



**US Army Corps
of Engineers®**
Buffalo District

SCOPING INFORMATION

Conneaut West Breakwater Repair Operations and Maintenance City of Conneaut, Ashtabula County, Ohio



March 2024

**Buffalo District, U.S. Army Corps of Engineers
478 Main Street
Buffalo, New York 14202**

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1 INTRODUCTION

The National Environmental Policy Act (NEPA) directs federal agencies to initiate "an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to the proposed action." The Buffalo District - U.S. Army Corps of Engineers (USACE) has prepared this scoping information packet to elicit public and agency concerns, clearly define the environmental issues and alternatives that should be examined, and identify federal, state, and local requirements that may need to be addressed. The information in this scoping document has been prepared as part of the formal scoping process pursuant to NEPA and the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR Part 1500 et seq.). This scoping document covers proposed project alternatives for the rehabilitation of a section of the Conneaut West Breakwater (Figure 1).

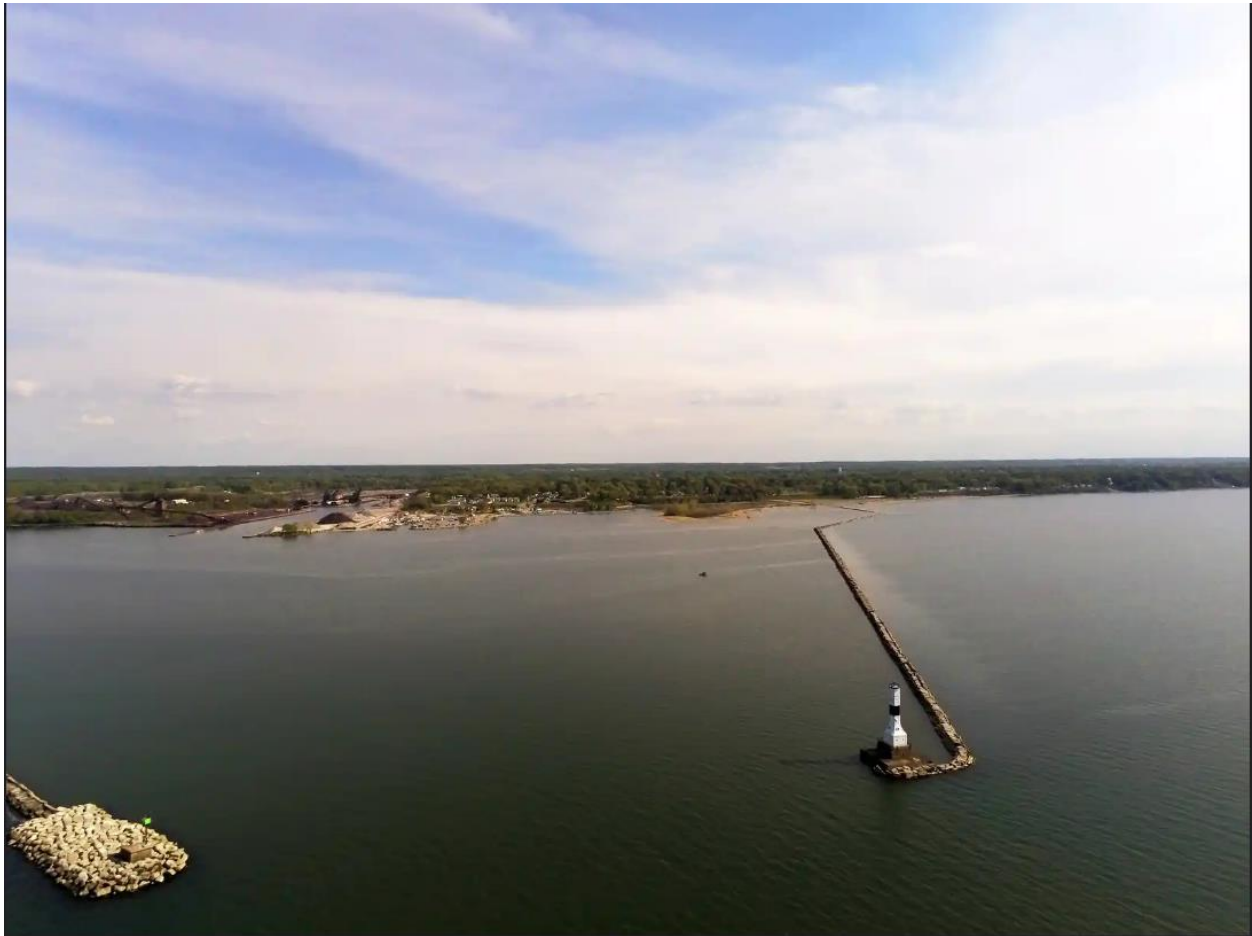


Figure 1: Aerial Image, Conneaut West Breakwater, center right.

2 PURPOSE AND NEED FOR BREAKWATER REPAIR

2.1 Overview

Conneaut Harbor is a deep draft commercial harbor located in the City of Conneaut, Ashtabula County, Ohio about 70 miles northeast of Cleveland, Ohio. The Conneaut West Breakwater is constructed of a rubble mound overlay and is exposed to deepwater wave and ice action.

2.2 Need for Action

The Conneaut West Breakwater shelters Conneaut Harbor and its associated features from severe lake storms and 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 Conneaut Harbor is also protected from erosion by the Western breakwater.

Recent inspections have indicated that the breakwater has deteriorated through wave action since the last repairs were made to the structure (Figure 2). Thus, the breakwater is at risk of no longer providing adequate protection to the harbor. Repair of this structure is necessary to restore the breakwater to its original functionality so it can provide adequate protection to Conneaut Harbor.



Figure 2: Loss of stone (circled) and near breach of the Conneaut West Breakwater, 2021

2.3 Study Authority

The existing breakwater was authorized by the River & Harbor Acts of 1910, 1917, 1935 and 1962.

2.4 Proposed Project

A rubblemound stone overlay is proposed along approximately 3,060 feet of the existing structure to a crest height of 10 feet above LWD¹, from Station 12+50 to Station 43+00 (Figure 3). The repair would be completed in phases allowing the structure to continue its intended function and does not include any additions or betterments that would constitute a change in the project's original purpose. Work would be performed every other year with two-month work periods until completed. The identified repair includes a rubblemound overlay at a 1V:2H slope and a three stone berm width, comprising of 6-to-13-ton armor stone, overlying 0.5-to-1.5-ton underlayer and 3-to-145-pound bedding for the northern reach from the lighthouse (Station 43+00) and wrapping around until Station 22+50. For the southern reach, from Station 22+00 to Station 12+50, the proposed repair would have 6-to-13-ton armor stone, overlying 0.3-to-1-ton underlayer and 2-to-80-pound bedding, continuing a 1V:2H slope and a three stone berm width. All repairs would be made along the lake side of the breakwater and have a toe berm two stones wide. The overlay would restore the original structure crest elevation of +10 feet LWD.

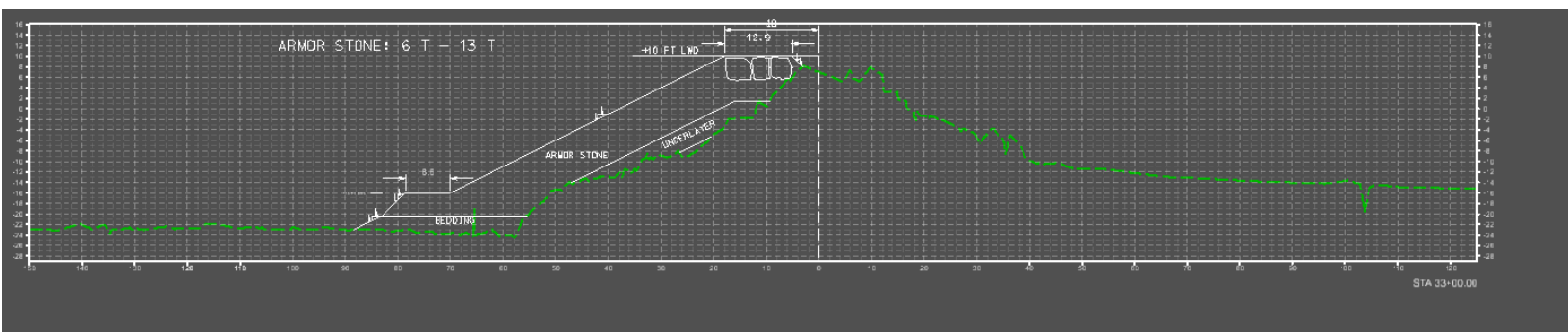


Figure 3: Representative Cross Section

¹ Low Water Datum (LWD) for Lake Erie is 569.2 feet above mean sea level at Rimouski, Quebec, Canada (International Great Lakes Datum 1985).

3 PROPOSED REPAIR ALTERNATIVES

3.1 Alternatives Considered

It is USACE policy to consider all practicable and relevant alternative measures, including the no action alternative. Two alternatives were evaluated to achieve the purpose of repairing and stabilizing the Conneaut West Breakwater.

3.1.1 No Action

The USACE is required to consider the option of “No Action” as one of the alternatives to comply with the requirements of NEPA. The No Action alternative assumes that no project would be implemented by the federal government to achieve the planning objectives. Under this alternative, it is assumed that no measures would be implemented to repair the damaged section of Conneaut West Breakwater. It is expected that damages and further degradation of the breakwater would continue, eventually allowing wave action to pass over the breakwater, thereby subjecting the Conneaut Harbor to damaging wind and storm-driven wave action.

3.1.2 Sheet Pile Encasement

This alternative involves sheet pile encasement for Conneaut West Breakwater Repair. Figure 4 is a representative cross section of the existing structure with conceptual sheet pile encasement at Station 41+00, which is the deepest part of the breakwater. At 10 feet above LWD, the sheet piles would be 42 feet deep. Geotechnical analysis shows that the lakeside bedrock elevation is close to bottom of the lake surface. This would make it harder to drive the sheet pile and the only option is to underpin the sheet pile to anchor at the base and require additional rows of tie rods.

Additionally, this work would also need to be performed on the harbor side of the structure. This would necessitate extra fill materials in addition to the fill materials already on the lake side. The encased pier would also be around 140 feet wide which would require more concrete work for the entire breakwater and a greater amount of fill into the lake. These factors make this alternative very expensive when compared to the proposed action, and thus this alternative is not recommended for the Conneaut West Breakwater.

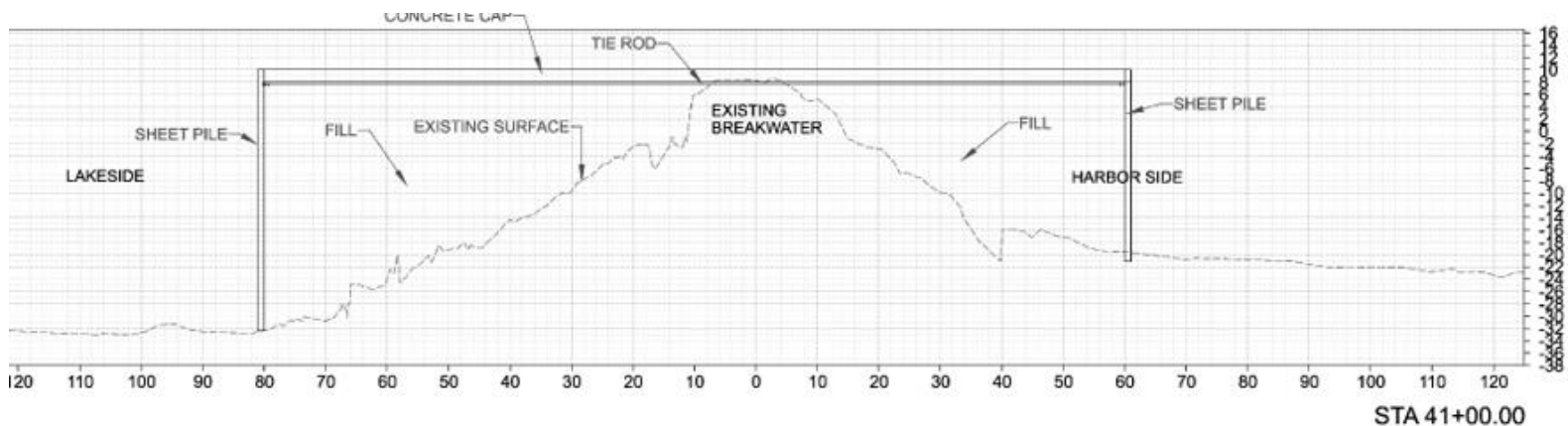


Figure 4: Sheet Pile Encasement Alternative

4 PUBLIC PARTICIPATION AND INTERAGENCY COORDINATION

Throughout the scoping process, stakeholders and interested parties are invited to provide comment on the Conneaut West Breakwater Repair Project. Interested parties are welcome to contact USACE to discuss their views and recommendations regarding this project.

5 IMPACT ASSESSMENT

Future conditions with the No-Action alternative and potential impacts associated with the preferred alternative would be assessed in relation to several parameters, including the following social, economic, and environmental categories:

- Fish and Wildlife Resources
- Water Quality
- Dredged Material Management
- Geology and Soils
- Contaminated Materials
- Air Quality
- Noise
- Recreation
- Historic Properties
- Property Values and Tax Revenues
- Employment
- Community Cohesion and Growth
- Transportation
- Public Facilities and Services
- Aesthetics
- Environmental Justice

6 COMPLIANCE WITH ENVIRONMENTAL PROTECTION STATUTES

Numerous environmental laws and executive orders influence and guide water resources planning, development, and management within the USACE Civil Works Program. The list below presents a comprehensive list of environmental protection statutes, executive orders, etc. that are normally considered. Therefore, an additional goal of this scoping process is to consult with appropriate agencies and other interested parties pertaining to resources protected by these

mandates. The dissemination of this scoping information initiates applicable coordination and consultation requirements required under their provisions.

Some important federal environmental protection statutes that would be assessed with respect to this proposed project include:

- *National Environmental Policy Act (NEPA)*. In accordance with 33 Code of Federal Regulations (CFR) 230 (Procedures for Implementing NEPA), USACE will assess the potential environmental effects of the project alternatives on the quality of the human environment. Using a systematic and interdisciplinary approach, an assessment will be made of the potential environmental impacts for each plan as determined by comparing it with the without-project conditions. The impact assessment process will determine if an Environmental Impact Statement is required or if an Environmental Assessment and Finding of No Significant Impact is appropriate. This scoping document initiates the NEPA process.
- *Clean Water Act*. The recommended plan involves the placement of dredged or fill material into waters of the United States. Therefore, the USACE would evaluate the discharge in accordance with the Clean Water Act Section 404(b)(1) Guidelines. Water quality and related information used in this evaluation will provide documentation to demonstrate that the recommended plan complies with this Act. A Section 404(a) Public Notice will be circulated and an opportunity to request a public hearing afforded to all potentially affected parties. Section 401 Water Quality Certification for the discharge will also be requested from the Ohio Environmental Protection Agency.
- *Coastal Zone Management Act*. The project is an ongoing federal activity that was initiated prior to the Ohio Coastal Management Program (OCMP) in 1997 and does not involve changes to the specific purpose of the project. The Ohio Department of Natural Resources does not require federal consistency review when the repair is limited to maintaining/rebuilding a structure constructed prior to the OCMP. Therefore, the repair to the Conneaut West Breakwater has been determined to be in compliance with this act.
- *Endangered Species Act*. In accordance with Section 7 of this Act, the USACE is requesting confirmation from the U.S. Fish and Wildlife Service (USFWS) that any listed or proposed species or designated or proposed critical habitat that may be present in the project area will not be impacted. After review of IPaC, the following species have been identified as possibly being located within the project area: indiana bat (*Myotis sodalist*), tricolored bat (*Perimyotis subflavus*), rufa red knot (*Calidris canutus rufa*), monarch butterfly (*Danaus plexippus*).

- *Fish and Wildlife Coordination Act.* The USACE is coordinating this project with the USFWS. The USACE will collaborate with the USFWS to identify any potential fish and wildlife concerns, identify relevant information on the study area, obtain their views concerning the significance of fish and wildlife resources and anticipated project impacts, and identify those resources which need to be evaluated in the study. Full consideration would be given to their comments and recommendations resulting from this coordination.
- *National Historic Preservation Act.* Under Section 106 of this Act, this scoping process also initiates consultation with the National Park Service, State Historic Preservation Office, potentially interested Indian nations, local historic preservation organizations and others likely to have knowledge of, or concern with, historic properties that may be present within the study's areas of potential effect (APE). Initial review of the study area using the online SHPO database has determined that there is one property listed on the National Register of Historic Properties or the Ohio Register of Historic Properties within the APE for this study. A Section 106 form has been submitted to Ohio SHPO for confirmation of no impact to the one existing historic location.

7 POINT OF CONTACT

Interested parties are encouraged to contact the USACE with their comments and recommendations about the Conneaut Harbor West Breakwater repair project. Questions or requests for additional information may be directed to:

Buffalo District Environmental Analysis Team
E-mail: Conneaut.Breakwater@usace.army.mil

Please review the study information and present any comments in writing within thirty (30) days to the attention of the Buffalo District Environmental Analysis Team to the email address listed above or at the following address:

U.S. Army Corps of Engineers
Attn: Environmental Analysis Team
Buffalo District
478 Main Street
Buffalo, NY 14202

Thank you for your review of this project.



Figure 5: Plan View of Displaced Crest Stones Sta. 30+50

Other federal environmental protection laws, orders, and policies that may apply to this project include:

1. PUBLIC LAWS

- a. American Folklife Preservation Act, P.L. 94-201; 20 U.S.C. 2101, *et seq.*
- b. Anadromous Fish Conservation Act, P.L. 89-304; 16 U.S.C. 757, *et seq.*
- c. Antiquities Act of 1906, P.L. 59-209; 16 U.S.C. 431, *et seq.*
- d. Archaeological and Historic Preservation Act, P.L. 93-291; 16 U.S.C. 469, *et seq.* (Also known as the Reservoir Salvage Act of 1960, as amended; P.L. 93-291, as amended; the Moss-Bennett Act; and the Preservation of Historic and Archaeological Data Act of 1974.)
- e. Bald Eagle Protection Act; 16 U.S.C. 668.
- f. Clean Air Act, as amended; P.L. 91-604; 42 U.S.C. 1857h-7, *et seq.*
- g. Clean Water Act, P.L. 92-500; 33 U.S.C. 1251, *et seq.* (Also known as the Federal Water Pollution Control Act; and P.L. 92-500, as amended.)
- h. Coastal Zone Management Act of 1972, as amended, P.L. 92-583; 16 U.S.C. 1451, *et seq.*
- i. Endangered Species Act of 1973, as amended, P.L. 93-205; 16 U.S.C. 1531, *et seq.*
- j. Estuary Protection Act, P.L. 90-454; 16 U.S.C. 1221, *et seq.*
- k. Federal Environmental Pesticide Control Act, P.L. 92-516; 7 U.S.C. 136.
- l. Federal Water Project Recreation Act, as amended, P.L. 89-72; 16 U.S.C. 460-1(12), *et seq.*
- m. Fish and Wildlife Coordination Act of 1958, as amended, P.L. 85-624; 16 U.S.C. 661, *et seq.*
- n. Historic Sites Act of 1935, as amended, P.L. 74-292; 16 U.S.C. 461, *et seq.*
- o. Land and Water Conservation Fund Act, P.L. 88-578; 16 U.S.C. 460/-460/-11, *et seq.*
- p. Migratory Bird Conservation Act of 1928; 16 U.S.C. 715.
- q. Migratory Bird Treaty Act of 1918; 16 U.S.C. 703, *et seq.*
- r. National Environmental Policy Act of 1969, as amended, P.L. 91-190; 42 U.S.C. 4321, *et seq.*
- s. National Historic Preservation Act of 1966, as amended, P.L. 89-655; 16 U.S.C. 470a, *et seq.*
- t. Native American Religious Freedom Act, P.L. 95-341; 42 U.S.C. 1996, *et seq.*
- u. Resource Conservation and Recovery Act of 1976, P.L. 94-580; 7 U.S.C. 1010, *et seq.*
- v. River and Harbor Act of 1899, 33 U.S.C. 403, *et seq.* (also known as the Refuse Act of 1899)
- w. Toxic Substances Control Act, P.L. 94-469; 15 U.S.C. 2601, *et seq.*
- x. Watershed Protection and Flood Prevention Act, as amended, P.L. 83-566; 16 U.S.C. 1001, *et seq.*
- y. Wild and Scenic Rivers Act, as amended, P.L. 90-542; 16 U.S.C. 1271, *et seq.*

2. EXECUTIVE ORDERS

- a. Executive Order 11593, Protection and Enhancement of the Cultural Environment. May 13, 1979 (36 FR 8921; May 15, 1971)
- b. Executive Order 11988, Floodplain Management. May 24, 1977 (42 FR 26951; May 25, 1977)
- c. Executive Order 11990, Protection of Wetlands. May 24, 1977 (42 FR 26961; May 25, 1977)
- d. Executive Order 11514, Protection and Enhancement of Environmental Quality, March 5, 1970, as amended by Executive Order, 11991, May 24, 1977
- e. Executive Order 12088, Federal Compliance with Pollution Control Standards, October 13, 1978
- f. Executive Order 12372, Intergovernmental Review of Federal Programs, July 14, 1982
- g. Executive Order 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements, August 3, 1993
- h. Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 11, 1994
- i. Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds

3. OTHER FEDERAL POLICIES

- a. Council on Environmental Quality Memorandum of August 11, 1980: Analysis of Impacts on Prime or Unique Agricultural Lands in Implementing the National Environmental Policy Act

- b. Council on Environmental Quality Memorandum of August 10, 1980: Interagency Consultation to Avoid or Mitigate Adverse Effects on Rivers in the National Inventory
- c. Migratory Bird Treaties and other international agreements listed in the Endangered Species Act of 1973, as amended, Section 2(a)(4)