(6).

VIII. Supporting Documents

1. EPA Region 1/USACE NAE. 2005. Response to Comments on the Final Environmental Impact Statement for the Designation of Dredged Material Disposal Sites in Central and Western Long Island Sound, Connecticut and New York. U.S. Environmental Protection Agency, Region 1, Boston, MA and U.S. Army Corps of Engineers, New England District, Concord, MA. April 2005.

2. EPA Region 1. 2005. Memorandum to the File Responding to the Letter from the New York Department of State Objecting to EPA's Federal Consistency Determination for the Dredged Material Disposal Site Designations. U.S. Environmental Protection Agency, Region 1, Boston, MA. May 2005.

3. EPA Region 1/USACE NAE. 2004. Final Environmental Impact Statement for the Designation of Dredged Material Disposal Sites in Central and Western Long Island Sound,

Connecticut and New York. U.S. Environmental Protection Agency, Region 1, Boston, MA and U.S. Army Corps of Engineers, New England District, Concord, MA. March 2004.

4. EPA Region 1/USACE NAE. 2004. Regional Implementation Manual for the Evaluation of Dredged Material Proposed for Disposal in New England Waters. U.S. Environmental Protection Agency, Region 1, Boston, MA, and U.S. Army Corps of Engineers, New England District, Concord, MA. April 2004.

5. EPA Region 2/USACE NAN. 1992. Guidance for Performing Tests on Dredged Material Proposed for Ocean Disposal. U.S. Environmental Protection Agency, Region 2, New York, NY and U.S. Army Corps of Engineers, New York District, New York, NY. Draft Release. December 1992.

6. EPA/USACE. 1991. Evaluation of Dredged Material Proposed for Ocean Disposal-Testing Manual. U.S. Environmental Protection Agency, Washington, DC, and U.S. Army Corps of Engineers, Washington, DC. EPA– 503/8–91/001. February 1991.

7. Long Island Sound Study. 2015. Comprehensive Conservation and Management Plan for Long Island Sound. Long Island Sound Management Conference. September 2015.

8. NY DEC and CT DEP. 2000. A total maximum daily load analysis to achieve water quality standards for dissolved oxygen in Long Island Sound. Prepared in conformance with section 303(d) of the Clean Water Act and the Long Island Sound Study. New York State

ED_001437C_00001243-00078

Department of Environmental Conservation, Albany, NY and Connecticut Department of Environmental Protection, Hartford, CT. December 2000.

9. USACE NAE. 2016. Final Long Island Sound Dredged Material Management Plan and Final Programmatic Environmental Impact Statement - Connecticut, Rhode Island and New York. U.S. Army Corps of Engineers, New England District. December 2015.

IX. Statutory and Executive Order Reviews

1. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action, as defined in the Executive Order, and was therefore not submitted to the Office of Management and Budget (OMB) for review.

2. Paperwork Reduction Act (PRA)

This action does not impose an information collection burden under the PRA because it would not require persons to obtain, maintain, retain, report or publicly disclose information to or for a federal agency.

3. Regulatory Flexibility Act (RFA)

This action will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (RFA). The amended restrictions in this proposed rule are only relevant for dredged material disposal projects subject to the MPRSA. Non-federal projects involving 25,000 cubic yards or less of material are not subject to the MPRSA and, instead, are regulated under CWA section 404. This action will, therefore, have no effect on such

ED_001437C_00001243-00079

projects. "Small entities" under the RFA are most likely to be involved with smaller projects not covered by the MPRSA. Therefore, EPA does not believe a substantial number of small entities will be affected by today's rule. Furthermore, the proposed amendments to the restrictions also will not have significant economic impacts on a substantial number of small entities because they primarily will create requirements to be followed by regulatory agencies rather than small entities, and will create requirements (i.e., the standards and procedures) intended to help ensure satisfaction of the existing regulatory requirement (*see* 40 CFR 227.16) that practicable alternatives to the ocean dumping of dredged material be utilized.

4. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local or tribal governments or the private sector.

5. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Through the RDT process, however, this action will provide a vehicle for facilitating the interaction and communication of interested federal and state agencies concerned with regulating dredged material disposal in Long Island Sound.

ED_001437C_00001243-00080

6. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175 because the proposed restrictions will not have substantial direct effects on Indian tribes, on the relationship between the federal government and Indian Tribes, or the distribution of power and responsibilities between the federal government and Indian Tribes. EPA consulted with the potentially affected Indian tribes in making this determination.

7. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children.

8. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use

This action is not subject to Executive Order 13211, because it is not a significant regulatory action under Executive Order 12866.

9. National Technology Transfer and Advancement Act (NTTAA)

This rulemaking does not involve technical standards.

ED_001437C_00001243-00081

10. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes the human health or environmental risk addressed by this action will **not** have a disproportionately high and adverse human health or environmental effects on minority, low-income or indigenous populations.

11. Executive Order 13158: Marine Protected Areas

Executive Order 13158 (65 FR 34909, May 31, 2000) requires EPA to "expeditiously propose new science-based regulations, as necessary, to ensure appropriate levels of protection for the marine environment." EPA may take action to enhance or expand protection of existing marine protected areas and to establish or recommend, as appropriate, new marine protected areas. The purpose of the Executive Order is to protect the significant natural and cultural resources within the marine environment, which means, "those areas of coastal and ocean waters, the Great Lakes and their connecting waters, and submerged lands thereunder, over which the United States exercises jurisdiction, consistent with international law."

The EPA expects that this proposed rule will afford additional protection to the waters of Long Island Sound and organisms that inhabit them. Building on the existing protections of the MPRSA and the ocean dumping regulations, the proposed regulatory amendments are designed to promote the reduction of open-water disposal of dredged material in Long Island Sound.

12. Executive Order 13547: Stewardship of the Ocean, Our Coasts, and the Great Lakes

ED_001437C_00001243-00082

Section 6(a)(i) of Executive Order 13547, (75 FR 43023, July 19, 2010) requires, among other things, EPA and certain other agencies "… to the fullest extent consistent with applicable law [to] … take such action as necessary to implement the policy set forth in section 2 of this order and the stewardship principles and national priority objectives as set forth in the Final Recommendations and subsequent guidance from the Council." The policies in section 2 of Executive Order 13547 include, among other things, the following: "… it is the policy of the United States to: (i) protect, maintain, and restore the health and biological diversity of ocean, coastal, and Great Lakes ecosystems and resources; [and] (ii) improve the resiliency of ocean, coastal, and Great Lakes ecosystems, communities, and economies …." As with Executive Order 13158 (Marine Protected Areas), the overall purpose of the Executive Order is to promote protection of ocean and coastal environmental resources.

The EPA expects that this proposed rule will afford additional protection to the waters of Long Island Sound and the organisms that inhabit them. Building on the existing protections of the MPRSA and the ocean dumping regulations, the proposed regulatory amendments are designed to promote the reduction or elimination of open-water disposal of dredged material in Long Island Sound.

List of Subjects in 40 CFR Part 228

Environmental protection, Water pollution control.

Dated: April 18, 2016.

ED_001437C_00001243-00083

H. Curtis Spalding,

Regional Administrator, EPA Region 1-New England.

For the reasons stated in the preamble, title 40, Chapter I, of the *Code of Federal Regulations* is proposed to be amended as set forth below.

PART 228—CRITERIA FOR THE MANAGEMENT OF DISPOSAL SITES FOR OCEAN DUMPING

1. The authority citation for part 228 continues to read as follows:

Authority: 33 U.S.C. 1412 and 1418.

2. Section 228.15(b) is amended by:

a. Revising paragraph (b)(4)(vi) introductory text; and

b. Adding new paragraphs (b)(6) introductory text, and (b)(6)(i) through (vi).

The revisions and additions read as follows:

§ 228.15 Dumping sites designated on a final basis.

* * * * *

ED_001437C_00001243-00084

(b) * * *

(4) * * *

(vi) *Restrictions:* The designation in this paragraph (b)(4) sets forth conditions for the use of the Central Long Island Sound (CLDS), Western Long Island Sound (WLDS) and Eastern Long Island Sound (ELDS) Dredged Material Disposal Sites. These conditions apply to all disposal subject to the MPRSA, namely, all federal projects and nonfederal projects greater than 25,000 cubic yards. All references to" permittees" shall be deemed to include the U. S. Army Corps of Engineers (USACE) when it is authorizing its own dredged material disposal from a USACE dredging project. The conditions for this designation are as follows:

* * * * *

(6) Eastern Long Island Sound Dredged Material Disposal Site (ELDS).

(i) *Location:* Corner Coordinates (NAD 1983) 41°15.81′ N., 72°04.57′ W.; 41°16.81′ N., 72°04.57′ W.; 41°16.81′ N., 72°07.22′ W.; 41°15.81′ N., 72°07.22′ W.

(ii) *Size:* A 2 by 1 nautical mile rectangular area, a size of 2 square nautical miles (nmi^2).

(iii) *Depth:* Ranges from 45 to 100 feet (14m to 30m).

ED_001437C_00001243-00085

(iv) *Primary use:* Dredged material disposal.

(v) *Period of use:* Continuing use.

(vi) *Restrictions:* See 40 CFR 228.15(b)(4)(vi)(A) – (N).