3. Affected Environment

This Affected Environment chapter describes the existing conditions within the project area, including the natural, cultural, and social environment that could be affected by the implementation of the actions considered in this EA. The specific topics examined include water resources, floodplains, biological resources (including vegetation, wildlife, and rare, threatened, and endangered species), cultural resources (including historic and archaeological resources), and hazardous materials.

The existing full-service marina is operated by SHM and provides approximately 720 If of side- tie dockage for a wide variety of vessels up to 200 ft in length. The project site is situated along Rockland Harbor Channel and consists of 4.78 acres, along with all the intertidal land along the entire frontage of the original parcel.

Details regarding the subject parcel and submerged land rights are as follows:

Deed Reference Numbers: Book #5663, Page 224

Map and Lot Numbers: Map #5, Lot #B13

Submerged Land Lease: 0045B-L-29

It is noted that the deed also conveyed all rights, title, and interest in the land and any improvements located between the high and low water lines, as well as any land and improvements located below the low water line, as described in the deed, where the Proposed Action will take place.

3.1. Project Site Impact History

The project area has a significant history of maritime use. The impacts associated with this project are proposed within an area that was previously disturbed, is no longer in its original, natural condition, and is currently utilized for similar maritime activities.

The history of approvals related to the subject site is provided in Table 3.1-1.



Table 3.1-1: Previous Permit History

Table 3.1-1: Previous Permit History		
Permit Number	Date	Project Description
L-20386-26-A-N L-20386-4E-B-N	10/24/2000	Office Building, Day Care Center, Boat House, Pavilion, Boardwalk for total of 5.44 ac impervious (reduced from 6.44 ac). Seawall reconstruction and boardwalk construction with coastal wetland impact of 18 sf
L-20386-4C-C-N	12/20/2000	Breakwater Restoration, Pier Construction, and Dredge. 1,050 sf of impact to coastal wetland
L-20386-4C-D-T	3/11/2008	Transfer from Bracebridge Corporation to Rockland Harbor Park, LLC
L-20386-26-E-M L-20386-2F-N	5/2/2008	Boathouse Conversion and Expansion. 1,386 sf of decking and paved area, 4 new pilings
L-20386-26-G-B L-20386-4E-H-N	7/23/2008	Expand Marina. 98 sf of direct impact and 17,010 sf of indirect impact, expand parking creating 0.52 acre impervious and developed area
L-20386-26-I-M L-20386-2F-J-M	7/23/2009	Construct 85-sf bathroom area on previously constructed pier. Minor change
L-20386-26-I-M L-20386-2F-J-M	1/26/2010	Reconfigure marina expansion reduced to 65 sf of direct impact and 13,160 sf of indirect impact
L-20386-26-M-M	3/4/2010	Building Use Change Day Care to Maine Coastal Islands
S-022546-W3-A-N	5/12/2021	Beneficial Use of Dredged Materials (associated with Proposed Action)
L-20386-26-N-T L-20386-43-O-T	5/18/2021	Transfer from Rockland Harbor Park, LLC to SHM Rockland, LLC
NAE-2021-01934	11/26/2021	USACE General Permit Authorization Letter and Screening Summary
L-20386-4P-P-N/L-20386-4E-Q-N	12/8/2021	MDEP NRPA and WQC Permit (for Proposed Action)



3.2. Water Resources

The existing marina is located adjacent to Rockland Harbor, which has a marine water classification zone of SC per Maine's designated use and classification system. Class SC waters are the third highest classification and as defined by §465-B of the Maine Revised Statutes (Title 38: Waters and Navigation) have the following characteristics:

- Class SC waters must be of such quality that they are suitable for recreation in and on the water, fishing, aquaculture, propagation and restricted harvesting of shellfish, industrial process and cooling water supply, hydroelectric power generation, navigation and as a habitat for fish and other estuarine and marine life.
- The dissolved oxygen content of Class SC waters must not be less than 70% of saturation. There
 are specific levels that enterococcus bacteria of human and domestic animal origin need to be at.
- Discharges to Class SC waters may cause some changes to estuarine and marine life provided that
 the receiving waters are of sufficient quality to support all species of fish indigenous to receiving
 waters and maintain the structure and function of the resident biological community.

3.3. Floodplains

The project area is located within Flood Zone VE, with a 100-year flood elevation of 15 ft, as defined by the July 6, 2016 FEMA Flood Insurance Rate Map (FIRM). The area is located within the 100-year floodplain, which designates a wetland of special significance. A copy of the FEMA FIRM is included in Appendix F.

3.4. Biological Resources

3.4.1. Special Aquatic Sites (SAS)

Special Aquatic Sites are those sites identified in 40 CRF 230, Subpart E (i.e., sanctuaries and refuges, wetlands, mud flats, vegetated shallows, coral reefs, and riffle and pool complexes). They are geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region (EPA, 40 CFR 230.3[q-1]).

The tidal areas between Mean Low Water (MLW) and Mean High Water (MHW) can be considered as SAS if the area provides significant habitat function. As the site is an existing, operational marina this is likely not the case. The only work occurring in these areas are associated with the proposed landward extension of the existing marina access pier. The current condition of the active tidal zone will remain unchanged, and the use of the property will remain as an operational marina.

Based on the EFH Determination Sheet (Appendix D), there are no impacts to tidal SAS.

3.4.2.Substrate

The substrates throughout the proposed project area are surficial fines over glacial till. There are widely scattered rocks/rip rap on the south and east sides of the existing granite crib pier. These rocks are the result of historic repairs to the existing jetty and placement of rip rap at the base of the jetty in accordance with USACE Authorizations NAE-2000-02618 and NE-2000-02133 and do not represent natural rocky habitat. Please reference the attached EFH Determination Sheet (Appendix D).



3.4.3. Vegetation

A field survey was conducted on June 17, 2021 at low tide and no tidal Submerged Aquatic Vegetation (SAV) or saltmarsh was present in the footprint of the project area. Please reference the attached field survey conducted by Eco-Analysts which is included in Appendix G.

3.4.4. Rare, Threatened and Endangered Plants

The project site was surveyed to determine if plant species listed as threatened or endangered under the federal ESA or MESA, or federally designated critical habitats, would be potentially impacted by the project. No listed plant species were observed during a field survey conducted by Eco-Analysts which is included in Appendix G. Please also reference the attached USFWS/MESFO List of Threatened and Endangered Species in Appendix C which states that "there are no critical habitats within your project area under this office's jurisdiction."

3.4.5. Wildlife and Wildlife Habitat

Some waterfowl and seabirds alight on the surface waters in the project area. These incidental species could be disbursed during construction but given the overall available water surface in the area and the existing commercial and recreational uses already present in the Rockland Harbor, the effects on these species would be negligible. Further, there are no inland waterfowl and wading bird, or shorebird critical habitats located in the project area based on available MDEP data.

An environmental survey of the area (Appendix G) found a few blue mussels (*Mytilus edulis*) attached to the scattered boulders and cobbles. Rock barnacles (*Semibalanus balanoides*), and periwinkles (*Littorina littorea*) are abundant on the granite pier. Sandworms (Nereis virens) were found in sediment sample cores collected for bulk chemistry analyses, indicating that they are common throughout. No listed species or critical habitat were identified in the project area.

Essential Fish Habitat (EFH) under the jurisdiction of NOAA in the project region were identified via NOAA's EFH Mapper Report (Appendix H). EFH in the region identified as being potentially present in the project area included EFH for the following species: Atlantic Sea Scallop, Atlantic Wolffish, Winter Flounder, Little Skate, Ocean Pout, Atlantic Herring, Atlantic Cod, Pollock, Red Hake, Silver Hake, White Hake, Windowpane Founder, Winter Skate, American Plaice, Smooth Skate, Thorny Skate, Bluefin Tuna, Atlantic Mackerel, Bluefish and Atlantic Butterfish.

3.5. Hazardous Materials

Environmental databases maintained by the EPA and the Maine DEP were reviewed to determine potential impacts to the project site. Data reviewed included:

- EPA Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)
- Maine DEP Brownfield Remediation Sites
- Maine Hazardous Oil Spill System (HOSS) Sites
- Maine Registered Petroleum Tanks Database
- Maine Remediation Sites (Institutional Controls) Database



The database review identified a total of 8 tanks registered with the Maine DEP and two identified brownfield sites within 1000 ft of the project area. Of the tanks identified, four were removed, one has been abandoned and three remain active. The active tanks contain diesel and #2 fuel oil and have not had recorded leaks. There is a Voluntary Response Action Program (VRAP) site associated with the Fisher Plow site with a closed status dated 3/1/2007. The second brownfield site was closed after an initial investigation found that the site was clear.

