

**Excerpts from the Application
Public Review Draft: Environmental Assessment
April 2013**

(Excerpts regarding project area, purpose, and description)

PUBLIC REVIEW DRAFT
Environmental Assessment
Finding of No Significant Impact
&
Clean Water Act § 404 (b) (1) Evaluation

SEARSPORT HARBOR
NAVIGATION IMPROVEMENT PROJECT
SEARSPORT, MAINE



**US Army Corps
of Engineers®**
New England District

APRIL 2013

**Searsport Harbor
Searsport, Maine**

**Navigation Improvement Project
General Investigation**

TABLE OF CONTENTS		PAGE NUMBER
1.0	INTRODUCTION	1
1.1	PROJECT AREA DESCRIPTION, HISTORY AND BACKGROUND	1
1.2	PURPOSE AND NEED FOR THIS PROJECT	5
1.3	PURPOSE AND SCOPE OF THIS ENVIRONMENTAL ASSESSMENT	5
1.4	PUBLIC REVIEW AND COMMENT	6
1.5	PROJECT AUTHORITY	6
1.6	PERMITS, APPROVALS, AND REGULATORY REQUIREMENTS	7
2.0	ALTERNATIVES	10
2.1	GENERAL	10
2.2	NO ACTION ALTERNATIVE	10
2.3	EVALUATED ALTERNATIVES	10
2.3.1	Navigation Improvement Alternatives	10
2.3.2	Dredged Material Disposal Alternatives	12
2.3.2.1	Beneficial Use and Upland Disposal	12
2.3.2.2	Aquatic Disposal	14
3.0	DESCRIPTION OF PROPOSED PROJECT	17
3.1	Federal Project	17
3.2	Non-Federal Project	19
4.0	AFFECTED ENVIRONMENT	20
4.1	GEOLOGY	20
4.2	PROJECT SEDIMENTS	20
4.3	WATER RESOURCES	27
4.3.1	Penobscot River Watershed	27
4.3.2	Marine Water Quality	27
4.4	BIOLOGICAL RESOURCES	27
4.4.1	General	27
4.4.2	Eelgrass	28
4.4.3	Benthic Resources	28
4.4.4	Shellfish Resources	32
4.4.5	Finfish Resources	32
4.4.6	Essential Fish Habitat	34
4.5	ENDANGERED AND THREATENED SPECIES	34
4.5.1	Federally Listed Endangered and Threatened Species	34
4.5.2	Federally Listed Candidate and Species of Special Concern	36
4.5.3	State Listed Species	37
4.6	AIR QUALITY	37

4.7	CULTURAL RESOURCES	38
4.7.1	Pre-Contact Period Archaeological Assessment and Sensitivity	38
4.7.2	Contact and Post-Contact Archaeological Assessment and Sensitivity	39
4.8	SOCIOECONOMICS	40
5.0	ENVIRONMENTAL CONSEQUENCES	41
5.1	GEOLOGY	41
5.2	PHYSICAL and WATER QUALITY IMPACTS	42
5.2.1	Dredging Impacts	42
5.2.2	Disposal Impacts	44
5.3	CHEMICAL IMPACTS	46
5.4	BIOLOGICAL IMPACTS	47
5.4.1	General	47
5.4.2	Benthic Resources	48
5.4.3	Fisheries Resources	48
5.4.4	Essential Fish Habitat	48
5.5	ENDANGERED AND THREATENED SPECIES	53
5.5.1	Federally Listed or Proposed Endangered or Threatened Species	53
5.5.2	Other Special Status Species	53
5.6	AIR QUALITY	54
5.7	CULTURAL RESOURCES	55
5.8	ENVIRONMENTAL JUSTICE AND PROTECTION OF CHILDREN	57
6.0	CUMULATIVE IMPACT	58
7.0	ACTIONS TO MINIMIZE ENVIRONMENTAL IMPACTS	59
8.0	COMPLIANCE WITH FEDERAL ENVIRONMENTAL STATUTES, EXECUTIVE ORDERS AND EXECUTIVE MEMORANDUM	60
9.0	REFERENCES	64
10.0	LIST OF PREPARERS	69
	FINDING OF NO SIGNIFICANT IMPACT (FONSI)	
	RECORD OF NON-APPLICABILITY (RONA) AND EMISSIONS CALCULATIONS	
	CLEAN WATER ACT SECTION 404 (b) (1) EVALUATION	

FIGURES

Figure EA-1. Searsport Harbor Federal Navigation Project Location	2
Figure EA-2. Existing Federal Navigation Project	3
Figure EA-3. Mack Point, Searsport Harbor, Maine	4
Figure EA-4. Dredged Material Disposal Site Locations	16
Figure EA-5. Existing and Proposed Federal Navigation Project	18
Figure EA-6. Sediment Sample Locations	21
Figure EA-7. Eelgrass Video Transects in Long Cove	29
Figure EA-8. Benthic Sample Locations	30
Figure EA-9. Benthic Sample Locations – Penobscot Bay Disposal Site	31
Figure EA-10. Station C-Photograph of Top of Vibracore	44
Figure EA-11. Long Cove Maneuvering Area	49

TABLES

Table EA-1. Major Environmental Permits and Reviews for the Sears Island Navigation Improvement Project	7
Table EA-2. Dredged Material Quantities (CY) for Each Navigation Improvement Depth	11
Table EA-3. Benefit-Cost Analysis for Alternative Searsport Harbor Navigation Deepening Plans	12
Table EA-4. Federal Maintenance and Improvement Dredged Material Quantities (CY)	17
Table EA-5. Non-Federal Berth Dredged Material Quantities (CY)	19
Table EA-6. Sample Stations, Cross-Reference for Station ID and Individual Sample ID	23
Table EA-7. List of Parameters Analyzed and Laboratory Achieved Detection Limits	24
Table EA-8. Summary of Geotechnical Results for Sediment Cores and Reference Samples	25
Table EA-9. Summary of Sediment Organic Contaminant ($\mu\text{g}/\text{Kg}$ dry weight) and Metals ($\mu\text{g}/\text{g}$ dry weight) Data	26
Table EA-10. Fish Species in the Area of Sears Island, CMP Fish Survey (ME DOT, 1987)	33
Table EA-11. Average Annual Employment for Searsport by Industry (2005-2009)	40
Table EA-12. Summary of Dredging and Disposal Impacts	41

APPENDICES

Appendix A: Public and Agency Involvement and Pertinent Correspondence
Appendix B: Dredged Material Disposal Suitability Determination
Appendix C: Benthic Resource Data
Appendix D: Essential Fish Habitat Life History

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ENVIRONMENTAL ASSESSMENT
Searsport Harbor, Searsport, Maine

Navigation Improvement Project
General Investigation

1.0 INTRODUCTION

This Environmental Assessment (EA) has been prepared by staff from the U.S. Army Corps of Engineers (USACE), New England District. The EA evaluates the environmental impacts of the Federal action to improve the existing navigation project in Searsport Harbor, Searsport, Maine. The Federal navigation project includes an entrance channel and turning basin which ends at Mack Point (see Figure EA-1). Two terminals are located on Mack Point to accommodate ships transferring goods to and from Maine. One terminal is owned and managed by Sprague Energy (the Liquid Cargo Pier) and the other terminal by the Maine Port Authority (the Dry Cargo Pier).

This report meets the requirements for compliance with the National Environmental Policy Act (NEPA) of 1969 and all applicable Federal environmental regulations and laws, and Federal executive orders, including an evaluation for meeting the requirements of Section 404 (b) (1) of the Clean Water Act. Normally, the USACE prepares an Environmental Impact Statement (pursuant to 33 Code of Federal Regulations (CFR) 230.6) for Federal actions that require a Feasibility Report for authorization and construction of major projects. However, the District commander may consider the use of an EA for particular actions if early studies and coordination show that a particular action is not likely to have a significant impact on the quality of the human environment (33 CFR 230.6). Methods used to evaluate the impacts to environmental resources of the area include field evaluations, review of available environmental data, historical knowledge and evaluations, and extensive coordination with Federal, State, and local environmental resource agencies and private individuals. Early coordination indicated that protected resources can be easily avoided by using environmental windows. Also, the vast majority of the material to be dredged is parent material (not exposed to anthropogenic contamination). Most of the dredged material would be removed from a previously disturbed area and disposed at deep open water disposal site in Penobscot Bay. No significant impacts on the quality of the human environment are expected.

1.1 PROJECT AREA DESCRIPTION, HISTORY, AND BACKGROUND

The proposed project is located at the head of Penobscot Bay in the coastal community of Searsport, Maine. The Penobscot River empties into Penobscot Bay to the east of Searsport. A small commercial fishing harbor is located near the center of town to the west of Mack Point, while the deep-draft commercial cargo port is located on Mack Point to the east of the center of town. Searsport Harbor is one of three commercial ports developed to meet the deepwater marine transportation needs of Maine. The other ports are Portland Harbor to the south and Eastport Harbor to the north.

The Federal navigation project in Searsport Harbor consists of a 500-foot wide and 3,500 feet long entrance channel and a turning basin at the end with a maximum width of 1,500 feet. The existing channel includes a widened flare at its seaward end to ease approach to the harbor. The entrance channel is located just west of Sears Island and is 35 feet deep at mean lower low water (MLLW; all depths are in MLLW). See Figure EA-2. The turning basin, adjacent to the

FIGURE EA-1. Searsport Harbor Federal Navigation Project Location

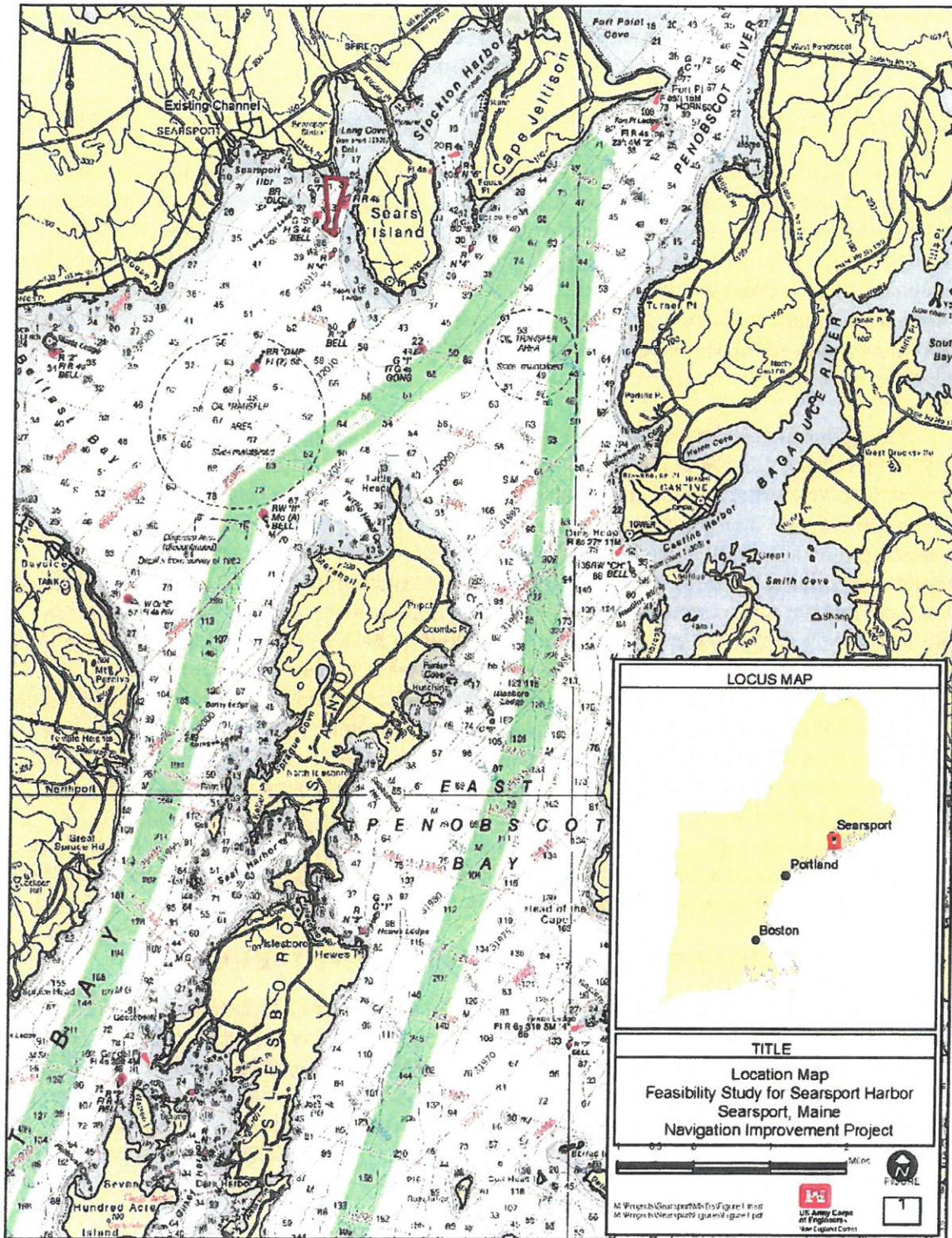
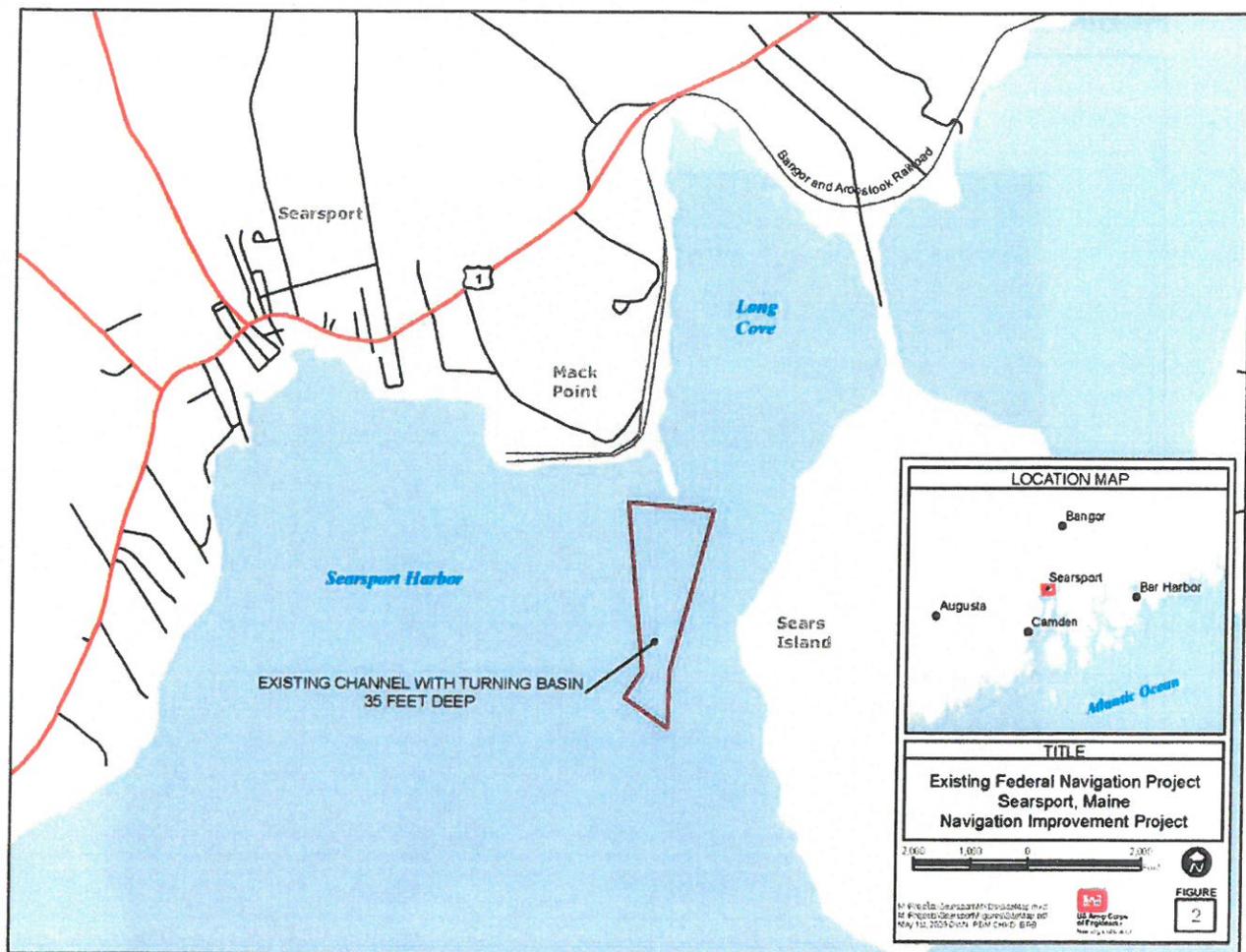


FIGURE EA-2. Existing Federal Navigation Project

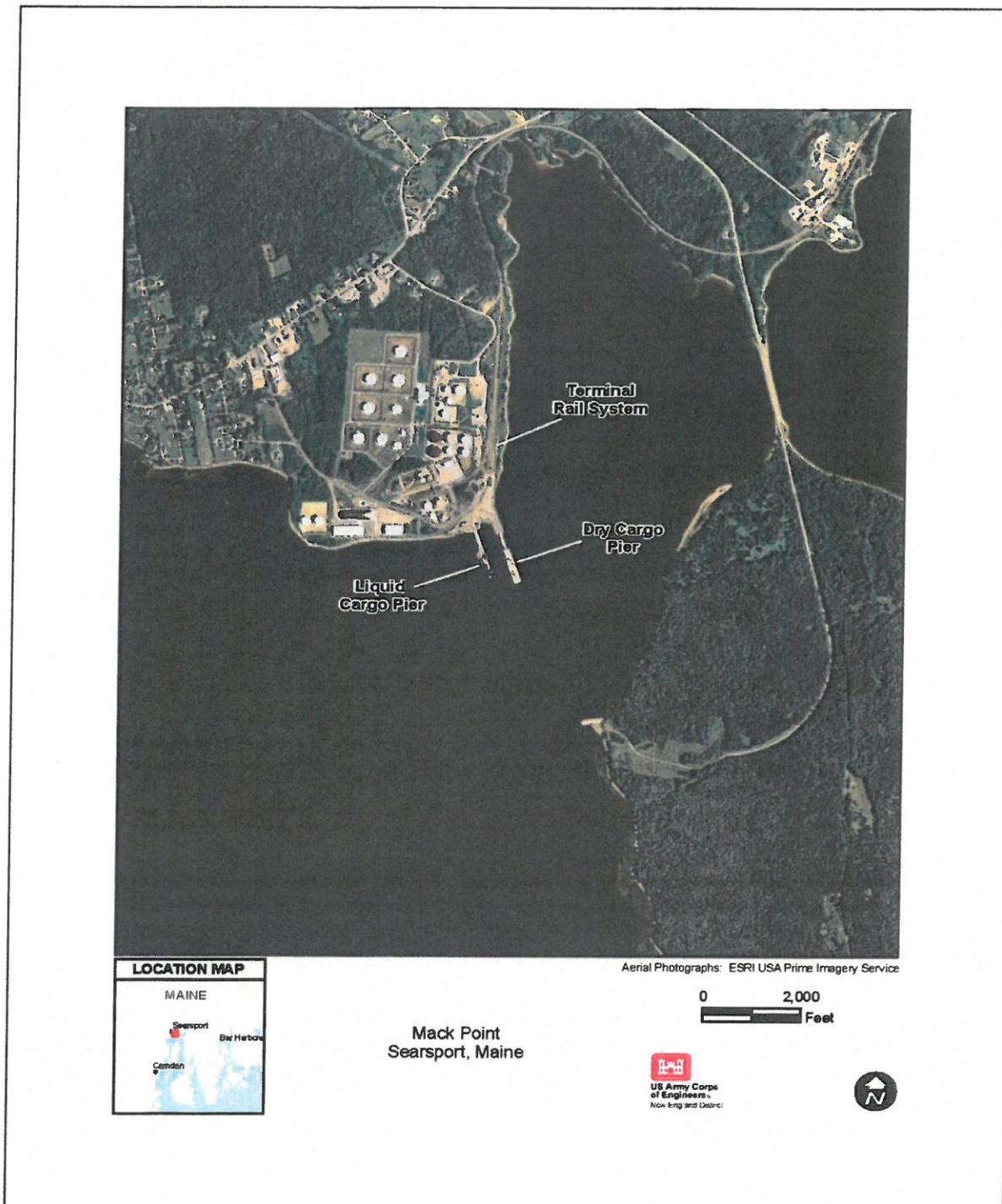


piers at Mack Point, is also 35 feet deep. Because of the low shoaling rate in Searsport Harbor, no maintenance dredging has been performed since construction of the project in 1964.

In addition to the Federal navigation project, there are two active piers at Mack Point. In 2003 the State of Maine reconstructed the eastern pier and dredged one berth to a depth of 40 feet in anticipation of a new, deeper and wider navigation channel. The State Pier handles most of the dry bulk products such as road salt and gypsum. To the west of the State Pier is the Sprague Energy pier which handles petroleum and other liquid bulk products, primarily for Sprague and Irving Petroleum. See Figure EA-3.

The largely undeveloped 941-acre Sears Island is located just to the east of Mack Point and Searsport Harbor. This site has been the focus of considerable controversy since 1978 when the Maine Department of Transportation (ME DOT) proposed a cargo terminal on the island (<http://maine.sierraclub.org>). Opponents to development on Sears Island pointed out that future port development should focus on Mack Point, which is the current terminal site, for development of marine transportation needs. In 1997, the then Governor King halted further consideration of the cargo port project at Sears Island over concern of the cost to the State and in recognition of the negative environmental impacts.

FIGURE EA-3. Mack Point, Searsport Harbor, Maine



On January 15, 2009, an Executive Order was signed by the Maine legislature to accept the Sears Island Planning Initiative consensus agreement. As part of the Executive Order, 601 acres of Sears Island will be held under a conservation easement, while the remaining 330 acres may be used for future port development, per environmental review and approval

required by NEPA, the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted.

1.4 PUBLIC REVIEW AND COMMENT

Federal, State and local agencies and companies were invited to an initial coordinated site visit on August 24, 2006 in Searsport, ME. The purpose of the invitation was to solicit comments, concerns, and information from the appropriate resources on the proposed project. See the attached meeting minutes in Appendix A for additional details.

A Public Notice on the availability of the draft environmental assessment will be issued and mailed to interested and appropriate individuals, organizations, and corporations. The issuance of a draft environmental assessment will initiate a 30-day public review period in accordance with the Council of Environmental Quality regulations (40 CFR Parts 1500-1508). Several State and Federal natural resource agencies were also coordinated with in the development of this environmental assessment.

1.5 PROJECT AUTHORITY

The General Investigation (USACE) program represents a vehicle for State and local government to pursue Federal assistance through Congressional initiative. Congress may call for an investigation through legislation or a committee resolution. Work identified under these existing authorities can be extensive. Typically the budget cycle results in a 1-2 year process for the identification of a proposed investigation and initial funding of that work.

This study of Searsport Harbor was authorized by a House Committee on Transportation and Infrastructure Resolution that was adopted on July 26, 2000. The Searsport Harbor study was initiated at the request of the State of Maine, Department of Transportation, the study sponsor, using funds added to the Fiscal Year 2004 Energy and Water Development Appropriations Bill. The authorizing study language is as follows:

Resolved by the Committee on Transportation and Infrastructure of the United States House of Representatives, that the Secretary of the Army is requested to review the report of the Chief of Engineers on Searsport Harbor, Maine, published as House Document 500, 87th Congress, 2nd Session, and other pertinent reports, with a view to determine whether modifications of the recommendations contained therein are advisable in the interest of navigation, including the advisability of deepening the existing 35-foot channel and turning basin.

A reconnaissance investigation (905(b) report) is conducted first to determine if a Federal interest exists. The reconnaissance investigation is 100 percent Federally funded and is generally completed within twelve months of their initiation. If additional study is approved, then a Feasibility investigation is initiated and is cost-shared with a non-Federal sponsor. The sponsor provides 50 percent of the cost of the Feasibility study. The local match can be a combination of cash and in-kind services. Congress must specifically authorize construction of any project resulting from a General Investigation (USACE) study, typically through a Water Resources Development Act. The non-Federal cost-share for implementation of a proposed project varies dependent on the project purposes and for navigation projects, the project depth. A reconnaissance investigation was finalized and the report approved in August 2004. This

(www.maine.sierraclub.org/sears_island). The development of a new port at Sears Island remains as an item of debate among local stakeholders and is not considered under this proposed navigation improvement project which is limited to the port needs at Mack Point.

1.2 PURPOSE AND NEED FOR THE PROJECT

Searsport Harbor at Mack Point is the largest deep draft commercial port north of Portland, Maine. The State Pier handles aggregates, forest products and other bulk cargos. The Sprague Energy terminal is located to the west of the State Pier. Since completion of the new State Pier, and upgrades to the petroleum terminals, the size of ships calling on Mack Point/Searsport Harbor has increased. As a consequence, the existing controlling depths in the Searsport channel are inadequate for existing and projected future vessel traffic. While the current fleet can access the Mack Point berths, a number of navigational inefficiencies exist due to the existing depths, which results in higher transportation costs. Among these inefficiencies are: tidal delays, light loading of vessels, the inability to switch to larger vessels, the inability to attract liner cargo service, and limits to future imports and exports at Searsport due to channel depths restricting the size of prospective vessels. In addition, the navigation pilots stated that the constriction mid-way between the channel entrance and the turning area requires widening to support the maneuvering of larger vessels. Without channel improvements, the commercial potential of the new State Pier will not be realized and existing navigational inefficiencies will continue. Project improvements will also provide more room to maneuver the larger ships that use the port.

The primary purpose of the proposed project is to reduce transportation costs incurred by shippers from navigation inefficiencies. The preferred alternative is identified based on USACE water resources planning regulations as described in ER1105-2-100, "Planning Guidance Notebook" and in compliance with other applicable laws, policies, and regulations. In general, alternatives are formulated and then evaluated to determine which alternative provides the greatest net economic benefit. The economic benefits calculated for this study are National Economic Development (NED) benefits.

NED benefits are contributions to national economic development that increase the value of the national output of goods and services. For deep-draft navigation projects, the most common type of NED benefit is transportation cost savings, typically waterborne transportation cost savings. The NED benefits are estimated by comparing the transportation costs without the project to the transportation costs with the project. Any decrease in total transportation costs resulting from the project equal the benefits of the project. The benefits are then subtracted from the project costs to determine the alternative net benefits. The alternative that maximizes the net benefits, while minimizing environmental impacts is the USACE NED plan and generally the proposed project (action).

1.3 PURPOSE AND SCOPE OF THIS ENVIRONMENTAL ASSESSMENT

This EA is designed to serve as a concise public document that briefly provides sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact. An EA also aids the USACE in compliance with the National Environmental Policy Act (NEPA), when an environmental impact statement is not necessary. The document includes brief discussions of the need for the proposal and the alternatives as

3.0 DESCRIPTION OF THE PROPOSED PROJECT

3.1 FEDERAL PROJECT

The preferred proposed navigation improvement alternative for Searsport Harbor would deepen both the existing entrance channel and turning basin from a depth of 35 feet to a depth of 40 feet. In addition, the entrance channel would be widened from its current 500 feet at the narrowest point, to 650 feet, and a maneuvering area adjacent to the State Pier's east berth in Long Cove would be created. The rectangular maneuvering area would have a length between about 875 feet on the west side and 1,066 feet on the east side and a width of 400 feet. This area would also be deepened to 40 feet. Approximately 892,000cy of material would be dredged for the improvement project. See Figure EA-5.

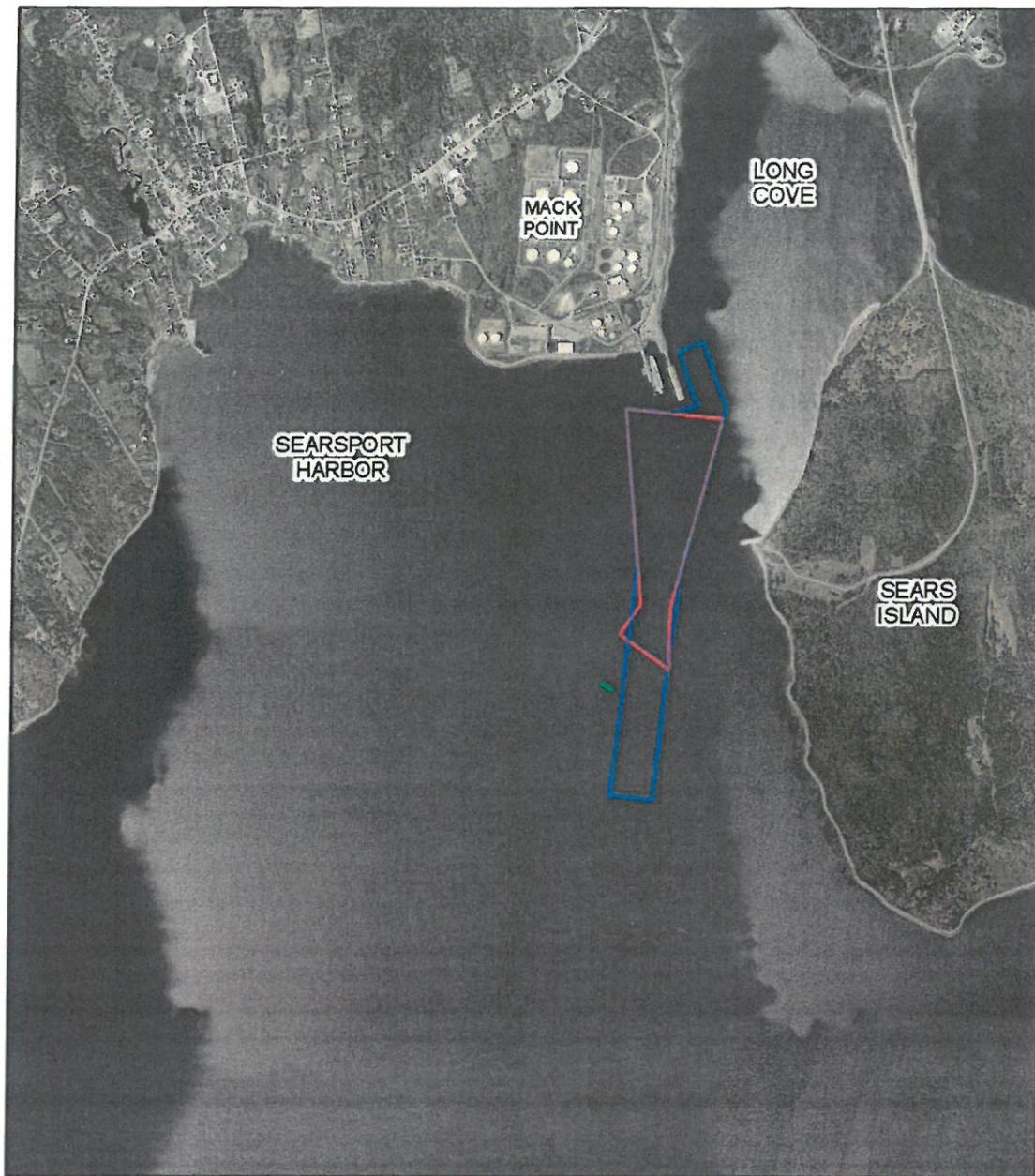
Concurrent with the improvement dredging, some maintenance dredging would be required to bring the existing project to its authorized depth (35-feet plus two feet allowable overdepth). Approximately 37,100cy of material would be removed for maintenance dredging. Total quantity of material to be removed from the proposed project is approximately 929,100 cy. See Table EA-4 below for a breakdown of material removed from each section of the project area and the maintenance and improvement dredged material quantities.

Material from the entrance channel, turning basin, and Long Cove maneuver area were tested for physical and chemical characteristics to determine if the material would be suitable for unconfined open water disposal. See Section 4.2 below for physical and chemical data details. Based on similar physical and chemical characteristics at the dredge and disposal sites, it was determined that the material from the Searsport Harbor would be suitable for disposal in Penobscot Bay at the Penobscot Bay Disposal Site. This disposal site is located approximately six miles from the project area.

A waterborne mechanical dredging plant would be used to construct the project, which would take approximately five months to complete. Dredging and disposal would occur between November 8 and April 9 to protect migrating Atlantic salmon and other natural resources in Penobscot Bay and no overflow from the scows during dredging would be allowed.

TABLE EA-4							
Federal Maintenance and Improvement Dredged Material Quantities (cy)							
Area	Maintenance			Improvement			Grand Subtotal
	Dredging	Over-depth	Subtotal	Dredging	Over-depth	Subtotal	
Entrance Channel	0	1,900	1,900	69,200	141,900	211,100	213,000
Turning Basin	6,800	28,400	35,200	203,000	194,400	397,400	432,600
Maneuvering Area (Long Cove)				245,700	37,800	283,500	283,500
Subtotal	6,800	30,300	37,100	517,900	374,100	892,000	929,100
GRAND TOTAL							
929,100							

FIGURE EA-5. Existing and Proposed Federal Navigation Project



Legend

- Shipwreck Location
- Proposed Project
- Existing Federal Channel and Turning Basin

SEARSPORT HARBOR PROPOSED PROJECT

2,000 1,000 0 2,000 Feet

US Army Corps of Engineers
New England District

3.2 NON-FEDERAL PROJECT

In addition to the Federal navigation project, two berths located at Mack Point are also proposed to be dredged to accommodate the deeper draft vessels. They are the berth on the east side of the Dry Cargo Pier and the berth on the east side of the Liquid Cargo Pier. The Dry Cargo Pier is owned by the Maine Port Authority and the Liquid Cargo Pier by Sprague Energy. Approximately 31,000 cy of material would be dredged from both berths to a depth of 43 feet (plus two feet of overdepth). See Table EA-5 below for a breakdown of the quantities.

If the material is found to be suitable for open water disposal, then the berths could also be dredged along with the Federal project within the existing environmental windows, if time allows. Otherwise, the berth dredged material could be considered for beneficial use or disposal at licensed landfills. When the State Pier was deepened in 2002-2003, some of the material was used to cap a tank farm. The remaining 72,000 cy of improvement material was disposed at the Rockland Disposal Site. Disposal alternatives are discussed in Section 2.3.2. The berth owners would be responsible for all costs, required sediment testing and associated permits.

TABLE EA-5	
Non-Federal Berth Dredged Material Quantities (cy)	
<i>Berth</i>	<i>Depth (43-Feet plus 2-Feet Overdepth)</i>
Dry Cargo Pier (State Pier)	9,800
Liquid Cargo Pier (Fuel Pier)	21,200
Total	31,000

