

**NEW HAVEN HARBOR
CONNECTICUT
NAVIGATION IMPROVEMENT PROJECT

INTEGRATED FEASIBILITY REPORT AND
ENVIRONMENTAL IMPACT STATEMENT**

**APPENDIX A
PUBLIC INVOLVEMENT AND PERTINENT
CORRESPONDENCE**

Appendix A Public Involvement and Pertinent Correspondence

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Notice of Intent - Federal Register

Transcript of Meeting

Office of the Assistant Secretary of Defense for Health Affairs announces a proposed public information collection and seeks public comment on the provisions thereof. Comments are invited on: Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; the accuracy of the agency's estimate of the burden of the proposed information collection; ways to enhance the quality, utility, and clarity of the information to be collected; and ways to minimize the burden of the information collection on respondents, including through the use of automated collection techniques or other forms of information technology.

DATES: Consideration will be given to all comments received by February 27, 2017.

ADDRESSES: You may submit comments, identified by docket number and title, by any of the following methods:

- **Federal eRulemaking Portal:** <http://www.regulations.gov>. Follow the instructions for submitting comments.
- **Mail:** Department of Defense, Office of the Deputy Chief Management Officer, Directorate for Oversight and Compliance, Regulatory and Advisory Committee Division, 4800 Mark Center Drive, Mailbox #24, Alexandria, VA 22350-1700.

Instructions: All submissions received must include the agency name, docket number and title for this **Federal Register** document. The general policy for comments and other submissions from members of the public is to make these submissions available for public viewing on the Internet at <http://www.regulations.gov> as they are received without change, including any personal identifiers or contact information.

Any associated form(s) for this collection may be located within this same electronic docket and downloaded for review/testing. Follow the instructions at <http://www.regulations.gov> for submitting comments. Please submit comments on any given form identified by docket number, form number, and title.

FOR FURTHER INFORMATION CONTACT: To request more information on this proposed information collection or to obtain a copy of the proposal and associated collection instruments, please write to ATTN: Ms. Shane Pham, 7700 Arlington Boulevard, Suite 5101, Falls Church, VA 22042-5101, or call at (703) 681-8666.

SUPPLEMENTARY INFORMATION:

Title; Associated Form; and OMB Number: TRICARE Plus Enrollment Application and TRICARE Plus Disenrollment Request; DD Form 2853 and DD Form 2854; OMB Control Number 0720-0028.

Needs and Uses: The information collection requirement is necessary for enrollment and disenrollment in the Department of Defense's TRICARE Plus Health Plan established in accordance with Title 10 U.S.C. 1099 (which calls for a healthcare enrollment system) and 1086 (which authorizes TRICARE eligibility of Medicare Eligible Persons and has resulted in the development of a new enrollment option called TRICARE Plus) and the Assistant Secretary of Defense for Health Affairs Policy Memorandum to Establish the TRICARE Plus Program, June 22, 2001. The information collected hereby provides the TRICARE contractors with necessary data to determine beneficiary eligibility and to identify the selection of a health care option.

Affected Public: Individuals or households.

Annual Burden Hours: 386.

Number of Respondents: 3305.

Responses per Respondent: 1.

Annual Responses: 3305.

Average Burden per Response: 7 minutes.

Frequency: On occasion.

The Department of Defense established TRICARE Plus as an enrollment option for persons who are eligible for care in Military Treatment Facilities (MTF) and not enrolled in TRICARE Prime. TRICARE Plus provides an opportunity to enroll with a primary care provider at a specific MTF, to the extent capacity exists. This is a way to facilitate primary care appointments at an MTF when needed. TRICARE Plus enrollment will help MTFs maintain an adequate clinical case mix for Graduate Medical Education programs and support readiness-related medical skills sustainment activities. In order to carry out this program, it is necessary that certain beneficiaries electing to enroll/disenroll in TRICARE Plus complete an enrollment application/disenrollment request. Completion of the enrollment forms is an essential element of the TRICARE program. There is no lock-in and no enrollment fee for TRICARE Plus.

Dated: December 20, 2016.

Aaron Siegel,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 2016-31078 Filed 12-23-16; 8:45 am]

BILLING CODE 5001-06-P

DEPARTMENT OF DEFENSE

Department of the Army, Corps of Engineers

Intent To Prepare an Environmental Impact Statement for the New Haven Harbor (New Haven, Connecticut) Navigation Improvement Project

AGENCY: U.S. Army Corps of Engineers, DoD.

ACTION: Notice of intent.

SUMMARY: The U.S. Army Corps of Engineers (USACE), New England District is conducting a feasibility study and Environmental Impact Statement (EIS) to examine navigation-improvements to the existing New Haven Harbor Federal Navigation project. The non-Federal sponsor for the study is the New Haven Port Authority in partnership with the Connecticut State Port Authority. Inadequate channel depths result in navigation inefficiencies in transporting goods into and out of the harbor. To reach the terminals, larger ships must lighter outside the breakwaters and/or experience delays while waiting for favorable tide conditions, or both. Deeper and wider navigation features (main channel, maneuvering area, and turning basin) are needed to increase the navigation efficiency and safety of New Haven Harbor.

FOR FURTHER INFORMATION CONTACT:

Questions about the proposed action and EIS can be answered by: Mr. Todd Randall, U.S. Army Corps of Engineers, New England District, 696 Virginia Road, Concord, MA 01742-2751, (978) 318-8518, email: todd.a.randall@usace.army.mil.

DATES: A public scoping meeting will be held on January 24, 2017 from 6:30 p.m. to 8:30 p.m. (registration starts at 6:00 p.m.) at the Hall of Records, Hearing Room, 200 Orange Street, New Haven, Connecticut.

SUPPLEMENTARY INFORMATION: The Corps participation in this study is authorized by a resolution of the Senate Committee on the Environment and Public Works dated July 31, 2007. This study was initiated at the request of the New Haven Port Authority and the Connecticut State Port Authority. The study is being cost-shared 50-percent Federal and 50-percent non-Federal with the New Haven Port Authority.

Proposed Action: The study will consider navigation improvements including deepening and widening the federal navigation project. The New Haven Harbor navigation project's main ship channel, maneuvering area, and

turning basin are authorized to a depth of – 35 feet mean lower low water (MLLW). The main ship channel is about 5 miles long extending from deep water in Long Island Sound to the terminals at the head of the harbor. The channel varies in width from 500 feet (outer-harbor) to 400 feet (inner-harbor), and widens to 800 feet along the terminals. Deeper and wider channels, maneuvering area, and turning basin are needed to increase the navigation efficiency and safety of New Haven Harbor.

Alternatives: The feasibility study will identify, evaluate, and recommend to decision makers an appropriate, coordinated and workable solution to the navigation inefficiencies at New Haven Harbor. Alternatives will include analyzing various incremental channel depths and widths based upon need, as well as alternative dredging methodologies. In addition, the study will evaluate various dredged material disposal alternatives such as beneficial use (e.g., marsh creation, beach nourishment, historic disposal mound capping), nearshore placement, open water placement, and upland placement.

Public Involvement and Scoping: Full public participation of affected Federal, state and local agencies, affected Indian tribes, and other interested private organizations and parties is invited. All interested parties are encouraged to submit their names and email addresses to the address noted above, to be placed on the project mailing list to receive fact sheets, newsletters and related public notices. The Corps and the New Haven Port Authority will host a public meeting on the study on January 24, 2017 (see **DATES** section). The public is invited to attend and further identify issues that should be addressed in the EIS. In addition to this notice, the date, place, and time of the public meeting will be announced in the local newspaper and on the USACE New England District Web page. Following the scoping process, a public informational meeting will be held in 2017 to present and discuss potential project alternatives. The Draft Integrated Feasibility Report and Environmental Impact Statement (IFR/EIS) is scheduled to be complete in April of 2018 and will be available for public review and comment.

Significant Issues: Significant issues to be discussed in the DEIS include the effects of dredging and disposal on the physical, biological, cultural, and socioeconomic environment of the project area.

Environmental Review and Consultation Requirements: The

proposed project is subject to review pursuant (but not limited to) to the Coastal Zone Management Act, Clean Water Act, Clean Air Act, Endangered Species Act, Fish and Wildlife Coordination Act, Magnuson-Stevens Fishery Conservation and Management Act, Marine Protection, Research, and Sanctuaries Act, and the National Environmental Policy Act.

Estimated Date: It is estimated that the Draft IFR/EIS will be made available to the public in April of 2018.

Dated: December 20, 2016.

Colonel Christopher J. Barron,

District Commander, U.S. Army Corps of Engineers, New England.

[FR Doc. 2016–31210 Filed 12–23–16; 8:45 am]

BILLING CODE 3720–58–P

DEPARTMENT OF EDUCATION

[Docket No.: ED–2016–ICCD–0145]

Agency Information Collection Activities; Submission to the Office of Management and Budget for Review and Approval; Comment Request; Application for Grants Under the Credit Enhancement for Charter School Facilities Program (1894–0001)

AGENCY: Office of Innovation and Improvement (OII), Department of Education (ED).

ACTION: Notice.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 3501 *et seq.*), ED is proposing an extension of an existing information collection.

DATES: Interested persons are invited to submit comments on or before January 26, 2017.

ADDRESSES: To access and review all the documents related to the information collection listed in this notice, please use <http://www.regulations.gov> by searching the Docket ID number ED–2016–ICCD–0145. Comments submitted in response to this notice should be submitted electronically through the Federal eRulemaking Portal at <http://www.regulations.gov> by selecting the Docket ID number or via postal mail, commercial delivery, or hand delivery. *Please note that comments submitted by fax or email and those submitted after the comment period will not be accepted.* Written requests for information or comments submitted by postal mail or delivery should be addressed to the Director of the Information Collection Clearance Division, U.S. Department of Education, 400 Maryland Avenue SW., LBJ, Room 226–62, Washington, DC 20202–4537.

FOR FURTHER INFORMATION CONTACT: For specific questions related to collection activities, please contact Clifton Jones, 202–205–2204.

SUPPLEMENTARY INFORMATION: The Department of Education (ED), in accordance with the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3506(c)(2)(A)), provides the general public and Federal agencies with an opportunity to comment on proposed, revised, and continuing collections of information. This helps the Department assess the impact of its information collection requirements and minimize the public's reporting burden. It also helps the public understand the Department's information collection requirements and provide the requested data in the desired format. ED is soliciting comments on the proposed information collection request (ICR) that is described below. The Department of Education is especially interested in public comment addressing the following issues: (1) Is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology. Please note that written comments received in response to this notice will be considered public records.

Title of Collection: Application for Grants under the Credit Enhancement for Charter School Facilities Program (1894–0001).

OMB Control Number: 1855–0007.

Type of Review: An extension of an existing information collection.

Respondents/Affected Public: Private Sector.

Total Estimated Number of Annual Responses: 15.

Total Estimated Number of Annual Burden Hours: 1,200.

Abstract: An application is required by statute to award the Credit Enhancement for Charter School Facilities Program (formerly known as the Charter School Facilities Financing Demonstration Program) grants. These grants are made to private, non-profits; public entities; and consortia of these organizations. The funds are to be deposited into a reserve account that will be used to leverage private funds on behalf of charter schools to acquire, construct, and renovate school facilities. The U.S. Department of Education is seeking an OMB extension approval for

PUBLIC SCOPING MEETING
NEW HAVEN HARBOR DEEP DRAFT NAVIGATION AND
IMPROVEMENT FEASIBILITY STUDY AND
ENVIRONMENTAL IMPACT STATEMENT

JANUARY 24, 2017

PRESENT:

MARK HABEL, CHIEF, NAVIGATION SECTION,
ENGINEERING-PLANNING DIVISION, U.S. ARMY CORPS
OF ENGINEERS, NEW ENGLAND DISTRICT
JUDY SHEIFFELE, EXECUTIVE DIRECTOR, NEW HAVEN PORT
AUTHORITY
EVAN MATTHEWS, EXECUTIVE DIRECTOR, NEW HAVEN PORT
AUTHORITY
BARBARA BLUMERIS, PROJECT MANAGER, U.S. ARMY CORPS OF
ENGINEERS, NEW ENGLAND DISTRICT
TODD RANDALL, ENVIRONMENTAL COMPLIANCE LEAD, U.S. ARMY
CORPS OF ENGINEERS, NEW ENGLAND DISTRICT

REPORTED BY:

TREVOR DRUMMOND
SHORTHAND REPORTER

<p>2</p> <p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p>	<p>4</p> <p>1 MR. HABEL: Okay. Good evening, and 2 welcome to this public scoping meeting for the New 3 Haven Harbor deep draft navigation and improvement 4 feasibility study and environmental impact statement. 5 Can everybody hear me? Good. I'm Mark Habel, chief 6 of navigation and environmental studies section for 7 the U.S. Army Corps of Engineers, New England 8 District. 9 The New Haven Harbor deepening study is 10 being undertaken by the Army Corps of Engineers in 11 partnership with the project sponsor, the New Haven 12 Port Authority and with the Connecticut Port 13 Authority. The purpose of this meeting is to inform 14 the public of the proposed project, to provide the 15 public with an opportunity to ask questions about the 16 project, to solicit public input to the scoping and 17 feasibility study and draft EIS, and to inform the 18 public of opportunities to provide comment on the 19 project to the Corps. 20 At this time if anybody has cell phones 21 please shut them off so we don't get interrupted. 22 I'd like to call on a representative from 23 our non-federal sponsor, the New Haven Port Authority, 24 Executive Director, Judy Sheiffele. 25 MS. SHEIFFELE: Thank you, Mark.</p>
<p>3</p> <p>1 ... Public scoping meeting regarding the New 2 Haven Harbor Improvement Deep Draft Navigation and 3 Improvement Feasibility Study and Environmental Impact 4 Statement for Long Island Sound before Trevor 5 Drummond, a duly qualified Court Reporter within and 6 for the State of Connecticut, held at 200 Orange 7 Street, New Haven, Connecticut on January 24, 2017 at 8 6:30 p.m. 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p>	<p>5</p> <p>1 My name is Judy Sheiffele, executive 2 director of the New Haven Port Authority, local 3 sponsor for this project. On behalf of the 4 commissioners I'd like to welcome you all and thank 5 you for attending this meeting. There has been 6 considerable discussion about our nation's 7 infrastructure, and the need to increase investment in 8 our transportation network to both improve safety and 9 increase efficiencies. However, most often referenced 10 in the context are highways, bridges, and passenger 11 rail. The subject of tonight's meeting addresses the 12 need of another mode of the transportation network; 13 ship channels. In the maritime world it is the depth 14 of those ship channels along with access to good 15 highway and great rail connections that are the 16 essential hallmarks of a competitive harbor. It is 17 worth noting the depth of the federal channel of New 18 Haven Harbor has long been a concern of the terminal 19 operators. They continue to upgrade their facilities 20 to maintain their competitiveness. And each and every 21 one of them has committed to making the improvements 22 required to handle deeper draft vessels should our 23 channel be deepened. I'd like to thank the Army Corps 24 of Engineers for undertaking this study, to the 25 Connecticut Port Authority for providing the match</p>

<p style="text-align: right;">6</p> <p>1 required of the local sponsor. And I need to</p> <p>2 acknowledge the vital role that our congressional</p> <p>3 delegation played in securing the authorization and</p> <p>4 subsequent appropriations so this study can move</p> <p>5 forward. Thank you.</p> <p>6 Mark?</p> <p>7 MR. HABEL: Thank you, Judy.</p> <p>8 I'd now like to introduce Mr. Evan Matthews,</p> <p>9 executive director for the Connecticut Port Authority.</p> <p>10 MR. MATTHEWS: Thanks, Mark. I</p> <p>11 don't have any prepared remarks, but I wanted to</p> <p>12 reemphasize what Judy said about the importance of the</p> <p>13 port complex here in New Haven. The Connecticut Port</p> <p>14 Authority represents all the maritime interests and</p> <p>15 promotes all the maritime interests in the entire</p> <p>16 state. And when we run any kind of analysis, obviously</p> <p>17 the port in New Haven and its channel represents the</p> <p>18 largest amount of commercial shipping in and out of</p> <p>19 Connecticut. So it's a very important harbor. And</p> <p>20 we're very interested in the analysis and feasibility</p> <p>21 study. We look forward to working with the Corps and</p> <p>22 New Haven Port Authority on this project.</p> <p>23 MR. HABEL: Thank you, Evan.</p> <p>24 With me tonight from the Corps of Engineers,</p> <p>25 New England District, we have Barbara Blumeris, our</p>	<p style="text-align: right;">8</p> <p>1 The first thing we have is what I'm going to</p> <p>2 talk about a little is about the purpose, explain</p> <p>3 what's out there today, and then talk about the Corps'</p> <p>4 study process for our federal project.</p> <p>5 So the purpose, as Mark noted, and as the</p> <p>6 port authority has mentioned, is to look at ways to</p> <p>7 improve navigation into the harbor. Currently the</p> <p>8 main channel is at minus 35 feet, authorized by</p> <p>9 Congress, and maintained by the Corps of Engineers.</p> <p>10 We know this is no longer a good depth for the types</p> <p>11 of ships that are coming into this harbor. So we're</p> <p>12 looking at improvements to both the depth and width of</p> <p>13 that channel. But to do that we will need to go to</p> <p>14 the feasibility study process that I will explain to</p> <p>15 you. And then that report will go up to Congress for</p> <p>16 a recommendation and decision. So this is a decision</p> <p>17 document that will go to Congress eventually to</p> <p>18 authorize a different document.</p> <p>19 So here we are with the existing channel.</p> <p>20 As I mentioned, it's currently authorized at minus 35</p> <p>21 feet in the middle of the water. The width of the</p> <p>22 channel is about 400 feet on the inside, 500 feet</p> <p>23 outside those breakwaters. People familiar with the</p> <p>24 channel will realize there's three breakwaters in the</p> <p>25 outer harbor that provide refuge for ships. And then</p>
<p style="text-align: right;">7</p> <p>1 project manager; Todd Randall, biologist, and preparer</p> <p>2 of the EIS, and staff from our field office who you</p> <p>3 met when you entered the facility.</p> <p>4 The agenda tonight: Following this</p> <p>5 introduction Barbara Blumeris will provide an</p> <p>6 overview of the Corps' role in navigation and</p> <p>7 improvement projects and specifics of the New Haven</p> <p>8 Harbor navigation project.</p> <p>9 Following Barbara, I will provide a brief</p> <p>10 overview of potential dredged material placement</p> <p>11 options for New Haven Harbor as were identified in the</p> <p>12 2016 Long Island Sound Dredged Material Management</p> <p>13 Plan and Final Programmatic EIS.</p> <p>14 Following that, Todd Randall will provide a</p> <p>15 brief overview of the NEPA EIS process as it relates</p> <p>16 to this New Haven Harbor study.</p> <p>17 I will then open the meeting to your</p> <p>18 comments and questions. Should you need copies of the</p> <p>19 public notice or other pertinent information, it is</p> <p>20 available at the registration table at the back.</p> <p>21 Ladies and gentlemen, Barbara Blumeris.</p> <p>22 MS. BLUMERIS: Thank you, Mark, and</p> <p>23 the public for the opportunity to be here tonight to</p> <p>24 talk about the Corps of Engineers and New Haven</p> <p>25 harbor.</p>	<p style="text-align: right;">9</p> <p>1 the channel extends out to deepwater in Long Island</p> <p>2 Sound. At the head of the harbor you have a</p> <p>3 maneuvering area, you see where it widens a little to</p> <p>4 the north in front of the terminals for the ships to</p> <p>5 turn. There's a few anchors associated as well with</p> <p>6 the federal navigation project as well as channels and</p> <p>7 a few of the tributaries; West River, Quinnipiac and</p> <p>8 Mill River. Those aren't necessarily part of the</p> <p>9 improvement project, but part of the federal</p> <p>10 navigation project. So the improvement project is</p> <p>11 focusing on the five-mile ship channel.</p> <p>12 I just want to say just before we go on to</p> <p>13 the next slide, in 1986 there was an improvement</p> <p>14 authorized to the existing channel. It was actually</p> <p>15 authorized to go to 40 feet. A feasibility study</p> <p>16 similar to what we're doing now was done in the '80s,</p> <p>17 and the project went to Congress and was authorized by</p> <p>18 Congress to be constructed. But it was never</p> <p>19 constructed. And that authorization sunsetted in</p> <p>20 2002. So in 2007 Congress asked us to look at it</p> <p>21 again and come up with the best improvement,</p> <p>22 environmental and economic. So a little history on</p> <p>23 the channel.</p> <p>24 Next slide: So this slide shows you some of</p> <p>25 the facts that have been mentioned, the largest</p>

<p style="text-align: right;">10</p> <p>1 deepwater port in Connecticut. It does 8.7 million 2 tons of cargo in 2014. That increased over 4 percent 3 from 2013. It's ranked 59th of the top 150 U.S. ports 4 by cargo volume. It has intermodal connections to 5 water, rail, pipeline for the transport of goods. It 6 is also the home of the Long Island Sound U.S. Coast 7 Guard.</p> <p>8 This is an aerial view of I-95, but the 9 terminals, you'll see those white tanks, some of the 10 terminals. There's seven terminals that use the 11 channel. This is the head of the harbor. So that 12 channel ships come in and they come up to the berths 13 of the terminals. And that is where the goods are 14 off-loaded. So there's at least seven terminals right 15 in this area.</p> <p>16 So this -- again, this is another photo 17 looking in at the terminals. You can see 95 in the 18 background. There again are the terminals. You can 19 see here some of the berthing area. You can see a 20 ship coming in. This shows another view of the port. 21 Very important connections here; pipelines that serve 22 Connecticut and Massachusetts, about a hundred-mile 23 pipeline carrying petroleum products through New 24 Haven, central Connecticut into Massachusetts. So 25 there's many uses of this port; by rail, by truck, and</p>	<p style="text-align: right;">12</p> <p>1 of spills. So it's a poor operation of the harbor and 2 vessels that are using the harbor.</p> <p>3 So now I'm going to talk a little bit about 4 the process of the feasibility study. So what we do 5 in the Corps of Engineers is very similar to the NEPA 6 process or any process to come up with a plan of 7 improvement. We first figure out what the problem is. 8 We look at what's existing, collect information. 9 Before we pass that out into the future, look at 10 alternatives to be able to handle that ship traffic in 11 an efficient manner, evaluate each of those 12 alternatives against each other to come up with a 13 cost-effective environmentally acceptable plan. 14 That's sort of the Corps' planning process. And 15 that's very similar to the EIS planning process. 16 These two processes will be done in tandem. So we'll 17 be doing an integrated feasibility report/EIS. When 18 you see the report it will be both processes melded 19 together into one.</p> <p>20 Next slide. Here is our Corps of Engineers' 21 study schedule. This is our process that we follow. 22 First, we have the scoping phase. That's the phase 23 we're in now. This is where we gather information. 24 We find out about the issues, scope out the problems, 25 get ideas on alternatives people would like to see.</p>
<p style="text-align: right;">11</p> <p>1 by pipeline.</p> <p>2 So for our feasibility studies the Corps 3 works in partnership with a nonfederal sponsor, in 4 this particular case the New Haven Port Authority, 5 Judy Sheffield, executive director, mentioned they're 6 the signatory on the cost sharing agreement with us. 7 So we have to sign a cost sharing agreement. We work 8 in partnership with the local port authority to do the 9 harbor study. The Connecticut State Port Authority is 10 a funding source. So they actually help put up 11 through the state legislature the funding for this 12 study. So the study itself is estimated to cost \$3 13 million. The cost sharing is 50-50. So it's 1.5 14 million federal, 1.5 million state funds.</p> <p>15 So as we know when we visited with the 16 terminal operators, talked to the pilots about the 17 problems in the port -- many people in the public are 18 already familiar with this -- the dimensions limit the 19 use of the harbor. Larger vessels have to lighter 20 outside the breakwaters that I pointed out and take 21 material in on barges until they get light enough to 22 bring the vessel in. They also can bring a ship in 23 without a full load. This increases transportation 24 costs and decreases efficiencies of shipping. The 25 lightening outside the breakwaters also carries a risk</p>	<p style="text-align: right;">13</p> <p>1 We also start to line up the alternatives for disposal 2 for the dredged material. Gather information on 3 future conditions, economics. We also collect 4 geotechnical information on the material that will be 5 dredged. We have to collect in the harbor, take 6 borings to see what's out there. We'll look at all 7 the different resources associated with the harbor. 8 Do all this. Identify everything. Try to figure out 9 what the most significant issues and problems are 10 from an environmental point of view. That's the 11 phase we're in right now; the scoping phase.</p> <p>12 The next phase is once we collect the 13 information we do an alternatives evaluation as I 14 described. After that we go out to public review with 15 the draft EIS. After that, after both the public 16 review and comments we do more detailed engineering, 17 economic analysis. And then finally we come to the 18 chief's report. And that's the document that goes up 19 to Congress eventually to authorize the project. And 20 at that point too we circulate the final EIS that will 21 eventually become signed into law. That's the whole 22 process. It takes about three years to do this 23 process.</p> <p>24 Next slide. I put a little detail. This 25 will be up on our website. So we have a project</p>

<p style="text-align: right;">14</p> <p>1 website that we're going to be posting our PowerPoints 2 as well as fact sheets and updates reports will be 3 posted. This is just a little description of what 4 comes under each smart planning module or milestone, 5 what kind of things we will have accomplished by that 6 milestone.</p> <p>7 So as I mentioned we're going to be looking 8 at an array of improvements; deepening and widening 9 the existing channel from Long Island Sound to the 10 head of the deep draft terminals near I-95. So we 11 will be looking at a range of depths from minus 37 to 12 minus 42 feet. Based on the types of information we 13 have gathered on ships to date, that will be the range 14 we look at. And we will be checking that with the 15 port and the future forecast of the types of vessels 16 that will use the harbor.</p> <p>17 Next slide. The way we'll look at -- One of 18 the tools we'll use in our process is a program called 19 HarborSym. So the Corps has a protocol that we use to 20 calculate benefits of harbor deepening and harbor 21 widening. So this will look at the estimated project 22 savings of transporting cargo in on the improved 23 waterway. So there will be no more lightering, no 24 waiting for the tide. There will be improved safety 25 at areas that are now less than optimal. So once we</p>	<p style="text-align: right;">16</p> <p>1 the alternatives milestone up till March 2017. That's 2 where we get our vertical team, New England district 3 division which is in New York, the headquarters, go 4 over the alternatives we're going to look at in the 5 next phase, alternatives evaluation phase. We'll say 6 these are the types of issues, these are the types of 7 alternatives. And then we'll get their endorsement of 8 that to move forward into the next phase, the 9 evaluation phase, and eventually come up with a TSP by 10 February of 2018. But the release of the draft 11 feasibility report and EIS is April 2018. And you can 12 see the other milestones which will be on the website. 13 If you'd like to get that slide. Basically the report 14 will be complete in September 2019.</p> <p>15 As I mentioned, the cost share for the study 16 itself is 50-50. Once we go into the implementation 17 phase this would be the cost share federal-nonfederal 18 for the actual project. This is just a little 19 information for the future when people talk about how 20 much is this going to cost. Then they can understand 21 how much the state's share will be about. Basically 22 it's 65-35. It's 75-25 with an extra 10 percent. So 23 it comes out to be 65-35, 65 federal, 35 nonfederal. 24 So that's an overview of the study process. 25 And now Mark Habel will come up and talk a</p>
<p style="text-align: right;">15</p> <p>1 have a better waterway, shippers will be encouraged to 2 move to deeper draft ships. So there may be a cost 3 savings with that. So it will be a positive from an 4 economic point of view. There will be savings in 5 transportation costs. Benefits will be looked at over 6 a 50-year period of analysis. So we're not just 7 looking at benefits today or 10 years from now, but 8 over 50 years. These are projects we don't do often, 9 as you know. The last was in the 1950s it was 10 constructed. When we do them we look at a long period 11 of analysis so we get the right channel that will last 12 for a while. Here we'll be using HarborSym. That 13 will be conducted by our Deep Draft Navigation Section 14 down in Mobile.</p> <p>15 And this slide; as we go through the process 16 we start out with a lot of uncertainly, but we make 17 decisions, screen out alternatives, scope issues. As 18 we hone in towards the end of the study, we decrease 19 the uncertainty and get a little bit more detailed 20 information on a few plans. So not as much detail, 21 but as we get into the fewer plans we'll have more 22 detail, and then the final plan.</p> <p>23 Next slide. And then this is a schedule. I 24 mentioned it's a three-year effort. This shows the 25 core milestones. But you can see right now we're in</p>	<p style="text-align: right;">17</p> <p>1 little about the disposal alternatives.</p> <p>2 MR. HABEL: Thank you, Barbara. The 3 Corps in partnership with the states of Connecticut 4 and New York and other agencies recently completed a 5 dredged material management plan for Long Island 6 Sound. Now, not everybody agreed with the results of 7 that study and its recommendations, but it made a lot 8 of them which are fairly similar to what we're going 9 to look at in New Haven.</p> <p>10 When we dredge materials off the bottom of a 11 harbor it's either improvement dredging or it's 12 maintenance dredging. Maintenance dredging dredges 13 shoal material that has accumulated since the time the 14 harbor was last dredged before. Improvement dredging 15 is dredging down into materials that have never been 16 dredged before, they are natural parent materials 17 whether rock or clay or till or sand. And we classify 18 material to determine appropriate disposal options 19 based on whether it's sand; maintenance silt; 20 improvement silt; or unsuitable material, material 21 that by the nature of chemical or biological test 22 results cannot be placed unconfined in open water.</p> <p>23 Here in New Haven the last several 24 maintenance cycles, as most of you know, we maintain 25 the 35-foot channel. The last several maintenance</p>

<p style="text-align: right;">18</p> <p>1 cycles in New Haven going back to the 1980s have all 2 been taken out to the central Long Island Sound site. 3 It's tested all the time, and determined to be 4 suitable for placement out there. There are 5 unsuitable materials in New Haven, but they come from 6 inner reaches of the Quinnipiac and Mill rivers. 7 Those are materials that would never go out into Long 8 Island Sound. The last couple times they've been 9 tested they were found to be unsuitable. You used to 10 be able to cap material in Long Island Sound, in other 11 words put unsuitable material down and then bring in a 12 much bigger project with suitable material and cap it. 13 You have not been able to do that under EPA's rules 14 since about the mid-'90s. So again, things like the 15 Mill and Quinnipiac, other options would need to be 16 found. But we're not talking about that right now. 17 We're talking about deepening the main channels by 18 removal of parent material. And here in New Haven 19 that is largely glacial clay. There is a good amount 20 of glacial till when you get out near the breakwaters. 21 And when you get between the breakwaters there is some 22 rock that would need to be blasted if we determined it 23 couldn't be ripped and removed that way. 24 Next slide. In the dredged material 25 management plan we threw out a lot of different ideas</p>	<p style="text-align: right;">20</p> <p>1 do have discrete deposits of the sand; to see if there 2 are uses for the rock or gravel and cobble to create 3 additional shellfish habitat somewhere in the bay or 4 in the harbor. We will have to take a look at if 5 there are any upland projects going on in the vicinity 6 such as additional highway projects that might need 7 fill, and can we take some of our material out there. 8 Still we're going to end up with a lot of material, 9 millions of cubic yards that we need to find a home 10 for, beneficially if we can. That leaves marsh 11 creation. Certainly in the 200 or so years that the 12 port of New Haven has been developed you've lost a lot 13 of marshland to terminal development and other onshore 14 projects. Is there the opportunity to offset some of 15 that loss by building a new marsh somewhere in the 16 harbor? From the Corps' point of view you could do 17 that behind the Sandy Point strip. You could 18 construct a marsh there. You could put more than a 19 million cubic yards in such an area. Build that up 20 and plant marsh grass and use it as wildlife habitat. 21 Like I said, if we find sand we're going to 22 look to put it on beaches. We want to hear from New 23 Haven and West Haven and East Haven and Milford. Are 24 there beaches you want sand on? At some point in this 25 study we're actually going to have some grain-sized</p>
<p style="text-align: right;">19</p> <p>1 just to see where people's heads were. When you have 2 a project like the improvement of New Haven which is 3 going to generate somewhere in the neighborhood of 4 four to five million yards of parent material, we 5 view that as dredged material looking for a disposal 6 site. We view that as a resource that needs to be 7 used beneficially if it can be. When we last dredged 8 New Haven in 1956, when we deepened it from 30 feet to 9 35 feet we took out, again, five or six million cubic 10 yards at that time of various classifications of 11 material. We found some sand deposits in the outer 12 entrance channel that ended up on beaches in West 13 Haven and Milford. We found a lot of glacial till and 14 clay that went into fill and development of the park 15 on the east side of the harbor. Also the expansion of 16 the airport was going on, and some of that material 17 was taken over there. So there were a lot of 18 different things done with material, but still most of 19 it went out to central Long Island Sound. 20 Our challenge here because of the agreement 21 between New York, Connecticut, and the EPA over how 22 the final rule for using the open water sites in 23 western and central Long Island Sound was written 24 requires us to take a much harder look at alternatives 25 and see if there are beaches that can take sand, if we</p>	<p style="text-align: right;">21</p> <p>1 data for people to take a lot at and see if that's 2 something they want to see us do with that material. 3 Next slide. One of the big things we've 4 been doing with parent material recently is 5 remediation. We've only been testing dredged material 6 essentially since about 1970, and not in a really 7 comprehensive way since 1980. So there's a lot of 8 dredged material out there in the central Long Island 9 Sound site and other sites that was placed there 10 before the advent of really in-depth testing 11 requirements. The central Long Island Sound site has 12 been used since the middle of the latter half of the 13 1800s for open water placement of dredged material. 14 So at Boston Harbor where next year we're 15 about to start a major port deepening to take that 16 harbor from 40 feet down to 47, that's going to 17 generate 11,000,000 cubic yards of unconsolidated 18 dredged material and clay, and another half a million 19 yards or so of rock. The Corps together with the 20 Commonwealth of Massachusetts and EPA came up with a 21 plan to use virtually all of that 11,000,000 cubic 22 yards of material to cap the former industrial waste 23 site in Massachusetts Bay. We're going to be able to 24 place about a 5-foot cap on roughly half a square mile 25 of that old site that was used for chemical waste and</p>

<p style="text-align: right;">22</p> <p>1 radiological waste from the '30s to 1980. That kind of 2 volume of parent material to do those types of things 3 comes along once in a generation. And I think 4 everybody in Massachusetts recognized that, and said 5 if we're going to ever do something about the old 6 industrial waste site, now is the time to do it. 7 You may have a similar opportunity here if 8 the Corps in Connecticut and New York can identify 9 where some of those old pre-1970 disposal mounds are 10 on the bottom at central Long Island Sound and maybe 11 at the Norwalk and Milford sites; and use this 12 material to cap those old mounds, thereby improving 13 the chemical quality of the material at the bottom of 14 the sound. These are the things this study is going 15 to examine as we go forward. And of course we're 16 looking to hear other people's ideas as well. 17 When we were doing the DMMP we looked at is 18 there one thing we could do in Long Island Sound that 19 would accommodate all 30 years of all the harbors in 20 Long Island Sound in one site. And the thing that 21 came to the surface was something that's been raised 22 before over the decades, and that's a containment 23 island in outer New Haven Harbor. This could be a 24 diked area. It doesn't have to be the thousand acres 25 you see there. It could be something smaller filled</p>	<p style="text-align: right;">24</p> <p>1 MR. RANDALL: Hello, my name is Todd 2 Randall, and I am an ecologist and environmental 3 compliance specialist with the New England District of 4 the U.S. Army Corps of Engineers. So tonight I'm 5 going to talk really quickly about the NEPA process 6 for the New Haven Harbor navigation improvement study, 7 give an overview of the NEPA process for this project. 8 I will define what NEPA is, talk about what the Corps 9 does to implement its process, and give you details on 10 the products that will come from the process. And 11 most importantly I will detail how you can participate 12 in the NEPA process and assist the study. 13 The National Environmental Policy Act, or 14 NEPA, is a federal law that was enacted on January 1, 15 1970. This law requires federal agencies proposing 16 any action to identify and analyze potential 17 environmental and socioeconomic impacts that may occur 18 as a result of the proposed action. 19 The requirement to apply the NEPA process is 20 triggered by federal actions that could significantly 21 affect the quality of the human environment. The NEPA 22 process ensures that the public has the opportunity to 23 participate in the federal decision making process by 24 providing input during project development, which we 25 are doing tonight; and that the public has access to</p>
<p style="text-align: right;">23</p> <p>1 and redeveloped as park land or wildlife habitat or 2 whatever the city or state wanted to do. The Corps 3 has built similar islands in partnership with the 4 state of Texas and elsewhere. There are some large 5 ones in Chesapeake Bay, Poplar Island; big ones all 6 over Galveston Bay also. It's not new technology. 7 It's something we could do. It's just is there a call 8 for this to be done? Do people see this as a benefit 9 or not? 10 Next slide. Other solutions: I mentioned 11 some of these already; use in highway projects; 12 processing to use at brownfields, still a few of 13 those in Connecticut; use it for other efforts at 14 elevating other lands along the coast, elevating 15 marshes to keep up with sea level rise. The weakness 16 here is all of these would require scheduling and 17 funding to be on the same time line as the port 18 deepening project to make that work. Sometimes we can 19 make that happen. Sometimes we can't. But we would 20 need nonsponsoring communities to be champions of 21 these ideas and to partner with the Corps to make that 22 happen. 23 Todd Randall is next. Please be kind to 24 Todd. He's getting over a cold like I am. His voice 25 is gone, but he's going to do his best.</p>	<p style="text-align: right;">25</p> <p>1 the information used to assess the baseline conditions 2 and the potential impacts of any proposed project. 3 The product of the NEPA process is generally 4 a report in the form of an environmental assessment or 5 environmental impact statement. Basically it looks at 6 the impact of the proposed alternatives, as well as 7 other alternatives, on existing conditions or 8 socioeconomic impact. If the impacts of any proposed 9 project are determined not to be significant, if a 10 project is not overly complex, or if there are no 11 controversies associated with a proposed project an EA 12 is generally prepared. An EIS is generally prepared 13 if the impacts associated with a project are deemed 14 significant, a project is complex, or if there are 15 controversies associated with a project. 16 Due to the complexity of New Haven Harbor 17 improvement study, the Corps has decided to prepare 18 an EIS for the project. 19 I will now go over the purpose of an EIS. 20 An EIS is intended to identify and evaluate all 21 alternatives for a proposed project in a defined study 22 and demonstrate compliance of the proposed action 23 with all applicable laws and regulations. 24 Identifying alternatives involves gathering 25 the practicable universe of possible alternatives and</p>

<p style="text-align: right;">26</p> <p>1 solutions to the problem you are trying to solve.</p> <p>2 Evaluating alternatives means gathering the</p> <p>3 baseline conditions of the human environment, so the</p> <p>4 environmental and socioeconomic conditions that exist</p> <p>5 in the proposed study area; and then predicting the</p> <p>6 impact to those conditions from the various</p> <p>7 alternatives.</p> <p>8 The alternatives considered, the evaluation</p> <p>9 of the impacts to the conditions, and the</p> <p>10 demonstration of compliance with all applicable laws</p> <p>11 are then documented and are all presented in the EIS.</p> <p>12 Public participation in the EIS creation is</p> <p>13 done through a scoping meeting, getting concerns or</p> <p>14 relevant data during the alternatives formulation</p> <p>15 process, public informational meetings as the EIS is</p> <p>16 prepared, review of the draft EIS once it's available,</p> <p>17 reviewing the alternatives considered and their</p> <p>18 associated impacts, and then comments on the draft EIS</p> <p>19 once it's public, and finally a review of the final</p> <p>20 EIS and record of decision.</p> <p>21 The major steps in the EIS process: Once an</p> <p>22 agency undertakes a project, they issue a notice of</p> <p>23 intent to prepare an EIS. Then we start the scoping</p> <p>24 project. This is the process seeking input from the</p> <p>25 public, knowledgeable persons, and other resource</p>	<p style="text-align: right;">28</p> <p>1 you can see the general framework for the information</p> <p>2 that would be contained within the EIS: A summary of</p> <p>3 the EIS; the purpose and scope of the EIS; the proposed</p> <p>4 action; the alternatives considered; the affected</p> <p>5 environment or baseline conditions of the study area;</p> <p>6 environmental and socioeconomic consequences of the</p> <p>7 project or impact analysis; a compliance section that</p> <p>8 details the project's compliance with all appropriate</p> <p>9 laws; a section detailing the public participation</p> <p>10 efforts, so a description of the scoping meeting,</p> <p>11 informational meetings, hearings, public notices,</p> <p>12 comments received on the project, and how those</p> <p>13 comments were addressed in the EIS; and finally a list</p> <p>14 of the EIS preparers.</p> <p>15 Next slide: This is our general schedule.</p> <p>16 We're in scoping right now. Sometime after summer we</p> <p>17 will get back together. We will have a list of</p> <p>18 alternatives to present to the public in September.</p> <p>19 As I said before, all this wraps up, draft EIS, in</p> <p>20 April 2018 it hits the streets. 30 days after which</p> <p>21 you have the public meetings. We will address those</p> <p>22 comments and finally come out with the final EIS in</p> <p>23 July of 2019.</p> <p>24 So the public participates throughout the</p> <p>25 process. The first effort is this scoping meeting,</p>
<p style="text-align: right;">27</p> <p>1 agencies regarding the scope of the EIS; what factors</p> <p>2 should be considered in detail, and what factors are</p> <p>3 less important or do not have to be included in the</p> <p>4 analysis.</p> <p>5 Baseline data gathering, it's pretty</p> <p>6 self-explanatory.</p> <p>7 Impact analysis is the process of examining</p> <p>8 how any proposed action may affect the baseline</p> <p>9 conditions.</p> <p>10 The draft EIS is the document that presents</p> <p>11 the alternatives considered, the baseline conditions</p> <p>12 and conditions that would be expected without the</p> <p>13 project, analysis of the effects of the project, and</p> <p>14 usually includes the agency's preferred alternative.</p> <p>15 As I said before, the draft EIS wraps all those items</p> <p>16 into a document.</p> <p>17 Once the draft EIS is made public a review</p> <p>18 period not shorter than 30 days is established and</p> <p>19 public hearings/meetings to present the results of the</p> <p>20 EIS and hear comments are scheduled. Following the</p> <p>21 review period, the lead agency addresses comments</p> <p>22 received and produces a final EIS and a record of</p> <p>23 decision identifying the alternative to be</p> <p>24 implemented.</p> <p>25 This is an outline of a typical EIS so that</p>	<p style="text-align: right;">29</p> <p>1 that's what we're doing tonight, in which we will be</p> <p>2 accepting comments and questions in just a few</p> <p>3 minutes.</p> <p>4 We will also be holding an informational</p> <p>5 meeting on the alternatives once we have a chance to</p> <p>6 review comments on the project, develop the range of</p> <p>7 practicable alternatives, and organize those into</p> <p>8 presentable form.</p> <p>9 Following our analysis of impacts to the</p> <p>10 alternatives considered and all the other EIS efforts</p> <p>11 that I spoke about previously, we will release a draft</p> <p>12 EIS that will be available for review and comment.</p> <p>13 Following the release of the draft EIS, a</p> <p>14 public meeting/hearing to present the results of the</p> <p>15 draft EIS will be held during which time comments can</p> <p>16 be provided. Written comments are also accepted</p> <p>17 during this period.</p> <p>18 During the study the Corps, as Barbara</p> <p>19 noted, we host a website dedicated to the New Haven</p> <p>20 project, and will keep the website updated with</p> <p>21 information on the study as it becomes ready.</p> <p>22 And then finally the purpose of tonight's</p> <p>23 meeting is to get feedback, comments, concerns on the</p> <p>24 proposed feasibility study. I know it's a lot to soak</p> <p>25 in. When we have comments tonight I just put up a</p>

<p style="text-align: right;">30</p> <p>1 tentative list of what people like to talk about in</p> <p>2 these meetings. It's definitely not limited to these</p> <p>3 issues.</p> <p>4 Just for example, how do I provide comments?</p> <p>5 Public affairs in the back has a comment card. You</p> <p>6 can provide verbal questions or comment to the panel.</p> <p>7 We have a stenographer. Or you can provide comments</p> <p>8 in writing or by E-mail. We would like to have all</p> <p>9 the comments on this part of the study in within 30</p> <p>10 days so we can understand them, by the 20th of</p> <p>11 February that would be great.</p> <p>12 Thankfully that's all I have. I will turn</p> <p>13 it back over to Mark.</p> <p>14 MR. HABEL: Okay. Thank you, Todd.</p> <p>15 Ladies and gentlemen, in accordance with the</p> <p>16 goals of the National Environmental Protection Act to</p> <p>17 encourage public participation, this public scoping</p> <p>18 meeting is your opportunity to ask questions. We</p> <p>19 believe it's crucial to this public participation</p> <p>20 process that your voice is heard. And we thank you</p> <p>21 for your contribution. Since we only have two people</p> <p>22 signed up to speak, I'm going to dispense with all the</p> <p>23 warnings rules and time limit, except to say please</p> <p>24 respect everybody's opinion, even if it's different</p> <p>25 from yours.</p>	<p style="text-align: right;">32</p> <p>1 years since Congresswoman DeLauro and others were able</p> <p>2 to identify some funding for this project we've been</p> <p>3 able to make the right steps to position ourselves.</p> <p>4 91 and 95 are now complete thanks to our friends in</p> <p>5 the State of Connecticut, as well as bringing</p> <p>6 intermodal access to the port with the freight</p> <p>7 railroad; as well as establishing governance, and also</p> <p>8 for lack of a better word, a district. So that the</p> <p>9 land side access is there for lay down and storage,</p> <p>10 and not just the ability to bring ships in, but</p> <p>11 actually do something with a more diverse setup.</p> <p>12 We'll of course submit more complete written</p> <p>13 testimony before your deadline. We did want to speak</p> <p>14 today to four areas of consideration that relate in</p> <p>15 part to the environment document or scoping or general</p> <p>16 feasibility.</p> <p>17 The first of those is we have other maritime</p> <p>18 users and people who use New Haven Harbor. So we</p> <p>19 would ask that you be very considerate and respectful</p> <p>20 for the aquaculture community. We have active</p> <p>21 shellfish beds in New Haven Harbor and other users.</p> <p>22 And to the extent we could do this project with the</p> <p>23 least amount of impact to those users would go a long</p> <p>24 way forward.</p> <p>25 Second, I would suggest to you your</p>
<p style="text-align: right;">31</p> <p>1 And we have Mr. Michael Piscitelli from the</p> <p>2 City of New Haven.</p> <p>3 MR. PISCITELLI: First of all, let</p> <p>4 me say thank you to Mr. Habel and members of the Army</p> <p>5 Corps, our partners from the Connecticut Port</p> <p>6 Authority and New Haven Port Authority.</p> <p>7 My name is Michael Piscitelli. I'm the</p> <p>8 deputy economic development administrator for the City</p> <p>9 of New Haven. I appear before you on behalf of Mayor</p> <p>10 Tony Harp and our economic development administrator,</p> <p>11 Matthew Emerson.</p> <p>12 With some excitement and appreciation for</p> <p>13 the effort and the journey to date that you're coming</p> <p>14 to us with the next step in a very important project</p> <p>15 for the City of New Haven which is the deepening of</p> <p>16 this channel. We have recognized for some time along</p> <p>17 with our port community how important it is that the</p> <p>18 existing users have a better, safer, and more</p> <p>19 efficient channel in which to conduct business. And I</p> <p>20 think we've also recognized that the economic value of</p> <p>21 our port district in some ways is left unrealized</p> <p>22 because we don't have the full endeavor of modal</p> <p>23 connections that we need to make an economic impact,</p> <p>24 if you will.</p> <p>25 I would suggest as well in the intervening</p>	<p style="text-align: right;">33</p> <p>1 proposals and thoughts regarding the dredged spoils</p> <p>2 are not only interesting, but innovative and creative</p> <p>3 and well worth the next step of dialogue to figure out</p> <p>4 what we can do here. I would offer to you, those of</p> <p>5 you from Boston, that the City of New Haven was</p> <p>6 heavily impacted by the two coastal storms, both Sandy</p> <p>7 and Irene. So to the extent living shorelines or</p> <p>8 other mechanisms to protect resiliency may be very</p> <p>9 well-received in this community, may be ways to work</p> <p>10 creatively with the spoils to protect other businesses</p> <p>11 along the coastline and other areas at risk for the</p> <p>12 next coastal storm.</p> <p>13 The third area and very sensitive is the</p> <p>14 cross sound cable. This is the Trans Energy line</p> <p>15 which has been laid directly north-south in the</p> <p>16 navigation channel. And many of you who have been</p> <p>17 here for a number of years will recall the city was</p> <p>18 quite vocal along with many our partners expressing a</p> <p>19 significant amount of concern that the cross sound</p> <p>20 cable would have no material impact on the ability to</p> <p>21 deliver the channel deepening project. And I trust</p> <p>22 that you will keep that front and center in your mind</p> <p>23 as you go through the cost benefit analysis or</p> <p>24 economic considerations or feasibility associated with</p> <p>25 the cross sound cable, that there are a series of</p>

<p style="text-align: right;">34</p> <p>1 commitments along the way that make it clear that the</p> <p>2 deepening project prevails. And figure out a way to</p> <p>3 make it work for all the parties that use the channel,</p> <p>4 but at the same time not foreclose our opportunity to</p> <p>5 deepen the channel.</p> <p>6 Lastly, very importantly for the city and</p> <p>7 our community, New Haven port is in a confined area.</p> <p>8 It's in a neighborhood. So to the extent we had a</p> <p>9 public hearing tonight that many people attended, we</p> <p>10 do need to take another step in public input with the</p> <p>11 New Haven Board of Aldermen, the residents of our</p> <p>12 neighboring communities. So to make a fulfilling</p> <p>13 project for everyone, do it responsibly, we'll do this</p> <p>14 before February 23, make sure the neighbors are heard</p> <p>15 as well. They have been great partners in allowing</p> <p>16 the port to grow, but there are impacts. And we'd</p> <p>17 like to make sure their voices are part of this</p> <p>18 process.</p> <p>19 With that, let me close by saying you'll</p> <p>20 hear from me and others. We believe this project will</p> <p>21 be found in the national interests, both in terms of</p> <p>22 transportation and future economic development. And I</p> <p>23 thank you for your time.</p> <p>24 MR. HABEL: Thank you. Next we have</p> <p>25 John Acampora.</p>	<p style="text-align: right;">36</p> <p>1 30 years. Right now the maximum draft we can bring in</p> <p>2 and out of New Haven without any tide restriction is</p> <p>3 31 feet. It's a 35-foot channel. We have port</p> <p>4 requirements at 2-foot under keel clearance. When the</p> <p>5 ship is underway we have squat where the stern of the</p> <p>6 ship is sucked down to the bottom. At high tide we</p> <p>7 can bring in 37-foot, and we've brought out 37-foot.</p> <p>8 At Gateway Terminal a lot of times they'll get ships</p> <p>9 in that load scrap metal. And as it approaches the</p> <p>10 tide if the tide is higher than normal maybe we'll</p> <p>11 load it a little bit deeper. But when you consider</p> <p>12 the size ships Gateway loads its scrap on, if they</p> <p>13 could load to one foot deeper on the draft that puts</p> <p>14 about 2,000 more tons of cargo on that ship. That's a</p> <p>15 considerable amount.</p> <p>16 The tankers that we bring in, the maximum</p> <p>17 draft two of the terminals take tankers at 37-foot.</p> <p>18 We're bringing them in an hour before high water. We</p> <p>19 have our required under keel clearance and the squat.</p> <p>20 But also the ships get alongside these tankers and</p> <p>21 they want to get what they call pumping through the</p> <p>22 tide. They want to get the ship light enough so that</p> <p>23 they're not near the bottom at low water. The port</p> <p>24 requirement for the ships at the berth is that they're</p> <p>25 safely afloat. So we need to do some dredging there.</p>
<p style="text-align: right;">35</p> <p>1</p> <p>2 MR. ACAMPORA: The cost of the</p> <p>3 project, has there been estimates?</p> <p>4 MR. HABEL: Estimates done in the</p> <p>5 late '70s and '80s; 5,000,000 cubic yards, somewhere</p> <p>6 in the 40 to 50 million dollar range.</p> <p>7 MR. ACAMPORA: There's a change now</p> <p>8 in the participation between the federal and state</p> <p>9 based on the depth of the channel?</p> <p>10 MR. HABEL: There has but it doesn't</p> <p>11 affect New Haven. Because that was a change in cost</p> <p>12 sharing prior to the latest act in December was a</p> <p>13 break at the 45-foot depth, the cost sharing changed.</p> <p>14 And this is roughly 40, 42. So the 2016 act moved</p> <p>15 that 45 break to 50 feet. So it really doesn't impact</p> <p>16 New Haven.</p> <p>17 MR. ACAMPORA: How about the</p> <p>18 availability of funds? This is like three or four</p> <p>19 years out.</p> <p>20 MR. HABEL: Who knows what Congress</p> <p>21 will or won't do?</p> <p>22 MR. JONAS: I'm Shelby Jonas. I'm</p> <p>23 one of the pilots bringing ships in and out of New</p> <p>24 Haven. I've been a pilot bringing ships in and out of</p> <p>25 New Haven and other Long Island Sound ports for over</p>	<p style="text-align: right;">37</p> <p>1 We're at the maximum. 37-foot is the maximum safe</p> <p>2 draft that we can bring in. And safety is the main</p> <p>3 concern here.</p> <p>4 These Panamax ships that come, they're about</p> <p>5 106-foot beam and 600 feet long. With a full load on</p> <p>6 them their draft is 40-foot. For them to come to New</p> <p>7 Haven they're going to go outside and lighten.</p> <p>8 They're going to have to take about 3 feet off that</p> <p>9 draft. That could be one or two barges. It could be</p> <p>10 a 12- to 24-hour operation. It's very expensive,</p> <p>11 lightering. It's weather dependent also. We have a</p> <p>12 wide open area where the barge comes along the ship.</p> <p>13 If there are 2- or 3-foot seas, 15, 20-knot winds, the</p> <p>14 ship is just going to sit there. Some of these ships,</p> <p>15 their chartering would be up to \$1,000 an hour. So</p> <p>16 one-day delay is a \$25,000 bill. And maybe the ship</p> <p>17 was chartered for another voyage, but maybe they'll</p> <p>18 miss that voyage because of the delay due to</p> <p>19 lightering. If we have a 42, 44-foot draft channel we</p> <p>20 wouldn't have to do any lightering, we could bring the</p> <p>21 ships right into the dock. It would save a lot of</p> <p>22 money and a lot of time.</p> <p>23 So the pilots, we're in favor of the</p> <p>24 dredging, and also the widening of the channel.</p> <p>25 Because the draft that we're bringing in now is also</p>

<p style="text-align: right;">38</p> <p>1 limited by the width of the channel, not only the 2 depth. Okay, thank you. 3 MR. HABEL: Thank you very much. Is 4 there anyone else who would like to speak? We're not 5 just here to listen to us but to listen to you. 6 Anyone else have a question or statement about the 7 process for or against? 8 Okay. Thank you very much for your 9 questions and comments this evening. Written 10 questions and feedback, letter can be sent to the 11 Corps, either in writing or by E-mail at any time. 12 We at the U.S. Army Corps of Engineers, New 13 Haven Port Authority, and Connecticut Port Authority 14 extend our appreciation to all who took the time to 15 involve themselves in this public scoping process. 16 Thank you again for providing us with your questions, 17 your thoughts, and your feedback. And that concludes 18 tonight's public scoping meeting. Good night. 19 (The meeting concluded at 7:25 p.m.) 20 21 22 23 24 25</p>	
<p style="text-align: right;">39</p> <p>1 STATE OF CONNECTICUT) 2) ss: 3 COUNTY OF HARTFORD) 4 5 I, Trevor Drummond, do hereby certify that 6 the foregoing matter was recorded stenographically by 7 me and reduced to typewriting by me. 8 I FURTHER CERTIFY that the foregoing 9 transcript of the said hearing is a true and correct 10 transcript of the testimony given at the time and 11 place specified hereinbefore. 12 I FURTHER CERTIFY that I am not a relative 13 or employee or attorney or counsel of any of the 14 parties, nor a relative or employee of such attorney 15 or counsel, or financially interested directly or 16 indirectly in this action. 17 IN WITNESS WHEREOF, I have hereunto set my 18 hand and seal of office at East Hartford, Connecticut, 19 this 31st day of January, 2017. 20 21 22 23 24 25</p> <p style="text-align: center;">_____ Trevor Drummond, Court Reporter</p>	

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1:17 7:1,14 23:23,24 24:1 30:14 tonight 6:24 7:4,23 24:4,25 29:1,25 34:9 tonight's 5:11 29:22 38:18 tons 10:2 36:14 Tony 31:10 tools 14:18 top 10:3 traffic 12:10 Trans 33:14 transcript 39:9,10 transport 10:5 transportation 5:8,12 11:23 15:5 34:22 transporting 14:22 Trevor 1:24 3:4 39:5,24 tributaries 9:7 triggered 24:20 truck 10:25 true 39:9 trust 33:21 Try 13:8 trying 26:1 TSP 16:9 turn 9:5 30:12 two	12:16 30:21 33:6 36:17 37:9 types 8:10 14:12,15 16:6,6 22:2 typewriting 39:7 typical 27:25 <hr/> U <hr/> U.S 1:13,16,17 4:7 10:3,6 24:4 38:12 uncertainly 15:16 uncertainty 15:19 unconfined 17:22 unconsolidated 21:17 understand 16:20 30:10 undertaken 4:10 undertakes 26:22 undertaking 5:24 underway 36:5 universe 25:25 unrealized 31:21 unsuitable 17:20 18:5,9,11 updated 29:20 updates 14:2 upgrade 5:19 upland 20:5 use 10:10 11:19 14:16,18,19 20:20 21:21 22:11 23:11,12 23:13 32:18 34:3	users 31:18 32:18,21,23 uses 10:25 20:2 usually 27:14 <hr/> V <hr/> value 31:20 various 19:10 26:6 verbal 30:6 vertical 16:2 vessel 11:22 vessels 5:22 11:19 12:2 14:15 vicinity 20:5 view 10:8,20 13:10 15:4 19:5,6 20:16 virtually 21:21 visited 11:15 vital 6:2 vocal 33:18 voice 23:24 30:20 voices 34:17 volume 10:4 22:2 voyage 37:17,18 <hr/> W <hr/> waiting 14:24 want 9:12 20:22,24 21:2 32:13 36:21,22
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2007	4	35:5
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2014	40-foot	8.7
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2017	42	9
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2018	44-foot	32:4
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2019	45	10:17 32:4
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35-foot	16:23	
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37	16:22,23	

A2-Agency Scoping Meeting, January 25, 2017

Meeting Notes

Cooperating Agency Letters

MEETING MINUTES



Date: January 25, 2017
Time: 0930 - 1230
Participants:

Todd Randall	USACE	Barbara Blumeris	USACE
Marc Paiva	USACE	Mark Habel	USACE
Michael Narcisi	USACE		
Joe Salvatore	CT Port Authority		
Judi Sheiffele	New Haven Port Authority		
Jeannie Brochi	USEPA (via webinar)		
Alison Verkade	NMFS (via webinar)		
Peter Francis	CTDEEP	Kristal Kallenberg	CTDEEP
Fred Riese	CTDEEP		
Davis Carey	CTBOA		
Shannon Andrews	USCG		
Brain Jones	CT Office of State Archaeology		

Subject: Agency Scoping Meeting for the New Haven Harbor Improvement Project
Environmental Impact Statement

The group of attendees listed above met at the Connecticut DOT offices in Newington (CT) and via webinar to discuss the scoping of the Environmental Impact Statement for the New Haven Harbor Improvement Project. Ms. Barbara Blumeris, Mr. Mark Habel, and Mr. Todd Randall of the USACE presented the attached PowerPoint presentations. The main discussion points in the presentations were: the purpose and needs of the improvement dredging in New Haven Harbor, potential navigation improvement features being considered in the study, purpose of the NEPA process, potential alternative locations known to the USACE for material placement, study schedule, and available data and data gaps for the study.

Dredging Purpose and Needs & Navigation Features Being Considered

Ms. Blumeris presented slides that detailed the New Haven Harbor project history, project need, and probable navigation features that would be studied for the New Haven Harbor Improvement Project. Presentation is attached.

Alternatives

Mr. Habel presented slides that detailed potential dredged material placement sites that would be studied for the New Haven Harbor Improvement Project. Presentation is attached.

NEPA Process & Available Data and Data Gaps for the Study

Mr. Randall discussed the National Environmental Protection Act (NEPA) process that the study (and Environmental Impact Statement (EIS) would follow. The major steps in the process include: the Notice of Intent to conduct the study, the invitation for agencies to be cooperating agencies, scoping, baseline data gathering, impact analysis, Draft EIS publication, public review and comment, Final EIS publication, and publishing a Record of Decision. Mr. Randall also presented a project schedule for the process. Mr. Randall also presented existing data available for New Haven Harbor and discussed possible data gaps that would be obtained during the study. Presentation is attached.

General Discussion

Brian Jones (SHPO)

Mr. Jones noted that new side scan data of the improvement features would be helpful in identifying any archaeological resources in the areas of new dredging. He noted that he would be interested in knowing if any buried terrestrial sediments would be found in the new dredge area and if it would be possible to get a sense of where the historical channel was and how it changed over time. Mr. Jones noted that historic ship wrecks could serve as obstructions if any were present in the side slope areas being considered for improvement and asked if the USACE know of any. Mr. Paiva (USACE) responded that there were no known wrecks and that the Cross Sound cable installation within the channel in the 2000's did not find any in their investigations. Mr. Jones requested that the sampling and analysis plan for sediment sampling be coordinated with the State Historic Preservation Office and that a set of cores be processed for archaeological studies.

Jeannie Brochi (EPA)

Ms. Brochi noted that, when considering placement alternatives, there are historical disposal sites throughout Long Island Sound (some that were used for medical waste disposal) as well as current EPA designated sites. EPA strongly suggests looking at beneficial uses (e.g., marsh creation or beach nourishment) of the material.

Peter Francis and Krystal Kallenberg (CTDEEP)

CT DEEP noted that the proposed study will need a joint Water Quality Certification and Coastal Zone Management Consistency Determination. CT DEEP committed to working with USACE on the permitting process by keeping the USACE informed of requirements they will need for review.

CT DEEP noted that there is a proposal to create a living shoreline project in the Long Wharf section of New Haven Harbor. CT DEEP suggested reaching out to City of New Haven for details.

Ms. Kallenberg asked about the percentage of blasting that will be required for the improvement project. Mr. Habel noted that while there was no calculated percentage as of this meeting, the blasting would be likely be limited to the area in the bend of the existing FNP (between the breakwaters) where the ledge is closer to the surface than other areas of the harbor. Mr. Habel noted that a previous navigation improvement study took some rock borings within the FNP.

CT DEEP inquired as to the status of the Cross Sound cable that is currently in the limits of the FNP. USACE noted that the permitting of the cable placement included a requirement for the cable's operator to move the cable should deepening of the FNP be undertaken.

Judi Sheffele (New Haven Port Authority)

Ms. Sheffele asked if the improvement project could be completed within one dredge season. USACE noted that the length of project construction would be determined by the selected alternative, the type of equipment needed to complete the project, and any time of year constraints that may be needed to protect ecological resources.

Ms. Sheffele asked if the creation of a dredged material placement island would be a possibility. Mr. Habel noted that, while all alternatives are being evaluated for this study, the creation of islands requires substantially more dredged material than would be generated from the New Haven project and that such an alternative would likely need to be a regional facility instead of a project specific alternative.

Ms. Sheffele noted that the floodplain elevations in New Haven have been raised and asked if any dredged material could be stockpiled in an upland area for future resilience use. USACE responded that if the material to be removed from New Haven Harbor was found to be suitable for use as structural fill, then that could be a viable option.

Alison Verkade (National Marine Fisheries Service)

Ms. Verkade noted that all the placement options would need to be reviewed by NMFS and noted that their main concerns (for both dredging and placement) would be habitat alteration as well as direct and indirect impacts to all NMFS trust resources. USACE noted the concern and insured NMFS that they would be consulted during the study process for their input on placement locations and other project details.

Ms. Verkade also noted that if blasting was going to occur, there would likely be time of year restrictions as well as other blasting requirements to minimize impacts to NMFS trust resources.

Joe Salvatore (Connecticut Port Authority)

Mr. Salvatore noted that New Haven Harbor contains a large portion of undersea bottom that is leased for shellfishing and asked if that would affect the potential to improve the FNP. Mr. Habel replied that USACE does not recognize subtidal leases and that the presence of any leases would not affect the ability to improve the New Haven FNP.

David Carey (Connecticut Bureau of Aquaculture)

Mr. Carey noted that there are shellfish beds present in New Haven Harbor and exhibited a map of the current leases and plots in the harbor. Mr. Carey said that some lease holder agreements date to the 1800s. Mr. Carey also noted that the New Haven Harbor water quality is currently appropriate for shellfish cultivation and that surficial sediment quality is generally good as historic contamination tends to be below recently settled sediments.

Mr. Carey stated that the deepening of the FNP is not a major concern for shellfish resources as the FNP is routinely dredged every 10 years or so. The main impact to shellfish habitat would come from the potential widening of the FNP and the associated side slopes.

Mr. Carey voiced opposition to the idea of a dredged material island creation alternative as it would remove potential oystering and clamming grounds in the harbor.

Mr. Carey mentioned that any rock to be generated from blasting activities could be used to stabilize Charles Island in Milford, CT. USACE noted that it could be considered as an alternative but would likely need a sponsor to support the added costs of transporting the material out of New Haven Harbor.

Summation

Following the presentations and general discussion, Mr. Randall requested that written comments on the project be provided to the USACE within 30 days. Mr. Randall also noted that any additional questions or concerns could be brought to the attention of Ms. Blumeris or Mr. Randall via letter, email, or call.

Meeting Adjourned.

Todd Randall
Marine Ecologist

The following agencies were invited to the scoping meeting via letter 30 days prior to the meeting:

National Marine Fisheries Service – Habitat Conservation Division

National Marine Fisheries Service – Protected Resources Division

US Environmental Protection Agency

US Fish and Wildlife Service

US Coast Guard

Connecticut Department of Energy and Environmental Protection – Marine Fisheries Division

Connecticut Department of Energy and Environmental Protection – Land & Water Resources Division

Connecticut Department of Agriculture – Bureau of Aquaculture

Connecticut Office of Historic Preservation

New York Department of State - Coastal Management Program

New York Department of Environmental Conservation

Mashantucket (Western) Pequot Tribe

Mohegan Tribe



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
5 POST OFFICE SQUARE SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

April 6, 2017

Lawrence Oliver
US Army Corps of Engineers
New England District
696 Virginia Road
Concord, MA 01742-2751

Dear Mr. Oliver:

We are writing to accept your invitation to serve as a cooperating agency under the National Environmental Policy Act (NEPA) in conjunction with the U.S. Army Corps of Engineers preparation of an Environmental Impact Statement (EIS) for New Haven Harbor, Connecticut Federal Navigation Project. As a cooperating agency we will review draft documents and attend coordination and public meetings as appropriate and as resources permit.

Should you have any questions, please feel free to contact Jean Brochi of my staff at (617) 918-1536 or brochi.jean@epa.gov.

Sincerely,

A handwritten signature in cursive script, reading "Regina Lyons", is positioned above the typed name.

Regina Lyons, Manager
Coastal and Ocean Protection Unit

From: [Randall, Todd A CIV USARMY CENAE \(US\)](#)
To: [Blumeris, Barbara R CIV USARMY CENAE \(US\)](#); [Habel, Mark L CIV USARMY CENAE \(US\)](#); [Oliver, Lawrence R CIV USARMY CENAE \(US\)](#); [Mackay, Joseph B CIV USARMY CENAE \(US\)](#)
Subject: FW: New Haven Harbor Improvement Project EIS scoping meeting
Date: Thursday, January 26, 2017 11:01:29 AM

FYI from NYDOS on New Haven Improvement

-----Original Message-----

From: Maraglio, Matthew (DOS) [<mailto:Matthew.Maraglio@dos.ny.gov>]
Sent: Thursday, January 26, 2017 10:58 AM
To: Randall, Todd A CIV USARMY CENAE (US) <Todd.A.Randall@usace.army.mil>
Cc: Zappieri, Jeffrey D (DOS) <Jeffrey.Zappieri@dos.ny.gov>
Subject: [EXTERNAL] RE: New Haven Harbor Improvement Project EIS scoping meeting

Todd

Thank you for reaching out to Denise regarding your invitation to participate as a cooperating agency for the New Haven Harbor Connecticut Federal Navigation Project feasibility study and environmental impact statement. The Department will not be participating as a cooperating agency pursuant to the National Environmental Policy Act. The Department is granted comparable authority to participate in such actions pursuant to the Coastal Zone Management Act and is happy to contribute to the discussion in this capacity. Please coordinate with myself and Jeffrey Zappieri (cc'd).

Matthew P. Maraglio
Coastal Resources Specialist, NYS Coastal Management Program
Consistency Review Unit, Office of Planning & Development

New York Department of State
99 Washington Avenue, One Commerce Plaza, Suite 1010, Albany, NY 12231
O: 518.473.3371 | Matthew.Maraglio@dos.ny.gov
Blockedwww.dos.ny.gov

-----Original Message-----

From: Randall, Todd A CIV USARMY CENAE (US) [<mailto:Todd.A.Randall@usace.army.mil>]
Sent: Thursday, January 19, 2017 11:16 AM
To: Caldwell, Denise (DOS) <Denise.Caldwell@dos.ny.gov>
Subject: RE: New Haven Harbor Improvement Project EIS scoping meeting

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Hello Denise, I was wondering if NYDOS would be responding to the Cooperating Agency request letter for the New Haven Improvement Project? Also, will a NYDOS representative be available to attend the Agency scoping meeting described below?

Thanks,
TODD

TODD RANDALL
Marine Ecologist

US Army Corps of Engineers
New England District
696 Virginia Road
Concord, MA 01742
978-318-8518
todd.a.randall@usace.army.mil

-----Original Message-----

From: Randall, Todd A CIV USARMY CENAE (US)
Sent: Tuesday, January 03, 2017 7:19 AM
To: 'denise.caldwell@dos.ny.gov' <denise.caldwell@dos.ny.gov>
Subject: New Haven Harbor Improvement Project EIS scoping meeting

Hi Denise,

My name is Todd Randall and I am an Ecologist with the New England District of the Corps of Engineers. The Corps is beginning the study of navigation improvements (i.e., deepening and widening) in the New Haven Harbor Federal Navigation Project in New Haven, CT. For the study the Corps will be drafting an Environmental Impact Statement (EIS). As such, our project managers have drafted letters with some specifics of the project and inviting stakeholder agencies to be cooperating agencies in the EIS process. The attached letter was sent out a week or 2 ago. I apologize for not dropping you an email sooner to give you a heads up. I believe your name came up as the point of contact for the NY DOS because of your previous involvement with Corps projects. If this is incorrect, could you please let me know who to use as a NY DOS POC (and forward this information to them).

In accordance with NEPA policies in the development of an EIS, the Corps will be holding a public scoping meeting as well as an agency scoping meeting to present the rationale for the improvement study and explain the study process. The Corps would like to invite the NY DOS to the agency scoping meeting (and public scoping meeting if you so desire), so this email provides the details of the meeting date and time.

The date for the Agency Scoping Meeting for the New Haven Harbor Navigation Improvement EIS will be Jan 25, 2017. Details are below:

Agency Scoping Meeting
Jan 25, 2017
0930-1230
Conference Room B

Connecticut DOT Office
2800 Berlin Turnpike
Newington, CT 06131

The Corps has also planned a public scoping meeting to present the study to the public. The details for that meeting are:

Public Scoping Meeting
January 24, 2017
6:30 pm to 8:30 pm

New Haven Hall of Records
200 Orange Street
New Haven, CT 06515

Please RSVP to this email to let me know if NY DOS would like to attend the agency scoping meeting. If you cannot attend but would still like to provide comments, please let me know and we'll arrange an alternative time to get together and go over the project and get NY DOS's input.

The Corps will provide an agenda for the agency scoping meeting as we move closer to the meeting date.

Thanks in advance for your assistance with this project. Feel free to call or email should you have any questions.

V/R,
TODD

TODD RANDALL
Marine Ecologist
US Army Corps of Engineers
New England District
696 Virginia Road
Concord, MA 01742
978-318-8518
todd.a.randall@usace.army.mil

From: [Randall, Todd A CIV USARMY CENAE \(US\)](#)
To: [Blumeris, Barbara R CIV USARMY CENAE \(US\)](#); [Habel, Mark L CIV USARMY CENAE \(US\)](#); [Paiva, Marcos A CIV USARMY CENAE \(US\)](#); [Oliver, Lawrence R CIV USARMY CENAE \(US\)](#); [Mackay, Joseph B CIV USARMY CENAE \(US\)](#)
Subject: FW: New Haven Harbor
Date: Thursday, January 26, 2017 2:37:50 PM

FYI - CT State Arch.- Accepts being Coop Agency

-----Original Message-----

From: Jones, Brian [<mailto:brian.jones@uconn.edu>]
Sent: Tuesday, January 24, 2017 3:43 PM
To: Randall, Todd A CIV USARMY CENAE (US) <Todd.A.Randall@usace.army.mil>
Subject: [EXTERNAL] New Haven Harbor

Mr. Todd Randall,

I am writing to accept your invitation to act as an agency contact regarding EIS coordination for the New Haven Harbor dredging project. A letter of invitation to participate recently arrived in my campus mailbox from Mr. Lawrence Oliver. Unfortunately, my office was moved last Fall, so mail has been delayed in the forwarding process (for future notifications, please see the updated address below).

I will be at tomorrow's scheduled scoping meeting in Newington.

Sincerely,

Brian Jones

Brian Jones, Ph.D.
State Archaeologist
Office of State Archaeology
brian.jones@uconn.edu <<mailto:brian.jones@uconn.edu>>
860-299-5769

For scheduled office visits: Monteith 408, UConn, Storrs
Mailing address: Department of Anthropology, UConn, 354 Mansfield Road, Storrs, Connecticut 06269-1176

January 24, 2017

Mr. Lawrence Oliver
Chief, Planning Division
U. S. Army Corps of Engineers
New England District
696 Virginia Road
Concord, Massachusetts 01742-2751

Dear Mr. Oliver:

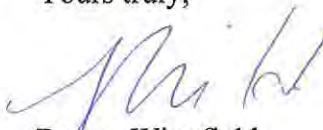
Thank you for your letter of December 14, 2016 inviting the Department to become a Cooperating Agency for the preparation of an Environmental Impact Statement (EIS) as part of the feasibility study to examine navigation improvements to the existing New Haven Harbor, Connecticut Federal Navigation Project. We will assist and participate in the NEPA process.

You should understand that because of the level of detail available during NEPA/CEPA review, all regulatory issues may not be fully identified in the environmental review process. By becoming a Cooperating Agency, the Department does not relinquish any authority, including requiring more detailed information for applications, under our Water Quality Certification and Coastal Zone Management programs.

Frederick Riese of the Office of Environmental Review is the appropriate NEPA/CEPA contact person for the New Haven Harbor IFR/EIS project. He will attend the January 25 meeting and coordinate the Department's participation in the review process with the appropriate resource and regulatory offices. He may be reached at (860) 424-4110 or frederick.riese@ct.gov.

Again, thank you for the invitation to participate in the environmental review process in connection with feasibility study and EIS for improvements to the New Haven Harbor Federal Navigation Project. I trust you will find the participation of Frederick Riese helpful.

Yours truly,



Betsey Wingfield
Bureau Chief
Water Protection and Land Reuse

BW/gw



United States Department of the Interior

FISH AND WILDLIFE SERVICE

New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087
<http://www.fws.gov/newengland>



REF: New Haven Harbor Navigation Project draft EIS

January 20, 2017

Mr. Lawrence Oliver
Department of the Army
U.S. Army Corps of Engineers
696 Virginia Road
Concord, Massachusetts 01742-2751

Dear Mr. Oliver:

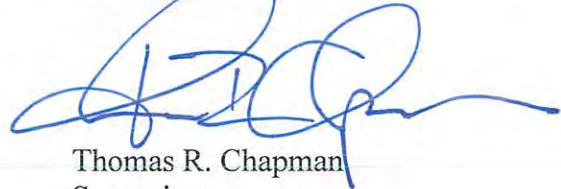
This responds to your letter requesting that the U.S. Fish and Wildlife Service (Service) participate as a cooperating agency, pursuant to 40 CFR 1501.6, in preparation of an environmental impact statement for the subject project. Your letter was dated December 14, 2016, and was received in our office on December 22, 2016. Under 40 CFR 1501.6, a jurisdictional nexus and special expertise may qualify an agency to act as a cooperating agency under the National Environmental Policy Act. However, although the federally threatened piping plover (*Charadrius melodus*) and red knot (*Calidris canutus rufa*) are known to occur in coastal Connecticut, at this time, it is not clear that these or other species listed under the Endangered Species Act (ESA), or other resources under the jurisdiction of the Service, would be affected by the subject project. In addition, the Service lacks special expertise in navigation improvement projects. Therefore, in the absence of a clear jurisdictional nexus or special expertise, we are declining to participate as a cooperating agency. If you are aware that listed species or other resource(s) under Service jurisdiction may be affected, please notify us so we may re-evaluate our participation. We are available to provide technical assistance as needed when the U.S. Army Corps of Engineers (Corps) considers the potential effects of the project under section 7 of the ESA.

Mr. Lawrence Oliver
January 20, 2017

2

Thank you for considering the Service in this process, and we look forward to working with you and the Corps in the future. If you have any questions regarding this letter, please contact David Simmons at 603-227-6425 or at david_simmons@fws.gov.

Sincerely yours,

A handwritten signature in blue ink, appearing to read 'T. Chapman', with a stylized flourish extending to the right.

Thomas R. Chapman
Supervisor
New England Field Office

From: [Linnick, Katherine E MST1](#)
To: [Blumeris, Barbara R CIV USARMY CENAE \(US\)](#); [Randall, Todd A CIV USARMY CENAE \(US\)](#)
Cc: [Andrew, Shannon L LTJG](#); [Gunning, Jason CDR](#); [Terveen, Jay C MST2](#)
Subject: [EXTERNAL] New Haven Harbor - Environment Impact Statement (EIS)
Date: Wednesday, January 18, 2017 8:43:44 AM

Good morning,

I am responding to your letter requesting participation in the EIS for New Haven harbor. Our Waterway Management Office here locally is willing to participate and assist in any way during this process. Please let me know when the first meeting will be setup and if there is any sort of scheduled agenda.

Thank you.

Regards,

MST1 Katherine Linnick
USCG Sector Long Island Sound
Waterways Management Division
Tel: (203)468-4565

todd.a.randall@usace.army.mil

-----Original Message-----

From: James Quinn [<mailto:jquinn@moheganmail.com>]

Sent: Tuesday, January 03, 2017 2:30 PM

To: Randall, Todd A CIV USARMY CENAE (US) <Todd.A.Randall@usace.army.mil>

Cc: Autumn Cholewa <ACholewa@moheganmail.com>

Subject: [EXTERNAL] New Haven Harbor, Connecticut Federal Navigation Project EIS

Dear Mr. Randall,

My office recently received an invitation to assist with the NEPA process for the above referenced project. Please accept this email as confirmation that the Mohegan Tribal Historic Preservation Office accepts the invitation to participate in the formulation of the EIS. Please provide any additional relevant information as it becomes available.

We look forward to working with all interested parties, stakeholders and agencies assisting with the process.

Best regards,
James

James Quinn

The Mohegan Tribe

Mohegan Tribal Historic Preservation Officer & Archaeology Department Manager

13 Crow Hill Rd.

Uncasville, CT

Office: 860-862-6893

Cell: 860-367-1573



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930-2276

DEC 22 2016

Lawrence Oliver
Chief, Planning Division
Department of the Army, Corps of Engineers
New England District
696 Virginia Road
Concord, MA 01742-2751

Re: New Haven Harbor: Navigation Improvement Project EIS, Request for Participation as a Cooperating Agency

Dear Mr. Oliver,

This letter is in response to your request, dated December 14, 2016, that we participate as a cooperating agency in the preparation of an Environmental Impact Statement (EIS) associated with the New Haven Harbor Navigation Improvement Project. We agree to participate as a cooperating agency to help advance effective interagency coordination on this project.

Our role and degree of involvement as a cooperating agency is dependent on existing staff and fiscal resources. Our contributions will be limited to providing written comments in response to your documents prepared as part of the NEPA process, i.e. draft EA, EIS and scoping documents. You can expect our comments in response to provide technical information identifying species and habitats of concern, identification of issues and topics that need consideration and evaluation in your NEPA process, and guidance on evaluating, minimizing and avoiding effects to our trust resources. We are not in a position to undertake data collection, conduct EIS analyses, or prepare sections of the draft or final EIS as staff and resources are fully tasked in other obligatory NOAA Fisheries programs.

Thank you for the opportunity to participate as a cooperating agency on this project. We look forward to working with you. If you have any questions regarding this matter, please contact Alison Verkade at (978) 281-9266 or by email at Alison.Verkade@noaa.gov for information regarding EFH (HCD Contact) or Zach Jylkka at (978) 282-8467 or by email at Zachary.Jylkka@noaa.gov for information regarding ESA (PRD Contact).

Sincerely,

John K. Bullard
Regional Administrator

EC: Verkade, NMFS/HCD; Jylkka, NMFS/PRD;
Blumeris, USACE; Randall, USACE

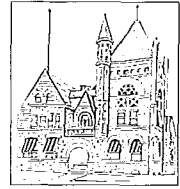


A3-Scoping Letters Received



CITY OF WEST HAVEN, CONNECTICUT HARBOR MANAGEMENT COMMISSION

City Hall | 355 Main Street | West Haven, Connecticut 06516



CITY HALL 1898-1967

March 17, 2017

Mr. Todd Randall
U.S. Army Corps of Engineers
New England District
696 Virginia Road
Concord, MA 01742-2751

RE: Proposed Dredging of New Haven Harbor

Dear Mr. Randall:

The Harbor Management Commission is aware that there is an effort to begin planning for the dredging of New Haven Harbor. The Commission is in the process of completing a Harbor Management Plan for West Haven and is supportive of efforts to dredge New Haven Harbor. This is important since West Haven shares a border with the Harbor but also because the only accessible deep water for West Haven is located along the Harbor and its confluence with the West River.

Since the federal channel extends westerly to the West Haven border and continues up into the West River, the Commission asks that plans to dredge New Haven Harbor also consider the feasibility of dredging the channel up the West River to its intersection with Interstate-95. Extension of this dredging to include this segment of the federal channel will help to better serve the commercial and recreational boating needs of West Haven, will help to implement our draft Harbor Management Plan and will provide an important access for emergency services (an existing police boat and a pending fire boat). It will also result in a comprehensive treatment of the Harbor that will not require a separate, future dredging project.

The Commission supports the efforts of the Corps of Engineers to identify appropriate beneficial uses for the dredged material, including upland uses to support water-dependent uses and increase coastal resilience. Please contact us if you have any questions on this request or would like to discuss it with us in further detail.

Thank you for your consideration,

Eugene Pacapelli,
Chairman

West Haven Harbor Management Commission

Cc: Mayor Edward O'Brien
Edward O'Donnell, U.S. Army Corps of Engineers
Joseph Salvatore, CT Port Authority

February 27, 2017

Todd Randall
U.S. Army Corps of Engineers
New England Division
696 Virginia Road
Concord, Massachusetts 01742

RE: New Haven Harbor Dredging
Feasibility Study and Environmental Impact Statement
Scoping Comments

Dear Mr. Randall:

The Department of Energy and Environmental Protection (DEEP) thanks you for the opportunity to submit these scoping comments as you begin your Deep Draft Navigational Impact Study for New Haven Harbor. We understand that a range of alternative configurations will be considered including deepening the existing 35' main channel to a depth in the range of 37' to 45' MLLW and widening the channel by up to 100'. Options for methodology and equipment will be considered in the study as well as various sediment disposal options including beneficial reuse. DEEP looks forward to following the progress of this study and has previously committed its intent to be a Cooperating Agency in the study effort (January 24, 2017 letter to Mr. Lawrence Oliver).

First of all, DEEP would like to express its support for maintaining and enhancing the Federal Navigation Project at New Haven Harbor. The State of Connecticut, through policies adopted as part of its federally-approved Coastal Zone Management Program, supports development of ports and harbors and encourages enhancement of existing federal navigation channels. Connecticut General Statutes speaking to this support include:

- Section 22a-92(b)(1)(c): to promote, through existing state and local planning, development, promotional and regulatory authorities, the development, reuse or redevelopment of existing urban and commercial fishing ports giving highest priority and preference to water dependent uses, including but not limited to commercial and recreational fishing and boating uses; and
- Section 22a-92(c)(1)(C): to initiate in cooperation with the federal government and the continuing legislative committee on state planning and development a long-range planning program for the continued maintenance and enhancement of federally maintained navigation facilities in order to effectively and efficiently plan and provide

for environmentally sound dredging and disposal of dredged materials; to encourage, through the state permitting program for dredging activities, the maintenance and enhancement of existing federally maintained navigation channels.

DEEP sees the Feasibility Study and Environmental Impact Statement as valuable planning tools in the process of developing the optimal project for the New Haven Harbor navigation channel enhancement. The EIS should include a detailed justification for the expansion option ultimately selected for implementation. DEEP will also look for the EIS to propose a project which minimizes shellfish impacts to the extent practical and which incorporates appropriate mitigation for all unavoidable shellfish impacts.

Regulatory Programs

The proposed channel enhancement dredging will require a Federal Coastal Consistency Determination from DEEP. In addition, a Section 401 Water Quality Certification will be necessary for the sediment disposal activities of this project. Both of these approvals would be obtained through the DEEP Land and Water Resources Division. DEEP looks forward to working with the Corps to assess the suitability of various disposal options, based on sediment characteristics and quality, whether employing upland disposal, beach nourishment, island or marsh creation, or open water disposal.

Fisheries Issues

A major concern from a fisheries perspective is the effect that the project will have on the quality of fish habitat. It is likely that deepening the existing Federal Navigation Project from -35 feet to -42 feet MLLW would have only a minimal effect. On the other hand, it is possible that widening the channel may have a very significant negative effect because shallow water habitat (roughly -10 to -15 feet MLLW) would be converted to deep water habitat. In addition, the bottom habitat in the channel is subjected to chronic disturbance by ship traffic. The additional magnitude of this effect would depend largely on how much new bottom area is created as the channel is widened.

To better understand what the effects of channel widening might be, the benthic habitat in the existing channel and the area proposed to be dredged should be characterized in terms of physical characteristics and the nature of the macrobenthic invertebrate community. The existing channel bottom habitat and associated macroinvertebrate communities would represent what could be expected to develop after the dredging is completed, and that can be compared to what currently exists in the shallower waters outside of the channel. The differences should be quantified for each widening scenario being considered in the feasibility study.

Fish habitat quality is also dependent on water quality. In this case, seasonal dissolved oxygen (DO) levels may be most important parameter. It is possible that in the summer months DO in the federal channel decreases to concentrations lower than what occurs in the shallower waters adjacent to the channel. Furthermore, DO may decrease to concentrations that could exclude fish from the channel's bottom water layer. Existing water quality data, if available, could be used to evaluate this issue; otherwise water quality data should be acquired.

Fish use of the bottom habitat in the channel compared to that of adjacent bottom habitat should be evaluated. Existing information may be used for this purpose if it is sufficient, otherwise the feasibility and effectiveness of conducting a fish survey should be discussed with DEEP and NOAA Fisheries.

The DEEP Fisheries Division routinely evaluates dredging projects in New Haven Harbor for the need to recommend time-of-year restrictions (TOYs) to protect specific fisheries resources. TOYs have been recommended for past Federal Navigation Project maintenance dredging projects, most recently a project in 2013. For that project, TOYs were developed to protect anadromous fish migration and winter flounder reproduction (see Special Conditions in the State Water Quality Certificate #201300217-KR). For the purposes of the EIS, these TOYs may serve as a guide for what the Fisheries Division may recommend for this improvement project. However, the need for TOYs is always determined on a case-by-case basis using the most current information. Implementation of this project is some number of years in the future so it is not possible at this time to provide specific TOYs.

Beneficial Reuse of Dredged Materials

DEEP supports the beneficial reuse of the sediments dredged to deepen and widen the Federal Navigation Project. Reuse opportunities will depend on the texture of the dredged materials, their cleanliness, ecological resources at the potential reuse sites and cost. DEEP looks forward to working with the Corps to develop the sediment sampling protocols for this project.

A check with the DEEP Waste Engineering and Enforcement Division revealed no anticipated opportunities for reuse of the dredged materials as potential cover material for any upcoming landfill closures. Likewise, the DEEP Remediation Division is not aware of any upcoming remediation projects which could make use of the dredged materials five to ten years from now. However, the DEEP State Parks Division is very interested in suitable New Haven Harbor dredged materials for beach nourishment at either Silver Sands State Park in Milford or Hammonasset Beach State Park in Madison, given suitable grain size and sediment quality. The interest in these sediments is not time sensitive so the timing of the channel deepening and widening is less of an issue for this purpose. Potentially significant volumes of dredged materials could be accommodated at these parks, particularly at Hammonasset.

Potential sediment reuse options such as marsh creation or artificial islands may be problematic in that such contained disposal facilities may likely require lengthy study periods to assess the current ecology and uses in the affected areas. Any such potential confined disposal areas would need to be assessed for the current fishing, lobstering, clamming, oystering, etc., uses they support and suitable compensation would need to be developed for impacts to these uses. Notwithstanding these issues, DEEP supports the further evaluation of a marsh creation project at Sandy Point in West Haven, as identified in the Long Island Sound Dredged Material Disposal Plan.

DEEP is aware of at least two local projects which may provide opportunities for beneficial reuse of dredged materials. The Town of East Haven has a potential use for a large volume of fill on approximately ten acres for an economic development project in connection with an expansion of an existing Town Fair Tire facility. The ten acre site is the upland portion of a larger property which the Town may transfer to Town Fair Tire. Mr. Sal Brancati, Economic Development Director for East Haven, may be contacted at (203) 468-3205 for more information on this project.

In addition, the City of New Haven is proposing a living shoreline, green infrastructure project at Long Wharf which will include a dune/berm system and wetland creation, both requiring fill material. This project may be able to take advantage of materials from the channel dredging and expansion. Donna Hall, Senior Project Planner with the City of New Haven, can be contacted at (203) 946-7842 or at dhall@newhavenct.gov.

Cross Sound Cable

Pursuant to approvals granted by the Connecticut Siting Council in Docket No. 208 (2001) and by Connecticut DEEP in Permit 200102720-MG and Certificate of Permission COP-2004-086-MG issued in 2002 and 2004, respectively, Cross Sound Cable Company LLC installed a 330MW direct current cable from United Illuminating's East Shore Substation on Waterfront Street in New Haven to Shoreham, Long Island.

The route of the Cross Sound Cable in New Haven Harbor runs within the Federal Navigation Project channel for 3.8 miles, buried to a minimum depth of 6' below channel bottom except in areas where the presence of ledge prevented that depth from being achieved. The planning and permitting for the Cross Sound Cable envisioned that the cable would need to be temporarily relocated should the navigation channel be dredged, and condition #21 of the 2002 DEEP permit requires Cross Sound Cable Company to remove and relocate the cable as necessary to accommodate future operations by the Corps in the channel, while condition #24 of that permit required Cross Sound Cable Company to post a \$1,000,000 performance bond for emergency repairs, removal or relocation of the cable.

A new Certificate of Permission from the DEEP Land and Water Resources Division will be required for the temporary relocation and then reburial of the Cross Sound Cable. Micheal Gryzwinski will be the contact in this regard and he can be reached at (860) 424-3674 or at micheal.gryzwinski@ct.gov. Recognizing the need for the temporary relocation and then post-dredging reburial of the cable, DEEP asks that the sequencing and methodology of the pre-dredging and post-dredging cable work be covered in detail in the upcoming EIS. This will promote the efficiency with which we can process the necessary regulatory approvals. This cable relocation and reburial will also be subject to time-of-year restrictions which, like those for the other elements of this project, will be specified by the DEEP Fisheries Division after the project parameters are defined. Cross Sound Cable Company is also encouraged to contact the Connecticut Siting Council to ascertain what, if any, modifications may be necessary to the approval given for the cable in the Docket 208 decision.

Shorebird Considerations

The upcoming EIS will need to consider and evaluate impacts to piping plovers and least terns from the dredging work and the disposal of the dredged materials. If dredged materials are used to nourish nearby beaches, this may create or enhance suitable nesting habitat for piping plovers. It may also require review and post-construction monitoring by the U.S. Fish and Wildlife Service. The Quinnipiac River marsh and its confluence with the harbor provide outstanding habitat for many wildlife species, including a number that are state-listed, and the harbor is both an important wintering area and a stopover site for many wildlife species. DEEP would like to see an assessment of potential impacts, both positive and negative, to these resources.

Thank you again for the chance to offer these scoping comments. DEEP wishes the Corps well with this study. Should you have any questions concerning these comments, please feel free to contact me at (860) 424-4110 or at frederick.riese@ct.gov.

Respectfully yours,



Frederick L. Riese
Senior Environmental Analyst

cc: Brian Thompson, DEEP Land and Water Resources
Micheal Gryzwinski, DEEP Land and Water Resources
Peter Francis, DEEP Land and Water Resources
Kristal Kallenberg, DEEP Land and Water Resources
George Wisker, DEEP Land and Water Resources
Tom Tyler, DEEP State Parks
Peter Aarrestad, DEEP Fisheries



February 22, 2017

Mr. Todd Randall
U.S. Army Corps of Engineers
New England District
696 Virginia Road
Concord, MA 01742

Subject: New Haven Harbor Navigation Improvement Feasibility Study – Comments

Dear Mr. Randall:

The newly established Connecticut Port Authority (herein know as CPA) would like to offer comments on the New Haven Harbor Feasibility Study and Environmental Impact Statement (EIS). CPA board members and staff attended both the public informational meeting and the agency scoping meeting held in January. In addition to attendance at the meetings, the December 2016 Federal Register Notice of Intent and the final Long Island Sound Dredge Material Management Plan (DMMP) have been reviewed specific to the National Environmental Policy Act (NEPA) and project disposal alternatives for Long Island Sound.

The New Haven Federal Navigation Channel serves Connecticut's busiest port complex and critical driver for the State's economy. The CPA request that the Corps investigate all proposed navigation improvements to the existing New Haven Harbor Federal navigation project. The navigation inefficiencies continue to exist within the main channel and turning basin. The main channels were last maintenance dredged in 2014, generating approximately one million cubic yards of sediment utilizing open water disposal. As we embark into a feasibility study to improve the navigation condition of the harbor it is very important to the CPA that project alternatives are investigated v. open water disposal.

CPA offers the following potential options for consideration into the plan;

Marsh Creation and Restoration:

Sandy Point Marsh Creation Site, West Haven, 70 acre site, 1.10 million cubic yard capacity. A CAD Cell developed would meet the needs of New Haven's unsuitable upper tributary channels materials, prior to nourishing the marsh area atop it (West, Mill and Quinnipiac Rivers). This will also serve as a coastal protection feature. The Cell could be design to accommodate the size needed.

To include; Habitat Restoration at Leetes Island Marsh, Guilford, 35 acre site.

Beach Nourishment Sites:

If sand deposits are located within the project limits as were found during the 1956 improvement to the -35-foot channel could be used on local beaches at Prospect Beach, West Haven and Lighthouse Point Park Beach, New Haven. CPA suggest that these two location be investigated as well as others in the project area.

To include; Hammonasset State Park Beach, Westbrook Beach sites, Rocky Neck State Park Beach, and others identified in the LIS DMMP (PEIS, 2015, table 6-22)

Morris Cove Borrow Pit Filling:

The Morris Cove borrow pit was created in 1956 to generate fill for the construction of Interstate 95. The pit remains and now has the opportunity to get filled with New Haven Harbor parent material sediments. The current area is identified as low productivity due to low concentrations of dissolved oxygen. The restored pit (600,000 cubic yards received) would turn this area into a productive shellfish resource which it currently is not. The beach front may also be considered for nourishment.

Confined Disposal Facilities (CDF's)

The existing two New Haven (west) breakwater structures be considered as the primary intended location for a CDF. The existing structures can be expanded and diked to create an island, development of wetlands, wildlife habitat, or park or a combination of all. The CDF size is open for discussion.

To include; Faulkner Island, Duck Island Roads, Twotree Island, and Groton Black Ledge as possible CDF locations as discussed in the LIS DMMP.

Upland Placement and Innovative Treatment:

Processing and Upland transport for use in Brownfield sites.

Use as construction fill.

Use as fill in land elevation efforts for coastal resiliency (City of New Haven, west side of harbor, west side of Bridgeport Harbor Dike plan, and Stratford Point restoration project).

Shellfish Habitat Creation:

New Haven Harbor east breakwater area. Place sediments to -8-foot depth to establish shellfish beds. Current depths are too deep to cultivate shellfish. This "fill" area would create new and productive habitat in a low stress area.

New Haven Port Terminal Infrastructure Improvements:

Terminal expansion by constructing CDF's to increase their facility foot print. Terminal owners and operators have indicated to CPA interest in expansion.

Resilience and Climate Adaption:

The CPA suggest that the Corps engages the Connecticut Institute for Resilience and Climate Adaption (CIRCA) to discuss potential project(s) along our coastline. CIRCA's mission is to increase the resilience and sustainability of vulnerable communities along CT coast and inland waterways. <http://circa.uconn.edu/>

The opportunity to utilize New Haven Harbor's dredge sediment to construct nearshore berms, restore wetlands and marsh's, raise land elevations, construct CDF islands is a one-time offering to the State to plan and execute these types of projects.

In addition, the CPA supports the Corps efforts to enforce the Cross Sound Cable owner(s) into compliance of their approved permit to relocate if the channel is deepened. It is also supported that the cost to relocate the cable not be included into the cost benefit analysis for the project. Your authority through the Rivers and Harbors Act of 1899, to handle physical encroachments within a channel is encouraged in this matter.

The CPA supports the Corps efforts to investigate and recommend beneficial use alternatives for the New Haven Harbor Navigation project. Please review our recommendations and let us know if we can be of any further assistance in your decision making process. The New Haven Navigation Deepening project is a vital part to Connecticut's long term growth of our maritime sector.

If you have any questions please contact,

Joseph Salvatore, Program Manager - 860-270-8199 - joseph.salvatore@ct.gov

Sincerely,



Scott Bates

Chairman, Connecticut Port Authority

Cc: Evan Matthews, Executive Director

Connecticut Port Authority

505 Hudson Street | Hartford, CT 06108 | P: 860.270.8018 | CTPortAuthority.com

CITY OF NEW HAVEN
TONI N. HARP, MAYOR



PREPARED COMMENT OF THE CITY OF NEW HAVEN

RE: NEW HAVEN HARBOR NAVIGATION IMPROVEMENT
PROJECT FEASIBILITY STUDY

February 20, 2017

I. Summary

The City of New Haven (“City”) respectfully offers this written comment concerning the above-referenced project, the environmental impact study and public scoping meeting. The City of New Haven, together with the New Haven Port Authority, supports the feasibility study and the efforts of the Army Corps of Engineers, New England Division (“ACOE”), to improve the navigability of New Haven Harbor and, in turn, to support the economic development of the Port of New Haven (“the Port”). There is significant unrealized economic potential due to the current depth of the federal navigation channel. The current depth restricts the type of ships that call on New Haven and all but forecloses opportunities for container services to call on New Haven. While the City is a regional leader in petroleum and other commodities; direct and indirect economic value will be enhanced substantially through improved navigation for larger ships and more diverse trade. The deepening of the federal navigation channel is likewise consistent with the City’s forward thinking vision for sustainable economic growth and, more importantly, is consistent with the interests of the United States by supporting economic development through intermodal and waterborne transportation.

II. Context

The City is the socio-economic center of south central Connecticut and among the fastest growing cities in New England in terms of both population and economic significance. For the first time since 1991, there are over 80,000 jobs in the City, making up approximately a quarter of the jobs in the New Haven MSA. Economic drivers in higher education, the life sciences, advanced manufacturing, information technologies and supporting service industries are catalyzing new job growth. New Haven also is a major transportation hub. In addition to the Port, New Haven is home to two Interstate Highways (91 & 95); the Northeast Corridor rail line; and freight rail. The Port is the largest deep-water commercial port in Connecticut and a leading port of

call on the Atlantic Seaboard. The Port is ranked #51 in the nation for domestic trade (5.9 million short tons) and #53 in the nation for foreign trade (2.7 million short tons) based on 2013 volume. The Port of New Haven moves 55% of the annual tonnage entering through Connecticut ports, including 71% of all petroleum and 98% of all manufactured products.¹ The City established a 366-acre Port district and the Port Authority itself to facilitate job growth through waterborne transportation. With assistance for the new Connecticut Port Authority, New Haven is even more well-positioned to attract new business.

III. Key Considerations

Due to the nature of this project, incorporating project feasibility and environmental considerations, the City respectfully requests that the ACOE take into account the following:

- a. Protection and mitigation of potential impacts to New Haven's well-established aquaculture industry, including shellfish beds and other facilities;
- b. Development of a cost-effective approach to the disposal of dredge material in containerized cells and/or through use of the Central LIS facility, adaptive reuse of material and/or living shoreline applications within New Haven Harbor and in support of New Haven's coastal resiliency program; and
- c. Relocation of the Transenergie "Cross Sound Cable" on a temporary or permanent basis at no cost or inconvenience to the deepening project, nor adverse effect to the cost-benefit analysis of the project; and
- d. Inclusion of meaningful community input by engaging the New Haven Board of Alders, community residents and the environmental justice community as well as commercial interests.

IV. Closing

The City appreciates the efforts of the ACOE, working with partners at the Connecticut Port Authority and New Haven Port Authority, to undertake this important and timely project. In light of the economic development potential of the Port of New Haven, the demonstrated needs of the shipping community and the readiness of the Port to accommodate responsible growth, the City supports the project and looks forward to a constructive partnership from planning through to implementation.

Respectfully submitted,

CITY OF NEW HAVEN



Michael Piscitelli, AICP

Deputy Economic Development Administrator
City of New Haven
165 Church Street
New Haven, CT 06510

¹ New Haven Official Statement, 2016.



POST OFFICE BOX 9663
NEW HAVEN, CONNECTICUT 06536
(203) 467-1997
FAX (203) 469-5956

GATEWAY TERMINAL

To: U.S. Army Corps of Engineers & New Haven Port Authority
From: Gateway Terminal
Date: January 24, 2017
Re: New Haven Harbor Navigation Improvement Feasibility Study and Environmental Impact Statement

Gateway Terminal (GT) appreciates the opportunity to offer the following comments relative to the New Haven Harbor Navigation Improvement Feasibility Study and Environmental Impact Statement at the public hearing jointly convened by the U.S. Army Corps of Engineers – New England District, and the New Haven Port Authority on January 24, 2017.

GT strongly supports the proposed feasibility study regarding the potential to dredge New Haven harbor to benefit the Port of New Haven and the region as a whole. We would direct your attention to the Connecticut Port Authority's (CPA) first Annual Report, wherein the CPA states the following:

New Haven is Connecticut's largest seaport and is located on the northern shore of Long Island Sound on the central Connecticut coast. The main channels were last maintenance dredged in 2014, the Mill River and Quinnipiac Rivers in 1982 and 1989. This project will serve multiple users that require a deeper depth at their berths to accommodate the calling of deeper draft vessels. The deeper depth channel will produce a greater annual net benefit to the terminal operators and the NHPA.

GT, which was founded 30 years ago, is the largest shipping operator in the port of New Haven. We currently handle hundreds of thousands of tons of cargo each year at our facility on Waterfront Street. The materials we handle include salt, petroleum products, iron and steel products, scrap metals, cement, aggregates, fertilizers and other dry and break bulk cargo. Gateway directly employs in excess of 150 people at our New Haven facilities, and we support numerous other transportation related businesses through our activities in the Port of New Haven. In addition, we recently acquired adjacent properties to allow for us to continue to grow our business and compete in the marketplace to handle an expanding list of commodities and materials.

We have done all of this while being severely limited by the depth of the channel into our facilities in New Haven; which forces us to turn away business opportunities as well as prosecute our existing business in an inefficient manner.

Improving the conditions in the port of New Haven by dredging the harbor to a depth in excess of the current 35 feet is essential if we are to compete with the larger and much deeper ports in Boston, Providence, New York/New Jersey and Philadelphia. With the expansion of the width and depths of the Panama Canal as well as the dredging of competing harbors along the East Coast of the United States to handle super cargo ships (far in excess of 45 ft) puts increased pressure on us to compete in the marketplace. While competitors move efficiently in and out of these ports, we often have to lighter ships in the harbor at anchorage in order to allow them to pass through the shallow channel to our docks. This adds time and cost related to handling the cargo several times before offloading it to our facilities and ultimately makes us less attractive in an increasingly competitive market.

Ensuring the viability of the Port of New Haven into the future should be both the goal and the responsibility of the local, state and federal government if we are to act as responsible stewards of this economic resource. Working together, we can ensure that this dredging and improvement project is planned and executed in a responsible way, taking into account the concerns all interested parties. Proceeding with this feasibility study is a prudent and necessary first step.

A4-Public Informational Meeting January 10, 2018

USACE News Release

Transcript of Meeting



NEWS RELEASE

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

For Immediate Release:
Dec. 19, 2017
Release No. CT 2017-135

Contact:
Tim Dugan, 978-318-8264
cenaepa@usace.army.mil

Corps of Engineers, New Haven Port Authority to hold public meeting Jan. 10 on New Haven Harbor Navigation Improvement Study

CONCORD, Mass. – The U.S. Army Corps of Engineers, New England District, the Connecticut Port Authority, and the New Haven Port Authority will hold a public information meeting on the status of the New Haven Harbor Navigation Improvement Feasibility Study and Environmental Impact Statement (EIS) on Jan. 10, 2018 in New Haven, Conn. The meeting will provide an opportunity for the Corps and the Connecticut and New Haven port authorities to provide a status update on the study and allow the public an opportunity to ask questions and provide comments.

In response to a resolution of the Senate Committee on the Environment and Public Works dated July 31, 2007, the U.S. Army Corps of Engineers, New England District is conducting a feasibility study and Environmental Impact Statement to examine navigation improvements to the existing New Haven Harbor Federal Navigation Project. The non-Federal sponsor for the study is the New Haven Port Authority in partnership with the Connecticut State Port Authority.

The public information meeting will be held on Wednesday, Jan. 10, 2018 in the Nathan Hale School auditorium at 480 Townsend Avenue in New Haven, Conn. Registration will start at 6 p.m. and the meeting will start at 6:30 p.m.

The study is considering navigation improvements, including deepening and widening the federal navigation project. Inadequate channel depths result in navigation inefficiencies in transporting goods into and out of the harbor. To reach the terminals, larger ships must lighter outside the breakwaters and/or experience delays while waiting for favorable tide conditions, or both. Deeper and wider navigation features (main channel, maneuvering area, and turning basin) are needed to increase the navigation efficiency and safety of New Haven Harbor.

The feasibility study will identify, evaluate, and recommend to decision-makers an appropriate, coordinated and workable solution to the navigation inefficiencies at New Haven Harbor. Alternatives will include analyzing various incremental channel depths and widths based upon net economic benefits and design requirements for deeper draft vessels. In addition, the study will evaluate various dredged material disposal alternatives such as beneficial use (e.g., oyster habitat and marsh creation, beach nourishment, historic disposal mound capping, nearshore placement), open water placement, and upland placement.

More information on the New Haven Harbor Improvement Study is available on the Corps website at:
<http://www.nae.usace.army.mil/Missions/Projects-Topics/New-Haven-Harbor/>.

– more –

Public information meeting Jan. 10 on New Haven Harbor Improvement Study/2-2-2-2

The Draft Integrated Feasibility Report/Environmental Impact Statement (IFR/EIS) is scheduled to be completed in April 2018 and will be available for public review and comment.

Significant issues to be discussed in the Draft EIS include the effects of dredging, disposal, and beneficial use of dredged material on the physical, biological, cultural, and socioeconomic environment of the project area.

Comments or questions about the EIS can be directed to Mr. Todd Randall, U.S. Army Corps of Engineers, New England District, 696 Virginia Road, Concord, MA 01742-2751, or by email to todd.a.randall@usace.army.mil.

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5 PUBLIC INFORMATION MEETING FOR THE NEW HAVEN HARBOR

6 IMPROVEMENT STUDY

7

8 JANUARY 10, 2018

9 6:30 P.M.

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11 NATHAN HALE SCHOOL

12 480 TOWNSEND STREET

13 NEW HAVEN, CONNECTICUT

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1 APPEARANCES:

2 MARK HABEL, CHIEF, NAVIGATION AND ENVIRONMENTAL STUDIES
3 SECTION, PLANNING DIVISION
4 U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DISTRICT

5 JOSEPH SALVATORE, CONNECTICUT PORT AUTHORITY

6 JUDI SHEIFFELE, EXECUTIVE DIRECTOR
7 NEW HAVEN PORT AUTHORITY

8 TODD RANDALL, ENVIRONMENTAL COMPLIANCE LEAD
9 U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DISTRICT

10 BARBARA BLUMERIS, Project Manager
11 U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DISTRICT

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1 (The hearing commenced at 6:30 p.m.)

2 MR. HABEL: Okay, good evening. Can
3 everyone please take their seats, and we'll get
4 underway here. Good evening and welcome to this
5 public information meeting for the New Haven Harbor
6 Deep Draft Navigation Improvement Feasibility Study
7 and Draft Environmental Impact Statement.

8 My name is Mark Habel. I'm the
9 Chief of the Navigation and Environmental Studies
10 section for the U.S. Army Corps of Engineers, New
11 England District. The New Haven Harbor Deepening
12 Study is being undertaken by the Corps of Engineers in
13 response to direction from Congress and in partnership
14 with the project sponsors, the New Haven Port
15 Authority and the Connecticut Port Authority.

16 This is my first time in this
17 building, so I'm sure all of you know more about this
18 place than I do, but for anyone who needs them, restrooms
19 are down the hall on the left on either side of the
20 cafeteria, and if you find yourself overcome by
21 thirst, there's a water bubbler across from the men's
22 room.

23 With that said, the purpose of this
24 meeting is to inform the public of our progress on the

25 feasibility study, to provide the public an

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1 opportunity to ask questions about the project, to
2 solicit public input to the feasibility study and
3 draft EIS, and to inform the public of opportunities
4 to provide comment on the project to the Corps and its
5 sponsors.

6 I'd now like to call on the
7 representative from our non-federal study sponsor, the
8 New Haven Port Authority, Judi Sheiffele. Judi, thank
9 you.

10 MS. SCHEIFFELE: Good evening, my
11 name is Judi Sheiffele, and I must apologize. I've
12 been losing my voice for the past week, so I'll try to
13 yell, but I'm the executive director of the New Haven
14 Port Authority, and it's almost been a year now since
15 we had the kickoff meeting where there was a
16 discussion on what would be involved in a navigation
17 improvement feasibility study.

18 During this past year I worked very
19 closely with our partners, the Army Corps of Engineers
20 and the Connecticut Port Authority, to assess the
21 existing conditions in our port and to define the
22 long-term navigational needs of New Haven Harbor.

23 Tonight, as Mark explained, the

24 Corps will share some of the tasks that have been
25 completed and provide a timeline for those yet to be

5

1 achieved.

2 The primary objectives of this study
3 are to identify transportation inefficiencies and
4 safety concerns and evaluate the net benefits a deeper
5 channel would provide in increasing the economic
6 competitiveness of the Port of New Haven.

7 On behalf of the commissioners of
8 the New Haven Port Authority I would like to extend
9 our thanks to the Army Corps of Engineers for
10 undertaking this study, to the Connecticut Port
11 Authority for providing the matching funds that were
12 required of the local sponsor, and also to the
13 maritime community who served the Port of New Haven
14 for their cooperation in supplying us with the very
15 necessary data that was needed for this study. With
16 that, thank you.

17 MR. HABEL: Thank you, Judi. And
18 now I'd like to call Joe Salvatore from the
19 Connecticut Port Authority for a few words.

20 MR. SALVATORE: Good evening and
21 welcome to this public meeting on the New Haven Harbor
22 Deep Draft Navigation Improvement Study. My name is
23 Joe Salvatore, and I'm here on behalf of the Chairman

24 of the Board, Scott Bates, and our executive director,
25 Evan Matthews.

6

1 The Port of New Haven is our state's
2 largest port and significant contributor to our
3 state's economy, not to mention the importance as a
4 source of import for much of our state's commerce
5 including the heating oil keeping us warm this
6 evening.

7 The Connecticut Port Authority, in
8 partnership with the New Haven Port Authority and the
9 Army Corps of Engineers, supports the study in a
10 deepening of the Port's navigation channels to ensure
11 that commerce remains in Connecticut.

12 The Connecticut Port Authority also
13 supports the beneficial use of dredge material from
14 the project including the proposals for ecosystem
15 enhancement and restoration. Along with our partners
16 here this evening, we welcome your remarks and hope to
17 answer your questions on the study and the project.

18 If you want to learn more about the
19 Connecticut Port Authority, go to
20 www.ctportauthority.com. Thank you.

21 MR. HABEL: Also with me tonight
22 from the Corps of Engineers, New England District is

23 Barbara Blumeris, our project manager, Todd Randall,
24 biologist, and the preparer of the draft EIS, Lisa
25 Winter, our coastal engineer, and Aaron Hopkins, who

7

1 is also from our environmental resources section, is
2 providing our slideshow today, and the staff of the
3 Public Affairs office, Sally and Tim, who you met as
4 you entered the facility.

5 The agenda tonight is; following this
6 introduction, Barbara Blumeris will provide an
7 overview of the Corps' study effort and the specifics
8 of the New Haven Harbor Navigation Project. Following
9 Barbara, Todd Randall will provide a briefing on the
10 status of our field investigations for the New Haven
11 Harbor Study and dredge material placement options
12 under consideration.

13 I will then open this meeting to
14 your comments and questions. Should you need copies
15 of the public notice or other pertinent information,
16 those are available out in the lobby at the table you
17 registered at, so ladies and gentlemen, Barbara
18 Blumeris.

19 MS. BLUMERIS: Good evening to
20 everyone. I would like to start this presentation off
21 with -- the first slide is j the agenda
22 of what we're going to cover this evening. Today's

23 presentation will focus on these ten items listed on
24 the slide. The items are presented to
25 inform you of the various aspects of the feasibility

8

1 study.

2 Next slide. The feasibility study
3 purpose is to look at improvements to the existing
4 federal navigation project that we have here at New
5 Haven Harbor.

6 AUDIENCE MEMBER: Could you speak
7 up, please?

8 MS. BLUMERIS: Oh, sure. So the
9 purpose of the study today is to look at the
10 improvements to the existing project that we have in
11 New Haven Harbor, the main channel specifically. The
12 study will examine increasing the depth and other
13 improvements to that existing channel.

14 The outcome of the study will be a
15 recommendation in a report to Congress for potential
16 Congressional authorization for those improvements.
17 The recommendation would require determination that such
18 improvements are engineeringly feasible,
19 environmentally acceptable, and economically
20 justified.

21 Next slide. We have the

22 non-federal sponsors with us tonight, and they are, as
23 we know, the New Haven Port Authority, and the state
24 Port Authority. They provide the 50 percent cost
25 share match for the study. The total cost of the

9

1 study is \$3 million, and it takes -- it will last for
2 a period of three years.

3 Next slide. This slide shows you
4 the main channel coming into New Haven Harbor. I'm
5 not sure how many people here are familiar with the
6 channel, but it starts out in the deep water of Long
7 Island Sound and goes through the breakwaters,
8 heading in past Morris Cove, up past Sandy Point Dike,
9 and then to where all the terminals are located at the
10 head of the harbor.

11 The existing channel that you see up
12 there that is currently in use today was completed in
13 1950, so quite awhile ago. At that time there was
14 about 5.1 million cubic yards of material removed to
15 create this 35-foot channel. That's 400 feet wide on
16 the inside, and 500 feet wide on the outside. This
17 channel provides one-way traffic for the deep draft
18 vessels that enter into those terminals at the head of
19 the harbor.

20 The Corps of Engineers maintains the
21 project at 100 percent federal cost. We dredge it

22 approximately on a 10-year cycle, and people in the
23 room, you know, may be familiar with the fact that we
24 dredged it in 2014, because you might have seen the
25 dredges out there at that time.

10

1 At that time we removed
2 650,000 cubic yards of material. That material was
3 tested prior to dredging. It was determined suitable
4 to go to the Central Long Island Sound disposal site.
5 So there's the existing channel, and the Corps
6 currently maintains that, so now what we're trying to
7 do in this study is look at ways to improve that
8 channel. Obviously it was built in the '50s. There's
9 been changes in ships since 1950.

10 Next slide, please.
11 Currently the port is ranked number 53 out of 150 U.S.
12 ports in the United States based on cargo volume.
13 It's the largest deep water port in Connecticut and
14 important to the State of Connecticut as we heard from
15 both Judi and Joe.

16 Basically
17 -- this diagram shows the terminals. We have
18 various terminals, Magellan up in the upper
19 left-hand corner. Then coming out we have the Gulf
20 terminal, the Gateway terminal, the Magellan T-dock,

21 you can see the T, the New Haven Harbor terminal
22 with the finger pier, and finally the Motiva Shell
23 terminal at the very lower piece of the slide.
24 So that shows you the
25 facilities that are here that are dependent on this

11

1 channel. PSEG is a little further seaward is not
2 shown on this slide. They have a dock where they
3 bring in barges occasionally, but they have converted
4 over to natural gas, so they don't actually use that
5 pier as much for deep draft any longer. So these are
6 the main terminals that we're looking at from the deep
7 draft point of view, the ones you see on the slide.

8 The port is serviced by the
9 railroads. We have access to areas in New England as
10 well as Canada. The pipeline transports jet fuel that
11 runs from here to the Bradley International Airport
12 and out to Westover.

13 Next slide. So now the
14 problems why -- so I mentioned it was constructed in
15 1950, and we have larger ships now coming in. The
16 insufficient channel depth and turning basin for the
17 larger ships causes transportation inefficiencies.
18 Ships drafting greater than 31 feet must enter in a
19 rising tide, that's a high tide, and
20 offload some of their product outside of the

21 breakwaters and the anchorages onto barges, have those
22 barges bring that material in, and then having been
23 lighter, then move themselves into the terminals.

24 So that is an issue, that the ships
25 cannot enter in the area because of the depth of 35

12

1 feet. The existing bend, which we see on this slide
2 to your right, is also a little bit of an issue. That
3 is -- it's a 35-degree bend, and it passes between the
4 existing breakwaters. The banks of this bend are very
5 steep, and strong bank forces are experienced when the
6 larger deep draft ships navigate through that
7 channel.

8 This problem is worse for the deeper
9 draft ships that must enter on the rising tide to take
10 advantage of that extra water. At that time the
11 currents are higher, so they experience those forces
12 to a greater extent.

13 Next slide. This is the study
14 schedule, so right now we're in the evaluation phase.
15 We anticipate being ready to release the draft report
16 this spring with the EIS. That will be for public and
17 agency review. Following
18 the public review, sort of in the
19 middle of the diagram, then after that we would do an

20 optimization analysis of the selected plan and then
21 prepare a Chief's Report in 2019.

22 That Chief's report would be April
23 2019, about a year and a half from today, and
24 -- that is a report I had mentioned that would
25 go to Congress for authorization for construction. If

13

1 construction is authorized, it wouldn't be anticipated
2 until 2023.

3 Next slide. . This is a
4 slide just to demonstrate the types of commodities
5 that enter into those terminals, into the port that I
6 showed you. It's primarily petroleum product. That's
7 that orange portion of the pie, but there are other
8 goods that come in as well. Other goods include coal,
9 sand, gravel, salt, copper, steel, cement, fabricated
10 metal products, and scrap metal, so there's --
11 primarily the bulk of the product is petroleum that
12 comes in.

13 Next slide. This slide is to
14 give you a sense of the change in volume of cargo
15 coming into the port over time. So it shows the
16 commerce for both the domestic and foreign ships
17 coming in. So the top is the total commerce, the
18 domestic is the second line, and then the foreign
19 commerce is the bottom line.

20 Domestic traffic primarily comes
21 from New York Harbor and other Northeastern ports, and
22 that primarily consists of petroleum products.
23 Domestic tonnage, a lot of that is barge traffic.
24 Foreign traffic primarily comes from Canada, from the
25 Netherlands, from Chile, United Kingdom and Turkey as

14

1 well as a few other countries. So that comes in to
2 these terminals, and that is petroleum product as well
3 as some of the other products I mentioned such as
4 steel and some of the exports that go out.

5 So this is the -- what the future would
6 look like without a project. So without a project,
7 without doing something -- we're now in 2023 before we
8 actually construct. That would be almost 75 years
9 from the original 35-foot deepening. Without a
10 project, transportation inefficiencies, safety and
11 maneuverability concerns to inadequate channel depths
12 and widths will continue to persist.

13 The imports and exports into the
14 port, the cargo volume is expected to continue to
15 grow. As Joe mentioned, many of the households in
16 Connecticut rely on fuel oil or some form of oil for
17 heating, and the population is expected to continue to
18 grow. Over the past 20 years, 25 years it has

19 actually increased 6.7 percent. Salt is one of the
20 products that come in, is used by Connecticut DOT, and
21 that's used for all of the different roadways in the
22 area.

23 Next slide. So this is to
24 give you a sense of the size of some of the ships that
25 are coming in. So this figure shows the fleet

15

1 distribution for the petroleum tankers coming into New
2 Haven Harbor. So you can see here the yellow is MR2.
3 MR2 is the midrange tanker, and that's the primary
4 tanker that's currently coming into New Haven.

5 So the MR2 drafts from 35 to 45
6 feet, the length overall, which is the length of the
7 ship can be up to 660 feet, and the width is 106 feet.
8 That gives you a sense of the size of the tankers
9 coming in. We also have a couple of visits of some
10 larger tankers.

11 Next slide. This slide shows you
12 the distribution of the bulk ships coming in such as
13 the salt and some of the other products I mentioned.
14 This shows you on this slide that the Handymax is the
15 most common size coming into the port. So you can see
16 the Handymax, the draft is 33 to 45 feet, length
17 overall up to 708 feet, and a mean of 106. So these
18 are the size ships that are coming in right now, so

19 the channel is inadequate for these size ships to come
20 in officially into this port.

21 Next slide. This shows just a
22 summary of the design vessels for the particular
23 studies. This is part of what the Corps looks at and
24 analyzes in terms of designing the new channel for the
25 port. This is just to give you a sense of what kinds

16

1 of information we use.

2 next slide. So
3 -- this is a summary of how we calculate our
4 economic benefits. They're based on decreasing
5 transportation costs. So for the feasibility study
6 the project benefits are assessed based on bringing
7 the product in on larger vessels, thereby achieving
8 efficiencies of scale of the larger vessels so we can
9 bring in volume at a lower unit cost into the harbor.

10 Savings also results in reduction in
11 tidal delays, so the larger ships do not need to wait
12 outside of the breakwater to enter on the rising tide.
13 It also reduces the safety concerns that resulted with
14 trying to navigate that bend.

15 There's also a reduction in lighting
16 costs of offloading material out in Long Island Sound
17 and then bringing it into the harbor, and that also

18 reduces environmental risk of spills in the harbor in
19 the Long Island Sound by reducing lighting. So these
20 are the alternatives we are looking at, like I
21 mentioned, without the project, , continued
22 problems, safety concerns, inefficiencies.

23 Some of the alternatives that we're
24 looking at are deepening the main ship channel as well
25 as widening it slightly and then changing and widening

17

1 the bend. We're considering depths from minus 37 to
2 minus 42 feet, and these dredging or widening
3 improvement alternatives would be combined with
4 different placement options.

5 So when we look at the alternatives
6 from the design point of view, there's components of
7 the design. So we have the inner channel, which is
8 the main channel. That's currently 35 feet, 400 foot
9 wide, and then we have the width. Along with that we
10 have a small turning basin. This is when the ships
11 back their ships out, and then they have to turn the
12 ship to head out. That's that turning basin.

13 So we have -- on the slide on your
14 right upper left is the proposed turning basin area,
15 and that's centrally located in front of the terminal
16 so they can take advantage of it, so that's two
17 key components.

18 We've also -- to minimize the
19 improvement dredging quantity, the alignment of the
20 improved channel will generally follow the course of
21 the existing authorized channel, so we are not moving
22 away from the existing channel. We're staying in it.
23 We're going to use the same maneuvering area in front
24 of the terminals, so that will help us to minimize
25 impacts. As I mentioned, the turning basin is going

18

1 to be slightly north to align with the location of the
2 terminals in New Haven Harbor.

3 Next slide. So this shows the
4 concept for widening the bends. The bend between the
5 two breakwaters is challenging for the ships to
6 navigate. As I mentioned, the proposed bend alignment
7 will replicate the existing bend. However,
8 improvements will be made in widening to the east and
9 also in deepening it as well.

10 The entrance channel, which is the
11 other component of the -- fourth component of this --
12 , I talked about four components -- is from
13 the breakwater out to deep water. So this is aligned
14 with the existing channel today, and what will happen
15 is it will be extended out to deep water of the
16 selected depth. So we're looking at 37 to 42 feet, so

17 it will extend out to either 37 or 42, whatever the
18 selected plan is.

19 Next slide. So this is the amount
20 of material that would need to be dredged for these
21 improvement projects. So we have a range. We have
22 dredge quantities ranging from 2 million cubic yards
23 for the 37-foot project to up to 5.7 million cubic
24 yards for the 42-foot project. That would be sort of
25 in the range of the original construction back in the

19

1 1950s.

2 As you can see, there's quite a
3 range depending on what turns out is the net that
4 optimizes, which one has the highest net benefits
5 when we look at both the cost and transportation cost
6 savings as well as environmental issues. Of that
7 material most of it is fine silt and clay. There is
8 some material that is not fine silt and clay.

9 There is a portion that's fine sand,
10 and that is primarily in the entrance channel. That's
11 the area outside of the breakwater. There is a
12 portion at the breakwaters that will be ledge. That
13 area would require blasting to deepen, and those are
14 your numbers for that rock removal.

15 Next slide. So when we dredge the
16 material, then we'll have placement options, different

17 alternatives of where we could put it. So one option
18 is the Central Long Island Sound disposal site, and
19 that is listed on the sign as CLDS. So Central Long
20 Island Disposal Site, although that's CLDS. That is
21 what that is and that's -- people are probably
22 familiar with that. It's in Long Island Sound.

23 There we would use some of the
24 material to cover some of the historic disposal mounds
25 where material was disposed at that site pre 1970s

20

1 before we did sediment testing. So we would use that,
2 this material from our dredging project to cover some
3 of the preexisting historic disposal mounds within
4 CLDS. That's one use of it.

5 Other uses are inside of the harbor
6 that we're going to look at, the Morris Cove, oyster
7 habitat creation, salt marsh restoration, rock
8 placement. Now, before I move on to those, which you
9 have on the next slide, I'll tell you which ones have
10 been eliminated.

11 MS. PINSKY: Morris Cove should be
12 eliminated.

13 MR. HABEL: Can we please limit
14 comments and questions until after the presentations
15 and then we can talk about Morris Cove.

16 MS. BLUMERIS: Yes, I'm going to
17 give more information on it. So the options that are
18 eliminated due to the fine grain nature of the
19 material, and Todd will get into a little bit of the
20 work ongoing on the sediment testing and the studies
21 we're doing, but we found already, we've looked at
22 some of the information, although we're still in the
23 process of looking at it, is that the sand is not
24 suitable for beach placement.

25 So we have found sand, but it's not

21

1 suitable. It has fines greater than the percentage
2 allowed to be placed on beaches. However, it's still
3 good, fine sand, and that will be used for the oyster
4 placement areas. Also, the fill, because again of the
5 fine nature of this material, it wouldn't be suitable
6 for coastal resiliency projects. It would wash away,
7 so it would not be suitable to place along the
8 shoreline as fill.

9 It would also not be suitable for
10 structural fill, so those three options are now off
11 the table based on the nature of the material.

12 MS. PINSKY: Question. The
13 material --

14 COURT REPORTER: I'm sorry, I can't
15 hear her, and if anyone's going to talk, they need to

16 come up here.

17 MR. HABEL: Yeah, we're going to
18 hold any questions and comments until after the
19 presentations.

20 MS. PINSKY: I wasn't aware of that.
21 Okay.

22 MS. BLUMERIS: So we're basically
23 taking into full consideration the practical benefits
24 of the dredge material in cooperation with willing and
25 capable sponsors and parties. All this will be key to

22

1 a successful project. So next slide.

2 This shows, as I mentioned, some of
3 the -- a little bit more detail on the placement sites
4 within New Haven Harbor. So Morris Cove Borrow Pit,
5 filling the pit with clean material. The capacity of
6 the Morris Cove is about 600,000 cubic yards of
7 material, and the material strategically placed within
8 the pit to fill it to roughly even with the
9 surrounding bottom.

10 The other area that we're talking
11 about is the oyster habitat creation area near the
12 east breakwater. So that would be putting sandy
13 material in that area to about a 2-foot depth on top
14 of the native silty material. This area has a

15 capacity of about 440,000 cubic yards to place sandy
16 material. Although we don't maybe have that much, we
17 would put what we have there. So right now we're
18 still looking at these sites, but that's a potential
19 option for the sandy material, is oyster habitat
20 creation at the east breakwater.

21 Another area we're looking at is
22 Sandy Point Dike Salt Marsh Restoration. So that's
23 over to the west side, and there we would use the
24 material, the fine grain, silty material to create a
25 salt marsh. That area has a capacity of about 450,000

23

1 to maybe a million cubic yards. However, we're still
2 looking at that as well.

3 The rock placement. So I mentioned
4 there would be rock. So that rock would be placed at
5 the west breakwater, at the toe of the breakwater
6 seaward to help stabilize the toe. So those are the
7 sites within the harbor, and then we have the CLDS
8 disposal mound covering. We're definitely trying to
9 look for beneficial uses of this material
11 , based on the nature of the material.

12 We also are minimizing, to whatever
13 extent practical, interference with the New Haven
14 shellfish harbor industry, and we're working with the
15 Department of Agriculture to avoid impacts to

16 shellfish.

17 We also have the Cross-Sound power
18 cable under the channel. It runs down the centerline
19 of the channel. This is a 25-mile 330-megawatt
20 fiberoptic cable that carries electric power, phone,
21 and Internet to Long Island. So most of the cable is
22 buried at 48 feet.

23 However, a portion of the cable,
24 about 700 feet, was not embedded to the required depth
25 and rests on the rock at the south ledge area near the

24

1 east breakwater. This area, this portion of the cable
2 would need to be moved. In 2004 the
3 Corps issued a permit that allowed the owner to meet
4 the 48-foot depth when we deepen the channel.

5 Next slide. This is some of
6 the environmental compliance acts that we will be
7 complying with as part of this project. These acts
8 address a wide range of topics including air quality,
9 water quality, fish habitat, and cultural resources.

10 Next slide. This slide shows the
11 non-federal cost sharing requirement for the
12 navigation project improvement. As I mentioned, the
13 studies cost share 50/50 of the project itself,
14 because it would be greater than 20 feet would be cost

15 shared 35 percent non-federal. For example, I put a
16 range of project cost estimates, which are still under
17 development, but this is just to give you a feel for
18 the magnitude of the project, could range from 40 to
19 80 million. 35 percent of the \$40 million project is
20 \$14 million.

21 Other items in the table are cost
22 shared as shown. For instance, improvements that the
23 terminals would need to make to their facilities to
24 accommodate if they needed to deepen their brooks
25 would be 100 percent their cost.

25

1 -- the
2 federal government cost shares in the actual
3 construction in the new navigation channel and turning
4 basin maintenance area, and then we would maintain it
5 at 100 percent federal cost into the future.

6 Next. Next we will have Todd
7 Randall come up and give us an overview of the field
8 studies.

9 MR. RANDALL: Thanks, Barb. It's
10 good to be back in New Haven. I spent a lot of time
11 here as an undergraduate, so it's kind of neat to be
12 back studying an area that I did a lot of fieldwork
13 with a long time ago. I see some old friends. I was
14 going to talk to you today about --

15 MR. HABEL: Speak up more.

16 MR. RANDALL: Yep, sorry, sorry. I
17 was just making small talk before my presentation loaded. My
18 name is Todd Randall. I'm a marine ecologist with the Corps
19 of Engineers. I just wanted to share with you
20 some of the studies we did in support of the project.

21 I'm essentially going
22 to run through some of the sediment sampling that we
23 did in support of the project, our biological sampling
24 that we did in support of the project, and then some
25 hydroacoustic surveys we did.

26

1 Again, this was to take a look at
2 the bottom in the areas that we're going to improve in
3 our navigation channel to look for, -or to give
4 us some more detailed bathymetry of the bottom, to
5 calculate out qualities, and to look for anomalies. We do
6 have one mystery at the end of this presentation.

7 We did find one, I'll call it a
8 "structure" in the water, and we don't know what it is.
9 Luckily, it's outside of the footprint of the
10 improvement project, but if anybody happens to know
11 what it is, I'm going to put my money on Mike Pimer, it
12 would be great to know exactly what it is.

13 Next slide. So sediment sampling.

14 We contracted out this work to one of our
15 environmental contractors, AECOM, and they worked with
16 Ocean Surveys, Incorporated out of Old Saybrook to
17 take some sediment samples within our improvement
18 area. So as Barbara said, we're widening, we're
19 looking at widening the channel, and deepening the
20 channel.

21 So you'll see in the next slide --
22 not yet. What we did is set up a
23 series of transects within the navigation channel to
24 try to pick up those side slopes that we would be
25 expanding as well as the depth that we'd be looking

27

1 at. So for our target depth, we just went with the
2 maximum.

3 As Barbara said, we're looking at a
4 depth range of between 37 and 42 feet. So we actually
5 sampled down to minus 44 feet, which gives us a maximum depth
6 of 42, plus two feet that we're allowed to go over. If
7 anybody that doesn't know what vibracoring is,
8 essentially there's a boat with a moon pool and a big
9 crane, and they lower that little apparatus down into
10 the bottom. It's got a core liner in the middle of
11 that tube, and it's got a pneumatic piston that just
12 drives it down, so that would allow us to achieve
13 those depths of 44 feet that we wanted to get to.

14 I was just going to show you some
15 examples. We don't have enough time to go
16 through every single core, but you can see what a
17 representative of the majority of the material looks
18 like. These are our stations in the inner harbor. We
19 have six transects. You can see they are formed by those
20 green dots that run across, and within those six transects
21 we had 17 stations.

22 Next slide. In the outer harbor we
23 had two transects with six stations, so essentially
24 three stations per transect, and I'll show you what we
25 found from some of those so you can get a feel for

28

1 what the material looks like.

2 Next slide. So hopefully you can
3 see this. This is a series of pictures from one of
4 the cores from the outer harbor. This is -- so right
5 out here, this is sample A. It was on one of the side
6 slopes, so in one of the areas where we're talking
7 about widening the channel.

8 Essentially what's shown is a series of
9 pictures that show from the top of the core, that's at
10 the sediment water interface, down to the bottom,
11 which is about 11 feet, and so you can see here the material
12 out there was that fine sand that Barbara was talking about.

13 It does have a component of silt in it, so we can't put
14 it on beaches, but it is useful material.

15 Basically all that material from the
16 breakwater out is similar and has the characteristic of being
17 sand, so that's where that majority of sand that
18 Barbara was talking about -- I'll flash up those
19 quantities again so you can see them, but essentially
20 that's the area that the sand is coming from.

21 Next slide. This is what the
22 majority of the material from the breakwaters into the
23 harbor looks like. This sample is from Station I, which is
24 right here on the side slope across from Morris Cove.
25 Again, the series of pictures show the depths of the

29

1 core.

2 On the left it starts at the top and
3 goes down to about 12 feet, and the material inside
4 the breakwater all the way into here is very similar
5 to this. It's a mix of silt and clay. It looks like
6 glacially deposited material. This again is one from
7 the side slope. The ones in the channel were obviously a
8 little shallower, but, they all look very
9 similar. The inner harbor is a little bit different.

10 Next slide, please. This is core
11 from station X, which is all the way up here just
12 before the bridges. This station is right in the middle, the

13 center of the channel, and what we see again, pictures
14 of the course from top to bottom, but -- so from zero
15 to about 5, 5.2 feet up in the top over there. You
16 have a black organic silt, and then below that
17 it varies.

18 Sometimes we would see that gray
19 silt and clay again. Other times, as in the case
20 that's right in the channel, we would come upon
21 a little bit more of a sand layer, and that, you know, is
22 essentially characteristic of these transects in here that
23 are within the channel.

24 The stations that we found here in
25 the little proposed turning basin area were

30

1 essentially silt all the way down, that gray -- well, a
2 combination of the black and then the gray silt. I
3 think in May we took cores down to about 30 feet, but
4 it was all very, very silty material.

5 Next slide. So this is just
6 Barbara's slide again on the quantities. You have the
7 channel design depth across the top. As Barbara said,
8 there's going to be some rock that would come out of
9 the bend. Those are her numbers again on the
10 top. The sand ranges from about 121,000 cubic yards
11 up to 475,000 cubic yards depending on the depth that
12 we go to, but again, it does have a signature of silt

13 in it, so it's really not beach compatible, but it's
14 useable material, and then the fines we have 1.9 to
15 5.2 million cubic yards.

16 Next slide. So sediment chemistry.
17 We did take individual chemical profiles of each
18 individual core for the contaminants of concern, and
19 we also ran biological testing on a composite from each
20 transect. So for each transect we would composite the
21 material and run these tests with the end result being its
22 suitability -- I mean, what we're trying to get at is the
23 material's suitability for open water placement.

24 So there are a series of tests that
25 we run: whole sediment testing where we put some

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1 critters in an aquarium with the sediment and check on
2 their survivability -- suspended sediment testing:
3 where we suspend the sediment in elutriate
4 form, put critters in, see their survivability.

5 And there's the bioaccumulation
6 testing where we put critters with the sediment, let
7 them live in the sediment for about a month, and then
8 we analyze their tissues for contaminants.
9 Unfortunately, we didn't get our testing results back until
10 just before Christmas.

11 So our chemistry folks are still

12 reviewing all the Q/A and QC on that, so we don't have
13 the results available right now, but we expect them
14 within the next month or so, and then that all leads
15 into the suitability modeling that gets done.

16 Next slide. Some of the other
17 things that we did, as Barbara mentioned, we worked
18 with the Bureau of Aquaculture to identify some
19 beneficial uses for the dredge material. One of the
20 suggestions that they put forth was to take a look at
21 the area behind the eastern breakwater and possibly
22 see if we can enhance the bottom sediments for shellfish.

23 At the moment the bottom is fine, silty
24 material, which basically is not good for oyster
25 habitat. So since we couldn't put that sand on the

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1 beach, one of the ideas put forth by the Bureau of
2 Aquaculture is to possibly place the sand in that area
3 to create more viable oyster habitat.

4 So while we were sampling out there we took
5 some samples just to see if that was indeed the case,
6 and sure enough, all that area behind there is silt
7 and clay.

8 Next slide. We also did some
9 benthic community analysis. Essentially this is just
10 critter counts. You know, you want to see what is
11 living in those sediments that we are talking about

12 disturbing. So on the slide slopes that we're going
13 to widen and within the channel we took some of these
14 benthic community samples.

15 Essentially benthic sampling entails using
16 a rig like you see here on the left, which takes a sample of
17 sediment. You bring it up, run it through a screen,
18 and then back in the lab you identify what's in it,
19 and it gives you a kind of picture of the health of
20 the bottom.

21 Next slide. So in New Haven we have
22 a fairly long, historic record, again, a lot of
23 benthic sampling back in the day for -- was it UI?
24 Yeah. And so we also have a pretty good historic
25 record, because as Barbara said, we maintain this

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1 channel every ten years.

2 So what we tried to do, since we
3 kind of know what's going on there, we targeted those
4 side slopes, you know, the widening areas to see what
5 we can find. So we had three samples on the inside
6 and about seven on the outside. We put some in that
7 shellfish triangle I showed you, the area behind the
8 eastern breakwater, to try and identify the benthic
9 community. Next slide. Real quick benthic ecology 101 on
10 this slide. When you take a look at the benthos that
11 live on the bottom, there's kind of a continuum. If

12 you would imagine a forest, if you were to kind
13 of clear cut it, and you start off with dirt, and you
14 have grasses, and then shrubs come back and trees,
15 same kind of concept in benthic ecology.

16 Sediments that are stressed or
17 disturbed. Once the disturbance stops, you tend to
18 start with this group 1 situation, which are really small
19 organisms that reproduce in high numbers, and then
20 there's a kind of continuum up to group 3 where you
21 find bigger bodied creatures. They're a little more
22 stable. They live longer.

23 Bottom line is the New Haven Harbor
24 channel and that shellfish area that we're looking at
25 are basically kind of in the middle. You know,

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1 there's a lot of representatives of these Group I species,
2 and there's some group three in there, too, so it's
3 nothing out of the ordinary: what we expect. This is
4 kind of healthy community what we expect to see in an
5 estuary like New Haven Harbor.

6 Next slide. Some of the other
7 surveys that we did, we did with our survey vessel. We can
8 go through this later in detail if anyone wants. Aaron's one
9 of the guys that helps us out with this, so any technical
10 questions we can work with him on it, but essentially we did
11 some surveys out in the harbor.

12 Next slide. That helped us better
13 define the bathymetry. Like I said before in the
14 beginning, we're looking at anomalies on the bottom to
15 see what we did. If we came across any that we didn't
16 know what they were, we used this little ROV. It's an
17 underwater camera on a tether that gives us some
18 pictures, so I got some pictures for you to look at in
19 just a few seconds.

20 Next slide. Really quick. This is
21 just the survey plan. We surveyed about 70 miles in
22 total back and forth in New Haven Harbor.

23 Next slide. As Barbara said, we're
24 also looking at extending the channel as it comes
25 out into Long Island Sound. Our target is 44

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1 feet, so the existing channel stops somewhere around
2 that green, so we extended the extent of the survey
3 out to see if there would be any required dredging out
4 there.

5 Next slide. This is just the
6 bathymetry we got, and we'll use this to finalize and
7 kind of fine tune our material quantities that I showed you
8 before.

9 Next slide. This is just the outer
10 harbor. Again, the bathymetry. Next slide. So,

11 again, this is just more of the bathymetry from
12 outside. So if anybody wants to discuss this after or
13 in questions, we can certainly do that, but what that
14 data gave us was also a side scan sonar survey of the
15 bottom. So that's kind of like almost a digital
16 picture of the bottom.

17 We basically go through with our
18 survey data and identify targets on the bottom that
19 would be affected by any kind of dredging, and
20 obviously we're trying to concentrate on those areas
21 that we're widening. The main channel has been
22 maintained once every ten years, so there's not a lot
23 in the main channel. But we're just trying to make
24 sure there's nothing of biological or historical
25 significance on the side slopes where we're going to

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1 widen the channels.

2 So in all we came away with about
3 242 targets, and we have numbers of different
4 examples. Some of them we know right away, because we
5 encounter them so often.

6 Next slide. So those are all
7 the targets that we found. Next slide. So we have
8 known targets. These are things that we can go over and
9 compare to a coast chart, and it's pretty obvious what
10 it is.

11 Next slide. So here within that
12 blue circle you can see, it's just a square block. We
13 compare it with the coast chart. It's right next to
14 the red nun #2 buoy, so basically that's a mooring block. So
15 we can eliminate a lot of things like that by making
16 an educated guess by the navigational features that
17 are supposed to be there, mooring blocks, sewer
18 outfalls, things of that nature.

19 Next slide. This is a cool slide.
20 You can see all those drag marks on the bottom: they are
21 essentially shellfish draggers marks. Those are the scars
22 from dragging their equipment around, and in that dark
23 shade is a kind of mounding of sediment maybe after
24 they pull their equipment. As I mentioned before,
25 some of the sewer outfalls can be seen.

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1 Here is a sediment pattern that kind of develops over the
2 top of the sewer outfall. Again, we compare it to a
3 nav chart, and that's what we see.

4 Next. So we eliminate a lot of
5 those known objects, and we get down to a handful of stuff
6 that we actually have to go out and investigate what that is.
7 That's where that little camera on the sled comes in.

8 Next slide. Here is one target next to the
9 channel just north of Sandy Point, again, just a block

10 on the bottom. There weren't any obvious mooring
11 fields or navigation marks there. So we went down
12 with the ROV, and it turns out it's some derelict
13 fishing gear. It's a lobster pot and string.

14 Next slide. Again, we're looking
15 for any things of historical or biological
16 significance. We came across an anomaly here to see
17 what it was and -- next slide. It turns out it's a
18 crepidula reef. Crepidula is a small -- well, not --
19 it's a relatively big Gastropod, snail, that forms
20 little reefs, so we've identified that. Again, this
21 is outside of the footprint of the project. We did pick it
22 up, so we decided to look at it.

23 Next slide. Let's see. Here's one
24 on the inside of West River, it's a long structure. We
25 figured it was a piling, but we dove on it on it anyways. It

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1 was a piling. So that's kind of what we've seen. We'll
2 have that information in the EIS, and you'll be able to look
3 at all the targets that we got.

4 So now the moment everyone's been
5 waiting for. What is this? It's just north of Sandy
6 Point. It looks like -- well, it kind of looks like a
7 half-buried wreck. So we went down with the camera,
8 and... we still don't know what it is. Fortunately, it's
9 outside of the project area, so we are going to put a

10 buffer around it just to make sure nothing happens to
11 it, but it may end up being investigated.

12 We have a staff of archaeological
13 folks that may take a look at it, if need be, but
14 again, it's not inside the project. It's just
15 outside, so we can keep a buffer around it. So those
16 are some of the things that we did for studies, and that's
17 all I have. Thank you.

18 MR. HABEL: Okay, ladies and
19 gentlemen, now it's time for you to speak to us. In
20 accordance with the goals of the National
21 Environmental Policy Act to encourage public
22 participation in the preparation of feasibility
23 studies and environmental impact studies, this public
24 information meeting continues your opportunity to ask
25 questions and provide feedback to the Corps and other

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1 agencies undertaking and cooperating in the study.

2 We believe it's crucial to this
3 public participation process that your voice be heard.
4 That's why we're here, and we thank you for your
5 contribution. This public information meeting will be
6 conducted in a manner that, should time allow, provides
7 those who desire to ask a question or require
8 information regarding the project an opportunity to do
9 so.

10 If we do run out of time this
11 evening, you're welcome to forward your questions to
12 the Corps or to fill out a feedback card that can
13 either be mailed to the Corps or provided to any one
14 of our team here tonight. Agency e-mail addresses and
15 other resources are listed on one of our handouts that
16 you would have picked up out in the lobby.

17 I must emphasize that this is not a
18 public hearing. We're here to listen to your comments
19 and answer your questions where we can at this point.
20 Though we have a stenographer present to record your
21 concerns and views, we're not taking actual testimony
22 here tonight. There will be a time for public
23 hearings when the Corps and its partners have
24 completed their draft analysis and have a document
25 ready for public review.

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1 We will be back to New Haven and
2 have public hearings on that. To help ensure that the
3 most people possible get to ask questions and provide
4 comments, please state your name and question
5 succinctly so that we may provide specific responses.

6 Please understand that not all
7 questions may be able to be answered tonight. These
8 studies are still ongoing, and no decisions have been

9 reached on the project. We are not here to reach any
10 conclusions. We are here to provide information and
11 answer your questions.

12 Please respect the right of all to
13 express their views. Please do not interrupt the
14 questions and responses. We will begin with those who
15 filled out a card at the registration table indicating
16 they had a question to ask. When you have had your
17 opportunity to speak, we had hoped to provide a
18 microphone, but we couldn't find one. I hope
19 everybody can hear me, and please speak up so that
20 everybody can hear you also.

21 In order to keep things flowing, I
22 will identify the next speaker when I call the speaker
23 who will come up currently. Please limit your
24 question time to a couple of minutes so we can
25 accommodate as many of you as possible.

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1 When beginning your question or
2 statement, please state your name and identify if you
3 are speaking for or representing a position of an
4 organization. If you speak as an individual, please
5 say so, and let us know what community or area you are
6 from. If all those who have filled out a card have
7 had an opportunity to ask questions and there's still
8 time remaining, we can open the floor to additional

9 questions.

10 If at that time you wish to ask a
11 question, please raise your hand, and one of our floor
12 facilitators will take your information. I want to
13 emphasize again that we would like all who wish to ask
14 a question to have an opportunity to do so. Should we
15 run out of time this evening, you're encouraged to
16 send your questions or feedback directly to the Corps.

17 Before we get going, I'd like to go
18 off script just a bit and explain two things about the
19 project. We're looking at an improvement dredging
20 project. Maintenance of the existing project, the
21 existing 35-foot channel, takes place about once a
22 decade when we remove anywhere from half a million to
23 a million cubic yards of accumulated silty shoal
24 material. That's material that through natural
25 processes has deposited itself in the channel since it

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1 was last dredged. That process will continue probably
2 as long as there's a port in New Haven.

3 Improvement dredging is when we
4 deepen a port or make a port's channels and anchorages
5 and turning basins bigger, and when we do improvement
6 dredging, we're digging into areas or elevations that
7 have not been dug before. So we're removing material

8 that was deposited long before the harbor was
9 developed and industry came and even long before
10 people inhabited the area. As Todd mentioned, this is
11 mostly glacial silts and clays that are inside the
12 breakwaters, so that's just the distinction between
13 maintenance and improvement dredging.

14 Now, I'd like to start calling
15 people in the order that they filled out cards. I'll
16 try to get your names pronounced right to the extent
17 you were able to write clearly. So first up is
18 Michael Pimer. Could you please come up. We're going
19 to ask everybody to stand over here so that the
20 stenographer can record your remarks. Next will be
21 Renate Dicks.

22 MR. MICHAEL PIMER: Right here?

23 MR. HABEL: Right there, that's
24 good.

25 MR. MICHAEL PIMER: Everybody hear

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1 me all right?

2 MR. HABEL: All okay.

3 MR. MICHAEL PIMER: A lot of you
4 don't know who I am. I'm Michael Pimer. I've lived
5 in New Haven, West Haven my entire life. I'm 79,
6 shortly to be 80. I've been a harbormaster for New
7 Haven for sixteen years. I rode the Spider, which

8 laid down the cable and kept track of the cable going
9 across the Long Island Sound while it was in the
10 harbor.

11 I have been doing marine stuff for
12 Yale, for Southern Connecticut, for just about all the
13 universities. These cores he took up, we took them, a
14 little different, but they were still called
15 vibracore, and we took vibracore samples back 50 years
16 ago. Had to have a diver on the bottom to guide the
17 thing, because we didn't have the good system they got
18 today, but here is what I want to say.

19 Approve the project. I don't know
20 how you're going to do anything unless you do move the
21 cable, but that's your problem. The spoils that
22 you're going to take out of the harbor, Sandy Point
23 has pretty much disappeared, the jetty. That jetty
24 protected City Point in West Haven and New Haven,
25 South Water Street, the restaurants.

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1 I've been around long enough to have
2 seen many storms and one storm 25 years ago or so pick
3 the oyster boats up and put them in the parking lot.
4 That's catastrophic today. It was bad enough back
5 then, but the guys were working around getting the
6 boats back in the water. Don't happen like that

7 today. Big expense plus the housing plus the
8 restaurant livelihoods. That's the West River.

9 Sandy Point protects the West River
10 from bad weather, and it's been going downhill since
11 before I was born. It's actually shifted and moved.
12 Sand from West Haven's beaches that they replenish
13 every year, because of the westerly breeze, comes
14 across Sandy Point into New Haven Harbor and ends up
15 in the anchorage in New Haven. It used to stop. It
16 doesn't happen anymore.

17 I set moorings for City of New Haven
18 as the harbormaster for years, and within the last
19 five years I'm pulling them up, and it's got red and
20 light colored sand in it, which means it's washing off
21 the beach, coming across, and ending up there.

22 We also have a sewer line in West
23 Haven that ends up a hundred foot from the main channel,
24 and it's in the books to have a new sewer line put in
25 place. I believe the Corps -- in fact, I know the Corps

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1 has got to approve that, but you want to keep this in
2 mind that maybe West Haven ought to get on the ball
3 and do that prior to your filling in, if you're going
4 to fill in, and like I said, I approve of that.

5 There's also -- we have all kinds of
6 moans and groans, because I know the people very well

7 over here in Morris Cove that don't want anything
8 going on in the borrow pit, but that borrow pit's so
9 full of mud that it's unbelievable. I've dove down
10 there. UConn almost lost a diver in it, because it's
11 so sludgy, absolutely horrible stuff, but you can cap
12 it as long as you don't ...

13 Years ago we were convinced, when
14 they built the highway, that you could dredge out
15 there, and it wouldn't affect the beaches. Well, all
16 of Morris Cove lost a beach. Off of the Sound School
17 there is also a borrows pit, and I was going to ask is
18 that where that light line was by buoy 5 in the West
19 River outside the main channel?

20 MR. RANDALL: Might be.

21 MR. MICHAEL PIMER: There's a
22 36-foot sailboat sitting in the bottom of it. It's
23 been there for five years, and people sail right over
24 the top of it, because they don't know it's there.
25 The mast was taken down and then sunk in a storm, but

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1 that is another borrows pit 26-foot in depth in some
2 places, not too many, probably an eighth to a quarter
3 mile long you can use for dredge material.

4 The West River. This is my favorite
5 project, why I'm here tonight, guys. I belong to City

6 Point Yacht Club. We got 350 plus members. We have
7 no water. Number of years ago, a lot of years ago,
8 Kimberly Avenue Bridge, they decided it needed to be
9 replaced. The Corps did this with the agreement of
10 New Haven and West Haven, which contributed to it, and
11 they built a temporary bridge.

12 The temporary bridge was built to
13 temporary specs, which means the uphill grade don't
14 mean a thing except it's not permitted in a permanent
15 bridge. Well, eight, ten years ago they made it
16 permanent. Now the traffic coming across crashes into
17 the traffic getting off the highway, because they
18 cannot see over the top. Not part of the dredging
19 problem, but it also stopped us from dredging
20 upriver.

21 The City of New Haven has 12 foot of
22 water to the end of Pequonnock Yacht Club, and then it
23 becomes six. It wasn't that way. Now I believe
24 Congress zipped it up to six foot so they wouldn't
25 have to dredge it anymore. We have boats bigger and

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1 deeper than six foot.

2 We were told to keep it dredged. We
3 had to have commercial vessels, fishermen, dredgers,
4 bigger boats inside of the bridge to get it dredged
5 outside of the bridge up to it, which is a navigable

6 channel, navigable to six foot. Commercial boats
7 aren't six foot. They're a little deeper.

8 We plow our way through the mud till
9 we get to City Point where now we got 12 feet. We
10 would like to see that resumed back 12 foot right up
11 to the bridge. We're not asking you to go under the
12 bridge. City Point Yacht Club has picked up the price
13 of dredging the main channel last time we dredged our
14 marina. We at least would like to see the Army Corps
15 of Engineers keep the channel.

16 We might have to go back to
17 Congress, I think I'm right about that, put it back to
18 12 foot and leave it there, but look into the future.
19 We're building a waterfront project there. They're
20 going to plan on putting -- they're going to have
21 their own marina. They want to invite people in with
22 boats that draw more than six foot to visit, spend
23 money in the City of West Haven and New Haven. You
24 got to have the water.

25 So I'm here tonight to ask you to

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1 consider putting that channel back to 12 foot. We had
2 an oil disposal unit 50 foot this side of the Kimberly
3 Avenue Bridge called Farnham Environmental Protection.
4 They offloaded tugboat sludge out of the bilge, and

5 they made -- that's beside the point.

6 Not too good a job, but they had
7 water enough for tugboats, and they had it all
8 along. This is what I'm trying to tell you. I'm not
9 making this story up. They come in, they pump the
10 bilges, and then they got rid of it. I don't know
11 where they put it. That's not the subject tonight.

12 But the river itself needs to be put
13 back to what it was initially, and Sandy Point needs
14 to be built up again with dredge material from the
15 main channel, and that would save Water Street and the
16 restaurants and the people at City Point and the
17 school, and I think I've talked enough, folks.

18 MR. RANDALL: Thank you.

19 MR. HABEL: Okay, thank you,
20 Mr. Pimer. Ms. Dicks, and next up would be Robert
21 Pimer.

22 MS. DICKS: I'm Renata Dicks, and
23 I'm a Morris Cove resident, and I'm one of many people
24 here who have been to numerous Army Corps of Engineer
25 meetings that have dealt with our harbor, our Morris

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1 Cove borrow pit, and the dredging of both New Haven as
2 well as Bridgeport, and I have to say I'm delighted to
3 see for the first time that the plans are to fill the
4 borrow pit with clean fill.

5 We would be anxious to see what the
6 clean fill is and be reassured that that will indeed
7 not affect the houses that get this water into their
8 basements, but I'm just so happy not to see the idea
9 of having bridge sludge tucked into that borrow pit
10 and capped and us ongoing having to fight that idea.

11 So thank you for putting that at the
12 top of options, and hopefully that clean fill will be
13 very clean, and we will have a very healthy Morris
14 Cove with new life able to grow on top of it. Thank
15 you.

16 MR. HABEL: Okay, thank you. I'll
17 have a few comments on Morris Cove, and then we'll get
18 on with your questions. At the last meeting that we
19 had on this project downtown almost a year ago we
20 talked with some of you that were there about Morris
21 Cove, and there had been prior meetings, as Renate
22 said, about what should happen with Morris Cove with
23 respect to dredge material.

24 What I said last year was as long as
25 that borrow pit exists on the bottom of New Haven

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1 Harbor, somebody's going to want to fill it with
2 something, and the Corps and the state had proposed
3 putting material from Bridgeport there. Sometimes it

4 takes the government a while to listen, but we heard
5 you, and we're not going to do that.

6 But the borrower pit does present an
7 opportunity for the Corps and the State and the City
8 to save a little bit of money by putting 400,000,
9 600,000 cubic yards of material in the borrower pit
10 rather than haul it out to Central Long Island Sound
11 and to cap that material over maybe with some portion
12 of the sand that we have.

13 We're not going to put material into
14 the Morris Cove borrow pit that Connecticut DEEP and
15 EPA do not approve of. The material is going to have
16 to meet their requirements for unconfined open water
17 placement, which is our definition of a marine world
18 of what is clean versus not clean.

19 Right now the plan is, pending the
20 outcome of the current round of sampling and testing
21 and maybe even some additional sampling and testing
22 later in the year, to take the material that is in the
23 channel that is immediately adjacent to Morris Cove
24 and put it into the Morris Cove borrow pit, bring that
25 pit back up to the elevation of the surrounding area

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1 so that it's then available to the shellfish industry
2 or whoever else wants to use it.

3 You will be given the opportunity to

4 view all of those test results and the opinions of
5 those agencies and comment on it. Robert Pimer, and
6 next up after Robert will be it looks like Joseph
7 Gilbert.

8 MR. ROBERT PIMER: Yeah, my name is
9 Bob Pimer. I promise not to talk as long as my father
10 did. I'd just like to give a little brief history,
11 because my main concern is the West River. I'm the
12 senior trustee for City Point Yacht Club. I've been
13 an officer there on and off for the last 20 something
14 years, and I won't go into relating most of the things
15 my dad said.

16 The river does need to get back to
17 12 feet. We do allow the New Haven -- I mean West
18 Haven's fireboat, which will be coming this spring, to
19 use our facility for zero dollars, the West Haven
20 Police Department. It's also right now that New Haven
21 was good enough to build another fireboat. Our
22 channel's the only access to protect the Amtrak
23 railroad bridge north of 95.

24 So I would love for you guys to
25 include the West River somehow. Maybe it won't get

1 done in 2023 here, but if it could be at that time
2 period, I think it's very important like for the

3 Amtrak bridge and the safety of those folks. God
4 forbid you get a fire there. It's the only access.
5 There's no road access to get there.

6 So I am here for City Point Yacht
7 Club, and I'm not sure if there's anybody here from
8 Pequonnock or West Haven, but everything my dad said
9 about Sandy Point is very true. We need that jetty
10 point. I commend you guys. I think the borrow pit, I
11 think the rock on the outside of the west wall, all
12 the areas you mentioned tonight are great avenues for
13 putting your material and not just sending it offshore
14 at a big expense to the government or ourselves.

15 I would like to give just a little
16 brief history just so people don't think I'm just some
17 officer from a yacht club. I'm a 30-year tugboat
18 captain, and I come from the days of my family running
19 pilot boats, wooden pilot boats, and I've actually
20 worked with the New Haven/Bridgeport pilots when they
21 would back ships into New Haven terminal un-tug
22 assisted.

23 We've come a long way, and the
24 widening of that channel out by the main wall, that's
25 a godsend. If you got to move the cable, you got to

1 move the cable. I've worked with Northeast pilots,
2 Sandy Hook pilots. I've dove and done research with

3 Yale, Southern Connecticut, the Army Corps of
4 Engineers. I put four years in the U.S. Coast Guard.
5 I'm not shooting off the hip. I think you did a
6 fantastic presentation. Thank you.

7 MR. HABEL: Okay, thank you. And
8 before we have the next speaker come up, which is
9 Anstress Farwell --

10 MS. FARWELL: I'm going to pass.

11 MR. HABEL: You're going to pass,
12 okay. Ned Taylor. Okay, you'll be next, but I do
13 want to talk about West River a little bit. West
14 River is an authorized federal navigation project. It
15 has a 12-foot entrance channel that goes partly up the
16 river and then a 6-foot channel that used to go even
17 farther up the river before Congress de-authorized the
18 upper end.

19 I understand that West Haven is
20 working with our navigation maintenance group, Eddie
21 O'Donnell and his people, to try to get the West River
22 studied and funded for maintenance dredging. If the
23 City wants to look beyond the depths that are
24 currently provided in the Congressional authorization,
25 that's a whole different process, and I'd be happy to

1 talk to you after the meeting about how to go about

2 doing that. Okay, Mr. Taylor.

3 MR. TAYLOR: My name is Ned Taylor,
4 and I've lived here in Morris Cove for about the same
5 length of time as you've been the harbormaster, okay,
6 and the reason I'm here is I'm worried about the
7 material.

8 Number 1, I'm all for doing this
9 work on the channel. We need business in New Haven.
10 Boy, we need something to set off the taxes. I hope we
11 do something. The reason I'm here about it is because
12 the material. I was here for the '55 dredging.
13 That's the one with all the gray clay that's in back
14 of the airport, which is East Shore Park, and I'm also
15 the president of the Fort Nathan Hale Restoration
16 Group, and every time we dig a hole for a bench post,
17 we run right into it.

18 Second was the one where they took
19 the sand and everything, put it over and built IKEA,
20 so forth and so forth, and then somebody from the
21 Engineering Department had a bright idea of putting
22 the excess sand all along the rock underneath the
23 cliffs and everything else.

24 Today I defy you to find one grain.
25 It got all sucked up, and then it goes around the

55

1 corner and comes into our fort. I'm losing my moat. So

2 if you have an extra little bit, dig out my moat, if
3 you will.

4 But the biggest thing I'm worried
5 about is pollution. The entire Morris Cove/West Haven
6 area is surrounded by signs that say don't take the
7 shellfish. It's polluted. Don't take it. When I was
8 growing up, we used to clam the hell out of it. You
9 name it, blue shell crabs, everything else, and we
10 don't have it today. Now the next thing the fishermen
11 are telling me at the fort is the sandworms are gone.
12 They've died or they're just plain gone.

13 So the pollution part is wherever
14 you're going to put this material, I'm not too happy
15 about putting it in Morris Cove, because I don't know
16 what's in it. So when you do your core samples or
17 whatever, I'd like to see the material.

18 And the last thing is when you're
19 looking around on the bottom, I have three cannons
20 that are missing from the fort. If you find three,
21 they're ours. 1759 they went in, so -- also the
22 biggest thing is we stick out the closest to the
23 channel, so anything goes by, people love to come to
24 the fort and say they're almost onboard ship. That
25 ship is almost within reach, so I'd like to see the

1 channel done and so forth.

2 Yes, the big thing is pollution. I
3 don't want to see that happen, okay, and I can't tell
4 you the fish and what have you that are missing, but
5 whatever. I hate to say the last flat fish I caught
6 tasted like Mobil 1, but I know that's not you. Thank
7 you.

8 MR. HABEL: Thank you. The next
9 speaker is Laura Chan. She left, okay. Martin Torres
10 Quintero, and after Martin will be Laura Moore.

11 MR. TORRES QUINTERO: Yeah,
12 greetings to everybody. I'm Martin Torres Quintero,
13 and I'm the outdoor event coordinator for the City of
14 New Haven, so I work for the City, and I have a list
15 of comments and questions, but I'm just going to be
16 brief, and I'll just ask some questions.

17 We run, in the City of New Haven,
18 one of the largest recreational boating programs, so I
19 would like to know if you have taken into
20 consideration or will take into consideration the
21 impact that this probably will have on the canoeing,
22 paddleboard and sailing programs that we run at some
23 parks that will be affected by this. Those parks are
24 Lighthouse Point Park, East Shore Park, and Criscuolo
25 Park.

1 I would also like you to take into
2 consideration the fact that we're about to finish the
3 boathouse on Long Wharf, so that is supposed to be
4 now -- once it's finished it's going to be one of the
5 largest human powerboating facilities in the state.
6 So I noticed that on the widening of the channel,
7 that's basically going to some of the areas we are
8 currently expanding our boating programs, so that's
9 one I would like to take into consideration.

10 (2) I would also like to know what
11 the timeline is for the project, because obviously
12 this is going to impact some of the wildlife that had
13 moved to New Haven Harbor, particularly sensitive
14 migratory birds. As you may know, we have now bald
15 eagles that are nesting nearby, and we have some other
16 species such as snowy owls that -- and it's just a
17 matter of like -- I just want to take into
18 consideration when the sensitive times for these guys
19 are.

20 And also obviously if I could have a
21 request to have better delineation of the channel, to
22 also let the recreational boaters know what to do,
23 because obviously, as you may know, paddle board and
24 kayaking have become the No. 1 activity in the Greater
25 New Haven waterways. So we have a lot of people that

1 go there and recreate, and obviously a paddleboard
2 and a kayak are not going to mix well with a tugboat
3 and a barge or an oil tanker.

4 So that's -- those are the ones that
5 I have, and I'll just be more than happy to pass this
6 to somebody. I have this, thank you.

7 MR. HABEL: Thank you, Martin. We'd
8 be happy to take into consideration whatever
9 information you provide, and if you give your contact
10 information to Barbara.

11 MR. TORRES QUINTERO: Yeah, it's
12 there with my e-mail.

13 MR. HABEL: She would be happy to
14 talk to you.

15 MR. TORRES QUINTERO: All right,
16 thank you.

17 MR. HABEL: Okay. Laura Moore, and
18 next would be Julia Merk.

19 MS. MOORE: So I'm Laura Moore. I'm
20 just a neighbor here, not representing anybody but
21 myself. However, I do go out and swim in the harbor.
22 My family does, we kayak, so the biggest concern is
23 pollution. What I wanted to do was actually synopsise
24 a little bit and see if I understand what you
25 presented. So at this time you do not have the

1 results of chemical or biological testing; is that
2 correct?

3 MR. RANDALL: We just received them
4 prior to Christmas break. We don't have them here
5 today, yes.

6 MS. MOORE: So what's the plan for
7 presenting that? I know this is going to go on for
8 another year and a half, so there's going to be an
9 additional meeting in six months? Three months?
10 It'll be on your Web site? How will we get that
11 information?

12 MR. HABEL: That information will be
13 made available this spring with the publication of the
14 draft report.

15 MS. MOORE: Okay. And that's posted
16 on your Web site?

17 MR. HABEL: That'll also be posted
18 on our Web site, yes, and it'll be -- that will be
19 done before the public hearings.

20 MS. MOORE: So now you talked a lot
21 about the sand and the rock and what your plans were
22 for those, and then there was this huge volume of silt
23 and clay, and I didn't hear any talk about what the
24 plan for that was. I mean, what -- I assume that's
25 sort of unsuitable for any kind of like --

1 MR. RANDALL: No, no, no, no,
2 definitely not. The silt and clays are, especially
3 the glacial material, would be suitable for the marsh
4 creation at Sandy Point. We would basically construct
5 a containment structure on the outside and backfill it
6 so it could be used for marsh sediments.

7 Central Long Island Sound Disposal
8 Site and the remediation of those PRE-NEPA disposal
9 that are out there and then the use of the Morris Cove
10 borrow pit.

11 MS. MOORE: So when you dump stuff
12 in the borrow pit, is it just the heaviness of the
13 material that takes it into that pit? Like how does
14 it get there?

15 MR. RANDALL: Yeah, so silt and clay
16 -- the best explanation I've ever heard of it is: the
17 diameter of a silt and clay particle is kind of
18 similar to like cooking flour, right, that you use in
19 the kitchen. So you would think if you just throw it
20 in the water, it would go everywhere.

21 But if you took that same flour and
22 add some water to it, right, you get a ball of dough.
23 So when we dredge it up, it's basically been
24 compressed over time, and it has water within it, so
25 it kind of acts like a giant solid, just kind of drops

1 down to the bottom.

2 I mean, there is some resuspension
3 that happens, but the Corps spent years and decades
4 modeling the effects of when it goes down and what
5 happens to that material. So the results of the
6 chemistry and all those tests that I talked about
7 basically get put into models, and that tells us
8 whether it's suitable to be done like that, to be
9 disposed of like that, or whether it's not.

10 So that whole process is
11 ongoing right now, and that will all be
12 presented and laid out in a draft report.

13 MS. MOORE: Okay. So once we know
14 what's in it --

15 MR. RANDALL: Absolutely, yeah,
16 yeah.

17 MS. MOORE: That'll be much easier to
18 understand like, oh, it's going to end up on the
19 beach, and it's okay, it's not okay, that kind of
20 thing.

21 MR. RANDALL: Okay, exactly.

22 MS. MOORE: That's all of my
23 questions. Thank you.

24 MS MERK: Hi. I'm Julia Merk. I've
25 lived in the cove for about four years now. I think

1 most of the questions and comments that I had have
2 been addressed, but I guess I don't expect an answer
3 to this question, but hypothetically would you support
4 this project if it was happening in your backyard, in
5 the water that you swim in, and your family plays in
6 and so just --

7 MR. RANDALL: Yeah, absolutely.

8 MS. MERK: You guys -- we know how
9 we all feel about it, but --

10 MS. SHEIFFELE: I live in Worchester
11 Square. I wish I lived on the water, but --

12 MS. MERK: So you would feel
13 comfortable taking your kids in the water and --

14 MR. RANDALL: As a matter of fact,
15 my parents still live in --

16 MS. MERK: I'm not asking about you.

17 MR. RANDALL: So we come down here
18 quite often, and we go out fishing in New Haven and
19 swim down there.

20 MS. MERK: Do you eat the fish?

21 MR. RANDALL: What's that?

22 MS. MERK: Do you eat the fish?

23 MR. RANDALL: Absolutely.

24 MS. MERK: All right. And others,

25 do you all live around here or --

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1 MR. HABEL: No, we don't.

2 MS. MERK: Would you feel
3 comfortable going into this water while this is going
4 on?

5 MR. HABEL: I've been doing this
6 work for 39 years now. If I wasn't comfortable with
7 it, I wouldn't be doing it.

8 MS. MERK: All right. That was --
9 thanks.

10 MR. HABEL: Okay. Next is Chris
11 Olier or --

12 MR. OZYCK: Ozyck.

13 MR. HABEL: Ozyck. Sorry about
14 that, Chris.

15 MR. OZYCK: Chris Ozyck. I live at
16 603 Quinnipiac Avenue. So I was struck on this
17 presentation, I was sitting up front, I was happy,
18 because when the presentation showed the core
19 samplings for the zero to five foot, it was described
20 as silty clay, nonplasticky, and I don't know if you
21 caught it, it also said faint odor of petroleum, and
22 so that is I think a concern that a lot of people will
23 have here as to where that material is going.

24 I also noticed on the slides that

25 there was a structural upland deposition. It was the

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1 last item on how you would dispose of this material.

2 MS. BLUMERIS: Right.

3 MR. OZYCK: And so my question was
4 those two things I think are things that I've heard
5 from a number of people, that they're very concerned
6 about where those type of materials would be placed,
7 in what communities, and how they would be handled.

8 You know, it was interesting. The
9 long-time fisherman/tugboat operator, you know, he's
10 eaten a lot of fish in his day, and he said recently
11 they've tasted like petroleum. So it's not hard to
12 connect the dots as to where that petroleum product is
13 coming from.

14 And one of my concerns has been it's
15 great to have economic vitality, widen the channel so
16 we can get more ships in here. I'm not sure how much
17 that benefits the City of New Haven. It may benefit
18 the State of Connecticut. It may benefit the
19 communities north of us such as New York,
20 Massachusetts and even Vermont.

21 They're looking at making a rail
22 connection to get more cargo to go up there, but yet
23 the Port Authority has not lived up to its

24 environmental mandates that were part of its creation,
25 and so there's supposed to be a greenway connection

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1 between this community and downtown, and that has not
2 happened and now they're actually looking at selling a
3 parcel of that land.

4 So you sort of say, hey, you know,
5 this sounds like a great idea, but maybe we should
6 really look at who benefits and who pays the -- bears
7 the burden. So I don't know if you guys have any
8 comments on that.

9 MS. SHEIFFELE: I'd certainly like
10 to have that conversation with you, Chris. We're not
11 selling land. The state's trying to take it.

12 MS. OZYCK: Okay. That's not what
13 your minutes show, but that's fine.

14 MR. HABEL: Chris, in terms of
15 looking at upland placement for some of the material,
16 originally when we started this study, we had a whole
17 list of things. We knew what we had done back in the
18 '50s.

19 As somebody mentioned, the airport
20 and the park and the City had a proposal to do some
21 shorefront resilience fill along the downtown
22 waterfront. But after we got a look at the nature of
23 the dredge material and that it wasn't really

24 structural material, those came off the table.

25 MR. OZYCK: Okay. So are you

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1 committing that none of the dredgings will end up
2 being mixed with concrete and used in an upland cap?

3 MR. HABEL: The Corps has no plans
4 for that, no.

5 MR. OZYCK: Okay. And so what will
6 happen to the petroleum-smelling material from one to
7 five feet in the channel?

8 MR. HABEL: If the material passes
9 all of the tests to EPA's satisfaction and DEEP's
10 satisfaction, then our plan is that any material we
11 don't use in marsh creation would go out to the
12 Central Long Island Sound site where it would be used
13 as cover material for some of the older disposal
14 mounds from back in the '50s, '60s, and even before
15 material that was put out there, before there was any
16 sampling and testing of that.

17 MR. OZYCK: And should the samples
18 not (?) meet those criteria, where will that material go?

19 MR. HABEL: We don't know. We would
20 have to come up with a plan to contain those
21 materials.

22 MR. OZYCK: Is there a practice of

23 one solution to pollution is dilution, of diluting the
24 polluted material enough so that it does meet that
25 criteria, or will you keep it as one element and not

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1 mix it with other materials?

2 MR. HABEL: Well, that's one way of
3 putting material upland and satisfying the state's
4 requirements. I don't believe EPA would allow you to
5 undertake that practice to make it suitable for open
6 water placement.

7 MR. OZYCK: Okay. Thank you.

8 MR. HABEL: Okay. Next is Frank
9 Cochran, and after him Steven Ortiz.

10 MR. COCHRAN: Hi. My name is Frank
11 Cochran. I live at 433 Edgewood Avenue in New Haven.
12 I'm here this evening primarily to just make contact
13 on behalf of the West River Watershed Coalition, which
14 is a group of a very large number of organizations
15 including five cities, two of which are New Haven, West
16 Haven, and we are undertaking all kinds of studies and
17 projects around the West River, so I'm very interested
18 in the maintenance dredging prospect that was
19 mentioned earlier, but I also want to be in contact
20 here.

21 There are other resources. There
22 are also oyster beds in the -- where the West River

23 empties into the harbor, and I wanted to make one
24 other point. I don't guess there's anybody from the
25 City of West Haven here tonight.

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1 You may want to have a similar
2 meeting in West Haven, because its Harbor Commission
3 has recently adopted a new plan, and there are some
4 facilities in West Haven near the mouth of the West
5 River but in the harbor, which, you know, might be
6 affected by this or might be added to the project
7 even.

8 So I'd like to just leave a brochure
9 for the Watershed Commission and my card for future
10 communications purposes.

11 MR. RANDALL: Thank you.

12 MR. COCHRAN: And I think most of
13 the other thoughts that I have had really have been --
14 would be echoing things people have already said. I
15 would be very interested in looking at those sampling
16 results when they do become available, obviously.

17 MR. HABEL: Okay. Thank you, Frank.

18 MR. MICHAEL PIMER: I'm here
19 representing the Harbor Management Commission from the
20 City of West Haven. That's what I wrote down. West
21 Haven is well aware of it.

22 MR. HABEL: Steven.

23 MR. ORTIZ: Hi, Steven Ortiz, a
24 life-long resident of the City of New Haven. Just a
25 couple questions. Was this meeting a mandatory

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1 scheduled meeting?

2 MR. HABEL: No, it's not.

3 MR. ORTIZ: So I feel like the only
4 unanswered question is the results of the core
5 testing. I felt like maybe you could have postponed
6 the meeting till you had that, because not everybody's
7 going to have the same amount of time to come to all
8 the meetings.

9 Having said that, is there going to
10 be a set date where you release all those actual
11 meetings, because I think primarily the biggest
12 concern is the ecological effect with the shellfish
13 and the fishing and the birds and every other animal
14 that revolves around the shore.

15 So I don't know if you can answer
16 that question now, but will we have a date where we
17 can sit here and listen to those results and the
18 action plan to deal with those results?

19 MR. HABEL: Yes, there will be. We
20 don't have a date yet. We have one checkpoint to get
21 by with D.C., and then we've got to begin preparing

22 the draft document that will go to the public, and as
23 Barbara and I said earlier, sometime this spring that
24 will be published. It will be made available through
25 our Web site.

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1 We'll give notice to the various
2 neighborhood groups in the City to try to spread the
3 word on that, and once that's gone out, there is a
4 public comment period that's 30 to 45 days. In the
5 middle of that period we would have one or more public
6 hearings.

7 MR. ORTIZ: Okay, all right, thank
8 you.

9 MR. HABEL: John Cox? Linda Pinsky.

10 MS. PINSKY: I've been around for
11 the first block with the bridge dredging issue, and
12 I'm suspicious that you might be trying to use this as
13 an issue to still put the bridge dredgings in there,
14 in our pit.

15 I'm also suspicious that our
16 neighborhood has a high cancer cluster, and I don't
17 want to see anything that goes into our neighborhood
18 to be contaminated.

19 I also don't like that we are being
20 called to a meeting with only a short notice, and that

21 more people could not have been coming because of
22 opportunity. I also don't trust the DEP results, and
23 I would want independent results as well, because I'm
24 suspicious of the DEP results, because they have shown
25 very lack of concern over what goes into the water

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1 here.

2 I think you guys should just leave
3 our pit alone. Just leave it alone. Move on. The
4 odor from the harbor as you drive by is usually pretty
5 horrendous. I don't want that permeating our little
6 cove.

7 Connecticut has become the fourth
8 state in the country of people leaving. In
9 Connecticut more people are leaving than coming.
10 We're a little beach area in New Haven. The only
11 little jewel of Connecticut, as the independent paper
12 once said, and I don't want to see it contaminated. I
13 don't want to see it messed with. I want to see it
14 protected. It deserves to be protected.

15 It's got a long history. It's got a
16 long history, and it's got a long membership of New
17 Haven and it's parallel to very exotic places. It's a
18 lovely cove. It's a lovely place to live, and we
19 don't need anybody contaminating it.

20 We went through studies of stuff

21 that can break through the CAD. Is that what you're
22 talking about forming, a CAD?

23 MR. HABEL: Well, we don't have to
24 form a CAD. There's a pit there already.

25 MS. PINSKY: Right, but you were

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1 going to top it off, right?

2 MR. HABEL: If we were to put dredge
3 material in the cove pit, we would cover it with
4 probably a layer of sand so that it could be used for
5 oysters.

6 MS. PINSKY: Right. We've already
7 proven that stuff can be permeated into the
8 neighborhood with the tides always coming over the
9 wall and going into the underground. That would
10 permeate in people's yards and lawns and grass, and
11 people would be eating stuff that they've grown, the
12 vegetables that are touching the stuff and putting it
13 in their face and getting contaminated.

14 I'm a nurse. I know this, and I
15 know a lot of people are sickened. Stop polluting it.
16 Stop putting these ideas in it. Move on. Find
17 somewhere else. We don't need it, and as for the
18 traffic, we don't need that either. You have other
19 harbors that are larger than these boats can go to.

20 It makes me suspicious as to why you're picking on New
21 Haven again.

22 New Haven's not -- it isn't a
23 beautiful place. We don't need more boats coming in
24 here either. We need it to be a quiet, sleepy,
25 beautiful town that can make money by tourists or by

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1 ingenuity, by tech. There are a lot of things that we
2 have smart people to do things. We don't need more
3 boats coming in here polluting, throwing bottles into
4 the water, throwing garbage. It always washes up on my
5 beach.

6 MR. HABEL: That's the end of the
7 people who had signed up to speak. Is there anyone
8 else who wishes to say something? Yes, sir, could you
9 come up, please? Please state your name for the
10 stenographer.

11 MR. SCHWARTZ: My name is Ed
12 Schwartz, and I live on Quinnipiac Avenue, and you
13 touched very briefly on what the dredging is going to
14 be in the Quinnipiac River. It's a very marine
15 intensive area, as you well know, including oysters,
16 barge building, etcetera, kayaking, recreational use,
17 and I would appreciate a little better explanation of
18 what you're going to be doing north of the Tomlinson
19 Bridge in the Quinnipiac River and what kind of

20 disruption that's going to have on the recreation and
21 the economy of the Quinnipiac River. Thank you.

22 MR. HABEL: Okay. In answer to your
23 question, the lower Quinnipiac River and Mill River
24 are both parts of the Federal Navigation Project for
25 New Haven. The Mill River has an authorized depth of

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1 12 feet. I believe the Quinnipiac has a split depth
2 of 16 in the lower end and 12 in the upper end.

3 Right now we have no plans to
4 conduct any maintenance dredging or improvement
5 dredging of either of those two waterway segments. We
6 had talked with the Port Authority and the City when
7 we started this study, and they both expressed to us
8 that there was no need for dredging in those areas.

9 MR. SCHWARTZ: Okay, thank you.

10 MR. HABEL: Yes.

11 MS. VISSER: Hello. My name is Rika
12 Visser, and I live in Morris Cove. I think I heard,
13 and I'm not sure if I heard correctly, that the
14 buildings around the harbor, the guarding structures,
15 would have to be updated, but it's not part of this
16 project.

17 So my question is how would that
18 play out if the channel is wider and the ships are

19 bigger, but the logistics around that is not in place?
20 How would that work? Whose responsibility will it be
21 to make sure that that actually connects?

22 MR. HABEL: The project is being
23 built so that the users of the harbor that bring in
24 the bigger ships will either be able to bring in
25 larger ships or will be able to act more efficiently

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1 by getting rid of the practice of offloading cargo out
2 in the Sound.

3 MS. VISSER: Okay.

4 MR. HABEL: All of the terminals
5 have represented to the Corps that with the exception
6 of deepening some of their berth areas, their
7 facilities already have the existing capacity to
8 support those increases in use. So they've told us
9 they don't need any more facilities. They just need to
10 dredge a little bit of their berths, and even if they
11 did need to conduct some improvements, that would be
12 on them to study and permit implement.

13 MS. VISSER: Okay. Just for my
14 education, are those terminals privately owned or
15 owned by the City?

16 MR. HABEL: All of them are
17 privately owned in New Haven.

18 COURT REPORTER: Could you spell

19 your first and last name for me, please?

20 MS. VISSER: My name is Rika,
21 R-I-K-A, and my last name is Visser, V-I-S-S-E-R.

22 MR. HABEL: Thank you. Anyone else?

23 Okay. We've heard your many thoughtful remarks
24 tonight and questions. Thank you very much.

25 Additional written questions and feedback may be

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1 submitted to the Corps either in writing or by e-mail.
2 Certainly any comments you submit to the state or City
3 Port Authority can also get referred to us.

4 We at the Corps and our partners,
5 the New Haven Port Authority and the Connecticut Port
6 Authority, extend our appreciation to all who took the
7 time to involve themselves in this public meeting.

8 I'd like to thank all of you, once
9 again, for taking the time to provide us with your
10 questions, thoughts, and feedback. This concludes
11 this public information hearing. Thank you again.

12 (Whereupon, this public information
13 hearing was concluded at 8:18 p.m.)

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1 CERTIFICATE OF REPORTER

2 I, Jacqueline V. McCauley, a Notary Public
3 duly commissioned and qualified in and for the State
4 of Connecticut, do hereby certify that the NEPA
5 Scoping Session for the New Haven Harbor Improvement
6 Study was taken on January 10, 2018 at 6:30 p.m., and
7 reduced to writing under my supervision; that this
8 hearing is a true record of the testimony given during
9 the hearing.

10 I further certify that I am neither attorney
11 nor counsel for, nor related to, nor employed by any
12 of the parties to the action in which this hearing is
13 taken, and further, that I am not a relative or
14 employee of any attorney or counsel employed by the
15 parties hereto, or financially interested in the
16 action.

17 IN WITNESS WHEREOF, I have hereunto set my hand

18 and affixed my seal this 18th day of January, 2018.

19

20 Jacqueline V. McCauley

21 Notary Public

22

23 My Commission expires: 12/31/2019

24

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A5-Public Review of DIFR/EIS

Comments and Response

#	Received		Organization	Name			Comment	Response
1	Draft DEIS comment period	10/24/2018	Private Citizen	Cort	Sperry	NA	I am 100% in favor.	Thank you for your support of the project.
2	Draft DEIS comment period	10/24/2018	Private Citizen	Cort	Sperry	NA	You should also dredge West Haven harbors, beaches.	New England District's Maintenance Dredging Program is currently testing the material in the West River channel (West Haven, CT) and developing placement alternatives for a maintenance dredging effort.
3	Draft DEIS comment period	10/24/2018	Gateway Terminal	N/A	N/A	Gateway Terminal Management and Staff	Supports project	Thank you for your support of the project.
4	Draft DEIS comment period	10/24/2018	Gateway Terminal	N/A	N/A	Gateway Terminal Management and Staff	Gateway is also strongly in support of straightening out the dog leg turn at the entrance, along with widening the main channel and turning basin which will allow larger Panamax and post Panamax vessels access to the Port of New Haven's terminals. Allowing the channel to be expanded both in width and depth will greatly facilitate the safe maneuvering of inbound and outbound ship traffic.	Thank you for your support of the project.
6	Draft DEIS comment period	10/24/2018	Gateway Terminal	N/A	N/A	Gateway Terminal Management and Staff	Review original permit for Cross Sound Cable and hold owner responsible for its relocation costs to keep navigation project cost down	The USACE granted CSC a permit amendment in 2004 that requires CSC to meet the -48 feet MLLW installation depth, at their cost, when corrective action is required by USACE.
7	Draft DEIS comment period	11/2/2018	City Point Yacht Club	Penna	Art	NA	Concern about depositing fill near Sandy Point to create salt marsh	Material placed in the salt marsh creation area in the vicinity of Sandy Point will be contained with geotubes. No impacts from the proposed project will occur to the West River Channel or the City Point Yacht Club.
8	Draft DEIS comment period	11/2/2018	City Point Yacht Club	Penna	Art	NA	USACE should add additional rock to jetty (at city point yacht club) to make it more visible to boaters	The rock to be removed from New Haven Harbor by blasting will consist of a mix of various sized rocks. The variability in size of rock eliminates the

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								material from being used in an engineered structure such as a jetty or breakwater.
9	Draft DEIS comment period	11/2/2018	Private Citizen	Maddern	Phil	NA	Don't relocate dredge materials to area near existing sandbar - please re-think b/c of water quality and fish health concerns	The placement of dredged material in the area near Sandy Point will create approximately 58 acres of salt marsh. Salt marshes provide critical functions and values to estuarine ecosystems like New Haven Harbor. Best management practices will be used during the salt marsh creation effort to minimize impacts to water quality and fish and wildlife in the harbor. Upon completion of the salt marsh it will provide habitat to many species.
10	Draft DEIS comment period	11/7/2018	Briarpatch Enterprises	Follini	Nancy	President	Our New Haven Lot 568 spans both sides of the Federal Channel and we are concerned that we will permanently lose many acres from shellfish production when they become part of the expanded FNP. We recommend that any shellfish bed owner impacted by the project be compensated for acreage lost due to the Project with acreage in kind from the proposed Shellfish Creation Area, or have their lease fees adjusted accordingly by the CT Bureau of Aquaculture. In addition, the Draft should have maps and tables that accurately list all impacted shellfish beds. While Lot 568 is listed in Table 7-2 of the Draft, it does not appear in the Shellfish Parcel Map in Attachment 2 of Appendix G.	Aquaculture leases in the project area are subject to navigation servitude and no compensation is required by the project. However, Connecticut Bureau of Agriculture will work with lease holders to facilitate use alternative bed use.

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11	Draft DEIS comment period	11/7/2018	Briarpatch Enterprises	Follini	Nancy	President	We have concerns about the filling in of the Morris Cove Borrow Pit that abuts the eastern portion of Lot 568. We have recently cultivated the substrate on the eastern portion of the lease in order to enhance the setting of shellfish on the bed. We are concerned that the filling activities in the Borrow Pit will cover this cultivated area with fine sediment, spoil our cultivation efforts and smother any young shellfish there. In addition, prop wash, scouring and damage from spuds, barges and tugs on Lot 568 are a concern to us because the fill will be transported from the Project area over Lot 568 to the Borrow Pit. We recommend that all transportation of fill to and filling activities in the Borrow Pit be done in a manner that minimizes impacts to the surrounding shellfish beds.	In order to minimize impacts shellfish in the Harbor no work will be done between June 1 to September 30. Best management practices will be used during placement events to minimize suspended sediments being transported away from the disposal location. Also the filling of the Morris Cove borrow pit will create approximately 42 acres of viable shellfish habitat
13	Draft DEIS comment period	11/7/2018	Briarpatch Enterprises	Follini	Nancy	President	Third, the Shellfish Creation Area was not adequately sampled and the sampling equipment used was insufficient to detect all natural resources in the benthic community. The entire Shellfish Creation Area was sampled in only three locations using a small 0.04 square meter grab sampler. This small grab sampler is insufficient in size and does not sample deep enough to detect all organisms in the benthos. Of note, no hard shell clams (<i>Mercenaria mercenaria</i>) were identified in any of the samples despite the area's long history as a productive hard shell clam bed (formerly known as Lot 634). We recommend that the Shellfish Creation Area be sampled again over a larger area and using better equipment in order to determine the total environmental impact of the Shellfish Creation Area on the benthic community, especially the hard shell clam population. Without adequate sampling data the Draft fails to account for impacts to a vast natural resource that would, be buried in 2 feet of sand. We recommend that the clams in the Shellfish Creation Area be removed prior to filling in the area with 434,000 CY of sand to create new oyster habitat in order to mitigate damage to the clam resource there	The benthic sampling that was performed was done to verify existing benthic data from New Haven Harbor. The USACE is aware that hard clam resources may be present in the footprint of the shellfish creation area. Prior to construction hard clam resources will be removed and relocated to adjacent hard clam habitat.

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15	Draft DEIS comment period	11/7/2018	Briarpatch Enterprises	Follini	Nancy	President	DEIS does not note the presence of the lease on Lot 674 in proposed Rock Reef Recreation Area	The Rock Reef creation area has been moved to the northern portion of the West Jetty and out of Lease 674.
16	Draft DEIS comment period	11/7/2018	Briarpatch Enterprises	Follini	Nancy	President	Finally, the Draft does not account for the presence of Lot 674 in the proposed plan for the Rock Reef Creation Area. In March of 2018, Briarpatch signed a lease with the CT Bureau of Aquaculture for the West Haven Shellfish Lot 674. Coincidentally, the proposed Rock Reef Creation area is in the same location as Lot 674, south of the western portion of the West Breakwall. Section 5.2.9 of the Draft is incorrect in noting that there are “no existing shellfish leases in that area”. In addition, the Draft should have maps that accurately list all impacted shellfish beds and Lot 674 does not appear in the Shellfish Parcel Map in Attachment 2 of Appendix G.	In consultation, with CT Bureau of Agriculture, the rock reef has been relocated to avoid Lot 674. No impacts from the proposed project will occur to Lot 674.
18	Draft DEIS comment period	11/8/2018	NA	Peszke	Michael	Captain	Supports project	Thank you for your support of the project.
19	Draft DEIS comment period	11/10/2018	Interports Pilots Agency Inc. Connecticut State Pilots	Jonas	Charlie	Captain	Supports project	Thank you for your support of the project.
20	Draft DEIS comment period	11/10/2018	NA	Toby	Donald	State Pilot	Supports project	Thank you for your support of the project.
21	Draft DEIS comment period	11/11/2018	Connecticut Maritime Coalition	Gash	William	Executive Director	Supports project	Thank you for your support of the project.
22	Draft DEIS comment period	11/11/2018	NA	Mulligan	William	Captain	Supports project	Thank you for your support of the project.
23	Draft DEIS comment period	11/13/2018	New England Shipping Company	Pohorylo	David	President	Supports project	Thank you for your support of the project.
24	Draft DEIS comment period	11/13/2018	US Coast Guard	Andrew	Shannon	Lieutenant	As a cooperating agency, we appreciate your thorough community outreach and encourage this outreach to continue as the project progresses. Please keep my office informed as the projects advances; there will be additional interest from my office regarding the possible relocation of Aids to Navigation, construction time frame, and dredge disposal locations.	USACE will continue to update the USCG on the project's progress and will include USCG in all future construction coordination efforts.
25	Draft DEIS comment period	11/14/2018	Interport Pilots Agency	Occhipinti	Don	Captain	Supports project	Thank you for your support of the project.
26	Draft DEIS comment period	11/14/2018	Blakeslee Arpaia Chapman	Chapman	David	President	Supports project	Thank you for your support of the project.

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27	Draft DEIS comment period	11/14/2018	Gulf Oil Limited Partnership	Baron	Michael	Terminal Manager	Supports project	Thank you for your support of the project.
28	Draft DEIS comment period	11/14/2018	New Haven Cooperative	Bacon	James	President	Supports project	Thank you for your support of the project.
29	Draft DEIS comment period	11/14/2018	New Haven Terminal Inc.	Vasaturo	Michael	Vice President/COO	Supports project	Thank you for your support of the project.
30	Draft DEIS comment period	11/14/2018	Port Security Services, Inc.	Gogliettino	Ralph	President	Supports project	Thank you for your support of the project.
31	Draft DEIS comment period	11/14/2018	Sea Support, Inc.	Gogliettino	Ralph	Principal	Supports project	Thank you for your support of the project.
32	Draft DEIS comment period	11/15/2018	New Haven Port Authority	Goodbody	Katharine	Chairwoman	Supports project	Thank you for your support of the project.
33	Draft DEIS comment period	11/15/2018	The American Waterways Operators	Vahey	Brian	Senior Manager - Atlantic Region	Supports project	Thank you for your support of the project. USACE will continue to engage and inform the stakeholders in New Haven Harbor about project progress. The New Haven Port Authority and the Connecticut Port Authority are feasibility study/project sponsors and are kept in constant contact in regard to project progress.
34	Draft DEIS comment period	11/15/2018	City of New Haven	Piscitelli	Michael	Deputy Economic Development Administrator	Supports project	Thank you for your support of the project.
35	Draft DEIS comment period	11/15/2018	City of New Haven	Piscitelli	Michael	Deputy Economic Development Administrator	The City is pleased to see that the ACOE has conducted a thorough assessment of environmental impacts and identified a cost-effective approach to the deepening of the federal navigation channel and the disposal of dredge material. However, we understand that the Army Corps is still carrying the cost of relocation of the Cross Sound Cable as part of the Total Investment Cost on Table ES-3, as well as on Table ES-4, Table 5-4a, and Table 5-4b. The City respectfully disagrees with the inclusion of the cable as a project cost and recommends that this cost should not be borne against the cost-benefit analysis. Given that the permit for the construction of the cable in 2002 required the cable to be buried to a depth of at least -48 feet MLLW in the Federal channel, the cost of corrective action	The USACE granted CSC a permit amendment 2004 that requires CSC to meet the -48 feet MLLW installation depth, at their cost, when corrective action is required by USACE.

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							should not present an inconvenience or adverse effect to this very important port deepening project.	
36	Draft DEIS comment period	11/15/2018	CT Port Authority	Bates	Scott	Chairman	Supports project	Thank you for your support of the project.
37	Draft DEIS comment period	11/15/2018	CT Port Authority	Bates	Scott	Chairman	The CPA would also like to express our strong support for the removal of the Cross Sound Cable cost from the Benefit Cost Ration analysis (BCR). We believe that revision is essential to the success of the project. The CPA would like this issue resolved at the Agency Decision Milestone meeting being held January 2019. The owner of the cable should be held in compliance of the permit issued to relocate if a deepening is to occur.	The USACE granted CSC a permit amendment 2004 that requires CSC to meet the -48 feet MLLW installation depth, at their cost, when corrective action is required by USACE.
38	Draft DEIS comment period	11/15/2018	Interport/CT State pilots	Meade	Sean	Captain	Supports projectJH35:I35	Thank you for your support of the project.
39	Draft DEIS comment period	11/15/2018	CT Dept of Ag	Carey	DAvid	Director, Bureau Aquaculture and Laboratory	Increasing the depth of the channel from 35 feet to 40 feet: The New Haven Harbor navigational channel intersected a number of shellfish beds when originally designated in 1850. Although these historical franchise and lease beds are still in existence, increasing the depth of the channel is likely to have minimal practical impact to shellfish production, as the channel has been dredged repeatedly in recent years and in likely no longer as suitable for shellfish habitat as it was under pre-dredge conditions.	The USACE agrees with this statement.

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							<p>Expansion of the width of the channel by 50 feet on each side:</p> <p>The project seeks to expand the width of the channel by 50 feet on each side, encompassing an additional 75 acres of commercial shellfish beds. Increasing the width and then reestablishing a 2 to 1 slope may negatively impact acreage at the upper surface of the channel bank, an area that has not been previously disturbed. The Department will continue to work with ACOE and the designated contractor to help ensure minimal impacts to these beds.</p> <p>The Department has several administrative options available in terms of the existing shellfish leases in the project area, parcels 593 and 673. Leases typically have a three-year term with a right of preference to renew unless the Commissioner with cause, ceases to lease such ground for shellfish culture.</p> <p>A commercial shellfish operation had expressed an interest in leasing inactive parcel 593. In consideration of the navigational channel project, the Department has declined this lease request in order to allow the channel widening to proceed without impact. The Department has sought to assist that operation and has issued a new lease in another location at their request. The area described as lease 593 is not currently productive shellfish grounds, and enhancement of more suitable area elsewhere in the project vicinity would have an overall greater benefit to oyster habitat than that currently provided by this area.</p>	
40	Draft DEIS comment period	11/15/2018	CT Dept. of Ag	Carey	David	Director, Bureau Aquaculture and Laboratory		Thank you for your assistance in project coordination.
41	Draft DEIS comment period	11/15/2018	CT Dept. of Ag	Carey	David	Director, Bureau Aquaculture and Laboratory	<p>Breakwater oyster habitat development:</p> <p>The construction of a new oyster habitat area inside the eastern breakwater along the navigational channel turn will utilize native material dredged during the deepening and widening of the channel.</p> <p>By way of correction to the information in the project Environmental Impact Statement (EIS),</p>	<p>USACE agrees with this recommendation and have adjusted the rock reef location.</p>

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							rock removed from former lease 593 should be placed on the north side of the western breakwater in the vicinity of shellfish lease 673, rather than on the south side as described in the EIS.	
42	Draft DEIS comment period	11/15/2018	CT Dept of Ag	Carey	DAvid	Director, Bureau Aquaculture and Laboratory	The construction of the salt marsh on the north side of Sandy Point, West Haven will impact an acreage of ten, comprised of several small shellfish parcels. The Department will work with impacted industry towards a resolution to address these losses as the project moves forward. Sandy Point salt marsh development:	A detailed operational plan will be developed during the design phase of the project and will incorporate plans to minimize impacts to shellfish resources in the vicinity.
43	Draft DEIS comment period	11/15/2018	CT Dept of Ag	Carey	DAvid	Director, Bureau Aquaculture and Laboratory	By way of correction to the information in the project Environmental Impact Statement (EIS), rock removed from former lease 593 should be placed on the north side of the western breakwater in the vicinity of shellfish lease 673, rather than on the south side as described in the EIS.	The Rock Reef creation area has been moved to the northern portion of the West Jetty and out of Lease 674.
	Draft DEIS comment period	11/15/2018	CT Dept of Ag	Carey	David	Director, Bureau Aquaculture and Laboratory	Sandy Point salt marsh development: The construction of the salt marsh on the north side of Sandy Point, West Haven will impact an acreage of ten, comprised of several small shellfish parcels. The Department will work with impacted industry towards a resolution to address these losses as the project moves forward.	Thank you for your assistance in project coordination.
44	Draft DEIS comment period	11/15/2018	EPA	Timmermann	Timothy	Director, Office of Environmental Review	EPA requests the opportunity to consult and coordinate with the USACE and the State of Connecticut Department of Energy and Environmental Protection regarding the relationship between the timing of USACE's General Conformity applicability analysis and the future reclassification of New Haven County. Please contact Mr. John Rogan of EPA 's Air Unit at 617 /918-1645 or rogan.john@epa.gov to discuss project General Conformity issues in greater detail.	Coordination with EPA Region 1 staff (Mr. John Rogan) in January 2019 determined that the 2008 8-hour ozone standard that was in place as of the date of the filing of the Draft EIS (September 28, 2018) was applicable.

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45	Draft DEIS comment period	11/15/2018	EPA	Timmermann	Timothy	Director, Office of Environmental Review	Alternatively, we encourage the USACE to require diesel retrofits whenever practicable. require the use of cleaner fuels, and institute idle reduction measures to minimize emissions from diesel construction equipment. Retrofit technologies may include EPA verified emission control technologies and fuels and CARB-verified emission control technologies.	USACE will consider diesel retrofits when practicable.
46	Draft DEIS comment period	11/15/2018	EPA	Timmermann	Timothy	Director, Office of Environmental Review	EPA requests the opportunity to continue to coordinate with the USACE on the design and implementation of the CAD cell for the unsuitable dredge material. If available, updated information should be provided in the FEIS regarding the CAD cell design, location, and development resulting from this coordination.	USACE has coordinated with EPA Region 1 on the final suitability determination and it has been concluded that all material from the New Haven Harbor Improvement project is suitable for open water placement. A CAD cell will not be required and has been removed from the project recommendation.
49	Draft DEIS comment period	11/15/2018	EPA	Timmermann	Timothy	Director, Office of Environmental Review	EPA appreciates the USA CE commitment to coordinate on the salt marsh creation portion of the project. We recommend that the USA CE coordinate closely with all cooperating agencies and we intend to continue to work with the USA CE on the design of each of the beneficial use projects. Mr. Ed Reiner (617/918-1692 or reiner.ed@epa.gov) will serve as the point of contact for the salt marsh creation work and Ms. Jeannie Brochi (617/918-1536 or brochi.jean(@.epa.gov) will serve as the EPA point of contact for all of the other beneficial use projects.	Thank you for your support of the project.
50	Draft DEIS comment period	11/15/2018	EPA	Timmermann	Timothy	Director, Office of Environmental Review	Recommendation: EPA recommends that the habitat restoration work prioritize the use of sediments from the outer harbor over more contaminated inner harbor sediments.	USACE has coordinated with EPA Region 1 on the final suitability determination and it has been concluded that all material from the New Haven Harbor Improvement project is suitable for open water placement.
52	Draft DEIS comment period	11/15/2018	Morgan Shipping Agencies, Inc.	Gura	James	Vessal Manager	Supports project	Thank you for your support of the project.

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53	Draft DEIS comment period	11/15/2018	City of West Haven, CT, Harbor Management Commission	Pacapelli	Eugene	Chairman	Supports project	Thank you for your support of the project.
54	Draft DEIS comment period	11/15/2018	City of West Haven, CT, Harbor Management Commission	Pacapelli	Eugene	Chairman	<p>The Harbor Management Commission supports the improvement and creation of wetlands in the outer Sandy Point area with the utilization of clean dredge material. We do have concerns about the specific siting of these materials, given its location in close proximity to our current boat launch and limited mooring areas.</p> <p>We seek to both improve the City's boat launching area as well as expand mooring options in the future in this area. Given the City's extensive coastline, it may not be immediately evident of our limited opportunities to do so. While there are multiple acres of open space and miles of sandy beach, much of the area from Sandy Point moving west is unsuitable for both uses. Our primary target area is the north side of Sandy Point to the West River basin. With careful planning and consideration, both the wetlands proposal and the future marine use plans are tenable and harmoniously achievable.</p>	<p>The USACE has been and will continue to coordinate with the City of West Haven in regard to the proposed project.</p>
55	Draft DEIS comment period	11/15/2018	City of West Haven, CT, Harbor Management Commission	Pacapelli	Eugene	Chairman	<p>A second serious consideration is the replacement of our WPCA outfall pipe. Our current pipe is past its life expectancy. It's now undersized for our needs moving forward, has suffered damage during large storms due to its design, and has been the subject of a replacement feasibility study. The current pipe, as well as the planned new one, lie directly inside the boundaries of the dredging project with the outfall terminus being on the west side of the channel bank.</p> <p>We are concerned that the draft Environmental Impact Statement shows no assessment of the potential impact of your proposed dredging project on that outfall pipe. We think this is an oversight. We would like to see both projects demonstrate consideration</p>	<p>The USACE has reviewed the outfall plans and the refined feasibility design provides for a 10 foot off-set form the outfall. We will continue to coordinate with West Haven during the pre-construction and engineering design phase of the project to ensure the project does not impact the outfall and keep West Haven informed of the proposed project schedule.</p>

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				for the other. Ideally, with two very large excavation events, it makes both economic and environmental sense to complete the work either simultaneously or as close as possible to each other.	
56	Draft DEIS comment period	11/16/2018	CT Dept of Energy and Environmental Protection	Riese Frederick	Senior Environmental Analyst
				Winter flounder is the most important fishery species in New Haven Harbor and is dependent on the harbor's habitat for all life stages. To protect this species, the EIS specifies on page 118 that no dredging or materials placement will occur between February 1 and June 30. It is unclear if this commitment supersedes the timeframes given in Appendix H, Draft Essential Fish Habitat Assessment, which contains in Section 4.2 a tiered seasonal restriction of no project activities occurring between February 1 and June 30 for portions of the harbor north of Sandy Point, and no project activities occurring between April 1 and June 30 for areas south of Sandy Point. DEEP Fisheries Division prefers the single February 1 through June 30 seasonal restriction for all of New Haven Harbor.	USACE coordinated with CTDEEP through its Water Quality Certification process to establish the appropriate time of year restrictions to minimize impacts to marine resources in the project area.

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61	Draft DEIS comment period	11/16/2018	CT Dept of Energy and Environmental Protection	Riese Frederick Senior Environmental Analyst	<p>Page 88 of the EIS discusses the need to increase the depth of burial of the Cross Sound Cable to -48' MLL W for those areas where it does not currently meet this requirement, which corresponds to the area of ledge just north of the channel bend. For this approximately 700' segment, the cable is installed at depths as shallow as -41. 5' MLL W. As discussed in the DEEP scoping comments of February 27, 2017, relocation or deeper burial of the cable will require a new Certificate of Permission from the DEEP Land and Water Resources Division. Micheal Grzywinski can be contacted in this regard and can be reached at (860) 424-3674 or at Micheal.grzywinski@ct.gov. Cross Sound Cable is also advised to contact the Connecticut Siting Council to determine what, if any, modifications 'may be necessary to the approval given by the Council for the cable in its Docket 208 decision.</p> <p>Noted.</p>
62	Draft DEIS comment period	11/16/2018	CT Dept of Energy and Environmental Protection	Riese Frederick Senior Environmental Analyst	<p>The shellfish habitat creation area north of the East Breakwater is proposed to be created using the fairly limited volume of suitably sandy material to be dredged as part of the TSP. This volume is estimated to be 351,300 cubic yards for a 40' channel depth, with the area of created shellfish habitat to be twenty-five acres according to page 120 of the EIS. If the volume of suitable sandy substrate should increase in subsequent sediment surveys, expansion of the area of enhanced shellfish habitat should be considered as both a beneficial use for this material and an avenue to compensate for potential losses of shellfish habitat from other elements of the project. Discussions with the Bureau of Aquaculture have indicated that the proposed shellfish habitat creation area could be expanded without encroaching upon any active shellfish lease areas and that the Bureau would support such an expansion.</p> <p>The shellfish habitat enhancement area may be expanded if, during the project's design phase, there are substantial changes in the volume of material that would be appropriate for placement as shellfish habitat.</p>
63	Draft DEIS comment period	11/16/2018	CT Dept of Energy and Environmental Protection	Riese Frederick Senior Environmental Analyst	<p>Coordination needed with DEEP Natural Diversity Data Base.</p> <p>Coordination with DEEP Natural Diversity Data Base was performed.</p>

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64	Draft DEIS comment period	11/16/2018	CT Dept of Energy and Environmental Protection	Riese	Frederick	Senior Environmental Analyst	Fort Hale Park is described on page 34 as being a 20-acre State-owned, City-run park. The vast majority of the once State-owned acreage was turned over to the Coast Guard when the adjacent Coast Guard station was developed. DEEP's residual ownership, which consisted of 0.4 acres of property and the park pier, was transferred to the City of New Haven in 2016. The State has no remaining ownership interest in Fort Hale Parle	EIS has been amended.
65	Draft DEIS comment period	11/16/2018	CT Dept of Energy and Environmental Protection	Riese	Frederick	Senior Environmental Analyst	The goal of eliminating lightering operations for larger or more heavily-laden ships entering the harbor is cited on pages 68, 71, 72 and 92 in the EIS and would certainly be a benefit of the project both in terms of improving efficiency and reducing the risk of any spills. The EIS treats this subject in a purely generic fashion. Is any information available? as to what percentage of inbound ships require lightering and what is the frequency of any spills or other mishaps that occur during such operations?	While USACE Is not aware of any specific spills relating to the lightering operations the navigation improvement project will reduce the risk of spills in the future. USACE does not have a tracking of historic lightering operations in the harbor. Ships that draft greater than 31 feet would be required to lighter or wait for the tide. Information on ship drafts is in the Economics Appendix C of the IFR/EIS.
66	Draft DEIS comment period	11/16/2018	CT Dept of Energy and Environmental Protection	Riese	Frederick	Senior Environmental Analyst	The size of the saltmarsh proposed to be created at Sandy Point may not be precisely determined until permitting and final design. It is noted here that the area is described in several locations in the EIS including pages 93 and 94 as being 70 acres and in other areas, including pages 81, 108 and 119, as being 73 acres	EIS has been amended to reflect correct salt marsh acreage of proposed plan.
67	Draft DEIS comment period	11/16/2018	CT Dept of Energy and Environmental Protection	Riese	Frederick	Senior Environmental Analyst	Discussion on page 59 of the EIS under Historic Context says Yale University was established in Saybrook in 1717 and subsequently moved to New Haven. Yale actually was founded in Saybrook in 1701, American's third oldest institution of higher learning, and moved to New Haven in 1716.	EIS has been amended.

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68	Draft DEIS comment period	11/16/2018	NMFS	Jylkka	Zach	Fisheries Biologist	My one main comment is that you did not consider the presence of migrating and foraging adult shortnose sturgeon, which could be present in the action area from April through November. I can provide some more detail on shortnose if you'd like. We are not prepared to concur with your preliminary NLAA determination, as the EIS does not include a full analysis of the potential effects of the project on listed species.	The presence of migrating and foraging adult shortnose sturgeon have been incorporated into the Final Environmental Impact Statement.
32	Transcript from Public Hearing	10/23/2018	Private Citizen	Pimer	Mike	Mr	Use material from blasting "between the breakwater" to put on the breakwater at Sandy Point to make it more visible to boaters [raise elevation of breakwater]	The material form the blasting is not suitable for placement on the training dike structure.
33	Transcript from Public Hearing	10/23/2018	Private Citizen	Pimer	Mike	Mr	Concern about Sandy Point Marsh creation affecting the West Haven Yacht Club Channel - let public know the extent of the proposed marsh creation	Material placed in the salt marsh creation area in the vicinity of Sandy Point will be contained with geotubes. No impacts from the proposed project will occur to the West River Channel or the West Haven Yacht Club.
34	Transcript from Public Hearing	10/23/2018	Private Citizen	Pimer	Mike	Mr	Dredge West River up to I-95 while doing the outer channel work.	New England District's Maintenance Dredging Program is currently testing the material in the West River channel (West Haven, CT) and developing placement alternatives for a maintenance dredging effort.
35	Transcript from Public Hearing	10/23/2018	Private Citizen	Marazzi	Bill	Mr	Deepen West River channel.	New England District's Maintenance Dredging Program is currently testing the material in the West River channel (West Haven, CT) and developing placement alternatives for a maintenance dredging effort.
36	Transcript from Public Hearing	10/23/2018	Empire Fisheries (Briarpatch Enterprises)	Gilbert	Joe	Mr	Impacts outside of navigation channel are of concern to Empire Fisheries/Briarpatch Enterprises	Noted.

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37	Transcript from Public Hearing	10/23/2018	West River Watershed Coalition and West Haven Restoration Committee	Hebert	Kathy	Ms	There is an old oyster bed on the New Haven side of the West River.	USACE has coordinated with CT Dept. of Agriculture to minimize impacts to all shell fish resources in New Haven Harbor.
38	Transcript from Public Hearing	10/23/2018	West River Watershed Coalition and West Haven Restoration Committee	Hebert	Kathy	Ms	Concern expressed for project impacts on the Sandy Point Bird Sanctuary	USACE has coordinated with the State and Federal resources agencies to ensure that the creation of salt marsh at Sandy Point will not impact ecological resources at Sandy Point.
40	Transcript from Public Hearing	10/23/2018	West Haven Harbor Management Commission	Flynn	Dennis	Mr	The whole federal navigation channel should be dredged in this project because it would be more "cost effective while you've got everything [dredging equipment] there"	New England District's Maintenance Dredging Program is currently testing the material in the West River channel (West Haven, CT) and developing placement alternatives for a maintenance dredging effort.
41	Transcript from Public Hearing	10/23/2018	West Haven Harbor Management Commission	Flynn	Dennis	Mr	Question: how far away are you going to be from an outflow pipe.	The USACE has reviewed the outfall plans and the refined feasibility design provides for a 10 foot off-set from the outfall. We will continue to coordinated with West Haven during the pre-construction and engineering design phase of the project to ensure the project does not impact the outfall.
42	Transcript from Public Hearing	10/24/2018	Office of Congresswoman Rosa DeLauro	Dodge	Allison	Outreach Coordinator	Supports project	Thank you for your support of the project.
43	Transcript from Public Hearing	10/24/2018	Office of Congresswoman Rosa DeLauro	Dodge	Allison	Outreach Coordinator	Comcerend with the inclusion of the repositioning of the Cross-Sound Cable and the total project cost.	The USACE granted CSC a permit amendment 2004 that requires CSC to meet the -48 feet MLLW installation depth, at their cost, when corrective action is required by USACE.
44	Transcript from Public Hearing	10/24/2018	Private Citizen	Cox	John	Mr	Supports plan for Morris Cover Borrow Pit	Thank you for your support of the project.

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45	Transcript from Public Hearing	10/24/2018	NA	Jonas	Charlie	Mr	Supports project	Thank you for your support of the project.
47	Transcript from Public Hearing	10/24/2018	Private Citizen	Blau	Renate	Ms	Supports plan for Morris Cover Borrow Pit	Thank you for your support of the project.
48	Transcript from Public Hearing	10/24/2018	Private Citizen	Hilts	John	Mr	The study needs more alternatives.	A range of dredging and placement alternatives were evaluated. The proposed project will use 45% of the material beneficially in the harbor to create habitat for ecological resources.
49	Transcript from Public Hearing	10/24/2018	Private Citizen	Hilts	John	Mr	Project benefits handful of private companies in harbor and wants a commitment from those companies to stay in New Haven so that the befits in trasit are realized as opposed to not being realized.	The Connecticut Port Authority and the New Haven Port Authority are sponsors to the project and are working to maintain the economic viability of the Harbor.
50	Transcript from Public Hearing	10/24/2018	Private Citizen	Gilbertson	Terry	Mr	Cross Sound Cable Owner should bear the cost of relocating it through enforcement of the 2002 permit	The USACE granted CSC a permit amendment 2004 that requires CSC to meet the -48 feet MLLW installation depth, at their cost, when corrective action is required by USACE.

**A6- Letters Receive on DIFR/EIS, Review
September 23, 2018 to November 15, 2018**

Blumeris, Barbara R CIV USARMY CENAE (USA)

From: Cort Sperry <cms0313@yahoo.com>
Sent: Wednesday, October 24, 2018 5:40 PM
To: CENAE-PD, NAE
Subject: [Non-DoD Source] New haven dredging

I am 100% in favor. You should also dredge West Haven harbors, beaches. Go Army Corp of engineers.

Sent from Yahoo Mail for iPad <Blocked<https://overview.mail.yahoo.com/?src=iOS>>



POST OFFICE BOX 9731
NEW HAVEN, CONNECTICUT 06536
(203) 467-1997
FAX (203) 469-5956

GATEWAY TERMINAL

October 24, 2018

U.S. Army Corps of Engineers, New England District
Attention Mr. Todd Randall
696 Virginia Road
Concord, Ma 01742-2751
NAE-PD-PN@usace.army.mil

RE: New Haven Harbor Navigation Improvement Project.

Gateway Terminal is writing this letter in support of the New Haven Harbor Navigational Improvement Project consisting of deepening the main ship channel, maneuvering area, and turning basin to 40 ft. MLLW or deeper. Gateway is also strongly in support of straightening out the dog leg turn at the entrance, along with widening the main channel and turning basin which will allow larger Panamax and post Panamax vessels access to the Port of New Haven's terminals. Allowing the channel to be expanded both in width and depth will greatly facilitate the safe maneuvering of inbound and outbound ship traffic.

Gateway Terminal is an established, fully licensed and bonded deep-water marine terminal operating in the Port of New Haven since 1985. Gateway Terminal handles import and export dry bulk, liquid bulk and break-bulk cargoes arriving and departing by vessels. Gateway also operates a fleet of tugs and barges that operate out of the Port of New Haven.

The implementation of this project is vital to the growth and success of our facility, the Port of New Haven and the State of Connecticut. As ship owners and charterers continue to push for larger bulkers and tankers capable of handling more cargo on a single voyage, the port of New Haven will risk obsolescence if the Navigation Improvement Project is not undertaken, putting at risk the jobs of numerous people whose livelihood is directly dependent on the shipping industry in New Haven. Without the needed improvements to the federal channel, the State stands to lose millions in revenue to neighboring states and risks higher taxes with increased costs of simple commodities such as deicing salts.

Allowing larger vessels to berth on arrival, without the need to lighter or wait for tide, would help attract or win back ship owners that otherwise would not and have not called the Port of New Haven because of delays. In our industry a twelve hour delay could very easily equate to tens of thousands of dollars in lost revenue to the ship owners. The ability to attract larger vessels to the Port of New Haven would create more jobs due to increased vessel traffic and result in

lower freight rates for vessel owners, which would reduce the overall cost of the cargoes.

The port of New Haven is uniquely situated between New York City and Boston, making us extremely attractive to customers that send cargo both east and west. Gateway Terminal has easy access to major highways and rail systems, which provides us the ability to ship cargo throughout the continental US and into Canada with relative ease and efficiency. Should New Haven Harbor fall behind the curve due to our inability to continue to bring in larger ship traffic, we will lose our ability to keep up with modern shipping, forcing us to rely solely on less economic older ships that are constantly being phased out. Larger ships equal lower cost for ship owners, operators, importers and exporters. With lower cargo costs, more cargo will come, bolstering the entire economy of New Haven, Connecticut, New England and beyond.

Gateway Terminal does also respectfully request that the Army Corps of Engineers review the original permit for the Cross Sound Cable that will need to be relocated for the improvement of the channel. It is our understanding that in accordance with the original permit for the cable, the owner of the cable is solely responsible for all costs associated with bringing the cable down to a depth of 48'. Holding the owner responsible for this cost will effectively cut the cost of this project in half, greatly improving the cost to benefit ratio.

Please accept this letter as a show of support for very important project.

Sincerely,

Gateway Management and staff.

From: [Art](#)
To: [Blumeris, Barbara R CIV USARMY CENAE \(USA\)](#)
Subject: [Non-DoD Source] New Haven Harbor project
Date: Friday, November 2, 2018 6:27:21 PM

Hi Barbara, I am concerned of what I learned coming of the West Haven meeting at Bailey Junior Hight. The mention of dropping aces of fill off the sandbar can serious impact West River and our City Point Yacht club with the in coming tide pushing the silt up river.

Second, why isn't the Army Corp, looking to add additional rock to our Jetty. At hight tide you cannot see the top of the rocks. Even a high low tide they are barely seen. A dangerous situation for boaters unaware of the area. They may not own up but a Coast Guard vessel hit it recently and they are based in the harbor

Art Penna Jr
City Point Yacht Club

Sent from my iPhone
Art

From: [phil maddern](#)
To: [Blumeris, Barbara R CIV USARMY CENAE \(USA\)](#)
Subject: [Non-DoD Source] Dumping of dredge material
Date: Friday, November 2, 2018 6:06:50 PM

From what Ive read to make a decision to relocate the dredge materials to an area near the existing sandbar is one crazy idea. Not sure who came up with this idea but I believe it needs to rethought please I beg you the water around the sound is getting cleaner every year and more fish are showing up please do not upset the area thank you the Madderns .

Sent from my iPad



Briarpatch Enterprises, Inc.

322 New Haven Avenue
Milford, CT 06460

Phone: (203) 876-8923

Fax: (203) 877-8263

November 7, 2018

TO: Mr. Todd Randall, U.S. Army Corps of Engineers, New England District

FROM: Nancy Follini, President, Briarpatch Enterprises, Inc.

RE: Comments on the New Haven Harbor Navigation Improvement Project Draft
Integrated Feasibility Report and Environmental Impact Statement

Dear Mr. Todd Randall,

Briarpatch Enterprises, Inc. (Briarpatch) is a shellfish company that holds shellfish leases in the area impacted by the New Haven Harbor Navigation Improvement Project (Project) and the proposed Rock Reef Creation Area. As such, we have some comments regarding the Project's Draft Integrated Feasibility Report and Environmental Impact Statement (Draft).

For one, our New Haven Lot 568 spans both sides of the Federal Channel and we are concerned that we will permanently lose many acres from shellfish production when they become part of the expanded FNP. We recommend that any shellfish bed owner impacted by the project be compensated for acreage lost due to the Project with acreage in kind from the proposed Shellfish Creation Area, or have their lease fees adjusted accordingly by the CT Bureau of Aquaculture. In addition, the Draft should have maps and tables that accurately list all impacted shellfish beds. While Lot 568 is listed in Table 7-2 of the Draft, it does not appear in the Shellfish Parcel Map in Attachment 2 of Appendix G.

Second, we have concerns about the filling in of the Morris Cove Borrow Pit that abuts the eastern portion of Lot 568. We have recently cultivated the substrate on the eastern portion of the lease in order to enhance the setting of shellfish on the bed. We are concerned that the filling activities in the Borrow Pit will cover this cultivated area with fine sediment, spoil our cultivation efforts and smother any young shellfish there. In addition, prop wash, scouring and damage from spuds, barges and tugs on Lot 568 are a concern to us because the fill will be transported from the Project area over Lot 568 to the Borrow Pit. We recommend that all transportation of fill to and filling activities in the Borrow Pit be done in a manner that minimizes impacts to the surrounding shellfish beds.

Third, the Shellfish Creation Area was not adequately sampled and the sampling equipment used was insufficient to detect all natural resources in the benthic community. The entire Shellfish Creation Area was sampled in only three locations using a small 0.04 square meter grab sampler. This small grab sampler is insufficient in size and does not sample deep enough to detect all organisms in the benthos. Of note, no hard shell clams (*Mercenaria mercenaria*) were identified in any of the samples despite the area's long history as a productive hard shell clam bed (formerly known as Lot 634). We recommend that the Shellfish Creation Area be sampled again over a larger area and using better equipment in order to determine the total environmental impact of the Shellfish Creation

Area on the benthic community, especially the hard shell clam population. Without adequate sampling data the Draft fails to account for impacts to a vast natural resource that would be buried in 2 feet of sand. We recommend that the clams in the Shellfish Creation Area be removed prior to filling in the area with 434,000 CY of sand to create new oyster habitat in order to mitigate damage to the clam resource there.

Finally, the Draft does not account for the presence of Lot 674 in the proposed plan for the Rock Reef Creation Area. In March of 2018, Briarpatch signed a lease with the CT Bureau of Aquaculture for the West Haven Shellfish Lot 674. Coincidentally, the proposed Rock Reef Creation area is in the same location as Lot 674, south of the western portion of the West Breakwall. Section 5.2.9 of the Draft is incorrect in noting that there are “no existing shellfish leases in that area”. In addition, the Draft should have maps that accurately list all impacted shellfish beds and Lot 674 does not appear in the Shellfish Parcel Map in Attachment 2 of Appendix G.

The disposal of 32,700 cubic yards of rock on Lot 674 would displace many acres of shellfish ground leased by Briarpatch. Once covered in disposed rock, the Rock Reef Creation Area will be inaccessible to shellfish harvest vessels without substantial damage to harvest equipment. We recommend that the Rock Reef Creation Area be relocated to an area where there are no existing shellfish leases.

Sincerely,

Nancy Follini
President
Briarpatch Enterprises, Inc.

CC: David Carey, Director, Connecticut Bureau of Aquaculture
Judi Sheiffele, Executive Director, New Haven Port Authority

To: U.S. Army Corps of Engineers

November 8, 2018

From: Captain Michael A. Peszke

Re: New Haven Harbor Dredge Project

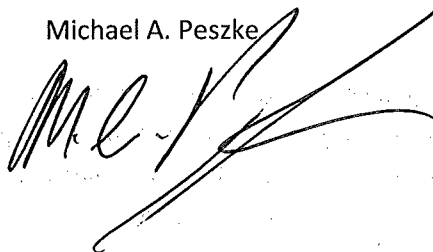
Dear Sir/Mam

My name is Michael A. Peszke and I am a licensed State of Connecticut Marine Pilot. I am writing this letter to urge the U.S.A.C.E. to approve funding and expedite all aspects of New Haven Harbor dredge project. New Haven Harbor is a most vital transportation and economic hub for the State of Connecticut which benefits a much larger area throughout Southern New England by allowing ships to move large volumes of refined petroleum cargo as well as bulk general cargo which eases congestion on our already over used highways. Deepening to 40 feet will assist in keeping the port relevant and competitive with the port of New York and New Jersey as well as Providence and Boston. Further neglecting to maintain the deep water port of New Haven will have long term far reaching effects. The Connecticut River was once a busy inland waterway alternative to Interstate 91 for moving petroleum cargo and it has been neglected to the point of unusable. This has an effect on availability and price of fuel delivered to Central Connecticut. It is imperative that the population of Connecticut as well as Southern New England can rely on New Haven harbor to continue to be a viable deep water port in regards to home heating oil delivery and gasoline as well as salt for our roads in winter time and many other cargoes too numerous to list.

Any and all consideration that you can give this project which allows it to move forward in a timely fashion is greatly appreciated.

Sincerely

Michael A. Peszke

A handwritten signature in black ink, appearing to read 'Michael A. Peszke', with a long, sweeping horizontal stroke extending to the right.

INTERPORT PILOTS AGENCY, INC. CONNECTICUT STATE PILOTS

906 Port Monmouth Road, Port Monmouth, New Jersey 07758-0236
business@interportpilots.net · (732)787-5554

10 November 2018

US Army Corps of Engineers, New England District
Attention: Mr. Todd Randall
696 Virginia Road
Concord, Massachusetts 01742-2751

Re: New Haven Harbor Deepening Project

Dear Mr. Randall:

New Haven Harbor channel depth is 35 ft at MLLW; for harbor transit, the port requirement is 2 ft UKC plus an additional 2 ft for squat thereby reducing the maximum low water transit draft to 31 ft. Maximum high water transit draft is 36 ft and is made on a rising tide about 1 hour before high water; at this time, a strong westerly set from the flood tide runs across the entrance channel; at the jetties, when making the 35 degree course change to starboard, the strong westerly set pushes the ship's stern to port which is compounded by severe bank suction on the ship's port quarter caused by the channel's steep bank in the vicinity of the #7 buoy. Depths inside the edge of the channel in this area are up to 40 ft, depths just outside the channel are about 23 ft-----this steep gradient amplifies bank suction effect.

Ships bound for New Haven with drafts over 36 ft must lighter before entering port. Lightering is done at New Haven Anchorage which is in open, unprotected waters of Long Island Sound approximately 3 to 6 miles offshore. The lightering operations are frequently delayed due to adverse weather conditions. The additional transfer of bulk liquid oil cargoes during lightering reduces the safety factor and drives up the cost of doing business in our port.

The proposed project to deepen and widen the channel resolves the draft, ship handling and LOA restrictions we are currently facing. The proposed 40 ft channel depth will increase the maximum low water draft transit to 36 ft and the maximum high water transits to 42 ft; widening the inner and outer channels, turning basin

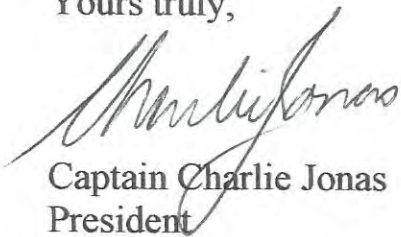
*Pilot Service Since 1959
New York, Long Island Sound, Philadelphia, Baltimore*

and the turn at the jetties will enhance the safety of piloting larger, deeper ships into the port.

The deepening and widening project will make the Port of New Haven, which is the largest port in Connecticut and the second largest port in New England, a safer and more economical destination for the larger, deeper ships.

This project is fully supported by the pilots.

Yours truly,

A handwritten signature in dark ink, appearing to read "Charlie Jonas", written over the printed name.

Captain Charlie Jonas
President

Interport/Connecticut State Pilots

cpjonas@optonline.net

From: [Donald Toby](#)
To: [CENAE-PD_NAE](#)
Subject: [Non-DoD Source] Attention Mr. Todd Randall
Date: Saturday, November 10, 2018 9:37:57 AM

Dear U.S. Army Corps of Engineers,

I am one of the State Licensed Pilots that bring Ships in/out of New Haven. The Channel being dredged to 40ft and widened up to 800ft would make New Haven a much more intriguing port to the shipping industry for importing/exporting cargo. The current depth of the channel of 35ft prevents many of the ships from docking on arrival which makes the customers divert the cargo to another port. An additional benefit to having the channel deepened and widened will make the transit safer for the pilots by reducing the effects of squat and bank suction that we currently deal with now.

I am eager to see what comes next with the study and working with the Army Corps and New Haven Port Authority.

Sincerely,

DJ Toby
Connecticut State Pilot

516-382-4318

CONNECTICUT MARITIME COALITION



11 November 2018

US Army Corps of Engineers, New England District
Attention: Mr. Todd Randall
696 Virginia Road
Concord, Massachusetts 01742-2751

Re: New Haven Harbor Deepening Project

Dear Mr. Randall:

This letter is in support of the New Haven Deepening Project currently under consideration by your District.

The New Haven Harbor channel depth is 35 feet at MLW; for harbor transit, the port requirement is 2 feet Under Keel Clearance plus an additional 2 feet for vessel squat thereby reducing the maximum low water transit draft to 31 feet. Maximum high water transit draft is 36 feet and is made on a rising tide about 1 hour before high water; a strong westerly set from the flood tide runs across the entrance channel; at the jetties, when making the 35 degree course change to starboard, the strong westerly set pushes the vessel's stern to port which is compounded by severe bank suction on the vessel's port quarter caused by the channel's steep bank in the vicinity of the #7 buoy. Depths inside the edge of the channel in this area are up to 40 feet, depths just outside the channel are about 23 feet-----this steep gradient amplifies bank suction effect.

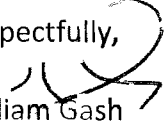
Vessels bound for New Haven with drafts over 36 feet must lighter before entering port. Lightering is done at New Haven Anchorage which is in open, unprotected waters of Long Island Sound approximately 3 to 6 miles offshore. The lightering operations are frequently delayed due to adverse weather conditions. The additional transfer of bulk liquid oil cargoes during lightering reduces the safety factor and drives up the cost of doing business in the Port of New Haven.

The proposed project to deepen and widen the channel resolves the draft, ship handling and LOA restrictions. The proposed 40-foot channel depth will increase the maximum low water draft transit to 36 feet and the maximum high-water transits to 42 feet; widening the inner and outer channels, turning basin and the turn at the jetties will enhance the safety of piloting larger, deeper vessels into the port.

The deepening and widening project will make the Port of New Haven, which is the largest port in Connecticut and the second largest port in New England, a safer and more economical destination for the larger, deeper commercial vessels.

This project is fully supported by the Connecticut Maritime Coalition.

Respectfully,



William Gash
Executive Director

Capt. William R. Mulligan, Jr.

33 Farview Ave.

Old Saybrook, CT 06475

Wmulligan01@snet.net

November 11, 2018

New England District

696 Virginia Road

Concord, Massachusetts 01742

U. S. Army Corps of Engineers

Attention: Todd Randall

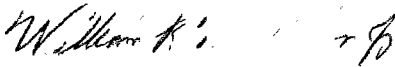
Dear Sir:

I am writing in support of the deepening of the Federal Channel in New Haven harbor to 40 feet.

I am a Connecticut State Pilot and believe that the future of the marine industry in Connecticut depends on the continued upgrading of our waterways.

Please consider authorization of the deepening project of New Haven harbor.

Regards,

A handwritten signature in dark ink, appearing to read "William R. Mulligan, Jr.", followed by a stylized flourish or initial.

Capt. William R. Mulligan, Jr.

New England Shipping Company, Inc.

CORPORATE HEADQUARTERS
359 New Haven Ave. • Milford, CT 06460
Tel: (203) 301-3333 • Fax: (203) 301-3332
email: ops@ne-dshipping.com
www.newenglandshipping.com

US Army Corps of Engineers, New England District
Attention: Mr. Todd Randall
696 Virginia Road
Concord, Massachusetts 01742-2751

November 13, 2018

Re: New Haven Connecticut Harbor Deepening Project

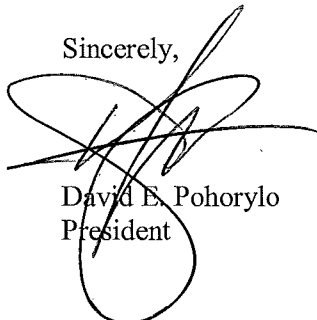
Dear Mr. Randall:

This letter is in support of the New Haven Connecticut Harbor Deepening Project currently under consideration by your District.

The New Haven Harbor channel depth is 35 feet at MLW; for harbor transit, the port requirement is 2 feet Under Keel Clearance plus an additional 2 feet for vessel squat thereby reducing the maximum low water transit draft to 31 feet. Maximum high water transit draft is 36 feet and is made on a rising tide about 1 hour before high water; a strong westerly set from the flood tide runs across the entrance channel; at the jetties, when making the 35 degree course change to starboard, the strong westerly set pushes the vessel's stern to port which is compounded by severe bank suction on the vessel's port quarter caused by the channel's steep bank in the vicinity of the #7 buoy. Depths inside the edge of the channel in this area are up to 40 feet, depths just outside the channel are about 23 feet-----this steep gradient amplifies bank suction effect. Vessels bound for New Haven with drafts over 36 feet must lighter before entering port. Lightering is done at New Haven Anchorage which is in open, unprotected waters of Long Island Sound approximately 3 to 6 miles offshore. The lightering operations are frequently delayed due to adverse weather conditions. The additional transfer of bulk liquid oil cargoes during lightering reduces the safety factor and drives up the cost of doing business in the Port of New Haven.

The proposed project to deepen and widen the channel resolves the draft, ship handling and LOA restrictions. The proposed 40-foot channel depth will increase the maximum low water draft transit to 36 feet and the maximum high-water transits to 42 feet; widening the inner and outer channels, turning basin and the turn at the jetties will enhance the safety of piloting larger, deeper vessels into the port. The deepening and widening project will make the Port of New Haven, which is the largest port in Connecticut and the second largest port in New England, a safer and more economical destination for the larger, deeper commercial vessels.

Sincerely,



David E. Pohorylo
President

U.S. Department of
Homeland Security

United States
Coast Guard



Commander
United States Coast Guard
Sector Long Island Sound

120 Woodward Avenue
New Haven, CT 06512
Phone: (203) 468-4437
Fax: (203) 468-4443

5740
November 13, 2018

Colonel William M. Conde
District Engineer
United States Army Corps of Engineers
New England District
696 Virginia Road
Concord, Massachusetts 01742-2751

Dear Colonel Conde:

I would like to thank you for reaching out to Sector Long Island Sound regarding the New Haven Harbor, Connecticut, Navigation Improvement Project. Continued coordination and discussions between the Army Corps of Engineers and the Coast Guard are vital to maintain safe waterways throughout the United States.

Currently, Sector Long Island Sound has no comments pertaining to the Draft Integrated Feasibility Report and Environmental Impact Statement (D-IFR/EIS), including all enclosed documents mailed to my office and dated on October 10, 2018.

As a cooperating agency, we appreciate your thorough community outreach and encourage this outreach to continue as the project progresses. Please keep my office informed as the projects advances; there will be additional interest from my office regarding the possible relocation of Aids to Navigation, construction time frame, and dredge disposal locations.

We look forward to continued coordination with your office on this and other projects. Please feel free to reach out to myself if you need any additional information or comments from Sector Long Island Sound at Shannon.L.Andrew@uscg.mil or (203) 468-4432.

Sincerely,

A handwritten signature in blue ink, appearing to read "Shannon L. Andrew", followed by the letters "LT".

S. L. ANDREW
Lieutenant, U.S. Coast Guard
Waterways Mgmt Division Chief
Sector Long Island Sound

From: [Randall, Todd A CIV USARMY CENAE \(US\)](#)
To: [Blumeris, Barbara R CIV USARMY CENAE \(USA\)](#)
Cc: [Habel, Mark L CIV USARMY CENAE \(US\)](#)
Subject: FW: [Non-DoD Source] Letter of Support - NH Dredging Project
Date: Wednesday, November 14, 2018 5:44:40 PM

FYI

-----Original Message-----

From: Donald Occhipinti [<mailto:donald.occhipinti@gmail.com>]
Sent: Wednesday, November 14, 2018 4:34 PM
To: Randall, Todd A CIV USARMY CENAE (US) <Todd.A.Randall@usace.army.mil>
Subject: [Non-DoD Source] Letter of Support - NH Dredging Project

Mr. Randall,

My name is Capt. Don Occhipinti and I am a pilot with the Interport Pilots Agency, Inc.

I am writing in support of the dredging project at New Haven Harbor, Connecticut.

Thank you,

Capt. Don Occhipinti
631.235.5200



BLAKESLEE • ARPAIA • CHAPMAN INCORPORATED

200 NORTH BRANFORD ROAD, ROUTE 139 - P.O. BOX 835
BRANFORD, CONNECTICUT 06405-0835
TELEPHONE (203) 488-2500
FAX (203) 488-4538
FAX (203) 488-3997
www.bac-inc.com

November 14, 2018

US Army Corps of Engineers, New England District
Attention: Mr. Todd Randall
696 Virginia Road
Concord, Massachusetts 01742-2751

Re: New Haven Harbor Deepening Project

Dear Mr. Randall:

This letter is in support of the New Haven Deepening Project currently under consideration by your District.

The New Haven Harbor channel depth is 35 feet at MLW; for harbor transit, the port requirement is 2 feet Under Keel Clearance plus an additional 2 feet for vessel squat thereby reducing the maximum low water transit draft to 31 feet. Maximum high water transit draft is 36 feet and is made on a rising tide about 1 hour before high water; a strong westerly set from the flood tide runs across the entrance channel; at the jetties, when making the 35 degree course change to starboard, the strong westerly set pushes the vessel's stern to port which is compounded by severe bank suction on the vessel's port quarter caused by the channel's steep bank in the vicinity of the #7 buoy. Depths inside the edge of the channel in this area are up to 40 feet, depths just outside the channel are about 23 feet-----this steep gradient amplifies bank suction effect.

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GENERAL • MARINE • INDUSTRIAL CONSTRUCTION

An Equal Opportunity Employer

November 14, 2018

Page 2

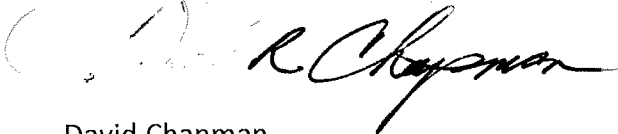
The proposed project to deepen and widen the channel resolves the draft, ship handling and LOA restrictions. The proposed 40-foot channel depth will increase the maximum low water draft transit to 36 feet and the maximum high-water transits to 42 feet; widening the inner and outer channels, turning basin and the turn at the jetties will enhance the safety of piloting larger, deeper vessels into the port.

The deepening and widening project will make the Port of New Haven, which is the largest port in Connecticut and the second largest port in New England, a safer and more economical destination for the larger, deeper commercial vessels.

This project is fully supported by the Connecticut Maritime Coalition.

Respectfully,

BLAKESLEE ARAPIA, CHAPMAN, INC.

A handwritten signature in black ink, appearing to read "D. Chapman", is written over a faint circular stamp.

David Chapman
Senior Vice President



**Gulf Oil Limited Partnership
500 Waterfront St.
New Haven, Ct. 06512**

November 14, 2018

U.S. Army Corps. Of Engineers
New England District
696 Virginia Road
Concord, MA. 01742
Attention: Todd Randall

Mr. Randall:

As a long time and current stakeholder here in the New Haven Harbor this letter is to inform you of Gulf's desire to see the Federal Navigation Channel through New Haven harbor deepened to 40-42 feet.

We currently operate a Bulk Oil Storage Terminal at the northern end of the harbor. We are presently in the design phase of a terminal upgrade to add additional storage tank(s) to our facility. The main purpose of this upgrade is to allow our terminal to accept larger vessels with larger cargos for simple economic reasons. The dock at our New Haven Terminal can currently accommodate ships with an arrival draft of up 39 feet. Should the channel deepening project take place we would certainly dredge our berth to be in line with or, more probably, be deeper than the channel restrictions.

Your consideration in this matter is greatly appreciated.

Best Regards,

A handwritten signature in black ink, appearing to read "Michael Baron", written over a horizontal line.

Michael Baron
Terminal Manager



New Haven Harbor Cooperative

November 14, 2018

U.S. Army Corps of Engineers
New England District ATTN: Todd Randall
696 Virginia Road
Concord, Massachusetts 01742

VIA EMAIL to Barbara.r.blumeris@usace.army.mil / Signed Copy sent via U.S. Mail

Dear Mr. Randall:

On behalf of the New Haven Harbor Cooperative, we stand in full support of the U.S. Army Corps of Engineers Navigation Improvements Study for New Haven Harbor.

The New Haven Harbor Cooperative (Co-op) is non-profit, voluntary cooperative serving members throughout Connecticut who are in, or closely affiliated, with the petroleum or energy supplier industry in the New Haven Harbor. The New Haven Harbor Cooperative, which was constituted in 1962, is the first group of companies in the United States to form an Oil Spill Cooperative. The mission of the Co-op is to provide the maritime facility industry a platform to facilitate collaboration, sharing of information, and partnering on certain regulatory exercises and training with both members and governmental agencies.

Our organization has been closely monitoring and our members have attended the Army Corps' various public hearings on the deepening of the federal channel in New Haven harbor from 35 to 40 feet. Our belief is that this project would result in greater frequency of deliveries into the harbor and a positive economic impact on our representative companies and the region.

We also fully support the widening of the main channel and turning basin. We believe this would allow for larger vessels into the New Haven harbor area. Additionally, the improvements will provide safer transit of vessels and more efficient vessel ingress and egress. With a widened main channel and turning basin our vessels will no longer have to lighten at anchorage outside of New Haven Harbor – a risky undertaking under certain seafaring conditions.

The New Haven Cooperative supports the deepening and widening efforts of the New Haven Harbor as proposed by the Army Corps of Engineers.

Sincerely,

James Bacon
President

NEW HAVEN TERMINAL, INC.



CHEMICAL AND PETROLEUM STORAGE SERVICES

P.O. BOX 9423 NEW HAVEN, CT 06534-0423
TEL (203) 468-0805 FAX (203) 469-6374

November 14, 2018

U.S. Army Corps of Engineers
New England District
696 Virginia Road
Concord, Massachusetts, 01742
Attention: Mr. Todd Randall

Dear Mr. Randall

I write this letter on behalf of New Haven Terminal, in support of the New Haven Harbor Navigation Improvement Project. We are a privately-owned Marine Terminal located in the Port of New Haven. We have been in business for over 75 years.

The deepening of the channel from 35 feet to 40 feet, is critical to the Port of New Haven, without this deepening the Port as well as our Terminal will find it difficult to maintain our current level of business and will make it impossible to take advantage of new business opportunities.

New Haven Terminal maintains three berths, with drafts of 40ft, 36ft and 36ft.

If the channel is deepened, New Haven Terminal is committed to increase the draft of all three of our berths to 40ft+.

Ports, as I'm sure you are aware can only be competitive based upon their infrastructure, such as rail, warehouse space, land and equally if not more importantly Draft, to keep up with new vessel sizes and requirements.

We strongly support this project and are requesting it be approved.

Sincerely

Michael Vasaturo
Vice President / COO

Port Security Services, Inc.

Corporate Headquarters:
100 Waterfront Street
New Haven, CT 06512
Mail to: P.O. Box 9166
New Haven, CT 06532

Toll Free: (800) 762-9147
Local: (203) 468-5489
Fax: (203) 468-2670
Email: ralph@portsecurity.us

November 14, 2018

U.S. Army Corps of Engineers
New England District
ATTN: Todd Randall
696 Virginia Road
Concord, Massachusetts 01742

VIA EMAIL to Barbara.r.blumeris@usace.army.mil / Hard Copy via U.S. Mail

Dear Mr. Randall:

On behalf of my company, specifically, and the Greater New Haven Harbor area, generally, I write to you in support of the U.S. Army Corps of Engineers Navigation Improvements Study for New Haven Harbor.

My company provides MTSA security at many of the terminals which currently bring in vessels of cargo to the New Haven Harbor. We believe this deepening of the federal channel in New Haven harbor from 35 to 40 feet would result in greater frequency of deliveries into the harbor and a positive economic impact on our company and the region.

We also support a widening of the main channel and turning basin. We believe this would hopefully allow for larger vessels into our harbor area. Additionally, the improvements will provide safer transit of vessels and more efficient ingress and egress.

This project is vital for New Haven harbor's survival. As the largest port of call in Connecticut (tonnage wise) our desire is to continue to expand port deliveries and operations. This would not be possible without the deepening and widening efforts as proposed by the Army Corps of Engineers.

Best regards,



Ralph Gogliettino
President



100 Waterfront St.,
New Haven, CT 06512

Ph: 203-467-1590
Fax: 203-468-2670
EMail: ralph@portsecurity.us

November 14, 2018

U.S. Army Corps of Engineers
New England District
ATTN: Todd Randall
696 Virginia Road
Concord, Massachusetts 01742

VIA EMAIL to Barbara.r.blumeris@usace.army.mil / Copy Sent via U.S. Mail

Dear Mr. Randall:

I write to you in support of the U.S. Army Corps of Engineers Navigation Improvements Study for New Haven Harbor. My company, Sea Support, Inc., is an environmental booming company that secures floating boom retention containment systems around vessels in New Haven's Harbor. This boom must be secured before any vessel unloads oil or petroleum liquids onto Connecticut's dock areas.

We are in full support of the deepening of the federal channel in New Haven harbor from 35 to 40 feet. We believe this would result in greater frequency of vessel deliveries into the harbor and, as a result, the need for more booming by my company. This would obviously have a positive economic impact for my company.

Aside from the positive economics for the company, we also firmly believe in the safety and free transit of vessels in the harbor. As such, we support a widening of the main channel and turning basin as these improvements will provide safer transit of vessels and more efficient vessel traffic flow.

Being in the Northeast and in Connecticut in particular, the economic situation has not been as plentiful as in the past. As a result, any effort which could serve as a impudence toward expanded port traffic and operations would be plus.

The bottom line is we fully support the Army Corps of Engineers deepening and widening efforts for New Haven Harbor.

Best regards,

Ralph Gogliettino
Principal

**NEW HAVEN PORT AUTHORITY
P.O. BOX 8716
NEW HAVEN, CONNECTICUT 06531**

November 15, 2018

U.S. Army Corps of Engineers
New England District
696 Virginia Road
Concord, Massachusetts 01742
Attention: Todd Randall

**RE: Draft Integrated Feasibility Report (“IFR”) & Environmental Impact
Statement (“EIS”)**

Dear Mr. Randall:

As the local sponsor for the Navigation Improvement Project in New Haven Harbor, the New Haven Port Authority (“the Port”) concurs with the findings presented in the draft report and applauds the alternatives that have been identified in the EIS for disposal of the dredge material. The Port’s only concern rests in the inclusion of the cost to relocate the Cross Sound Cable in the project budget

The Port of New Haven is strategically located at the junction of I-95 and I-91, with freight rail service that has seen significant growth since being reestablished after more than a decade off-line to accommodate the construction of the Pearl Harbor Memorial Bridge. The Port also hosts the Buckeye Pipeline. An increase in the controlling depth of the federal channel from 35 to 40 feet has been a long awaited infrastructure improvement for terminal operators here. Having previously been authorized at 40 feet, but never constructed, the deepening of the federal channel has been consistently raised by the terminal operators as a much needed infrastructure improvement. In fact, many of the terminals, in anticipation of a deeper draft channel, have undertaken dockside and landside improvements to accommodate a deeper controlling draft.

The IFR accurately examined and describes the cargo handled in New Haven. In addition to being the busiest port on Long Island Sound, the Port is second only to Boston in New England in volume of cargo handled. The Port of New Haven is a multi-modal port representing an asset and economic generator both locally, to the region and beyond. It is worth noting that jet fuel is

U.S. Army Corps of Engineers

New England District
November 15, 2018
Page 2

transported via the Buckeye Pipeline from the port of New Haven to Bradley International Airport and the Air National Guard base in Massachusetts.

The New Haven Port Authority fully supports both the IFR and the EIS and is committed to seeing this project move to construction. However, as previously stated, it is concerned with the inclusion of the cost to relocate the Cross Sound Cable in the project budget. It is its fear that the inclusion of those costs will impact the Benefit Cost Ratio and may limit its ability to secure an appropriation for the construction of this project.

The emphasis of the New Haven Port Authority continues to be increasing the volume of waterborne commerce at our port and to facilitate more efficient and safer transport of cargo both on its waters and over land.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Ker', followed by a long horizontal flourish.

Katharine Goodbody
Chairwoman



801 North Quincy Street
Suite 200
Arlington, VA 22203

PHONE: 703.841.9300, ext. 251
EMAIL: bvahey@americanwaterways.com

Brian Vahey
Senior Manager – Atlantic Region

November 15, 2018

Mr. Todd Randall
U.S. Army Corps of Engineers
New England District
696 Virginia Road
Concord, Massachusetts 01742-2751

Re: Draft Feasibility Report and
EIS for the New Haven
Harbor Navigational
Improvement Project Study
(COE-2016-31210)

Dear Mr. Randall:

The American Waterways Operators is the national trade association for the U.S. tugboat, towboat and barge industry. Our industry is the largest segment of the nation's 40,000-vessel Jones Act fleet and moves more than 760 million tons of cargo each year safely and efficiently. This includes more than 80 percent of New England's home heating oil, 60 percent of U.S. export grain and significant bulk commodities imported to and exported from New England states. On behalf of our over 300 AWO member companies, thank you for the opportunity to comment on the Draft Feasibility Report and EIS for the New Haven Harbor Navigational Improvement Project Study.

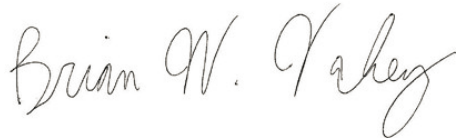
AWO members play a pivotal role in the safe and efficient movement of commerce throughout the Northeast Region. In Connecticut alone, the maritime industry moves more than two million tons of petroleum products, including home heating oil, and contributes millions of dollars to the state economy. The efficiency of maritime commerce helps to keep traffic off the roads, benefiting the environment, decreasing fatalities and improving the quality of life in Connecticut and throughout the Northeast region. A single dry cargo barge can haul 1,750 tons of cargo, the same amount of cargo as 16 bulk rail cars or 70 tractor trailers. Similarly, in order to move 27,500 barrels of liquid cargo, it would take 144 tanker trucks or 46 rail cars, compared to a single barge.

AWO supports the U.S. Army Corps of Engineers' preferred approach to improve the operational efficiency of New Haven Harbor. The plan to deepen the channel and turning basin to 40 feet and to widen the navigation channel to a minimum of 500 feet will make navigation

in the harbor safer and create new opportunities for AWO members. Several AWO member companies are active in New Haven Harbor, moving petroleum and aggregate to the terminals along the waterfront, conducting crew changes, mooring barges, and managing other types of projects that require adequate space to navigate. In addition to tug and barge traffic, large ocean-going ships call on the port in New Haven and require towing vessel ship assists to maneuver into berth. This proposed project will help harbor stakeholders manage all of these jobs safely and efficiently.

Given the importance of this project to tug and barge operators, AWO encourages the Corps to continue to work closely with the New Haven and Connecticut Port Authorities and with local maritime industry stakeholders to help make this project a reality. Thank you again for the opportunity to comment. We would be pleased to answer any questions you have.

Sincerely,

A handwritten signature in cursive script that reads "Brian W. Vahey". The signature is written in dark ink and is positioned above the printed name and title.

Brian W. Vahey
Senior Manager – Atlantic Region

CITY OF NEW HAVEN
TONI N. HARP, MAYOR



PREPARED COMMENT OF THE CITY OF NEW HAVEN

RE: NEW HAVEN HARBOR CONNECTICUT NAVIGATION IMPROVEMENT PROJECT
DRAFT INTEGRATED FEASIBILITY REPORT AND ENVIRONMENTAL IMPACT STATEMENT

November 15, 2018

I. Summary

The City of New Haven ("City") respectfully offers this written comment concerning the New Haven Harbor Connecticut Navigation Improvement Project Draft Integrated Feasibility Report and Environmental Impact Statement. The City, together with the New Haven Port Authority, supports the efforts of the Army Corps of Engineers, New England Division ("ACOE"), to improve the navigability of New Haven Harbor and, in turn, to support the economic development of the Port of New Haven ("the Port"). There is significant unrealized economic potential due to the current depth of the federal navigation channel. The current depth restricts the type of ships that call on New Haven and all but forecloses opportunities for container services to call on New Haven. While the City is a regional leader in petroleum and other commodities; direct and indirect economic value will be enhanced substantially through improved navigation for larger ships and more diverse trade. The deepening of the federal navigation channel is likewise consistent with the City's forward thinking vision for sustainable economic growth and, more importantly, is consistent with the interests of the United States by supporting economic development through intermodal and waterborne transportation.

II. Context

The City is the socio-economic center of south central Connecticut and among the fastest growing cities in New England in terms of both population and economic significance. There are over 80,000 jobs in the City, making up approximately a quarter of the jobs in the New Haven MSA. Economic

drivers in higher education, the life sciences, advanced manufacturing, information technologies and supporting service industries are catalyzing new job growth. New Haven also is a major transportation hub. In addition to the Port, New Haven is home to two Interstate Highways (91 & 95); the Northeast Corridor rail line; and freight rail. The Port is a leading port of call on the Atlantic Seaboard and Connecticut's commercial port for the import of home heating oil, gasoline, and road salt. Given the significance of our Port to the economy of the Northeast, the City established a 366-acre Port district and the Port Authority itself to facilitate job growth through waterborne transportation. With assistance for the new Connecticut Port Authority, New Haven is even more well-positioned to attract new business.

III. Comments

The City is pleased to see that the ACOE has conducted a thorough assessment of environmental impacts and identified a cost-effective approach to the deepening of the federal navigation channel and the disposal of dredge material. However, we understand that the Army Corps is still carrying the cost of relocation of the Cross Sound Cable as part of the Total Investment Cost on Table ES-3, as well as on Table ES-4, Table 5-4a, and Table 5-4b. The City respectfully disagrees with the inclusion of the cable as a project cost and recommends that this cost should not be borne against the cost-benefit analysis. Given that the permit for the construction of the cable in 2002 required the cable to be buried to a depth of at least -48 feet MLLW in the Federal channel, the cost of corrective action should not present an inconvenience or adverse effect to this very important port deepening project.

IV. Closing

The City appreciates the efforts of the ACOE, working with partners at the Connecticut Port Authority and New Haven Port Authority, to undertake this important and timely project. In light of the economic development potential of the Port of New Haven, the demonstrated needs of the shipping community and the readiness of the Port to accommodate responsible growth, the City supports the project and looks forward to a constructive partnership from planning through to implementation.

Respectfully submitted,

CITY OF NEW HAVEN



Michael Piscitelli, AICP

Deputy Economic Development Administrator
City of New Haven
165 Church Street
New Haven, CT 06510



U.S. Army Corps of Engineers
ATTN: Mr. Todd Randall
New England District
696 Virginia Road
Concord, MA 01742

November 15, 2018

Subject: New Haven Harbor Draft Integrated Feasibility Report and Environmental Impact Statement (D-IFR/EIS) – Comments

Mr. Randall,

The Connecticut Port Authority (CPA) would like to express our strong support for the New Haven Harbor Draft Integrated Feasibility Report and Environmental Impact Study.

The CPA recently released a five-year maritime strategy for Connecticut. A key component of that strategy is working with our partners and the U.S. Army Corps of Engineers to invest in and support dredging projects throughout Connecticut that will sustain and increase the use of our ports, waterways and marinas well into the future. In support of that strategy, CPA supports the Tentatively Selected Plan (TSP) to deepen the channel depth and the turning basin to -40-feet.

The TSP reduces transportation cost, improves navigation through the bend at breakwaters and promotes environmental benefits. The navigation inefficiencies that currently exist were investigated and summarized in the TSP to provide a safe, reliable, efficient, and environmentally sustainable waterborne transportation system. The TSP determined that the navigation improvements to the existing Federal navigation project at the New Haven Harbor are warranted and are in the State and Federal interest.

The TSP outlines several base plan placement sites, to beneficially use the 4.27-million cubic yards of sediment and 43,500 cubic yards of rock. The plan utilized two placement sites in the West River and the Morris Cove borrow pits to place only clean dredge sediment. The rock will be used to create an artificial reef near the West Breakwater. The base plan also includes oyster habitat creation will be developed behind the east breakwater and the balance of the material will go to the Central Long

CONNECTICUT PORT AUTHORITY

455 Boston Post Road Suite 204 | Old Saybrook, CT 06475 | P: 860-577-5174 | CTPortAuthority.com

Island Sound Disposal Site to cover historic disposal mounds. The CPA supports all of these options. Additionally, the CPA supports the opportunity to create approximately a 70-acre salt marsh at Sandy Point, West Haven. The Beneficial Use Plan utilizes 840,000 cubic yards of dredge material to create the marsh. Project elements that support the reduction of open water disposal is encouraging, and creates ecosystem habitat benefits that do not currently exist in this particular location.

The CPA would also like to express our strong support for the removal of the Cross Sound Cable cost from the Benefit Cost Ratio analysis (BCR). We believe that revision is essential to the success of the project. The CPA would like this issue resolved at the Agency Decision Milestone meeting being held January 2019. The owner of the cable should be held in compliance of the permit issued to relocate if a deepening is to occur. The TSP project depth of -40-feet has a BCR of 1.90 with the inclusion of the cable relocation cost. It is the CPA's opinion that a BCR below 2.0 is not a likely priority project for funding. Reduction in the project cost will raise the BCR to over 2.0, thus making it more attractive to receive funding authorization. Your authority through the Rivers and Harbors Act of 1899 – to handle physical encroachments within a channel – is encouraged in this matter.

The Connecticut Port Authority strongly supports the Navigational Deepening Improvement of the New Haven Harbor Channel and Turning Basin. The Port of New Haven is the largest port in Connecticut and is the second largest port in New England. Therefore, it is a top priority of the Connecticut Port Authority to improve the channel depth and width to ensure safe navigation and maintain existing commercial activities. The improvement dredging of the channel and turning basin must progress as scheduled in order to maintain the economic viability of the port and Connecticut's maritime economy.

Sincerely,



Scott Bates
Chairman

US Army Corp of Engineers, New England District
Attention: Mr. Todd Randall
696 Virginia Road
Concord, Massachusetts 01742-2751

Re: New Haven Harbor Deepening Project

Dear Mr. Randall,

This letter is written in support of the proposed deepening project for New Haven Harbor. The project would bring a great deal of increased safety for commercial vessels. As the newest licensed pilot in Connecticut, safe and economical business is the most important factor that will insure that I have a long and successful career.

As of now, ships with a draft of 36 feet or more must lighter offshore prior to entering the port. The cost of ship lightering is very expensive and poses its own risks for environmental damage. Because of these hurdles, ships have often been diverted to New York and Boston. Deepening would promote more ship traffic at a cheaper cost to shippers. More ship traffic would bring much needed work to the local longshoremen and terminal operators that depend on the ports maritime business to survive.

As far as the safe piloting of the harbor, the current channel depth and width poses zero room for error. The project would increase safety tremendously as we would require less rudder and power to steer through the turn at the entrance. In addition, there would be less affect from the bank suction, which reduces the risk of the ship sheering and losing control.

In conclusion, the proposed project has my full support along with my colleagues from Interport/Connecticut State Pilots. Please feel free to reach out to us with any question or concerns.

Very Respectfully,

A handwritten signature in black ink, appearing to read 'S. Meade', written in a cursive style.

Captain Sean Meade
Interport/Connecticut State Pilots



CONNECTICUT DEPARTMENT OF AGRICULTURE

PO Box 97, 190 Rogers Avenue, Milford, CT 06460

Bureau of Aquaculture



The Connecticut Department of Agriculture Bureau of Aquaculture and Laboratory is the lead state agency for the regulation of shellfish harvest in the state. The Department administers shellfish franchises and shellfish leases for the State of Connecticut, for the purpose of planting and cultivating shellfish.

The Department of Agriculture recognizes the critical importance of the Army Corps of Engineers (ACOE) New Haven Harbor Improvement Project, increasing the depth of the navigational channel and expanding opportunities for commerce within the state and region, and appreciates the opportunity to participate in the permitting process via discussions with the Corps and the Connecticut Department of Energy and Environmental Protection (DEEP). The Department seeks to assist the Corps in the development of a project which ultimately achieves much needed commerce modernization improvements, while minimizing impacts to existing shellfish operations and active shellfish production areas. The Department would like to provide comment on several key components of the project as follows:

Increasing the depth of the channel from 35 feet to 40 feet:

The New Haven Harbor navigational channel intersected a number of shellfish beds when originally designated in 1850. Although these historical franchise and lease beds are still in existence, increasing the depth of the channel is likely to have minimal practical impact to shellfish production, as the channel has been dredged repeatedly in recent years and is likely no longer as suitable for shellfish habitat as it was under pre-dredge conditions.

Expansion of the width of the channel by 50 feet on each side:

The project seeks to expand the width of the channel by 50 feet on each side, encompassing an additional 75 acres of commercial shellfish beds. Increasing the width and then reestablishing a 2 to 1 slope may negatively impact acreage at the upper surface of the channel bank, an area that has not been previously disturbed. The Department will continue to work with ACOE and the designated contractor to help ensure minimal impacts to these beds.

The Department has several administrative options available in terms of the existing shellfish leases in the project area, parcels 593 and 673. Leases typically have a three-year term with a right of preference to renew unless the Commissioner with cause, ceases to lease such ground for shellfish culture.

A commercial shellfish operation had expressed an interest in leasing inactive parcel 593. In consideration of the navigational channel project, the Department has declined this lease request in order to allow the channel widening to proceed without impact. The Department has sought to assist that operation and has issued a new lease in another location at their request. The area described as lease 593 is not currently productive shellfish grounds, and enhancement of more suitable area



CONNECTICUT DEPARTMENT OF AGRICULTURE

PO Box 97, 190 Rogers Avenue, Milford, CT 06460

Bureau of Aquaculture



elsewhere in the project vicinity would have an overall greater benefit to oyster habitat than that currently provided by this area.

Filling of the Morris Cove borrow pit:

The filling of the Morris Cove borrow pit to within 20 feet of the surface will require a detailed operational plan with the designated contractor. The Department will work cooperatively with the DEEP to ensure that the operational plan: 1) specifies appropriate dredging windows, and 2) includes a plan to ensure that disposal is conducted in a manner that minimizes impacts to critical shellfish resource in the vicinity.

Breakwater oyster habitat development:

The construction of a new oyster habitat area inside the eastern breakwater along the navigational channel turn will utilize native material dredged during the deepening and widening of the channel.

By way of correction to the information in the project Environmental Impact Statement (EIS), rock removed from former lease 593 should be placed on the north side of the western breakwater in the vicinity of shellfish lease 673, rather than on the south side as described in the EIS.

Sandy Point salt marsh development:

The construction of the salt marsh on the north side of Sandy Point, West Haven will impact an acreage of ten, comprised of several small shellfish parcels. The Department will work with impacted industry towards a resolution to address these losses as the project moves forward.

The Department appreciates the extent to which the mitigation of shellfish resource habitat losses and the enhancement of additional oyster habitat are being considered in the overall project development. We will continue to work with the Corps to ensure that the New Haven Harbor Improvement Project proceeds with minimal impact to shellfish resources and associated commercial shellfish activities, in order to achieve an overall beneficial outcome for navigation and commerce in New Haven Harbor.

David H. Carey
Director Bureau Aquaculture & Laboratory



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912

November 15, 2018

Todd Randall
U.S. Army Corps of Engineers
New England District
696 Virginia Road
Concord Massachusetts 01742

Subject: Draft Environmental Impact Statement (DEIS) and Draft Integrated Feasibility Report for the New Haven Harbor Navigation Improvement Project, New Haven, Connecticut (EIS No. 20180224)

Dear Mr. Randall:

The U.S. Environmental Protection Agency (EPA) has reviewed the U.S. Army Corps of Engineers (USACE) DEIS pursuant to our responsibilities under the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

The DEIS evaluates the potential impacts of proposed deepening and widening of the existing USACE New Haven Harbor Federal Navigation Project (FNP). The USACE FNP in New Haven was completed in 1950 and last maintained in 2014 when approximately 830,000 cubic yards of shoal material was dredged. The new improvement dredging includes deepening the main ship channel, maneuvering area and turning basin, and widening the primary channel and turning basin to allow deep draft vessels to efficiently access the port terminals. The proposed project proposal includes dredging approximately 4.28 million cubic yards of silty material and blasting and removal of 43,500 cubic yards of rock from the channel. Most of the dredged material will be disposed at the Central Long Island Sound Disposal Site (CLDS) and some of the sediment will be beneficially used to create shellfish (oyster) habitat, a saltmarsh, and to fill two existing borrow pits in the harbor. The blasted rock will be used to create a reef. Overall increased water depths in the FNP created by the project will result in transportation cost savings for port users and will make operations at the Port of New Haven more efficient.

While EPA supports this dredging effort, our attached comments identify General Conformity issues that should be considered during project development and offer suggestions regarding project design measures that could be implemented to help avoid impacts during the dredging, disposal and use of dredged material generated by the project. We intend to continue to work closely with the USACE to help address these important issues.

Effective October 22, 2018, EPA will no longer include ratings in our comment letters. Information about this change and EPA's continued roles and responsibilities in the review of

federal actions can be found on our website at: <https://www.epa.gov/nepa/epa-review-process-under-section-309-clean-air-act>.

EPA appreciates the opportunity to review this DEIS. If you have any questions regarding our comments, please contact me at 617/918-1025 or timmermann.timothy@epa.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Tim Timmermann".

Timothy Timmermann, Director
Office of Environmental Review

EPA Detailed Comments on the Draft Environmental Impact Statement and Draft Integrated Feasibility Report for the New Haven Harbor Navigation Improvement Project, New Haven, Connecticut, September 2018

General Conformity

The New Haven Harbor Navigation Improvement Project is situated in New Haven County, Connecticut. New Haven County (as part of the New York-N. New Jersey-Long Island, NY-NJ-CT air quality control region) is designated by the EPA as a moderate non-attainment area under both the 2008 and the 2015 8-hour ozone standards. The area is designated as attainment for all other NAAQS (see 40 CFR §81.307).

Projects located within a non-attainment area must be evaluated for applicability to the Federal General Conformity regulations found at 40 CFR 93.150-165. Specifically, if the total of direct and indirect emissions of a criteria pollutant or precursor in a non-attainment or maintenance area caused by a Federal action would equal or exceed the applicability thresholds established in 40 CFR 93.153, the requirements of general conformity must be satisfied. The *de minimis* General Conformity applicability thresholds are listed in 40 CFR 93.153.

The estimated project emissions included in Appendix L of the DEIS for the New Haven Harbor FNP indicate that emissions will not exceed either the 100 tons per year (tpy) *de minimis* General Conformity applicability threshold for NO_x or the 50 tpy threshold for VOCs. According to the DEIS, the proposed project estimated annual NO_x and VOC emissions for the three construction years of the project are 79.83 tpy of NO_x and 11.28 tpy of VOC for year one, 99.06 tpy of NO_x and 114.28 tpy of VOC for year 2, and 73.71 tpy of NO_x and 10.42 tpy of VOC for year three. Under the current non-attainment classification for New Haven County the estimated project emissions would not trigger General Conformity.

However, the USACE should be aware that under the 2008 8-hour ozone standard, New Haven County is subject to reclassification to serious non-attainment due to failure to attain the 2008 8-hour ozone NAAQS by the July 20, 2018 attainment date (see 40 CFR 51.1103). As was explained during a recent conversation with USACE Resources Section program staff, EPA has published a notice of proposed rulemaking in the Federal Register that includes reclassification of New Haven County to serious non-attainment (83 FR 56781). The *de minimis* threshold in a serious non-attainment area is 50 tpy for both NO_x and VOCs. Reclassification could affect the USACE's General Conformity applicability analysis for the project.

Recommendation: EPA requests the opportunity to consult and coordinate with the USACE and the State of Connecticut Department of Energy and Environmental Protection regarding the relationship between the timing of USACE's General Conformity applicability analysis and the future reclassification of New Haven County. Please contact Mr. John Rogan of EPA's Air Unit at 617/918-1645 or rogan.john@epa.gov to discuss project General Conformity issues in greater detail.

Reducing Diesel Emissions

The DEIS includes a general commitment to limit construction and use “clean” equipment. Given the public health concerns about diesel exhaust from heavy duty diesel trucks and other heavy-duty construction equipment, EPA encourages the USACE to commit to the use of newer vintage diesel engines whenever possible. Alternatively, we encourage the USACE to require diesel retrofits whenever practicable, require the use of cleaner fuels, and institute idle reduction measures to minimize emissions from diesel construction equipment. Retrofit technologies may include EPA verified emission control technologies and fuels and CARB-verified emission control technologies. A list of these diesel exhaust control technologies can be accessed at <https://www.epa.gov/verified-diesel-tech/manufacturer-contact-list-clean-diesel>. A list of approved idle reduction technologies can be found on the Agency’s SmartWay site here: <https://www.epa.gov/verified-diesel-tech/smartway-verified-list-idling-reduction-technologies-irts-trucks-and-school>. We also encourage operator training to reduce unnecessary idling of equipment to supplement the adoption of these technologies.

The Northeast Diesel Collaborative has prepared model construction specifications to assist in developing contract specifications that would require construction equipment to be retrofitted with control devices and use clean fuels to reduce diesel emissions. The model construction specifications can be found on the Northeast Diesel Collaborative web site <http://northeastdiesel.org/pdf/NEDC-Construction-Contract-Spec.pdf>.

Recommendation: We recommend that the USACE identify specific exhaust emission mitigation measures to help reduce and minimize the air quality impacts from construction of the proposed project in the FEIS and more fully describe how commitments to these measures will be secured from the contractors selected to perform project related construction.

Outstanding Technical and Design Issues for Unsuitable Material Disposal

EPA previously concurred with the USACE suitability determination that project sediments are acceptable for ocean disposal except for dredged material in the general vicinity of the port terminals represented by Composites 6 and 7. This material is to be disposed in a Confined Aquatic Disposal (CAD) cell. EPA supports this approach and notes that additional analysis and design work will be necessary to implement this approach.

Recommendation: EPA requests the opportunity to continue to coordinate with the USACE on the design and implementation of the CAD cell for the unsuitable dredge material. If available, updated information should be provided in the FEIS regarding the CAD cell design, location, and development resulting from this coordination.

Beneficial Use of Dredged Material

Consistent with the goal of EPA’s 2016 rule to modify the designation of the Central Long Island Sound Disposal Site, which is to “reduce or eliminate open-water disposal of dredged material,” EPA agrees with the overall strategy to use dredged material to establish habitat for oysters, fill in existing borrow pits to create winter flounder habitat, and create a salt marsh and a rock reef.

Development of each of these disposal/use options will require thoughtful design, planning and coordination. The DEIS commits to developing and coordinating “adaptive management and corrective actions related to [the] salt marsh creation placement site.”

Recommendation: EPA appreciates the USACE commitment to coordinate on the salt marsh creation portion of the project. We recommend that the USACE coordinate closely with all cooperating agencies and we intend to continue to work with the USACE on the design of each of the beneficial use projects. Mr. Ed Reiner (617/918-1692 or reiner.ed@epa.gov) will serve as the point of contact for the salt marsh creation work and Ms. Jeannie Brochi (617/918-1536 or brochi.jean@epa.gov) will serve as the EPA point of contact for all of the other beneficial use projects.

Measures to Avoid and Minimize Impacts

EPA generally agrees with the list of actions proposed to “minimize adverse impacts to natural and economic resources.” We support the implementation of the identified time-of-year restrictions to protect sensitive life stages of fish and shellfish in the project areas during dredging and disposal activities. We concur that prohibition on barge overflow during the dredging associated with the project will help minimize impacts.

While suitable for ocean disposal, the dredged material contains elevated levels of metals, Total PAHs and Total PCBs that should be fully considered in the context of habitat restoration. Not all the dredged material is necessarily desirable for habitat restoration due to the potential for adverse effects to benthic organisms. As identified in Appendix J, the majority of inner harbor stations (except D,H, I, and X) had detectable concentrations of metals, Total PAHs, Total PCBs, and pesticides that were above the effects-range low (ERL) but below the effects-range medium (ERM) values which describe how contaminant levels equate to the probability for toxic effects. A subset of inner harbor stations had concentrations of certain metals (copper, mercury, and zinc), Total PAHs, or Total PCBs that were above the ERM. Sub-samples with ERM exceedances were more common in the extreme inner harbor stations near the turning basin and terminals. Use of this material for habitat creation would introduce a stressor to the environment increasing the risk for reduced species diversity and survival.

Recommendation: EPA recommends that the habitat restoration work prioritize the use of sediments from the outer harbor over more contaminated inner harbor sediments.



Moran Companies
Moran Transportation Ind., Inc.
Moran Shipping Agencies, Inc.
Moran Shipping Agency of Texas, Inc.
Moran-Gulf Shipping Agencies, Inc.
Moran-Pacific Shipping Agencies, Inc.

Going Beyond the Call...Since 1937

To: U.S. Army Corps of Engineers New England District
Attn: Todd Randall
Ref: New Haven, CT Dredging
From: Moran Shipping Agencies

Good Day Mr. Randall

Dredging in New Haven Harbor is a needed endeavor. Moran Shipping Agencies fully supports this project. Moran Shipping represents approximately 100 foreign and US flagged vessels that call on the ports of Connecticut annually. The proposed dredging of New Haven Harbor Channel will only increase the potential for more vessels to call into New Haven. Many petroleum tankers are forced to employ costly "lightering" operations at New Haven Anchorage in order to meet a safe transit draft into the harbor. This increases costs and causes delays to the operations. These charges are passed onto the charterers and owners of the vessels' which cause them to look else where to make their bulk deliveries.

As sizes of vessels' increase due to the expansion of the Panama Canal, New Haven will be put at a disadvantage in the future with new ship builds coming online. These vessels will be longer, wider and deeper. This allows them to carry more cargo which reduces costs for their principals. Facilities within the harbor already have the capabilities to accept these vessels. The dredging will allow them to enter port without having to lighter or call another deeper port in advance of the New Haven port call.

The State of Connecticut faces several hurdles economically. However, the location of the state in relation to the Northeast corridor and intermodal access to the port are a bright spot on the state's horizon. A deeper channel will mean more vessel traffic, which will mean more jobs, taxes and revenue. By going forward with the dredging project, the potential of Connecticut can be realized.

Many thanks for your time and consideration

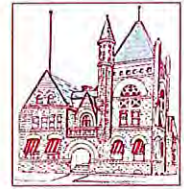
With Regards

James Gura Jr
Moran Shipping Agencies
Vessel Manager



CITY OF WEST HAVEN, CONNECTICUT HARBOR MANAGEMENT COMMISSION

City Hall | 355 Main Street | West Haven, Connecticut 06516



CITY HALL 1898-1967

November 15, 2018

Mr. Todd Randall
U.S. Army Corps of Engineers
New England District
696 Virginia Road
Concord, MA 01742-2751

Dear Mr. Randall:

The West Haven Harbor Management Commission has reviewed the draft Environmental Impact Statement for this project and offers the following comments: The Harbor Management Commission supports the dredging of NH Harbor as a vital Connecticut port and driver of the New Haven County economy. Since the City now has an adopted Harbor Management Plan, these dredging plans must also be reviewed by the Commission to assure the dredging plans are consistent with the Plan and will not have a negative impact on the Harbor Management Area.

The Harbor Management Commission supports the improvement and creation of wetlands in the outer Sandy Point area with the utilization of clean dredge material. We do have concerns about the specific siting of these materials, given its location in close proximity to our current boat launch and limited mooring areas.

We seek to both improve the City's boat launching area as well as expand mooring options in the future in this area. Given the City's extensive coastline, it may not be immediately evident of our limited opportunities to do so. While there are multiple acres of open space and miles of sandy beach, much of the area from Sandy Point moving west is unsuitable for both uses. Our primary target area is the north side of Sandy Point to the West River basin. With careful planning and consideration, both the wetlands proposal and the future marine use plans are tenable and harmoniously achievable.

A second serious consideration is the replacement of our WPCA outfall pipe. Our current pipe is past its life expectancy. It's now undersized for our needs moving forward, has suffered damage during large storms due to its design, and has been the subject of a replacement feasibility study. The current pipe, as well as the planned new one, lie directly inside the boundaries of the dredging project with the outfall terminus being on the west side of the channel bank. We are concerned that the draft Environmental Impact Statement shows no assessment of the potential impact of your proposed dredging project on that outfall pipe. We think this is an oversight.

We would like to see both projects demonstrate consideration for the other. Ideally, with two very large excavation events, it makes both economic and environmental sense to complete the work either simultaneously or as close as possible to each other.

We look forward to your response and ask that you contact the City's Assistant City Planner, David Killeen to schedule a meeting with the Harbor Management Commission to review these topics.

Thank you for your consideration,

A handwritten signature in cursive script that reads "Eugene Pacapelli". To the right of the signature, there are initials "dak" written in a similar cursive style.

Eugene Pacapelli, Chairman
Harbor Management Commission

November 16, 2018

U.S. Army Corps of Engineers
New England Division
696 Virginia Road
Concord, Massachusetts 01742-2751
Attention: Todd Randall

RE: Integrated Feasibility Report and Environmental Impact Statement
New Haven Harbor Navigation Improvement Project
September 2018

Dear Mr. Randall:

The Department of Energy and Environmental Protections (DEEP) appreciates the opportunity to review the above-referenced document and to submit these comments. DEEP fully supports the proposed widening and deepening of the Federal navigation project at New Haven Harbor. The improvements to the Federal navigation channel will not only improve the efficiency and competitiveness of the Port of New Haven but will also achieve environmental and safety benefits through the elimination of the need to lighter many ships outside the harbor, which will reduce the risk of petroleum product spills or accidents, and the substantial widening of the channel at the bend between the Middle and East Breakwaters which will make navigation to enter New Haven Harbor simpler and safer.

The proposed action, referred to in the Integrated Feasibility Report/ EIS as the tentatively selected plan (TSP), would deepen the navigation channel from -35' MLLW to -40' MLLW, widen the channel by 100' to 500' wide in the inner harbor and 600' wide in the outer harbor, widen the channel at the breakwater bend from 560' to 800', and widen the turning basin adjacent to the commercial terminals by 200' to the north. To accomplish this, 4.27 million cubic yards of sediments and 43,500 cubic yards of rock would be removed. We understand that these volumes, as contained in the report, have been somewhat refined since the time of its preparation and may yet undergo further refinement.

DEEP is also supportive of the proposed beneficial use of up to 1.93 million cubic yards of the removed sediments and rock at five placement sites to create oyster habitat, fill in two existing borrow pits, and create approximately 70 acres of salt marsh. The use of the dredged sediments to fill in the Morris Cove and West River borrow pits will restore 57 acres of benthic habitat in the harbor which would be of particular benefit to winter flounder, but to other species as well. The shellfish habitat creation area leeward of the East Breakwater will not only create 25 acres of favorable shellfish habitat but will mitigate other potential habitat losses due to the salt marsh creation at Sandy Point and the widening of the Federal navigation channel. Lastly, the creation of approximately 70 acres of saltmarsh habitat at Sandy Point will replace a small portion of the large areal extent of such habitat which has been lost in the harbor, estimated in the EIS to be 750 acres over the last two centuries. In addition, these beneficial uses of the dredged materials operate to preserve capacity at the Central Long Island Sound Disposal Area.

Previous Coordination between DEEP and the Corps of Engineers

DEEP, particularly through the Land and Water Resources Division, has been coordinating with the Army Corps of Engineers on this project since the scoping process began in January 2017. DEEP's scoping comments of February 27, 2017 highlighted support for this project based on its expected consistency with the policies of Connecticut's Coastal Zone Management Program, cited the need for regulatory approvals from DEEP including a Federal Coastal Consistency Determination and a Section 401 Water Quality Certificate, noted potential fisheries habitat and dissolved oxygen concerns, discussed issues arising from the relocation of the Cross Sound Cable, and expressed support for the beneficial reuse of the dredged sediments.

In particular, DEEP has coordinated with the Corps on the various options for the reuse and disposal of the dredged sediments and we are supportive of the Corps' proposed options. However, the various approaches may each create their own set of impacts which will need to be addressed. For example, the need for a structural barrier to enclose and contain the sediments at the saltwater marsh creation project at Sandy Point will need to be assessed. Also, to ensure the success of the wetland development at this location, a planting and monitoring plan may be required. DEEP will also need to ensure that any materials to be disposed of at the Central Long Island Sound Disposal Site will have been tested and are appropriate for open-water disposal. This is typically done during the Water Quality Certification process. That said, DEEP is supportive of this New Haven Harbor navigation improvement project including the various disposal options.

Winter Flounder Seasonal Restrictions

Winter flounder is the most important fishery species in New Haven Harbor and is dependent on the harbor's habitat for all life stages. To protect this species, the EIS specifies on page 118 that no dredging or materials placement will occur between February 1 and June 30. It is unclear if this commitment supersedes the timeframes given in Appendix H, *Draft Essential Fish Habitat Assessment*, which contains in Section 4.2 a tiered seasonal restriction of no project activities occurring between February 1 and June 30 for portions of the harbor north of Sandy Point, and no project activities occurring

between April 1 and June 30 for areas south of Sandy Point. DEEP Fisheries Division prefers the single February 1 through June 30 seasonal restriction for all of New Haven Harbor.

Cross Sound Cable

Page 88 of the EIS discusses the need to increase the depth of burial of the Cross Sound Cable to -48' MLLW for those areas where it does not currently meet this requirement, which corresponds to the area of ledge just north of the channel bend. For this approximately 700' segment, the cable is installed at depths as shallow as -41.5' MLLW. As discussed in the DEEP scoping comments of February 27, 2017, relocation or deeper burial of the cable will require a new Certificate of Permission from the DEEP Land and Water Resources Division. Micheal Grzywinski can be contacted in this regard and can be reached at (860) 424-3674 or at Micheal.grzywinski@ct.gov. Cross Sound Cable is also advised to contact the Connecticut Siting Council to determine what, if any, modifications may be necessary to the approval given by the Council for the cable in its Docket 208 decision.

Shellfish Habitat Creation Area

The shellfish habitat creation area north of the East Breakwater is proposed to be created using the fairly limited volume of suitably sandy material to be dredged as part of the TSP. This volume is estimated to be 351,300 cubic yards for a 40' channel depth, with the area of created shellfish habitat to be twenty-five acres according to page 120 of the EIS. If the volume of suitable sandy substrate should increase in subsequent sediment surveys, expansion of the area of enhanced shellfish habitat should be considered as both a beneficial use for this material and an avenue to compensate for potential losses of shellfish habitat from other elements of the project. Discussions with the Bureau of Aquaculture have indicated that the proposed shellfish habitat creation area could be expanded without encroaching upon any active shellfish lease areas and that the Bureau would support such an expansion.

DEEP Natural Diversity Data Base

There is no indication in the EIS that any coordination has taken place with the DEEP Natural Diversity Data Base regarding this project. The most recent record of any contact between the Corps and the Natural Diversity Data Base for New Haven Harbor dates from 2013 and concerns the last maintenance dredging project at New Haven. The specific area of interest to NDDB biologists is Sandy Point and the adjacent wetlands creation area. In addition to the three Federally-listed bird species discussed in the EIS (piping plover, red knot and roseate tern) which occur at Sandy Point, there are a number of State-listed bird and plant species occurring there. The Corps should contact the NDDB at DEEP.nddbrequest@ct.gov concerning a survey request for Sandy Point and the surrounding area. Alternatively, Dawn McKay, a wildlife biologist with the NDDB program, can be contacted at (860) 424-3592. Avoidance and protection strategies for any listed species present at the site will be specified in the NDDB survey response.

Miscellaneous Commentary

Fort Hale Park is described on page 34 as being a 20-acre State-owned, City-run park. The vast majority of the once State-owned acreage was turned over to the Coast Guard when the adjacent Coast Guard station was developed. DEEP's residual ownership, which consisted of 0.4 acres of property and the park pier, was transferred to the City of New Haven in 2016. The State has no remaining ownership interest in Fort Hale Park.

The goal of eliminating lightering operations for larger or more heavily-laden ships entering the harbor is cited on pages 68, 71, 72 and 92 in the EIS and would certainly be a benefit of the project both in terms of improving efficiency and reducing the risk of any spills. The EIS treats this subject in a purely generic fashion. Is any information available as to what percentage of inbound ships require lightering and what is the frequency of any spills or other mishaps that occur during such operations?

The size of the saltmarsh proposed to be created at Sandy Point may not be precisely determined until permitting and final design. It is noted here that the area is described in several locations in the EIS including pages 93 and 94 as being 70 acres and in other areas, including pages 81, 108 and 119, as being 73 acres.

Discussion on page 59 of the EIS under *Historic Context* says Yale University was established in Saybrook in 1717 and subsequently moved to New Haven. Yale actually was founded in Saybrook in 1701, American's third oldest institution of higher learning, and moved to New Haven in 1716.

Thank you for the opportunity to submit these comments. Feel free to contact me at (860) 424-4110 or at Frederick.riese@ct.gov should you have any questions concerning them. Best wishes to you and the Corps as you proceed with the planning for this project.

Respectfully yours,



Frederick L. Riese
Senior Environmental Analyst

cc: Commissioner Rob Klee

Brian Thompson, Land and Water Resources Division

Peter Francis, Land and Water Resources Division

Justin Davis, Fisheries Division

David Carey, Bureau of Aquaculture

Micheal Grzywinski, Land and Water Resources Division

Blumeris, Barbara R CIV USARMY CENAE (USA)

From: Randall, Todd A CIV USARMY CENAE (US)
Sent: Friday, November 16, 2018 4:24 PM
To: Blumeris, Barbara R CIV USARMY CENAE (USA)
Cc: Mackay, Joseph B CIV USARMY CENAE (US)
Subject: FW: [Non-DoD Source] Re: FW: New Haven Harbor DIFR/DEIS released

NMFS-PRD comments on New Haven EIS

-----Original Message-----

From: Zachary Jylkka - NOAA Federal [mailto:zachary.jylkka@noaa.gov]
Sent: Friday, November 16, 2018 4:15 PM
To: Randall, Todd A CIV USARMY CENAE (US) <Todd.A.Randall@usace.army.mil>
Subject: [Non-DoD Source] Re: FW: New Haven Harbor DIFR/DEIS released

Hi Todd,

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Let me know if you have any questions.

Best,
Zach

On Tue, Oct 2, 2018 at 3:40 PM Randall, Todd A CIV USARMY CENAE (US) <Todd.A.Randall@usace.army.mil
<mailto:Todd.A.Randall@usace.army.mil> > wrote:

Z/M,

Forgot to include you in the email below - apologies!

TODD

-----Original Message-----

From: Randall, Todd A CIV USARMY CENAE (US)
Sent: Tuesday, October 2, 2018 1:36 PM
To: Jeanie Brochi (brochi.jean@epa.gov <mailto:brochi.jean@epa.gov>) <brochi.jean@epa.gov
<mailto:brochi.jean@epa.gov> >; 'Lyons, Regina' <Lyons.Regina@epa.gov <mailto:Lyons.Regina@epa.gov> >; 'Alison Verkade - NOAA Federal' <alison.verkade@noaa.gov <mailto:alison.verkade@noaa.gov> >; christopher.boelke@noaa.gov <mailto:christopher.boelke@noaa.gov> >; 'Corsair, Cynthia' <cynthia_corsair@fws.gov <mailto:cynthia_corsair@fws.gov> >; 'David Simmons' <David_Simmons@fws.gov <mailto:David_Simmons@fws.gov> >; Andrew, Shannon L LTJG <Shannon.L.Andrew@uscg.mil <mailto:Shannon.L.Andrew@uscg.mil> >

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USACE website - Direct Link to DEIS and Appendices

Blocked<http://www.nae.usace.army.mil/Missions/Projects-Topics/New-Haven-Harbor/New-Haven-Harbor-EIS/>

Federal Register NOA

Blocked<https://www.federalregister.gov/documents/2018/09/28/2018-21111/environmental-impact-statements-notice-of-availability>

Thanks for your assistance with the New Haven Harbor project. We look forward to moving this forward with you all. Enjoy!

V/R,
TODD

TODD RANDALL
Marine Ecologist
US Army Corps of Engineers
New England District
696 Virginia Road
Concord, MA 01742
978-318-8518
todd.a.randall@usace.army.mil <<mailto:todd.a.randall@usace.army.mil>>

--

Zach Jylkka
Fisheries Biologist
Protected Resources Division

Greater Atlantic Regional Fisheries Office NOAA Fisheries Gloucester, MA 01930 zachary.jylkka@noaa.gov
<mailto:zachary.jylkka@noaa.gov>

office: (978) 282-8467

For additional ESA Section 7 information and Critical Habitat guidance, please see:

Blockedwww.greateratlantic.fisheries.noaa.gov/protected/section7

<Blocked<http://www.greateratlantic.fisheries.noaa.gov/protected/section7>>

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To: Jeanie Brochi (brochi.jean@epa.gov <mailto:brochi.jean@epa.gov>) <brochi.jean@epa.gov
<mailto:brochi.jean@epa.gov> >; 'Lyons, Regina' <Lyons.Regina@epa.gov <mailto:Lyons.Regina@epa.gov> >; 'Alison Verkade - NOAA Federal' <alison.verkade@noaa.gov <mailto:alison.verkade@noaa.gov> >; christopher.boelke@noaa.gov <mailto:christopher.boelke@noaa.gov> >; 'Corsair, Cynthia' <cynthia_corsair@fws.gov <mailto:cynthia_corsair@fws.gov> >; 'David Simmons' <David_Simmons@fws.gov <mailto:David_Simmons@fws.gov> >; Andrew, Shannon L LTJG <Shannon.L.Andrew@uscg.mil <mailto:Shannon.L.Andrew@uscg.mil> >

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<mailto:Joseph.B.Mackay@usace.army.mil> >; Blumeris, Barbara R CIV USARMY CENAE (US)
<Barbara.R.Blumeris@usace.army.mil <mailto:Barbara.R.Blumeris@usace.army.mil> >
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A7-Public Meetings October 23 and 23, 2018

Public Notice

Transcripts of Meetings

[Home](#)

Thursday, October 18, 2018

NOTICE OF PUBLIC HEARINGS FOR NEW HAVEN HARBOR (NEW HAVEN)

NOTICE OF PUBLIC HEARINGS FOR New Haven Harbor (New Haven, Connecticut) Navigation Improvement Project, Draft Integrated Feasibility Study and Environmental Impact Statement. Tuesday, October 23, 2018 Harry M. Bailey Middle School 106 Morgan Ln, West Haven, CT Doors and Registration open at 5:30 p.m., Hearing begins at 6:30 p.m. Wednesday, October 24, 2018 Hall of Records, Hearing Room 200 Orange Street, New Haven, CT Doors and Registration open at 5:30 p.m., Hearing begins at 6:30 p.m. A Draft Integrated Feasibility Report and Environmental Impact Statement (D-IFR/EIS) has been prepared as part of the New Haven Harbor Navigation Improvement Project Study (NHHNIP). To facilitate efficient and safe navigation and marine commerce in New Haven Harbor (New Haven, Connecticut), navigation improvements (i.e., deepening and widening) to the existing Federal navigation project were studied. The proposed project consists of deepening the main ship channel, maneuvering area, and turning basin to -40 feet MLLW and widening the main channel and turning basin to allow larger vessels to efficiently access the Port of New Haven's terminals. The proposed improvements would remove about 4.28 million cubic yards of predominately glacially deposited silts from the Federal channel. Additionally, approximately 43,500 cubic yards of rock would be blasted and removed from the channel. Several feasible alternative dredged material placement sites were identified and include: an area for shellfish habitat creation, two borrow pits in the harbor, an area for salt marsh creation, an area for rock reef creation, and open water disposal at an EPA designated ocean dredged material disposal site in Long Island Sound. This D-IFR/EIS describes the existing environment of the project area and assesses the impacts of the proposed project. The D-IFR/EIS is available on the USACE web site at: <http://www.nae.usace.army.mil/Missions/Projects-Topics/New-Haven-Harbor/> Comments concerning the D-IFR/EIS are requested to be submitted by November 15, 2018. Comments on the D-IFR/EIS should be sent to: U.S. Army Corps of Engineers New England District 696 Virginia Road Concord, Massachusetts 01742 Attention: Mr. Todd Randall Mr. Randall can be reached via phone at (978) 318-8518 or email at NAE-PD-PN@usace.army.mil

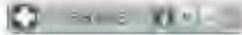
Appeared in: **New Haven Register** on Wednesday, 10/17/2018

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Corps of Engineers, New Haven Port Authority release New Haven Harbor Connecticut Navigation Improvement Project Draft Integrated Feasibility Report and Environmental Impact Statement for review



Email Print

Posted 9/28/2018

Release no. 18-068

Contact

Tim Dugan

978-318-8264

cenae-pa@usace.army.mil

CONCORD, Mass. – A Draft Integrated Feasibility Report and Environmental Impact Statement (D-IFR/EIS) has been prepared as part of the New Haven Harbor Navigation Improvement Project Study (NHHNIP). To facilitate efficient and safe navigation and marine commerce in New Haven Harbor in New Haven, Conn., navigation improvements (i.e., deepening and widening) to the existing Federal navigation project were studied.

The proposed project consists of deepening the main ship channel, maneuvering area, and turning basin to -40 feet MLLW and widening the main channel and turning basin to allow larger vessels to efficiently access the Port of New Haven's terminals.

The proposed improvements would remove about 4.28 million cubic yards of predominately glacially deposited silts from the Federal channel. Additionally, approximately 43,500 cubic yards of rock would be blasted and removed from the channel. Several feasible alternative dredged material placement sites were identified and include: an area for shellfish habitat creation, two borrow pits in the harbor, an area for salt marsh creation, an area for rock reef creation, and open water disposal at an EPA designated ocean dredged material disposal site (ODMDS) in Long Island Sound. This D-IFR/EIS describes the existing environment of the project area and assesses the impacts of the proposed project.

The D-IFR/EIS is available for review on the USACE web site at:

<http://www.nae.usace.army.mil/Missions/Projects-Topics/New-Haven-Harbor/>

Comments concerning the D-IFR/EIS are requested to be submitted by Nov. 15, 2018.

Comments on the D-IFR/EIS should be sent to:

U.S. Army Corps of Engineers

New England District

898 Virginia Road

Concord, Massachusetts 01742-2751

Attention: Mr. Todd Randall

Mr. Randall can be reached via phone at (978) 318-8518 or by email at

NAE-PD-PN@usace.army.mil

Public Hearings are scheduled for:

Tuesday, October 23, 2018

Harry M Bailey Middle School

108 Morgan Ln, West Haven, CT

Doors and registration open at 5:30 p.m., hearing begins at 6:30 p.m.

Wednesday, October 24, 2018

Hall of Records, Hearing Room

200 Orange Street

New Haven, CT

Doors and registration open at 5:30 p.m., hearing begins at 6:30 p.m.

PUBLIC HEARING ON THE
DRAFT INTEGRATED FEASIBILITY REPORT AND EIS
NEW HAVEN HARBOR NAVIGATION IMPROVEMENT PROJECT

OCTOBER 23, 2018

6:32 P.M.

BAILEY MIDDLE SCHOOL
106 MORGAN LANE
WEST HAVEN, CONNECTICUT

<p style="text-align: right;">2</p> <p>1</p> <p>2 APPEARANCES:</p> <p>3</p> <p>4 MARK HABEL: CHIEF, NAVIGATION AND ENVIRONMENTAL STUDIES</p> <p>5 SECTION, PLANNING DIVISION, U.S. ARMY CORPS OF</p> <p>6 ENGINEERS, NEW ENGLAND DISTRICT</p> <p>7 JUDI SHEIFFELE: EXECUTIVE DIRECTOR, NEW HAVEN PORT</p> <p>8 AUTHORITY</p> <p>9 EVAN MATTHEWS: EXECUTIVE DIRECTOR, CONNECTICUT PORT</p> <p>10 AUTHORITY</p> <p>11 JOHN KENNELLY: CHIEF, PLANNING DIVISION, U.S. ARMY</p> <p>12 CORPS OF ENGINEERS, NEW ENGLAND DISTRICT</p> <p>13 BARBARA BLUMERIS: PROJECT MANAGER, WATER RESOURCES</p> <p>14 PLANNING SECTION, PLANNING DIVISION, U.S. ARMY CORPS OF</p> <p>15 ENGINEERS, NEW ENGLAND DISTRICT</p> <p>16</p> <p>17 TODD RANDALL: MARINE ECOLOGIST, ENVIRONMENTAL RESOURCES</p> <p>18 SECTION, PLANNING DIVISION, U.S. ARMY CORPS OF</p> <p>19 ENGINEERS, NEW ENGLAND DISTRICT</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p style="text-align: right;">4</p> <p>1 Manager, Todd Randall, Lisa Winter, and Caitlyn</p> <p>2 Bryant, from the Corps' Jacksonville District, who</p> <p>3 prepared the economic evaluation for this study.</p> <p>4 Should you need copies of the public</p> <p>5 notice, hearing procedures, or other information,</p> <p>6 it is available at the registration table.</p> <p>7 Following this introduction, the project</p> <p>8 sponsors will give brief remarks. Judy Sheiffele</p> <p>9 is the Executive Director of the New Haven Port</p> <p>10 Authority. Following Judy will be Evan Matthews,</p> <p>11 the Executive Director of the Connecticut Port</p> <p>12 Authority.</p> <p>13 Our hearing officer, John Kennelly, will</p> <p>14 then address the hearing. John will be followed by</p> <p>15 Barbara Blumeris, who will provide information on</p> <p>16 the Draft Integrated Feasibility Report for the</p> <p>17 New Haven Harbor Navigation Improvement Project</p> <p>18 Study. Barbara will be followed by Todd Randall,</p> <p>19 who will provide an overview of the environmental</p> <p>20 investigations conducted during this study.</p> <p>21 At the conclusion of the briefings, I</p> <p>22 will then review the Corps of Engineers'</p> <p>23 responsibilities in this process and explain the</p> <p>24 hearing procedures.</p> <p>25 Following that, I will open the floor to</p>
<p style="text-align: right;">3</p> <p>1 (The hearing commenced at 6:32 p.m.)</p> <p>2 MR. HABEL: Good evening, and welcome to</p> <p>3 the public hearing for the New Haven Harbor</p> <p>4 Navigation Improvement Project.</p> <p>5 My name is Mark Habel. I'm Chief of the</p> <p>6 Navigation and Environmental Studies Section for</p> <p>7 the United States Army Corps of Engineers,</p> <p>8 New England District. I will be your moderator and</p> <p>9 facilitator tonight.</p> <p>10 Before we begin, I would like to thank</p> <p>11 you for getting involved in this review process for</p> <p>12 the New Haven Harbor Navigation Improvement Project</p> <p>13 Study.</p> <p>14 The New Haven Harbor deepening study is</p> <p>15 being undertaken by the Corps of Engineers in</p> <p>16 partnership with the project sponsor, the New Haven</p> <p>17 Port Authority, and with the Connecticut Port</p> <p>18 Authority.</p> <p>19 The hearing officer tonight is John</p> <p>20 Kennelly, on the far left, your far right, Chief of</p> <p>21 the Planning Division for the Corps in New England.</p> <p>22 Also from the Corps New England Program</p> <p>23 and Project Management Division is Erika Mark, and</p> <p>24 from New England's Engineering and Planning</p> <p>25 Divisions are Barbara Blumeris, the Project</p>	<p style="text-align: right;">5</p> <p>1 public comment, utilizing the Corps of Engineers'</p> <p>2 hearing protocol.</p> <p>3 One additional reminder: We are here</p> <p>4 tonight to receive your comments, not to enter into</p> <p>5 any discussion of those comments or to reach any</p> <p>6 conclusions. Any questions should be directed to</p> <p>7 the record and not to the individuals on the panel.</p> <p>8 And now, ladies and gentlemen, I would</p> <p>9 like to call on the representative from our</p> <p>10 non-federal study sponsor, Judi Sheiffele,</p> <p>11 Executive Director of the New Haven Port Authority.</p> <p>12 Judy?</p> <p>13 MS. SHEIFFELE: Thanks, Mark. Good</p> <p>14 evening. Some of you I remember from past</p> <p>15 hearings. This is the third hearing I think being</p> <p>16 held on this project. And although it's been long</p> <p>17 talked about in the Port community in New Haven,</p> <p>18 the Corps, along with the Connecticut and New Haven</p> <p>19 Port Authorities, have been acting on this</p> <p>20 feasibility study for the past three years and</p> <p>21 assessing the current conditions and determining</p> <p>22 the feasibility as to whether the channel should be</p> <p>23 deepened. And tonight we'll see the results of</p> <p>24 this study.</p> <p>25 We look forward to the end of this phase</p>

<p style="text-align: right;">6</p> <p>1 and looking on to what will probably be a more</p> <p>2 challenging phase, trying to get a reauthorization</p> <p>3 and funding. But thank you.</p> <p>4 MR. HABEL: Thank you, Judi.</p> <p>5 Ladies and gentlemen, I would like to</p> <p>6 introduce Evan Matthews, Executive Director for the</p> <p>7 Connecticut Port Authority.</p> <p>8 MR. MATTHEWS: Thank you, Mark. My name</p> <p>9 is Evan Matthews, and I'm the Executive Director of</p> <p>10 the Connecticut Port Authority. We are</p> <p>11 headquartered in Old Saybrook, Connecticut. I'm</p> <p>12 joined by Joe Salvatore, who many of you may</p> <p>13 recognize. He heads up all of our dredging</p> <p>14 programs.</p> <p>15 We're both here tonight and excited to</p> <p>16 work with the Corps for conducting this hearing and</p> <p>17 moving this project forward. We've used the</p> <p>18 resources of the CPA in recent weeks to try to</p> <p>19 encourage involvement in the process, and it's good</p> <p>20 to see the public here tonight. We believe the</p> <p>21 public input leads to better results.</p> <p>22 From the Port Authority's perspective,</p> <p>23 this project is entirely consistent with our</p> <p>24 overall goals outlined in the Port Authority's</p> <p>25 Connecticut Maritime Strategy, which we released in</p>	<p style="text-align: right;">8</p> <p>1 relative to the New Haven Harbor Navigation</p> <p>2 Improvement Study.</p> <p>3 While no decision will be made tonight,</p> <p>4 we welcome your comments on the New Haven Harbor</p> <p>5 Navigation Improvement Project Study. Your</p> <p>6 comments will be considered in our development of</p> <p>7 the Final Integrated Feasibility Report and</p> <p>8 Environmental Impact Statement.</p> <p>9 Please feel free to provide comments that</p> <p>10 you would like to enter into the record.</p> <p>11 Additionally, we will receive written</p> <p>12 comments tonight and through November 15th, 2018.</p> <p>13 I assure you that all of your comments, written or</p> <p>14 oral, will be addressed during this process, will</p> <p>15 be treated equally on the record, and will be</p> <p>16 considered in the development of the final report.</p> <p>17 It is crucial to the public process that</p> <p>18 your voice be heard, and we're here to listen to</p> <p>19 your comments, to understand your concerns, and to</p> <p>20 provide you an opportunity to put your thoughts on</p> <p>21 the record should you care to do so.</p> <p>22 The primary purpose of this hearing is to</p> <p>23 solicit the public's comments and input. However,</p> <p>24 the hearing will begin with the project team</p> <p>25 providing background information on the Integrated</p>
<p style="text-align: right;">7</p> <p>1 August.</p> <p>2 The strategy puts an emphasis on</p> <p>3 maximizing the potential of Connecticut's three</p> <p>4 deepwater ports. New Haven absolutely is one of</p> <p>5 those important ports. New Haven is particularly</p> <p>6 important to this strategy and is long overdue for</p> <p>7 a Navigation Improvement Plan.</p> <p>8 I'm sure there are many ideas on how to</p> <p>9 improve the draft plan you have published. We look</p> <p>10 forward to hearing the public input in person at</p> <p>11 these two hearings and online, and I'm confident</p> <p>12 you will take those public comments into account as</p> <p>13 your plans finalize. Thank you.</p> <p>14 MR. HABEL: Thank you, Evan.</p> <p>15 Ladies and gentlemen, John Kennelly.</p> <p>16 MR. KENNELLY: Good evening. I would</p> <p>17 like to welcome you tonight to this public hearing</p> <p>18 regarding the New Haven Harbor Navigation</p> <p>19 Improvement Project Study.</p> <p>20 I would also like to thank you for your</p> <p>21 involvement, for involving yourself in this study</p> <p>22 and for providing us with your views and comments.</p> <p>23 By conducting this public hearing, we,</p> <p>24 the Corps of Engineers, continue to fulfill our</p> <p>25 requirement to seek public comment and input</p>	<p style="text-align: right;">9</p> <p>1 Feasibility Report and Environmental Impact</p> <p>2 Statement, including details on the existing</p> <p>3 deep-draft navigation problems, alternatives</p> <p>4 evaluated, information on the Tentatively Selected</p> <p>5 Plan, and information on the dredge material and</p> <p>6 placement sites.</p> <p>7 These presentations, at the beginning of</p> <p>8 each public hearing, will assist the public and</p> <p>9 agency reviewers in understanding the documents and</p> <p>10 the evaluation process which was followed; thus,</p> <p>11 aiding the public as they review the draft report.</p> <p>12 In addition to providing comments at the</p> <p>13 public hearing, the public may provide written</p> <p>14 comments at any time during the public review</p> <p>15 period. I would like to emphasize this is your</p> <p>16 hearing, and we need you to assist us in this</p> <p>17 public review process.</p> <p>18 We want your comments on the draft report</p> <p>19 so that we can consider all of the comments that we</p> <p>20 receive, those made here tonight, as well as those</p> <p>21 submitted during the public review process in the</p> <p>22 preparation of the Final Integrated Feasibility</p> <p>23 Report and the EIS. Thank you.</p> <p>24 MR. HABEL: Thank you, John.</p> <p>25 Ladies and gentlemen, Barbara Blumeris.</p>

<p style="text-align: right;">10</p> <p>1 MS. BLUMERIS: Good evening. Tonight</p> <p>2 Todd and I will present summary information on the</p> <p>3 planning process to reach the Tentatively Selected</p> <p>4 Plan for the improvements at New Haven Harbor. The</p> <p>5 slides that we share tonight will be posted on our</p> <p>6 project website on Thursday. The project website</p> <p>7 is located -- you can find the location link on</p> <p>8 that Fact Sheet that's at the front.</p> <p>9 This slide illustrates the Corps' civil</p> <p>10 works planning process. New Haven Harbor study has</p> <p>11 now reached, as I mentioned, the Tentatively</p> <p>12 Selected Plan milestone. The hour shows we are</p> <p>13 here. So we are about -- a little over halfway</p> <p>14 through the process. A Draft Integrated</p> <p>15 Feasibility Report and Environmental Impact</p> <p>16 Statement was issued in September, and we'll be</p> <p>17 taking comments, as mentioned, through November</p> <p>18 15th from the public.</p> <p>19 Concurrent with public review, we are</p> <p>20 also conducting Corps Agency Technical Review and</p> <p>21 Independent External Peer Review.</p> <p>22 Following these concurrent reviews, there</p> <p>23 will be an internal Agency Decision Milestone, near</p> <p>24 the number 3 on the slide. And that's when we have</p> <p>25 a buy-in from headquarters office on the plan, and</p>	<p style="text-align: right;">12</p> <p>1 resource for the state of Connecticut.</p> <p>2 There is an existing federal channel</p> <p>3 authorized within New Haven Harbor. And this</p> <p>4 federal navigation project is shown in the middle</p> <p>5 of this diagram. This consists of several</p> <p>6 features, a deep-draft channel, turning basin and</p> <p>7 maneuver area, authorizing a depth of minus 35 feet</p> <p>8 mean lower low water.</p> <p>9 That main channel, which the commercial</p> <p>10 ships deep-draft, are shown in the center of the</p> <p>11 drawing.</p> <p>12 In addition, there are three</p> <p>13 shallow-draft channels, several anchorages, and</p> <p>14 three breakwaters. The breakwaters are at the</p> <p>15 entrance of the Harbor. There is also a training</p> <p>16 dike at Sandy Point.</p> <p>17 This study focuses on the deep-draft main</p> <p>18 channel, turning basin, and maneuvering area, as</p> <p>19 these are the areas requiring improvements.</p> <p>20 The deep-draft channel was authorized in</p> <p>21 1946 and constructed in 1950. In 2018, the channel</p> <p>22 is now 68 years old and due for an improvement as</p> <p>23 ship sizes have increased over the last 60 years.</p> <p>24 Next slide. In terms of total tonnage</p> <p>25 shipped and received, the Port of New Haven is the</p>
<p style="text-align: right;">11</p> <p>1 we move into the completion of efforts and to</p> <p>2 optimize the selected plan.</p> <p>3 Next slide, please. The New Haven Port</p> <p>4 Authority is the non-federal sponsor for the study.</p> <p>5 The Connecticut Port Authority is working in</p> <p>6 partnership with New Haven and provided the</p> <p>7 non-federal funding for the study. The study is</p> <p>8 cost shared 50 percent federal and 50 percent</p> <p>9 non-federal.</p> <p>10 Legislative authority for the study came</p> <p>11 from a congressional resolution passed in July</p> <p>12 2007. The cost share agreement for the study was</p> <p>13 signed with the Port Authority in December 2015,</p> <p>14 and work began in earnest in 2016 on site.</p> <p>15 The purpose of the study is to</p> <p>16 investigate improvements needed to provide a safe,</p> <p>17 reliable, efficient, and environmentally</p> <p>18 sustainable waterborne transportation system at the</p> <p>19 New Haven Port, and also determine whether the</p> <p>20 improvements we identify are warranted and in the</p> <p>21 federal interest.</p> <p>22 New Haven Harbor is centrally located on</p> <p>23 the north shore of Long Island Sound, as shown in</p> <p>24 the small insert map on the right. And the Harbor</p> <p>25 is an extremely important maritime commercial</p>	<p style="text-align: right;">13</p> <p>1 largest port in Connecticut, and the second largest</p> <p>2 port in New England in 2016, ranking only behind</p> <p>3 the Port of Boston.</p> <p>4 The total freight into the port is</p> <p>5 8.8 million metric tons, and represented about</p> <p>6 24 percent of all waterborne commerce in New</p> <p>7 England, and about 81 percent of all commerce in</p> <p>8 Connecticut.</p> <p>9 The Northeast maintains a large refinery</p> <p>10 production/demand deficit, and must rely heavily on</p> <p>11 imported volumes of petroleum products in order to</p> <p>12 meet demand.</p> <p>13 The port is a crucial import location for</p> <p>14 refined petroleum products, which supplies demand</p> <p>15 within Connecticut and the broader Northeast</p> <p>16 region.</p> <p>17 The majority of the landside acreage in</p> <p>18 the Port of New Haven is devoted to energy-related</p> <p>19 uses. And this represents a long-term land use and</p> <p>20 economic asset for the state.</p> <p>21 Next slide. Petroleum products imports</p> <p>22 have historically constituted about 70 percent of</p> <p>23 the channel tonnage. Data from 2016 is shown in</p> <p>24 the pie chart with the petroleum products in blue.</p> <p>25 You can see that. As I mentioned, that is a</p>

<p style="text-align: right;">14</p> <p>1 significant commodity coming into the Port.</p> <p>2 New Haven also provides dry bulk and</p> <p>3 break bulk services, including commodities such as</p> <p>4 salt, sand, cement imports. Virtually all of these</p> <p>5 volumes are used locally.</p> <p>6 Steel is also imported, and includes</p> <p>7 steel rail, rebar, and steel billets.</p> <p>8 There's approximately 1 million tons of</p> <p>9 scrap metal produced annually within the state, and</p> <p>10 about half of that amount is exported through the</p> <p>11 Port of New Haven. Driving to the hearing tonight,</p> <p>12 we saw a very large pile of scrap metal right along</p> <p>13 the harborfront.</p> <p>14 Export volumes of scrap metal in</p> <p>15 New Haven have demonstrated sustained growth with</p> <p>16 volumes destined primarily to Turkey, Peru, Egypt,</p> <p>17 and Saudi Arabia.</p> <p>18 Next slide. There are several terminals</p> <p>19 in New Haven Harbor, and all of these except for</p> <p>20 the PSEG Terminal provide berths to accommodate</p> <p>21 deep-draft commercial ships.</p> <p>22 This slide shows the location of the</p> <p>23 various terminals: Magellan, Gulf, Gateway,</p> <p>24 Motiva, and New Haven Harbor Terminal.</p> <p>25 Gulf Oil, Magellan, and Motiva handle</p>	<p style="text-align: right;">16</p> <p>1 larger ships coming in on the flood are set further</p> <p>2 to the west, because the current runs east to west.</p> <p>3 This pushes them toward the steep outer bank of the</p> <p>4 curve.</p> <p>5 To compensate for this, the pilots</p> <p>6 approach the bend on the far right side of the</p> <p>7 channel. As they come out of the bend, they go</p> <p>8 hard full ahead to make the turn and not have the</p> <p>9 stern hit the west bank.</p> <p>10 This makes straightening the ship toward</p> <p>11 the next set of buoys ahead difficult since moving</p> <p>12 forward and turning at a high speed at the same</p> <p>13 time. This leaves little to no room to respond to</p> <p>14 changes in conditions that they may experience in</p> <p>15 bringing in these larger ships.</p> <p>16 Next slide. So that was explaining the</p> <p>17 different problems at the existing channel.</p> <p>18 Now, this is a slide of the ships that</p> <p>19 are constrained due to the 35-foot channel.</p> <p>20 The authorized depth is 35 feet at low</p> <p>21 tide. And this provides insufficient depth for</p> <p>22 larger ships. So basically, the ships require 4</p> <p>23 foot of underkeel. That is 4 foot of water under</p> <p>24 the ship when it comes in. So a 31-foot ship can</p> <p>25 come in unconstrained with 4 foot of underkeel</p>
<p style="text-align: right;">15</p> <p>1 primary petroleum products, chemicals, and related</p> <p>2 products.</p> <p>3 Gateway handles petroleum products, dry</p> <p>4 bulk, such as salt, asphalt, cement, stone, sand,</p> <p>5 scrap metal, and steel. So Gateway has a terminal</p> <p>6 shown close to the bridge. They also lease the</p> <p>7 facilities at Harbor Terminal.</p> <p>8 Next slide. Navigation transportation</p> <p>9 delays and inefficiencies occur today due to</p> <p>10 inadequate federal project depth for the main</p> <p>11 channel and the turning basin.</p> <p>12 So, as I mentioned, it's at minus 35 feet</p> <p>13 mean lower low water. A lot of ships that draft</p> <p>14 greater than 31 feet are delayed and need to</p> <p>15 transit the channel only at high tide. They also</p> <p>16 may have to light-load or offload cargo onto barges</p> <p>17 before they can come into the port.</p> <p>18 Lightering operations can be adversely</p> <p>19 affected by weather, and this can cause additional</p> <p>20 delays. Lightering of liquid petroleum products</p> <p>21 also carries the risk of spills and environmental</p> <p>22 impacts in Long Island Sound.</p> <p>23 The large ships coming in on the high</p> <p>24 tide are also an issue. As the ships come in from</p> <p>25 Long Island Sound in through the breakwaters, the</p>	<p style="text-align: right;">17</p> <p>1 clearance, but anything that drafts greater than 31</p> <p>2 feet cannot come in.</p> <p>3 This shows a diagram of ships that are</p> <p>4 increasingly coming in at larger drafts.</p> <p>5 Without an improvement project, ships</p> <p>6 would continue to be limited in the size of vessel</p> <p>7 they could use to call on the port, leaving them</p> <p>8 unable to achieve the economies of scale of larger</p> <p>9 vessels.</p> <p>10 Many shippers prefer to use larger</p> <p>11 vessels, which has a lower overall cost per ton,</p> <p>12 particularly for the trips that come over long</p> <p>13 distances, such as from South America or Europe.</p> <p>14 Without a project, the degree to which</p> <p>15 commodities brought to the port can be shipped on</p> <p>16 the most cost-effective vessels would be limited by</p> <p>17 the 35-foot authorized channel.</p> <p>18 Next slide. This slide illustrates the</p> <p>19 alternative depths and widths considered for the</p> <p>20 improvement project. Alternatives were developed</p> <p>21 to address vessel delays and inefficient vessel</p> <p>22 loading. We looked at depths ranging from 37 to</p> <p>23 42.</p> <p>24 Next slide. This slide shows the</p> <p>25 quantity estimates developed for each of the</p>

<p style="text-align: right;">18</p> <p>1 alternatives. Along with the increase in depth, 2 there would also be incidental widening to 3 accommodate the larger ships, which was shown on 4 the previous slide.</p> <p>5 These quantities and widths were 6 estimated for each of the depths, and were used to 7 derive cost estimates for the project. The cost 8 estimates were accurate for the conditions expected. 9 in each of the alternatives. And they include a 10 contingency of about 20 percent. So these 11 quantities were used to drive the cost estimates 12 for dredging the improvement.</p> <p>13 In addition to the federal base plan for 14 our placement sites, we also looked at a beneficial 15 use plan for the placement of dredge material. And 16 Todd will talk later on in this presentation about 17 the alternatives developed for placement of the 18 dredge material.</p> <p>19 Basically, for the 40-foot, we have about 20 4.2 million cubic yards in the alternatives 21 analysis, with a good portion of that in rock.</p> <p>22 Next slide. This is the slide that talks 23 about the economic analysis done by our Mobile 24 Deep-Draft Navigation Center. So they're the 25 primary production center for navigation, economic</p>	<p style="text-align: right;">20</p> <p>1 2023, assuming the project would be constructed in 2 2023, through 2072 for the width project condition, 3 and basically compared the cost to bring that 4 amount of cargo in without the new project and with 5 the new project.</p> <p>6 We use a model called a HarborSym model 7 that's done at the Mobile center. It includes a 8 range of variables in running the model. HarborSym 9 is a Monte Carlo simulation model of vessel 10 movement at the port, and it generates costs for 11 that operation.</p> <p>12 The model calculated costs for all the 13 project years, so that is for all the 50 years 14 going forward, and then produces an average annual 15 equivalent cost. So this can then be compared 16 against the construction costs that I talked about, 17 analyzing both and comparing them.</p> <p>18 Next slide. So the project team used 19 specific economic decision criteria to evaluate and 20 compare plans against each other.</p> <p>21 The 1983 Principles and Guidelines for 22 Water Resources Planning within the Corps dictates 23 that the NED plan be the plan that maximizes net 24 economic benefits.</p> <p>25 So in this case, you see the annual</p>
<p style="text-align: right;">19</p> <p>1 analysis for the Corps of Engineers.</p> <p>2 There are three primary effects from 3 channel deepening that lead to changes in the 4 future fleet at the Port of New Haven. The first 5 is an increase in a vessel's maximum practical 6 loading capacity.</p> <p>7 Deepening the channel reduces the 8 constraint of the size ship that can come in, as 9 well as the loading of that ship. This increase in 10 vessel has the result of fewer required vessel 11 trips to transport forecasted cargo, improving the 12 transportation into the Harbor.</p> <p>13 The second effect with increased channel 14 depth is the reliability of the water depth, which 15 encourages the shippers to move -- as you can see 16 in that trends slide of trips per draft, they'll 17 continue to bring in ships that have deeper draft 18 'cause of the economies of scale of the larger 19 ship. So that trend will continue and, with the 20 improvement, be efficient.</p> <p>21 So transportation costs were estimated 22 for a lookout project condition, that is, as it is 23 today, what does it cost to bring the cargo into 24 the port. And then we looked at that through a 25 50-year period of analysis, so through 2072, from</p>	<p style="text-align: right;">21</p> <p>1 equivalent cost -- you have the alternatives, your 2 annual equivalent cost, and then your annual 3 equivalent benefit. And then the net is the 4 difference between those numbers.</p> <p>5 And then you can see here that the 6 maximum total net benefits occurs at the 40-foot 7 plan. And this carries a BCR of 1.9. So the 8 40-foot plan is the NED plan. That would be the 9 plan that we've selected, along with consideration 10 of other factors, environmental, social, and 11 regional economics. But that 40-foot plan is the 12 selected plan.</p> <p>13 Following the selection of the TSP, we 14 refined the TSP design. So basically once we 15 selected the 40-foot alternative, we did a ship 16 simulation study at our center down in Vicksburg, 17 Mississippi, where we have a computer simulation of 18 the ships coming in and a computer simulation of 19 the Harbor.</p> <p>20 So the two pilots familiar with the ships 21 came down to drive the ships in in the computer 22 model. So here we have two of the pilots from 23 Connecticut in Vicksburg running the ship 24 simulation model.</p> <p>25 So based on the ship simulation study of</p>

<p style="text-align: right;">22</p> <p>1 the 40-foot plan, we had a few design refinements</p> <p>2 of that plan. So we found that we needed to widen</p> <p>3 the bend of the breakwaters slightly greater than</p> <p>4 we had, and also that we would relocate -- we had</p> <p>5 planned to move the turning basin more to the</p> <p>6 north, but when we did the ship simulation study,</p> <p>7 we found that actually its current location is</p> <p>8 best, and if we just widened it slightly to the</p> <p>9 north by 200 feet, we would be able to turn the</p> <p>10 ships sufficiently. So that basically had our</p> <p>11 refined design.</p> <p>12 And the ship simulation also verified the</p> <p>13 widths of the channels that we had chosen of</p> <p>14 extending 50 feet on either side.</p> <p>15 Next slide. Here are the features of our</p> <p>16 Tentatively Selected Plan. Now, as we talked</p> <p>17 about, had a refined design, so the cost went up</p> <p>18 slightly due to increased rock at the ledge. At</p> <p>19 the breakwaters is ledge.</p> <p>20 And so when we refined the design, we</p> <p>21 were actually widening that bend a little bit more,</p> <p>22 so the cost of the project went up a little bit.</p> <p>23 So that's the TSP. We have 4.27 million cubic</p> <p>24 yards of ordinary material, a little bit more rock,</p> <p>25 43 versus 35.</p>	<p style="text-align: right;">24</p> <p>1 And now I'd like to invite Todd to come</p> <p>2 up and talk about the placement.</p> <p>3 MR. RANDALL: Thank you, Barbara.</p> <p>4 I will now talk about the placement</p> <p>5 alternatives for the New Haven project. In our</p> <p>6 last meeting back in January, we presented portions</p> <p>7 of this list as possible placement alternatives.</p> <p>8 The first six alternatives listed here,</p> <p>9 which we presented in January, have been identified</p> <p>10 as feasible alternatives. The West River borrow</p> <p>11 pit was one that was identified in January. And</p> <p>12 we've taken a look at it, and it is a feasible</p> <p>13 placement alternative.</p> <p>14 The bottom three, beach placement,</p> <p>15 bidding some kind of resiliency project, or using</p> <p>16 material and structure fill have been deemed</p> <p>17 unfeasible because of the nature of the material</p> <p>18 from New Haven. It's all silt, very difficult to</p> <p>19 do anything with.</p> <p>20 And then the fourth from the bottom, a</p> <p>21 confined aquatic disposal cell may be required.</p> <p>22 I'm going to talk a lot about that in just a couple</p> <p>23 minutes. So we'll come back to that.</p> <p>24 Next slide, please. Before we go into</p> <p>25 detail on the individual placement sites, I will go</p>
<p style="text-align: right;">23</p> <p>1 Next slide. This is the summary of the</p> <p>2 TSP. So you could see now the BCR went down</p> <p>3 slightly. It's 1.6 instead of 1.9. And we'll</p> <p>4 continue to refine the design as we move forward,</p> <p>5 as I mentioned, during the optimization phase. So</p> <p>6 we'll be looking at ways to be more efficient on</p> <p>7 the costs and also looking at benefits. So these</p> <p>8 numbers could change again before you see the</p> <p>9 final.</p> <p>10 And then also this talks here a little</p> <p>11 bit about the salt marsh creation, which is a</p> <p>12 beneficial use site. So that would be an</p> <p>13 additional cost above the base plan. And we would</p> <p>14 be able to use some material from the project to</p> <p>15 create a salt marsh at the Sandy Point Dike.</p> <p>16 Next slide. So this is a summary of the</p> <p>17 costs and proportionment of those costs between the</p> <p>18 federal and non-federal share.</p> <p>19 So for the first cost for the project,</p> <p>20 including the beneficial use, the federal cost</p> <p>21 would be 52 million, and the non-federal cost would</p> <p>22 be about 18 million.</p> <p>23 So that summarizes the project that we</p> <p>24 propose at this time, the Tentatively Selected</p> <p>25 Plan.</p>	<p style="text-align: right;">25</p> <p>1 through a brief discussion of how the sediments to</p> <p>2 be dredged can be characterized.</p> <p>3 Using the study's initial design, a</p> <p>4 sampling and analysis plan was developed in</p> <p>5 coordination with the US EPA and the Connecticut</p> <p>6 Department of Energy and Environmental Protection.</p> <p>7 The sampling plan was intended to</p> <p>8 characterize the sediments to be dredged, using at</p> <p>9 the time the largest footprint that we were looking</p> <p>10 at for our alternatives. So this included samples</p> <p>11 at depths of the deepest dredged depth, which was</p> <p>12 42 feet, and also looking at the width increases of</p> <p>13 100 and 200 feet.</p> <p>14 And we also, as Barbara noted, had in our</p> <p>15 initial design a large turning basin feature in our</p> <p>16 initial design, different from what's there now and</p> <p>17 what we're ultimately going to be proposing.</p> <p>18 But when we had to do our sampling, we</p> <p>19 used that biggest footprint 'cause we didn't want</p> <p>20 to miss anything.</p> <p>21 Next slide, please. Sediment</p> <p>22 classification and determining suitability for</p> <p>23 alternative placement options is determined by a</p> <p>24 tiered process. That's sampling, testing,</p> <p>25 evaluating, and modeling. These processes are all</p>

<p style="text-align: right;">26</p> <p>1 aimed at determining the risk of contaminants to</p> <p>2 human health and ecological health. This process</p> <p>3 is detailed in testing manuals that are jointly</p> <p>4 authored by the US EPA and Army Corps of Engineers.</p> <p>5 Next slide, please. The sediment</p> <p>6 classification is basically a tiered process. The</p> <p>7 first tier, the top of the pyramid, is examining</p> <p>8 the history of the Harbor testing, spills and</p> <p>9 industry in the area. So basically you're</p> <p>10 evaluating existing data, existing conditions.</p> <p>11 The second tier is sampling and testing</p> <p>12 to determine the physical and chemical</p> <p>13 characteristics of the material. This tier is a</p> <p>14 screening tool that's based on chemical</p> <p>15 concentrations of contaminants in the dredge</p> <p>16 materials. And it should be noted that chemical</p> <p>17 concentrations alone are not reliable tools for</p> <p>18 determining a sediment's actual toxicity. For</p> <p>19 this, we move into tier 3.</p> <p>20 Tier 3 involves performing water column</p> <p>21 testing of the sediments, the water column</p> <p>22 chemistry, performing toxicity tests on benthic</p> <p>23 organisms, and performing bioaccumulation tests on</p> <p>24 organisms that are exposed to the sediment.</p> <p>25 These are the real drivers to determine</p>	<p style="text-align: right;">28</p> <p>1 tests can be found in the suitability</p> <p>2 determination, which is in Appendix J of the Draft</p> <p>3 Environmental Impact Statement.</p> <p>4 Links to all these documents are on the</p> <p>5 website that we will leave up at the very end of</p> <p>6 the presentation.</p> <p>7 Next slide, please. Dredge material</p> <p>8 which is found to be toxic or pose significant risk</p> <p>9 to the environment or the human health is deemed</p> <p>10 unsuitable. That's the term that we use.</p> <p>11 Such materials must be managed to isolate</p> <p>12 them from the environment, or they must undergo</p> <p>13 some kind of treatment to reduce their level of</p> <p>14 contamination to the point that other uses or</p> <p>15 placement options become available.</p> <p>16 Only materials determined to be nontoxic</p> <p>17 and low risk, or suitable, as opposed to</p> <p>18 unsuitable, may be placed in unconfined open water</p> <p>19 sites.</p> <p>20 This slide basically shows the</p> <p>21 decision-making process in a flowchart form.</p> <p>22 Sediment proposed for dredging is tested. If it</p> <p>23 fails testing, the toxicity testing -- not that</p> <p>24 tier 3 testing I was talking about in the earlier</p> <p>25 slide -- it's deemed unsuitable.</p>
<p style="text-align: right;">27</p> <p>1 sediment toxicity.</p> <p>2 And finally, tier 4, performing</p> <p>3 sub-lethal bioaccumulation tests. And that's</p> <p>4 basically exposing a critter to the sediment,</p> <p>5 letting it live for 30 days, and then taking a look</p> <p>6 at the amount of contaminants it could uptake in</p> <p>7 the tissue.</p> <p>8 And then those tests basically culminate</p> <p>9 in a risk assessment model that determines the</p> <p>10 potential for risk to human health and ecological</p> <p>11 health.</p> <p>12 This tiered method allows us to assess</p> <p>13 the actual effects of the sediment's chemistry to</p> <p>14 biological organisms and, through modeling, to</p> <p>15 human health and ecological health.</p> <p>16 For the New Haven Harbor project, all of</p> <p>17 the testing results that I will discuss can be</p> <p>18 found in Technical Supporting Document 1, which is</p> <p>19 on our website. And at the end of the</p> <p>20 presentation, we'll have a link to that. That has</p> <p>21 all the chemistry and biotesting that you may ever</p> <p>22 want to see.</p> <p>23 But if you are looking for a simpler</p> <p>24 version, a simple table of just the chemistry data,</p> <p>25 a summary of the biological tests and toxicity</p>	<p style="text-align: right;">29</p> <p>1 If the material passes the toxicity</p> <p>2 testing, you move into water column testing. If it</p> <p>3 passes that -- I mean if it fails that, it's</p> <p>4 considered unsuitable.</p> <p>5 And then finally, the bioaccumulation</p> <p>6 tests can be done and risk models prepared. And</p> <p>7 that also is the final test that would determine</p> <p>8 suitable versus unsuitable.</p> <p>9 Next slide. So here's the New Haven</p> <p>10 Harbor and the samples that we tested in our</p> <p>11 initial project footprint in 2017.</p> <p>12 In the inner harbor, there were 17</p> <p>13 stations sampled. As you can see here, we kind of</p> <p>14 set them up in transect form. So in the inner</p> <p>15 harbor, there were six transects.</p> <p>16 These transects, or groups of samples,</p> <p>17 covered the areas that included channel deepening</p> <p>18 as well as the widening alternatives.</p> <p>19 In addition, they covered that shifted</p> <p>20 and expanded turning basin that's up at the head of</p> <p>21 the project. In just a second I'm going to show</p> <p>22 you a slide so you can see where it is now versus</p> <p>23 what it looks like.</p> <p>24 The proposed expanded alignment again</p> <p>25 placed the turning basin further to the north and</p>

<p style="text-align: right;">30</p> <p>1 to the west of where it's currently located.</p> <p>2 Next slide. In the outer harbor, we had</p> <p>3 six samples, we had two different transects.</p> <p>4 Again, we were looking at maximum depth, 42 feet,</p> <p>5 and then the width of a hundred feet.</p> <p>6 Next slide, please. Just a little</p> <p>7 cartoon. This is a graphic that illustrates how</p> <p>8 samples were obtained. Basically, a coring device</p> <p>9 is vibrated down through the sediment to the</p> <p>10 proposed depth that we want to get to. The core is</p> <p>11 then sampled for chemical and physical parameters.</p> <p>12 And then additionally gallons of the</p> <p>13 sediment are collected to prepare those water</p> <p>14 column tests, toxicity tests, bioaccumulation</p> <p>15 tests.</p> <p>16 For this project, the cores sampled</p> <p>17 through a layer of maintenance material on top.</p> <p>18 That's stuff that's been kind of laid down since</p> <p>19 the Harbor was last dredged. And since we're going</p> <p>20 deeper, you can see it's into that glacial marine</p> <p>21 sediment or, you know, sediments that were</p> <p>22 deposited, we'll leave it at a long time ago.</p> <p>23 Next slide. So the chemistry data for</p> <p>24 each sample can be found in Technical Supporting</p> <p>25 Document 1 and Appendix J.</p>	<p style="text-align: right;">32</p> <p>1 The elutriate test, which is a water</p> <p>2 column test, which is the 7th column there, water</p> <p>3 column modeling, that passed for everything with</p> <p>4 the exception of composite 6 and composite 7. And</p> <p>5 again, back to our flowchart, that kicks it into</p> <p>6 unsuitable.</p> <p>7 So as it stands today, transects 1 and 2,</p> <p>8 which are in the outer harbor, are suitable.</p> <p>9 Transects 3, 4, 5, and 8, which are in the inner</p> <p>10 harbor, are all considered suitable. And then 6</p> <p>11 and 7, based on this testing, are unsuitable. So</p> <p>12 there's a little diagram of where they are at the</p> <p>13 moment. In the next slide I'll talk to you a</p> <p>14 little more about the unsuitable stuff.</p> <p>15 So this next slide, if we zoom in and</p> <p>16 look at the two transects that are currently</p> <p>17 unsuitable, we see they encompass both the channel</p> <p>18 area to the east and that relocated or expanded</p> <p>19 turning basin in our footprint design that was</p> <p>20 expanded to the west and to the north.</p> <p>21 The map on the right shows the existing</p> <p>22 location of the current turning basin. Essentially</p> <p>23 it's right here. That's the existing turning</p> <p>24 basin. The map on the left shows that expanded</p> <p>25 turning basin.</p>
<p style="text-align: right;">31</p> <p>1 I also noted that the chemical analysis</p> <p>2 is a screening that kind of dictates whether you</p> <p>3 move to biological testing or not. So the</p> <p>4 chemistry of New Haven Harbor dictated that we move</p> <p>5 into the bioaccumulation and biotoxicity testing.</p> <p>6 So these are the results of the</p> <p>7 biological testing for New Haven. Using the tiered</p> <p>8 testing approach, the first decision point is the</p> <p>9 toxicity test.</p> <p>10 The toxicity test uses two different</p> <p>11 species of critters that are representative of</p> <p>12 native fauna. That's the first -- so the</p> <p>13 composites, those are the transects that I was</p> <p>14 talking about earlier, the eight transects</p> <p>15 throughout the inner harbor and outer harbor.</p> <p>16 The second and third column are the</p> <p>17 toxicity tests using two critters that are native</p> <p>18 to this area. And as you can see, all of the</p> <p>19 transects passed the amphipod <i>Leptocheirus</i></p> <p>20 <i>plumulosus</i>. That's the first one.</p> <p>21 However, the second one, <i>Americamysis</i></p> <p>22 <i>bahia</i>, it's a mysid, it's a little shrimp,</p> <p>23 composite 6 failed. So if we go back to our</p> <p>24 flowchart, at the moment composite 6 would fail and</p> <p>25 be deemed unsuitable.</p>	<p style="text-align: right;">33</p> <p>1 The reason I'm bringing this to your</p> <p>2 attention is that as the project progressed, we had</p> <p>3 discussions with the Harbor pilots. We went</p> <p>4 through the ship simulation model that Barbara</p> <p>5 talked about just a few minutes ago, and we</p> <p>6 basically determined that a significantly larger</p> <p>7 and wider turning basin wasn't needed for the ships</p> <p>8 that call into New Haven.</p> <p>9 So as a result, the footprint of the</p> <p>10 turning basin is being reduced. And in light of</p> <p>11 the design change, we are currently resampling and</p> <p>12 retesting the sediment in the areas around these</p> <p>13 two transects to basically better define the</p> <p>14 material.</p> <p>15 Next slide. I'll show you what I mean.</p> <p>16 With the additional sampling, here's an</p> <p>17 overlay of the reduced turning basin footprint and</p> <p>18 the additional sampling that we're currently</p> <p>19 performing.</p> <p>20 The green sample locations are the ones</p> <p>21 that are being evaluated. These sediments will be</p> <p>22 re-evaluated the same way with the tiered testing</p> <p>23 process to determine their suitability. It should</p> <p>24 be noted that -- can you go back one slide,</p> <p>25 Barbara? I apologize. I forgot. That expanded</p>

<p style="text-align: right;">34</p> <p>1 turning basin actually kind of encroached into this</p> <p>2 area here, which is an existing 16-foot anchorage</p> <p>3 basin that hasn't really been dredged since 1950.</p> <p>4 So with our -- next slide, please -- with</p> <p>5 our reduced design of just the existing turning</p> <p>6 basin, with a slight 200-foot increase to the</p> <p>7 north, we're trying to pull out of that area that</p> <p>8 hasn't been dredged in a long time.</p> <p>9 So today our conclusions indicate that we</p> <p>10 have some unsuitable material. So with such, we've</p> <p>11 included a CAD cell in the placement alternatives</p> <p>12 that I'll discuss in just a second.</p> <p>13 But it should be noted that data from the</p> <p>14 sampling of the reduced footprint may show the</p> <p>15 material is suitable due to removing the material</p> <p>16 out of that whole existing 16-foot anchorage. But</p> <p>17 that process is basically still ongoing.</p> <p>18 Next slide. What is a CAD cell? A CAD</p> <p>19 cell is basically a confined aquatic disposal site,</p> <p>20 a hole in the ocean, if you will. The CAD cell is</p> <p>21 required.</p> <p>22 This schematic shows you the general</p> <p>23 process behind the creation of one. Suitable</p> <p>24 material is removed. And that's what's happening</p> <p>25 in the first graphic.</p>	<p style="text-align: right;">36</p> <p>1 shellfish habitat. So that's where our plan for</p> <p>2 the outer harbor material is.</p> <p>3 All the blasted rock that comes out of</p> <p>4 that bend that Barbara talked about expanding would</p> <p>5 be placed south of the west breakwater to create a</p> <p>6 rock reef, some habitat for Long Island Sound</p> <p>7 organisms.</p> <p>8 And then the remaining suitable material,</p> <p>9 mostly silts, would be placed at the central Long</p> <p>10 Island Sound disposal site. It's not shown in this</p> <p>11 map, but it's a few miles south of the entrance to</p> <p>12 New Haven Harbor.</p> <p>13 There's an additional beneficial use</p> <p>14 alternative with the plan that's beyond the federal</p> <p>15 base plan. This alternative involves using the</p> <p>16 silty material to create approximately 70 acres of</p> <p>17 salt marsh and tidal creeks in the vicinity of</p> <p>18 Sandy Point in West Haven.</p> <p>19 As noted in the draft EIS, since the late</p> <p>20 1800s, the New Haven Harbor ecosystem has lost over</p> <p>21 60 percent of its historical wetlands through</p> <p>22 filling for residential and commercial property</p> <p>23 development. So the creation of 70 acres of salt</p> <p>24 marsh would restore some of the functions and</p> <p>25 values that marsh systems provide to the New Haven</p>
<p style="text-align: right;">35</p> <p>1 And then the second one, the cell is</p> <p>2 filled with unsuitable material. That's what's</p> <p>3 happening in the second.</p> <p>4 And then in the third picture, the</p> <p>5 unsuitable material is capped with suitable</p> <p>6 material.</p> <p>7 So with that in mind, we'll go ahead and</p> <p>8 go into the alternative placement slides now. So</p> <p>9 here are the placement alternatives that are</p> <p>10 carried forward in the study and documented in the</p> <p>11 Draft IFR/EIS.</p> <p>12 The baseline plan consists of the two</p> <p>13 borrow pits, the Morris Cove borrow pit and the</p> <p>14 West River borrow pit.</p> <p>15 These pits will be filled to elevations</p> <p>16 that are within 1 and 2 feet of their surrounding</p> <p>17 areas. These pits were dredged for material to</p> <p>18 create the 95 embankment.</p> <p>19 The material from the outer harbor, which</p> <p>20 is -- it's a silty sand. It's not sandy enough to</p> <p>21 put it on the beach or use as a structural fill.</p> <p>22 But we do plan to take that material and place it</p> <p>23 behind the east breakwater to raise the bottom</p> <p>24 elevation and change the bottom sediments a little</p> <p>25 bit, so it's a little bit sandier sediment for</p>	<p style="text-align: right;">37</p> <p>1 Harbor ecosystem.</p> <p>2 Also, as I just noted, during the</p> <p>3 sediment characterization CAD cell discussion, a</p> <p>4 potential CAD cell has been planned in the event</p> <p>5 that we need to manage any kind of unsuitable</p> <p>6 material. And the proposed CAD cell location is</p> <p>7 just to the west of the channel in the vicinity of</p> <p>8 Sandy Point. So it's that purple box just</p> <p>9 southeast of Sandy Point.</p> <p>10 Next slide, please. This slide shows the</p> <p>11 base plan placement sites, about a million cubic</p> <p>12 yards. So basically, the inner harbor sites total</p> <p>13 about a million cubic yards for the placement. The</p> <p>14 rock will be placed, like I said, to the west of --</p> <p>15 south of the west breakwater. And then the rest of</p> <p>16 the material would go to central Long Island Sound.</p> <p>17 Should a CAD cell be required, the</p> <p>18 material, the suitable material that would come out</p> <p>19 of a CAD cell would kind of take the place of one</p> <p>20 of those other options. And unsuitable material</p> <p>21 would be placed in the CAD cell.</p> <p>22 Next slide. Here's just a quick look at</p> <p>23 the beneficial use placement site above the base</p> <p>24 plan. It involves creating salt marsh in the</p> <p>25 vicinity of Sandy Point. This option would place</p>

<p style="text-align: right;">38</p> <p>1 approximately 840,000 cubic yards of suitable silt 2 just to the north of Sandy Point, in the area 3 that's shown in the green box in the little inset. 4 This area would be designed as salt marsh, tidal 5 creek, and it would retain the sandy beach habitat. 6 Next slide: This slide is just a summary 7 of the projected measures that, following project 8 review, authorization, and design, would be used to 9 protect resources in New Haven Harbor. 10 Construction windows for dredging and 11 blasting would be used to minimize impacts to 12 potential fish habitat, shellfish, anadromous fish, 13 endangered species. 14 The Corps also performed a series of 15 culture resource studies in the area and did not 16 identify the need to -- we didn't find anything 17 that was in need of protection. 18 Next slide, please. This slide documents 19 the coordination efforts that are ongoing for the 20 project. These are all detailed in the EIS. 21 In terms of our public involvement with 22 the project, we had scoping meetings in January of 23 2017. We had the alternatives briefing in January 24 2018. And now we're into the public review and 25 public hearing process for the Draft Feasibility</p>	<p style="text-align: right;">40</p> <p>1 Mr. Habel. He can walk you through the commenting 2 process. Thank you. 3 MR. HABEL: Thank you, Todd. 4 The hearing tonight will be conducted in 5 a manner so that all who desire to express their 6 views will be given an opportunity to speak. 7 To preserve the right of all to express 8 their views, I ask that there be no interruptions. 9 When you came in, copies of the Fact Sheet and 10 procedures to be followed at this hearing were 11 available. If you did not receive these, both are 12 still available at the registration table. I will 13 not read either of them, but they will be entered 14 into the record. 15 The record of this hearing will remain 16 open, and written comments may be submitted 17 tonight, sent by mail or by email through 18 November 15th. 19 All written comments will receive equal 20 consideration with oral comments made this evening, 21 and both oral and written comments will be 22 considered in the development of the Final 23 Integrated Feasibility Report and Environmental 24 Impact Statement. 25 We need your participation throughout the</p>
<p style="text-align: right;">39</p> <p>1 Report and EIS. 2 The website with all the information we 3 presented is over there in green. But the next 4 slide -- well, the last slide will have that -- 5 we'll leave it up in case you'd like to -- next 6 slide, please. 7 And then finally here's the project 8 schedule. As I just noted, we are currently in the 9 45-day review period for the IFR and the EIS. 10 Comments on the draft are due by November 15th, 11 again, written, email, here tonight. We listen to 12 them all. 13 Once we get to that date, we will take a 14 look at all the comments, hopefully get to them by 15 January of this year -- of next year, and with 16 responses make an agency decision on which plan to 17 move forward with. And then we will move towards 18 finalizing the IFR and the EIS, which will, again, 19 come out for public review and public comment. Our 20 time frame for that right now is September of 2019. 21 So on behalf of Barbara and all of the 22 New Haven Harbor team members, thanks for your 23 interest, and thanks in advance for looking at the 24 documents and providing the comments. 25 I'll now hand the microphone back over to</p>	<p style="text-align: right;">41</p> <p>1 entire process, and I thank you for contributing 2 your comments and thoughts tonight. 3 A transcript of this hearing is being 4 made to assure a detailed review of all comments. 5 A copy of the transcript will be available at the 6 Corps' Concord, Massachusetts headquarters for 7 review, posted on the Corps' website for your use, 8 or you may make arrangements with the stenographer 9 for a copy at your own expense. 10 Anyone who does not comment tonight but 11 wishes to send written comments may do so. Please 12 forward those comments to the Corps' project 13 manager, Barbara Blumeris, at the Corps' New 14 England District office located in Concord, 15 Massachusetts. 16 When making a statement tonight, please 17 come forward to the microphone and state your name. 18 If you are speaking for or representing a position 19 of an organization, please say so. 20 There are only about four people who have 21 filled out speaker cards tonight, so we won't use 22 the typical three-minute clock, but I ask you to 23 please summarize your comments. If you have more 24 detailed comments, please make those in writing by 25 email or by letter to the Corps.</p>

<p style="text-align: right;">42</p> <p>1 Again, oral and written statements will 2 receive equal consideration in making decisions. 3 Also, any written comments you may have brought 4 with you tonight may be submitted to the 5 stenographer. 6 The first individual to provide comment 7 for the record tonight is Michael Pimer. 8 MR. PIMER: Good evening. My name is 9 Mike Pimer, ex-harbormaster, ex-business owner. 10 I'm 80-plus years old. That's what makes me ex. 11 Nobody wants me, but I've got a big mouth. And 12 I've been around a long time. And I've got a few 13 questions for you. 14 I represent the West Haven's harbor 15 management. That I am still part of. Also, I'm 16 like a deputy harbormaster still, 'cause my son is 17 now the West Haven harbormaster. Okay. Here we 18 go. 19 Initially, when I went to the hearings, 20 you had the straightening of the approach to the 21 breakwater. That's been scrapped? 22 The straightening of the channel, it's 23 now been widened on the bend, and not so much as 24 moving the channel to the west, the outer channel, 25 making it straighter. Is this correct?</p>	<p style="text-align: right;">44</p> <p>1 station and run over it. Not a good thing. 2 But that was my reasoning for building 3 that up with material which you had to move. I'd 4 just like you to consider that in the future. 5 Now, you're going to make a marsh to the 6 north of Sandy Point? Is that going to shut off 7 the West Haven Yacht Club channel, basically out to 8 the main channel? They're located inboard on the 9 shore. Are you going to -- I didn't see how far 10 this was going to go. Is it going to hug the Sandy 11 Point break -- beach there, or is it going to move 12 away from the beach? And how far? 13 So you might consider putting that out on 14 the next hearing you're going to have, showing us 15 exactly how far out you're going to move it. 16 Because West Haven Yacht Club is located inboard of 17 that. And they normally run alongside that sand 18 bar to get out. 19 West River. You're going to fill in the 20 borrow pit there now. Not a bad idea. It was used 21 for sailboat anchorage. It was part of the 22 harbormaster's domain to put sailboats. They'll 23 find another spot. 24 But we would like to -- I say we -- the 25 350 members of the City Point Yacht Club and I</p>
<p style="text-align: right;">43</p> <p>1 MR. HABEL: Sir, this is a hearing 2 tonight. It's not a dialogue. 3 MR. PIMER: Well, I'm just asking. 4 Because according to what I'm seeing up there 5 tonight is the channel is the same place it was 6 before. It just got a little wider. 7 MR. HABEL: It's been widened, yes. 8 MR. PIMER: Is that basically wider and 9 deeper? 10 MR. HABEL: Yes. 11 MR. PIMER: Okay. You're going to blast 12 between the breakwater, correct? 13 MR. HABEL: Where the rock is. 14 MR. PIMER: That's where the rock is. 15 It's granite. 16 I had suggested at the last hearing that 17 we take the material from that blast, instead of 18 putting it on the outside of the west wall, that we 19 might consider putting it on the breakwater at 20 Sandy Point, the little jetty opposite the Coast 21 Guard station. 22 We've had so many boats run over that 23 because of the rising tide and the fact that it's 24 not -- you can't see it anymore. Government boats 25 have run over it, come right out of the Coast Guard</p>	<p style="text-align: right;">45</p> <p>1 think The Havens, which is a multimillion-dollar 2 investment going into West Haven in the West River, 3 needs to have some water. 4 While you're doing the outer channel, I 5 would like you to consider doing the West River up 6 to I-95. 12 feet would be desirable. You have 12 7 feet halfway in that channel and then it suddenly 8 jumps up to 6. And that's a killer. 9 Half the boats are dragging their tails 10 coming out of that river. And you can't expect 11 people with yachts to come in and go shopping in a 12 big mall when they don't have water. So I just 13 want to throw that out at you. 14 I think everybody's in agreement here 15 that we ought to deepen the West River. It was 16 deep at one time. We had tugboats and barges that 17 went all the way up to the river tracks past where 18 I-95 is now. We had a brick company up there. We 19 had coal barges going in there. 20 We had tugboats going into -- just the 21 side of the old Kimberly Avenue Bridge was 22 nonexistent, which used to open up. And we have 23 asked before to have this done. And we've heard 24 that we have to have commercial vessels up there. 25 Well, unless we've got water, we can't have</p>

<p style="text-align: right;">46</p> <p>1 commercial vessels because they throw more than 2 what we have in depth. You can't tell a commercial 3 boat, oh, I can't go out now. It's low tide. 4 So we had maybe half a dozen commercial 5 vessels up beyond the bridge. But they're small. 6 We did have bigger boats. Nonexistent. 7 The Army Corps decided to build a bridge, 8 get rid of an open-and-closing bridge, and turn 9 around and make a permanent bridge. And that was 10 the end of that. 11 So since that time, it's been getting 12 shallower and shallower and shallower. And when 13 you go to take your samples, you'll notice it's 14 6 foot, and minus 6 foot is what you're going to 15 find in the West River from Pequonnock Yacht Club 16 up the river. 17 We would like to see -- we've got a fire 18 training center, New Haven fire boat. We'd like to 19 see that be able to go there. West Haven is 20 getting a very large fire boat. We'd like to see 21 that be able to operate. 22 We've got to tell them, well, you've got 23 to put it over at City Point because we don't have 24 enough water. We had enough water. I would like 25 to see us get it back. Thank you.</p>	<p style="text-align: right;">48</p> <p>1 This is an important project for 2 New Haven. Keeping the channel deep and keeping 3 businesses up there competitive is important to all 4 of us. 5 There are some impacts, though, outside 6 of the actual navigation channel that concern us. 7 I just want to go on record that I will be 8 submitting some written comments to that effect. 9 Thank you. 10 MR. HABEL: Thank you, sir. 11 Kathy Hebert. 12 MS. HEBERT: Hi. I'm Kathy Hebert, and I 13 represent two different watersheds: West River 14 Watershed Coalition and West Haven Watershed 15 Restoration Committee. 16 In reference to the West River watershed, 17 we have been concerned about the dredging and the 18 sand dumping at the mouth of West River. And you 19 pretty much covered it, where the CAD, if there's 20 any contaminated removal from somewhere else, 21 you're going to fill the West River borrow pit and 22 then cover it up -- no? Okay. That's what I'm not 23 understanding. And I guess we don't get answers 24 tonight. 25 MR. HABEL: Well, I'll just provide a</p>
<p style="text-align: right;">47</p> <p>1 MR. HABEL: Thank you, sir. 2 Next up is Bill Marazzi. 3 MR. MARAZZI: Thank you for giving me 4 this opportunity to speak tonight. I don't want to 5 reiterate what Mike Pimer had just given you. But 6 our club is 350 people, City Point Yacht Club. 7 We're one of the oldest clubs around, 1896. 8 I joined 30, 40 years ago, right after I 9 got out of the Army. If we didn't have water and 10 boating, I probably wouldn't be here today. I fell 11 onto the City Point Yacht Club, and I use it as my 12 falling stone. Instead of going to the VA to get 13 help, I got help from the members of the City Point 14 Yacht Club, which in turn I have used my boat there 15 for therapy, camaraderie. And the depth of the 16 water was much greater, as Michael said. 17 By giving us a little help up that end of 18 the river, the West River, would be much welcomed. 19 And I think it is much needed for the both yacht 20 clubs that use that channel. Thank you. 21 MR. HABEL: Thank you. Next is Joe 22 Gilbert. 23 MR. GILBERT: Hi. My name is Joe 24 Gilbert. I represent Empire Fisheries. I'm here 25 speaking on behalf of Briarpatch Enterprises.</p>	<p style="text-align: right;">49</p> <p>1 quick clarification. 2 The Morris Cove borrow pit and the West 3 River borrow pit, the holes that are already there, 4 we would be filling those in with suitable dredge 5 material. 6 MS. HEBERT: Okay. 7 MR. HABEL: And the unsuitable material 8 from wherever in the Harbor, we would dig a 9 separate confined aquatic disposal cell in the 10 outer harbor to place that in and then cover that. 11 MS. HEBERT: That's good. That answers 12 that question. 13 And it was brought to the West River 14 Coalition that there's an old oyster bed on the 15 New Haven side of the West River. And we didn't 16 know about it, and we didn't know if you knew about 17 it. 18 And in your plans, 'cause you did say you 19 were going to protect the sea life, is there any 20 plan to protect that? Is the dredging going to 21 damage that? Or do you not even know? Did you not 22 know about it? So that's a comment. 23 And for the West Haven watershed, we're 24 concerned about any changes to Sandy Point bird 25 sanctuary. And I saw the pictures up there.</p>

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1 So, again, a question. Because the
2 outlay pipe from the West Haven Treatment Center
3 pretty much goes alongside or through Sandy Point,
4 and I've heard they're going to be replacing that.
5 Who, I don't know. I don't know if it's you or
6 West Haven. But we just want to make sure that
7 there's no damage to that when you're doing that.
8 Because we don't want any of the sewage in the
9 Sandy Point bird sanctuary and the salt marshes.
10 And I think that was it. Thank you.

11 MR. HABEL: Okay. Thank you, ma'am.

12 That was the last of the individuals who
13 filled out speaker cards. Is there anyone else in
14 the audience who did not fill out a card but wishes
15 to speak?

16 Sir, please come up and state your name.

17 MR. FLYNN: My name is Dennis Flynn. I'm
18 also a member West Haven Harbor Management
19 Commission.

20 My two comments are as big as this
21 dredging project is, I can't understand why you're
22 not doing the rest of the federal navigation
23 channel, which I think should be done. It's
24 cost-effective while you've got everything there to
25 do the rest of the dredging.

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1 And the other thing is your slides
2 showing -- and the woman before me commented --
3 where you're talking about marsh restoration, it
4 doesn't show far enough and exactly how far away
5 you're going to be from an outflow pipe, which is
6 very important to us. We need to know that.

7 So if we could get, you know, an
8 estimate, is it going to be a hundred feet away, a
9 thousand feet away, that's very important. Thank
10 you.

11 MR. HABEL: Okay. Is there anyone else?
12 All right. John, the floor is yours.

13 MR. KENNELLY: Thank you, Mark. We have
14 heard many thoughtful statements this evening. All
15 of the comments received tonight, as well as
16 written comments we receive during the review
17 period, will be considered in the development of
18 the Integrated Feasibility Report and EIS.

19 Written statements may be submitted to
20 the Corps of Engineers until November 15, 2018.
21 They will receive equal consideration with those
22 presented tonight.

23 We, the Army Corps of Engineers, extend
24 our appreciation to all who took the time to
25 involve themselves in this public review process

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1 and the Bailey Middle School for the use of their
2 fine facility tonight.

3 I'd like to thank all for taking the time
4 to provide us with your thoughts, your comments,
5 and your concerns. Goodnight.

6 (Whereupon, this public hearing was
7 concluded at 7:42 p.m.)

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C E R T I F I C A T E

I hereby certify that I am a Notary Public, in
and for the State of Connecticut, duly commissioned and
qualified to administer oaths.

I further certify that the record of the
proceedings held in the matter was taken by me
stenographically in the presence of counsel and reduced
to typewriting under my direction, and the foregoing is
a true and accurate transcript of said proceedings.

I further certify that I am neither of counsel
nor attorney to either of the parties to said matter,
nor am I an employee of either party to said matter, nor
of either counsel in said matter, nor am I interested in
the outcome of said cause.

Witness my hand and seal as Notary Public
this 4th day of November 2018.

Janet C. Phillips
Notary Public

My Commission expires:
October 31, 2021

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PUBLIC HEARING ON THE
DRAFT INTEGRATED FEASIBILITY REPORT AND EIS
NEW HAVEN HARBOR NAVIGATION IMPROVEMENT PROJECT

OCTOBER 24, 2018

6:31 P.M.

CITY OF NEW HAVEN HALL OF RECORDS
200 ORANGE STREET
NEW HAVEN, CONNECTICUT

<p style="text-align: right;">2</p> <p>1</p> <p>2 APPEARANCES:</p> <p>3</p> <p>4 MARK HABEL: CHIEF, NAVIGATION AND ENVIRONMENTAL STUDIES</p> <p>5 SECTION, PLANNING DIVISION, U.S. ARMY CORPS OF</p> <p>6 ENGINEERS, NEW ENGLAND DISTRICT</p> <p>7 JUDI SHEIFFELE: EXECUTIVE DIRECTOR, NEW HAVEN PORT</p> <p>8 AUTHORITY</p> <p>9 EVAN MATTHEWS: EXECUTIVE DIRECTOR, CONNECTICUT PORT</p> <p>10 AUTHORITY</p> <p>11 JOHN KENNELLY: CHIEF, PLANNING DIVISION, U.S. ARMY</p> <p>12 CORPS OF ENGINEERS, NEW ENGLAND DISTRICT</p> <p>13 BARBARA BLUMERIS: PROJECT MANAGER, WATER RESOURCES</p> <p>14 PLANNING SECTION, PLANNING DIVISION, U.S. ARMY CORPS OF</p> <p>15 ENGINEERS, NEW ENGLAND DISTRICT</p> <p>16 TODD RANDALL: MARINE ECOLOGIST, ENVIRONMENTAL RESOURCES</p> <p>17 SECTION, PLANNING DIVISION, U.S. ARMY CORPS OF</p> <p>18 ENGINEERS, NEW ENGLAND DISTRICT</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p style="text-align: right;">4</p> <p>1 our Coastal Engineering Unit.</p> <p>2 Should you need copies of the public</p> <p>3 notice, hearing procedures, or other pertinent</p> <p>4 information, it is available at the registration</p> <p>5 table in the back of the room.</p> <p>6 Following this introduction, the project</p> <p>7 sponsors will give brief remarks. Judi Sheiffele</p> <p>8 is the Executive Director of the New Haven Port</p> <p>9 Authority. And following Judi will be Evan</p> <p>10 Matthews, the Executive Director of the Connecticut</p> <p>11 Port Authority.</p> <p>12 Our hearing officer, John Kennelly, will</p> <p>13 then address the hearing. John will be followed by</p> <p>14 Barbara Blumeris, who will provide information on</p> <p>15 the Draft Integrated Feasibility Report and</p> <p>16 Environmental Impact Statement for the New Haven</p> <p>17 Harbor Study. And Barbara will be followed by Todd</p> <p>18 Randall, who will provide an overview of the</p> <p>19 environmental investigations conducted during this</p> <p>20 study.</p> <p>21 At the conclusion of these briefings, I</p> <p>22 will then review the Corps of Engineers</p> <p>23 responsibilities in this process and explain the</p> <p>24 hearing procedures.</p> <p>25 Following that, I will open the floor to</p>
<p style="text-align: right;">3</p> <p>1 (The hearing commenced at 6:31 p.m.)</p> <p>2 MR. HABEL: Good evening, and welcome to</p> <p>3 the public hearing for the New Haven Harbor</p> <p>4 Navigation Improvement Project.</p> <p>5 My name is Mark Habel. I'm Chief of the</p> <p>6 Navigation and Environmental Studies Section for</p> <p>7 the United States Army Corps of Engineers,</p> <p>8 New England District. I will be your moderator and</p> <p>9 facilitator tonight.</p> <p>10 Before we begin, I would like to thank</p> <p>11 you for getting involved in this review process for</p> <p>12 the New Haven Harbor Navigation Improvement Project</p> <p>13 Study.</p> <p>14 The New Haven Harbor deepening study is</p> <p>15 being undertaken by the Corps of Engineers in</p> <p>16 partnership with the project sponsor, the New Haven</p> <p>17 Port Authority, and with the Connecticut Port</p> <p>18 Authority.</p> <p>19 Our hearing officer tonight is John</p> <p>20 Kennelly, Chief of the Planning Division for the</p> <p>21 Corps in New England.</p> <p>22 Also here from the Corps New England</p> <p>23 District are Barbara Blumeris, our Project Manager,</p> <p>24 and Todd Randall, who helped write the</p> <p>25 Environmental Impact Statement; Lisa Winter, from</p>	<p style="text-align: right;">5</p> <p>1 public comment, utilizing the Corps of Engineers</p> <p>2 hearing protocol.</p> <p>3 One additional reminder: We are here</p> <p>4 tonight to receive your comments, not to enter into</p> <p>5 any discussion of those comments or to reach any</p> <p>6 conclusions. Any questions should be directed to</p> <p>7 the record and not to the individuals on the panel.</p> <p>8 And now, ladies and gentlemen, I would</p> <p>9 like to call on the representative from our</p> <p>10 non-federal study sponsor, Judi Sheiffele,</p> <p>11 Executive Director of the New Haven Port Authority.</p> <p>12 Judi?</p> <p>13 MS. SHEIFFELE: Thanks, Mark.</p> <p>14 My name is Judi Sheiffele, and, as Mark</p> <p>15 has told you, I am the Executive Director of the</p> <p>16 New Haven Port Authority.</p> <p>17 The subject of tonight's hearing is to</p> <p>18 hear the Draft Feasibility Report and Environmental</p> <p>19 Impact Statement on the Navigational Improvement</p> <p>20 Project which would involve the deepening and</p> <p>21 widening of the federal channel in New Haven.</p> <p>22 Deepening the channel from its current</p> <p>23 authorized depth of 35 to 40 feet is a major</p> <p>24 infrastructure improvement that when constructed</p> <p>25 will improve the safety and increase the efficiency</p>

<p style="text-align: right;">6</p> <p>1 of the movement of vessels through the Port of 2 New Haven. 3 Over the past three years, the 4 Connecticut and New Haven Port Authorities have 5 worked with the Army Corps of Engineers to assess 6 the conditions in New Haven Harbor and make a 7 determination as to whether a deepening is 8 warranted. Tonight the Corps will be presenting 9 the draft findings. 10 And in closing, I would like to thank you 11 you all for coming, your interest in this project, 12 and we look forward to hearing your comments. 13 MR. HABEL: Thank you, Judi. 14 Ladies and gentlemen, I would like to 15 introduce Evan Matthews, Executive Director for the 16 Connecticut Port Authority. 17 MR. MATTHEWS: Thank you, Mark. My name 18 is Evan Matthews. And I'm the Executive Director 19 of the Connecticut Port Authority, headquartered in 20 Old Saybrook, Connecticut. 21 We have enjoyed partnering with the 22 New Haven Port Authority to fund this study. I 23 want to thank the Army Corps for conducting this 24 hearing and moving the project forward. We have 25 used the resources of the CPA in recent weeks to</p>	<p style="text-align: right;">8</p> <p>1 MR. HABEL: Thank you, Evan. 2 Ladies and gentlemen, John Kennelly. 3 MR. KENNELLY: Good evening. I would 4 like to welcome you tonight to this public hearing 5 regarding the New Haven Harbor Navigation 6 Improvement Project Study. 7 I would also like to thank you for your 8 involvement, for involving yourself in this study, 9 and for providing us with your views and comments. 10 By conducting this public hearing, we, 11 the Corps of Engineers, continue to fulfill our 12 requirement to seek public comment and input 13 relative to the New Haven Harbor Navigation 14 Improvement Study. 15 While no decision will be made tonight, 16 we welcome your comments on the New Haven Harbor 17 Navigation Improvement Project Study. Your 18 comments will be considered in our development of 19 the Final Integrated Feasibility Report and 20 Environmental Impact Statement. 21 Please feel free to provide comments that 22 you would like to enter into the record. 23 Additionally, we will receive written 24 comments tonight and through November 15th, 2018. 25 I assure you that all of your comments, written or</p>
<p style="text-align: right;">7</p> <p>1 try to encourage involvement in this process 2 because we believe public input leads to better 3 results. 4 From the Port Authority's perspective, 5 this project is entirely consistent with our 6 overall goals outlined in the Port Authority's 7 Connecticut maritime strategy, which is available 8 on our website, which was released in August. 9 And that strategy puts an emphasis on 10 maximizing the potential of Connecticut's three 11 deep-water ports. Obviously, New Haven is one of 12 those ports. As you'll hear in some of the 13 analysis later on, it's one of the larger ports 14 complexes in the state. 15 New Haven is particularly important in 16 that strategy and long overdue for navigational 17 improvements. 18 I'm sure that there are many ideas on how 19 to improve the draft plan you have published. We 20 look forward to hearing the public's input in 21 person at these two hearings -- we were in West 22 Haven last night -- and online, and I'm confident 23 that you will take those public comments into 24 account as the plan is finalized. Thank you very 25 much.</p>	<p style="text-align: right;">9</p> <p>1 oral, will be addressed during this process, will 2 be treated equally on the record, and will be 3 considered in the development of the final report. 4 It is crucial to the public process that 5 your voice be heard, and we're here to listen to 6 your comments, to understand your concerns, and to 7 provide you an opportunity to put your thoughts on 8 the record should you care to do so. 9 The primary purpose of this hearing is to 10 solicit the public's comments and input. However, 11 the hearing will begin with the project team 12 providing background information on the Integrated 13 Feasibility Report and Environmental Impact 14 Statement, including details on the existing 15 deep-draft navigation problems, alternatives 16 evaluated, information on the Tentatively Selected 17 Plan, and information on the dredge material and 18 placement sites. 19 These presentations, at the beginning of 20 each public hearing, will assist the public and 21 agency reviewers in understanding the documents and 22 the evaluation process which was followed; thus, 23 aiding the public as they review the draft report. 24 In addition to providing comments at the 25 public hearing, the public may provide written</p>

<p style="text-align: right;">10</p> <p>1 comments at any time during the public review</p> <p>2 period. I would like to emphasize this is your</p> <p>3 hearing, and we need you to assist us in this</p> <p>4 public review process.</p> <p>5 We want your comments on the draft report</p> <p>6 so that we can consider all of the comments that we</p> <p>7 receive, those made here tonight, as well as those</p> <p>8 submitted during the public review period, in</p> <p>9 preparing the Final Integrated Feasibility Report</p> <p>10 and the EIS. Thank you.</p> <p>11 MR. HABEL: Thank you, John.</p> <p>12 Ladies and gentlemen, Barbara Blumeris.</p> <p>13 MS. BLUMERIS: Good evening. Tonight</p> <p>14 Todd and I will present summary information on the</p> <p>15 planning process to reach the Tentatively Selected</p> <p>16 Plan.</p> <p>17 The slides that we share tonight will be</p> <p>18 posted on our project website on Thursday. The</p> <p>19 project website is included in the Fact Sheet, on</p> <p>20 the back of the Fact Sheet. So you can see here's</p> <p>21 the link to the project website. And they'll be</p> <p>22 posted on that site</p> <p>23 This first slide illustrates the Corps</p> <p>24 planning process. We're about in the middle of the</p> <p>25 process right now, starting on the reviews. So we</p>	<p style="text-align: right;">12</p> <p>1 This is the slide that shows the existing</p> <p>2 federal project.</p> <p>3 New Haven is centrally located on the</p> <p>4 north shore of Long Island Sound, as you can see in</p> <p>5 the small insert map to the right. The Harbor is a</p> <p>6 very important maritime commercial resource for the</p> <p>7 state of Connecticut.</p> <p>8 The current federally-authorized</p> <p>9 New Haven Harbor Navigation Project includes a</p> <p>10 deep-draft channel, turning basin, maneuver area.</p> <p>11 So this is the existing project. So we</p> <p>12 currently have a deep-draft channel that comes in</p> <p>13 from Long Island Sound into terminals at the head</p> <p>14 of the harbor. Those are shown in purple. And</p> <p>15 that deep-draft channel is authorized at minus</p> <p>16 35 feet mean lower low water. So that means at low</p> <p>17 tide, there's 35 feet of water available for ships</p> <p>18 to sail into the Harbor.</p> <p>19 This project was authorized in 1946 by</p> <p>20 Congress, and constructed in 1950. So in 2018,</p> <p>21 that deep-draft channel will be 68 years old, and</p> <p>22 due for an improvement, as ship sizes have</p> <p>23 increased over the last 60 years.</p> <p>24 Now, the next slide talks about the type</p> <p>25 of commodities coming in, as well as the total</p>
<p style="text-align: right;">11</p> <p>1 have public review right now to November 15th. We</p> <p>2 also at the same time are conducting concurrent</p> <p>3 reviews with the agency technical review. That's</p> <p>4 an internal team of four reviewers, and then an</p> <p>5 independent external review by our panel of</p> <p>6 reviewers.</p> <p>7 Next slide. The non-federal sponsors are</p> <p>8 here with us tonight. And they are cost-sharing</p> <p>9 this particular effort, 50 percent federal,</p> <p>10 50 percent non-federal.</p> <p>11 To conduct the study, we needed</p> <p>12 congressional authorization. And this slide</p> <p>13 provides the authorization that was provided by</p> <p>14 Congress in 2007 to conduct this feasibility study.</p> <p>15 In 2015, we entered into that</p> <p>16 cost-sharing agreement with the Port Authority, and</p> <p>17 we started in earnest in 2016 on the effort.</p> <p>18 The purpose of the study is to</p> <p>19 investigate improvements needed to provide a safe,</p> <p>20 reliable, efficient, and environmentally</p> <p>21 sustainable waterborne transportation system into</p> <p>22 New Haven. We're going to be determining whether</p> <p>23 the navigation improvements to the existing federal</p> <p>24 project at New Haven Harbor are warranted and in</p> <p>25 the federal interest.</p>	<p style="text-align: right;">13</p> <p>1 tonnage.</p> <p>2 In terms of total tonnage, this is the</p> <p>3 second largest port in New England, and the largest</p> <p>4 port in Connecticut. In 2016, the total freight</p> <p>5 traffic was 8.8 million metric tons, representing</p> <p>6 about 24 percent of all waterborne commerce in</p> <p>7 New England, and about 81 percent of all waterborne</p> <p>8 commerce in Connecticut.</p> <p>9 The Northeast maintains a large refinery</p> <p>10 production/demand deficit, and must rely heavily on</p> <p>11 imported volumes of petroleum products in order to</p> <p>12 meet demand.</p> <p>13 The port is a crucial import location for</p> <p>14 refined petroleum products, which supplies demand</p> <p>15 within Connecticut as well as the broader Northeast</p> <p>16 region.</p> <p>17 The majority of the landside acreage in</p> <p>18 the Port of New Haven is devoted to energy-related</p> <p>19 uses. This represents a long-term land use and</p> <p>20 economic asset for the economy in the state of</p> <p>21 Connecticut.</p> <p>22 Next slide. Petroleum products have</p> <p>23 historically constituted about 70 percent of</p> <p>24 channel tonnage. Data from 2016 is shown on this</p> <p>25 pie chart, with the petroleum products in blue.</p>

<p style="text-align: right;">14</p> <p>1 You can see that, based on this one year, that,</p> <p>2 yes, petroleum constitutes the most.</p> <p>3 But we also have other important things</p> <p>4 coming into the port, including dry bulk and break</p> <p>5 bulk, including salt, sand, cement. And also we</p> <p>6 have steel, rebar, and steel billets, steel rail.</p> <p>7 But then we also have an export, which is</p> <p>8 the scrap metal, which you probably may have</p> <p>9 noticed as you drive on the highway, there's a huge</p> <p>10 pile of scrap metal. And this is an export.</p> <p>11 There's approximately 1 million tons of scrap metal</p> <p>12 produced annually within the state, and</p> <p>13 approximately half of that amount is exported</p> <p>14 through the Port of New Haven.</p> <p>15 Next slide. This, shows our port</p> <p>16 terminals. Magellan, Motiva, and Gateway, one of</p> <p>17 the larger terminals. So this is just a slide</p> <p>18 showing the location of the facilities in the</p> <p>19 harbor.</p> <p>20 Next slide.</p> <p>21 There are several problems with the</p> <p>22 existing channel. One is the insufficient depth of</p> <p>23 the main channel and the turning basin. And then</p> <p>24 also there's a problem at the bend. So there's a</p> <p>25 bend between the two breakwaters that protect the</p>	<p style="text-align: right;">16</p> <p>1 restricted. So they either have to come in on high</p> <p>2 tide or they have to lighter outside of the</p> <p>3 anchorage. This creates transportation</p> <p>4 inefficiency and results in additional</p> <p>5 transportation costs of bringing the cargo into the</p> <p>6 port.</p> <p>7 Without an improvement project, shippers</p> <p>8 will continue to be limited to the size of the</p> <p>9 vessels they can call to port, leaving them unable</p> <p>10 to achieve the economies of scale of larger</p> <p>11 vessels, and ships would begin to bypass the port</p> <p>12 as they cannot bring their larger ships in and</p> <p>13 unload the cargo at the current dimensions of the</p> <p>14 channel.</p> <p>15 Next slide. Once we identified the</p> <p>16 problem, we wanted to identify alternatives to</p> <p>17 correct the problem.</p> <p>18 So one of the issues is the depth. So we</p> <p>19 looked at a range of depths from 37 to 42 feet to</p> <p>20 increase the efficiency of ships coming in. We</p> <p>21 also looked at widening the channel. As the ships</p> <p>22 get larger, they're a little bit more width. So we</p> <p>23 increased the width of the inner harbor by a</p> <p>24 hundred foot and the width of the outer harbor by a</p> <p>25 hundred foot, 50 feet on either side.</p>
<p style="text-align: right;">15</p> <p>1 inner harbor, and the ships have to transect this</p> <p>2 bend.</p> <p>3 The existing channel bend from the</p> <p>4 entrance channel to the interior is about 35</p> <p>5 degrees, with the outer portion with a bend to the</p> <p>6 west. Large ships coming in on the flood are set</p> <p>7 further west because the current runs east to west.</p> <p>8 This pushes them towards the steep outer bank of</p> <p>9 the curve.</p> <p>10 To compensate for this, pilots approach</p> <p>11 the bend on the far right side of the channel. As</p> <p>12 they come out of the bend, they go hard over full</p> <p>13 ahead to make the turn to not have the stern hit</p> <p>14 the west bank. This makes straightening the ship</p> <p>15 toward the next set of buoys very difficult since</p> <p>16 moving forward and turning at a high speed.</p> <p>17 So the two problems here that we're</p> <p>18 trying to address are the channel depth as well as</p> <p>19 the bend in the channel.</p> <p>20 Next slide. As I mentioned, the channel</p> <p>21 is authorized to minus 35 feet mean lower low</p> <p>22 water. So this provides unrestricted draft of</p> <p>23 31 feet, which requires 4 foot of underkeel</p> <p>24 clearance. That means 4 feet of water below the</p> <p>25 bottom of the ship. Ships greater than 31 feet are</p>	<p style="text-align: right;">17</p> <p>1 We also looked at increasing the bend</p> <p>2 width, as I mentioned, to go from 560 to 700 feet.</p> <p>3 This slide shows the quantities associated with</p> <p>4 each of those alternatives. And quantities are</p> <p>5 important because they drive the cost of the</p> <p>6 alternative.</p> <p>7 So this is the amount of material that</p> <p>8 would have to removed from the sea floor dredge in</p> <p>9 order to create that deeper channel, create those</p> <p>10 water channel widths, and to create that bend.</p> <p>11 Costs were estimated for the federal base plan</p> <p>12 placement as well as for beneficial use plan</p> <p>13 placement, which Todd Randall will talk about in a</p> <p>14 few minutes.</p> <p>15 Next slide, please. So we have the cost</p> <p>16 side of the equation, how much is it going to cost</p> <p>17 to build this. So we have to estimate the benefits</p> <p>18 side of the equation. And that's the</p> <p>19 transportation cost savings that will be realized</p> <p>20 over the 50-year period of the analysis. So that</p> <p>21 is the amount of cost reduction for ships to bring</p> <p>22 in the cargo into the port.</p> <p>23 So without the project, it costs -- on an</p> <p>24 average annual equivalent basis, it costs 64</p> <p>25 million, approximately, to bring in the cargo to</p>

<p style="text-align: right;">18</p> <p>1 the Harbor. So with each of these alternatives, it</p> <p>2 will cost less to bring that same amount of cargo</p> <p>3 in. And that is the result of the fact that they</p> <p>4 no longer have to lighter, no long have to wait for</p> <p>5 the tide, but they can also move some of the cargo</p> <p>6 to a slightly larger ship, and receive the</p> <p>7 economies of scale of that larger ship.</p> <p>8 So the next step is we take those two</p> <p>9 things, the cost of the project and average annual</p> <p>10 equivalent, and then we compare it against the</p> <p>11 benefits of the project, the average annual</p> <p>12 equivalent, and we get the total net benefits for</p> <p>13 the project. So you can see in the fourth column</p> <p>14 the total net benefits.</p> <p>15 And we looked for the project that</p> <p>16 maximizes the net benefits. So in this case, the</p> <p>17 project that maximizes the net benefits is the</p> <p>18 40-foot project. And that has a BCR of 1.9. So</p> <p>19 that's a benefit-to-cost ratio, and it's a positive</p> <p>20 project which shows federal interest in this</p> <p>21 alternative.</p> <p>22 After we selected the Tentatively</p> <p>23 Selected Plan, which is the 40-foot project, we did</p> <p>24 a refinement on that using the ship simulation down</p> <p>25 at our facility in Vicksburg, Mississippi. So we</p>	<p style="text-align: right;">20</p> <p>1 cubic yards. So you can see that's going to be a</p> <p>2 little bit of an additional cost.</p> <p>3 Next slide. So this is a summary of the</p> <p>4 Tentatively Selected Plan, the 40-foot plan, with</p> <p>5 those refinements. So the cost went up slightly,</p> <p>6 so that means our benefits go down a little bit.</p> <p>7 Our BCR went down slightly to 1.6.</p> <p>8 But we will be looking at these numbers,</p> <p>9 both the costs and benefits over the next few</p> <p>10 months, and we will be refining this design as we</p> <p>11 go forward. So those numbers might change again as</p> <p>12 we check some of the different parameters. And so</p> <p>13 you might see slightly different numbers in the</p> <p>14 final report. But the good news is this is still a</p> <p>15 positive project.</p> <p>16 So the TSP will result in more efficient</p> <p>17 transportation of the commodities into the port.</p> <p>18 It will increase the safety and maneuverability for</p> <p>19 the larger ships.</p> <p>20 Next slide. This slide shows the cost</p> <p>21 share for the non-federal and federal share. Total</p> <p>22 project cost, including the beneficial use site, is</p> <p>23 \$71 million. And cost shared, you can see the</p> <p>24 numbers broken down. Federal cost share will be</p> <p>25 75 percent, and the non-federal will be 25 percent.</p>
<p style="text-align: right;">19</p> <p>1 created a computer model of the channel and the</p> <p>2 coastal hydraulics, and we were able to then</p> <p>3 simulate the ships coming into the port.</p> <p>4 And we had two pilots come down and drive</p> <p>5 those ships so they could test the different</p> <p>6 scenarios. So they could test the width of the</p> <p>7 channel, test the bend, test the turning basin</p> <p>8 under various conditions.</p> <p>9 As a result of that, we came up with some</p> <p>10 design refinements on the plan. We verified the</p> <p>11 inner and outer harbor channel widths. But we did</p> <p>12 determine that the bend needed to be greater than</p> <p>13 700 feet, up to 800 foot wide. So we added an</p> <p>14 additional hundred feet on the bend widening.</p> <p>15 And we also determined that the turning</p> <p>16 basin we had turned to the north in the original</p> <p>17 plan, but because when we tested it in the model,</p> <p>18 we found that the existing location was optimum,</p> <p>19 and that all we needed to actually do was widen it</p> <p>20 200 feet to the north. So this results in a</p> <p>21 refinement of the quantities, which, as you know,</p> <p>22 is important 'cause it drives the cost.</p> <p>23 So the quantity of ordering materials is</p> <p>24 similar, but the quantity of rock went up from</p> <p>25 about 30-something thousand cubic yards to 43,000</p>	<p style="text-align: right;">21</p> <p>1 So that's highlighted in yellow.</p> <p>2 Once construction is completed, the</p> <p>3 non-federal sponsor will be required to pay an</p> <p>4 additional 10 percent of the cost of the general</p> <p>5 navigation features.</p> <p>6 The federal government would be</p> <p>7 responsible for a hundred percent of the navigation</p> <p>8 project maintenance, as it is today. So we</p> <p>9 currently maintain the channel about every 10</p> <p>10 years.</p> <p>11 In the construction of the salt marsh</p> <p>12 site, beneficial use site is included in that cost,</p> <p>13 and it would be cost shared at 65/35 with the</p> <p>14 non-federal sponsor.</p> <p>15 So that's the Tentatively Selected Plan.</p> <p>16 And now we'll welcome Todd up to talk about the</p> <p>17 placement alternatives.</p> <p>18 MR. RANDALL: Thanks, Barbara. Thanks,</p> <p>19 everybody, for coming tonight. I'm just going to</p> <p>20 talk about the placement alternatives that we have</p> <p>21 for this 4.2 million cubic yards of material that</p> <p>22 we have coming out of New Haven.</p> <p>23 We had a meeting back in January of this</p> <p>24 year, where we essentially ran through these</p> <p>25 alternatives. Two alternatives have been added to</p>

<p style="text-align: right;">22</p> <p>1 this list: The West River borrow pit, which was</p> <p>2 identified in our January meeting, and then a</p> <p>3 potential confined aquatic disposal cell. And</p> <p>4 we'll talk about this in a couple minutes.</p> <p>5 Next slide, please. Before we go into</p> <p>6 detail on all the placement sites, I'll go through</p> <p>7 a brief discussion of how the sediment that are</p> <p>8 going to be dredged are characterized.</p> <p>9 Using the study's initial design that</p> <p>10 Barbara had talked about previously, a sample and</p> <p>11 analysis plan was developed that was intended to</p> <p>12 characterize the sediment using that largest</p> <p>13 project footprint. So an expanded turning basin</p> <p>14 and 42-foot depth is what we sampled for. Because</p> <p>15 you'll see chemistry takes a long time to sample,</p> <p>16 to analyze, and then to make sense of the results.</p> <p>17 Next slide, please. Sediment</p> <p>18 classification and determining sediment suitability</p> <p>19 for alternative placement options is determined by</p> <p>20 a tiered process of sampling, testing, evaluating,</p> <p>21 and modeling. These processes are all aimed at</p> <p>22 determining the risk of contaminants to human</p> <p>23 health and ecological health.</p> <p>24 Next slide. Sediment classification is</p> <p>25 basically done with a tiered process. As you can</p>	<p style="text-align: right;">24</p> <p>1 modeling to human and ecological health.</p> <p>2 For the New Haven Harbor project, all the</p> <p>3 testing results that I discussed can be found in</p> <p>4 Technical Supporting Document 1 on our website,</p> <p>5 which we'll leave up at the end and, as Barbara</p> <p>6 pointed out, is on your Fact Sheet.</p> <p>7 And if you just want a simple breakdown</p> <p>8 of the chemistry results and toxicity tests, I'll</p> <p>9 refer you to Appendix J, which is the suitability</p> <p>10 determination for the material. Both of those</p> <p>11 documents are on the Corps website.</p> <p>12 Next slide. Dredge material which is</p> <p>13 found to be toxic or poses significant risk to the</p> <p>14 environment or human health is deemed unsuitable.</p> <p>15 Such materials must be managed to isolate them from</p> <p>16 the environment or undergo some kind of treatment</p> <p>17 to reduce their level of contaminants to the point</p> <p>18 that other uses or placement options may become</p> <p>19 acceptable.</p> <p>20 Only materials that are deemed to be</p> <p>21 nontoxic and low risk are suitable and may be</p> <p>22 placed unconfined in open water. So we have</p> <p>23 suitable and unsuitable material.</p> <p>24 This slide just shows the decision-making</p> <p>25 process in flowchart form. Sediment proposed for</p>
<p style="text-align: right;">23</p> <p>1 see here in the pyramid, tier 1 is basically</p> <p>2 examining the history of harbor testing, looking at</p> <p>3 the industry that's in the Harbor. So basically</p> <p>4 evaluating existing data. Tier 2 is the actual</p> <p>5 physical sampling and testing to determine the</p> <p>6 physical nature of the sediment, is it sand, is it</p> <p>7 silt, and what the chemistry is. It should be</p> <p>8 noted that chemical concentrations alone are not a</p> <p>9 driver of -- a reliable tool for determining a</p> <p>10 sediment's toxicity. That really comes in tier 3</p> <p>11 and tier 4.</p> <p>12 Tier 3 involves performing water column</p> <p>13 testing of the sediments, water column chemistry,</p> <p>14 performing toxicity on testing on benthic</p> <p>15 organisms, the critters that actually live in the</p> <p>16 sediments, and then bioaccumulation testing on</p> <p>17 organisms that are exposed to the sediments for a</p> <p>18 period of time. These are the real drivers that</p> <p>19 determine the toxicity. And then also performing</p> <p>20 sub-lethal bioaccumulation tests and risk models</p> <p>21 that basically evaluates ecological -- potential</p> <p>22 for ecological risk and human health risk.</p> <p>23 This tiered methodology allows us to</p> <p>24 assess the actual effects of the sediment's</p> <p>25 chemistry to biological organisms and through</p>	<p style="text-align: right;">25</p> <p>1 dredging is tested. If it fails the toxicity test,</p> <p>2 the tier 3 testing that I talked about before, it's</p> <p>3 deemed unsuitable. Bioaccumulation tests, if it</p> <p>4 passes the toxicity, are performed. And then the</p> <p>5 models are prepared. And if there is significant</p> <p>6 risk found, it's deemed unsuitable.</p> <p>7 Next slide. So here's the initial</p> <p>8 New Haven Harbor footprint that we have and the</p> <p>9 samples that we took. As you can see, we had in</p> <p>10 the inner harbor, there were six transects that</p> <p>11 were represented by 17 stations.</p> <p>12 These transects cover the areas that we</p> <p>13 were looking to improve, the widening and the</p> <p>14 deepening alternatives, as well as that expanded</p> <p>15 turning basin to the north. I'll show you another</p> <p>16 picture in just a second and we'll discuss that</p> <p>17 turning basin.</p> <p>18 Next slide. And then in the outer harbor</p> <p>19 we had six stations that were represented by those</p> <p>20 two transects that you can see there with the green</p> <p>21 dots.</p> <p>22 Next slide. Here's just a quick graphic</p> <p>23 that illustrates how the samples are obtained. A</p> <p>24 coring device is vibrated down through the sediment</p> <p>25 to the proposed depth you want to get to. The core</p>

<p style="text-align: right;">26</p> <p>1 is then sampled for the chemistry and physical 2 parameters. And then gallons of all of this 3 sediment are collected to prepare those water 4 column tests and toxicity tests.</p> <p>5 Next slide. So if we go back to that 6 tiered evaluation concept, the chemistry data for 7 each sample -- I'm sorry -- the chemistry data for 8 New Haven, which, again, I said can be found in 9 Technical Supporting Document 1, or Appendix J, 10 basically dictated that we move into biological 11 testing.</p> <p>12 And so here are the results of the 13 biological testing for New Haven. Using the tiered 14 testing approach, the first decision point is the 15 whole sediment toxicity test. That's what you'll 16 see in the second and third columns there.</p> <p>17 This test uses two different species that 18 are representative of native fauna. And as you can 19 see, all the transects passed for the amphipod 20 <i>Leptocheirus</i>. That's the second column. However, 21 in the third column, there was composite 6, failure 22 for the <i>Americamysis</i>. That's a kind of shrimp. So 23 that, according to our hierarchy, would kick it 24 into unsuitable material.</p> <p>25 The water column testing, which is in</p>	<p style="text-align: right;">28</p> <p>1 in-depth discussion with the pilots, as well as 2 running the ship simulation model, it was 3 determined that that expanded turning basin wasn't 4 needed.</p> <p>5 So as a result, the footprint of the 6 turning basin is being reduced. And essentially 7 it's being pulled out of that 16-foot anchorage 8 area. And the reason that's relevant is because 9 that 16-foot anchorage area hasn't been dredged 10 since the 1950s. So we think that may be a driver 11 of the failures.</p> <p>12 Next slide, please. So we have made the 13 Corps go back out and resample in those areas with 14 a reduced footprint. Here is an overlay of the 15 reduced turning basin design and the additional 16 sampling that we're doing in green. These 17 sediments will be evaluated with that tiered 18 testing.</p> <p>19 So as of today, our conclusions indicate 20 that we may have unsuitable material to manage. 21 And as such, we've included a CAD cell in the 22 placement alternatives I'll discuss in just a 23 second.</p> <p>24 But it should be noted that should the 25 data from the sampling of this reduced footprint</p>
<p style="text-align: right;">27</p> <p>1 column 7, basically met the required standards for 2 all but transects 6 and 7. So again, back to the 3 hierarchy testing, transects 6 and 7 failed that. 4 They are deemed unsuitable.</p> <p>5 So today, as it stands right now, 6 transect 1 and 2, which were in the outer harbor, 7 and then transects 3, 4, and 5, which are in the 8 kind of mid-harbor region, and then transect 8, 9 which is all the way up in the top at the head of 10 navigation, are considered to have suitable 11 material, and transects 6 and 7 are considered to 12 have unsuitable material.</p> <p>13 So if we zoom in and examine the two 14 transects that are currently unsuitable, we see 15 they encompass both the channel area to the east 16 and that expanded turning basin that was expanded 17 to the west and to the north in our initial design.</p> <p>18 So if you see, the map on the right shows 19 that the existing location of this widened -- so 20 that's the existing location of the turning basin, 21 right? But the expanded footprint actually 22 overlaps into what is currently a 16-foot anchorage 23 area right there.</p> <p>24 So the reason I'm bringing this to your 25 attention is as the project progressed, we had</p>	<p style="text-align: right;">29</p> <p>1 show the material to be suitable because it's been 2 pulled out of that old 16-foot anchorage, a CAD 3 cell may not be needed.</p> <p>4 So what is a CAD cell? Basically, a CAD 5 cell is short for a confined aquatic disposal cell. 6 And it's a way to sequester unsuitable material.</p> <p>7 If a CAD cell is required, this schematic 8 shows the general process behind the creation of 9 one. You find an area where you have suitable 10 material and dig that out, and then fill the cell 11 with the unsuitable material. And then following 12 the filling, you cap it with a layer of suitable 13 material.</p> <p>14 So with that one in mind, I'll go through 15 all the placement alternatives that were carried 16 forward in the study.</p> <p>17 The base plan consists of two borrow 18 pits, one at the entrance of the West River, and 19 one borrow pit in Morris Cove. Now, these two 20 alternatives will be used to place only suitable, 21 silty material. The plan would be to fill these 22 pits to the elevation that are within 1 to 2 feet 23 of their surrounding elevations.</p> <p>24 Some of the silty sand that we have from 25 the outer harbor can be placed in an area behind</p>

<p style="text-align: right;">30</p> <p>1 the east breakwater, represented by that blue 2 triangle. That's just a conceptual area. The 3 material wouldn't take up that whole area. 4 But the idea there would be to raise the 5 bottom elevation slightly and create a slightly 6 sandier bottom than currently exists to create a 7 better substrate for oyster habitat. 8 As Barbara noted, there's going to be 9 some blasted rock coming out from between the east 10 and middle breakwater. That material would be 11 placed just to the south of the west breakwater, 12 where Lisa is circling, basically to create a rock 13 reef for habitat. 14 And then the remainder of the suitable 15 material, which, again, is mostly silt, would be 16 placed at the central Long Island Sound disposal 17 site. It's not shown on this map, I'll give it on 18 the next one, but just a little bit south of 19 New Haven Harbor. 20 There is also an additional beneficial 21 use alternative within the plan that's beyond the 22 federal base plan. This involves using the silty 23 material to create approximately 70 acres of salt 24 marsh and tidal creeks in the vicinity of Sandy 25 Point in West Haven. There were a lot of questions</p>	<p style="text-align: right;">32</p> <p>1 site above the base plan, it's the salt marsh that 2 I was talking about. About 840,000 cubic yards of 3 silt could fit in there. 4 From this perspective, it's basically -- 5 well, like I said, from the boat ramp out to Sandy 6 Point. And we would keep that sandy beach feature 7 and the little marsh and lagoon feature. And it 8 would be meant to basically complement that 9 sanctuary. 10 Next slide. This slide is a summary of 11 projected measures that, once we get through the 12 process, we could use the protect resources in 13 New Haven Harbor. Construction windows for 14 dredging and blasting would be used to minimize 15 impacts to essential fish habitat, shellfish, 16 anadromous fish resources, and marine mammals. 17 The Corps also performed a series of 18 cultural resource studies in the project area, and 19 didn't uncover anything within the project's 20 footprint that would need to be protected from a 21 historical perspective. 22 Next slide. This is the details of the 23 coordination efforts that are ongoing for the 24 project. And so these are all documented in the 25 EIS.</p>
<p style="text-align: right;">31</p> <p>1 last night as to where that line is. It's 2 basically from -- if you know the West Haven boat 3 ramp out to Sandy Point, the area essentially in 4 front of the sewage treatment plant. 5 And then also as I noted during the 6 sediment characterization and CAD cell discussion, 7 a potential CAD cell has been planned in the event 8 that we need to manage unsuitable material. And 9 the proposed cell is located just to the west of 10 the channel in the vicinity of Sandy Point, where 11 Lisa just pointed to. 12 Next slide, please. This is just a 13 closer look at the base plan placement sites. 14 About a million cubic yards will be placed 15 throughout these sites in the Harbor, and the 16 remainder will be placed out at central Long Island 17 Sound to cover up historic disposal mounds that 18 were placed out there before sediment testing 19 requirements came into being. 20 And should a CAD cell be required, the 21 material that would be excavated from that, the 22 suitable material, would be placed at one of these 23 alternatives, and the unsuitable material would be 24 placed in the CAD cell. 25 Next slide. The beneficial use placement</p>	<p style="text-align: right;">33</p> <p>1 In terms of the public involvement with 2 the project, we had the scoping meetings in January 3 2017, public information meetings in 2018, and are 4 now into the public review process of the EIS. 5 The website is there in green, but in the 6 very last slide it will be in big letters. 7 Next slide. Finally, here is the 8 projected schedule. As I noted, we're currently in 9 the 45-day review period for the draft EIS and 10 Feasibility Report. The comments are due, 11 requested by November 15th. 12 Following the review of the comments, the 13 agency and the sponsors will come to a decision 14 point and move towards a final report. And then 15 this final report will be circulated again for 16 comment. 17 So on behalf of Barbara and the whole 18 New Haven team, thanks for your interest in the 19 project, and thanks in advance for your review of 20 the documents. I'll turn it back over to Mark. 21 MR. HABEL: Okay. Thank you, Barbara, 22 and thank you, Todd. 23 The hearing tonight will be conducted in 24 a manner so that all who desire to express their 25 views will be given an opportunity to speak. To</p>

<p style="text-align: right;">34</p> <p>1 preserve the right of all to express their views, I 2 ask that there be no interruptions. 3 When you came in, copies of the Fact 4 Sheet and procedures to be followed at this hearing 5 were available. If you did not receive these, both 6 are available at the registration table. I will 7 not read either of them, but they will be entered 8 into the record. 9 The record of this hearing will remain 10 open, and written comments may be submitted 11 tonight, sent by email or by email through 12 November 15th, 2018. 13 All written comments will receive equal 14 consideration with oral statements made this 15 evening. And both oral and written comments will 16 be considered in the development of a Final 17 Integrated Feasibility Report and Environmental 18 Impact Statement. 19 We need your participation throughout the 20 entire process. And I thank you for contributing 21 your comments and thoughts tonight. A transcript 22 of this hearing is being made to ensure a detailed 23 review of all comments. A copy of that transcript 24 will be available at the Corps Concord, 25 Massachusetts headquarters for review, posted on</p>	<p style="text-align: right;">36</p> <p>1 two, we'll see if that works. So Allison? 2 MS. DODGE: Good evening. My name is 3 Allison Dodge. I am the Outreach Coordinator for 4 Congresswoman Rosa DeLauro. She asked me to 5 deliver a statement on her behalf this evening. 6 Many thanks to the Army Corps of 7 Engineers for their work to complete the Draft 8 Integrated Feasibility Report and Environmental 9 Impact Statement for the New Haven Harbor 10 Navigation Improvement Project. 11 As I am sure you are aware, the deepening 12 of the federal navigation channel in the New Haven 13 Harbor is a priority of the New Haven Port 14 Authority, the City of New Haven, as well as the 15 various businesses that populate the port district. 16 As the highest volume commercial shipping 17 port on Long Island Sound, and the largest 18 deep-water port in the state of Connecticut, 19 New Haven Harbor is an integral component to the 20 regional economy and represents a key connection in 21 the transportation network that includes water, 22 rail, road, and pipelines. 23 Already today, many vessels destined for 24 the port must lighter their cargo before they can 25 enter because the navigation channel is simply too</p>
<p style="text-align: right;">35</p> <p>1 the Corps website for your use, or you may make 2 arrangements with the stenographer for a copy at 3 your own expense. 4 Anyone who does not comment today but 5 wishes to send written comments may do so. Please 6 forward those comments to the Corps project 7 manager, Barbara Blumeris, at the Corps New England 8 district office located in Concord, Massachusetts. 9 When making a statement tonight, please 10 come forward to the microphone and state your name. 11 If you are speaking for or representing a position 12 of an organization, please say so. 13 Since there are only five people who 14 signed up to speak tonight, we will dispense with 15 the three-minute clock, but, again, I do ask you to 16 be brief and address any more lengthy comments in 17 writing to the Corps. 18 The first individual to provide comment 19 for the record tonight is Allison Dodge, 20 representing Congresswoman Rosa DeLauro. Allison? 21 One more thing, please. The microphone 22 we have over here is held up with some tape. 23 Please don't try to move it around. And despite 24 our turning all of the volumes down to zero, it's 25 still pretty loud. So if you'd step back a foot or</p>	<p style="text-align: right;">37</p> <p>1 shallow for some more modern ships. With 2 ever-advancing technologies and shipmaking design, 3 deepening the navigation channel is critical. 4 Having had the opportunity to review the 5 Integrated Feasibility Report and Environmental 6 Impact Study, I wanted to express my overall 7 support for the project's Tentatively Selected 8 Plan. 9 I was pleased to see that the Corps was 10 thoughtful in their approach to the disposal of 11 dredge materials, including the beneficial use plan 12 in addition to open water disposal. 13 However, I do have some concerns with the 14 inclusion of the repositioning of the Cross-Sound 15 Cable and the total project cost. I will be 16 submitting separate comments to the Corps on that 17 issue. 18 I have long advocated for this 19 infrastructure upgrade, and look forward to working 20 with the Corps, New Haven Port Authority, and the 21 Connecticut Port Authority to move this project 22 forward. Thank you. 23 MR. HABEL: Thank you, Allison. 24 Next up will be John Cox. 25 MR. COX: Good evening. My name is John</p>

<p style="text-align: right;">38</p> <p>1 Cox. I live at 235 Townsend Avenue, across from 2 the seawall overlooking the borrow pit. I've been 3 involved in Army Corps of Engineers hearings and 4 meetings on this since the ill-fated Bridgeport 5 dredging proposal in 2010.</p> <p>6 And I think most of us remember that, 7 where they were proposing to move the toxic waste 8 from Bridgeport into the Morris Cove borrow pit.</p> <p>9 At the January public meeting held this 10 year, the Army Corps of Engineers acknowledged the 11 public's comments, and agreed that going forward 12 they would not make any similar proposals and would 13 only recommend that clean DEEP and EPA-approved 14 fill would go in there. And that was absolutely 15 what the community was looking for.</p> <p>16 The current plan makes good on that 17 promise. And by eliminating the borrow pit, which 18 was basically an environmental mistake, created a 19 huge dead zone right in the middle of the cove, 20 what they're going to be doing is restoring life to 21 that area, which is now dead -- and that is a very 22 good thing -- by using the 600,000 cubic yards of 23 fill, with sediment from the dredging project.</p> <p>24 I applaud this move on the part of the 25 Corps, and support your initiative. I think this</p>	<p style="text-align: right;">40</p> <p>1 maximum draft we bring in is 37 feet. Only two of 2 the facilities are authorized for 37 feet.</p> <p>3 With the inbound deep draft ships, we 4 bring them in on a rising tide. And that's when we 5 have a strong westerly set. And the biggest 6 problem we have, as you heard, is making a turn at 7 the jetties, a 35-degree turn. We're getting set 8 to the left from the flood tide, and then the stern 9 of the ship gets close to the bank, which is a very 10 steep bank. It's 48 foot in some spots right 11 inside the channel, but right outside the channel 12 it's 22 feet. So we get a lot of suction in there 13 that keeps trying to turn the ship to starboard.</p> <p>14 We can do it safely, but we're at the 15 limits with this draft and at this stage of the 16 tide that we're bringing ships in. But we're at 17 the limit. We can't do any deeper or any bigger 18 ships. The maximum length overall ship we can 19 bring in now is 750 feet. And that's the limit.</p> <p>20 So the pilots requested that -- this is 21 our wish list again -- 45-foot draft channel, which 22 we're not going to get. We'll get 40 feet, but we 23 can live with that. And to make the channel 300 24 feet wider. But we're looking at a hundred feet 25 wider.</p>
<p style="text-align: right;">39</p> <p>1 project is good for New Haven's economy, and it's 2 also good for the environment in Morris Cove. So 3 thank you very much.</p> <p>4 MR. HABEL: Thank you, Mr. Cox. 5 Next up will be Charlie Jonas.</p> <p>6 MR. JONAS: Good evening. I'm one of the 7 pilots that was at the Army Corps of Engineers 8 research and development facility down in 9 Vicksburg, Mississippi.</p> <p>10 And I can't speak more highly of that 11 system that they have and the simulator. It's 12 really, really excellent. We tested the limits of 13 different drafts and different widths of the 14 channel. And of course, we came up with a draft 15 deeper than the Army Corps came up with, but that 16 was on our wish list.</p> <p>17 New Haven Harbor has a channel depth 18 right now of 35 feet. To bring a ship in at low 19 tide, we have 2-foot underkeel clearance and we 20 have 2-foot squat for the ships. And that went 21 down to 31 feet at low water.</p> <p>22 So the pilots, because of the width of 23 the channel, we do one-way transits. Also, when we 24 have the deeper draft ships come in, we add a foot 25 for every hour of tide to that 31 foot. The</p>	<p style="text-align: right;">41</p> <p>1 And the big thing is the turn, making the 2 turn. We have to make two gradual turns instead of 3 one sharp turn. And then we also need the sloping 4 banks where they make the channel deeper to 5 eliminate the effects of bank cushioning.</p> <p>6 So we're in favor of this. And now that 7 we know the limits that we're going to go to 40 8 feet, we can look at the width of the channel and 9 the bend there. So thank you.</p> <p>10 MR. HABEL: Thank you, Mr. Jonas. 11 Next up is Renate Blau.</p> <p>12 MS. BLAU: Renate Blau. I also live just 13 off of the seawall. I look down the road and there 14 it is. And I also overlook the borrow pit. And 15 I'm one of many neighbors who have been following 16 this process with a lot of anxiety about what goes 17 into that borrow pit, and hoping that the Corps 18 would come around to see our perspective of wanting 19 that water to stay clean and pristine and useful to 20 both the animals as well as for our recreational 21 purposes. And you've done that.</p> <p>22 So I'm here to thank you. Thank you for 23 keeping an open mind, and traversing this long, 24 long period of time to the point where you can see 25 doing something that's both good for us and good</p>

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<p>FÁ for New Haven Harbor as well. So thank you.</p> <p>2 MR. HABEL: Thank you, ma'am.</p> <p>3 And next is John Hilts.</p> <p>HÁ MR. HILTS: Good evening. My name is</p> <p>IA John Hilts. I'm a self-employed consultant who has</p> <p>6 30 years of experience in marine construction</p> <p>7 permitting for regulatory matters such as dredging.</p> <p>8 Having read your study, one thing I</p> <p>IA noticed was a lack of alternatives that were, you</p> <p>FEÁ know, presented for cost-effectiveness and also</p> <p>11 lessen the environmental impact. I hope that</p> <p>FGÁ during the comment period, some of these might be</p> <p>FĜÁ included for further review.</p> <p>FHÁ And in addition, I wish to note that by</p> <p>FIA my estimation, the project seems to benefit greatly</p> <p>FIWÁ several private corporations who have terminals in</p> <p>FIA the New Haven Harbor, and I'd like to know further</p> <p>FIA the commitment on their part to remain in the</p> <p>FIA Harbor after this project is completed so that the</p> <p>GEÁ benefits in transit that we've seen on your slides</p> <p>GFÁ are realized as opposed to not being realized.</p> <p>GGÁ Thank you.</p> <p>GĜÁ MR. HABEL: Thank you.</p> <p>GHÁ That was it for the people who siĝned a</p> <p>GIA card wishing to speak. Is there anyone else in the</p>	<p>FÁ reasons, it did not achieve that. And I encourage</p> <p>2 you to continue your efforts to enforce that</p> <p>ĜÁ earlier 2002 permit.</p> <p>HÁ I am concerned that we've added to the</p> <p>IA construction cost of this project rather</p> <p>6 remarkably, presuming that Cross-Island will not</p> <p>7 perform in its duty. Cross-Island does not provide</p> <p>8 any benefit whatsoever to the state of Connecticut.</p> <p>IA And I encourage you to persist in our enforcement</p> <p>FEÁ efforts. Thank you.</p> <p>11 MR. HABEL: Thank you. Is there anyone</p> <p>FGÁ else who wishes to speak tonight?</p> <p>FĜÁ Okay. John, the floor is yours.</p> <p>FHÁ MR. KENNELLY: Thanks, Mark. We have</p> <p>FIA heard many thoughtful statements this evening.</p> <p>FIWÁ All of the comments received tonight as</p> <p>FIA well as the written comments we receive during the</p> <p>FIA review period will be considered in the development</p> <p>FIA of the final integrated feasibility report and EIS.</p> <p>GEÁ Written statements may be submitted to</p> <p>GFÁ the Corps of Engineers until November 15th, 2018.</p> <p>22 They will receive equal consideration with those</p> <p>23 presented today.</p> <p>24 We at the Corps of Engineers extend our</p> <p>GIA appreciation to all who took the time to involve</p>
43	HIÁ
<p>FÁ audience who did not fill out a card, but wishes to</p> <p>GÁ speak? Could you please come down to the podium –</p> <p>ĜÁ or down to the microphone, state your name and town</p> <p>4 of residence for the record.</p> <p>IA MR. GILBERTSON: Good evening. Terry</p> <p>6 Gilbertson, New Haven, Connecticut, 61 East Grand</p> <p>IA Avenue in New Haven.</p> <p>8 And I've had a chance to review your</p> <p>9 rather remarkable and comprehensive report, and I</p> <p>FEÁ thank you all and the Corps for its very good work.</p> <p>FFÁ I can't help but notice and wish to bring</p> <p>FGÁ to your attention the Cross-Island Cable issue. On</p> <p>FĜÁ page ES-6 of your report, you have a final – first</p> <p>FHÁ cost construction cost of 65, \$66 million.</p> <p>FIA However, the cable enforcement action cost is</p> <p>FIWÁ \$32 million.</p> <p>FIA And there may be those of us in this</p> <p>FIA room, I believe in 2000 might have even been in</p> <p>FIA this room, where we talked about the Cross-Island</p> <p>FIA Cable and how it was not supposed to have this</p> <p>GEÁ effect on this particular project.</p> <p>GFÁ Further, in your report, on other pages</p> <p>GGÁ in your report, you do identify the Cross-Island</p> <p>GĜÁ Cable is responsible for the cost of relocation</p> <p>GHÁ down to 48 feet. It did not achieve – for several</p> <p>GIA</p>	<p>FÁ themselves in this public review process and the</p> <p>GÁ City of New Haven for the use of this fine facility</p> <p>ĜÁ tonight.</p> <p>HÁ I'd like to thank you all for taking time</p> <p>IA to provide us with your thoughts, your comments,</p> <p>IWÁ and your concerns. Goodnight.</p> <p>IA (Whereupon, this public hearing was</p> <p>IA concluded at 7:29 p.m.)</p> <p>9</p> <p>FEÁ</p> <p>FFÁ</p> <p>FGÁ</p> <p>FĜÁ</p> <p>FHÁ</p> <p>FIA</p> <p>FIWÁ</p> <p>FIA</p> <p>FIA</p> <p>FIA</p> <p>GEÁ</p> <p>GFÁ</p> <p>22</p> <p>23</p> <p>24</p> <p>GIA</p>

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UĜFĚĜÍĚĜÍĚĚÁ UŰXNSSÓÁ ÒNSEÁ & NUUŠOŦNÚÓUEÁ ØSOĚÁ ÒNSEĤÓŠŠĤÚØSÖÈØŠRÁ

1 CERTIFICATE

2
3 I hereby certify that I am a Notary Public, in
4 and for the State of Connecticut, duly commissioned and
5 qualified to administer oaths.

6 I further certify that the record of the
7 proceedings held in the matter was taken by me
8 stenographically in the presence of counsel and reduced
9 to typewriting under my direction, and the foregoing is
10 a true and accurate transcript of said proceedings.

11 I further certify that I am neither of counsel
12 nor attorney to either of the parties to said matter,
13 nor am I an employee of either party to said matter, nor
14 of either counsel in said matter, nor am I interested in
15 the outcome of said cause.

16 Witness my hand and seal as Notary Public
17 this 4th day of November 2018.
18
19
20
21

22 _____
Janet C. Phillips
Notary Public

23 My Commission expires:
24 October 31, 2021
25

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A8-Agency Coordination Letters 2019



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD MA 01742-2751

September 4, 2019

Planning Division
Navigation Section

Mr. Louis A. Chiarella
Assistant Regional Administrator
Habitat Conservation
National Marine Fisheries Service
55 Great Republic Drive
Gloucester, MA 01930-2276

Dear Mr. Chiarella:

I am writing in response to National Marine Fisheries Service (NMFS) letter of February 21, 2019 regarding the US Army Corps of Engineers (Corps) proposal to conduct improvement and maintenance dredging in the New Haven Harbor Federal Navigation Project (FNP) in New Haven, Connecticut. Since the date of your letter, Mr. Todd Randall of the Corps and Ms. Alison Verkade of your office have had several meetings concerning the project. The Corps has provided your office with additional project related information and Mr. Randall and Ms. Verkade have been working on refining project details to minimize environmental impacts to New Haven Harbor resources.

The intent of this letter is to address NMFS comments, EFH conservation recommendations, and Fish and Wildlife Coordination Act recommendations contained in your February 21, 2019 letter and summarize the informal discussions and their outcomes between the Corps and NMFS concerning the comments and recommendations.

In your letter, NMFS commented on several aspects of the project and provided the Corps with three essential fish habitat (EFH) conservation recommendations. Each conservation recommendation is discussed below.

EFH Conservation Recommendation #1. Time of year restriction of January 1 to May 31 be employed for all dredging and blasting activities to protect sensitive life stages of winter flounder.

The Corps agrees with the need to minimize impacts to winter flounder sensitive life stages and winter flounder EFH, however, we cannot accommodate EFH conservation recommendation #1 for the project in its entirety. During discussions between the Corps and NMFS, Ms. Verkade noted that the critical concerns for winter flounder resources in New Haven Harbor are the placement of material inside the harbor (i.e., any placement activity inside the breakwaters) and the dredging of areas that fall within winter flounder EFH (i.e., dredging in areas shallower than 5 meters (16.4 feet)). As such, we have constructed a project time of year schedule (Table 1 attached) that will allow for the January 1 to May 31 restriction to be applied to placement of material in the harbor and the dredging of areas in winter flounder EFH. Table 1 also details the quantities of material to be removed from each

project segment and the location of the placement. The proposed schedule will allow the project to be completed in a timely, cost-effective, and environmentally sensitive manner. Updating of project quantities, dredge sequencing, and matching of dredged material and placement sites will occur in the final design phase of the project.

The justifications for allowing dredging to occur in the months of January and February for the New Haven Harbor Improvement project are that all dredging during that period will be in project segments that are currently greater than 5 meters in depth (authorized depths of 35 feet), mechanical dredging plumes are generally highly localized and short term in their duration, and all placement activities associated with the dredging efforts in January and February will be in open water at the Central Long Island Sound Disposal Site (CLDS). The basis for these justifications are detailed below.

As winter flounder EFH in the project area is defined as waters shallower than 5 meters (16.4 feet), the majority of the New Haven Harbor deepening effort will occur in areas that are not designated as winter flounder EFH. The existing channel is currently authorized and maintained to a depth of 35 feet, as is the proposed seaward entrance channel extension area to the south. A portion of the proposed channel widening areas and proposed side slopes (approximately 8.6 acres) are shallower than 5 meters and therefore contain winter flounder EFH. However, these areas will be sequenced so that they are dredged prior to January 1 to minimize impacts to winter flounder.

Major maintenance dredging of New Haven Harbor occurs about once every ten years with between 500,000 and 1 million cubic yards removed in each cycle. The last maintenance was accomplished in 2014. Based on dredge monitoring information from previous New Haven Harbor dredging efforts (DAMOS, 1996), it was determined that the majority of the suspended sediments associated with the dredging operations tended to stay within the deeper portions of the main channel while limited amounts of suspended sediments were observed within the adjacent shallow subtidal areas. DAMOS (1996) also concluded that dredge-induced sediment suspension was very limited in duration and a minor perturbation relative to other resuspension factors such as wind, wind waves, and effluent discharge. Monitoring of mechanical dredging in Boston Harbor deep draft channels found that the majority of suspended sediments remained near bottom following their suspension and that the suspended plumes dissipated rapidly (USACE/Normandeau 1998, ENSR 2002, Battelle 2009). As all dredging in the months of January and February will be in project segments that are 35 feet deep or greater, we do not anticipate significant impacts to winter flounder resources from suspended sediments as we do not expect the resource to be present in the impacted areas. Additionally, the Corps has agreed to eliminate barge overflow in January and February to aid in reducing suspended sediments during the dredge process.

The areas of the improvement project that require blasting are located exclusively in the vicinity of the channel bend between the east and middle breakwaters. All existing water depths within the expected footprint of the blasting effort are below the 5 meter winter flounder EFH designation. As such, the Corps will allow drilling and blasting efforts to occur between October 1 and March 1. Following additional geotechnical studies during the design phase, should the footprint of the drilling and blasting effort expand into winter flounder EFH, the Corps will prioritize work the areas within winter flounder EFH so that they are completed prior to January 1.

EFH Conservation Recommendation #2. A detailed blasting plan with the areal extent of the blasting clearly delineated should be submitted for NMFS review and comment.

USACE accepts this conservation recommendation. During the Corps' pre-construction engineering and design phase of the project (PED) a probing and boring effort will be implemented to define the areal extent of the rock to be blasted. Following those efforts, the extent of blasting and removal will be delineated and best management practices identified that will be implemented to minimize blasting impacts. The Corps will provide NMFS the results of the geotechnical analyses, the delineation of the blasting area and the BMPs during the PED phase and prior to the start of the project's construction phase for review.

EFH Conservation Recommendation #3. Details plans of the beneficial use sites (Morris Cove Borrow Pit, West River Borrow Pit, Oyster Creation Area, Salt Marsh Creation Area, and Rock Reef) should be provided to NMFS for review.

USACE accepts this conservation recommendation. During the PED phase of the project, detailed plans for placement of material in the beneficial use sites will be developed. Plans will include: plan views and cross sections of the sites, fill elevations, and material source (i.e., which dredging segment the dredged material for a particular site will be coming from). The Corps will provide NMFS the detailed plans during the PED phase and prior to the start of the project's construction phase.

In addition, NMFS provided one Fish and Wildlife Coordination Act conservation recommendation.

Fish and Wildlife Coordination Act conservation recommendation #1. A time of year restriction of April 1 to June 30 be implemented for blasting and dredging activities to protect diadromous fish spawning migrations.

USACE accepts this conservation recommendation as it relates to blasting activities and will incorporate this restriction in the project design. Please note that the USACE does not concur with this restriction for application to dredging operations. However, as this time of year restriction overlaps with restrictions in place for winter flounder and shellfish resources, it is being incorporated in project design.

The Corps thanks NMFS for its conservation recommendations and continued support in providing protection for the nation's marine resources. If you have any questions or require additional information on this project, please contact the project ecologist, Mr. Todd Randall at 978-318-8513, or todd.a.randall@usace.army.mil, or the planning project manager, Ms. Barbara Blumeris at 978-318-8737, or barbara.r.blumeris@usace.army.mil.

Sincerely,



John R. Kennelly
Chief, Planning Division

Attachment

Cc: Ms. Alison Verkade, NMFS

References:

Battelle. 2009. Final Summary Report: Plume Monitoring, Boston Harbor Inner Harbor Maintenance Dredging Project. Prepared for U.S. Army Corps of Engineers, New England District 696 Virginia Road, Concord, MA 01742. Contract No. DACW33-03-D-0004, Delivery Order No. 44.

DAMOS. 1996. An Investigation of the Dispersion of Sediments Resuspended by Dredging Operations in New Haven Harbor. US Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742.

ENSR International. 2002. Boston Harbor Navigation Improvement Project: Phase 2 Summary Report. Prepared for U.S. Army Corps of Engineers, New England District and Massachusetts Port Authority. Document No. 9000-178-000. Contract No. DACW33-96-D-004, Task Order 51, May 2002.

USACE/Normandeau Associates Inc. 1998. Boston Harbor Dredging. Water Quality Monitoring. Environmental Bucket Qualification Study. Prepared for: Great Lakes Dredge and Dock Company, September 1998.

ATTACHMENT

Table 1
Time of Year Schedule for the New Haven Harbor, CT, Navigation Improvement Project

DISPOSAL (See Note 1)		
Disposal Location	Target Quantity (cy)	Time of Year for Disposal
Morris Cove Borrow Pit	623,310	October 1 – January 1
West River Borrow Pit	87,800	October 1 – January 1
Shellfish Creation Area	518,300	October 1 – January 1
Sandy Point Marsh Creation Area	657,000	October 1 – January 1 (See Note 2)
Rock Reef	43,500	October 1 – March 1
Central Long Island Sound Disposal Site (CLDS)	2,392,290	October 1 – March 1
DREDGING & BLASTING (See Note 1)		
Construction Effort	Quantity (cy) / Target Disposal Site	Time of Year for Construction
Drill and Blast	-	October 1 – March 1
Rock Removal	43,500 / Rock Reef	October 1 – March 1
Dredge Entrance Channel	464,500 / Shellfish Creation Area	October 1 – January 1
Dredge Entrance Channel Extension	53,800 / Shellfish Creation Area	October 1 – January 1
Dredge Main Channel	657,000 / Sandy Point Marsh Creation Area	October 1 – January 1 (See Note 2)
Dredge Main Channel	623,310 / Morris Cove Borrow Pit	October 1 – January 1
Dredge Main Channel	87,800 / West River Borrow Pit	October 1 – January 1
Dredge Maneuvering Area	652,300 / CLDS	October 1 – March 1
Dredge Turning Basin	158,100 / CLDS	October 1 – March 1 in areas $\geq 5m$ October 1 – Jan 1 in areas $< 5m$
Dredge Main Channel	1,581,890 / CLDS	October 1 – March 1 in areas $\geq 5m$ October 1 – Jan 1 in areas $< 5m$

Note 1: All quantities, dredging sequence, and matching specific dredge and disposal areas are subject to change due to shoaling and future surveys.

Note 2: A window of October 1 to March 1 may be used for placement of material in the Sandy Point Marsh creation area if control techniques are developed in design that that effectively limit total suspended solids during construction.



United States Department of the Interior



FISH AND WILDLIFE SERVICE

New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087
<http://www.fws.gov/newengland>

August 14, 2019

Colonel William M. Conde
District Engineer
U.S. Army Corps of Engineers
New England District
696 Virginia Road
Concord, MA 01742-2751

Re: New Haven Harbor, Connecticut, Navigation Improvement Project, Draft Integrated Feasibility Report and Environmental Impact Statement (D-IFR/EIS)
TAILS: 2019-CPA-0005 & 19-I-0134

Dear Colonel Conde:

This responds to your October 9, 2018, letter, received in our office on October 18, 2018, requesting comments and a final coordination act report on the above-referenced project pursuant to section 2(b) of the Fish and Wildlife Coordination Act (FWCA) and comments under the Endangered Species Act. In an email dated March 5, 2019, the U.S. Army Corps of Engineers (Corps) also requested concurrence from the U.S. Fish and Wildlife Service (Service) with the determination that the proposed project may affect, but is not likely to adversely affect the federally threatened piping plover (*Charadrius melodus*) and red knot (*Calidris canutus*), and the federally endangered roseate tern (*Sterna dougallii dougallii*). Lastly, during an August 9, 2019, phone call, the Corps further clarified the scope of the concurrence request—at this time, limiting the request to dredging, open water disposal, several conceptual beneficial use design aspects of project activities, and working with the Service in the Corps' pre-construction and engineering design phase of the project (PED). Your request and our response are made pursuant to section 7 of the Endangered Species Act of 1973, as amended (87 Stat. 884, as amended; 16 U.S.C 1531, *et seq.*) (ESA).

The Corps proposes (1) dredging and open water disposal of approximately 4.3 million cubic yards of clays, silts, sands, and tills from the harbor bottom; and (2) under the preferred alternative, to continue developing the details and design of a saltmarsh at Sandy Point in West Haven, Connecticut. Dredged material removed from New Haven Harbor would be placed at several open water sites. The preferred alternative also calls for a variety of beneficial use placement sites within the Harbor, including the creation of as much as 73 acres of saltmarsh habitat in and around Sandy

Colonel William M. Conde
August 14, 2019

Point. The project would take about 2 years to construct, and dredge and disposal activities will occur between September 1 and March 31.

In the D-IFR/EIS, the Corps made the preliminary determination that the proposed activities associated with the New Haven Harbor Navigation Improvement Project may affect, but are not likely to adversely affect, the federally threatened piping plover and red knot, and the federally endangered roseate tern (section 7.6; pp. 114-116). In a follow-up email dated March 5, 2019, the Corps confirmed that no significant changes to the project as described in the D-IFR/EIS are anticipated, and therefore, this determination will not change. In this subsequent email, the Corps requested our concurrence with this determination.

As documented in section 3.6.3 of the D-IFR/EIS, piping plovers, roseate terns, and red knots and their breeding (piping plovers only), roosting, or foraging habitat may occur in or within the vicinity of the project action area.

Piping plover

Piping plover nesting habitat will not be affected by dredge or disposal activities due to the distance of breeding beaches from the project action area. Piping plovers may forage on the intertidal mud/sand flats in the vicinity of the Sandy Point disposal site, although they would not be present during construction.

Roseate tern

Roseate terns may forage within the project action area if suitable prey (primarily sand lance) are available. Roseate terns are generally present in Connecticut beginning late April through September, and are known to occur in the vicinity of the Sandy Point beneficial use disposal site.

Red knot

Red knots may forage in intertidal sand flats within New Haven Harbor and have been noted to occur in low numbers along the Connecticut coast from May through November. Red knots have been documented in recent years at the Sandy Point beneficial use disposal site from May through September.

Endangered Species Act

The creation and restoration of saltmarsh habitat, particularly high marsh habitat to support species like the at-risk saltmarsh sparrow (*Ammodramus caudacutus*), is a high priority for the Service region-wide, and we support the Corps' intention to use dredge material for this beneficial purpose when possible. The intertidal habitat at Sandy Point supports foraging piping plovers and red knots. The potential loss of this habitat as part of the proposed beneficial use placement and saltmarsh restoration at Sandy Point may affect these species. The Corps will continue to refine its proposal for this portion of the larger project during future design discussions in PED. As discussed on a conference call on June 19, 2019, between the Corps and the Service, the Corps (1) committed to developing a design that will minimize and/or avoid adverse impacts as much as possible; (2) will continue to coordinate with the Service on the potential beneficial use placement at Sandy Point; and (3) will continue to coordinate with the Service under section 7 of the ESA during the design and construction phases of the project. Based on the conceptual nature of the beneficial use

Colonel William M. Conde
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proposal as described in the D-IFR/EIS, we concur that this aspect of the proposed action (i.e., the development of a saltmarsh restoration design at Sandy Point in West Haven, Connecticut) is not likely to adversely affect the federally threatened piping plover and red knot, and the federally endangered roseate tern. The Service will work with the Corps during the subsequent design phase on site-specific aspects of the project to ensure compliance with the ESA on the final project design and implementation.

With regard to the remaining components of the project (i.e., the dredging of the channel and disposal of material at open water sites described in the D-IFR/EIS), we concur with your determination that the proposed project may affect, but is not likely to adversely affect, piping plovers, roseate terns, or red knots based on the following:

- dredge and disposal activities associated with the project will occur during the time of year when these species are not anticipated to be present in the project area;
- piping plover and red knot habitat is not present in the dredge channel or open water disposal sites; and
- the project would have insignificant effects on roseate tern foraging habitat because effects are anticipated to be short term (limited to during and immediately after the dredging activities) and will occur when the species are not present.

Fish and Wildlife Coordination Act


The FWCA established an authority for the Service to provide assistance to, and cooperate with, Federal agencies in minimizing impacts of projects on wildlife resources; however, the workload generated by the collective number of FWCA requests, and other correspondence we receive, exceeds our ability to address all requests. Although we are unable to provide a FWCA report at this time, we are unaware of any substantial impacts the project would have on wildlife resources in the project area during dredging and open water disposal. This does not preclude future evaluation and recommendations by the Service, should the project description change, including during the design phase of the project.

Further consultation with us under section 7 of the ESA is not required at this time. If the proposed action changes in any way such that it may affect a listed species in a manner not previously analyzed or if new information reveals the presence of additional listed species that may be affected by the project, the Corps should contact us immediately and suspend activities that may affect those species until the appropriate level of consultation is completed with our office.

Colonel William M. Conde
August 14, 2019

Thank you for your cooperation, and please contact Ms. Cindy Corsair at (401) 213-4416 if you have questions or need further assistance.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'T. R. Chapman', with a long horizontal flourish extending to the right.

Thomas R Chapman
Supervisor
New England Field Office



Date: October 11, 2019

U.S. Army Corps of Engineers
Barbara Blumeris
696 Virginia Road
Concord, MA 01742

SUBJECT: #201905657-WQC and #201906504-FCC
New Haven Harbor Federal Navigation Project

Dear Ms. Blumeris:

This letter is in response to John Kennelly's September 4, 2019 letter to Susan Jacobson of my staff regarding dredging within a seasonal prohibition period. Terms and Conditions, paragraph 2., of #201905657-WQC and Appendix, paragraph 1., of #201906504-FCC prohibit dredging between February 1st and June 30th in order to protect winter flounder. The U.S. Army Corps of Engineers has requested to begin dredging within the existing navigation channel during February.

Staff has consulted with Bruce Williams of the Department of Energy and Environmental Protection's Fisheries Division regarding work within the winter flounder closure period. Based on this consultation, the following condition has been modified:

Seasonal Work Prohibition North of Breakwater. Unconfined in-water excavation, dredging*, filling, blasting or removal of debris or other material is prohibited between February 1st and September 30th, inclusive, of any year unless otherwise authorized in writing by the Commissioner. The specific closure dates are as follows: February 1st through June 30th in order to protect winter flounder; April 1st through June 30th to protect diadromous fish; March 1st through September 30th to protect nesting birds on Sandy Point; and, June 1st through September 30th in order to protect spawning shellfish.

*Dredging may occur between February 1st and March 1st within existing channels with depths greater than -20' MLLW.

Additionally, the following condition has been added:

January and February Dredging Restrictions. Dredging during January and February shall be conducted by mechanical means only.

The September 4, 2019 letter mentions that "the Corps has agreed to eliminate barge overflow in January and February to aid in reducing suspended sediments during the

dredge process.” Please note that for dredge and disposal activities, the following general condition always applies:

Barge Control. Spoil scows or barges shall be loaded and navigated in a manner which prevents uncontrollable motion or spillage and washout of dredged or excavated materials.

Please be advised that all other terms and conditions of the water quality certification and conditions of the consistency concurrence shall remain in full force and effect. If you have any questions, please contact Ms. Jacobson at 860-424-3693 or susan.jacobson@ct.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "B. P. Thompson", with a long horizontal flourish extending to the right.

Brian P. Thompson, Director
Land and Water Resources Division
Bureau of Water Protection & Land Reuse

cc: Files #201905657-WQC and #201906504-FCC
E-mail to:

Mayor Toni Harp, MayorHarp@newhavenct.gov
Mayor Nancy Rossi, nrossi@westhaven-ct.gov
Joe Salvatore, CT Port Authority, Joseph.Salvatore@ct.gov
Judi Sheffele, New Haven Port Authority
Bruce Williams, DEEP Fisheries
David Carey, DOA/BOA
Harbormasters, NH and WH
West Haven Harbor Management Commission

Date: August 14, 2019

Barbara Blumeris
U.S. Army Corps of Engineers
696 Virginia Road
Concord, MA 01742

RE: Federal Coastal Consistency #201906504-FCC
New Haven Harbor Federal Navigation Project

Dear Ms. Blumeris:

The Department of Energy and Environmental Protection (DEEP) has reviewed your request for Federal Consistency Concurrence (FCC) to improve the New Haven Harbor Federal Navigation Project pursuant to section 307(c)(1) of the Coastal Zone Management Act of 1972, as amended, and Subpart C of 15 Code of Federal Regulations (CFR), Part 930. Based on a review of the proposed activities as indicated on the plans and described in the application received by DEEP on June 3, 2019, we conditionally concur with your determination, subject to the requirements in the attached Appendix, that the activity as proposed is consistent with Connecticut's federally approved Coastal Management Program (CMP) and will be conducted in a manner consistent with that program.

Specific activities include:

1. deepening the channel, maneuvering area and turning basin from -35' to -40' MLLW;
2. widening the turning basin to the north by 200';
3. widening the inner channel from 400' to 500' and the entrance channel from 500' to 600';
4. widening the channel bend at the East Breakwater from 560' to 800'; and
5. disposing of the dredge sediment at:
 - Morris Cove (623,000 CY) and West River (88,000 CY) borrow pits;
 - North of the East Breakwater to create oyster habitat (434,000 CY);
 - West Breakwater for the placement of rock (44,000 CY);
 - Sandy Point Salt Marsh Creation Area (845,000 CY) and,
 - Central Long Island Disposal Site (approximately 2,300,000 CY).

By following the conditions in the attached Appendix, such work will be conducted in a manner consistent with the Connecticut CMP. Please be advised that any subsequent modifications to the proposed activity, regardless of their magnitude or impact, constitute a new application for the purposes of FCC. Accordingly, all such modifications must be submitted to DEEP for a coastal consistency concurrence pursuant to 15 CFR 930.50.

Thank you for providing a consistency determination and supporting information for our review. Should you have any questions regarding this consistency determination please contact Susan Jacobson of my office at 860-424-3693 or susan.jacobson@ct.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "B. P. Thompson", with a long horizontal flourish extending to the right.

Brian P. Thompson, Director
Land and Water Resources Division
Bureau of Water Protection & Land Reuse

Attachment: Appendix

cc: Mayor Toni Harp, MayorHarp@newhavenct.gov
Mayor Nancy Rossi, nrossi@westhaven-ct.gov
Joe Salvatore, CT Port Authority, Joseph.Salvatore@ct.gov
Judi Sheffele, New Haven Port Authority
Bruce Williams, DEEP Fisheries
David Carey, DOA/BOA
Harbormasters, NH and WH
File copy

APPENDIX

1. **Seasonal Work Prohibition North of Breakwater.** Unconfined in-water excavation, dredging, filling, blasting or removal of debris or other material is prohibited between February 1st and September 30th, inclusive, of any year unless otherwise authorized in writing by the Commissioner. The specific closure dates are as follows: February 1st through June 30th in order to protect winter flounder; April 1st through June 30th to protect diadromous fish; March 1st through September 30th to protect nesting birds on Sandy Point; and, June 1st through September 30th in order to protect spawning shellfish.
2. **Seasonal Work Prohibition South of Breakwater.** Unconfined in-water excavation, dredging, filling, blasting or removal of debris or other material is prohibited between June 1st and September 30th, inclusive, of any year in order to protect spawning shellfish in the area unless otherwise authorized in writing by the Commissioner.
3. **Sediment Suitability for New Haven Harbor Placement Sites.** The Certificate Holder shall submit, no later than 90 days prior to dredging and for the Commissioner's review and final sediment suitability determination, a site-specific sediment placement plan.
4. **Sandy Point Salt Marsh Creation Area.** The Certificate Holder shall submit, for the Commissioner's review and written approval, a final plan for the Sandy Point Salt Marsh Creation Area. Such plan shall be submitted no later than 90 days prior to marsh creation and shall include:
 - a. relevant easements with West Haven;
 - b. Final comments from the West Haven Harbor Management Commission;
 - c. Final NDDDB Determination, including, if applicable, Wildlife Division approved best management practices and mitigation plans
 - d. location of Old Field Creek channel, including a maintenance plan;
 - e. identification of intertidal flat habitat to be impacted by Marsh Creation Area; and
 - f. short-term and long-term maintenance plans for the Marsh Creation Area.
5. **Blasting Plan.** The Certificate Holder shall submit, not later than 30 prior to the commencement of blasting, a plan for the blasting of rock within the channel.
6. **Aquaculture Coordination.** Not later than 60 days prior to the commencement of dredging, the Certificate Holder shall notify the Connecticut Department of Agriculture, Bureau of Aquaculture so that shellfish resources may be removed prior to sediment placement activities.
7. **Final Plans.** The Certificate Holder shall submit, not later than 60 days prior to the commencement of dredging, a set of signed and sealed plans to the Commissioner. Such plans shall include proposed dredge conditions within the Federal Navigation Project and sediment disposal sites within New Haven Harbor.
8. **Sequential Disposal at the Central Long Island Sound Disposal Site.** The Certificate Holder shall first dispose of dredge sediment from the north terminus of the project. This sediment shall be sequentially covered by channel sediment from north to south, resulting in inner harbor sediments being covered by outer harbor/entrance channel sediments.



Date: August 14, 2019

U.S. Army Corps of Engineers
Barbara Blumeris
696 Virginia Road
Concord, MA 01742

SUBJECT: Water Quality Certificate #201905657-WQC
New Haven Harbor Federal Navigation Project

Dear Ms. Blumeris:

Enclosed is the signed certificate which constitutes the approval of your application to conduct regulated activities. Your attention is directed to the conditions of the enclosed permit. Construction or work must conform to that which is authorized.

If you have any questions concerning your certificate, please contact me at 860-424-3693 or susan.jacobson@ct.gov.

Sincerely,

Susan Jacobson, Environmental Analyst
Land and Water Resources Division
Bureau of Water Protection and Land Reuse

Enc. – #201905657-WQC

cc: File #201905657-WQC

E-mail to:

Mayor Toni Harp, MayorHarp@newhavenct.gov
Mayor Nancy Rossi, nrossi@westhaven-ct.gov
Joe Salvatore, CT Port Authority, Joseph.Salvatore@ct.gov
Judi Sheiffele, New Haven Port Authority
Bruce Williams, DEEP Fisheries
David Carey, DOA/BOA
Harbormasters, NH and WH
West Haven Harbor Management Commission

Connecticut Department of Energy and Environmental Protection License*

Section 401 Water Quality Certification

Licensee(s): U.S. Army Corps of Engineers

Licensee Address(s): 696 Virginia Road
Concord, MA 01742

License Number(s): 201905657-WQC

Municipality: New Haven and West Haven

Project Description: Disposal of approximately 4,334,000 cubic yards of dredge sediment from the New Haven Harbor Federal Navigation Project.

Project Address/Location: Central Long Island Disposal Site; West River Borrow Pit; Morris Cove Borrow Pit; Sandy Point; East and West Breakwaters

Waters: New Haven Harbor and Long Island Sound

Authorizing CT Statute(s) and/or Federal Law: Section 401 CWA (33 USC 1341)

Applicable Regulations of CT State Agencies: 22a-426-1 to 9

Agency Contact: Land & Water Resources Division,
Bureau of Water Protection & Land Reuse, 860-424-3019

License Expiration: Five (5) years from the date of issuance of this license.

Project Site Plan Set: Plans to be submitted in accordance with Terms and Conditions, paragraph 7, below.

License Enclosures: LWRD Dredging and General Conditions, LWRD Dredging Report Form, Work Commencement Form, Compliance Certification Form, Land Record Filing

*Connecticut's Uniform Administrative Procedure Act defines License to include, "the whole or part of any agency permit, certificate, approval, registration, charter or similar form of permission required by law . . ."

Authorized Activities:

The Licensee is hereby authorized to conduct the following work as described in application # 201905657-WQC and as depicted on any site plan sheets / sets cited herein:

Dispose of approximately 4,334,000 cubic yards of dredge sediment from the New Haven Harbor Federal Navigation Project, through hydraulic and mechanical means, at the following locations:

- a. Morris Cove Borrow Pit with approximately 623,000 CY;
- b. West River Borrow Pit with approximately 88,000 CY;
- c. North of the East Breakwater to create oyster habitat with approximately 434,000 CY;
- d. North of the West Breakwater with approximately 44,000 CY of rock;
- e. North of Sandy Point with approximately 845,000 CY in accordance with Terms and Conditions paragraph 5., below; and,
- f. Central Long Island Disposal Site with approximately 2,300,000 CY in accordance with Terms and Conditions paragraph 8., below.

Failure to comply with the terms and conditions of this license shall subject the Licensee and / or the Licensee's contractor(s) to enforcement actions and penalties as provided by law.

This license is subject to the following Terms and Conditions:

1. **License Enclosure(s) and Conditions.** The Licensee shall comply with all applicable terms and conditions as may be stipulated within the License Enclosure(s) listed above.
2. **Seasonal Work Prohibition North of Breakwater.** Unconfined in-water excavation, dredging, filling, blasting or removal of debris or other material is prohibited between February 1st and September 30th, inclusive, of any year unless otherwise authorized in writing by the Commissioner. The specific closure dates are as follows: February 1st through June 30th in order to protect winter flounder; April 1st through June 30th to protect diadromous fish; March 1st through September 30th to protect nesting birds on Sandy Point; and, June 1st through September 30th in order to protect spawning shellfish.
3. **Seasonal Work Prohibition South of Breakwater.** Unconfined in-water excavation, dredging, filling, blasting or removal of debris or other material is prohibited between June 1st and September 30th, inclusive, of any year in order to protect spawning shellfish in the area unless otherwise authorized in writing by the Commissioner.
4. **Sediment Suitability for New Haven Harbor Placement Sites.** The Licensee shall submit, no later than 90 days prior to dredging and for the Commissioner's review and final sediment suitability determination, a site-specific sediment placement plan.
5. **Sandy Point Salt Marsh Creation Area.** The Licensee shall submit, for the Commissioner's review and written approval, a final plan for the Sandy Point Salt Marsh Creation Area. Such plan shall be submitted no later than 90 days prior to marsh creation and shall include:
 - a. relevant easements with West Haven;

- b. Final comments from the West Haven Harbor Management Commission;
 - c. Final NDDB Determination, including, if applicable, Wildlife Division approved best management practices and mitigation plans
 - d. location of Old Field Creek channel, including a maintenance plan;
 - e. identification of intertidal flat habitat to be impacted by Marsh Creation Area; and
 - f. short-term and long-term maintenance plans for the Marsh Creation Area.
6. **Aquaculture Coordination.** Not later than 60 days prior to the commencement of dredging, the Licensee shall notify the Connecticut Department of Agriculture, Bureau of Aquaculture so that shellfish resources may be removed prior to sediment placement activities.
7. **Final Plans.** The Licensee shall submit, not later than 60 days prior to the commencement of dredging, a set of signed and sealed plans to the Commissioner. Such plans shall include proposed dredge conditions within the Federal Navigation Project and sediment disposal sites within New Haven Harbor.
8. **Sequential Disposal at the Central Long Island Sound Disposal Site.** The Licensee shall first dispose of dredge sediment from the north terminus of the project. This sediment shall be sequentially covered by channel sediment from north to south, resulting in inner harbor sediments being covered by outer harbor/entrance channel sediments.

Issued under the authority of the Commissioner of Energy and Environmental Protection on:

8/14/19
Date

Betsey Wingfield
Betsey Wingfield
Deputy Commissioner
Department of Energy & Environmental Protection

Dredging and General Conditions for Land & Water Resource Division Licenses

1. **Time-of-Year Restriction.** Unless otherwise noted in the License, unconfined in-water excavation, dredging, filling or removal of debris or other material is prohibited, inclusive, in any year from June 1 through September 30 in order to protect spawning shellfish in the area unless otherwise authorized in writing by the Commissioner.
2. **Dredging Report.** Not later than two (2) weeks subsequent to the completion of any dredging activity authorized herein, the Licensee shall submit to the Commissioner a completed Dredging Report. A separate form shall be submitted by the Licensee for each distinct dredging activity conducted pursuant to this license.
3. **Bottom Disturbance.** Dragging the bottom with a spoil barge, scow, vessel, beam or similar equipment outside of any authorized area is prohibited.
4. **Material Handling.** Sidecasting or in-water rehandling of dredged or excavated material is prohibited.
5. **Barge Control.** Spoil scows or barges shall be loaded and navigated in a manner which prevents uncontrollable motion or spillage and washout of dredged or excavated materials.
6. **Sale of Sediment.** Sediment dredged pursuant to the license shall not be sold nor shall any fee for its use be charged without the express prior written authorization of the Commissioner and payment of a \$4.00 per yard royalty to the state of Connecticut Department of Energy & Environmental Protection, pursuant to CGS section 22a-361(e).
7. **Sediment Disposal.** The Licensee shall dispose of aquatic sediments in accordance with the terms and conditions of the license.
8. **Submission of As-Dredged Plans.** On or before ninety (90) days after completion of the work authorized herein, the Licensee shall submit to the Commissioner an "as-dredged" survey of the work area showing contours, bathymetries, tidal datums and structures, as applicable. Such survey shall be the original one and be signed and sealed by an engineer, surveyor or architect, as applicable, who is licensed in the State of Connecticut.

Open Water Disposal, if authorized in Project Description

1. **Material Disposal.** The Licensee shall dispose of dredged or excavated material in accordance with the requirements of the United States Army Corps of Engineers-New England District, except that if the authorized disposal site is modified, the Licensee shall submit a request for modification of the location to the Commissioner and shall not dispose of the material until such location modification has been approved in writing by the Commissioner.

2. **Disposal Site / Use Modification.** The Commissioner may modify the authorized disposal site and direct dredged sediment to an alternate site for use as cap material, provided that no modification will take effect if such modification imposes uncompensated additional costs solely attributable to such modification on the Licensee.
3. **Disposal Monitoring.** The Licensee shall not dispose of dredged or excavated material unless said disposal is supervised and witnessed by an on-board inspector or documented by an automated disposal monitoring program approved by the United States Army Corps of Engineers-New England District.
4. **Barge Navigation.** Spoil scows or barges used by the Licensee for disposal of dredged or excavated material shall travel to and from the authorized disposal site utilizing sea lanes defined by the United States Army Corps of Engineers-New England District.
5. **Point Dumping.** The Licensee shall point-dump dredged or excavated materials at a specified buoy or set of coordinates identified by United States Army Corps of Engineers-New England District within the authorized disposal site.

LWRD General Conditions

1. **Land Record Filing.** The Licensee shall file the Land Record Filing on the land records of the municipality in which the subject property is located not later than thirty (30) days after license issuance pursuant to Connecticut General Statutes (CGS) Section 22a-363g. A copy of the Notice with a stamp or other such proof of filing with the municipality shall be submitted to the Commissioner no later than sixty (60) days after license issuance. If a Land Record Filing form is not enclosed and the work site is not associated with an upland property, no filing is required.
2. **Contractor Notification.** The Licensee shall give a copy of the license and its attachments to the contractor(s) who will be carrying out the authorized activities prior to the start of construction and shall receive a written receipt for such copy, signed and dated by such contractor(s). The Licensee's contractor(s) shall conduct all operations at the site in full compliance with the license and, to the extent provided by law, may be held liable for any violation of the terms and conditions of the license. At the work site, the contractor(s) shall, whenever work is being performed, have on site and make available for inspection a copy of the license and the authorized plans.
3. **Work Commencement.** Not later than two (2) weeks prior to the commencement of any work authorized herein, the Licensee shall submit to the Commissioner, on the Work Commencement Form attached hereto, the name(s) and address(es) of all contractor(s) employed to conduct such work and the expected date for commencement and completion of such work, if any.
 - For water diversion activities authorized pursuant to 22a-377(c)-1 of the Regulations of Connecticut State Agencies, the Licensee shall also notify the Commissioner in writing two weeks prior to initiating the authorized diversion.
 - For emergency activities authorized pursuant Connecticut General Statutes Section

22a-6k, the Licensee shall notify the Commissioner, in writing, of activity commencement at least one (1) day prior to construction and of activity completion no later than five (5) days after conclusion.

4. **License Notice.** The Licensee shall post the first page of the License in a conspicuous place at the work area while the work authorized therein is undertaken.
5. **Unauthorized Activities.** Except as specifically authorized, no equipment or material, including but not limited to, fill, construction materials, excavated material or debris, shall be deposited, placed or stored in any wetland or watercourse on or off-site. The Licensee may not conduct work within wetlands or watercourses other than as specifically authorized, unless otherwise authorized in writing by the Commissioner. Tidal wetlands means "wetland" as defined by section 22a-29 and "freshwater wetlands and watercourses" means "wetlands" and "watercourses" as defined by section 22a-38.
6. **Excavated Materials.** Unless otherwise authorized, all excavated material shall be staged and managed in a manner which prevents additional impacts to wetlands and watercourses.
7. **Best Management Practices.** The Licensee shall not cause or allow pollution of any wetlands or watercourses, including pollution resulting from sedimentation and erosion. In constructing or maintaining any authorized structure or facility or conducting any authorized activity, or in removing any such structure or facility, the Licensee shall employ best management practices to control storm water discharges, to prevent erosion and sedimentation, and to otherwise prevent pollution of wetlands and other waters of the State. For purposes of the license, "pollution" means "pollution" as that term is defined by CGS section 22a-423. Best Management Practices include, but are not limited, to practices identified in the *Connecticut Guidelines for Soil Erosion and Sediment Control* as revised, 2004 *Connecticut Stormwater Quality Manual*, Department of Transportation's *ConnDOT Drainage Manual* as revised, and the Department of Transportation Standard Specifications as revised.
8. **Work Site Restoration.** Upon completion of any authorized work, the Licensee shall restore all areas impacted by construction, or used as a staging area or accessway in connection with such work, to their condition prior to the commencement of such work.
9. **Inspection.** The Licensee shall allow any representative of the Commissioner to inspect the project location at reasonable times to ensure that work is being or has been conducted in accordance with the terms and conditions of this license.
10. **Change of Use. (Applies only if a use is specified within the License "Project Description")**
 - a. The work specified in the license is authorized solely for the purpose set forth in the license. No change in purpose or use of the authorized work or facilities as set forth in the license may occur without the prior written approval of the Commissioner. The Licensee shall, prior to undertaking or allowing any change in use or purpose from that which is authorized by this license, request permission from the Commissioner for such change. Said request shall be in writing and shall describe the proposed change and the reason for the change.

- b. A change in the form of ownership of any structure authorized herein from a rental/lease commercial marina to a wholly-owned common interest community or dockominium may constitute a change in purpose as specified in paragraph (a) above.

11. De Minimis Alteration. The Licensee shall not deviate from the authorized activity without prior written approval from the Commissioner. The Licensee may request a de minimis change to any authorized structure, facility, or activity. A de minimis alteration means a change in the authorized design, construction or operation that individually and cumulatively has minimal additional environmental impact and does not substantively alter the project as authorized.

- For diversion activities authorized pursuant to 22a-377(c)-2 of the Regulations of Connecticut State Agencies, a de minimis alteration means an alteration which does not significantly increase the quantity of water diverted or significantly change the capacity to divert water.

12. Extension Request. The Licensee may request an extension of the license expiration date. Such request shall be in writing and shall be submitted to the Commissioner at least thirty (30) days prior to the license expiration. Such request shall describe the work done to date, what work still needs to be completed, and the reason for such extension. It shall be the Commissioner's sole discretion to grant or deny such request.

13. No Work After License Expiration. Work conducted after the license expiration date is a violation of the license and may subject the licensee to enforcement action, including penalties, as provided by law.

14. License Transfer. The license is not transferable without prior written authorization of the Commissioner. A request to transfer a license shall be submitted in writing and shall describe the proposed transfer and the reason for such transfer. The Licensee's obligations under the license shall not be affected by the passage of title to the license site to any other person or municipality until such time as a transfer is approved by the Commissioner.

15. Document Submission. Any document required to be submitted to the Commissioner under the license or any contact required to be made with the Commissioner shall, unless otherwise specified in writing by the Commissioner, be directed to:

Regulatory Section
Land & Water Resources Division
Department of Energy and Environmental Protection
79 Elm Street
Hartford, Connecticut 06106-5127
860-424-3019

16. Date of Document Submission. The date of submission to the Commissioner of any document required by the license shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under the license, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three (3) days after it is mailed by the

Commissioner, whichever is earlier. Except as otherwise specified in the license, the word "day" as used in the license means calendar day. Any document or action which is required by the license to be submitted or performed by a date which falls on a Saturday, Sunday or a Connecticut or federal holiday shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or a Connecticut or federal holiday.

- 17. Certification of Documents.** Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under the license shall be signed by the Licensee and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense."
- 18. Accuracy of Documentation.** In evaluating the application for the license, the Commissioner has relied on information and data provided by the Licensee and on the Licensee's representations concerning site conditions, design specifications and the proposed work, including but not limited to representations concerning the commercial, public or private nature of the work or structures, the water-dependency of said work or structures, its availability for access by the general public, and the ownership of regulated structures or filled areas. If such information proves to be false, deceptive, incomplete or inaccurate, the license may be modified, suspended or revoked, and any unauthorized activities may be subject to enforcement action.
- 19. Limits of Liability.** In granting the license, the Commissioner has relied on all representations of the Licensee, including information and data provided in support of the Licensee's application. Neither the Licensee's representations nor the issuance of the license shall constitute an assurance by the Commissioner as to the structural integrity, the engineering feasibility or the efficacy of such design.
- 20. Reporting of Violations.** In the event that the Licensee becomes aware that they did not or may not comply, or did not or may not comply on time, with any provision of this license or of any document incorporated into the license, the Licensee shall immediately notify the agency contact specified within the license and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. In so notifying the agency contact, the Licensee shall provide, for the agency's review and written approval, a report including the following information:

 - a. the provision(s) of the license that has been violated;
 - b. the date and time the violation(s) was first observed and by whom;
 - c. the cause of the violation(s), if known;
 - d. if the violation(s) has ceased, the duration of the violation(s) and the exact date(s) and times(s) it was corrected;

- e. if the violation(s) has not ceased, the anticipated date when it will be corrected;
- f. steps taken and steps planned to prevent a reoccurrence of the violation(s) and the date(s) such steps were implemented or will be implemented; and
- g. the signatures of the Licensee and of the individual(s) responsible for actually preparing such report.

If the violation occurs outside of normal business hours, the Licensee shall contact the Department of Energy and Environmental Protection Emergency Dispatch at 860-424-3333. The Licensee shall comply with any dates which may be approved in writing by the Commissioner.

- 21. Revocation/Suspension/Modification.** The license may be revoked, suspended, or modified in accordance with applicable law.
- 22. Other Required Approvals.** License issuance does not relieve the Licensee of their obligations to obtain any other approvals required by applicable federal, state and local law.
- 23. Rights.** The license is subject to and does not derogate any present or future property rights or powers of the State of Connecticut, and conveys no property rights in real estate or material nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the property or activity affected hereby.
- 24. Condition Conflicts.** In the case where a project specific special condition listed on the license differs from, or conflicts with, one of the general conditions listed herein, the project specific special condition language shall prevail. It is the licensee's responsibility to contact the agency contact person listed on the license for clarification if needed prior to conducting any further regulated activities.



Connecticut Department of

ENERGY &
ENVIRONMENTAL
PROTECTION

Bureau of Water Protection & Land Reuse
Land & Water Resources Division

79 Elm Street • Hartford, CT 06106-5127

www.ct.gov/deep

Affirmative Action/Equal Opportunity Employer

Land Record Filing*

To: City of West Haven Clerk

**Signature and
Date:**

Susan Foster 8/14/19

Subject: North of Sandy Point
License # 201905657-WQC

Pursuant to Section 22a-363g of the Connecticut General Statutes, the Commissioner of Energy and Environmental Protection gives notice that a license has been issued to U.S. Army Corps of Engineers, 696 Virginia Road Concord, MA, 01742 to:

create a 60 – 70 acres salt marsh north of Sandy Point by placing sediment filled geotubes and approximately 845,000 cubic yards of dredge sediment.

If you have any questions pertaining to this matter, please contact the Land & Water Resources Division at 860-424-3019.

Return to:

Land & Water Resources Division
State of Connecticut
Department of Energy & Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

*The Licensee shall file the Land Record Filing on the land records of the municipality in which the subject property is located not later than thirty (30) days after license issuance pursuant to Connecticut General Statutes (CGS) Section 22a-363g. A copy of the Notice with a stamp or other such proof of filing with the municipality shall be submitted to the Commissioner no later than sixty (60) days after license issuance.



Work Commencement Form

To: Regulatory Section
Department of Energy and Environmental Protection
Land & Water Resources Division
79 Elm Street
Hartford, CT 06106-5127

Licensee Name: _____

Licensee Address: _____

License No(s): _____

CONTRACTOR(s):

1 Name: _____

Address: _____

Telephone: _____

E-mail: _____

2 Name: _____

Address: _____

Telephone: _____

E-mail: _____

3 Name: _____

Address: _____

Telephone: _____

E-mail: _____

Date Contractor(s) received a copy
of the license and approved plans: _____

EXPECTED DATE OF COMMENCEMENT OF WORK: _____

EXPECTED DATE OF COMPLETION OF WORK: _____

LICENSEE: _____

(Signature)

(Date)



DREDGING REPORT
(To be completed by Licensee)

License No(s).: _____
Licensee Name: _____
Address of Dredging Activity: _____

Dredging Contractor Information:

Name: _____
Mailing Address: _____
Business Phone: _____
Contact Person: _____
E-mail: _____

Dates Dredged: _____
Total Volume Dredged during this period: _____
Disposal Volume(s) and Location(s): _____

**If any portion of the dredged materials was used in a beneficial manner, please identify the beneficial use type (i.e. beach nourishment, habitat restoration, landfill cap, construction materials...), volume of dredged material utilized and the location of beneficial usage.

Document Certification:

"I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense."

Signature of Licensee _____ Date _____

If you have any questions pertaining to this form, please contact the Land & Water Resources Division at 860-424-3034.

Return to:
Land & Water Resources Division
State of Connecticut Department of Energy & Environmental Protection
79 Elm Street
Hartford, CT 06106-5127



Compliance Certification Form

The following certification must be signed by the licensee working in consultation with a Connecticut-licensed design professional and must be submitted to the address indicated at the end of this form within ninety (90) days of completion of the authorized work.

1. Licensee Name: _____ License Number(s): _____ Site Address: _____	
2. Check one: (a) <input type="checkbox"/> "I certify that the final site conditions and / or structures are in general conformance with the approved site plans". Identify and describe any deviations and attach to this form. (b) <input type="checkbox"/> "The final site conditions and / or structures are not in general conformance with the approved site plans. The enclosed "as-built" plans note the modifications".	
3. "I understand that any false statement in this certification is punishable as a criminal offence under section 53a-157b of the General Statutes and under any other applicable law."	
_____ Signature of Licensee	_____ Date
_____ Name of Licensee (print or type)	
_____ Signature of CT-Licensed Design Professional	_____ Date
_____ Name of CT-Licensed Design Professional (print or type)	
_____ Professional License Number (if applicable)	Affix Stamp Here
<div style="border: 1px solid black; width: 150px; height: 100px; margin: 0 auto;"></div>	
<ul style="list-style-type: none">As-built plans shall include: elevations or tidal datums, as applicable, and structures, including any proposed elevation views and cross sections included in the approved license plans. Such as-built plans shall be the original ones and be signed and sealed by an engineer, surveyor or architect, as applicable, who is licensed in the State of Connecticut.The Licensee will be notified by staff of the Land and Water Resources Division (LWRD) if further compliance review is necessary. Lack of response by LWRD staff does not imply compliance.	
Submit this completed form to : Regulatory Section Department of Energy and Environmental Protection Land & Water Resources Division 79 Elm Street Hartford, CT 06106-5127	



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930-2276

John R. Kennelly
Chief, Planning Division
Department of the Army
U.S. Army Corps of Engineers
New England District
696 Virginia Road
Concord, MA 01742-2751

JUL 8 - 2019

Re: New Haven Harbor Deepening (New Haven, Connecticut)

Dear Mr. Kennelly:

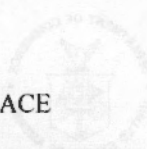
We have completed our consultation under section 7 of the Endangered Species Act (ESA) in response to your letter received on June 24, 2019, regarding the above-referenced proposed project. We reviewed your consultation request document and related materials. Based on our knowledge, expertise, and your materials, we concur with your conclusion that the proposed action is not likely to adversely affect any National Marine Fisheries Service ESA-listed species or designated critical habitat. Therefore, no further consultation pursuant to section 7 of the ESA is required.

Reinitiation of consultation is required and shall be requested by the lead federal agency or by us, where discretionary federal involvement or control over the action has been retained or is authorized by law and: (a) If new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered in the consultation; (b) If the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this consultation; or, (c) If a new species is listed or critical habitat designated that may be affected by the identified action. No take is anticipated or exempted. If there is any incidental take of a listed species, reinitiation would be required. Should you have any questions about this correspondence please contact Zachary Jylkka at (978) 282-8467 or by email (Zachary.Jylkka@noaa.gov). For questions related to Essential Fish Habitat, please contact Alison Verkade with our Habitat Conservation Division at (978)-281-9266 or at Alison.Verkade@noaa.gov.

Sincerely,

Michael J. Asaro, PhD
Acting Assistant Regional Administrator
for Protected Resources





EC: Verkade, NMFS/HCD; Randall, USACE
ECO: GARFO-2019-01601
File Code: H:\Section 7 Team\Section 7\Non-Fisheries\ACOE\Informal\2019\New England\USACE New Haven Harbor Deepening

JUL 8 - 2019


John K. Randall
Chief, Planning Division
Department of the Army
U.S. Army Corps of Engineers
New England District
600 Virginia Road
Framingham, MA 01742-1311

Re: New Haven Harbor Deepening (New Haven, Connecticut)

Dear Mr. Randall:

We have completed our consultation under section 7 of the Endangered Species Act (ESA) in response to your letter received on June 14, 2019, regarding the above-captioned proposed project. We reviewed your consultation request document and related materials. Based on our knowledge, expertise, and your materials, we concur with your conclusion that the proposed action is not likely to adversely affect any National Marine Fisheries Service (NMFS)-listed species or designated critical habitat. Therefore, no further consultation pursuant to section 7 of the ESA is required.

Reinitiation of consultation is required and shall be requested by the lead federal agency or by us where the action, critical habitat, or the action over the action has been retained or is a new action or listed species. If new information reveals effects of the action that may affect a listed species or critical habitat in a manner not previously considered in the consultation, or if the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the consultation, a new consultation is required. Should you have any questions about this correspondence, please contact Allison Verkade at (978) 282-8460 or by email at allison.verkade@noaa.gov. For more information on ESA critical habitat, please contact Allison Verkade with the label.

Respectfully,

Allison Verkade, PhD
Acting Assistant Regional Administrator
for Protected Resources



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD MA 01742-2751

June 19, 2019

Planning Division
Evaluation Branch

Michael Pentony
Northeast Regional Administrator
NOAA Fisheries
Northeast Regional Office
55 Great Republic Drive
Gloucester, MA 01930-2276

Dear Mr. Pentony:

This letter serves to initiate informal consultation under Section 7 of the Endangered Species Act (ESA) concerning the potential effects to listed species that could occur from the proposed New Haven Harbor Navigation Improvement Project, in New Haven Connecticut. Pre-consultation technical assistance was provided by your office in 2018 during the alternatives analysis for the effort. We have made the determination that the proposed activity may affect, but is not likely to adversely affect, species listed as threatened or endangered by NMFS under the ESA of 1973, as amended. We have prepared a Draft Integrated Feasibility Report and Environmental Impact Statement (D-IFR/EIS) describing potential effects to threatened and/or endangered species which are likely to result from construction or operation of the proposed project. The findings of that assessment are summarized in this letter.

Proposed Project and Construction Considerations:

The existing New Haven Harbor Federal Navigation Project (FNP) is shown in Figure 1. Navigation features of the existing Federal Navigation Project include:

- A main ship channel, -35 feet Mean Lower Low Water (MLLW), extending about 5 miles from deep water in Long Island Sound to the head of the harbor at the mouth of the Quinnipiac River, varying in width from 500 feet (outer-harbor) to 400 feet (inner-harbor), and widened to 800 feet along the upper harbor terminals to provide a maneuvering area;
- A turning basin in the upper harbor west of the channel also at -35 feet MLLW;
- Two anchorages west of the main channel, at -15 and -16 feet MLLW;
- The Quinnipiac River Channel, at -18 feet MLLW (lower channel) and -16 feet MLLW (upper channel), and generally 200 feet wide;

- The Mill River Channel, at -12 feet MLLW, 200 feet wide, including two branches (east branch at 100 ft. wide, and west branch at 125 feet wide);
- The West River channel authorized at -12-feet MLLW, 100 to 150 feet wide, with a -6 foot MLLW anchorage;
- A pile and stone T-dike at Stony Point west of the main channel, 4,200 feet long; and
- Three offshore stone breakwaters, totaling 12,100 feet in length providing a refuge in the outer harbor.

Due to inefficiencies in large vessels transiting the harbor, USACE is considering navigation improvement to the New Haven Harbor FNP. The tentatively selected plan (TSP) for the New Haven Harbor Navigation Improvement project is the -40 feet MLLW Plan. The TSP consists of the following General Navigation Feature Improvements:

TSP - General Navigation Feature Improvements

- Deepen the channel, maneuvering area, and turning basin from - 35 to -40 feet, MLLW
- Widen the turning basin to the north 200 feet
- Widen the inner channel from 400 to 500 feet and the entrance channel from 500 to 600 feet.
- Widen the channel bend at the East Breakwater from 560 to 800 feet

These improvements will involve dredging about 4.3 million cubic yards (MCY) of clays, silts, sands, and tills, the majority of which are parent materials largely of glacial origin, from the harbor bottom. In addition, about 43,500 CY of rock would be blasted and dredged from the harbor. The project would take about two years to construct. The improvement features are shown in Figure 2. The dredged material quantity estimate for the improvement dredging is shown in Table 1.

Table 1. TSP Dredged Material Quantity Estimates.

TSP (-40 feet MLLW Plan)	Dredging Quantities (CY)		Total
	Cut	2-ft. Over depth	
Entrance Channel	278,300	240,000	518,300
Bend (Ordinary Material)	475,300	161,300	636,600
Bend (Rock) (Required Cut to El 42)	24,900	18,600	43,500
Interior Channel	1,537,400	776,000	2,313,400
Maneuvering Area	377,700	274,600	652,300
Turning Basin	117,900	40,200	158,100
Total Improvement Dredging	2,811,500	1,510,700	4,322,200

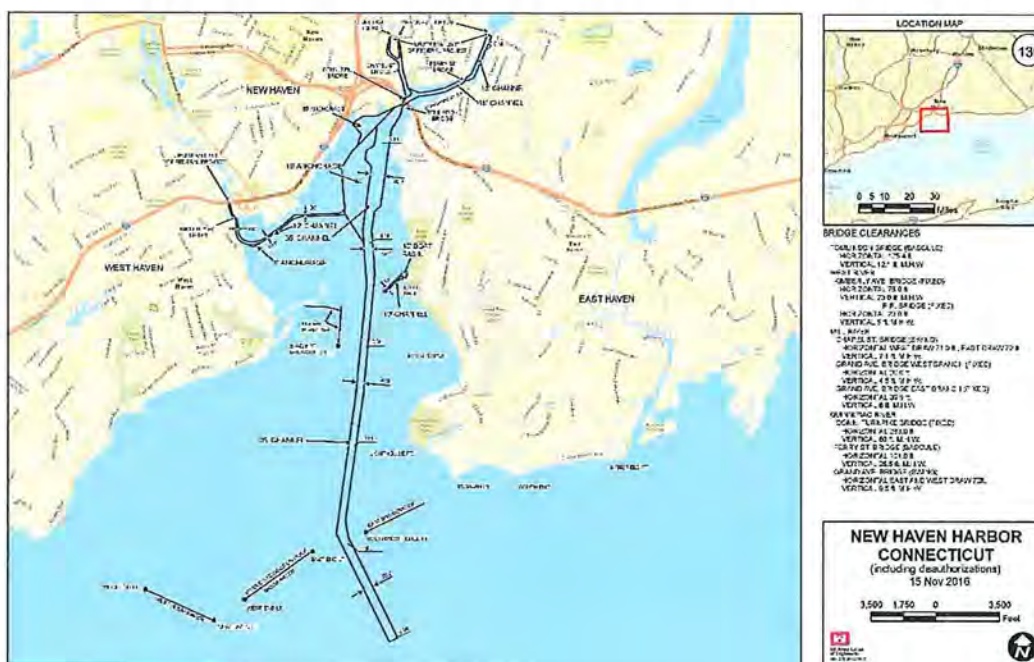


Figure 2. Navigation Improvement Features and Placement Site Locations



Project Construction Sequence

As the project is in the feasibility phase, no specific construction sequence has been designed to date. Preliminary schedule design involves the following:

Construction Year One:

- Drilling and Blasting Activities
- Mechanical Dredging of Interior Channel with material placement at near shore sites and CLDS
- Hydraulic Dredging of Interior Channel with material placement at Sandy Point wetland creation area

Construction Year Two:

- Mechanical Dredging of Entrance Channel, Interior Channel, Turning Basin and Maneuvering Area with material placement at near shore sites and CLDS

Time of Year Restrictions

The following periods during which construction could occur are as follows:

- Dredging and Disposal
October 1 to January 31 in the inner harbor
(north to the mid-point of Sandy Point)

October 1 and April 1 in the outer harbor
(mid-point of Sandy Point south to Long Island
Sound)
- Blasting
October 1 – April 1

Construction Techniques

The following best management practices for construction will be utilized to ensure that the proposed project does not adversely affect any threatened or endangered species:

- Prohibiting blasting during passage of schools of fish or large fish (e.g., Atlantic sturgeon, Shortnose Sturgeon)
- Prohibiting blasting in the presence of marine mammals
- Using inserted delays of a fraction of a second per blast drill hole (25 millisecond delay currently specified)
- Placing material on top of boreholes (stemming) to reduce shock waves reaching the water column

Construction Monitoring

The following monitoring efforts will be utilized to avoid adverse effects to threatened and endangered species:

- NMFS-approved Marine Mammal Observers will be present during blasting events and on scows transiting to CLDS
- NMFS-approved Fisheries Observers will be present during blasting events. In the unlikely event that any sea turtles or sturgeon are observed within the safety zone during a blast event, all reasonable attempts to monitor the condition and behavior of the animal will be undertaken. These incidences will be reported immediately to NMFS [(1-866-755-NOAA) and Zachary Jylkka (zachary.jylkka@noaa.gov)] to determine whether the incident would require reinitiating Section 7 Consultation.
- Fish/Marine Mammal detecting system (i.e., sonar) will be used during blasting events
- Fish startle system will be used for 30 minutes prior to and up to 5 minutes before each blasting event
- Hydro acoustic monitoring of every blast event (monitors will be placed approximately 250 feet upstream and downstream stations from blast source to monitor noise levels and pressure levels)
- Any interactions with listed species will be reported as soon as possible (within 24-hours) to the NMFS Marine Animal Response Hotline at (866) 755-NOAA as well as incidental.take@noaa.gov. In addition, USACE will immediately report any injured or dead marine mammals, sea turtles, and/or sturgeons to NMFS at (866) 755-NOAA and incidental.take@noaa.gov.

Description of the Action Area

The action area is defined as “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action” (50CFR§402.02). For this project the action area consists of the areas proposed to be dredged in New Haven Harbor, the beneficial use sites within New Haven Harbor, the Central Long Island Sound Disposal Site, as well as the route travelled to and from the project to the CLDS, and all underwater areas where the effects of dredging and dredged material placement (e.g., increases in suspended sediment, loss of prey, and increased risk of vessel strikes) will be experienced.

Analyses of mechanical dredging activities using a clamshell style dredge bucket indicate that increased sediment levels at the near bottom will be fully dissipated at a distance of 2,300 feet from the dredge site if dredging silt (Bohlen *et al.*, 1979), but typical surface plumes only extend about 1,000 feet (USACE, 2015). As the project

sediments are a mix of sand and silt, the coarser-grained material is expected to settle out of the water column more rapidly. The open water placement activities are expected to produce turbidity plumes that will be fully dissipated at a distance of 6,500 feet from the placement (SAIC, 2005). Therefore, the action area consists of the dredge footprint, the 2,300-foot radius around each of the areas to be mechanically dredged, a 6,500-foot radius from the open water placement area, and the routes travelled by the barges/scows from the dredge site to the placement site. These areas are expected to encompass all of the direct and indirect effects of the proposed actions.

New Haven Harbor is largely surrounded by urbanized land. Three waste-water pollution control facilities (WPCF) in the cities of New Haven, West Haven, and North Haven release effluent into the Quinnipiac River and New Haven Harbor. Effects of the WPCFs in North Haven and West Haven are minimal as compared to effects on New Haven east shore WPCF (Bell and Romick, 2002). The intensity of this urbanization and associated industrialization has brought with it all the attendant problems of municipal and industrial pollution, ranging from sewage to oil spills.

The waters of New Haven Harbor are classified by the State of Connecticut as SB throughout the harbor. The term SB is for coastal waters of overall good quality. The Connecticut Class SB waters designated uses are for: marine fish, shellfish and wildlife habitat, commercial shellfish harvesting, recreation, industrial water supply, and navigation (CT DEEP, 2017).

Long Island Sound, which includes New Haven Harbor, supports a diverse assemblage of fish. Many of the fish species in Long Island Sound are commercially and recreationally important. Connecticut commercial fisheries, between 2010 - 2014, harvested on average 5 to 6 million pounds of catch from Long Island Sound annually (CT DEEP 2015). Commercial and recreational fisheries in Long Island Sound are valued at over one billion dollars (LIS Task Force 2003).

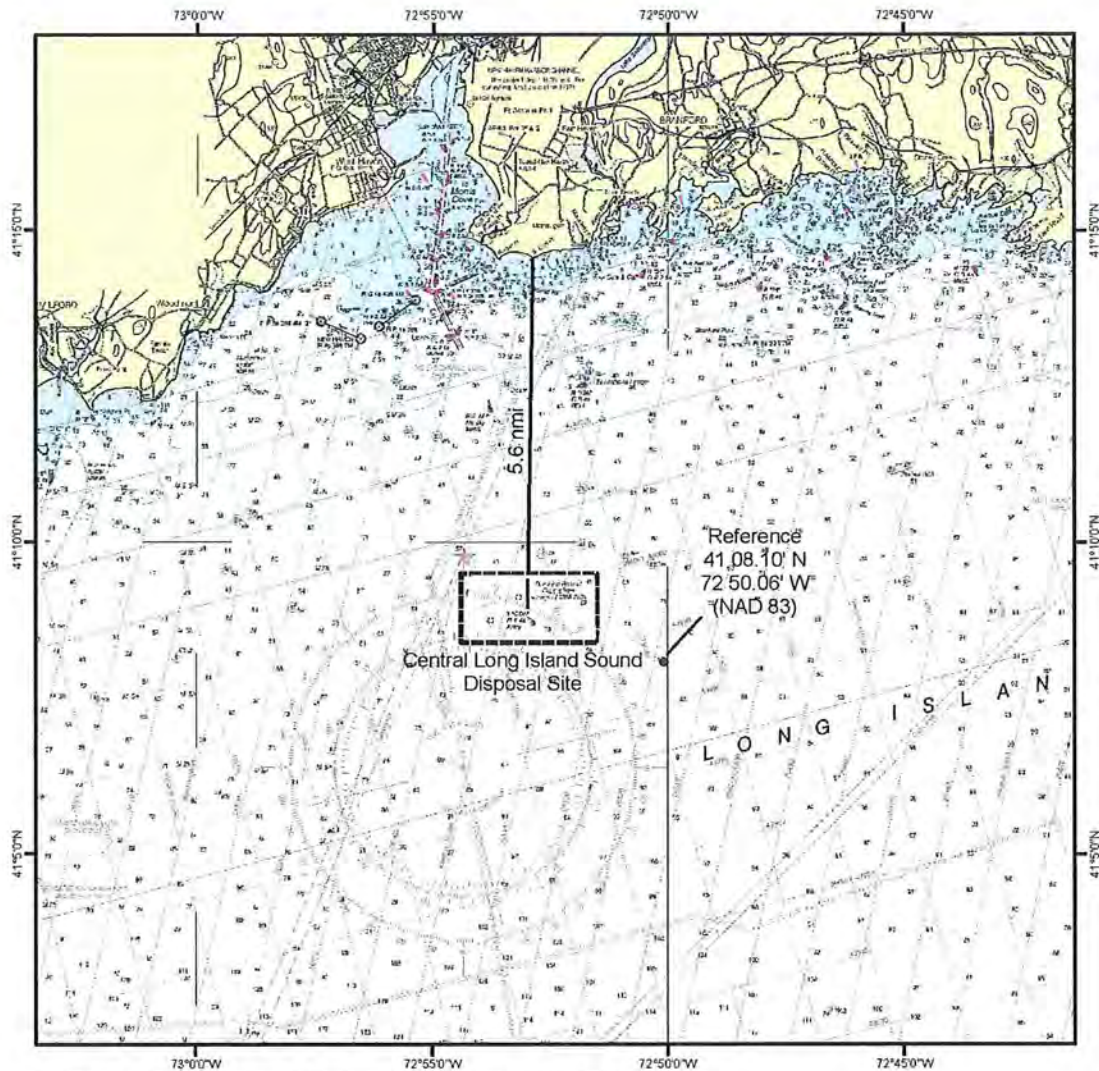
The most common year-round species of fish found in Long Island Sound include winter flounder, windowpane flounder, Atlantic menhaden, Atlantic silversides, butterfish, and scup. The most common anadromous species of fish (species that migrate from marine waters to freshwater streams and rivers) found in these waters include striped bass, alewife, blueback herring, white perch, and American shad.

Long Island Sound, a semi-enclosed estuary, is an important economic resource for both commercial and recreational/sport fisherman. The region is occupied by more than 83 fish species; however, only a few of them are considered year-round residents (Gottschall et al., 2000). Standard research tows for fish and shellfish conducted by the CTDEP between 1984 and 2000 document that the highest catch per unit effort (CPUEs) in Long Island Sound were found in central Long Island Sound

The Central Long Island Sound (CLDS) Disposal Site is located in Connecticut state waters approximately 5 nautical miles (6.5 miles) due south of South End Point, New Haven, Connecticut and over 10 nautical miles north of Shoreham Beach, New York.

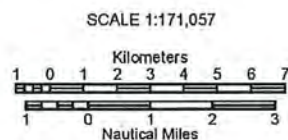
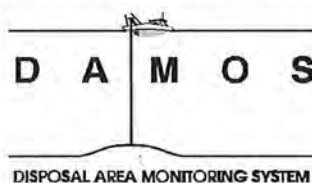
The CLDS has the longest continuous record of use of any disposal site in the Long Island Sound with records of material being disposed of at this site from 1941-1945 and again from 1954 to the present. Overall, CLDS has received in excess of 13 million cubic yards of dredged material since 1941.

Figure 3. Central Long Island Sound Disposal Site.



CENTRAL LONG ISLAND SOUND DISPOSAL SITE

Description: The Central Long Island Sound Disposal Site (CLDS) is one of four regional dredged material disposal sites located in the waters of Long Island Sound. CLDS covers a 11.04 km² (3.2 nmi²) area and is centered at 41° 08.950' N, 72° 52.950' W (NAD 83). It is located approximately 10.89 km (5.6 nmi) south of South End Point, East Haven, Connecticut. Since 1977, the management strategy at CLDS has entailed the controlled placement of small to moderate volumes of sediment to form individual disposal mounds on the seafloor. The authorized disposal point (within the overall disposal area) is specified for each dredging project in other project documents.



NOTE: This chart is not intended for use in navigation



CLDS is in a depositional area with a gradually sloping bottom ranging from a depth of 59 feet in the northwest corner to 72 feet in the southeast corner, with distinct disposal mounds from past dredged material placement activities rising to depths as shallow as 46 ft. (AECOM, 2013). The bottom sediments at the CLDS are composed of fine silts and clays characteristic of the low-energy environment found in deep areas of the western and central basins. The site is in an area of sediment accumulation, which is indicative of a generally low current regime (Bokuniewicz and Gordon, 1980).

The CLDS area has had extensive monitoring conducted of its benthic populations since 1979 (SAIC, 1989; SAIC, 1995, ENSR, 1998). As with many temperate benthic populations, benthic biota in the entire site undergoes seasonal fluctuations in densities, numbers of species, and dominants. A total of 184 species averaging 2,267.6 individuals per square meter have been identified at the CLDS site. The dominant species were the polychaete *Nephtys incisa*, and the bivalves *Mulinia lateralis* and *Yoldia limatula*.

The CLDS is removed from (6.3 miles) the near-shore estuarine environment that provides spawning, nursery, and productive feeding grounds for many marine resources, including summer and winter flounder. Divers have seen, in decreasing order of abundance, winter flounder, windowpane flounder, fourspot flounder, striped searobin, summer flounder, grubby sculpin and silver hake (SAIC, 1989). In fish trawls taken by CTDEP from 1992 to 1997, 35 species of finfish were identified. The top five dominants were butterfish (*Peprilus triacanthus*), winter flounder (*Pseudopleuronectes americanus*), scup (*Stenotomus chrysops*), bluefish (*Pomatomus saltatrix*) and windowpane flounder (*Scopthalmus aquosus*). Based on the CTDEEP data, lobsters, which were most abundant on muddy substrates, occurred Sound-wide in all seasons during the study period (i.e., 1984 to 2000) and were moderately abundant. However since that time lobster populations have declined dramatically in the sound. Commercial fin fishing activities at CLDS are limited due to the low populations of ground fish.

NMFS Listed Species and Critical Habitat in the Action Area

Per your letter of April 3, 2017 and using the Section 7 mapping tool, there are four species of sea turtles and two species of fish listed under the Endangered Species Act (ESA) that occur or have the potential to occur in the action area and may be adversely affected by the proposed action. ESA species include:

Sea Turtles

- Kemp's Ridley Turtle (*Lepidochelys kempii*) - Endangered (35 FR 18319; Recovery plan: NMFS *et al.* 2011)
- Leatherback Turtle (*Dermochelys coriacea*) - Endangered (35 FR 8491; Recovery plan: NMFS & USFWS 1992)

- Loggerhead Turtle (*Caretta caretta*) - Threatened (76 FR 58868; Recovery plan: NMFS & USFWS 2008)
- Green Turtle (*Chelonia mydas*) - Threatened (81 FR 20057; Recovery plan: NMFS & USFWS 1991)

Fish

- Atlantic Sturgeon (*Acipenser oxyrinchus oxyrinchus*) - Endangered except for Gulf Of Maine DPS - Threatened (77 FR 5880 and 77 FR 5914; Recovery plan: None published)
- Shortnose Sturgeon (*Acipenser brevirostrum*) (32 FR 4001; Recovery plan: NMFS 1998)

Sea Turtles

Four species of federally listed threatened or endangered sea turtles may be seasonally found in coastal waters of New England including the action area. These species include the threatened Northwest Atlantic Ocean distinct population segment (DPS) of loggerhead and North Atlantic DPS of green, and the endangered Kemp's ridley and leatherback. Sea turtles are generally distributed in coastal Atlantic waters from Florida to New England. As water temperatures of coastal New England rise in the spring, turtles begin to migrate north from their overwintering waters in the south. Sea turtles are expected to be found in the action area during the summer and fall months (May-November) when the water temperatures are at least 59° F (Shoop and Kenney, 1992) with the highest concentrations of turtles from May through October (Morreale, 1999; Morreale and Standora, 2005).

Atlantic Sturgeon

There are four DPSs of Atlantic sturgeon listed as endangered (New York Bight, Chesapeake Bay, Carolina, and South Atlantic) and one DPS listed as threatened (Gulf of Maine) under the ESA. The marine range for all five DPSs includes marine waters, coastal bays and estuaries from the Labrador Inlet in Labrador, Canada to Cape Canaveral, Florida. The presence of Atlantic sturgeon has been documented in the action area according to the NOAA Fisheries endangered species map. Available information on the distribution of Atlantic sturgeon indicates that a majority of the Atlantic sturgeon in the action area will be from the New York Bight (NYB) DPS with a small chance of any other DPS individuals occurring in the action area (Damon-Randall *et al.*, 2012).

Atlantic sturgeon are bottom feeders; diets of adult and migrant sub-adult Atlantic sturgeon include mollusks, gastropods, amphipods, annelids, decapods, isopods, and fish such as sand lance (Bigelow and Schroeder, 1953; ASSRT, 2007; Guilbard *et al.*, 2007; Savoy, 2005). The distribution of Atlantic sturgeon is strongly associated with prey availability. Therefore, Atlantic sturgeon may occur where suitable forage and

appropriate habitat conditions are present (e.g., soft substrate with higher densities of prey items). Long Island Sound may be an important feeding or resting area on-the-way to and from spawning areas in the Hudson River as adult and sub-adult Atlantic sturgeon have been seen or captured in the Sound. Atlantic sturgeon were caught in all three basins of Long Island Sound but were mainly located in the vicinity of Falkner Island (Savoy and Pacileo, 2003).

Eggs and larvae of Atlantic sturgeon are not expected in the marine action area, due to the fact that they spawn in freshwater portions of large rivers and their early life stages are not tolerant of salinity. Juvenile Atlantic sturgeon generally remain in their natal river; therefore, no juveniles should be present in the action area as it is not located in a river where sturgeon spawn. While in the estuary, sturgeon would be expected to occur primarily in outer New Haven Harbor.

Adult and sub-adult Atlantic sturgeon are known to overwinter outside of their natal rivers and a limited number of adult and sub-adult Atlantic sturgeon could be present foraging in the harbor during winter months. During winter months, adult Atlantic sturgeon primarily occupy deeper water offshore; they occupy the deepest waters during winter and early spring (November–March) and shallower waters during late spring to early fall (May–September) (Erickson *et al.*, 2011). Because the species uses a variety of habitats for foraging throughout the year, we expect Atlantic sturgeon to occupy waters that are generally deeper than what is available in the action area during the winter months, but will most likely move back into shallower near shore areas as the water temperature rises in the spring. Based on habitat conditions in the action area, we expect the presence of transient Atlantic sturgeon in the action area to be greater in April–November, but acknowledge that the species may be present year-round.

Shortnose Sturgeon

Shortnose sturgeon occur in rivers and estuaries along the east coast of the U.S. and Canada (SSSRT 2010). There are 19 documented populations of shortnose sturgeon, with the population in LIS closest to the action area occurring approximately 50 miles to the east in the Connecticut River. There is no critical habitat designated for this species. While movements between river systems have been documented in the Gulf of Maine, between the Connecticut and Hudson and in the Southeast, interbreeding between river populations is limited to very few individuals per generation; this results in morphological and genetic variation between most river populations (see Walsh *et al.* 2001, Grunwald *et al.* 2008, Waldman *et al.* 2002). This means that while individual shortnose sturgeon may move between rivers, very few shortnose sturgeon are spawning outside their natal river.

In fall 2014, a shortnose sturgeon of Connecticut River DPS was caught in the Merrimack River (Mass.) carrying a tag which was implanted in the Connecticut River in 2001 (NMFS comm. with Kieffer and Savoy 2014). However, the available tagging and tracking information is too limited to determine if Hudson and Connecticut River shortnose sturgeon are making regular movements outside of their natal rivers and

whether movement as far as the Merrimack River is a normal behavior. The genetic differentiation between these populations is thought to be a reflection of the rarity of these types of movements. However, the movement of a shortnose sturgeon from the Connecticut River to the Merrimack River, does indicate that occasional transient adult shortnose sturgeon moving between the Hudson and Connecticut or Merrimack Rivers could pass through the action area.

As with the Atlantic sturgeon, spawning and early life stages of the shortnose sturgeon only occur in freshwater habitats. However, adult shortnose sturgeon do not overwinter in the marine environment, instead spending the winter season in freshwater portions of large rivers. Because the action area consists solely of an estuarine environment, the best available information suggests that no life stages other than salinity tolerant adults undertaking migratory movements are expected to occur in the action area. Because adult shortnose sturgeon will feed on mollusks, crustaceans and other organisms on the estuarine bottom, and such may be present within the action area, it is feasible that shortnose sturgeon could opportunistically feed on a seasonal basis (April through November).

Effects Determination

Mechanical and Hydraulic Dredging

Entrapment

Mechanical dredging entails lowering the open bucket or clamshell through the water column, closing the bucket after impact on the bottom, lifting the bucket up through the water column, and emptying the bucket into a barge. The bucket operates without suction or hydraulic intake, moves relatively slowly through the water column and impacts only a small area of the aquatic bottom at any time. In order to be captured in a dredge bucket, an animal must be on the bottom directly below the dredge bucket as it impacts the substrate and remain stationary as the bucket closes. Species captured in dredge buckets can be injured or killed if entrapped in the bucket or buried in sediment during dredging and/or when sediment is deposited into the dredge scow. Species captured and emptied out of the bucket can suffer stress or injury, which can lead to mortality. As a mechanical dredge is not typically present in New Haven Harbor, the analyses below all refer to effects when added to baseline conditions.

A hydraulic dredge consists of a cutterhead on the end of an arm connected to a pump, which loosens the bottom sediments and entrains them in a water slurry that is pumped up from the bottom. The material is then discharged away from the channel (side cast), or is pumped via a pipeline to a dewatering area or disposal site. A hydraulic dredge is generally used for material that will be disposed of in an upland area or on a nearby beach, or for pumping any type of unconsolidated material into a confined (diked) disposal/dewatering area. Bottom dwelling species do have the potential to be entrained by the cutterhead and sucked through the hydraulic pipeline. As a hydraulic

dredge is not typically present in New Haven Harbor, the analyses below all refer to effects when added to baseline conditions.

Sea Turtles

Sea turtles are not known to be vulnerable to capture or entrainment in mechanical and hydraulic dredges, presumably because they are able to avoid the dredge bucket or cutterhead. Dredging efforts will occur in late fall and winter, so the likelihood of sea turtles co-occurring with an active dredge is low. Furthermore, the suction of the hydraulic dredge will not be activated until the head of the dredge is seated on the sea floor. Based on this information, effects to sea turtles from dredging are extremely unlikely, and are discountable.

Sturgeon

In 2012, the Corps provided NMFS with a list of all documented interactions between dredges and sturgeon reported along the U.S. East Coast; reports dated as far back as 1990 (USACE, 2012). This list included four incidents of sturgeon captured in dredge buckets. These include the capture of a decomposed Atlantic sturgeon in Wilmington Harbor in 2001. The condition of this fish indicated it was not killed during the dredging operation and was likely dead on the bottom or in the water column and merely scooped up by the dredge bucket. Another record was of the capture of an Atlantic sturgeon in Wilmington Harbor in 1998; however, this record is not verified and not considered reliable. The report also listed the live capture of an Atlantic sturgeon at the Bath Iron Works (BIW) facility in the Kennebec River, Maine in 2001 as well as a shortnose sturgeon captured at BIW in 2003 that was observed to have suffered death recently at the time of capture. One report of a live shortnose sturgeon captured in a dredge bucket at BIW in 2009 was not included in the report. Observer coverage at dredging operations at the BIW facility has been 100% for approximately 15 years, with dredging occurring every one to two years. Hundreds of mechanical dredging projects occur along the U.S. Atlantic coast each year and we are not aware of any other captures of sturgeon in mechanical dredges anywhere in the U.S prior to or after 2012.

The risk of interactions between sturgeon and mechanical dredges is thought to be highest in areas where large numbers of sturgeon are known to aggregate. The risk of capture may also be related to the behavior of the sturgeon in the area. While foraging, sturgeon are at the bottom of the river interacting with the sediment. This behavior may increase the susceptibility of capture with a dredge bucket. We also expect the risk of capture to be higher in areas where sturgeon are overwintering in dense aggregations as overwintering sturgeon may be less responsive to stimuli which could reduce the potential for a sturgeon to avoid an oncoming dredge bucket.

Most mobile organisms, including adult and juvenile Atlantic and shortnose sturgeon, are able to avoid mechanical dredge buckets. The slow movement of the dredge bucket through the water column and the relatively small area of bottom impacted by

each pass of the bucket makes the likelihood of interaction between a dredge bucket and an individual fish relatively low.

Based on all available evidence, the risk of sturgeon being captured in a mechanical dredge is low. The risk is further reduced because the action area is not known to support high densities of sturgeon and the areas to be dredged are not used for overwintering. Furthermore, the inclusion of a construction window of October 1 through April 1 will further decrease the likelihood of impacts to migrating sturgeon from mechanical dredging. Based on these factors, it is extremely unlikely that any sturgeon will be captured, injured or killed during mechanical dredging activities and effects to sturgeon are discountable.

Entrainment of sturgeon can occur when flow fields created near the suction intakes of hydraulic dredges exceed the capabilities of the fish to escape. Sturgeon entrainment or "takes" from dredging activities with observer programs are summarized in the U. S. Army Corps of Engineers Sea Turtle Data Warehouse (2013). From 1995 through January 2013, a total of 48 sturgeon takes (3 Gulf sturgeon, 11 shortnose sturgeon, 34 Atlantic sturgeon) have been recorded. Of these 3 Atlantic and 2 shortnose sturgeon were released alive, the remainder were mortalities. The majority of sturgeon takes were associated with hopper dredging (n=22) and mechanical clamshell dredging (n=3), operations; although takes by mechanical dredges are more appropriately classified as impingement rather than entrainment or "takes". During this period a single Atlantic sturgeon was entrained by a hydraulic pipeline (i.e. cutterhead) dredge (ERDC TR-14-12, 20XX). Given the low number of sturgeon entrainment interactions in hydraulic pipeline dredging efforts, as well as the expectation that only occasional transient sturgeon (i.e., no dense aggregations) will occur in the project area from October 1 – April 1, any effects of entrapment from the proposed hydraulic dredging activities on sturgeon are extremely unlikely, and are therefore, discountable.

Blasting

Rock removal for the proposed project will be accomplished by fracturing the rock through blasting and then dredging the rock with a mechanical bucket dredge. The rock removal operations will follow the management practices (endangered species observers, delayed charges, etc.) noted above and will be consistent with the practices developed for the Boston Harbor Navigation Improvement Project in Boston, MA. It is expected that blasting associated with this improvement project will take place over a period of about 4 to 6 weeks between October 1 and April 1.

Potential aquatic impacts associated with blasting include noise, thermal energy release, increased turbidity, damage to structures, and effects on aquatic life, all of which are expected to be minor and temporary in nature due to the precautions to minimize the shock wave and to scare aquatic life away from the blast areas. These impacts would be generated as a result of vibrations, explosion-induced surface water waves, or air overpressure. Underwater sound from explosions will be presented in terms of peak pressure levels (psi) and impulse levels (psi-s).

Any blast impacts to aquatic populations will be localized and temporary, with the most pronounced effect on aquatic species in the immediate vicinity of the blast site. Currently NMFS has no acoustic guidelines or criteria for effects of blasting on fish. However, based on Moser (1999) studies, peak pressure levels at or below 75.6 psi and peak impulse levels at or below 18.4 psi-msec will cause no injury or mortality to fish (NMFS 2012).

According to the underwater acoustic modeling for rock blasting in New Bedford Harbor (New Bedford, MA) for the construction of the South Terminal, the following radial distances to two threshold criteria were estimated for a range of charge weights between 30lbs and 150 lbs (Table 2). Threshold criteria are provided for peak pressure (75.6 psi) and peak positive impulse (18.4 psi/msec; NMFS 2012). Assuming the most conservative metric, radial distances for 30 to 150 lb charge weights could range from 187 to 291 feet respectively (Matthews and Zykov 2013). These estimated radial distances were considered to be overestimated for the conditions at the New Bedford Harbor. Model inputs specific to the New Bedford Harbor included water depth, geoacoustic properties, type of explosive, the charge weight, the geometry of the detonation (depth of the charge, distance to the receiver, and depth of the receiver), and the geoacoustic parameters of the substrate: density, compressional-wave (or P-wave) velocity, and attenuation coefficient.

Although model inputs were specific to the New Bedford Harbor, and there are likely some differences in the parameters between New Bedford Harbor and the New Haven Harbor channel, we believe the estimates are reasonable and applicable to the proposed project because of the large range of charge weights modeled. It is anticipated that the range of charge weights for the New Haven Harbor project will fall within the range noted in Table 2.

Table 2. Estimated radial distance to threshold criteria for peak pressure (75.6 psi) and peak positive impulse (18.4 psi/msec), New Bedford, MA.

Charge Weight (lb)	Distance to peak pressure injury criterion of 75.6 psi (feet)	Distance to impulse injury criterion of 18.4 psi·ms (feet)
30	182	187
50	201	219
100	222	268
130	228	283
150	231	291

Source: Matthews and Zykov 2013

Sea turtles

The effects of underwater explosives on sea turtles depends on many variables including charge size, charge type, and depth of the explosive charge; the size and

depth of the turtle in the water column; overall water column depth; and the distance between the turtle and the explosive charge (CSA 2004). Information regarding effects of underwater explosions to sea turtles is scarce (Viada et al. 2008). However, potential impacts may include behavioral modifications, injury, or mortality from high levels of sound pressure and/or shock waves from blasting if a sea turtle was present in the action area.

The U.S. Navy (2017) estimates that sea turtles will experience injury from exposure to impulsive noise or explosions at the following thresholds:

Temporary Threshold Shift (TTS) Threshold		Permanent Threshold Shift (PTS) Threshold	
SEL (weighted) (dB SEL)	Peak SPL (dB SPL)	SEL (weighted) (dB SEL)	Peak SPL (dB SPL)
189	226	204	232

A Biological Opinion (BO) prepared for removing structures on the outer continental shelf in the Gulf of Mexico (MMS and NMFS 2006) provides a thorough discussion of behavioral and physiological impacts from underwater explosions as well as a very useful monitoring protocol. This protocol includes impact zone radii for five blasting categories differentiated by charge size, water depth, and placement of charge. These impact zones were developed for the five threatened and endangered sea turtle species found in the Gulf of Mexico, loggerhead, leatherback, green, Kemp's ridley, and hawksbill. The range of impact zone radii is from 856 feet for the smallest charge size of 0 to 10 pounds placed below the mudline to 5,012 feet for the largest charge of greater than 200 up to 500 pounds placed above the mudline (MMS and NMFS 2006). These estimated distances were calculated using a 12 psi threshold criterion. Since these impact zone radii were estimated for deep outer continental shelf waters, and blasting was for an underwater structure as opposed to into rock, they may not be applicable to the proposed project, but are provided for context. Behavioral modification may occur with noise levels at or above 175 dB re 1 μ Pa SPL rms (McCauley et al. 2000; US Navy, 2017).

We believe 175 dB re 1 μ Pa SPL rms threshold for behavioral impacts is protective for sea turtles during underwater explosive work, and should be used to determine the corresponding monitoring/exclusion zone. In other words, to be conservative, the exclusion zone would be contained within the radial distance from the blast to where received sound levels decrease to less than 175 dB re 1 μ Pa SPL rms. Estimates of radial distance from project blasting out to the 175 dB re 1 μ Pa SPL rms isopleth or to the 12 psi isopleths from underwater blasting are not available.

If the estimated distances for blasting in the Gulf of Mexico are applicable to the improvement project area, potential impacts may occur over an approximately 900 foot radius around the blast point for sea turtles if they are present during blasting between October 1 and April 1. However, data indicates that the likelihood of sea turtles being

present in the blasting area during that timeframe is extremely low. Therefore, based on the rarity with which we expect sea turtles in the action area during blasting, combined with the presence of ESA-listed species observers who will survey the blast zone prior to detonations and the use of scare charges, we believe the risk of sea turtle injury from blasting is extremely unlikely, and therefore, discountable.

Sturgeon:

If sturgeon are present in the New Haven Harbor channel at the time of the blasting, injury or mortality from acoustic shock wave may potentially occur. In order to provide a rough estimate of radial distance of impacts for this Project, the results from the underwater monitoring model for New Bedford Harbor have been applied. However, it is important to note that underwater noise and shockwave pressure behave differently at different sites. Depending on the charge weight, and using the more conservative impulse threshold criteria, impacts of injury or mortality could occur for sturgeon out to a minimum of 187 to 291 feet from the blasting (Table 2). Even during the maximum extent of rock blasting, a zone of passage within the harbor will be available to allow sturgeons to avoid blasting impacts. In addition, USACE will incorporate specific blasting protective measures noted above.

Due to the combination of a low likelihood of sturgeon occurrence in the action area, and the fact that blasting activities should not inhibit any sturgeon movement through New Haven Harbor and within an available zone of passage, we conclude that injury to sturgeon is extremely unlikely, and therefore, discountable. Furthermore, any movement by sturgeon to avoid the negative impacts of rock blasting operations would be too small to be meaningfully measured or detected, and are therefore, insignificant.

Sediment Plume from Mechanical Dredging and Placement

Mechanical dredging will disturb sediments and cause a temporary increase in suspended sediment within the action area. Re-suspended sediment is expected to settle out of the water column within a few hours. Information on suspended sediment plumes associated with mechanical clamshell dredges indicate that the concentration of suspended sediments will be highest close to the bottom (445 mg/l) and will decrease rapidly higher in the water column (105 mg/l) and further from the dredge site (USACE, 2001). A study by Burton (1993) measured turbidity levels at 500, 1000, 2000, and 3300 feet from the dredge site. Based on these analyses, elevated suspended sediment levels of up to 445 mg/l may be present in the immediate vicinity of the clamshell bucket, and suspended sediment levels of up to 191 mg/l could be present within a 2,300 foot radius from the location of the clamshell dredge.

The exact size of the plume is influenced by the particular dredge used, the dredge operator, sediment type, strength of current and tidal stage and is likely to vary throughout the project. For example, a more pronounced effect would occur when dredging the channel inlet on an outgoing tide. The majority of the sediment would settle out within several hours, but some of the very fine particles could stay in

suspension for many days (Corps of Engineers, 1977; Christodoulou et al., 1974). However, disturbed sediments generally settle much more quickly in natural conditions due to particle collisions, flocculation and biological reworking (Humby and Dunn, 1975; Krone, 1972).

Within New Haven Harbor, turbidity would remain localized about the dredge and in the navigation channel (USACE 1996). Several studies have monitored sediment plumes associated with dredging projects along the Atlantic Coast. Turbidity levels associated with these sediment plumes typically range from 40-350 mg/L with the highest levels detected adjacent to the dredge bucket and concentrations decreasing with greater distance from the dredge (Anchor Environmental, 2003). Based on this information, the impacts should be limited in time and restricted primarily to the cove.

At the disposal sites, dredged material will be released from a scow or barge. The material will pass through several stages as it travels to the sea bottom. Several factors influence the behavior of the descending plume, including the properties of the sediment (e.g. silt, sand, clumps, etc.), water depth, water column stratification, and the interplay of the descending sediment with the water through which it passes. In general, the behavior of the plume can be described as occurring in three phases: convective descent, dynamic collapse, and passive diffusion.

Turbidity measurements at CLDS (Gordon, 1974) showed that when 2,000 cubic meters of dredged material were discharged in waters 20 meters deep, the density surge carried less than 18 percent of the material outside a circle of a 30 meter radius, and essentially none beyond about 120 meters. The residual turbidity in the water column, which drifts with the tidal stream, contained less than one percent of the material discharged (USACE, 1979). Monitoring studies performed during disposal operations at CLDS of suspended solids indicated that approximately one percent of the sediments remained suspended in the water column after disposal of clamshell dredged silty material (USACE, 1985), meaning that almost all of the dredged material travels and settles to the seafloor. Total suspended solids near the center of the sediment plume body have been observed to return to near background levels in 35 to 45 minutes (USACE and EPA, 2010; SAIC, 2005).

Sediment Plume – Hydraulic Dredging and Placement

Hydraulic dredging equipment will be used to remove silty material from the channel that will be used for marsh creation at the Sandy Point beneficial use site. Re-suspension of fine-grained material during hydraulic dredging is usually restricted to the vicinity of the dredge head and decreases rapidly with increasing distance from the operation. The cutterhead pipeline dredge is capable of removing sediments with relatively small amounts of re-suspension extending beyond the immediate vicinity of the dredge.

A cutterhead could suspend 25-250 mg/l of silty sediments within 100 to 400 feet down current of the dredge (Hayes, 1986). The discharge of material at the end of the

hydraulic pipeline at the placement area has the potential to suspend large amount of silt and clay. However, the anticipated methodology involves using the hydraulic dredge to fill geotubes in place with the silty material. The geotubes will be designed to retain all fine-grained material. Once the geotubes are filled, they will create a containment structure which will ring the perimeter of the marsh creation area. Hydraulic dredging will then be used to fill the area within the geotube containment area to elevations appropriate for salt marsh creation. Best management practices will be used to keep suspended sediments within the geotube containment area and minimize impacts to adjacent subtidal softbottom habitats.

Sediment Plume – Blasting

Blasting of rock from the proposed project will produce short term increases in turbidity as silts and clays overlaying and in the vicinity of each blast event are suspended during the underwater explosions and the release of gasses from the fractured rock. Teleki and Chamberlin (1978) reported elevated short-term turbidity levels associated with blasting in glacial tills in the shallow waters of Lake Erie, however elevated turbidities lasted only a matter of hours before returning to ambient conditions. Blasting activities are generally limited to one to two blasting events per day as the process of drilling holes, loading explosives, setting charges, and removing divers must be done sequentially and therefore requires significant time to accomplish. Therefore, blasting is not anticipated to contribute to significant levels of turbidity for extended periods of time during construction of the proposed project.

Overall, water quality impacts from dredging, blasting, and placement are anticipated to be minor and temporary in nature. The total suspended solids (TSS) within the water column naturally vary based on season, winds, and storm events. Once dredging, blasting, and placement operations are complete, the project area is expected to return to ambient conditions within a few hours as the sediments settle out of the water column (Clarke et al., draft).

Sea Turtles

No information is available on the effects of TSS on juvenile and adult sea turtles; however, elevated TSS levels could affect sea turtles if a plume causes a barrier to normal behaviors. As sea turtles are highly mobile and breathe air, they will be able to avoid any sediment plume they encounter with minor movements to alter their course away from the sediment plume. Thus, any effect on sea turtle movements is likely to be immeasurable and therefore insignificant.

Sturgeon

The life stages of sturgeon most vulnerable to increased sediment are eggs and non-mobile larvae which are subject to burial and suffocation. As noted above, no sturgeon eggs and/or larvae will be present in the action area. Sturgeon in the action area during dredging may avoid a sediment plume by swimming around it. However, if sturgeon do

interact with the plume, expected TSS levels (up to 445 mg/l) (USACE, 2015) are below those shown to have an adverse effect on fish (580 mg/l for the most sensitive species, with 1,000 mg/l more typical (Burton, 1993)).

Turbidity studies conducted during dredging projects provide values above baseline conditions; when these values are added to general baseline conditions (e.g., 2 to 15 mg/l, Boston Harbor (Battelle, 2009)) they are still within acceptable levels. Dredging related suspended sediments or turbidity plumes may differ in scope, timing, duration, and intensity from natural conditions (Clarke and Wilber, 2000). Major storms can displace larger amounts of sediments than dredging operations, and tend to occur one to three times a year. Natural disturbances are more frequent than most dredging operations at a particular area and dredging affects much smaller areas (i.e. a localization of impacts) than these major storms (Wilber and Clarke, 2001). Based on this information, any effects of suspended sediment from dredging activities on sturgeon resulting in minor movements to avoid the plume are not capable of being meaningfully measured, evaluated or detected; therefore, effects to sturgeon from turbidity related to dredging activities are insignificant.

Habitat modification

Effects to listed species can be caused by disturbance to the sea floor that reduces the availability of prey species or alters the composition of forage. Mechanical dredging, blasting, and unconfined open water placement, can affect future use of the action area by sea turtles and sturgeon by reducing prey species (such as worms, mollusks, and crustaceans) through the alteration of the existing biotic assemblages. The dredge and placement activities have the potential to impact up to 600 acres of bottom habitat. Green sea turtles forage on sea grasses and no sea grasses will suffer adverse effects from dredging or placement. Leatherback sea turtles feed on jellyfish. As jellyfish are pelagic species and not vulnerable to interactions with the dredge, there is not likely to be a reduction in the forage base for leatherbacks. Kemp's ridley and loggerhead sea turtles typically feed on crabs, other crustaceans and mollusks. Some of the prey species targeted by turtles and sturgeon, including crabs, are mobile; therefore, some individuals are likely to avoid the dredge and scows, but sessile infauna would be impacted.

Studies reviewed by Wilbur and Clarke (2007) demonstrate that benthic communities in temperate regions occupying shallow waters with a combination of sand, silt, or clay substrate reported recovery times between 1-11 months after dredging. Thus, we expect the benthic community within the project area to recover in less than one year and no permanent removal of potential forage organisms from the area. As the projected maintenance dredging cycle of the New Haven Harbor FNP is anticipated to be approximately every 10 years, benthic communities should stabilize between dredging events. Some species of benthic invertebrates that sturgeon and turtles feed on have limited mobility and could be temporarily buried during disposal operations. Some buried animals will be able to migrate upward through the sediment and

reestablish themselves. The surrounding areas where dredged material will be placed are expected to be recolonized by individuals from similar habitat nearby.

While there is likely to be some temporary reduction in the amount of prey in the dredge and placement areas, the action will result in the loss of only a small portion of the available forage in the action area, which extends from the dredge site to CLDS (6 miles). Therefore, sturgeon and sea turtles opportunistically foraging in the action area will be able to forage in other portions of the action area where benthic communities have not been removed or buried. In addition, dredging activities are not likely to alter the habitat in such a way as to prevent sturgeon from using the project area as a migratory pathway. As a result, effects on habitat modification from dredging and placement when added to typical baseline conditions will be too small to be meaningfully measured or detected, and are therefore insignificant.

Vessel Traffic

Collision with vessels is a source of anthropogenic mortality for sea turtles and sturgeon. The proposed project requires the use of a tug and scow to transit to the various placement sites, and will therefore lead to a temporary increase in vessel traffic during the construction period. However, the deepening of the New Haven Harbor should decrease the overall number of vessel trips that occur annually in the channel as several vessels that utilize the port will be able to access the terminals on all tides and not need to offload cargo in Long Island Sound (which causes multiple trips to and from the port by support vessels).

Sea Turtles

Interactions between vessels and sea turtles can result in injury or death. Most vessel interactions result from contact between sea turtles and boat propellers. Information is lacking on the type or speed of vessels involved in turtle vessel strikes. However, there does appear to be a correlation between the number of vessel struck turtles and the level of recreational boat traffic (NRC, 1990). Dredge vessels and scows have relatively shallow drafts and travel at slow speeds (i.e., less than 3 knots while dredging, less than 10 knots at any other time). While sea turtles occur at the water's surface and are therefore susceptible to interactions with shallow-draft vessels, sea turtles are highly mobile and have ample space and time to avoid any interaction with a project vessel. Additionally, trained observers will be present to scan for the presence of turtles during the transit of material to the placement sites. Therefore, effects of vessel traffic on sea turtles are extremely unlikely.

Sturgeon

When this project is completed, it will not result in an increased number of vessels in the action area, and thus, there is no increased risk of vessel strike in the future. We have also considered the likelihood that an increase in vessel traffic related to the project activities would generally increase the risk of interactions between sturgeon and vessels

in the action area, in addition to baseline conditions. The use of tugs and scows will cause a small, localized, temporary increase in vessel traffic between October 1 and April 15 of the years of construction. Given the small increase in vessel traffic above existing levels in New Haven Harbor and Long Island Sound, there will be no measurable or detectable increase in the risk of vessel strike, thus effects to sturgeon are insignificant. Furthermore, a trained marine mammal and sea turtle observer will be present during placement activities that occur during April, October, and November and will document vessel strikes and/or other effects to marine mammals or turtles during placement activities and transit to and from the disposal site.

Based on this information, we believe the effects of vessel traffic on sea turtles and sturgeon from the proposed project are insignificant and discountable.

Conclusions

Based on the analysis that all effects of the proposed action when added to baseline conditions will be insignificant and/or discountable, as well as the inclusion of a construction window of October 1 through April 1, that this project is not likely to affect threatened or endangered species in the project area. Furthermore, a trained marine mammal and sea turtle observer will be present during placement activities that occur during October, November, and April, and will document vessel strikes and/or other effects to marine mammals or turtles during placement activities and transit to and from the disposal site. The Corps used the best scientific and commercial data available to complete this analysis.

The information presented above constitutes our assessment of effects, which we believe sufficiently show that the proposed navigation improvement project may affect, but will not likely adversely affect any threatened or endangered species that may occur in the vicinities of the proposed dredging, blasting, and placement areas. We request your concurrence with our determination. If you need any further information you may contact Mr. Todd Randall at todd.a.randall@usace.army.mil or phone (978) 318-8518.

Sincerely,


John R. Kennelly
Chief, Planning Division

Enclosure

Copy Furnished:
Ms. Blumeris
Mr. Jylkka
Mr. Randall

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Department of Economic and
Community Development

State Historic Preservation Office

May 13, 2019

Mr. Marc Paiva, Archaeologist
U.S. Army Corps of Engineers
696 Virginia Road
Concord, MA 01742-2751

Subject: Proposed New Haven Harbor Navigation Improvement Project
New Haven, Connecticut

Dear Mr. Paiva,

The Connecticut State Historic Preservation Office (SHPO) has reviewed the referenced project in response to your request for our comments regarding potential effects to historic properties. Consultation with our office began during October of 2018 when our office was noticed about the Draft Integrated Feasibility Report and Environmental Impact Statement for this project. SHPO understands that the United States Army Corps of Engineers (USACE) plans to deepen the existing channel, widen the turning basin, widen the inner channel, and widen the channel bend. Dredged material will be deposited at six different locations: Morris cove, East Breakwater, West River, West Breakwater, the Central Long Island Sound Disposal Site, and Sandy Point Dike.

A combination of new archaeological surveys and a review of previously completed cultural resources investigations were taken into consideration to evaluate potential project impacts. All of the dredge disposal locations are either existing disposal sites or have been previously reviewed for cultural resources. Based on the information submitted to our office, it is unlikely that disposal at the identified locations will impact significant historic resources and no additional investigations are warranted. USACE completed side scan sonar surveys and obtained vibracore samples within the New Haven Harbor study area. A possible wreck/obstruction was identified adjacent to the channel side slope, but outside of the proposed improvements. SHPO recommends that no construction related activities occur within 150 feet of this possible wreck. If impacts to this area cannot be avoided, our office understands that additional archaeological examination of the site will be completed and additional consultation will follow. With these precautions taken into consideration for the potential wreck, SHPO concurs with USACE that that no historic properties will be affected by the proposed undertaking.

This office appreciates the opportunity to review and comment upon this project and appreciates the comprehensive effort that USACE has put forth on this project. These comments are provided in accordance with Section 106 of the National Historic Preservation Act, as amended. For additional information, please contact me at (860) 500-2329 or catherine.labadia@ct.gov.

Sincerely,

Catherine Labadia
Deputy State Historic Preservation Officer

State Historic Preservation Office

450 Columbus Boulevard, Suite 5 | Hartford, CT 06103 | P: 860.500.2300 | Cultureandtourism.org

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DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD MA 01742-2751

June 7, 2019

Planning Division
Evaluation Branch

Mr. Michael Johnson, Deputy Tribal Historic Preservation Officer
Natural Resources Protection & Regulatory Affairs
Mashantucket Pequot Tribal Nation
550 Trolley Line Boulevard, P.O. Box 3202
Mashantucket, CT 06338-3202

Dear Mr. Johnson:

The U.S. Army Corps of Engineers, New England District has received your letter dated May 6, 2019 (copy enclosed) regarding the New Haven Harbor Navigation Improvement Project. We would like to provide the following responses to the questions that were raised in your letter.

1. What dredging process will you use in the harbor? The New Haven Harbor improvement project would use both a mechanical dredge and a hydraulic pipeline dredge. Mechanical dredging involves the use of a barge-mounted crane with a clamshell bucket, or a backhoe arm to dig the material from the harbor bottom. Typical dredging buckets come in various sizes from five cubic yards to thirty or more cubic yards. The material is placed in a scow for transport to the disposal site by tug. For open-water or ocean disposal, a split-hull scow is generally used for ease of disposal and to minimize the discharge plume. Material at the disposal site is typically discharged using preset coordinates monitored by the tug. Hydraulic pipeline dredges employ a mechanical cutter to break up the material, which is then excavated hydraulically and transported to the placement site through a pipeline.

2. Does your procedure include an archaeological examination of the recovered material at or near the Central Long Island Sound (CLIS) site? The CLIS site will be used solely for disposal of dredged material from the New Haven Harbor channel improvement project.

3. Your letter indicates that "CLIS is unlikely to impact any significant historic properties." Could you please tell us how that determination was derived? No dredging of material will occur at CLIS as part of the proposed project. CLIS will solely be used for the disposal of dredged material from the New Haven Harbor project. Since CLIS is a historic disposal site that has been used since the 1970's for the disposal of dredged material from New Haven with the placement of about 4.5 million cubic yards to

date, we feel that any historic properties that may have originally been present in the area have been disturbed or destroyed through continued use of the site.

4. Could you please provide our office with a copy of the vibracore and side scan sonar survey, and who the firm was that provided the determination? The vibracore and side scan sonar surveys were conducted in-house by the New England District Marine Programs Section with analysis of the cores by the project archaeologist. We are happy to provide you with a copy of the survey findings.

5. While we do concur with CT SHPO asking for a 150-foot buffer around all sides of the possible wreck site, would it be possible to confirm what the site is? Yes, New England District plans to conduct an archaeological assessment of the wreck site during our Project Engineering and Design phase of the project prior to construction. We will include your office in the findings from this assessment as well as any follow-up evaluation and coordination.

6. May we obtain a copy of that 2009 archaeological survey for the West Haven Water Pollution Control Facility at Sandy Point? New England District came upon the survey report at the Special Collections Library of the University of Connecticut. While we do not have a copy, our review of the report indicated that the wastewater treatment plant was built on imported fill with modern debris over altered wetland soils in highly disturbed contexts. CT SHPO agreed with the recommendation that no further work was required.

If you have any questions or wish to discuss this information further, please contact Mr. Marc Paiva, Archaeologist at marcos.a.paiva@usace.army.mil or 978-318-8796, or Ms. Barbara Blumeris, study manager at barbara.r.blumeris@usace.army.mil or 978-318-8737 at your convenience.

Sincerely,


John R. Kennelly
Chief, Planning Division

Enclosure



The Mashantucket Pequot
Tribal Nation
Tribal Historic
Preservation Office

5/6/19

Department Of The Army
US Army Corps Of Engineers
New England District
696 Virginia Road, Concord Ma 01742-2751

Dear Barbara,

Thank You for the opportunity to consult on the New Haven Harbor Navigation Improvement Project. After our initial review of the project, we have some additional questions regarding the project. Per your letter, we understand that the project would entail:

- Deepening the Channel, Maneuvering area, and turning basin from -35 to -40 feet, Mean Lower Low Water.
- Widening the turning basin to the north 200 feet.
- Widening the inner channel from 400 to 500 feet and the entrance channel from 500 to 600 feet.
- Widening the channel bend at the East Breakwater from 560 to 800 feet.

We further understand that dredged material removed from the project area Of Potential Effect (APE) would then be transported by dump Scow and placed at several near shore or open water sites.

With regards to the dredged material, **page 2** of your letter refers to disposing of the material most likely at CLIS:

- What dredging process will you use in the harbor?
- Does your procedure include an archaeological examination of the recovered material at or near the CLIS site?
- Your letter indicates *"CLIS is unlikely to impact and significant historic properties."* Could you please tell us how that determination was derived?

Page 2 mentions that Vibracore samples were taken in the APE, as well as side sonar scans, and that *"No evidence of habitation surfaces or artifacts of any type indicative of a Pre-Contact occupation were encountered."*

- Could you please provide our office with a copy of the survey, and who the firm was that provided the determination?

Page 2 of your letter, 3rd paragraph speaks to *"no other possible shipwreck or submerged sites were identified in the side sonar data."* outside of what has been determined as a "wreck/obstruction" which is outside the APE.

- While we do concur with CT SHPO asking for a 150' buffer around all sides of the possible wreck site, would it be possible to confirm what the site is?

Page 3 of your letter references an archaeological survey conducted in 2009 for the West Haven Water Pollution Control Facility to Sandy Point.

- May we obtain a copy of that 2009 archaeological survey?

Thank You.

Michael Kickingbear Johnson

Deputy Tribal Historic Preservation Office



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD MA 01742-2751

April 3, 2019

Planning Division
Evaluation Branch

Marissa Turnbull, Tribal Historic Preservation Officer
Natural Resources Protection & Regulatory Affairs
Mashantucket Pequot Tribal Nation
550 Trolley Line Blvd., P.O. Box 3202
Mashantucket, CT 06338-3202

Dear Ms. Turnbull:

The U.S. Army Corps of Engineers (USACE), New England District is requesting your review of the proposed New Haven Harbor Navigation Improvement project in accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended. This is a follow-up to our previous letter of October 12, 2018 notifying your office that the New Haven Harbor, Connecticut, Navigation Improvement Project, Draft Integrated Feasibility Report and Environmental Impact Statement (IFR/EIS) was available for review. The attached figure shows the proposed project and the dredged material placement sites. The proposed project includes the following navigation improvement features:

- Deepening the channel, maneuvering area, and turning basin from -35 to -40 feet, Mean Lower Low Water
- Widening the turning basin to the north 200 feet
- Widening the inner channel from 400 to 500 feet and the entrance channel from 500 to 600 feet.
- Widening the channel bend at the East Breakwater from 560 to 800 feet.

Dredged material removed from the project would be transported by dump scow and placed at several near shore or open water sites including:

- Morris Cove Borrow Pit
- Oyster Habitat Creation site at the East Breakwater
- West River Borrow Pit
- Rock placement site at West Breakwater (rock reef habitat creation)
- Open Water Placement at Central Long Island Sound Disposal Site (CLDS) with targeted placement to cover historic disposal mounds
- Sandy Point Dike, West Haven for salt marsh creation (approximately 850,000 cubic yards to be hydraulically pumped to the site).

Dredging for Navigational Improvements

USACE has conducted side scan sonar surveys and obtained vibracore samples of the navigation improvement areas within the New Haven Harbor study area. A possible wreck/obstruction site was located just outside of the main channel and adjacent to the channel side slope (see enclosed Inner Harbor figure). CT SHPO recommends a 150-foot buffer from all sides of the side scan sonar image of the possible wreck site. The current data is inconclusive to determine whether this site is a shipwreck or other obstruction. Since the location is outside of the current improvements to the channel, it will be avoided with a buffer during detailed design of the channel in the pre-construction engineering and design (PED) phase of the project. However, if during PED, it is determined that impacts to the area cannot be avoided, then an archaeological examination of the site would be required and we would coordinate with your office on the scope of the investigation, evaluation of results, and if necessary, measures to avoid, minimize or mitigate any adverse impacts to historic properties.

No other possible shipwreck or submerged sites were identified in the side scan sonar data. The vibracore samples were examined and consisted primarily of deep fill material overlaying the original sediments. No evidence of habitation surfaces or artifacts of any type indicative of a Pre-Contact occupation were encountered.

Disposal Sites

- Central Long Island Sound Disposal Site (CLIS)
- West River Borrow Pit
- Morris Cove Borrow Pit
- East Breakwater Oyster Habitat Creation Site
- West Breakwater, General Rock Placement Area

CLIS is a previously utilized disposal site for dredged material. Disposal of dredged material from the New Haven Harbor navigation improvement project at CLIS is unlikely to impact any significant historic properties.

Side scan sonar of the West River Borrow Pit was conducted in 2018. Aside from a modern submerged vessel (likely a sailboat – see enclosed Sunken Vessel PDF) at the West River, no known or recorded shipwrecks or submerged archaeological sites are located in the proposed West River site. The borrow site is unlikely to contain undisturbed historic properties. The Morris Cove site has been previously used for dredged material disposal and impacts to significant properties are not expected.

A review of the National Oceanic and Atmospheric Administration's Office of Coast Survey Electronic Navigation Charts (ENC) and Automated Wreck and Obstruction Information System (AWOIS) database did not identify any recorded shipwrecks or submerged historic properties in the vicinity of the proposed East Breakwater oyster habitat creation area or at the West Breakwater rock placement site. Impacts to historic properties, including the Southwest Ledge Lighthouse on the southwest end of the East Breakwater, are not anticipated.

-Sandy Point, Wetland Creation Site

Research conducted by the Public Archaeology Laboratory as part of the 2010 Long Island Sound Dredged Material Management Plan identified one potential shipwreck, the Laura S. Hatch, northwest of the Sandy Point dike area. A 150-foot buffer will be maintained around this site. As the wetland creation area is well to the south (roughly 2,000 feet) along the edge of Sandy Point, its development will not impact this wreck site. If the dimensions of the wetland site change and the buffer cannot be maintained around the shipwreck, further evaluation would be required including archaeological investigation and coordination with project stakeholders.

An archaeological survey of the West Haven Water Pollution Control Facility adjacent to Sandy Point was conducted in 2009. Originally built in 1969, the facility was expanding to the east along the former wetland areas that bordered Sandy Point. The original building was built with imported fill over wetland soils and this is documented in thick fill deposits containing modern debris in highly disturbed contexts closest to the structure with lesser amounts of debris away from the facility. No further archaeological work was recommended as part of the expansion project. Additionally, a sewage outfall pipe is located in the intertidal zone of Sandy Point and portions have been repaired and replaced since its construction in the late 1960's. Based on this data, creation of the proposed wetland area at Sandy Point will not impact historic properties.

In conclusion, the dredging and disposal activities associated with the proposed New Haven Harbor Navigation Improvement Study shall have no effect upon significant historic properties as defined by Section 106 of the NHPA and implementing regulations 36 CFR 800. We would appreciate your concurrence with this determination. In all cases, if unanticipated discoveries are found during implementation of the project, USACE will follow the post review discoveries guidance of the Advisory Council's regulations (36 CFR 800.13) and continue coordination with your office.

If you have any questions, please feel free to contact the Project Manager, Ms. Barbara Blumeris at (978) 318-8737 or Mr. Marc Paiva, Archaeologist at (978) 318-8796.

Sincerely,


John R. Kennelly
Chief, Planning Division

Enclosures

SAME LETTER SENT TO (with enclosures):

Brian Jones, Ph.D., State Archaeologist
Connecticut State Museum of Natural History &
Connecticut Archaeology Center
University of Connecticut, Unit 3023
75 N. Eagleville Road
Storrs, CT 06269-3023

Mary Dunne, State Historic Preservation Officer
Connecticut State Historic Preservation Office
450 Columbus Boulevard, Suite 5
Hartford, CT 06103

James Quinn, Tribal Historic Preservation Officer
Mohegan Tribe Cultural Department
5 Crow Hill Road
Uncasville, CT 06382



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD MA 01742-2751

April 3, 2019

Planning Division
Evaluation Branch

Brian Jones, Ph.D., State Archaeologist
Connecticut State Museum of Natural History &
Connecticut Archaeology Center
University of Connecticut, Unit 3023
75 N. Eagleville Road
Storrs, CT 06269-3023

Dear Dr. Jones:

The U.S. Army Corps of Engineers (USACE), New England District is requesting your review of the proposed New Haven Harbor Navigation Improvement project in accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended. This is a follow-up to our previous letter of October 12, 2018 notifying your office that the New Haven Harbor, Connecticut, Navigation Improvement Project, Draft Integrated Feasibility Report and Environmental Impact Statement (IFR/EIS) was available for review. The attached figure shows the proposed project and the dredged material placement sites. The proposed project includes the following navigation improvement features:

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Dredged material removed from the project would be transported by dump scow and placed at several near shore or open water sites including:

- Morris Cove Borrow Pit
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Dredging for Navigational Improvements

USACE has conducted side scan sonar surveys and obtained vibracore samples of the navigation improvement areas within the New Haven Harbor study area. A possible wreck/obstruction site was located just outside of the main channel and adjacent to the channel side slope (see enclosed Inner Harbor figure). CT SHPO recommends a 150-foot buffer from all sides of the side scan sonar image of the possible wreck site. The current data is inconclusive to determine whether this site is a shipwreck or other obstruction. Since the location is outside of the current improvements to the channel, it will be avoided with a buffer during detailed design of the channel in the pre-construction engineering and design (PED) phase of the project. However, if during PED, it is determined that impacts to the area cannot be avoided, then an archaeological examination of the site would be required and we would coordinate with your office on the scope of the investigation, evaluation of results, and if necessary, measures to avoid, minimize or mitigate any adverse impacts to historic properties.

No other possible shipwreck or submerged sites were identified in the side scan sonar data. The vibracore samples were examined and consisted primarily of deep fill material overlaying the original sediments. No evidence of habitation surfaces or artifacts of any type indicative of a Pre-Contact occupation were encountered.

Disposal Sites

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A review of the National Oceanic and Atmospheric Administration's Office of Coast Survey Electronic Navigation Charts (ENC) and Automated Wreck and Obstruction Information System (AWOIS) database did not identify any recorded shipwrecks or submerged historic properties in the vicinity of the proposed East Breakwater oyster habitat creation area or at the West Breakwater rock placement site. Impacts to historic properties, including the Southwest Ledge Lighthouse on the southwest end of the East Breakwater, are not anticipated.

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Research conducted by the Public Archaeology Laboratory as part of the 2010 Long Island Sound Dredged Material Management Plan identified one potential shipwreck, the Laura S. Hatch, northwest of the Sandy Point dike area. A 150-foot buffer will be maintained around this site. As the wetland creation area is well to the south (roughly 2,000 feet) along the edge of Sandy Point, its development will not impact this wreck site. If the dimensions of the wetland site change and the buffer cannot be maintained around the shipwreck, further evaluation would be required including archaeological investigation and coordination with project stakeholders.

An archaeological survey of the West Haven Water Pollution Control Facility adjacent to Sandy Point was conducted in 2009. Originally built in 1969, the facility was expanding to the east along the former wetland areas that bordered Sandy Point. The original building was built with imported fill over wetland soils and this is documented in thick fill deposits containing modern debris in highly disturbed contexts closest to the structure with lesser amounts of debris away from the facility. No further archaeological work was recommended as part of the expansion project. Additionally, a sewage outfall pipe is located in the intertidal zone of Sandy Point and portions have been repaired and replaced since its construction in the late 1960's. Based on this data, creation of the proposed wetland area at Sandy Point will not impact historic properties.

In conclusion, the dredging and disposal activities associated with the proposed New Haven Harbor Navigation Improvement Study shall have no effect upon significant historic properties as defined by Section 106 of the NHPA and implementing regulations 36 CFR 800. We would appreciate your concurrence with this determination. In all cases, if unanticipated discoveries are found during implementation of the project, USACE will follow the post review discoveries guidance of the Advisory Council's regulations (36 CFR 800.13) and continue coordination with your office.

If you have any questions, please feel free to contact the Project Manager, Ms. Barbara Blumeris at (978) 318-8737 or Mr. Marc Paiva, Archaeologist at (978) 318-8796.

Sincerely,



John R. Kennelly
Chief, Planning Division

Enclosures

SAME LETTER SENT TO (with enclosures):

Mary Dunne, State Historic Preservation Officer
Connecticut State Historic Preservation Office
450 Columbus Boulevard, Suite 5
Hartford, CT 06103

James Quinn, Tribal Historic Preservation Officer
Mohegan Tribe Cultural Department
5 Crow Hill Road
Uncasville, CT 06382

Marissa Turnbull, Tribal Historic Preservation Officer
Natural Resources Protection & Regulatory Affairs
Mashantucket Pequot Tribal Nation
550 Trolley Line Blvd., P.O. Box 3202
Mashantucket, CT 06338-3202



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
696 VIRGINIA ROAD
CONCORD MA 01742-2751

April 3, 2019

Planning Division
Evaluation Branch

Ms. Mary Dunne, State Historic Preservation Officer
Connecticut State Historic Preservation Office
450 Columbus Boulevard, Suite 5
Hartford, CT 06103

Dear Ms. Dunne:

The U.S. Army Corps of Engineers (USACE), New England District is requesting your review of the proposed New Haven Harbor Navigation Improvement project in accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended. This is a follow-up to our previous letter of October 12, 2018 notifying your office that the New Haven Harbor, Connecticut, Navigation Improvement Project, Draft Integrated Feasibility Report and Environmental Impact Statement (IFR/EIS) was available for review. The attached figure shows the proposed project and the dredged material placement sites. The proposed project includes the following navigation improvement features:

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Dredged material removed from the project would be transported by dump scow and placed at several near shore or open water sites including:

- Morris Cove Borrow Pit
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Dredging for Navigational Improvements

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No other possible shipwreck or submerged sites were identified in the side scan sonar data. The vibracore samples were examined and consisted primarily of deep fill material overlaying the original sediments. No evidence of habitation surfaces or artifacts of any type indicative of a Pre-Contact occupation were encountered.

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Side scan sonar of the West River Borrow Pit was conducted in 2018. Aside from a modern submerged vessel (likely a sailboat – see enclosed Sunken Vessel PDF) at the West River, no known or recorded shipwrecks or submerged archaeological sites are located in the proposed West River site. The borrow site is unlikely to contain undisturbed historic properties. The Morris Cove site has been previously used for dredged material disposal and impacts to significant properties are not expected.

A review of the National Oceanic and Atmospheric Administration's Office of Coast Survey Electronic Navigation Charts (ENC) and Automated Wreck and Obstruction Information System (AWOIS) database did not identify any recorded shipwrecks or submerged historic properties in the vicinity of the proposed East Breakwater oyster habitat creation area or at the West Breakwater rock placement site. Impacts to historic properties, including the Southwest Ledge Lighthouse on the southwest end of the East Breakwater, are not anticipated.

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Sincerely,


John R. Kennelly
Chief, Planning Division

Enclosures

SAME LETTER SENT TO (with enclosures):

Brian Jones, Ph.D., State Archaeologist
Connecticut State Museum of Natural History &
Connecticut Archaeology Center
University of Connecticut, Unit 3023
75 N. Eagleville Road
Storrs, CT 06269-3023

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DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
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April 3, 2019

Planning Division
Evaluation Branch

James Quinn, Tribal Historic Preservation Officer
Mohegan Tribe Cultural Department
5 Crow Hill Road
Uncasville, CT 06382

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Side scan sonar of the West River Borrow Pit was conducted in 2018. Aside from a modern submerged vessel (likely a sailboat – see enclosed Sunken Vessel PDF) at the West River, no known or recorded shipwrecks or submerged archaeological sites are located in the proposed West River site. The borrow site is unlikely to contain undisturbed historic properties. The Morris Cove site has been previously used for dredged material disposal and impacts to significant properties are not expected.

A review of the National Oceanic and Atmospheric Administration's Office of Coast Survey Electronic Navigation Charts (ENC) and Automated Wreck and Obstruction Information System (AWOIS) database did not identify any recorded shipwrecks or submerged historic properties in the vicinity of the proposed East Breakwater oyster habitat creation area or at the West Breakwater rock placement site. Impacts to historic properties, including the Southwest Ledge Lighthouse on the southwest end of the East Breakwater, are not anticipated.

-Sandy Point, Wetland Creation Site

Research conducted by the Public Archaeology Laboratory as part of the 2010 Long Island Sound Dredged Material Management Plan identified one potential shipwreck, the Laura S. Hatch, northwest of the Sandy Point dike area. A 150-foot buffer will be maintained around this site. As the wetland creation area is well to the south (roughly 2,000 feet) along the edge of Sandy Point, its development will not impact this wreck site. If the dimensions of the wetland site change and the buffer cannot be maintained around the shipwreck, further evaluation would be required including archaeological investigation and coordination with project stakeholders.

An archaeological survey of the West Haven Water Pollution Control Facility adjacent to Sandy Point was conducted in 2009. Originally built in 1969, the facility was expanding to the east along the former wetland areas that bordered Sandy Point. The original building was built with imported fill over wetland soils and this is documented in thick fill deposits containing modern debris in highly disturbed contexts closest to the structure with lesser amounts of debris away from the facility. No further archaeological work was recommended as part of the expansion project. Additionally, a sewage outfall pipe is located in the intertidal zone of Sandy Point and portions have been repaired and replaced since its construction in the late 1960's. Based on this data, creation of the proposed wetland area at Sandy Point will not impact historic properties.

In conclusion, the dredging and disposal activities associated with the proposed New Haven Harbor Navigation Improvement Study shall have no effect upon significant historic properties as defined by Section 106 of the NHPA and implementing regulations 36 CFR 800. We would appreciate your concurrence with this determination. In all cases, if unanticipated discoveries are found during implementation of the project, USACE will follow the post review discoveries guidance of the Advisory Council's regulations (36 CFR 800.13) and continue coordination with your office.

If you have any questions, please feel free to contact the Project Manager, Ms. Barbara Blumeris at (978) 318-8737 or Mr. Marc Paiva, Archaeologist at (978) 318-8796.

Sincerely,



John R. Kennelly
Chief, Planning Division

Enclosures

SAME LETTER SENT TO (with enclosures):

Brian Jones, Ph.D., State Archaeologist
Connecticut State Museum of Natural History &
Connecticut Archaeology Center
University of Connecticut, Unit 3023
75 N. Eagleville Road
Storrs, CT 06269-3023

Mary Dunne, State Historic Preservation Officer
Connecticut State Historic Preservation Office
450 Columbus Boulevard, Suite 5
Hartford, CT 06103

Marissa Turnbull, Tribal Historic Preservation Officer
Natural Resources Protection & Regulatory Affairs
Mashantucket Pequot Tribal Nation
550 Trolley Line Blvd., P.O. Box 3202
Mashantucket, CT 06338-3202



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930-2276

FEB 21 2019

John R. Kennelly
Chief, Planning Division
US Army Corps of Engineers
696 Virginia Road
Concord, MA 01742-2751

Re: Draft Environmental Impact Statement for the New Haven Harbor Federal Navigation Project in New Haven, Connecticut

Dear Mr. Kennelly:

We have reviewed the Draft Environmental Impact Statement (DEIS) Essential Fish Habitat (EFH) Assessment dated September 2018, regarding the proposed navigation improvements to the New Haven Harbor Federal Navigation Project (FNP) in New Haven, Connecticut. The existing New Haven FNP extends approximately five miles from Long Island Sound into New Haven Harbor and includes a main channel, maneuvering area, and turning basin. The New Haven FNP is currently authorized to a depth of -35 feet mean lower low water (MLLW) with channel widths varying from 400 feet to 800 feet along its length. The current authorized depth of the FNP is not adequate for larger ships using the harbor. The project seeks to deepen the existing channels and turning basin to a depth of -40 feet MLLW with 2 feet overdepth. Areas of the existing FNP will also be widened, including the inner channel from 400 to 500 feet, the entrance channel from 500 to 600 feet, and the East Breakwater bend section from 560 to 800 feet. The project will generate approximately 4.3 million cubic yards of soft sediment dredge material and approximately 43,500 cubic yards of rock. You have evaluated multiple beneficial reuse projects to dispose of the dredge material. Dredge material will be placed to create a rock reef along the western breakwater in New Haven Harbor with the rocky dredge material and to create oyster habitat along the eastern border of the FNP. You also propose to create a tidal wetlands over an approximately 73.2 acre area at Sandy Point and fill two abandoned borrow pits (Morris Cove and West River). Any remaining material will be disposed of at Central Long Island Sound Disposal Site or within a confined aquatic disposal cell if it is deemed unsuitable.

You have determined that the proposed project will result in a loss of winter flounder EFH of 8.6 acres due to the proposed dredging and 60.6 acres due to proposed tidal wetland creation. As mitigation for these losses, you have proposed to create 57 acres of winter flounder EFH by filling the two abandoned borrow pits (Morris Cove and West River) to an elevation suitable to serve as winter flounder egg habitat.

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) and the Fish and Wildlife Coordination Act require Federal agencies to consult with one another on projects like this project. Because the project involves EFH, the consultation process is guided by the EFH regulatory requirements under 50 CFR 600.920, which mandates the preparation of EFH assessments and generally outlines your obligations. We offer the following comments and recommendations for your consideration.



General Comments

New Haven Harbor and the surrounding waters of Long Island Sound contain productive fishery habitat that supports numerous important living marine resources including federally managed finfish and shellfish. Multiple managed fish species have EFH designated for multiple life history stages in the project vicinity and within the vicinity of the placement areas, including winter flounder, summer flounder, windowpane flounder, little skate, winter skate, and black sea bass. The proposed project would adversely affect the habitat value through direct removal of subtidal habitats, burial of benthic organisms and habitat by the disposal of dredged material and through the elevation of suspended sediments in the water column. Of particular concern are the proposed impacts to EFH for winter flounder sensitive life history stages (e.g. eggs, larvae, young-of-year). Winter flounder EFH that supports these reduced mobility life stages are more likely to be adversely affected by indirect, temporary effects of dredging activities (e.g. suspended sediments) while the projects direct effects (e.g. sediment removal, sediment disposal, or blasting) will result in both temporary and permanent impacts to winter flounder EFH.

Temporary adverse impacts

Winter flounder spawn in Connecticut waters beginning in January when water temperatures are approximately 2-5°C (Pereira et al. 1999). Winter flounder have demersal, adhesive eggs that sink and remain on the bottom until they hatch (Pereira et al. 1999). After hatching, flounder larvae are initially planktonic, but following metamorphosis they are negatively buoyant and are more abundant near the substrate (Pereira et al. 1999; Able and Fahay 1998). Young-of-the-year flounder tend to burrow in the soft-sediments in response to perceived threats rather than flee. Thus, they are not likely to swim away from a dredge, and run a high risk of being entrained. Eggs, larvae and young-of-year flounder are essentially non-dispersive resulting in spawning areas and nursery areas being located in close proximity to each other (Pearcy 1962; Crawford and Carey 1985). These sensitive life history stages could be directly impacted by sediment removal and placement activities, or by deposition of suspended sediments (Berry et al. 2004; Johnson et al. 2008). Blasting activities would have similar impacts, and may also result in adverse impacts to spawning activity.

Eggs and newly metamorphosed larvae that are located within a dredge footprint, blast debris impact area, and the disposal areas would be destroyed and could result in a considerable loss in a year class. Dredging and in-water disposal also result in elevated suspended sediments in the water column which have been documented to result in adverse impacts to various life stages of fish (Newcombe and Jensen 1996, Wilber and Clark 2001). Suspended sediments have also been shown to restrict and inhibit habitat use and function, including fish reproduction (Newcombe and MacDonald 1991). Settlement of suspended sediments onto winter flounder eggs can result in mortality, delayed hatching, and developmental defects to larvae (Klein-MacPhee et al. 2004; Berry et al. 2004). Decreased hatching success of eggs was observed when covered in as little as 1 mm of sediment, and burial in sediments greater than 2.5 mm has been demonstrated to cause a zero percent hatch rate (Berry et al. 2004). These adverse temporary impacts can be alleviated by implementing appropriate time of year (TOY) work restrictions to avoid impacts during the periods that the habitat is used.

To minimize these temporal impacts to winter flounder EFH, the proposed activities, including dredging, in-water sediment deposition, and blasting, should occur outside the time of year spawning and early life history stages are present in the project area. For this area of Long Island Sound, we recommend a work restriction from January 1 through May 31. Currently, you have proposed two different TOY work restrictions for dredging and placement activities in the inner and outer harbors.

North of Sandy Point you have proposed a February 1 to June 30 work restriction and south of Sandy Point you have proposed an April 1 to June 30 restriction. You have proposed a work period of October 1 to May 1, or May 2 to September 30 work restriction for the blasting activities that would occur south of Sandy Point. However, winter flounder are known to spawn in both regions of the harbor (Schultz et al 2007). Of the eggs collected within the inner and outer harbor, Schultz et al (2007) collected the highest numbers of eggs per site at locations within the outer harbor. Based on this, we do not agree that the proposed modified TOY restriction would adequately protect winter flounder EFH from adverse impacts south of Sandy Point. We recommend a TOY restriction of January 1 to May 31 be employed for all dredging and blasting activities.

As discussed in our May 1, 2017 letter, New Haven Harbor supports diadromous fish spawning migrations. Your currently proposed dredging TOY work restrictions extend until June 30 which would provide protection of diadromous spawning migrations. We support and recommend that the TOY restriction should extend until June 30, for an inclusive TOY work restriction of January 1 to June 30. Currently, you propose blasting activities to extend until May 1. As blasting activities would also create noise and turbidity impacts that could adversely impact diadromous fish spawning migrations, we recommend the blasting should not occur during the standard spring spawning migration TOY restriction of April 1 to June 30.

A list of additional BMPs to be incorporated to minimize blasting impacts were included in the EFH assessment, but a detailed blasting plan was not provided. It also does not appear that the aerial extent of blasting impacts has been fully assessed. While you discussed that benthic species adjacent to the blasting footprint are expected to be adversely impacted, you have not provided an assessment on the scope of these impacts, or measures that could be employed to minimize impacts associated with debris. A full blasting plan, with information on the expected extent of impacts and detailed measures to be employed to minimize these impacts should be provided for our review and comment.

Permanent adverse impacts

The EFH assessment states that a total of 69.2 acres of winter flounder egg habitat would be lost. The proposed dredging would result in an 8.6 acre loss and the proposed tidal wetland creation would result in an additional 60.6 acre loss. To offset these losses you have proposed to fill two historically used and currently abandoned borrow pits in the project vicinity, Morris Cove and West River. The proposed filling of the Morris Cove pit would create 42.0 acres and the West River filling would create an additional 15.0 acres of winter flounder egg habitat, resulting in a net loss of 12.2 acres of sensitive life history stage EFH. You also propose to create oyster habitat along the eastern edge of a portion of the FNP and a rocky reef adjacent to an existing breakwater on the western side of New Haven Harbor.

The loss of winter flounder egg EFH appears to be adequately offset with the proposed creation of tidal wetlands, filling of the abandoned borrow pits, and rocky reef and oyster habitats. The New England Fisheries Management Council recently updated their managed fish species EFH designations and tidal wetland habitats are now specifically designated as EFH for juvenile winter flounder, which is also a sensitive life history stage. Tidal wetlands are also designated as EFH for sensitive life history stages of multiple other managed fish species and provide important ecological services for many NOAA-trust resources. Depending on design, the proposed rocky reef and oyster habitat could provide complex habitat that would support multiple managed fish and prey species. However, the details, including plan views, of the proposed mitigation projects have not been provided. You have provided the square footage of the proposed tidal wetland creation and indicated that the borrow pits will be filled to an elevation of less than 5 meters to provide winter flounder egg

EFH, but no information has been provided on the extent or construction of the proposed rocky reef or oyster habitat. We agree that the proposed suite of mitigation projects should offset adverse impacts of the proposed FNP modifications. However, as the details of the projects have not been reviewed, further consultation will be required as the mitigation projects are developed to determine if additional conservation recommendations may be necessary.

Essential Fish Habitat Conservation Recommendations

The project area is designated as EFH under the MSA for several species, including winter flounder. As described above, the proposed project would have adverse effects on winter flounder EFH through dredging and filling subtidal habitats. Pursuant to Section 305(b)(4)(A) of the MSA, we recommend that you adopt the following EFH conservation recommendations to ensure minimal impacts to EFH:

- 1) To avoid impacts to sensitive life stages of winter flounder, no in-water activity should occur between January 1st and May 31st of any year.
- 2) A detailed blasting plan should be developed and provided for our review and comment. Based on our review of a blasting plan, additional EFH conservation recommendations may be required to adequately conserve and protect EFH.
- 3) The proposed mitigation project plans should be provided for our review and comment. Based on our review of the mitigation plans, additional EFH conservation recommendations may be required to avoid and minimize adverse impacts to EFH.

Please note that Section 305(b)(4)(B) of the MSA requires you to provide us with a detailed written response to these EFH Conservation Recommendations, including a description of measures adopted by you for avoiding, mitigating, or offsetting the impact of the project on EFH. In the case of a response that is inconsistent with our recommendations, Section 305(b)(4)(B) of the MSA also indicates that you must explain your reasons for not following the recommendations. Included in such reasoning would be the scientific justification for any disagreements with us over the anticipated effects of the proposed action and the measures needed to avoid, minimize, mitigate, or offset such effects pursuant to 50 CFR 600.920(k).

Please also note that a distinct and further EFH consultation must be reinitiated pursuant to 50 CFR 600.920(l) if new information becomes available or the project is revised in such a manner that affects the basis for the above EFH Conservation Recommendations.

Fish and Wildlife Coordination Act Recommendations

In addition to the EFH provisions of the MSA, the Fish and Wildlife Coordination Act requires that we consult with each other on activities that impact fish and wildlife resources. As discussed above, the project area supports diadromous fish spawning migrations. In order to protect diadromous fish resources we recommend you adopt the time of year restriction noted below.

- 1) To protect diadromous species, dredging within the entrance channel should not occur between April 1 and June 30 of any year.

Endangered Species Act

A consultation, pursuant to section 7 of the Endangered Species Act (ESA) of 1973, as amended, may be necessary. Under the ESA, if the proposed project has the potential to affect listed species or designated critical habitat, and it is being approved, permitted or funded by a Federal agency, the lead Federal agency, or their designated non-Federal representative, is responsible for determining

whether the proposed action may affect the listed species or designated critical habitat. In this situation, you are responsible for this determination. If you determine the proposed action may affect listed species under our authority, the determination along with justification for their determination should be sent to the attention of the ESA Section 7 Coordinator at nmfs.gar.esa.section7@noaa.gov (NMFS Greater Atlantic Regional Fisheries Office, Protected Resources Division (PRD), 55 Great Republic Drive, Gloucester, MA 01930). After reviewing this information, we would then be able to conduct a consultation under section 7 of the ESA. If you determine the proposed action will not affect listed species under our authority, no further consultation with us is necessary. Should you have any questions about these comments or about the section 7 consultation process in general, please contact Zach Jylkka at Zachary.Jylkka@noaa.gov or (978) 282-8467.

Conclusion

We look forward to your response to our EFH recommendations on this project. If you have any questions regarding these comments and recommendations, please contact Alison Verkade at 978-281-9266, or at Alison.Verkade@noaa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'L. Chiarella', with a long horizontal flourish extending to the right.

Louis A. Chiarella
Assistant Regional Administrator
for Habitat Conservation

cc: Zach Jylkka, PRD
Tom Nies, NEFMC
Chris Moore, MAFMC
Lisa Havel, ASMFC
Todd Randall, ACOE
Barbara Blumeris, ACOE
Nathan Margason, USEPA

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February 11, 2019

Mr. John Kennelly, Chief
Planning Division, New England District
U.S. Army Corps of Engineers
696 Virginia Road
Concord, MA 01742-2751

Re: F-2018-1341 (DA)
U.S. Army Corps of Engineers/New England District
(Corps) submission of a consistency determination -
proposed New Haven Harbor Navigation Improvement
Project. Quinnipiac River, New Haven Harbor, Long Island
Sound, New Haven, Connecticut.

Concurrence with Consistency Determination

Dear Mr. Kennelly:

The Department of State (Department) has completed its review of the Corps' consistency determination for the proposed New Haven Harbor Navigation Improvement Project with the New York State Coastal Management Program (CMP). The Corps determined that the project is consistent to the maximum extent practicable with the 13 enforceable coastal policies of the Long Island Sound Coastal Management Program, a regional component of the CMP. (15 CFR § 930.36(a)). Based upon the information submitted by the Corps, the Department concurs with the Corps' consistency determination. (15 CFR § 930.41(a)).

The Corps' Tentatively Selected Plan (TSP) for the proposed navigation improvement project involves the deepening and widening of the existing New Haven Harbor Federal Navigation Project (FNP) to -40' MLW and 200', 500 and 800' (variable widths). This will result in the removal of approximately 4.3 million cubic yards (mcy) of dredged material. The base plan that meets the National Economic Development (NED) plan allows for a portion of the material to be used beneficially at the following locations¹:

- Morris Cove Borrow Pit – 623,310 cy
- West River Borrow Pits – 87,800 cy
- Create Oyster Habitat south of east breakwater – 351,300 cy
- Rock placement at west Breakwater (rock reef) – 32,700 cy
- The unsuitable material identified as Composites 6 and 7 are undergoing further evaluation at the time of the submission. The Corps has indicated that this material, once isolated, will be likely be placed within a confined aquatic disposal (CAD) cell within the Harbor.
- Up to 2,333,059 cy of remaining suitable material will be used to cover historic disposal mounds at the Central Long Island Sound Disposal Site (CLDS).

¹ See pp. ES-4, and 79-83 of the Corps' Integrated Feasibility Report and Environmental Impact Report, September 2018.

<https://www.nae.usace.army.mil/Portals/74/docs/Topics/New%20Haven/EIS/2-DraftNHH-EIS.pdf?ver=2018-09-27-164709-180>



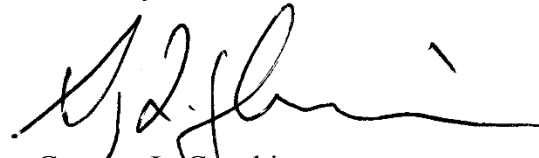
•Sandy Point salt-marsh creation and erosion mitigation proposal² is an additional alternative that will create up to 70 acres of salt marsh using approximately 843,500 cubic yards of suitable dredged material that would otherwise be placed at CLDS. This alternative does not meet NED and cannot be included in the base plan, however the non-federal sponsor(s) will cost-share the project.

The federal Coastal Zone Management Act implementing regulations provide for supplemental coordination for federal activities that were previously determined by the State agency to be consistent with the management program, but which have not yet begun. (15 CFR § 930.46). If the proposed New Haven Harbor Navigation Improvement Project proceeds with a substantial change, significant new circumstances or information becomes available, or information of substantial change made during the Department's review period and notice was not made available to the Department, then a supplemental coordination may be required. The Department requests that the Corps maintain communication and coordination efforts with the Department as the project moves forward.

The Department is encouraged by the diligent efforts of the Corps and State of Connecticut to implement disposal alternatives to open water disposal. The TSP for this proposal successfully reduces the open-water disposal of dredged material in Long Island Sound by 45%, or by 1,938,610 cy.

Please feel free to contact Jennifer Street at (518) 474-7247 or e-mail at: Jennifer.Street@dos.ny.gov and reference file no. F-2018-1341 (DA).

Sincerely,



Gregory L. Capobianco
Office of Planning, Development and
Community Infrastructure

GLC/jls

ecc: COE/New England District – Barbara Blumeris, Mark Habel, Todd Randall
COE/New York District - Regulatory
CT DEEP – Brian Thompson
CT Port Authority – Joe Salvatore
New Haven Port Authority – Judi Sheiffelle
NYSDEC Region 1 – DEP
NYSDEC Div. Marine Resources – Dawn McReynolds, Cassandra Bauer

² See p. 81, 94, of the Corps' Integrated Feasibility Report and Environmental Impact Report, September 2018.
<https://www.nae.usace.army.mil/Portals/74/docs/Topics/New%20Haven/EIS/2-DraftNHH-EIS.pdf?ver=2018-09-27-164709-180>

MEMORANDUM FOR THE RECORD

SUBJECT: Review and coordination of USACE's New Haven Harbor Navigation Improvement Project (NHHNIP) with the Federal Aviation Administration (FAA)

1. DATE: 07 February 2019

2. MEETING PARTICIPANTS:

Todd Randall, USACE - todd.a.randall@usace.army.mil
Michelle Ricci, FAA - michelle.ricci@faa.gov

3. DISCUSSION:

Mr. Randall and Ms. Ricci spoke via teleconference on February 7, 2019 to discuss the NHHNIP. Mr. Randall presented the attached presentation to inform FAA of the proposed project. Ms. Ricci noted that the FAA was appreciative of the coordination effort and noted that, as presented, the FAA had no comments on the proposed project. Ms. Ricci requested that USACE provide the FAA with copies of the Sandy Point salt marsh creation area plans once they are developed during the design phase of the project.

07 FEB 2019

Date

RANDALL.TODD.
A.1241930480

Digitally signed by RANDALL.TODD.A.1241930480
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI,
ou=USA, cn=RANDALL.TODD.A.1241930480
Date: 2019.02.12 09:08:50 -05'00'

TODD RANDALL
Marine Ecologist