FINDING OF NO SIGNIFICANT IMPACT
AND
ENVIRONMENTAL ASSESSMENT

U.S. ARMY CORPS OF ENGINEERS
OPERATIONS AND MAINTENANCE

DUNKIRK OUTER BREAKWATER
DUNKIRK HARBOR
CHAUTAUQUA COUNTY, NEW YORK

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
Buffalo District
478 Main Street
Buffalo, NY 14202

January 2024

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FINDING OF NO SIGNIFICANT IMPACT

DUNKIRK OUTER BREAKWATER
DUNKIRK HARBOR
CHAUTAUQUA COUNTY, NEW YORK

The U.S. Army Corps of Engineers (USACE), Buffalo District has assessed the environmental impacts of the subject project in accordance with the National Environmental Policy Act (NEPA) of 1969 and has determined a Finding of No Significant Impact (FONSI). The attached draft Environmental Assessment (EA) dated November 2023, addresses the USACE repair of the Dunkirk Outer Breakwater located at the City of Dunkirk, Chautauqua County, New York on the southern shore of Lake Erie, 40 miles southwest of Buffalo. The Dunkirk Outer Breakwater shelters Dunkirk Harbor and its associated features from severe lake storms and waves. The breakwater provides necessary shelter from lake waves, allowing commercial vessels to navigate and serve industry at the harbor. In addition, the structure enables small vessels and recreational boats to navigate to and from the marina. The shoreline along Dunkirk Harbor is also protected from erosion by the outer breakwater.

Recent inspections indicate the breakwater has deteriorated from wave action since the last repairs were made to the structure. Thus, the breakwater is at risk of no longer providing adequate protection to the interior of Dunkirk Harbor from severe lake storms and waves. Reconstruction of this structure is necessary to restore the breakwater to its nearly original condition so it can provide adequate protection to the Dunkirk Harbor navigation channel and shoreline.

PURPOSE

An EA was completed in support of this FONSI. Its purpose is to provide sufficient information on the potential environmental effects of the proposed USACE repair of the Dunkirk Outer Breakwater. Analysis of the potential effects of this action will aid in determining whether the proposed project is a major federal action which would significantly affect the quality of the human environment. The attached EA facilitates compliance with NEPA and includes discussion of the need for the action, the affected environment, a description of the proposed action and alternatives, its environmental impacts, environmental compliance, and a list of agencies, interested groups, and individuals consulted.

BACKGROUND

Dunkirk Harbor is a deep draft navigation project that was completed in 1943. Below is a summary of the federal project features:

- An outer entrance channel with depths of 17 feet in earth and 18 feet in rock.
- An inner entrance channel and basin to a depth of 16 feet.
- Removal of a rock shoal on the west side of the inner entrance channel to a depth of 17 feet.

- A pier 1,410 feet in length on the west side of the entrance channel, extending to shore.
- A detached breakwater (outer breakwater) extends eastward from the entrance channel, 2,812 feet in length.
- In addition, a small boat harbor was authorized in December 1970 under provisions of Section 201 of 1965 Flood Control Act to provide for construction of a detached rubble mound breakwater, 1,200 linear feet west of the city pier, over the existing submerged rock dike, dredging west access channel, and dredging a dock front channel.

This repair plan is focused on the Outer Breakwater at Dunkirk Harbor. The Outer Breakwater is comprised of a timber crib substructure and three distinct superstructures built between 1899 and 1931.

Most of the breakwater superstructure consists of laid up stone, specifically from Station 6+00 to 11+62 and Stations 12+62 to 25+00 for a total length of 1,800 feet and crest elevation of +8.3 feet above low water datum (LWD). Notably from Stations 11+62 to 12+62, a 100-feet repair was completed in 1925 using precast concrete units as a shoreline protection experiment. The remainder of the outer breakwater from Stations 25+00 to 28+12 consists of a concrete monolith cap at a crest elevation of +10.3 feet above LWD.

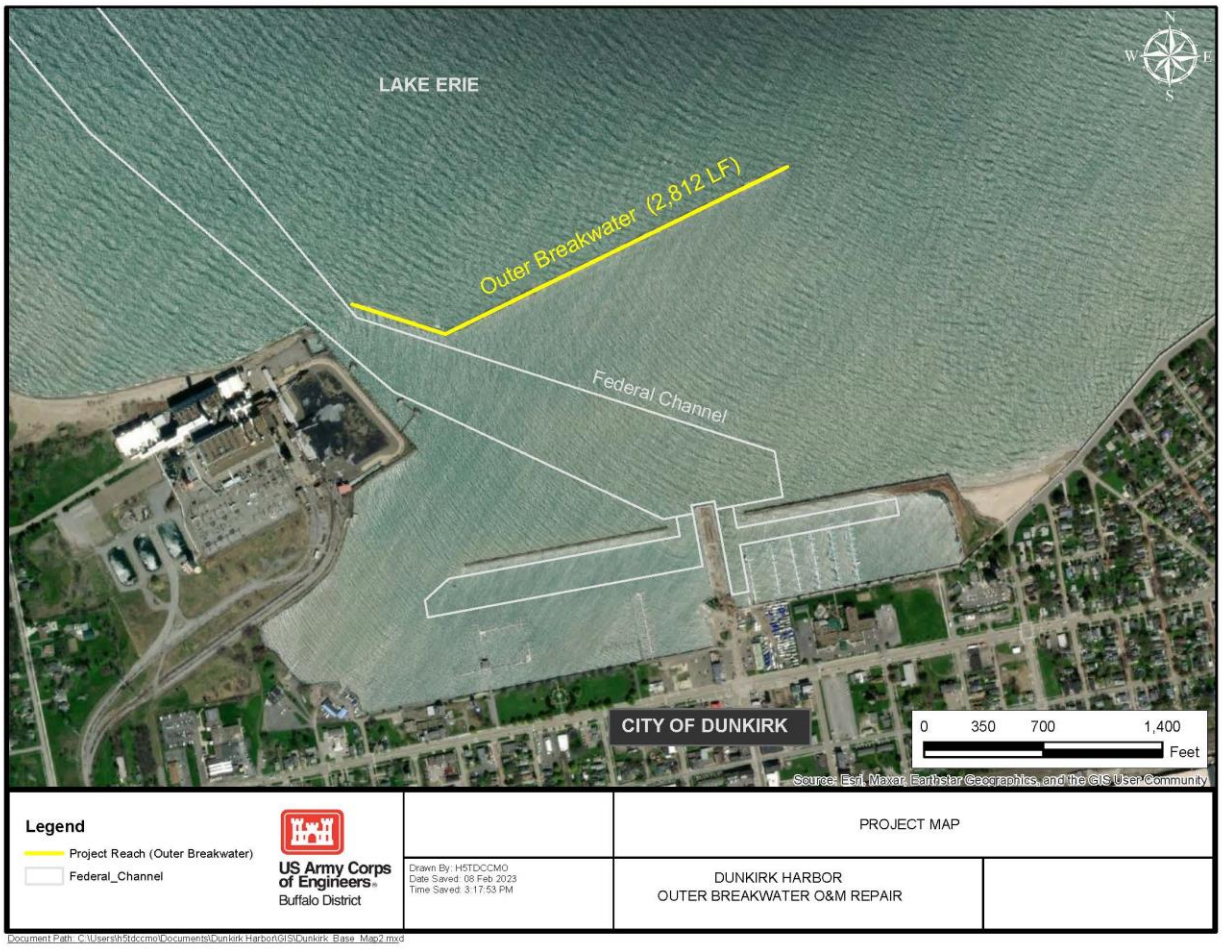

Figure 1. Dunkirk Harbor Map

ALTERNATIVES CONSIDERED

Alternative one consists of a rubble-mound overlay at two distinct reaches along the Dunkirk Outer Breakwater, reach 1 and 2, respectively. Reach 1 extends from Station (Sta.) 6+00 to Sta. 25+00. This reach is a laid-up stone super structure with a crest elevation of +8.3 feet above LWD. Reach 2 extends from Sta. 25+00 to the east head of the breakwater at Sta. 28+12. This reach is a concrete superstructure with crest elevation of +10.3 feet above LWD. Both reaches have a stone-filled timber crib substructure. The overlay has a crest height of +10.3 feet above LWD, which is 2 feet higher than the existing crest shown from the 1930s as-built drawings (i.e., +8.3 feet above LWD). The higher crest is specifically from Sta. 6+00 to Sta. 25+00. This new crest elevation was warranted for structural stability of the rubble-mound overlay and to minimize the footprint on the lakebed. In addition, the proposed repair includes a wraparound of the east head of the outer breakwater. The east end of the breakwater as-built crest elevation is +10.3 feet above LWD. The new rubble mound overlay wrap around will match the as-built elevation of +10.3 feet above LWD. The slope of the rubble mound overlay is 1V:2.5H along the east face on the lakeside, and then transitions to 1V:2H slope on the harborside. The total length of the eastern wrap around is approximately 315 feet (Figures 6 & 7). The proposed repair plan does not include excavation of the lakebed as the new structure will rest on the existing lakebed.

Alternative two includes a crest height of +9 ft LWD, a flattened slope between 1V:2.5H and 1V:3H (from station 6+00 to 25+00) and two large toe stones keyed into lakebed for slope stability. The footprint of this alternative is approximately 2.7 acres in area, while the first alternative resulted in a smaller footprint (2.4 acres). Both designs are structurally sound and will dissipate wave energy at Dunkirk Harbor effectively, however, since alternative one resulted in a smaller project footprint (by 0.3 acres) it is the preferred alternative and was carried forward to final design.

The no action alternative is not recommended as it would not meet project objectives of continuing to have a functional breakwater to protect the Dunkirk Harbor.

An assessment of the potential effects of the project alternatives is presented in the EA while a summary of the potential effects of the recommended plan is listed in the table below:

Public Interest	Insignificant effects	Insignificant effects as a result of mitigation	Resource unaffected by action
Air quality	☒	☐	☐
Water quality	☒	☐	☐
Greenhouse Gases and Climate Change	☐	☐	☒
Plankton & Benthos	☒	☐	☐
Vegetation	☐	☐	☒
Fisheries	☒	☐	☐

Wetlands	☐	☐	☒
Threatened and Endangered Species	☐	☐	☒
Wild and Scenic Rivers	☐	☐	☒
Wildlife and Significant Coastal Fish and Wildlife Habitat	☒	☐	☐
Water and Associated Land Use	☒	☐	☐
Public Facilities and Services/Water and Service Facilities	☐	☐	☒
Noise	☐	☐	☒
Aesthetic Values	☐	☐	☒
Cultural resources	☐	☐	☒
Environmental justice	☐	☐	☒
Displacement of People/Displacement of Farms	☐	☐	☒
Public Health and Safety	☒	☐	☐
Community and Regional Growth; Business and Industry/Labor Force; Employment and Income; Community Cohesion	☒	☐	☐
Leisure Opportunities/Recreational Resources	☒	☐	☐

* Mitigation would be through adherence to any environmental work exclusion window required by the New York State Department of Environmental Conservation.

Consultation and Compliance with Other Laws and Regulations

Pursuant to Section 7 of the Endangered Species Act (ESA) of 1973, as amended, the USACE has determined that the recommended plan would have no effect on federally listed species or designated critical habitat. In a letter sent to USFWS on September 26, 2023, the USACE asked for concurrence that the proposed project would have "No Effect" on the proposed federally listed candidate species. No habitat in the project impact area is currently designated or proposed "critical habitat" in accordance with provisions of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.). Therefore, no effect to any federally threatened or endangered species will occur as a result of the project. A response was received from the USFWS on October 4th, 2023, stating that since USACE determined that there is "No Effect" we do not "need an ESA response."

The project's impact on cultural resources has been evaluated in accordance with Engineer Regulation (ER) 1105-2-50 and 36 CFR 800. The USACE has consulted with the National Park Service, NYSOPRHP (SHPO), New York State Museum, and several potentially interested Indian nations that have ancestral homelands within the project area. Response was received on December 27th, 2023, confirming the project will have no effect on any historically significant locations.

Pursuant to the Clean Water Act of 1972, as amended, project coordination was initiated with agencies and interests including the US Environmental Protection Agency (USEPA) and the New York State Department of Environmental Conservation (NYSDEC) via a scoping information packet in August of 2023. The proposed work is limited to activities and a scope similar to the provisions of Army Corps of Engineers Nationwide Permit No. 3 (NWP 3) for maintenance projects, issued in accordance with Section 404 of the Clean Water Act. The New York State Department of Conservation (NYSDEC) has issued a Section 401 water quality certification for NWP 3. The NYSDEC acknowledged that the USACE may rely on this water quality certification and that NYSDEC does not intend to issue a project specific water quality certification in a letter dated January 18th, 2024. (Appendix A).

All applicable environmental laws have been considered and coordination with appropriate agencies and officials has been completed or is currently in progress.

All applicable laws, executive orders, regulations, and local government plans were considered in evaluation of alternatives. Based on this report, the reviews by other federal, state, and local agencies, tribes, input of the public, and the review by my staff, it is my determination that the recommended plan would not cause significant adverse effects on the quality of the human environment. Therefore, preparation of an Environmental Impact Statement is not required. Full compliance will be attained once the public review period is concluded and all relevant comments have been sufficiently addressed, no significant adverse impacts are identified, and the FONSI is signed.

Date: _____

COLBY K. KRUG
LTC, EN
Commanding

ENVIRONMENTAL ASSESSMENT

U.S. ARMY CORPS OF ENGINEERS
OPERATIONS AND MAINTENANCE

DUNKIRK OUTER BREAKWATER

DUNKIRK HARBOR
CHAUTAUQUA COUNTY, NEW YORK

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1.0 PURPOSE AND AUTHORITY

1.1 PURPOSE

The purpose of this Environmental Assessment (EA) is to provide sufficient information on the potential environmental effects of the subject action proposed by the U.S. Army Corps of Engineers, Buffalo District (USACE). This EA facilitates compliance with the National Environmental Policy Act (NEPA) of 1969, as amended, and includes discussion of the need for the action, its potential environmental impacts, status of environmental compliance, and a list of agencies, interested groups, and individuals consulted. A NEPA scoping document was distributed to applicable state and federal agencies, local officials, and Indian nations on August 11, 2023.

1.2 AUTHORITY

The Dunkirk Harbor deep draft navigation project was authorized by the 1827, 1867, 1896, 1910, and 1948 River and Harbor Acts and Sec. 201 of the 1965 Flood Control Act.

2.0 NEED FOR THE PROPOSED ACTION

2.1 INTRODUCTION

Dunkirk Harbor is a deep draft navigation project completed in 1943 on the southern shore of Lake Erie (Figure 1). Major stakeholders include the U.S. Coast Guard, the City of Dunkirk, private marinas, charter fishing interests, and the recreational boating community (USACE, 2023).

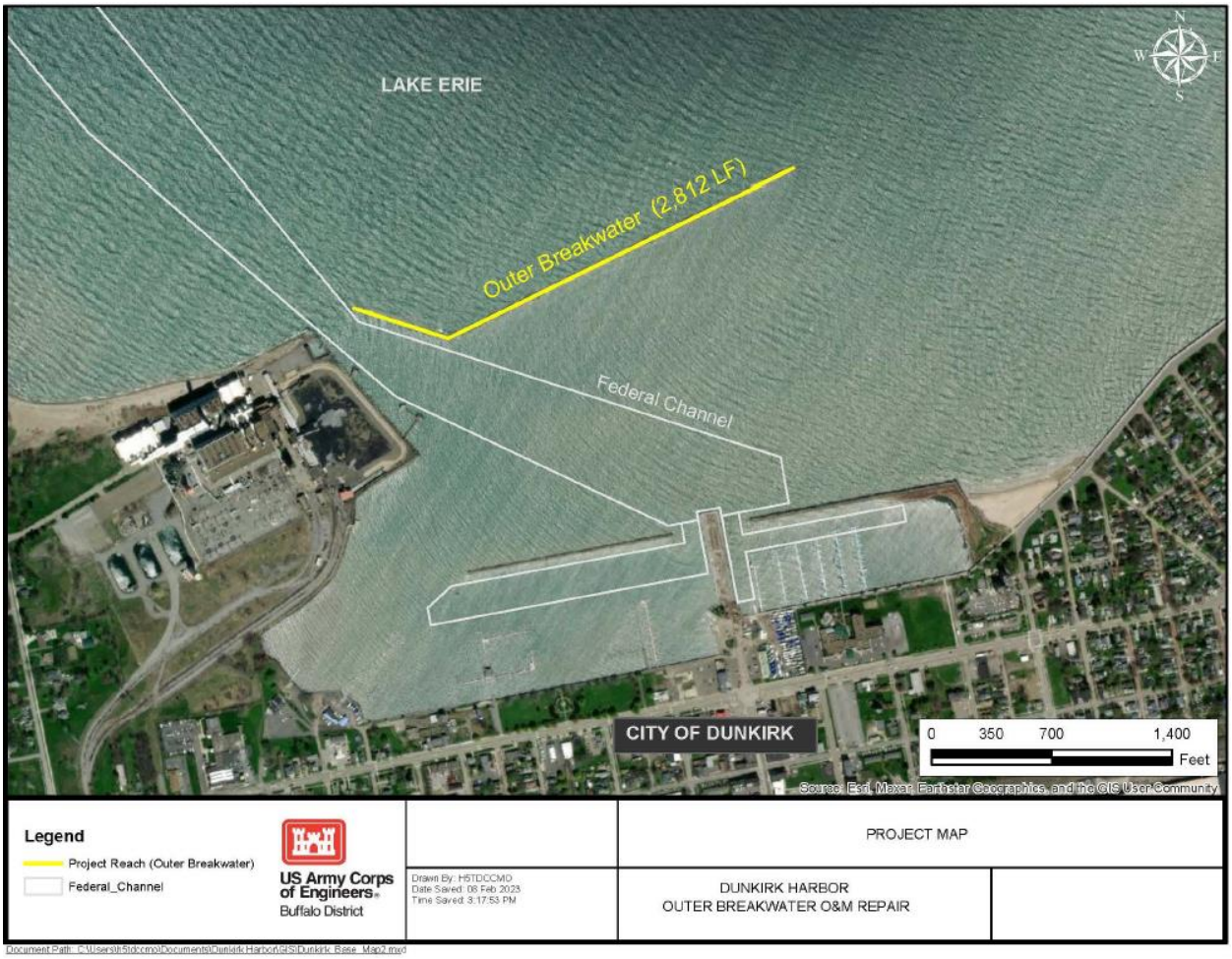

Figure 1. Map of Dunkirk Harbor and associated features.

Below is a summary of the federal project features:

- An outer entrance channel with depths of 17 feet in earth and 18 feet in rock.
- An inner entrance channel and basin to a depth of 16 feet.
- Removal of a rock shoal on the west side of the inner entrance channel to a depth of 17 feet.
- A pier 1,410 feet in length on the west side of the entrance channel, extending to shore.
- A detached breakwater (outer breakwater) extends eastward from the entrance channel, 2,812 feet in length.
- In addition, a small boat harbor was authorized in December 1970 under provisions of Section 201 of 1965 Flood Control Act to provide for construction of a detached rubble mound breakwater, 1,200 linear feet west of the city pier, over the existing submerged rock dike, dredging west access channel, and dredging a dock front channel.

This repair plan is focused on the Outer Breakwater at Dunkirk Harbor. The Outer Breakwater is comprised of a timber crib substructure and three distinct superstructures built between 1899 and 1931 (Figure 2 & 3). Most of the breakwater superstructure consists of laid up stone, specifically from Stations 6+00 to 11+62 and Stations 12+62 to 25+00, for a total length of 1,800 feet and crest elevation of +8.3 feet above low water datum (LWD). Notably, from Stations 11+62 to 12+62, a 100-feet repair was made in 1925 using precast concrete units as a shoreline protection experiment. The remainder of the outer breakwater from Stations 25+00 to 28+12 consists of a concrete monolith cap at a crest elevation of +10.3 feet above LWD.

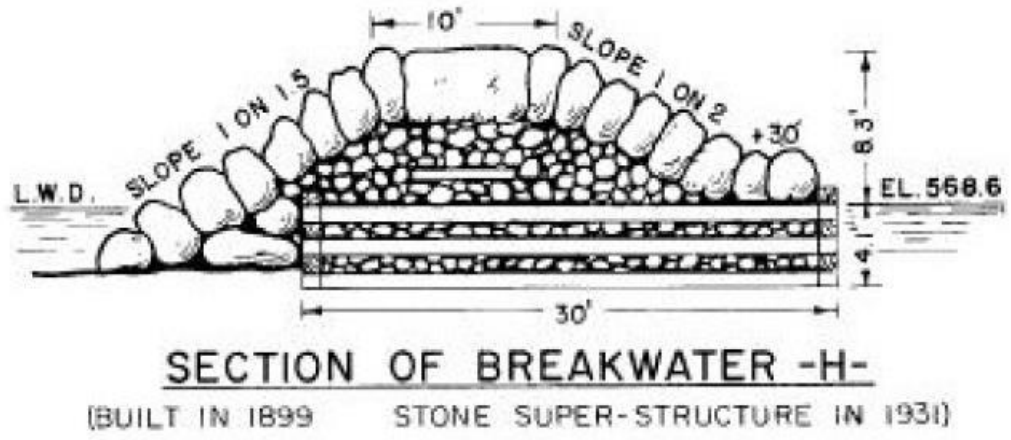

Figure 2. Cross section of existing breakwater showing laid up stone design.

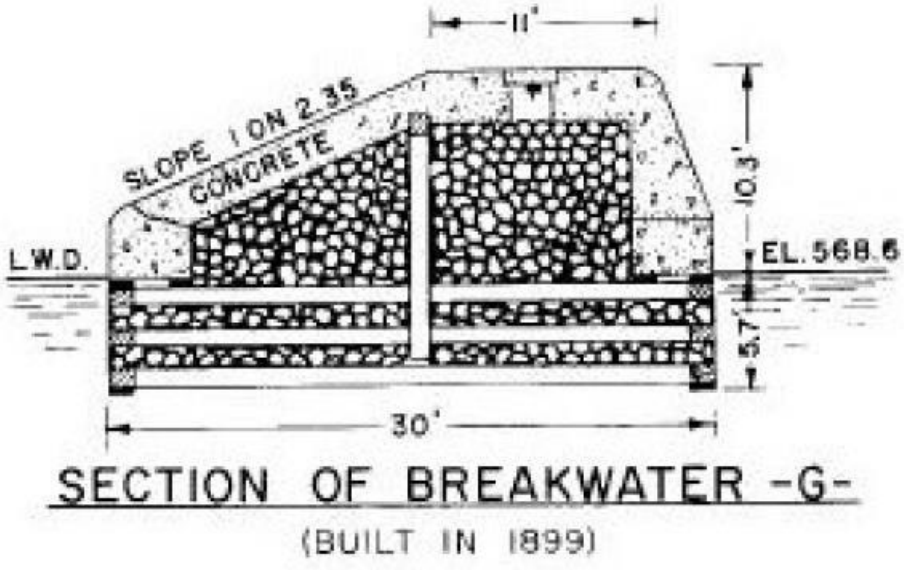

Figure 3. Cross section of existing breakwater showing concrete monolith cap.

2.2 NEED FOR ACTION

The Dunkirk Outer Breakwater shelters Dunkirk Harbor and its associated features from severe lake storms and waves. The breakwater provides necessary shelter from lake waves, allowing commercial vessels to navigate and serve industry at the harbor. In addition, the structure enables small vessels and recreational boats to navigate to and from the marina. The shoreline along Dunkirk Harbor is also protected from erosion by the Outer breakwater. Recent breakwater inspections in August of 2022 indicated that the breakwater has deteriorated through wave action since the last repairs were made to the structure (Figure 4 & 5). Thus, the breakwater is at risk of no longer providing adequate protection to the interior of Dunkirk Harbor from severe lake storms and waves. Reconstruction of this structure is necessary to restore the breakwater to its nearly original condition so it can provide adequate protection to the Dunkirk Harbor navigation channel and shoreline.

Figure 4. Eastern head of Outer Breakwater, Dunkirk (USACE August 2022)

Figure 5. Eastern head of Outer Breakwater, Dunkirk (USACE 3D Model – August 2022)

3.0 PROPOSED ACTION AND ALTERNATIVES CONSIDERED

3.1 PROPOSED ACTION

The proposed repair (Alternative 1) consists of a rubble-mound overlay at two distinct reaches along the Dunkirk Outer Breakwater, reach 1 and 2, respectively. Reach 1 extends from Station (Sta.) 6+00 to Sta. 25+00. This reach is a laid-up stone super structure with a crest elevation of +8.3 feet above LWD. Reach 2 extends from Sta. 25+00 to the east head of the breakwater at Sta. 28+12. This reach is a concrete superstructure with crest elevation of +10.3 feet above LWD. Both reaches have a stone-filled timber crib substructure. The overlay has a crest height of +10.3 feet above LWD, which is 2 feet higher than the existing crest shown from the 1930s as-built drawings (i.e., +8.3 feet above LWD). The higher crest is specifically from Sta. 6+00 to Sta. 25+00. This new crest elevation was warranted for structural stability of the rubble-mound overlay and to minimize the footprint on the lakebed. In addition, the proposed repair includes a wraparound of the east head of the outer breakwater. The east end of the breakwater as-built crest elevation is +10.3 feet above LWD. The new rubble mound overlay wrap around will match the as-built elevation of +10.3 feet above LWD. The slope of the rubble mound overlay is 1V:2.5H along the east face on the lakeside, and then transitions to 1V:2H slope on the harborside. The total length of the eastern wrap around is approximately 315 feet (Figure 7). The proposed repair plan does not include excavation of the lakebed as the new structure will rest on the existing lakebed.

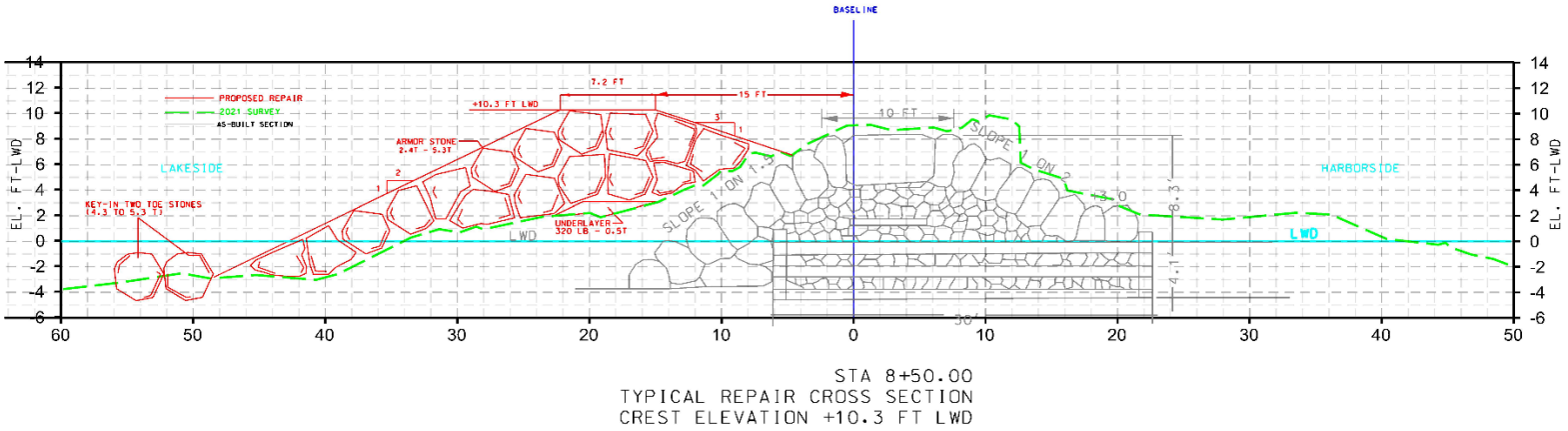

Figure 6. Dunkirk Proposed Repair Footprint from Stations 6+00 to 20+00 (1,400 LF) & Wrap Around East Head

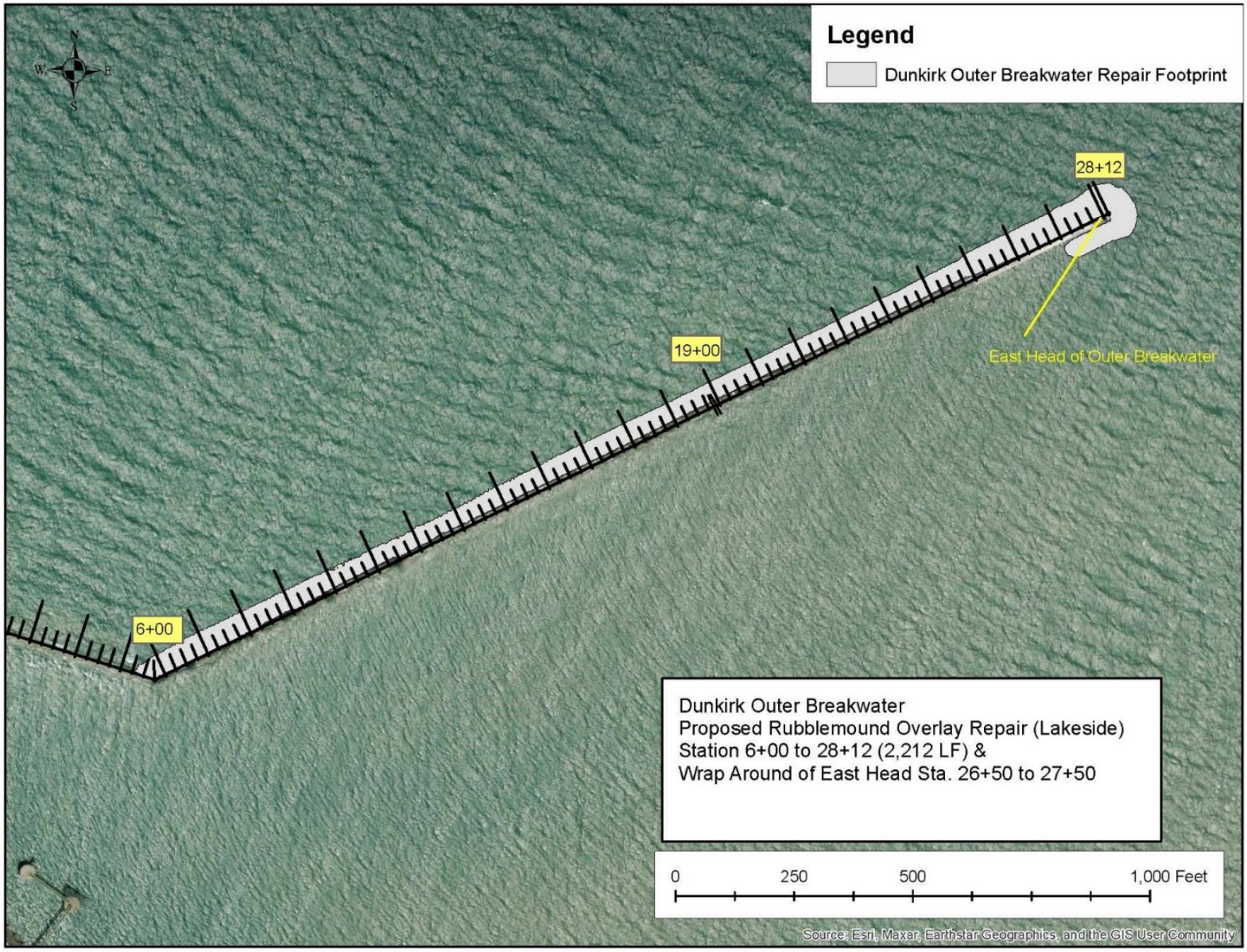

Figure 7. Dunkirk Outer Breakwater – Typical Repair Section Sta. 6+00 to 20+00 (slope 1 on 2)

3.2 ALTERNATIVES TO THE PROPOSED ACTION

Alternative 2 includes a crest height of +9 feet LWD, a flattened slope between 1V:2.5H and 1V:3H (from station 6+00 to 25+00), and two large toe stones keyed into lakebed for slope stability. The footprint of this alternative is approximately 2.7 acres, while the proposed design

for Alternative 1 would result in a smaller footprint (2.4 acres). Both designs are structurally sound and would dissipate wave energy at Dunkirk Harbor effectively. However, since the proposed design resulted in a smaller project footprint (by 0.3 acres), it was determined to be the minimal design necessary to effectively repair the structure and was thus carried forward to final design.

No Action Alternative: The USACE is required to consider the option of "No Action" as one of the alternatives to comply with the requirements of NEPA as well as to serve as a baseline against which any action alternatives may be compared. Under this alternative, it is assumed that no measures would be implemented to repair the damaged sections of the Dunkirk Outer Breakwater. Damages and further degradation of the breakwater would therefore continue, eventually allowing wave action to pass through, or over the breakwater, subjecting Dunkirk Harbor to damaging wind and storm-driven wave and ice action.

Although two action alternatives were identified, only the No Action Alternative and Alternative 1 are evaluated in detail in Section 4 of this EA. Alternative 2 was eliminated because it resulted in an additional 0.3 acre of fill in Lake Erie and was determined to be unnecessary to achieve the project purpose.

Figure 8. Comparison of Alternative Design Footprint (Red) vs. Selected Design (Gray)

4.0 EXISTING CONDITIONS AND IMPACTS

4.1 PHYSICAL/NATURAL ENVIRONMENT

4.1.1 *Air Quality*

Existing Conditions - A review of the U.S. Environmental Protection Agency (USEPA) AIRdata database indicates that no areas in the vicinity of the proposed project have been found to be in "non-attainment" of National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment (USEPA, 2023a). These pollutants include carbon monoxide, nitrogen dioxide, ozone, lead, particulate matter, and sulfur dioxide. Therefore, ambient air quality in the project area for these parameters was recorded as being in attainment with NAAQS.

No Action Alternative - Since this alternative involves no construction, air quality in the vicinity of the Dunkirk Harbor would continue to be similar to existing conditions. There would be no project-related dust or exhaust emissions from construction equipment that could contribute to the degradation of air quality.

Proposed Alternative 1 – The operation of construction equipment would result in an increase in air emissions (e.g., suspended particulates, nitrogen dioxide, carbon monoxide, lead, etc.) into the local atmosphere. Air quality impacts in this regard would be minor, adverse, and short-term.

4.1.2 *Water Quality*

Existing Conditions - Dunkirk Harbor on Lake Erie is categorized as a Section 701.7 Class B fresh surface waters. According to New York State Department of Environmental Conservation (NYSDEC) regulations: "The best usages of Class B waters are primary and secondary contact recreation and fishing. These waters shall be suitable for fish, shellfish and wildlife propagation and survival" (NYSDEC, 2023).

No Action Alternative - There would be no immediate negative adverse impact on water quality in the vicinity of the project site as the result of the no action alternative as there would be no federal action. However, continued failure of the outer breakwater will eventually allow storm driven waves to damage the harbor shoreline, likely contributing to erosion and turbidity.

Proposed Alternative 1 - Construction activities associated with the implementation of the project would result in localized turbidity. The fill material would consist of clean, locally sourced stone. Water quality impacts in this regard would be minor, adverse, and only short-term. There is also a possibility of accidental spills of fuel, oil, and/or grease into the water during application and monitoring activities. The eventual contractor would be required to prepare a spill control plan and to implement appropriate measures in the event of a release. Such discharges, should they occur, are expected to be short-term and relatively low

magnitude.

4.1.3 *Greenhouse Gases and Climate Change*

Existing Conditions - Greenhouse gases (GHGs) are components of the atmosphere that trap heat relatively near the surface of the earth and, therefore, contribute to the greenhouse effect and climate change. Most GHGs occur naturally in the atmosphere but increases in the concentration can result from human activities such as burning fossil fuels that add carbon dioxide (CO2), methane, nitrous oxides, and other greenhouse (or heat-trapping) gases to the atmosphere. As this occurs, it is difficult to reliably predict increases or decreases in regional rainfall (Intergovernmental Panel on Climate Change (IPCC), 2007).

Global climate change may already be affecting both the climate of the Great Lakes region and the physical behavior of the Great Lakes themselves (Environmental Law and Policy Center 2019). Regional weather extremes in temperature and precipitation are believed to be intensifying. In recent decades, a number of changes in the climate of the Great Lakes region have been documented, including a significant warming trend, an increase in extreme summertime precipitation, changing lake levels, and changing trends in lake-effect snows. Warm, wet winters are producing extensive early-season flooding, which threatens people and infrastructures. Further changes in climate projected over the coming decades are likely to add significantly to the vulnerabilities and risks to the Great Lakes. Additionally, changes to lake temperature and stratification would affect water quality, lake ecology, and wildlife.

In the Great Lakes region, the U.S. states bordering the Great Lakes have seen an overall increase in annually averaged temperature of 1.4 degrees Fahrenheit for the period 1985-2016. These trends are higher than the overall change of 1.2 degrees Fahrenheit over the contiguous United States (and found globally) United States Global Change Research Program (USGCRP 2018). There is a generally positive trend in annual precipitation for U.S. states bordering the Great Lakes present-day (1986–2016) relative to 1901–1960, but with strong local variations in the trend across the states (Vose et al. 2014). There is a 10 percent increase in annual precipitation in the Great Lakes Basin. Heavy rainfall is increasing in intensity and frequency across the United States and globally and is expected to continue to increase (Karl and Knight 1998). The largest observed changes in extreme precipitation in the United States have occurred in the Midwest and Northeast. Changes in climate are increasing the likelihood for these types of severe events. The amount of precipitation coming in extreme events has already increased over the last five decades in the Great Lakes region (USGCRP 2018) and is projected to increase further over the coming decades. The amount of precipitation occurring in storms with a five-year return period is projected to increase by 18.7 percent by 2085 for the higher scenario and 10.8 percent for the lower scenario (20.8 percent and 11.3 percent, respectively, for the Great Lakes Basin) (Environmental Law and Policy Center 2019). The amount of precipitation in such extreme storms is projected to increase by seven to eight percent by the 2030s and by nine to 12 percent by the 2050s. The precipitation from what are currently considered to be one in 50 and one in 100-year storms are projected to increase similarly, meaning that very large amounts of precipitation are expected from these once-unusual events.

No Action Alternative - The no action alternative would have no impacts to climate change or greenhouse gases since there would be no federal action.

Proposed Alternative 1 – The proposed action is not expected to have any long-term adverse impacts to climate change or greenhouse gases. The operation of the boats and construction equipment would result in short-term increased emissions of pollutants (e.g., suspended particulates, nitrogen dioxide, carbon monoxide) into the local atmosphere. The release of these pollutants is not expected to result in any long-term effects on greenhouse gases or climate change.

4.1.4 *Plankton and Benthos*

Existing Conditions - The benthic habitat at Dunkirk Harbor is characterized by a fine silt substrate. Near the breakwaters, the substrate is a mix of armor stones that have been slumped from the structure, including cobbles, gravel, and sand. Live and spent dreissenid shells cover most hard surfaces, and no rooted submerged vegetation is present.

No Action Alternative - Since this alternative involves no construction, no significant change in the existing planktonic and benthic community would occur in the short-term. In the long-term, breakwall armor stone and eventually cribbing stone would continue to slough off and slide onto the lakebed. This would potentially change the benthic and planktonic community structure in the area.

Proposed Alternative 1 - Placement of the large stone units and the associated resettling of suspended sediments could initially smother some benthic organisms in the vicinity of the project area. Recolonization of these areas by benthos from the surrounding bottom substrate typically occurs rapidly following completion of construction and resettling of sediment. Such impacts would be minor, adverse, and short-term.

4.1.5 *Vegetation*

Existing Conditions – The area around the Dunkirk Outer Breakwater consists of open-water in a storm driven environment. Factors such as wave and ice action, boat traffic, turbidity, and water depths contribute to the almost total lack of vegetated habitat in the lake adjacent to the project area for establishment and growth of submerged aquatic plants.

No Action Alternative – If no action were taken to repair the Dunkirk Outer Breakwater, stone and fill from the breakwater would continue to fall onto the lake bed, thereby creating the possibility for aquatic plant establishment and growth, due to the shallower water depths created by the stone. This would change, and possibly improve, the aquatic habitat in this area over the long-term, though wave action would make establishment of vegetation difficult in this area. Since this alternative involves no construction, no disturbance of existing vegetation would be anticipated.

Proposed Alternative 1 - Placement of fill material to construct the armor stone overlay would not significantly affect any submerged aquatic vegetation. Temporary increases in turbidity and suspended solids generated by the filling activity may cause localized minor decreases in

primary production and photosynthesis through reduced light penetration into the water column. This disturbance would likely only affect algae populations. Impacts to aquatic vegetation are expected to be negligible.

4.1.6 *Fisheries*

Existing Conditions - Extensive beds of aquatic macrophytes inside Dunkirk Harbor provide the most significant spawning habitat in Lake Erie (New York) for various warmwater fish species, especially esoscids (e.g., northern pike and muskellunge). The harbor is also a prime spawning area for smallmouth bass. Concentrations of many other fish species use the harbor as a spawning and/or nursery area (generally from March through July), including gizzard shad, rainbow smelt, carp, emerald shiner, brown bullhead, white bass, and walleye. In addition to most of the warmwater species noted above, large numbers of salmonids, including rainbow trout, brown trout, coho salmon, and occasionally chinook salmon, move into the area between September and March. As a result of the abundant fish populations in the area, Dunkirk Harbor provides high quality recreational fishing opportunities throughout the year (NYSDOS 2023).

No Action Alternative - Since this alternative involves no construction, fisheries would likely not be significantly altered in the short-term. Without maintenance repair, stone and fill material from the breakwater would continue to slide into the lake and settle on the lakebed. This would improve habitat for some fish species over the long-term, mainly through the formation of shoals and establishment of submerged aquatic vegetation. This would degrade habitat for other fish species, however, mainly those species that prefer deep water habitat. Without the proposed project on the breakwater however, storm driven wave and ice action would continue to breach the breakwater and would alter the bottom conditions in the Dunkirk Harbor. Waters would also be more turbid and would generally be less hospitable to fish species finding refuge behind the breakwater. Any areas of benthic vegetation inside the harbor would also be at risk from greater storm energy being able to enter the harbor.

Proposed Alternative 1 - Placement of fill material to construct the armor stone overlay would not significantly affect any fisheries resources. If appropriate following coordination with NYSDEC, potential impacts to lake sturgeon could be mitigated by limiting in-water work to within an environmental window to ensure lake sturgeon spawning populations are not affected. Impacts to fisheries would therefore be minor, adverse, and short-term.

4.1.7 *Wetlands*

Existing Conditions - The project area is located within Lake Erie in open-water. No wetlands exist within the project area. Additionally, there are no state or federally designated freshwater wetlands found directly adjacent to the project.

No Action Alternative - The no action alternative would have no impacts to wetlands since there would be no federal action.

Proposed Alternative 1 - Since no wetlands are present within the project area, no effect would occur.

4.1.8 *Threatened and Endangered Species*

Existing Conditions - According to the U.S. Fish and Wildlife Service (USFWS IPAC) species list (accessed October, 2023), the project area is within range of the following species: northern long-eared bat *(Myotis septentrionalis)* (endangered), salamander mussel *(Simpsonaias ambigua)* (proposed endangered*)* and the monarch butterfly (*Danaus plexippus*) (candidate). The bald eagle is also identified as occurring within the region. However, it is no longer listed on the endangered species list. It is however, protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668) and is listed as threatened by NYSDEC.

No Action Alternative - The no action alternative would have no impacts to threatened and endangered species since there would be no federal action.

Proposed Alternative 1 – Of the above listed species, only the salamander mussel has designated critical habitat, but this habitat does not exist in Dunkirk Harbor. Additionally, the monarch butterfly may inhabit the area but is reliant on their obligate milkweed host plant for breeding, which is not present at the outer breakwater location. Thus, this project would have no effect on the monarch butterfly, or any other listed or eligible threatened or endangered species. A letter was sent to the NYS USFWS Field office on September 26, 2023, requesting concurrence with our effects determination. An email response from USFWS was received on October 4th, 2023, stating that since USACE determined that there is "No Effect" we do not "need an ESA response."

The NYSDEC listed the common tern (*Sterna hirundo*) as a threatened species in New York. There have not been any sightings, or nesting locations found within Dunkirk Harbor.

The NYSDEC has also listed the lake sturgeon (*Acipenser fulvescens*) as a threatened species in New York. The shallow water habitat near the breakwater is potential spawning habitat. The critical spawning period for lake sturgeon is March 30 to July 1. The USACE would avoid work during the lake sturgeon spawning period, if requested by NYSDEC. No other species would be affected by the proposed project.

4.1.9 *Wild and Scenic Rivers*

Existing Conditions - The Nationwide Rivers Inventory is a list of more than 3,400 free-flowing river segments that are believed to possess one or more "outstanding remarkable" natural or cultural value features judged to be of more than local or regional importance. No portions of Upper Niagara River have been designated as a wild, scenic, or recreational river (National Wild and Scenic Rivers System, 2023).

No Action Alternative - The no action alternative would have no impacts to wild and scenic rivers since there would be no federal action.

Proposed Alternative 1 - No portions of project area have been designated as a wild, scenic, or recreational river, therefore this Act is not applicable to the proposed project.

4.1.10 *Wildlife and Significant Coastal Fish and Wildlife Habitat*

Existing Conditions - Dunkirk Harbor is an important resting and feeding area for migratory birds. This makes it a designated significant coastal fish and wildlife habitat by New York State Department of State. Concentrations of many species of waterfowl, loons, grebes, gulls, and other waterbirds occur in the area during spring and fall migrations (March - April and September - November, primarily). The harbor is also heavily used by these birds during winter. Due to this, it is listed as significant coastal fish and wildlife habitat by New York State Department of State. Mid-winter aerial surveys for the ten-year period 1976-1985 indicate average concentrations of approximately 250 birds in the area between Cattaraugus Creek and Barcelona Harbor each year (587 in peak year), including mergansers, scaup, common goldeneye, mallard, black duck, canvasback, and Canada goose. Dunkirk Harbor is the primary concentration area for these wintering waterfowl populations due to the attraction of the warmwater discharge and concentrations of forage fish in the area. Large numbers of great black-backed, ring-billed, and herring gulls are also attracted to the harbor throughout the year. The abundance and diversity of birds in Dunkirk Harbor, and the availability of good public access and vantage points, has made this one of the most popular birdwatching areas in Western New York. The sighting of many rarities at this location, including red-throated loon, eared grebe, harlequin duck, and red phalarope, is a special attraction of Dunkirk Harbor (NYSDOS 2023).

No Action Alternative - Since this project involves no construction, no immediate impacts to wildlife or wildlife habitat would occur. However, without the proposed project to stabilize the breakwater, eventually storm driven wave and ice action would begin to breach the breakwater. Formerly protected waters behind the breakwall would be more inhospitable to wildlife species (particularly avian species) finding refuge behind the breakwater.

Proposed Alternative 1 - Disruption and disturbance by equipment during operations would result in the short-term avoidance of the project area by some bird species. However, some bird species, such as gulls, may be attracted to the project area during construction. Bird species are expected to resume their normal patterns following completion of the project. Wildlife impacts in this regard would be minor, adverse and short-term.

Any adverse effects that may occur to these species during construction would be mitigated by adhering to any environmental exclusion windows coordinated with the NYSDEC, if applicable.

4.2 SOCIO-ECONOMIC ENVIRONMENT

4.2.1 *Water and Associated Land Uses*

Existing Conditions – The existing condition of the project area is comprised of open-water and the existing outer breakwater. No other land-uses are within the project area.

No Action Alternative - The no action alternative would have no impacts to water or associated land use since there would be no federal action.

Proposed Alternative 1 - The water and associated land use immediately adjacent to the project area would remain unchanged with the implementation of the proposed project. Completion of repairs would ensure that the outer breakwater continues to protect the harbor shoreline and harbor navigation.

4.2.2 *Public Facilities and Services/Water and Service Facilities*

Existing Conditions – There are no public facilities and services/water and service facilities in the vicinity of the project.

No Action Alternative - The no action alternative would have no impacts to public facilities and services or water and service facilities since there would be no federal action.

Proposed Alternative 1 - The implementation of the proposed project would have no impacts to this public interest factor since there are no public or service facilities present in the immediate project area.

4.2.3 *Noise*

Existing Conditions - No significant noise problems or sources were noted in the immediate project area. No sensitive noise receptors (i.e., hospitals, schools) are located within the general vicinity of the project area.

No Action Alternative - The no action alternative would have no impacts to noise since there would be no federal action.

Proposed Alternative 1 - Construction equipment would be observed in the project area and activities would result in a short-term increase in local noise levels. Noise generated by the construction operation would not exceed ambient noise levels in the harbor area.

4.2.4 *Aesthetics Value*

Existing Conditions - The areas adjacent to the Dunkirk Outer Breakwater consist of open-water. The current condition of the breakwater could be considered aesthetically unpleasing due to the fact it is in disrepair.

No Action Alternative - The no action alternative would have adverse impacts to aesthetics since there would be no federal action and the Dunkirk Outer Breakwater would continue to deteriorate.

Proposed Alternative 1 - The presence of boats in the lake is normal for this area and thus

would not detract from the aesthetic quality of the area. Construction equipment would be observed in the project area and activities would result in a short-term decrease in aesthetics in the project area. Once construction is completed and the breakwater is repaired this would result in a long-term increase in aesthetics of the breakwater.

4.2.5 *Cultural Resources*

Existing Conditions - A Scoping Information Package was distributed to several Indian nations that have ancestral homelands within the project area, federal, state, and local agencies including the NYS Office of Parks, Recreation, and Historic Preservation (SHPO) and the public in August of 2023. After review of the SHPO database in October 2023, it was concluded that there are no historically significant places located within the project area. The area of potential effect (APE) for the necessary repair work is limited to the footprint of section needing repair of the existing outer breakwater shown in Figure 6. Response was received on December 27th, 2023, confirming the project will have no effect on any historically significant locations.

No Action Alternative - The no action alternative would have no impacts to cultural resources since there would be no federal action.

Proposed Alternative 1 – Repair of the Dunkirk outer breakwater would not affect any archaeological or architectural resources within the project APE. There are no cultural resources within the footprint of the existing outer breakwater.

4.2.6 *Environmental Justice*

Existing Conditions - The existing condition within the project area is comprised of open-water and the existing outer breakwater itself. There are no specific demographics or socio-economic communities located within the vicinity of the project area according to the USEPA EJScreen on-line mapping tool (USEPA 2023b).

No Action Alternative - The no action alternative would have no impacts on environmental justice since there would be no federal action.

Proposed Alternative 1 - No effect is expected in this regard since project construction would be limited to only in-water activities that would not disproportionally affect any specific demographic or socio-economic community.

4.2.7 *Displacement of People/Displacement of Farms*

Existing Conditions - The proposed project location resides entirely in open water. Therefore, no displacement of people or farms would be required.

No Action Alternative - Since this alternative involves no construction to preserve the Dunkirk Outer Breakwater, the Dunkirk Harbor would continue to be subject to storm driven wave and ice action. This will eventually further deteriorate the breakwater to

the point where it wouldn't fully function as designed. If and when this were to happen, the harbor would be exposed to increased shoreline erosion and limiting safe navigation within the harbor. If the Dunkirk Harbor was not maintained, interests dependent on harbor facilities would be adversely impacted and could eventually be displaced to areas that better provide for their needs (e.g., cost of goods). Such impacts would be significant, adverse and long-term.

Proposed Alternative 1 - Maintenance of the Dunkirk Outer Breakwater within the Dunkirk Harbor would facilitate continued harbor and associated community facilities and activities. No displacement of people/farms would be anticipated as a result of the proposed project.

4.2.8 *Public Health and Safety*

Existing Conditions - With the current state of deterioration and potential new damage from storms, the current Dunkirk Outer Breakwater poses a threat to public health and safety. The breaks in the Dunkirk Outer Breakwater allow waves to pass through the structure and create wave action along the shoreline, as well as some hazard to navigation within the harbor.

No Action Alternative - Since this alternative involves no construction or placement of fill material, no immediate effects to human health would occur. The overall value of the harbor as a water resource to commercial navigation and recreational use would continue to progressively deteriorate to a point at which vessels could not safely navigate the harbor. Such impacts would likely be substantial, adverse, and long-term.

Proposed Alternative 1 - Maintenance repair of the breakwater would facilitate continued safe navigation within Dunkirk Harbor. The concentration of heavy equipment in the project area during maintenance operations could potentially pose a navigation and recreational hazard. However, standard USACE contract specifications require the maintenance of a safe, restricted work area during these periods. The contractor is required to prepare a detailed job hazard analysis of each major phase of work, including all anticipated hazards and specific actions which would be taken to prevent personal injury. The contractor is required to comply with Occupational Safety and Health Administration Standards.

4.2.9 *Community and Regional Growth; Business and Industry/Labor Force; Employment and Income; Community Cohesion*

Existing Conditions - Community cohesion is a result of a number of social and economic factors. Many area residents and entities have resided in the Dunkirk area for a long time. General community pride/cohesion is relatively strong and the harbor has played an important part in this development.

No Action Alternative - Since this alternative involves no construction to stabilize the Dunkirk Outer Breakwater, Dunkirk Harbor would become more vulnerable to storm driven wave and ice action. This would negatively affect safe navigation within the harbor. Eventually, wave action and erosion would reduce harbor use to some degree. Consequently,

individuals and enterprises dependent on this mode of transportation for their livelihood would suffer economically. A number of primary and secondary enterprises would also be impacted. In turn, associated deep-draft harbor community and regional benefits would be diminished. Business, industry, employment, and income would be adversely affected. Associated land use dilapidation or redevelopment would likely occur in the long term. Industrial and commercial processes, transportation interfaces, and public facilities, services and utilities would also be altered. Several community sustenance and cohesion factors would be disrupted. Such impacts would be substantial, adverse, and long-term.

Proposed Alternative 1 - Maintenance of the Dunkirk Outer Breakwater would facilitate continued easy access of Dunkirk Harbor and associated community shoreward facilities and activities (including associated public facilities and services) and would help to preserve the area's potential for desirable community and regional growth. Construction activities associated with placing stone would result in a short-term increase in business/employment/income opportunities, specifically in the construction trades. The maintenance of a functional harbor in Dunkirk would help to preserve existing business/ employment/ income opportunities associated with shipping and cargo handling. Construction activities would not adversely affect any public services or facilities. No public water sources should be affected by project implementation.

4.2.10 *Leisure Opportunities/Recreational Resources*

Existing Conditions – Water-related recreational developments/activities at Dunkirk Harbor include those associated with fishing and general boating. Fishing is popular both from the shoreline and boats. Recreational boating is a significant activity out of Dunkirk Harbor. Numerous marinas and associated facilities are located along the shore Lake Erie.

No Action Alternative - Since this alternative involves no construction, the ability for Dunkirk Harbor to continue providing safe and protected navigation would be diminished. Recreational navigation and associated enterprises would eventually be adversely affected due to the lack of safe navigation.

Proposed Alternative 1 – Maintenance of the outer breakwater would continue to facilitate safe navigation within Dunkirk Harbor would continue harbor operations for recreational watercraft and associated facilities.

Construction activities may temporarily disrupt some commercial and recreational vessel traffic due to restrictions within the vicinity of the construction operations. All construction equipment would be adequately marked and lighted to avoid any potential navigation hazards with recreational boating.

5.0 COMPLIANCE WITH ENVIRONMENTAL PROTECTION REQUIREMENTS

In order to characterize the affected environment of the project area and to assess the environmental impacts of the proposed action, information has been obtained from existing

literature and coordination with tribes and federal, state, and local agencies. Agencies, interested groups, and public that have been contacted during this process are listed in Section 6.0.

A Scoping Information Packet was distributed to these individuals on August 7, 2023, and no comments were received. The following is a list of the applicable, relevant, and appropriate Federal Statutes, Executive Orders and Memorandum that were considered for the proposed project, and a description of the project's compliance with each.

5.1 Archaeological and Historical Preservation Act of 1979 (16 USC 470 *et seq.*); National Historic Preservation Act of 1966 (16 USC 470 *et seq.*); Executive Order 11593 (Protection and Enhancement of the Cultural Environment), May 13, 1979 – The project's impact on cultural resources has been evaluated in accordance with Engineer Regulation (ER) 1105-2-50 and 36 CFR 800. The USACE has consulted with the National Park Service, SHPO, NYS Museum, and several potentially interested Indian nations that have ancestral homelands within the project area. Response was received on December 27th, 2023, confirming the project will have no effect on any historically significant locations.

5.2 American Indian Religious Freedom Act (42 USC 1996); Native American Graves Protection and Repatriation Act (25 USC 3001 *et seq.*) – The scoping packet was sent to several potentially interested Indian nations that have ancestral homelands within the project area and no response was received. No sacred sites or objects were identified through previous tribal consultation. It is not expected that any adverse effect would be incurred to religious rights as a result of the proposed project. No Native American grave sites or other sensitive sites are expected to be affected by the project.

5.3 Clean Air Act, as Amended, 42 USC 7401 – 7671g - Project coordination was initiated with the USEPA and the NYSDEC in 2023. No comments were received in response. As indicated in this EA, no significant adverse impacts to air quality would be expected from the proposed repair work at the Dunkirk Outer Breakwater. In addition, review copies of this EA will be sent to the Regional Administrator of the USEPA requesting comments in compliance with the Clean Air Act.

5.4 Clean Water Act, as Amended (Federal Water Pollution Control Act Amendments of 1972); 33 USC 1251 *et seq.* – Project coordination was initiated with agencies and interests including the USEPA and the NYSDEC via the scoping information packet in 2023. The project would result in a Section 404 discharge. Therefore, a Section 401 state water quality certification (WQC) (Protection of Waters Permit) will be required. The proposed work is limited to activities and a scope similar to the provisions of Army Corps of Engineers Nationwide Permit No. 3 (NWP 3) for maintenance projects, issued in accordance with Section 404 of the Clean Water Act. The New York State Department of Conservation (NYSDEC) has issued a Section 401 water quality certification for NWP 3. The NYSDEC acknowledged that the USACE may rely on this water quality certification and that NYSDEC does not intend to issue a project specific water quality certification in a letter dated January 18th, 2024 (Appendix A).

5.5 Coastal Zone Management Act of 1972, as Amended, 16 USC 1451 - 1464 - Project coordination was initiated with the New York State Department of State (NYSDOS) – Division

of Coastal Resources via the project scoping information packet in 2023. The USACE has analyzed the proposed action with respect to the management policies presented in the State of New York Coastal Management Program Federal Consistency Assessment. This analysis determined that the proposed maintenance repair activity would be consistent, to the maximum extent practicable, with this program. A Coastal Management Program Federal Consistency Determination (FCD) was prepared and coordinated with the NYSDOS, and is included with this EA as Appendix B. The FCD was submitted to the NYSDOS on October 31, 2023. The NYSDOS provided a letter on December 28, 2023, stating USACE is in compliance with this Act.

5.6 Comprehensive Environmental Response, Compensation, and Liabilities Act (CERCLA), as Amended; 42 USC 9601-9675 – Project coordination was initiated with agencies and interests including the USEPA via the scoping process in 2023. No comments were received in this regard. The proposed project involves placement of clean cut-stone into an area that has been previously disturbed by wave action. Therefore, the proposed project is in compliance with this Act.

5.7 Endangered Species Act of 1973, as Amended; 16 USC 1531 *et seq.* – Coordination in this regard was initiated with the USFWS and the NYSDEC – Region 9 in 2023. As discussed in paragraph 4.1.9, three proposed federal candidate species are listed as being present in this area of New York. However, no habitat in the project impact area is currently designated or proposed as "critical habitat" in accordance with provisions of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.). Therefore, no effect is expected to any federally threatened or endangered species as a result of the project. A letter was sent to the USFWS on September 26, 2023, requesting concurrence with our effects determination. In an email response from USFWS on October 4th, 2023, stating that since USACE determined that there is "No Effect" we do not "need an ESA response."

5.8 Farmland Protection Policy Act (Subtitle I of Title XV of the Agriculture and Food Act of 1981), 7 USC 4201 *et seq.*; Executive Memorandum – Analysis of Prime and Unique Farmlands, CEQ Memorandum, August 30, 1976, January 4, 1979 – Coordination was initiated with the U.S. Department of Agriculture – Farm Service Agency and Natural Resources Conservation Service (NRCS) via the project scoping letter in 2023. No comments were received in this regard. Since the proposed project in wholly within Lake Erie it would not affect prime and unique farmlands in any manner, the recommended action is in compliance with this act.

5.9 Federal Water Project Recreation Act, as Amended; 16 USC 460l-12 – 4601-22, 662 - In planning the proposed project, full consideration has been given to opportunities afforded by the project for outdoor recreation and fish and wildlife enhancement. Review copies of this EA have been provided to the U.S. Department of the Interior in regard to recreation and fish and wildlife activities for conformance with the comprehensive nationwide outdoor recreation plan formulated by the Secretary of the Interior.

5.10 Fish and Wildlife Coordination Act (Fish and Wildlife Conservation and Water Resource Developments-Coordination), 16 USC 661 *et seq.* – Coordination with the USFWS and NYSDEC was initiated through the scoping process in 2023. No correspondence has yet been

received from the USFWS with regards to this Act. Therefore, the project is in compliance with this Act.

5.11 Flood Control Act of 1944, 16 USC 460d *et seq.*, 33 USC 701 *et seq.* - In planning the proposed project, full consideration has been given to opportunities afforded by the project for outdoor recreation. Coordination was initiated with agencies and interests including the U.S. Department of the Interior, the Federal Emergency Management Agency, the NRCS, and the NYSDEC in this regard in 2023. No comments were received from any of these agencies regarding this Act. The proposed Dunkirk Outer Breakwater repairs would have no adverse effect on any resources associated within this Act.

5.12 Land and Water Conservation Fund Act of 1965; 16 USC 460l-4 *et seq.* – Project coordination was initiated with agencies and interests including the U.S. Department of the Interior via the scoping process in 2023. No comments were received in regards to this Act. The proposed Dunkirk Outer Breakwater repairs would not result in property that was acquired or developed with assistance from this fund is present in the project area or would be affected by the project.

5.13 National Environmental Policy Act of 1969, as amended; 42 USC 4321 - 4347 - Project coordination was initiated with agencies and interests via the scoping process. The EA and FONSI have been prepared in accordance with the Council on Environmental Quality's "Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act," 40 CFR 1500-1506, and Corps of Engineers Regulation ER 200-2-2, "Environmental Quality: Policy and Procedures for Implementing NEPA." With the circulation of this draft EA and FONSI, the proposed project is in partial compliance with the Act. Full compliance will be attained once the public review period was concluded, and no significant adverse impacts were identified and the FONSI is signed.

5.14 Resource Conservation and Recovery Act of 1976, 42 USC 6901 *et seq.* – The proposed project would not involve the generation, treatment, storage, or disposal of any hazardous wastes, and no potentially hazardous waste sites have been identified in the project vicinity. Therefore, the project is in compliance with this Act.

5.15 River and Harbor and Flood Control Act of 1970 (P.L. 91-611) – USACE planning actions have fulfilled the requirements of the Act. All 17 points identified in Section 122 of the Act (P.L. 91-611) have been evaluated in this EA.

5.16 Toxic Substances Control Act, 15 USC 2601-2671 *et seq.* – Project coordination was initiated with agencies and interests including the USEPA via the scoping process in 2023. No comments were received in regards to this Act. The proposed project would not involve any PCB, asbestos, radon, or lead-based paint activities. Therefore, the project is in compliance with this act.

5.17 Wild and Scenic Rivers Act, as amended; 16 USC 1271, *et seq.* – No portions of Lake Eire or Dunkirk Harbor have been designated as a wild, scenic, or recreational river. Therefore, this Act is not applicable to the proposed project.

5.18 Executive Order 11988, Flood Plain Management, May 24, 1977 – The USACE has concluded that there is no practicable alternative to the proposed action, which would occur within the base (100-year) flood plain of Lake Erie, and that the recommended action is in compliance with the Order.

5.19 Executive Order 11990, Protection of Wetlands, May 24, 1977 – Not applicable because no wetlands are present.

5.20 Executive Order 12114, Environmental Affects Abroad of Major Federal Actions – Not applicable to this action. This project is not a major federal action that would affect both the United States and Canada.

5.21 Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 11, 1994 – Project coordination was initiated with agencies and interests including the USEPA via the scoping process in 2023. No comments were received in regards to this Executive Order. As noted in section 4.2.6, the proposed project would not result in disproportionately high or adverse human health or environmental effects on minority or low-income populations.

5.22 Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, January 11, 2001 – The proposed project is not expected to incur any significant adverse effects to migratory birds. As addressed in section 4.1.8, any adverse effects that may occur to migratory birds during construction would be mitigated by adhering to any environmental exclusion windows coordinated with the NYSDEC.

6.0 AGENCIES/PUBLIC CONTACTED

6.1 Coordination - Copies of this EA will be sent to the following agencies and individuals for review and comment:

6.1.1 Federal

- Federal Emergency Management Agency
- Federal Maritime Commission
- International Joint Commission
- U.S. Coast Guard
- U.S. Department of Agriculture:
  - Farm Service Agency
  - Forest Service
  - Natural Resource Conservation Service
- U.S. Department of Commerce:
  - National Oceanic and Atmospheric Administration
  - Ecology and Conservation Office
- U.S. Department of Energy
- U.S. Department of the Interior:
  - Fish and Wildlife Service
  - National Park Service
  - Office of Environmental Project Review
- U.S. Department of State
- U.S. Department of Transportation:
  - Federal Aviation Administration
  - Federal Highway Administration
  - Federal Railroad Administration
- U.S. Environmental Protection Agency

6.1.2 Tribal

- Delaware Nation
- Seneca-Cayuga Tribe of Oklahoma
- Seneca Nation of Indians
- Tonawanda Seneca Nation

6.1.3 State

- New York Sea Grant
- New York State Department of Environmental Conservation:
  - New York Natural Heritage Program
  - Permit Administrator - Region 9
  - Division of Fish and Wildlife - Region 8 and 9
- New York State Department of Health:
  - Division of Environmental Protection
- New York State Department of State:
  - Consistency Review Unit Office of Planning and Development
  - Division of Coastal Resources and Waterfront Revitalization

New York State Department of Transportation:
Highways, Aviation and Ports Division
New York State Museum
New York State Office of Parks, Recreations, and Historic Preservation
Historic Preservation Field Service
State Historic Preservation Officer

6.1.4 Regional/Local

Great Lakes Commission
Great Lake Fishery Commission
City of Dunkirk

6.1.5 Individuals/Organizations

League of Women Voters
Atlantic Chapter Office
Audubon New York
Audubon Society of New York State
Canal Society of New York State
Ducks Unlimited
Great Lakes Fishery Commission
Great Lakes Historical Society
Great Lakes Sport Fishing Council
Lake Carriers' Association
Lower Lakes Marine Historical Society
Sierra Club
The Industrial Heritage Committee, Inc.
Trout Unlimited

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APPENDIX A:
Coordination Documents

SECTION 404(b)(1) EVALUATION

OPERATIONS AND MAINTENANCE
DUNKIRK OUTER BREAKWATER REPAIR PROJECT

CITY OF DUNKIRK, CHAUTAUQUA COUNTY, NEW YORK

Section 404(b)(1) of the Clean Water Act (33 USC 1344) requires that discharge sites and dredged fill material proposed for discharge into waters of the United States be evaluated through the application of guidelines developed by the Administrator of the U.S. Environmental Protection Agency (USEPA) in conjunction with the Secretary of the Army. The purpose of this Section 404(b)(1) Evaluation is to assess any affect that may result from placing fill material into a water of the United States, pursuant to Section 404 of the Clean Water Act.

1. PROJECT DESCRIPTION

1.1 Location

The proposed repair project is located on the Dunkirk Outer Breakwater within the Dunkirk Harbor. The Dunkirk Harbor project lies on the southern shore of Lake Erie in the City of Dunkirk, Chautauqua County, New York.

1.2 General Description

The existing Dunkirk Outer Breakwater is 2,812 feet long and was originally authorized by the River and Harbors Acts of 1827, 1867, 1896, 1907, 1910, 1948 and Section 201 of the Flood Control Act of 1965. The Outer Breakwater is comprised of a timber crib substructure and three distinct superstructures built between 1899 and 1931.

The breakwater provides necessary shelter from lake waves, allowing commercial vessels to navigate and serve industry at the harbor. In addition, the structure enables small vessels and recreational boats to navigate to and from the marina. The shoreline along Dunkirk Harbor is also protected from erosion by the Outer breakwater.

Recent inspections indicate the breakwater has deteriorated from wave action since the last repairs were made to the structure. Thus, the breakwater is at risk of no longer providing adequate protection to the interior of Dunkirk Harbor from severe lake storms and waves. Reconstruction of this structure is necessary to restore the breakwater to its nearly original condition so it can provide adequate protection to the Dunkirk Harbor navigation channel and shoreline.

Most of the breakwater superstructure consists of laid up stone, specifically from Station 6+00 to 11+62 and Stations 12+62 to 25+00 for a total length of 1,800 feet and crest elevation of +8.3 feet above low water datum (LWD). Notably from Stations 11+62 to 12+62, a 100-feet repair was completed in 1925 using precast concrete units as a shoreline protection experiment. The remainder of the outer breakwater from Stations 25+00 to 28+12 consists of a concrete monolith cap at a crest elevation of +10.3 feet above LWD.

The proposed repair consists of a rubble-mound overlay at two distinct reaches along the Dunkirk Outer Breakwater, reach 1 and 2, respectively. Reach 1 extends from Station (Sta.) 6+00 to Sta. 25+00. This reach is a laid-up stone super structure with a crest elevation of +8.3 feet above LWD. Reach 2 extends from Sta. 25+00 to the east head of the breakwater at Sta. 28+12. This reach is a concrete superstructure with crest elevation of +10.3 feet above LWD. Both reaches have a stone-filled timber crib substructure. The overlay has a crest height of +10.3 feet above LWD, which is 2 feet higher than the existing crest shown from the 1930s as-built drawings (i.e., +8.3 feet above LWD). The higher crest is specifically from Sta. 6+00 to Sta. 25+00. This new crest elevation was warranted for structural stability of the rubble-mound overlay and to minimize the footprint on the lakebed. In addition, the proposed repair includes a wraparound of the east head of the outer breakwater. The east end of the breakwater as-built crest elevation is +10.3 feet above LWD. The new rubble mound overlay wrap around will match the as-built elevation of +10.3 feet above LWD. The slope of the rubble mound overlay is 1V:2.5H along the east face on the lakeside, and then transitions to 1V:2H slope on the harborside. The total length of the eastern wrap around is approximately 315 feet.

1.4 General Description of Fill Materials

1.4.1 General Characteristics of Material

The primary material used to construct the project will be quarry stone of various sizes ranging from large armor stone to small cobbles. The existing breakwater will be repaired with 2.4 – 5.3 ton irregularly shaped new quarry stone of medium diameter (3.6 feet). The underlayer stone will be 320lb – 0.53 ton irregularly shaped stone of medium diameter (1.6 feet).

1.4.2 Quantity of Material

Dunkirk Outer Breakwater
Date: 5-Jan-24
Calculated By: Colleen O'Connell

Table 1. Quantity of Material for EA

Start Station	End Station	Length (ft)	Underlayer Volume* (CY)	Armor Volume* (CY)
6+00	16+00	1000	380	6780
16+00	26+50	1050	1885	6700
East Head Wrap (Sta. 26+50 to 28+12 & harborside)			1550	3150

* Underlayer assumes 33% void space & Armor assumes 37% void space.

1.4.3 Source of Material

The primary material used to construct the project would be locally-sourced new quarried stone.

1.5 Description of the Proposed Discharge Site

1.5.1 Location

The discharge location consists of the existing breakwater as described in sections 1.1 – 1.2.

1.5.2 Size

The area of breakwater construction encompasses about 2,800 linear feet.

1.5.3 Type of Site

The water depth along the Outer Breakwater is shallow ranging from 4 feet – 10 feet (assuming an average water level of +3 feet LWD). Shale bedrock is near the lakebed surface and is estimated to be at elevation -3 feet LWD. The existing materials on the lakebed (above the bedrock) consists of coarse sediment (i.e., sand and gravel). In addition, large armor stone has shifted off the existing breakwater over the years and has settled at the lakeside toe. Moving away from the toe of the breakwater the sediment composition is predominately sand.

1.5.5 Timing and Duration of Discharge

Repair of the breakwater will occur in phases as dictated by yearly budget allocations. Construction will be scheduled outside of the in-water work restriction period at Dunkirk Harbor to avoid impacts to fishing resources and spawning activity in the area. This period runs from April 1st to June 30th of a given year.

1.6 Description of Discharge Method

A contractor of the federal government would accomplish the project. Armor stone will be placed using a floating plant and crane and/or excavator.

2. Factual Determinations

The construction materials to be used are chemically inert and physically immobile under existing conditions. These characteristics eliminate the possibility of chemical-biological interaction and any testing specified under Section 230.61 is not applicable in this instance.

2.1 Physical Substrate Determinations

2.1.1 Substrate Elevation and Slope

The crest height of the rubble mound overlay repair is +10.3 feet LWD. The elevation of the lakebed along the lakeside face of the outer breakwater ranges from -1 feet LWD to -7 feet LWD on average. The shallow areas are at the west end of the breakwater near Station 6+00, while the deeper areas surround the east head (near station 28+12).

2.1.2 Sediment Type

Lakebed substrates consist of a mix of substrates, from large armor stone, to gravel, to sand.

2.1.3 Fill Material Movement

The armor stone, underlayer stone, and stability berm stone are intentionally designed to “lock” into place and be resistant to storm driven wave action, seiches, and ice scour. Over time, some of the stones may be mobilized or heaved from their locations due to the high-energy system. However, it is not anticipated that the materials would move beyond the project area.

2.1.4 Physical Effects on Benthos

The placement of fill would adversely affect bottom-dwelling organisms at the site by direct burial of immobile forms or forcing mobile forms to migrate from the area temporarily. However, the submerged portions of the proposed armor stone would increase benthic habitat diversity and may increase the diversity of local benthic communities.

2.1.5 Other Effects

Some compaction of the existing substrate would occur as a result of the project construction.

2.1.6 Actions Taken to Minimize Impacts

Stone sizes for the proposed project have been selected to provide the required protection from wave action and remain stable under anticipated conditions.

2.2 Water Circulation and Salinity Determinations

2.2.1 Water

a. Salinity – Not applicable.

b. Water Chemistry – No significant effect.

c. Clarity – Construction activities would result in a short-term, localized, increase in turbidity.

d. Color – Water color at the project site would be temporarily altered during construction activities.

e. Odor – No significant effect.

f. Taste – No effect.

g. Dissolved Gas Levels – No effect.

h. Nutrients – No effect.

i. Eutrophication – No effect.

2.2.2 Current Patterns and Circulation

a. Current Pattern and Flow – No effect.

b. Velocity – The project will have no effect on water velocities.

c. Stratification – The project will raise the bottom elevation of the lakebed, thereby reducing stratification of the lake in the immediate vicinity. The waters will be shallower, thereby attracting fish species and other organisms suited to shallow water depths.

d. Hydrologic regime – No effect.

2.2.3 Normal Water Level Fluctuations

No effect.

2.2.4 Salinity Gradients

Not applicable.

2.2.5 Actions Taken to Minimize Impacts

The contractor will be required to restrict the construction activities within the boundaries of the proposed work area, and minimize spillage of materials outside the work area. The contractor would further be required to minimize accidental spills of fuel, oil, and/or grease, and take appropriate actions in the event of a release.

2.3 Suspended Particulate/Turbidity Determinations

2.3.1 Effects on Chemical and Physical Properties of the Water Column

a. Light Penetration – Construction activities and resultant turbidity increases would temporarily decrease light penetration at the project site.

b. Dissolved Oxygen – No significant effect.

c. Toxic Metals and Organics – No significant effect.

d. Pathogens – No effect.

e. Aesthetics – Increased turbidity in the project area may be temporarily aesthetically displeasing. However, the turbidity plume generated should be localized and will dissipate before affecting widespread areas.

2.3.3 Effects on Biota

a. Primary Production and Photosynthesis – No aquatic macrophytes have been visually identified in the project area, but periphytic algal species are likely to colonize benthic substrates. Temporary increases in turbidity and suspended solids generated during project construction may cause minor decreases in primary production and photosynthesis. If residing at the project location, aquatic macrophytes and periphytic algal species may be covered as a result of construction activities, but would rapidly recolonize post-construction.

b. Suspension/Filter Feeders – The increased localized turbidity caused by construction activities may temporarily disrupt suspension/filter feeder activities. These effects are expected to be minor and short-term. Filter feeders will likely resume their normal patterns of behavior following completion of construction.

c. Sight Feeders - The increased localized turbidity caused by construction activities may temporarily disrupt sight feeder activities. These effects are expected to be minor and short-term. Sight feeders will likely resume their normal patterns of behavior following completion of construction.

2.3.4 Actions Taken to Minimize Impacts

The contractor would be required to restrict the construction activities within the boundaries of the proposed work area, and minimize the spillage of materials outside of the work area. The contractor would further be required to minimize accidental spills of fuel, oil, and/or grease, and take appropriate actions in the event of a release. The construction period will be scheduled outside of the Dunkirk Harbor environmental window (April 1st-June 30th) to avoid impacts to fishing resources in the area.

2.4 Contaminant Determinations

The construction materials would not introduce, relocate, or increase any contaminants.

2.5 Aquatic Ecosystems and Organisms Determinations

2.5.1 Effects on Plankton

Only short-term minor adverse impacts would be expected to occur on plankton. These impacts are due to limited, temporary increases in turbidity and suspended solids during project construction.

2.5.2 Effects on Benthos

The placement of fill material on the lake bed would cover and/or destroy immobile bottom-dwelling organisms. However, the varying stone sizes proposed for the stability berm would maintain local benthic habitat diversity.

2.5.3 Effects on Nekton

Free-swimming aquatic organisms would temporarily avoid the project area during the construction period. Submerged portions of the proposed project would provide improved feeding and shelter habitat for these species.

2.5.4 Effects on Aquatic Food Web

Only minor, temporary effects on food webs are expected at the project site, primarily due to the mortality of some benthic organisms as discussed in paragraph 2.1.4. Other effects would reflect the mortalities of plankton and nekton from physical impacts. Rapid re-colonization of the project site is anticipated.

2.5.5 Effects on Special Aquatic Sites

a. Sanctuaries and Refuges – Not applicable.

b. Wetlands – No wetlands would be affected by the proposed project.

c. Mud Flats – Not applicable.

d. Vegetated Shallows – Not applicable.

e. Coral Reefs – Not applicable.

f. Riffle and Pool Complexes – Not applicable.

2.5.6 Threatened and Endangered Species

Based on the review of available environmental data and consultation with the U.S. Fish and Wildlife Service, it has been determined that the proposed project would not affect any species proposed or designated by the U.S. Department of the Interior as threatened or endangered, nor would it affect the critical habitat of any such species. The proposed project lies within the range of the federally endangered Indiana bat (*Myostis sodalis*), the federally threatened northern long-eared bat (*Myotis septentrionalis*) and the protected bald eagle (*Haliaeetus leucocephalus*). There are no suitable roost trees located in the vicinity of the project. Also, there are no records of bald eagles nesting near the project area. Therefore, unless additional information indicates otherwise, no further consultation pursuant to Section 7 of the Endangered Species Act Amendments of 1978 would be undertaken with the U.S. Fish and Wildlife Service.

2.5.7 Other Wildlife

Disruption and disturbance by equipment during construction activities would result in a short-term avoidance of the project area by local wildlife species, however there would be no significant long term impact to wildlife or habitat in the project area.

2.5.8 Actions Taken to Minimize Impacts

The contractor would be required to restrict the construction activities within the boundaries of the proposed work area, and minimize the spillage of materials outside of the work area. The contractor would further be required to minimize accidental spills of fuel, oil, and/or grease, and take appropriate actions in the event of a release. Spawning and nesting dates will be observed, and no construction activities will take place during these periods. The construction period will be scheduled outside of the Dunkirk Harbor environmental window (April 1st-June 30th) to avoid impacts to fishing resources in the area. Additionally, there was a second design considered that included a crest height of +9 ft LWD, a flattened slope between 1V:2.5H and 1V:3H (from station 6+00 to 25+00) and two large toe stones keyed into lakebed for slope stability. The footprint of this alternative is approximately 2.7 acres in area, while the proposed design resulted in a smaller footprint (2.4 acres). Both designs are structurally sound and will dissipate wave

energy at Dunkirk Harbor effectively, however, since the proposed design resulted in a smaller project footprint (by 0.3 acres) it is the preferred alternative and was carried forward to final design.

2.6 Proposed Discharge Site Determinations

2.6.1 Mixing Zone Determination

Since the construction material would consist mainly of inert stone fill; a mixing zone determination would not be applicable for this project.

2.6.2 Determination of Compliance with Applicable Water Quality Standards

The proposed discharge would be in compliance with the State of New York's Water Quality Standards in that it would not introduce harmful or toxic conditions or substances. Section 401 Water Quality Certification or waiver thereof, would be granted pending the NYSDEC's favorable review of this Section 404(b)(1) Evaluation and Section 401 application.

2.6.3 Potential Effects on Human Use Characteristics

a. Municipal and Private Water Supply - No effect.

b. Recreational and Commercial Fisheries - The proposed construction activities would temporarily deter recreational fishing opportunities in the immediate project area. However, these effects are expected to be minor and temporary.

c. Water-Related Recreation - Water-related recreational opportunities would be temporarily unavailable in the immediate vicinity of the proposed project area during construction activities.

d. Aesthetics - The presence of construction equipment and its associated work areas would temporarily detract from the local aesthetic qualities of the project area. Construction activities would also temporarily increase turbidity in the river, thereby detracting from the appearance of the area.

e. Parks, National and Historical Monuments, National Seashores, Wilderness Areas, Research Sites, and Similar Preserves – No effects.

2.7 Determination of Cumulative Effects on the Aquatic Ecosystem

No significant cumulative impacts are expected to result from the implementation of the proposed project. The proposed project would have little long term local or cumulative impacts on water surface elevations or velocity.

2.8 Determination of Secondary Effects on the Aquatic Ecosystem

No effect.

2.9 Public Coordination

A Section 404(a) Public Notice was distributed to applicable state and federal agencies, local officials, and Indian nations on December 21st, 2023. No comments were received regarding this public notice.

2.9.1 Public Comments

FINDING OF COMPLIANCE

DUNKIRK OUTER BREAKWATER REPAIR PROJECT
DUNKIRK HARBOR, LAKE ERIE

CITY OF DUNKIRK
CHAUTAUQUA COUNTY, NEW YORK

1. No significant adaptations of the Section 404(b)(1) guidelines were made relative to this evaluation.

2. A "No Action Plan" was considered. This alternative was removed from consideration, as it would result in the eventual failure of the Dunkirk Outer Breakwater. Alternative two includes a crest height of +9 ft LWD, a flattened slope between 1V:2.5H and 1V:3H (from station 6+00 to 25+00) and two large toe stones keyed into lakebed for slope stability. The footprint of this alternative is approximately 2.7 acres in area, while the first alternative resulted in a smaller footprint (2.4 acres). Both designs are structurally sound and will dissipate wave energy at Dunkirk Harbor effectively, however, since alternative one resulted in a smaller project footprint (by 0.3 acres) it is the preferred alternative and was carried forward to final design.

3. The planned placement of fill materials at the project site would not violate any applicable State water quality standards. The construction operation would not violate the Toxic Effluent Standards of Section 307 of the Clean Water Act.

4. Use of the selected fill site would not harm any threatened or endangered species or their designated critical habitat.

5. The proposed placement of fill material would not result in significant adverse effects on human health and welfare, including municipal and private water supplies, recreational and commercial fishing, plankton, fish, shellfish, wildlife, or special aquatic sites. The life stages of aquatic life and other wildlife should not be adversely affected. No significant adverse effects on aquatic ecosystem diversity, productivity and stability, or recreational, aesthetic and economic values would occur.

6. Appropriate steps to minimize potential adverse impacts of the discharge on aquatic systems would be taken. During construction, the contractor would be required to minimize turbidity and accidental spills of fuels, oils, and/or greases, and take appropriate actions in the event of a release.

7. No public or agency comments were received on this project in response to the Section 404(a) Public Notice.

8. On the basis of the guidelines, the proposed site for the discharge of fill materials is specified as complying with these guidelines.

9. No comments were received from the 404(a) Public Notice.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Permits, Region 9
700 Delaware Avenue, Buffalo, NY 14209
P: (716) 851-7165 | F: (716) 851-7168
www.dec.ny.gov

SENT VIA EMAIL

January 18, 2024

Martin Wargo
US Army Corps of Engineers
478 Main Street
Buffalo, New York 14202

Permit Transmittal Letter
DEC ID No. 9-0603-00038/00004

Dear Martin Wargo:

Enclosed is your New York State Department of Environmental Conservation (NYSDEC) permit which was issued in accordance with applicable provisions of the Environmental Conservation Law. The permit is valid for only that project, activity or operation expressly authorized. If modifications are desired after permit issuance, you must submit the proposed revisions and receive written approval from the Permit Administrator prior to initiating any change. If the NYSDEC determines that the modification represents a material change in the scope of the authorized project, activity, operation or permit conditions, you will be required to submit a new application for permit.

Please review all permit conditions carefully to identify your initial responsibilities under this permit in order to assure timely action if required; **specifically note the fisheries time of year restriction in Natural Resource Permit Condition #5 on page 3.** Since failure to comply precisely with permit conditions may be treated as a violation of the Environmental Conservation Law, you are requested to provide a copy of the permit to the project contractor, facility operator, or other persons directly responsible for permit implementation (if any).

Note that this permit does not eliminate the need to obtain any other federal, state, or local permits or approvals that may be required for this project. If the project site is located within the floodplain or floodway, you should contact the municipal floodplain administrator to determine whether a floodplain development permit or approval is required.

If you have any questions regarding this permit, please contact this office at the address above.

Respectfully,

David S. Denk
Regional Permit Administrator

Enclosure
Ecc: Joseph Zuppelli, NYSDEC BEH R9
Beth Geldard, NYSDEC DOW R8
Shannon Dougherty, NYSDEC GL

Division of Law Enforcement, NYSDEC R9
Alex Heist, USACE
Matthew Maraglio, NYSDOS (F-2023-0795)

PERMIT

Under the Environmental Conservation Law (ECL)

Permittee and Facility Information

Permit Issued To:
US DEPT OF THE ARMY
THE PENTAGON
WASHINGTON, DC 20310

Facility:
DUNKIRK HARBOR
ST RTE 5 & CENTRAL AVE
DUNKIRK, NY

Facility Location: in DUNKIRK in CHAUTAUQUA COUNTY
Facility Principal Reference Point: NYTM-E: 143 NYTM-N: 4714.6
Latitude: 42°30'05.0" Longitude: 79°20'40.5"
Project Location: Dunkirk Harbor
Authorized Activity:

This Section 401 Water Quality Certification (WQC) authorizes the following activities, in accordance with the information and plans referenced in Condition Nos. 1 and 2 of this permit: approximately 9,850 cubic yards of stone fill below the mean high water level of Lake Erie, associated with the repair of approximately 1,715 linear feet of the Dunkirk Outer Breakwater.

Note: Wherever used in this permit, ECL refers to New York State Environmental Conservation Law and 6 NYCRR refers to Title 6 of the New York Code, Rules, and Regulations.

Permit Authorizations

Water Quality Certification - Under Section 401 - Clean Water Act
Permit ID 9-0603-00038/00004
New Permit Effective Date: 1/18/2024 Expiration Date: 1/17/2027

NYSDEC Approval

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.

Permit Administrator: MICHELLE R WOZNICK, Deputy Regional Permit Administrator
Address: NYSDEC Region 9 Headquarters
700 Delaware Ave
Buffalo, NY 14209

Authorized Signature: Michelle R. Woznick Date 1 / 18 / 2024

Permit Components

NATURAL RESOURCE PERMIT CONDITIONS

WATER QUALITY CERTIFICATION SPECIFIC CONDITION

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

NATURAL RESOURCE PERMIT CONDITIONS - Apply to the Following Permits: WATER QUALITY CERTIFICATION

1. **Conformance With Plans** All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or applicant's agent as part of the permit application. Such approved plans were prepared by the permittee or their representative(s) and are identified in condition no. 2, which includes the relevant water quality standards and explanation for the condition.

2. **Conformance with Plans List** All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or applicant's agent as part of the permit application. Such approved plans were submitted by the US Army Corps of Engineers Buffalo District, entitled 'Dunkirk Outer Breakwater Repair - Design Documentation Report', and dated August 2023.

Water Quality Requirements: 6 NYCRR 608.9 Discharges prohibited without certification.

Explanation: This condition is necessary to identify what discharges are authorized by the certification. Any discharge not identified in the referenced plans is prohibited.

3. **Precautions Against Contamination of Waters** All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate or any other environmentally deleterious materials associated with the project.

4. **Precaution Against Contamination of Waters - Custom** All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate or any other environmentally deleterious materials associated with the project.

Water Quality Standards: 6 NYCRR 703.2. Narrative water quality standards related to turbidity, suspended solids, toxic substances, color, and other deleterious subtances.

Explantion: This condition is necessary to ensure that the permittee undertakes whatever additional measures are necessary, and not otherwise specified in the conditions of this permit, to prevent the contravention of water quality standards during the implemenation of the project.

5. **Time of Year Restrictions - Fisheries** All inwater work, as well as any work that may result in the suspension of sediment, is prohibited from April 1 - June 30 of any calendar year.

Water Quality Standards: 6 NYCRR 703.2: Narrative water quality standards for turbidity, toxic materials, and other deleterious substances. 6 NYCRR 701: Classification of surface waters and identification of best usages.

Explanation: This condition is necessary to ensure that the discharge does not adversely impact water quality during sensitive fish spawning periods and contravene water quality standards or impair the waters best usages for fish propogation or fish survival.

6. **Install and Maintain Erosion Controls** Appropriate soil erosion and sediment controls (such as silt fences, turbidity curtains, straw bales, and other appropriate measures) shall be installed, used, and maintained in effective operating condition during all work. Controls shall be installed prior to ground disturbance, inspected periodically to ensure that they are not damaged, repaired promptly when needed, and remain in place until the site is stabilized by the regrowth of suitable vegetation. Erosion controls shall be removed after the site is stabilized by the regrowth of suitable vegetation.

Water Quality Standards: 6 NYCRR 703.2: Narrative water quality standards for turbidity, suspended solids, and other deleterious substances.

Explanation: This condition is necessary to ensure that upland erosion is minimized and contained during project construction, preventing contravention of the water quality standards.

7. **Clean Fill Only** All fill shall consist of clean soil, sand and/or gravel that is free of the following substances: asphalt, slag, flyash, broken concrete, demolition debris, garbage, household refuse, tires, woody materials including tree or landscape debris, and metal objects. The introduction of materials toxic to aquatic life is expressly prohibited.

Water Quality Standards: 6 NYCRR 703.2: Narrative water quality standards related to turbidity, suspended solids, garbage, cinders, ashes, oils, sludge, other refuse, toxic substances, and other deleterious substances.

Explanation: This condition is necessary to ensure that there are no unauthorized materials are discharged, and that those authorized materials do not contain any other materials that are toxic to aquatic life and, thereby, contravene water quality standards.

8. **Equipment Cleaning** To prevent turbid discharges and the potential introduction of invasive species into regulated waters from other areas, all equipment used in any project work area involving regulated waters will be inspected for, and cleaned of, any visible soils, vegetation, and debris before being used in regulated waters.

Water Quality Standards: 6 NYCRR 703.2: Narrative water quality standards related to turbidity, suspended solids and other deleterious substances.

Explanation: This condition is necessary to ensure that equipment used will not contribute to a contravention of water quality standards.

9. Stockpiles Fill or other excavated materials shall not be stockpiled in a manner conducive to erosion, or in areas with the potential to cause turbid runoff during storm events. Mats or geotextile fabric shall be placed under any temporary fill or stockpile and shall be removed following construction.

Water Quality Standards: 6 NYCRR 703.2: Narrative water quality standards for turbidity, suspended solids, and other deleterious substances.

Explanation: This condition is necessary to ensure that erosion from stockpiled materials is minimized and contained during project construction, preventing contravention of the water quality standards.

WATER QUALITY CERTIFICATION SPECIFIC CONDITIONS

1. Water Quality Certification The authorized project, as conditioned pursuant to the Certificate, complies with Section 301, 302, 303, 306, and 307 of the Federal Water Pollution Control Act, as amended and as implemented by the limitations, standards, and criteria of state statutory and regulatory requirements set forth in 6 NYCRR Section 608.9(a). The authorized project, as conditioned, will also comply with applicable New York State water quality standards, including but not limited to effluent limitations, best usages and thermal discharge criteria, as applicable, as set forth in 6 NYCRR Parts 701, 702, 703, and 704.

GENERAL CONDITIONS - Apply to ALL Authorized Permits:

1. Facility Inspection by The Department The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71- 0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

2. Relationship of this Permit to Other Department Orders and Determinations Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

3. **Applications For Permit Renewals, Modifications or Transfers** The permittee must submit a separate written application to the Department for permit renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Regional Permit Administrator
NYSDEC Region 9 Headquarters
700 Delaware Ave
Buffalo, NY14209

4. **Submission of Renewal Application** The permittee must submit a renewal application at least 30 days before permit expiration for the following permit authorizations: Water Quality Certification.

5. **Permit Modifications, Suspensions and Revocations by the Department** The Department reserves the right to exercise all available authority to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:

a. materially false or inaccurate statements in the permit application or supporting papers;

b. failure by the permittee to comply with any terms or conditions of the permit;

c. exceeding the scope of the project as described in the permit application;

d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;

e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

6. **Permit Transfer** Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee, excepting state or federal agencies, expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under

Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

STATE OF NEW YORK
DEPARTMENT OF STATE
ONE COMMERCE PLAZA
99 WASHINGTON AVENUE
ALBANY, NY 12231-0001
HTTPS://DOS.NY.GOV

KATHY HOCHUL
GOVERNOR

ROBERT J. RODRIGUEZ
SECRETARY OF STATE

December 28, 2023

Martin Wargo
Army Corps of Engineers
478 Main Street
Buffalo, NY 14202
Martin.P.Wargo@usace.army.mil

Re: F-2023-0795(DA)
U.S. Army Corps of Engineers, Buffalo District
Dunkirk Outer Breakwater repair: Repair ~1400lf of the existing breakwater by placing armor stone (2-6T) on a 2:1 slope on the lake side of the breakwater with a crest elevation of 10.3' above the LWD. The project would result in a discharge of ~9850cy of rock fill below the plane of Ordinary High Water.
Dunkirk Harbor, City of Dunkirk, Chautauqua County
Concurrence with Consistency Determination

Dear Martin Wargo:

The Department of State received the Army Corps of Engineers' Consistency Determination and supporting information for this proposed Federal Agency Activity (15 CFR 930 Subpart C) on October 31, 2023.

The Department of State has completed its review of the Army Corps of Engineers' consistency determination regarding the consistency of the above proposed federal agency activity, with the New York State Coastal Management Program.

Based upon the information submitted, the Department of State concurs with the Army Corps of Engineers' consistency determination regarding this matter.

When communicating with us regarding this matter, please contact David Newman at (518) 474-9039 (e-mail: david.newman@dos.ny.gov) and refer to our file #F-2023-0795(DA).

Sincerely,

Matthew P. Maraglio
Director, Development Division
Office of Planning, Development and
Community Infrastructure

NEW YORK STATE OF OPPORTUNITY. Department of State