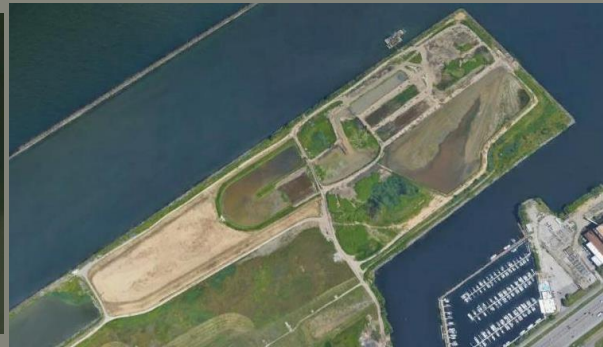


THE HISTORY OF CDFS IN THE GREAT LAKES



USACE for the Great Lakes Dredging Team
26 February 2021

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US Army Corps
of Engineers



U.S. ARMY



ACRONYMS AND DEFINITIONS



- CDF = confined disposal facility
- DMDF = dredged material disposal facility
- DMMF = dredged material management facility
- DMMP = dredged material management plan

Federal Standard = lowest cost, technically and environmentally acceptable (sediment disposal) alternative



WHAT WAS DONE WITH SEDIMENT HISTORICALLY (PRE 1970)?



- Open water dumping
- Side casting
- Lakeshore fill (especially around urban areas)
- Wetland fill





HOW DID USACE GET INTO THE CDF BUSINESS?



Public Law 91-611 (Rivers and Harbors Act of 1970): “Section 123.(a) The Secretary of the Army, acting through the Chief of Engineers, ***is authorized to construct, operate, and maintain...contained spoil disposal facilities of sufficient capacity for a period not to exceed ten years....***”

[Public Law 91-224, April 3, 1970] Section 21 of the Federal Water Pollution Control Act (a):
“Each Federal agency...having jurisdiction over any real property or facility...shall...insure (sic) compliance with applicable water quality standards....”

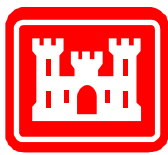




WHY WE NEED DISPOSAL AREAS

- ❖ Great Lakes Annual Dredging Need: 3.3M cu yds
- ❖ Typical Dredging Program: 20-30 projects annually, 3-5 M cu yds
- ❖ Of this, approximately 43% currently goes to CDF. That means about 1.3 – 2.1 M cy yds of material is placed into disposal facilities each year.
- ❖ 45 CDFs or disposal facilities have been constructed around the Great Lakes since 1970.
- ❖ There are currently 22 active CDFs, DMDFs, or DMMFs.





Active Confined Disposal Facilities on the Great Lakes





CONTINUED USE OF SEDIMENT DISPOSAL FACILITIES

Realization #1: The sediment disposal facilities need management.

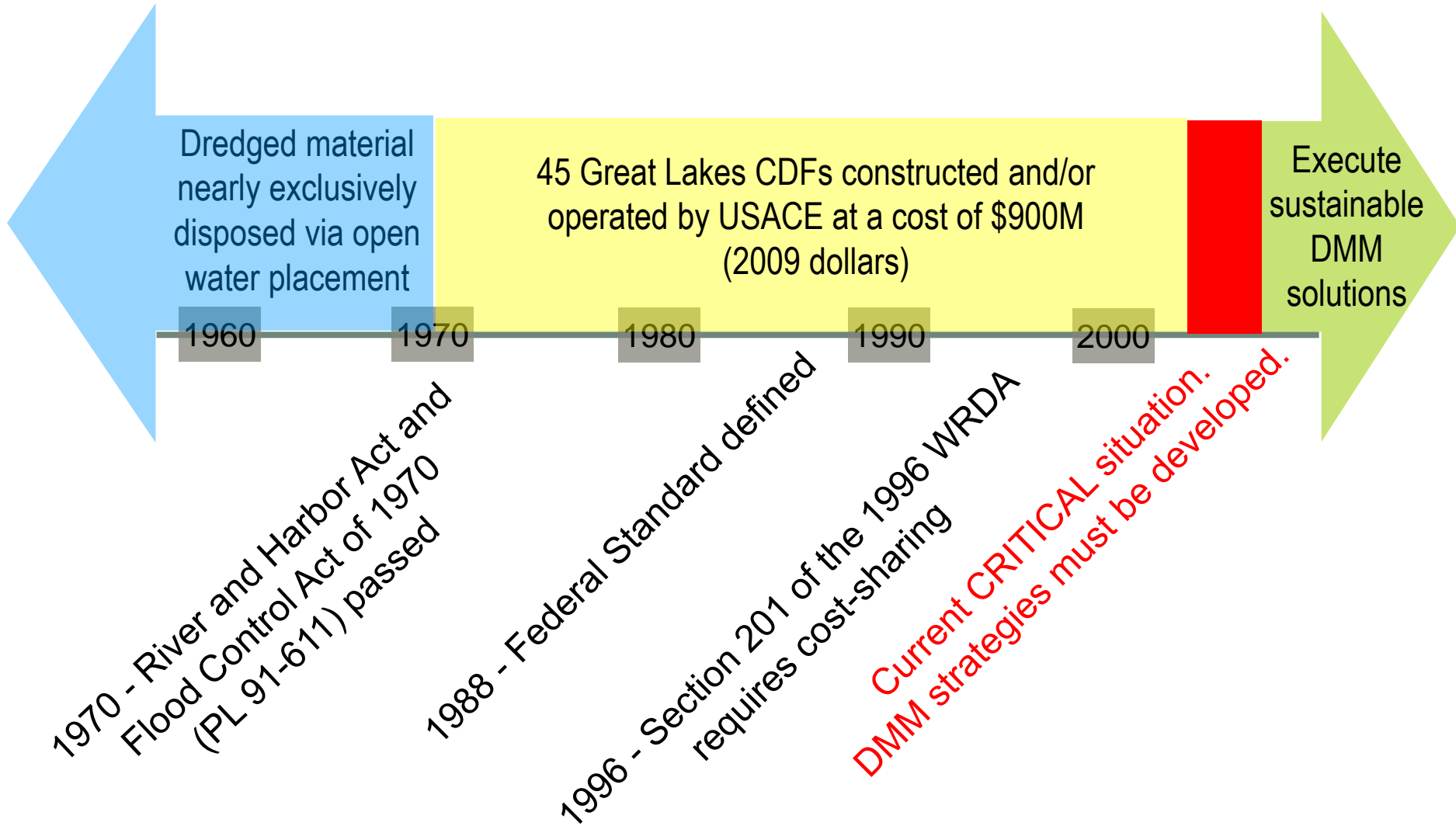
The Water Resources Development Act of 1976 (Public Law 94-587), Section 148, directed the Corps of Engineers to use Management Practices that will extend the useful life of Dredged Material Disposal Facilities, thereby minimizing the need to construct new sites.

Realization #2: This isn't over in 10 years.

The Water Resource Development Act of 1988 (Public Law 100-676), Section 24, amended Section 123 of the River and Harbor Act of 1970 (Public Law 91-611) to permit continued use of DMDF's beyond the initial 10-year period, until the DMDF is no longer needed or is completely filled.

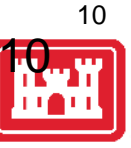


Dredged Material Management Historical Perspective





The Federal Standard



(1988) 33 CFR Section 335: “The Corps of Engineers undertakes operations and maintenance activities where appropriate and environmentally acceptable. All practicable and reasonable alternatives are fully considered on an equal basis. This includes the discharge of dredged or fill material into waters of the U.S. or ocean waters in the *least costly manner, at the least costly and most practicable location*, and consistent with engineering and environmental requirements.”

This act includes the formal definition of the Federal Standard.

In the Great Lakes, dredging and disposal costs vary from \$4 – 30 per cubic yard.



WHERE DO WE STAND NOW?

- Not all sediment is clean. (How is “clean” defined?)
- Even clean sediment has limitations on uses (for example silts verses sands)
- All Federal harbors need a DMMP that covers 20 years of sediment disposal. WRDA 1996 Implementation, Planning Guidance Letter #97-02: “The Secretary of the Army may enter into cooperation agreements with non-Federal interests...for the development of long-term management strategies for controlling sediments at navigation projects.”





WHAT'S IN A NAME?

We used to call them CDFs.

Now they are DMDFs. What's the difference?

- PL 91-611 (1970): contained spoil disposal areas
- WRDA 1988: dredged material disposal areas
- WRDA 1996 updated language on cost sharing and used the term “dredged material disposal facilities” to describe the projects. This is the current cost sharing and language used in policy guidance.
- Projects authorized before this are typically still referred to as “CDFs”, while newer facilities are “DMDFs”.





A MORE WHOLISTIC APPROACH?

Management of Dredged Material was originally provided for in (WRDA 1992):

- Section 2326 of Title 33 of the U.S. Code (33 U.S.C. § 2326, Regional Sediment Management): “To reduce or avoid Federal costs, the Secretary shall consider the beneficial use of dredged material....”
- 33 U.S.C. § 2326b (Sediment Management): “...projects...may be carried out in any case in which...the environmental, economic, and social benefits of the project, both monetary and nonmonetary, justify the cost of the project....”





THE FUTURE – DREDGED MATERIAL MANAGEMENT FACILITIES



New pressures on dredged material disposal, and new opportunities

- ✓ Public opposition to new disposal facility construction
- ✓ Cost and funding issues
- ✓ Conflicting state regulations and policies (land and water)
- ✓ Cleaner sediment
- ✓ Recognition that sediment is a resource
- ✓ Public acceptance of sustainable and environmentally responsible solutions
- ✓ Still need staging and handling areas for sediment!





WRDA 2020: CHANGES ARE COMING



WRDA 2020, SEC. 125. BENEFICIAL REUSE OF DREDGED MATERIAL; DREDGED MATERIAL MANAGEMENT PLANS.

(a)(1) “...It is the policy of the United States for the Corps of Engineers to maximize the beneficial reuse, in an environmentally acceptable manner, of suitable dredged material....”

(a)(2)(B) “...The economic benefits and efficiencies from the beneficial use of dredged material...shall be included in any determination relating to the “Federal standard” ...for the placement or disposal of such material.”





CHANGING THE PAST, CREATING THE FUTURE

- Expansion and alteration of older facilities (Chicago Area CDF, Milwaukee DMDF)
- New facilities for sediment disposal when needed (Milwaukee)
- Revamping existing facilities (Erie Pier)
 - The section 408 process
- Beneficial use projects





Questions?

