



**US Army Corps  
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Buffalo District

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Cleveland Harbor  
Interim Dredged Material Management Plan  
Environmental Assessment  
Scoping Information Packet



March 5, 2012

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1776 Niagara Street  
Buffalo, New York 14207

## **Contents**

1. Introduction.....	3
2. Background.....	4
3. Need for Action and Study Overview.....	5
4. Proposed Actions and Measures.....	5
5. Environmental Impacts.....	7
6. Public Participation and Interagency Coordination.....	8
7. Compliance with Environmental Protection Statues.....	8
Federal Environmental Protection Laws, Executive Orders, and Policies.....	10

## 1. Introduction

Implementation of the National Environmental Policy Act (NEPA) requires that Federal agencies initiate “an early and open process for determining the scope of issues to be addressed and for identifying any significant issues related to the proposed action.” The purpose of this Scoping Information is to disseminate information regarding the U.S. Army Corps of Engineers (USACE), Buffalo District Cleveland Harbor Interim Dredged Material Management Plan, and to elicit comments from interested parties. This information 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.)

Cleveland Harbor is located on Lake Erie at the mouth of the Cuyahoga River. The harbor is 191 miles southwest of Buffalo, NY and 110 miles east of Toledo, Ohio (Figure 1). It measures about 1,300 acres, is 5 miles long and varies in width between 1,600 to 2,400 feet. The harbor is protected by a breakwater system: an east breakwater (20,970 feet long), a west breakwater (6,048 feet long), and the east and west arrowhead breakwaters (each measuring 1,250 feet). Authorized depths in this area range from 25 to 28 feet. The East and West Arrowhead Breakwater protect the Lake Approach Channel with an authorized depth of 29 feet. The Entrance Channel varies in width from 220 to 750 feet and is maintained at an authorized depth of 28 feet to the mouth of the Cuyahoga River. The lower Cuyahoga River Channel, from the lakeward side of the piers to immediately above the Old River confluence, is maintained to an authorized depth of 27 feet. The upper Cuyahoga River and turning basin are maintained to an authorized depth of 23 feet and 18 feet respectively.

Since the 1960's, five confined disposal facilities (CDFs) have been constructed at Cleveland Harbor (9, 10B, 12, 13, and 14). The current operational CDF, 10B, design capacity has been reached. Since 2006, measures have been implemented to extend the useful life of the CDF and this capacity will be full in 2014. In 2007, testing in accordance with joint U.S. Environmental Protection Agency (USEPA)/USACE protocols contained in the Great Lakes Dredged Material Testing and Evaluation Manual (1998), indicated that all sediment dredged from Cleveland Harbor and Cuyahoga River Channels is unsuitable for open lake and nearshore placement. All dredge sediment is currently disposed in a CDF. Sediment sampling is conducted approximately every five years and is scheduled for 2012.



Figure 1: Location of Cleveland Harbor, Ohio

## 2. Background

Capacity in the Cleveland Harbor CDFs for disposal of dredged sediment is limited. Additional capacity is required to continue the operation and economic viability of the port. To maintain (i.e., dredge) the federally authorized channel, a reduced quantity of approximately 225,000 cubic yards (cy) of sediment must be dredged and managed each year. Since 2006, the original design capacity of the existing CDFs has been extended using management strategies contained within the original design footprint of the CDFs. By the year 2015, a new disposal facility or other management method will have to be in place in order to continue dredging Cleveland Harbor.

The August 2009 draft Dredged Material Management Plan and Environmental Impact Statement (2009 DMMP-EIS) for Cleveland Harbor specified construction of a new waterfront CDF. Ultimately, the facility could not be constructed for financial reasons. Contained within the 2009 DMMP-EIS was also a review of potential beneficial uses of dredged material that included mine land reclamation, littoral nourishment, soil manufacture, wetlands/habitat creation, and landfill cover. However, none of these alternatives were considered feasible at that time nor carried forward for detailed analysis due to a lack of information and inability to refine the management concepts.

In 2011, a report was prepared by the USACE, Engineer Research and Development Center (ERDC) providing a review of the logistical and technical feasibility of beneficial use alternatives, including an analysis of the engineering and ecological suitability, environmental and regulatory acceptability, site specific logistical considerations, and preliminary cost estimates for implementing each of the beneficial use management options deemed feasible. A screening-level analysis of potential risk to human health demonstrated that the use of dredged material for topsoil or fill at commercial and industrial sites would be protective of human health. The potential risk and acceptability of using dredged material for surface soils at recreational sites will be dependent on the type of recreational activity and site construction methods. Construction methods can be used to reduce or eliminate potential risk to human health, further increasing the range of options for beneficial use of dredged material. The full report can be accessed at: <http://www.lrb.usace.army.mil/missions/cleveland/b-report.html>

### **3. Need for Action and Study Overview**

All existing Cleveland CDFs would have been filled to capacity in 2006 had USACE not implemented a variety of management measures (such as berm raisings). By the year 2015, additional disposal capacity or method will have to be available in order to continue dredging Cleveland Harbor. The Buffalo District will complete an Interim DMMP/Environmental Assessment (EA) that will assess short-term alternatives for dredged material placement from 2015 through 2018.

The Buffalo District has worked very closely with the project's stakeholders, including but not limited to, the Cleveland-Cuyahoga County Port Authority, City of Cleveland, and State regulatory agencies to identify sustainable alternatives for dredged material management in lieu of building new CDFs. During 2010, various beneficial use alternatives were brought to the attention of the Cleveland Harbor Dredging Task Force and the USACE, Buffalo District. The Interim DMMP/EA will assess a variety of alternative measures contained in the USACE, ERDC report and that have been presented at monthly Cleveland Harbor Dredging Task Force meetings.

### **4. Proposed Actions and Measures**

The selected alternative would include either one or a combination of the following alternatives.

Alternative 1: No Action - Under this alternative, the Federal Government would do nothing to address the need for interim placement of dredged material. Without dredging, the navigation channel would progressively shoal in and eventually impede commercial navigation. Deep-draft commercial navigation would become economically nonviable and gradually cease.

Alternative 2: Brook Park Landfill - Brook Park is a 28-acre landfill located south of Hopkins Airport that is owned by the City of Cleveland. The City is currently developing plans for capping and filling the former landfill in order to accommodate industrial development of the site, including potential use as a solar collection farm. The site is easily accessible for truck transportation and has a capacity for accepting 350,000 to 500,000 cy of dredged sediment depending on the final site development plans. Development of the site will require geotechnical survey and engineering analysis of site stability, storm water control, and protection of the adjacent Abrams Creek. The City planned to complete environmental and geotechnical assessments in 2011 to confirm the feasibility of developing the site. The site is anticipated to be ready to receive dredged sediment as early as 2013.

Alternative 3: Silver Oak Landfill - Silver Oak is a 27-acre inactive construction and demolition landfill located on a 49-acre site at 26101 Solon Rd, Oakwood Village, Ohio. Negotiations for closure of the landfill under OEPA rules are currently underway between representatives of the the landfill owner and the Cuyahoga County Board of Health. Closure of the landfill will require contouring the landfill and construction of a compacted cap requiring a minimum of 100,000 cy of fill or dredged sediment. Due to the current configuration of the landfill, construction of the final cap and vegetative cover may require a modification to the original landfill design and permit. The site is located adjacent to the Cleveland MetroPark Bedford Reserve which is adjacent to Tinkers Creek. This is a high quality recreation area that includes picnic areas, hiking trails, and horseback riding trails. Upstream of the landfill, Tinkers Creek drops 220 feet over a two mile reach where a steep, walled gorge is the dominant landform surrounding the creek. The gorge, declared a National Natural Landmark, is a unique area with numerous tree, shrub, and flower species. Additional dredged sediment could be used for contouring and landscaping the site (Silver Oak) for use as an upland nature preserve, creating the opportunity to use an additional 200,000 cy of dredged sediment.

Alternative 4: Adding capacity at existing CDFs - USACE will be developing a plan to optimize capacities through mounding dredged sediment in CDFs 10B, 9, and 12. The dredged sediment would be mechanically placed in the CDFs and graded to meet structural and slope stability requirements. Due to the proximity to Burke Lakefront Airport, the project must comply with Federal Aviation Administration requirements. The height and slope of the mounded sediment would be determined during further alternative development based largely on results of geotechnical analysis of the CDFs. Locations and methods of mechanical offloading of dredged sediment would also be analyzed.

Alternative 5: CVIC site - The Cuyahoga Valley Industrial Center (CVIC) is a 58-acre brownfield development located at 3183 Independence Road controlled by a public-private partnership dedicated to attracting development to the City. The need for significant quantities of construction fill to bring the site to finished grade makes it an attractive prospect for the beneficial use of dredged sediment. This site has previously obtained Ohio EPA approval for receipt of dredged sediment in 2010. The estimated capacity at the site is 300,000 cy.

The buildable site is currently for sale and there is no assurance that the presently available capacity can be retained for purposes of this Interim DMMP. However, in the event capacity at the site is preserved, a project could consist of two options: 1) removal of sediment from the adjacent upper Cuyahoga River during dredging operations with direct truck transport to the nearby site, or; 2) Excavation of sediment from the existing CDFs with truck transport to the site.

There is a possibility that this alternative could be implemented as a disposal site option in conjunction with dredging as early as the fall of 2012. If this were to occur, it would be preceded by a separate Environmental Assessment.

Alternative 6: Cleveland Lakefront Nature Preserve - The Cleveland Lakefront Nature Preserve is an 88-acre CDF, formerly CDF14, on Cleveland's east side along Lake Erie. Approximately 6 million cy of sediment from Cleveland Harbor was placed into CDF 14 from 1979 to 1999. In 1999, the site was transferred to the non-Federal sponsor, Cleveland-Cuyahoga County Port Authority, and is currently managed as a nature preserve. In 2007, a study conducted by OEPA indicated that the site can be used safely as a nature preserve and recreation site for hiking and bird watching. OEPA has indicated that a five acre section of the facility contains pollutants with measured levels above residential land use standards established by OEPA. The contaminants of concern include polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and lead. The preliminary remediation plan is to place a 4-foot cap of soil or dredged sediment on top of the area that has elevated concentrations of contaminants. Approximately 28,500 cy of material would be needed to cover the five acre area and reduce potential future exposure to people and wildlife.

Alternative 7: ODOT Transportation Projects - The Ohio Department of Transportation (ODOT) is planning roadway construction projects in the Cleveland area. It is anticipated that these projects could require significant quantities of top soil/fill if the projects proceed to construction. Currently, ODOT is in the process of reviewing the schedules for the projects and the State of Ohio is evaluating funding priorities.

## 5. Environmental Impacts

Future conditions with the no-action alternative, as well as potential impacts associated with the proposed action and alternatives, will be assessed for several social, economic, and environmental categories including:

- Biological Resources
- Recreation
- Cultural Resources
- Socioeconomics
- Transportation
- Geology and Soils

- Water Resources
- Solid Waste Management
- Contaminated Materials
- Air Quality
- Noise
- Aesthetics
- Health and Safety
- Environmental Justice

## 6. Public Participation and Interagency Coordination

Throughout the scoping process, stakeholders and interested parties are invited to provide comment on the alternatives that will be evaluated in the Cleveland Harbor Interim Dredged Material Management Plan. An Environmental Assessment will evaluate the potential social, economic, and environmental effects that may be expected from each alternative plan selected for detailed analysis.

## 7. Compliance with Environmental Protection Statues

a. National Environmental Policy Act (NEPA) In accordance with the Council on Environmental Quality’s “Regulations for Implementing the Procedural Provisions of the NEPA of 1969” (40 CFR 1500-1508) and Engineer Regulation 200-2-2 (Procedures for Implementing NEPA), the USACE, Buffalo District 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 judged by comparing the “with-project” and “without-project” conditions. The Environmental Assessment process will determine if an Environmental Impact Statement is required, or if an Environmental Assessment and Finding of No Significant Impact (FONSI) is appropriate.

b. Clean Water Act It is expected that a plan will be proposed for implementation that involves the placement of dredged or fill material in an upland disposal facility where there may be a discharge (return water) back into waters of the U.S. Therefore, the project will be evaluated in accordance with the guidelines promulgated by the Administrator of the U.S. Environmental Protection Agency in conjunction with the Secretary of the Army under the authority of Section 404(b)(1) of the Act. A Section 404(a) Public Notice will be issued and any party that may be significantly impacted by the project will be afforded the opportunity to request a public hearing. Under Section 401 of the Act, certification from the Ohio Environmental Protection Agency that the proposed project is in compliance with established water quality standards will be requested.

If the proposed project will involve any construction activities affecting one acre or more, a National Pollution Discharge Elimination System stormwater permit will be required.

c. National Historic Preservation Act Under Section 106 of this Act, this Scoping Information initiates USACE consultation with the National Park Service, the Ohio Historic Preservation

Office, interested Indian Nations, historic preservation organizations, and others likely to have knowledge of, or concern with, historic properties that may be present within the area of potential effect. A Section 106 Review Project Summary Form, sent under separate cover, will additionally initiate consultation with the Ohio State Historic Preservation Office.

d. Coastal Zone Management Act. The Act requires that Federal actions reasonably likely to affect any land or water use or natural resource of the coastal zone, regardless of location, be consistent with approved state coastal management programs. A Federal consistency determination will be submitted to the Ohio Department of Natural Resources (ODNR), Office of Coastal Management for their concurrence.

e. Endangered Species Act. In accordance with Section 7 of this Act, USACE, Buffalo District is requesting information from the U.S. Fish and Wildlife Service (USFWS) on any listed or proposed species, or designated or proposed critical habitat that may be present in the project area. If this consultation with USFWS identifies any such species or critical habitat, then USACE, Buffalo District will conduct a biological assessment to determine the proposed project's effect on these species or critical habitat.

f. Fish and Wildlife Coordination Act. USACE, Buffalo District is coordinating this study with the Reynoldsburg Field Office of the USFWS and ODNR, Division of Wildlife. USACE, Buffalo District will collaborate with these agencies to identify any 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 will be given to their comments and recommendations resulting from this coordination.

g. Other Coordination Requirements. In addition to the aforementioned Federal statutes, the proposed project must also comply with other applicable or relevant and appropriate Federal laws as provided in the comprehensive list below. Therefore, an additional intent of this scoping information packet is to disseminate pertinent project information to meet the applicable coordination/consultation requirements required under their provisions.

The purpose of the scoping process is to provide an opportunity for the public and governmental agencies to comment on and provide input to help identify issues related to the proposed project to be addressed in the Environmental Assessment. If, after this evaluation, it is concluded that the proposed project would have no significant environmental impacts and an environmental impact statement is not required, the District Commander will sign a FONSI.

Comments and input about the issues and studies for the proposed project will be accepted **30 days from the date of this scoping document** and should be sent to:

U.S. Army Corps of Engineers, Buffalo District  
Environmental Analysis Team  
ATTN: Christine M. Cardus, Biologist  
1776 Niagara Street  
Buffalo, NY 14207-3199

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## Federal Environmental Protection Laws, Executive Orders, and Policies

### 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 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 Barrier Resources Act of 1982, 16 U.S.C. § 3501 *et seq.*; 12 U.S.C. § 1441 *et seq.*
- (i) Coastal Zone Management Act of 1972, as amended, P.L. 92-583; 16 U.S.C. 1451, *et seq.*
- (j) Endangered Species Act of 1973, as amended, P.L. 93-205; 16 U.S.C. 1531, *et seq.*
- (k) Estuary Protection Act, P.L. 90-454; 16 U.S.C. 1221, *et seq.*
- (l) Federal Environmental Pesticide Control Act, P.L. 92-516; 7 U.S.C. 136.
- (m) Federal Water Project Recreation Act, as amended, P.L. 89-72; 16 U.S.C. 460-1(12), *et seq.*
- (n) Fish and Wildlife Coordination Act of 1958, as amended, P.L. 85-624; 16 U.S.C. 661, *et seq.*
- (o) Historic Sites Act of 1935, as amended, P.L. 74-292; 16 U.S.C. 461, *et seq.*
- (p) Land and Water Conservation Fund Act, P.L. 88-578; 16 U.S.C. 460/-460/-11, *et seq.*
- (q) Migratory Bird Conservation Act of 1928; 16 U.S.C. 715.
- (r) Migratory Bird Treaty Act of 1918; 16 U.S.C. 703, *et seq.*
- (s) National Environmental Policy Act of 1969, as amended, P.L. 91-190; 42 U.S.C. 4321, *et seq.*
- (t) National Historic Preservation Act of 1966, as amended, P.L. 89-655; 16 U.S.C. 470a, *et seq.*
- (u) Native American Religious Freedom Act, P.L. 95-341; 42 U.S.C. 1996, *et seq.*
- (v) Resource Conservation and Recovery Act of 1976, P.L. 94-580; 7 U.S.C. 1010, *et seq.*
- (w) River and Harbor Act of 1899, 33 U.S.C. 403, *et seq.* (Also known as the Refuse Act of 1899.)
- (x) Submerged Lands Act of 1953, P.L. 82-3167; 43 U.S.C. 1301, *et seq.*
- (y) Surface Mining and Reclamation Act of 1977, P.L. 95-89; 30 U.S.C. 1201, *et seq.*
- (z) Toxic Substances Control Act, P.L. 94-469; 15 U.S.C. 2601, *et seq.*
- (aa) Watershed Protection and Flood Prevention Act, as amended, P.L. 83-566; 16 U.S.C. 1001, *et seq.*
- (bb) 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.

### **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).