

3. AUTHORIZATION AND DEVELOPMENT HISTORY

3.1 General

Authorizing legislation for the dredging of the Upper Saginaw River has evolved over the years. Legislation specific to Saginaw River is shown on Table 2.

Prior to 1969, dredged material for the upper and lower Saginaw River was generally open water placed. In 1970 and 1972, the Corps used Skull Island (constructed by the city of Bay City) for the placement of lower and upper Saginaw River dredged material. From 1973 through 1984 the Corps used Middle Ground Island Confined Disposal Facility (CDF) - also constructed by the city of Bay City - for placement of the upper Saginaw River dredged material, while from 1973 through 1977 open water was used for placement of dredged material from the lower Saginaw River.

In 1977 the Saginaw Bay CDF (constructed by the Corps) began accepting dredged material from the lower Saginaw River. Since 1984, Saginaw Bay CDF has been the primary placement site of dredged material from the lower Saginaw River and occasionally from the upper Saginaw River. A study conducted in the mid-1990's determined that it is not cost effective to transport dredged material from the Upper Saginaw River to the Saginaw Bay Island CDF. A summary of disposal locations for annual maintenance dredging is displayed below in Table 1.

TABLE 1 - Disposal History		
Year	Upper River	Lower River
Prior-1969	Open Water	Open Water
1970-72	Skull Island	Skull Island
1973-77	Middle Ground Island	Open Water
1977-84	Middle Ground Island	Saginaw Bay CDF
1985-1995	Saginaw Bay CDF ¹	Saginaw Bay CDF
1995-Present	-----	Saginaw Bay CDF
1. The dredged material from Upper Saginaw River was placed in the Saginaw Bay CDF on a emergency basis only, not annually.		

Section 123 of the 1970 River and Harbor Act (Public Law 91-611) authorized the Corps of Engineers to construct, operate, and maintain contained placement areas for contaminated dredged material in the Great Lakes area. This law provided for the construction of CDFs specific to the region, with local interests supplying lands, easements and right-of-ways. Construction of the existing CDF at Saginaw Bay under Section 123 was at 100% Federal cost. A 25% non-Federal cost share was waived in cases that the sponsor was participating in a wastewater treatment program and was not violating water quality standards. However, construction of a new CDF under Section 123 is no longer possible due to a change in policy.

Until passage of the Water Resources Development Act (WRDA) of 1996, there was no specific administrative policy for cost sharing the construction of a new CDF. Administration

policy had followed criteria per a 23 July 93 Assistant Secretary of the Army, Civil Works (ASA-CW) memorandum that the Army could accept contributions from non-Federal interests for the pre-1986 projects for all expenses associated with a CDF, unless precluded by authorizing legislation. If a project's authorization was vague regarding responsibility for CDF construction, it was not to be 100% Federal.

A national policy for cost sharing for construction of dredged material disposal facilities associated with the construction and operations and maintenance of Federal navigation projects for harbors and inland waters was established by WRDA '96. It specifies that land-based and aquatic dredged material disposal facilities shall be considered as general navigation features of the project. Section 101 of WRDA '86, as amended by Section 201 of WRDA '96, that pertain to cost sharing for maintenance dredging are as follows;

SEC. 101 HARBORS.

(a) Construction.-

(1) PAYMENTS DURING CONSTRUCTION. - The non-Federal interests for a navigation project for a harbor or inland harbor, or any separable element thereof, on which a contract for physical construction has not been awarded before the date of enactment of this Act shall pay, during the period of construction of the project, the following costs associated with general navigation features:

(A) 10 percent of the cost of construction of the portion of the project which has a depth not in excess of 20 feet; plus

(B) 25 percent of the cost of construction of the portion of the project which has a depth in excess of 20 feet but not in excess of 45 feet; plus

(C) 50 percent of the cost of construction of the portion of the project, which has a depth in excess of 45 feet.

(2) ADDITIONAL 10 PERCENT PAYMENT OVER 30 YEARS. - The non-Federal interests for a project to which paragraph (1) applies shall pay an additional 10 percent of the cost of the general navigation features of the project in cash over a period not to exceed 30 years, at an interest rate determined pursuant to section 106. The value of lands, easements, rights-of-way, and relocations provided under paragraph (3), and the costs of relocations borne by the non-Federal interests under paragraph (4) shall be credited toward the payment required under this paragraph.

(3) LANDS, EASEMENTS, AND RIGHTS-OF-WAY. -The non-Federal interests for a project to which paragraph (1) applies shall provide the lands, easements, rights-of-way, and relocations (other than utility relocations, under paragraph (4)) necessary for the project including lands, easements, rights-of-way, and relocations (other than utility relocations accomplished under paragraph (4) that are necessary for dredged material disposal facilities.

(4) UTILITY RELOCATIONS. - The non-Federal interests for a project to which paragraph (1) applies shall perform or assure the performance of all relocations of utilities necessary to carry out the project, except that in the case of a project for a deep draft harbor and in the case of a project constructed by non-Federal interests under Section 204, one-half of the cost of each such relocation shall be borne by the owner of the facility being relocated and one-half of the cost of each such relocation shall be borne by the non-Federal interests.

(5) DREDGED MATERIAL DISPOSAL FACILITIES FOR PROJECT CONSTRUCTION. - In this subsection, the term “ general navigation features” includes constructed land-based and aquatic dredged material disposal facilities that are necessary for the disposal of dredged material required for project construction and for which a contract for construction has not been awarded on or before the date of enactment of this paragraph.

TABLE 2
AUTHORIZING LEGISLATION

ACT	WORK AUTHORIZED	DOCUMENTS
Jun 25, 1910	Channel 200 feet wide, with depth of 18.5 feet in Bay and 16.5 feet in River.	H. Doc 740, 61st Cong., 2nd Sess.
Jul 3, 1930	Project Depth of 18.5 feet extended up River to Saginaw.	Rivers and Harbors Committee Doc. 30, 71st Cong., 2d Sess.
Aug 26, 1937	Turning Basin.	Rivers and Harbors Committee Doc. 21, 75th Cong., 1st Sess.
Jun 20, 1938	Present project channel dimensions from Bay to Sixth Street Bridge in Saginaw.	H. Doc 576, 75rd Cong., 3rd Sess.
Sep 3, 1954	New Channel in Bay, 350 feet wide and 24 feet deep from 24-foot contour to River mouth, Project Depth of 24 feet in River channel up to Detroit & Mackinac Railway Bridge, Project Depth of 22 feet in River Channel up to Sixth Street Bridge, Turning Basins at Essexville and Carroleton, and elimination of present channel in Bay.	H. Doc. 500, 83th Cong., 2d Sess.
Oct 23, 1962	Deepen Bay Channel, Deepen River Channel to Detroit & Mackinac Bridge, Extend 22-foot project above Sixth Street Bridge, Deepen Essexville Turning Basin, and Construct 2 new Turning Basins.	H. Doc. 554, 87th Cong., 2nd Sess.
Oct 27, 1965	Deepen River Channel to 25 feet, from Detroit & Mackinac, Bridge to New York Central Railroad Bridge.	H. Doc. 240, 89th Cong., 1st Sess.

3.2 Saginaw River

The Saginaw River is located on the west side of Lake Huron approximately 90 miles north of Detroit, Michigan. The River and Harbor Acts of 25 June 1910, 3 July 1930, 26 August 1937, 20 June 1938, 3 September 1954, 23 October 1962, and 27 October 1965 authorized the dredging of the river to accommodate robust commercial shipping activity. Through this dredging history, several sites have been used for dredged material disposal. The following are descriptions of past and currently used disposal sites for this activity.

3.3 Saginaw Bay CDF (Confined Disposal Facility)

The Saginaw Bay CDF was constructed in 1978 under Section 123 of the River and Harbor Act of 1970 (Public Law 91-611). It consists of a 284-acre site with capacity of approximately 10,000,000 cubic yards. As the Bay CDF approached its dredged material capacity in 1995, a DMMP was conducted for the lower Saginaw River. The DMMP, which was approved on May 1997, recommended raising the dikes of the Bay CDF to extend its life for another 20 years. The dikes were raised in 2002 for the northern ½ of the facility only.

It should be noted that the dredged material capacity of the Saginaw Bay CDF was based on the lower Saginaw River only; it was not designed to include dredged material from upper Saginaw River. The DMMP also determined that it is not cost efficient to transport dredged material from the upper Saginaw River to the Saginaw Bay CDF.

3.4 Middle Ground Island

The Middle Ground Island CDF was constructed approximately in 1972 by the city of Bay City. Middle Ground Island is located in the center of the Saginaw River channel, 7 miles upstream of the mouth of Saginaw River (See Figure 2). The CDF site is approximately 12.7 acres and was used as a dredged material transfer site, which supplied material as daily cover for a landfill adjacent to the CDF until the landfill was filled in 1984. The adjacent landfill has been closed, capped and groundwater-monitoring wells installed due to PCB movement in the groundwater. The landfill site is expected to be placed on the superfund list for cleanup.

3.5 Skull Island

The Skull Island CDF disposal site was constructed approximately in 1969 by the city of Bay City. Skull Island is located on the east side of the Saginaw River channel, 8.3 miles upstream of the mouth of Saginaw River, just downstream the Clements Municipal Airport (See Figure 2 – Skull Island not identified on map). The Island is approximately 70 acres, and was raised and connected to the lands on shore via a

dump/landfill operation. The Skull Island CDF was filled to capacity with 130,000 cy of material.

3.6 Previous Studies

Upper Saginaw River, Diked Disposal Facility at Crow Island State Game Area, Saginaw and Bay Counties, Michigan, Letter Report and Draft Environmental Impact Statement (November 1984). The study was initiated in 1979. Sixteen sites were evaluated for potential CDF locations under the authority of PL 91-611. The recommended plan was to construct a series of islands located within Crow Island state game area.

Upper Saginaw River, Diked Disposal Facility at Crow Island State Game Area, Saginaw and Bay Counties, Michigan - Supplement I to the Draft Environmental Impact Statement (May 1986). The supplemental report revised the recommended plan location, which continued to be at the Crow Island state game area. However, the revised plan called for constructing one large island instead of a series of small islands. The revisions resulted from opposition by a number of organizations, and difficulties encountered in the design feasibility. The project was dropped in 1986 due to excessively high costs (\$8,785,000) and unresolved environmental issues.

Draft Letter Report and Preliminary/Draft Environmental Impact Statement, Diked Disposal Area (Cheboyganing Creek) Upper Saginaw River 1 June 1992. Twenty-nine sites were evaluated for potential Confined Disposal Facility (CDF) locations under the authority of PL 91-611. This study was terminated in November 1999. The basis for the decision to terminate the study was the long-term decline in the level of PCB contamination in the dredged material for the Upper Saginaw River area, and therefore a more stringent confinement facility (CDF) was not required. The cost of constructing the proposed CDF was estimated to be \$12,457,000.