



IN REPLY REFER TO:

DEPARTMENT OF THE ARMY
DETROIT DISTRICT, CORPS OF ENGINEERS
477 MICHIGAN AVE.
DETROIT, MICHIGAN 48226-2550

March 7, 2014

Planning Office
Environmental Analysis Branch

TO ALL INTERESTED AGENCIES, PUBLIC GROUPS, AND CITIZENS

The enclosed Environmental Assessment (EA)—*Transfer and Storage of Dredged Material, Sebewaing Harbor, Michigan*—is provided for your review. The EA addresses the potential environmental impacts associated with excavating previously placed dredged material from the Sebewaing Harbor confined disposal facility (CDF) to provide capacity for needed maintenance dredging. Excavated material would be placed at an existing upland site (South Upland Site) and at a newly proposed site (North Upland Site) located adjacent to the CDF. The navigation project at Sebewaing Harbor is authorized by the Rivers and Harbors Act of 3 June 1896.

Alternatives considered include 1) Excavate the CDF, 2) Construct New Hydraulic Facility, and 3) No Action. The proposed action is Alternative 1, Excavate the CDF. Environmental review indicates that the proposed action would not result in significant adverse environmental effects, nor would it be expected to result in any significant cumulative or long-term adverse environmental effects. Adverse effects would be minor, limited primarily to short-term noise and air emissions from equipment operation, and limited aesthetic effects during construction. The proposed action supports maintenance dredging for continued navigation in Sebewaing Harbor.

No material would be placed in the waters of the United States in the proposed transfer and storage of dredged material excavated from the CDF. The proposed action is within the coastal zone as designated by the State of Michigan, but would have no effect on the coastal zone and is therefore consistent to the maximum extent practicable with the State of Michigan Coastal Zone Management program. The proposed action complies with the Federal Executive Order on Flood Plain Management (E.O. 11988) because it would not encourage floodplain development nor induce flooding.

Any comments you may have concerning the proposed action should be made within thirty (30) days from the date of this notice. If no comments are received by the end of the thirty (30) day review period, it will be assumed that you have no comment. Please direct your comments to:

U.S. Army Engineer District, Detroit
ATTN: CELRE-PL-E (Charles A. Uhlarik)
477 Michigan Avenue
Detroit, Michigan 48226-2550

Following the comment period and a review of the comments received, the District Engineer (Detroit District, Corps of Engineers) will make a final decision regarding the necessity of preparing an Environmental Impact Statement (EIS) for the proposed action. Based on the conclusions of the EA, it appears that preparation of an EIS will not be required; therefore, a preliminary Finding of No Significant Impact has been included in the EA.



Jim E. Galloway
Chief, Planning Office

Enclosure

ENVIRONMENTAL ASSESSMENT

Transfer and Storage of Dredged Material Sebewaing Harbor, Michigan



March 2014

U.S. Army Engineer District, Detroit
Corps of Engineers, CELRE-PL-E
477 Michigan Avenue
Detroit, Michigan 48226-2550
313-226-6752

ENVIRONMENTAL ASSESSMENT

Transfer and Storage of Dredged Material Sebewaing Harbor, Michigan

INTRODUCTION AND PROJECT AUTHORITY

The U.S. Army, Corps of Engineers, Detroit District (USACE), in support of needed maintenance dredging at Sebewaing Harbor, Michigan, proposes to excavate dredged material from the Sebewaing Harbor confined disposal facility (CDF) and to permanently store the excavated material in upland sites. This Environmental Assessment addresses the transfer and storage of the dredged material to be excavated from the CDF. Maintenance dredging and the construction and operation of the CDF are addressed in a 1978 Environmental Impact Statement¹. The existing South Upland Site was addressed in 1996².

Sebewaing Harbor is at the mouth of the Sebewaing River on the southeast shore of Saginaw Bay, Lake Huron, approximately 35 miles northeast of Saginaw and 100 miles north of Detroit, Michigan. The navigation project at Sebewaing Harbor is authorized by the Rivers and Harbors Act of 3 June 1896. The Federal navigation channel extends from the 8-foot depth contour in Saginaw Bay approximately 15,000 feet upstream (Figure 1). The navigation channel is 100 feet wide and has an authorized depth of 8 feet. A narrower, flood-control channel extends an additional 7,000 feet upstream to the confluence of the State and Columbia Drains.

PROJECT PURPOSE AND NEED

The purpose of the proposed action is to support maintenance dredging by providing storage capacity for shoal material to be dredged from Sebewaing Harbor. This is needed because shoaling is impacting navigation and will likely worsen over time. The existing dredged material placement sites at Sebewaing do not have capacity to accommodate the dredging quantity (approximately 55,000 cubic yards) necessary to restore navigable channel depths (approximately 5-6 feet).

Navigation at Sebewaing Harbor is important because Sebewaing Harbor serves as a Harbor of Refuge from storms and other boater emergencies and supports charter fishing and recreational navigation interests. Navigation at Sebewaing is also economically important because significant income-generating infrastructure has been established over the years focused on the harbor facilities and serving the local community as well as tourists. Significant impacts on navigability and harbor use would occur if shoaling continues and is not addressed. Over the long term this could result in loss of jobs locally, including those in charter fishing, and loss of recreational fishing opportunities.

¹ 1978. Final Environmental Impact Statement, Sebewaing River, Michigan. Operations and Maintenance, Confined Disposal Facility & Flood Control Facilities. U.S. Army Corps of Engineers, Detroit.

² 1996. Environmental Assessment, Sebewaing Harbor, Huron County, Michigan. Upland Disposal of Dredged Material. U.S. Army Corps of Engineers, Detroit.

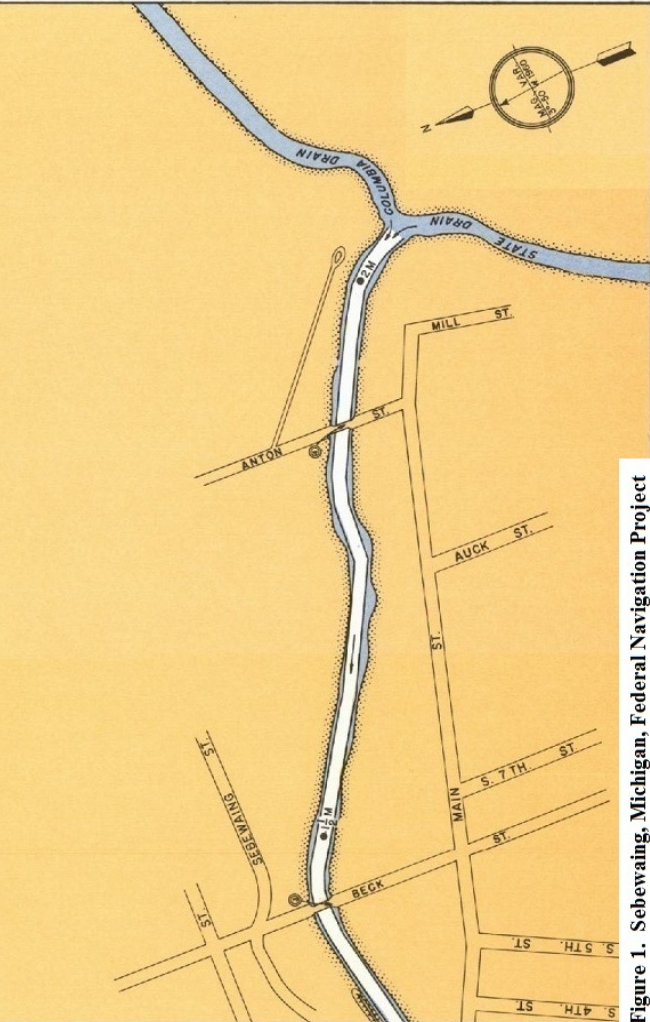
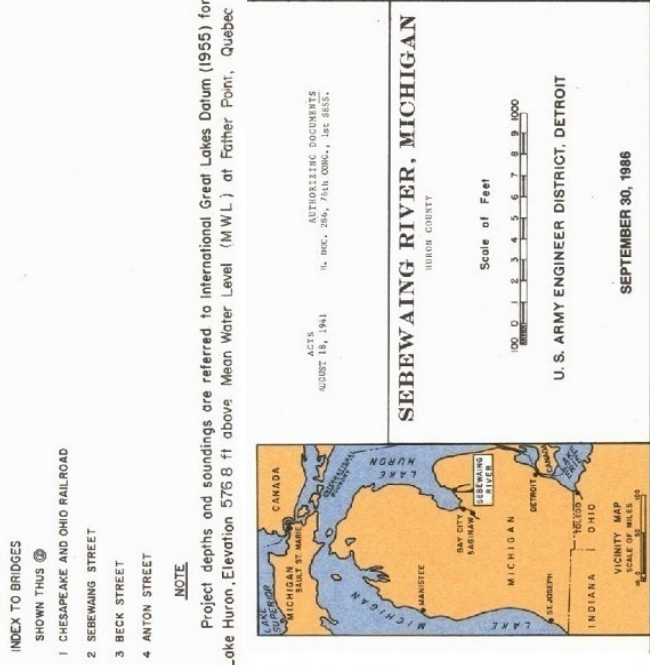
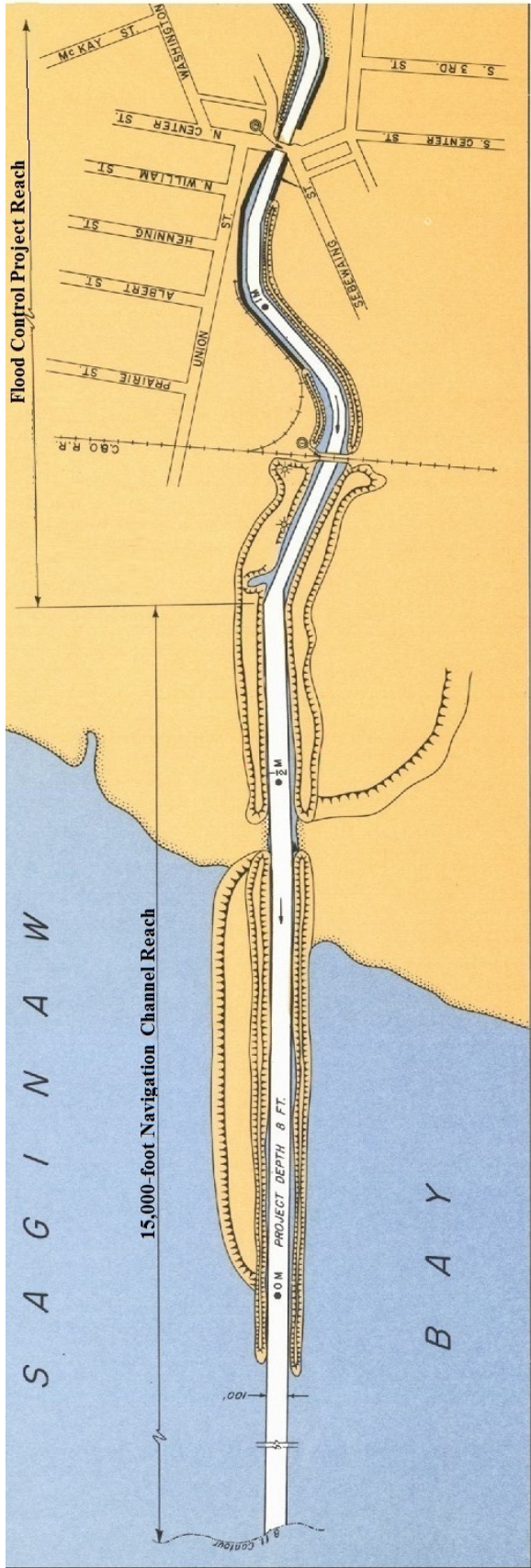


Figure 1. Sebewaing, Michigan, Federal Navigation Project

ALTERNATIVES CONSIDERED

Alternatives considered³ to support maintenance of the navigation channel include: 1) Excavate the CDF, 2) Construct New Hydraulic Facility, and 3) No Action. Under alternative 1 previously placed dredged material would be excavated from the CDF and placed into a newly proposed site (North Upland Site), with some of the material placed into the existing South Upland Site (Figure 2). The North Upland Site, which is owned by Sebewaing Township, is located immediately adjacent to the CDF. Under Alternative 2, the North Upland Site would be used for construction of a new diked facility for direct placement of hydraulically⁴ dredged material.

The proposed action is Alternative 1, Excavate the Existing CDF. Alternative 1 was selected for the simplicity of reusing the existing CDF as opposed to constructing a new facility for hydraulic dredged material placement, and because it would provide the needed capacity at a single location, which will improve operational efficiency for the hydraulic discharge. Since the material is being mechanically excavated, engineered dikes are not needed at the proposed North Upland Site. Erosion control berms would be formed from some of the first excavated CDF material placed at the site

Under Alternative 2, Construct New Hydraulic Facility, the area of the proposed North Upland Site (Alternative 1) would be used for direct placement of hydraulically dredged material. For direct hydraulic placement, the site would require engineered dikes to contain the hydraulic slurry (typically about 75% water and 25% solids), and an outlet weir to discharge the excess water. Engineering, design, and construction of these features would delay dredging and increase cost over that of Alternative 1.

Under Alternative 3, No Action, the Corps would not dredge the Sebewaing Harbor. This is not a viable option as it does not provide for maintenance dredging at Sebewaing Harbor. While a small amount of capacity remains at the two existing dredged material sites (CDF and South Upland Site), it is not cost effective to mobilize a dredging plant and associated equipment for the limited amount of dredging that could be completed. The last dredging cycle was limited to “critical shoals” because of this limited remaining capacity, which is part of the reason the current dredging need is up to 80,000 cubic yards.

Consideration of the “No Action” alternative is required under the National Environmental Policy Act (NEPA). Under No Action the Sebewaing Harbor navigation channel would not be dredged by the USACE. As such, the No Action Alternative is synonymous with the Future Without Project condition, which forms the basis for evaluating the effects of the action alternatives.

³ Open water placement in Saginaw Bay was considered but rejected because the shallow nature of Saginaw Bay presents a high potential for the material to be moved by wave action, potentially burying shallow water spawning habitat in the area.

⁴ Mechanical dredging is not considered at this time because the offloading site at the north end of the CDF, in its present condition, will not safely support equipment needed for mechanical offloading.

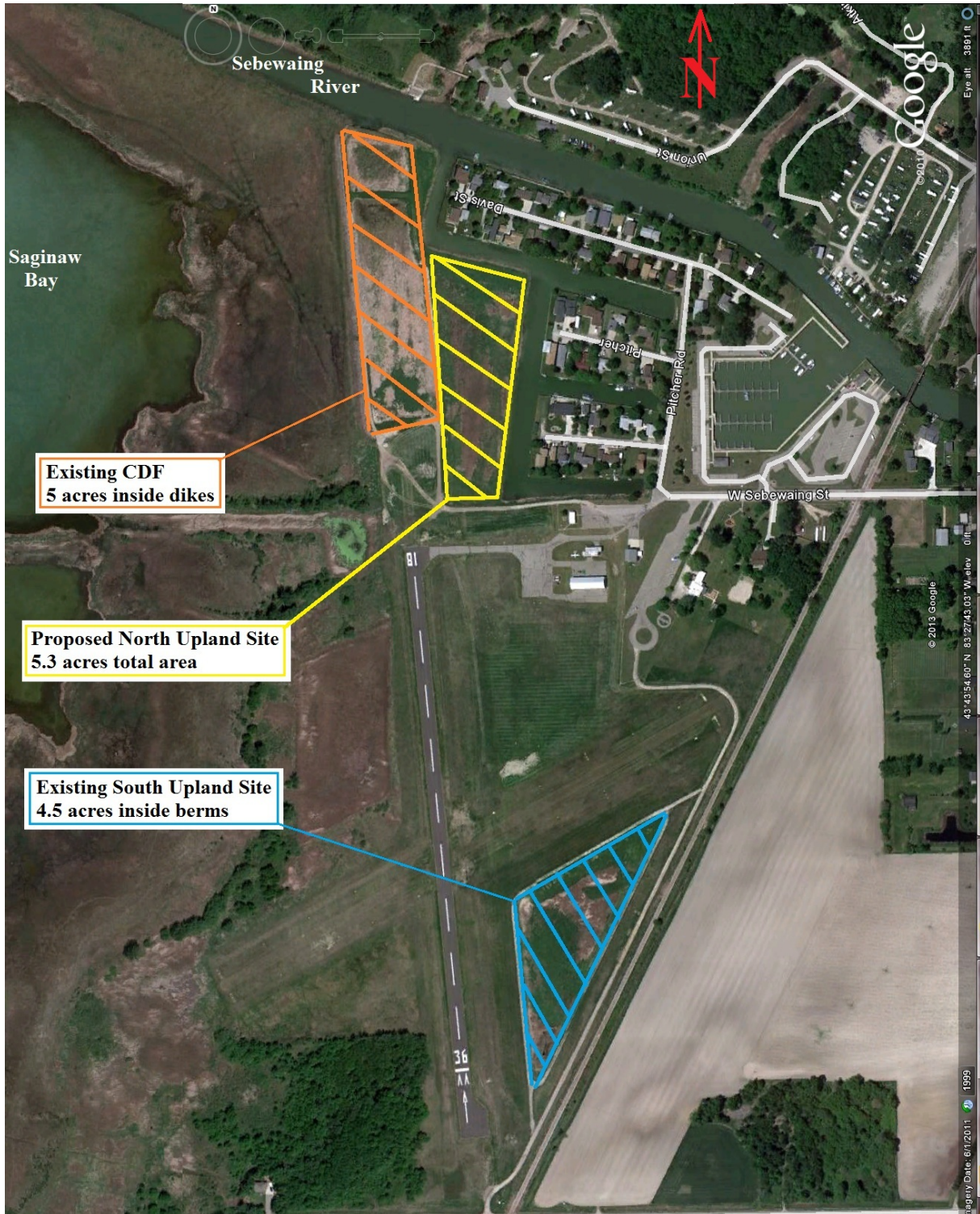


Figure 2. Approximate Locations of Existing and Proposed Dredged Material Storage Sites.

Description of the Proposed Action: Material excavated from the CDF would be placed directly on the proposed North Upland Site using appropriate erosion and sedimentation controls (including berms) to prevent loss of material from the site.⁵ The drier material first excavated from the CDF would be stabilized around the perimeter of the North Upland Site and seeded for permanent erosion control. Wetter material from deeper in the CDF would be placed within this perimeter, which will serve to contain the material. To maximize capacity in the CDF, some of the excavated material would also be trucked to the South Upland Site.

At present, the CDF has a remaining capacity of approximately 8000 cubic yards (cy) and the South Upland Site has a remaining capacity of approximately 27,000 cy. The proposed plan is to excavate 72,000 cy from the CDF and place approximately 27,000 cy in the South Upland Site and approximately 45,000 cy in the newly proposed North Upland Site. The maximum elevation of the new North Upland Site will be at 588 feet (IGLD, 1985), which is the same elevation as the CDF (Figure 3). While the CDF will have a capacity of 80,000 cy (8000 current plus 72,000 excavation), without special procedures to speed consolidation of the material (e.g., adding a flocculent) only about 55,000 cubic yards of material can be dredged in a single dredging season because the need for material settling and decanting of excess water associated with hydraulic dredging limits available capacity to about 2/3 of actual capacity.

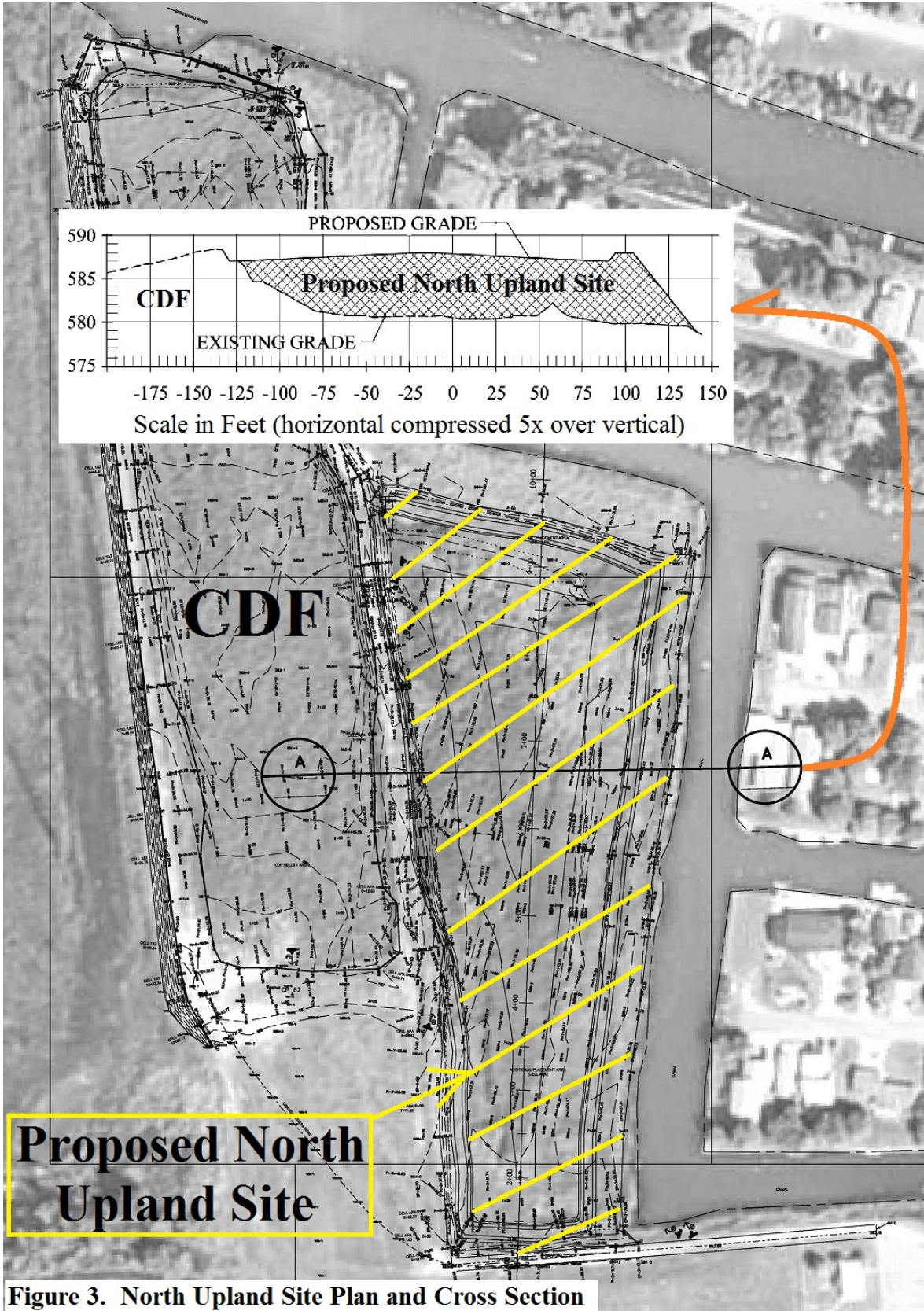
The proposed action may require temporary structures and/or staging areas. These locations cannot be determined at this time, since they would be incidental to the work being performed. Examples are work and storage areas, access roads, and office facilities. Temporary structures or fill material would be at USACE-approved locations within project boundaries or rights-of-way, outside of any wetlands, areas containing Federal or state protected species or their critical habitat, or properties listed on or eligible for listing on the National Register of Historic Places or state-listed properties. Temporary activities will include appropriate precautionary measures to prevent erosion and sedimentation or other undesirable environmental impacts. These construction aids would be removed when no longer needed and their sites would be restored to pre-project conditions upon project completion.

Some variation in design details may occur as a result of unanticipated design improvements, site conditions, or cost-saving measures. Any variations that result in a significant change to the project design or environmental impacts would be further evaluated under the National Environmental Policy Act.

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

Review of the proposed action indicates that it would not result in significant adverse environmental effects, nor would it be expected to result in any significant cumulative or long-term adverse environmental effects. Adverse effects would be minor, limited primarily to short-term noise and air emissions from equipment operation and limited aesthetic effects during construction. The proposed action supports maintenance dredging for continued navigation in Sebawaing Harbor.

⁵ Applicable erosion control permits would be obtained by the construction contractor as a USACE contract condition.



Wetlands, Aquatic Habitat, Water Quality: No impacts. All work is in upland areas. There are no direct water quality impacts from excavating the CDF and placing the material for upland storage. Work sites are adjacent to the waterway, so indirect effects on water quality would be controlled through sedimentation and runoff prevention measures (required as conditions of the construction contract) such as berms, seeding, silt fencing, and/or straw bales as necessary.

Vegetation/Wildlife Habitat: The proposed North Upland Site is between the existing CDF and a canal that serves a residential area. The site is composed of fill material. Three representative sample points were evaluated in July 2011 by USACE Regulatory field staff. They noted that while the site exhibits hydrophytic vegetation, the site lacks any evidence of hydrology or hydric soils, and therefore does not meet the USACE Regulatory criteria for a wetland. The site vegetation is predominantly herbaceous and is about 80 percent reed canary grass (*Phalaris arundinacea*). Other plants included common milkweed at approximately 5 percent cover at two sample points, Kentucky bluegrass at about 11 percent cover at all three sample points, geranium at 13 percent at one sample point, and reed canary grass at 19 percent in one sample plot.

There are no trees at any of the sites (CDF, North Upland Site, and South Upland Site). The sites do not provide unique or important wildlife habitat. Wildlife would not be significantly affected by project activities which are short-term. Better habitat is plentiful in the immediate area for wildlife displaced by the proposed activities.

Endangered and Threatened Species: Federal listings under the Endangered Species Act Huron County, Michigan, include Indiana bat (endangered), Northern long-eared bat (proposed endangered), rufa red knot (proposed threatened), Eastern massasauga (candidate for listing), Pitcher's thistle (threatened), and Eastern prairie fringed orchid (threatened). The areas to be affected by the proposed excavation of the CDF and material storage in the proposed North Upland Site and existing South Upland Site do not contain trees and so would not provide habitat for either of the bat species. The sites do not include any coastal aquatic habitat, mesic to wet prairie or meadow, or stabilized dunes and blowout areas, and thus do not include habitat for migrating rufa red knot birds, Eastern prairie fringed orchid, or Pitcher's thistle. The sites are likely too dry to provide suitable habitat for eastern massasauga. Therefore, our determination is that the proposed upland dredged material placement at Sebewaing, Michigan, would have no effect on any of the species listed as occurring in Huron County.

Sediment and Soils: Sediment samples from the Sebewaing Harbor navigation channel were tested in March 2006. This sampling revealed low concentrations of nutrients and metals, while chlorinated organics and polychlorinated biphenyls (PCBs) were below minimum detection levels. The physical character of the sediments ranges from primarily sand to primarily silt. This material is suitable for unrestricted upland placement. These 2006 results are consistent with prior year's sampling efforts over the duration of material placement into the CDF, which began in 1980. Soils at the CDF and South Upland Site are former dredged material. Soil at the North Upland Site is sand.

Floodplains: The proposed action would occur within the 100-year floodplain as depicted on the Federal Emergency Management Agency National Flood Insurance Program map. The proposed action complies with the Federal Executive Order on Flood Plain Management (E.O. 11988) because it would not adversely impact flood stages, since it is located in a lakeshore floodplain where there is no flow to be impacted such as would occur with a riverine floodplain; the

proposed action would not encourage floodplain development; and there is no practicable alternative to construction in the flood plain.

Cultural Resources: In compliance with Section 106 of the National Historic Preservation Act of 1996 (NHPA) and Executive Order 11593 (Protection and Enhancement of the Cultural Environment, May 1971), we have evaluated the proposed upland dredged material storage site and have determined it is comprised of fill placed in the 1940s. Also, there are no properties listed on, or eligible for listing on, the National Register of Historic Places in the proposed upland dredged material storage site. Therefore, the USACE has made a determination of "no historic properties affected" for this project under 36 CFR 800.4 of the NHPA. This determination has been sent to the State Historic Preservation Office and local Native American tribes for review concurrent with the public review of this Environmental Assessment.

Recreation, Noise, and Aesthetics: The project would not have significant adverse effects on recreation, noise, or aesthetics. The project will support maintenance dredging of a recreational harbor. There is a residential neighborhood situated around a series of finger canals immediately east of the proposed North Upland Site. Immediately south of the project site and residential area is an airport. To the east of the residential area is a marina. Two campgrounds are along the north bank of the Sebewaing River, one across from the residential area and one across from the marina. The housing and campgrounds are included among potential noise receptors, but should not be disturbed by project activities considering the proximity of the airport, marina, canals, and river navigation channel and associated aircraft and boat noise inputs to the area. The project induced noise would be a temporary effect for the duration of a dredging season. Aesthetic impacts of the project activities are also temporary. The elevation of the placed dredged material at the North Upland Site should not obstruct views since it is immediately adjacent to the existing CDF and would be to the same maximum elevation as the CDF.

Traffic: Traffic impacts would be temporary and minimal, comprised of a minor increase in truck traffic, primarily within the airport property. All truck activity would use approved hauling routes and abide by local, state, and federal requirements.

Air Quality: Effects on air quality would arise from emissions of motorized construction equipment. All equipment would be required to meet emission standards and emissions are expected to be minor. Thus, the proposed project would be exempted as *de minimis* (Latin for 'of minimal importance') and meet the Conformity Requirements under Section 176(c) of the Clean Air Act, as amended, and 40 C.F.R. 93.153.

Coastal Zone Management: The proposed CDF excavation and upland storage activity is within the coastal zone of the State of Michigan, but would have no adverse effects on the waters of Lake Huron/Saginaw Bay since erosion and sedimentation control measures will be incorporated and there is not work in the waters of the U.S. as the excavated material will be placed in upland storage sites. Therefore, the project is "consistent to the maximum extent practicable" (as defined in 16 U.S.C. 1456, Coastal Zone Management Act) with the Michigan Coastal Management Program.

Cumulative Impacts: The proposed CDF excavation activity would not result in significant cumulative or long-term adverse environmental impacts. The new North Upland Site and the existing South Upland Site are both disturbed sites comprised of fill material. Placement of

dredge material at these sites would not adversely impact the sites or adjacent sites. Sebewaing Township has indicated they have no plans to expand the airport or any other facilities near the project site. The remaining area is well developed with the airport to the south, the residential area to the east, the river to the north, and wetlands to the west. Development that may cumulatively interact with the proposed action is unlikely.

Other Resources: The project would not have a significant adverse impact on community cohesion, desirable community growth, tax revenues, property values, public facilities, public services, regional growth, employment or the labor force, business and industrial activity, farmland, or man-made resources, nor would the project cause displacement of people.

EARLY COORDINATION

Information on the proposed action was provided to the U.S. Fish and Wildlife Service, the U.S. Environmental Protection Agency, the Michigan Department of Environmental Quality, the USDA Natural Resource Conservation Service, the Federal Aviation Administration, and various Native American Tribes and groups (notice January 10, 2014)⁶. No comments have been received to date. Further opportunity to comment is provided as noted in the Public Review section farther below.

CONCLUSIONS AND DETERMINATIONS

The proposal to excavate the Sebewaing Harbor CDF and place the excavated material in upland sites (one existing and one proposed) has been reviewed pursuant to the following Acts and Executive Orders: Fish and Wildlife Act of 1956; Fish and Wildlife Coordination Act of 1958; National Historic Preservation Act of 1966; National Environmental Policy Act of 1969; Clean Air Act of 1970; Executive Order 11593, Protection and Enhancement of the Cultural Environment, May 1971; Coastal Zone Management Act of 1972; Endangered Species Act of 1973; Clean Water Act of 1977; Executive Order 11988, Flood Plain Management, May 1977; and Executive Order 11990, Wetland Protection, May 1977. The proposed action has been found to be in compliance with these Acts and Executive Orders.

As the North Upland Site is near the Sebewaing Airport, which serves private recreational aircraft, the Federal Aviation Administration (FAA) has been contacted. FAA airport height restriction regulations have been consulted in developing the proposed plan. Additionally, the finalized site plan will be provided to the FAA and the State of Michigan Bureau of Aeronautics for their review.

This Environmental Assessment has been prepared in accordance with the National Environmental Policy Act (NEPA); the Council on Environmental Quality, *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act* (40 CFR Parts 1500-1508); and the Corps of Engineers, *Policy and Procedure for Implementing NEPA* (33 CFR Part 230).

⁶ Section 106 coordination under the National Historic Preservation Act was sent to the Michigan State Historic Preservation Office on February 19, 2014, and to the tribes on February 20, 2014.

This Environmental Assessment concludes that 1) there are no significant cumulative or long-term adverse environmental impacts associated with the proposed action; 2) the benefits outweigh the minor, temporary impacts that may result; and 3) it does not constitute a major Federal action significantly affecting the quality of the human environment.

PUBLIC REVIEW

This Environmental Assessment will be made available to the public for a 30-day review period. Following this period and a review of the comments received, a final determination will be made by the USACE District Engineer regarding the necessity of preparing an Environmental Impact Statement (EIS) for the proposed CDF excavation and upland dredged material storage at Sebewaing, Michigan.

Based on the conclusions of this Environmental Assessment, it appears that preparation of an EIS will not be required. Therefore, a Preliminary Finding of No Significant Impact (FONSI) is included in the next section of this Environmental Assessment. If the District Engineer determines that an EIS is not necessary, the Preliminary FONSI would be finalized and the proposed CDF excavation would be implemented.

PRELIMINARY FINDING OF NO SIGNIFICANT IMPACT

In accordance with the National Environmental Policy Act of 1969, the U.S. Army Corps of Engineers, Detroit District, in support of maintenance dredging at Sebewaing Harbor, Michigan, has assessed the potential environmental impacts of excavating previously placed dredged material from the Sebewaing Harbor confined disposal facility (CDF) to provide capacity for needed maintenance dredging. The navigation project at Sebewaing Harbor is authorized by the Rivers and Harbors Act of 3 June 1896. Sebewaing Harbor is located approximately 100 miles north of Detroit, Michigan, along the south shore of Saginaw Bay, Lake Huron. Excavated material from the CDF would be placed at an existing upland site (South Upland Site) and at a newly proposed site adjacent to the CDF (North Upland Site). Alternatives considered include 1) Excavate the CDF, 2) Construct New Hydraulic Facility, and 3) No Action. The proposed action is Alternative 1, Excavate the CDF, which provides a more cost effective solution than Alternative 2.

An Environmental Assessment (EA) for the proposed North Upland Site and transfer and storage of the excavated dredged material has been completed. The EA indicates the project would not result in significant short-term, long-term, or cumulative adverse environmental effects. Adverse effects would be limited primarily to minor, short-term noise and air emissions from equipment operation and limited aesthetic effects during construction. The proposed action supports maintenance dredging for continued navigation in Sebewaing Harbor.

The proposed action complies with the Federal Executive Order on Flood Plain Management (E.O. 11988) because it would not adversely impact flood stages, since it is located in a lakeshore floodplain, and it would not encourage floodplain development; there is no practicable alternative to construction in the flood plain. The proposed project is within the coastal zone of the State of Michigan, but would have no adverse effects on the waters of Lake Huron/Saginaw Bay; there is no in-water work and appropriate sediment and erosion controls would be implemented. Therefore, the project is “consistent to the maximum extent practicable” (as

defined in 16 U.S.C. 1456, Coastal Zone Management Act) with the Michigan Coastal Management Program.

Review of the proposed action and the comments received during public review of the EA indicates that the project does not constitute a major Federal action significantly affecting the quality of the human environment; therefore, an Environmental Impact Statement will not be prepared.

Date

Robert J. Ells
Lieutenant Colonel, U.S. Army
District Engineer