Working with the Federal Standard in Planning Beneficial Uses of Dredged Material

Great Lakes Dredging Team
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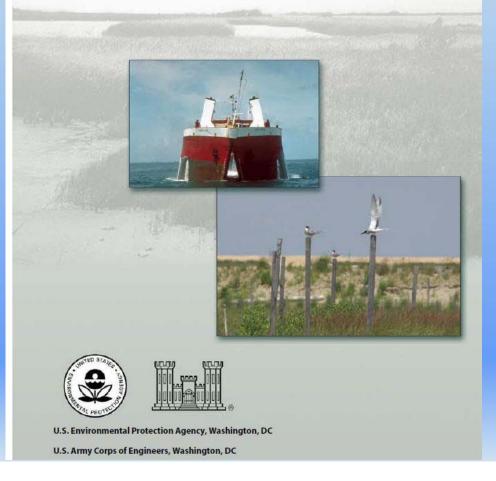
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The Role of the Federal Standard in the Beneficial Use of Dredged Material from U.S. Army Corps of Engineers New and Maintenance Navigation Projects

Beneficial Uses of Dredged Materials



EPA-Corps Joint Guidance:

https://www.epa.gov/cwa-404/role-federal-standardbeneficial-use-dredged-material

Role of Federal Standard in Beneficial Use Projects

- Largest quantities of dredged material are generated from Corps maintenance of existing Federal navigation projects.
- <u>Federal Standard</u>: Least costly, environmentally acceptable dredged material disposal or placement alternative identified by Corps that is
 - >consistent with sound engineering practices
 - > meets all Federal requirements (including those under CWA Section 404 and the MPRSA)
- Federal Standard, also referred to as the "base plan", defines the disposal or placement costs assigned to "navigation purpose" of project
 - ➤ navigation costs shared with non-Federal sponsor (non-Federal share ranges from 20-65% depending on project depth)

Who bears the costs assigned to the "navigational purpose" of a dredging project?

New Navigation Projects

(deepening or widening of an existing federal navigation channel or creation of a new federal navigation channel)

For the portion of the project with a depth:	The non-federal share is:
Up to 20 ft	20% (10% during construction + 10% over 30 years)*
Over 20 ft and up to 45 ft	35% (25% during construction + 10% over 30 years)*
Over 45 ft	60% (50% during construction + 10% over 30 years)*

Operation and Maintenance of Existing Navigation Projects

- Operation and Maintenance Dredging: Federal share is 100% (except for harbors greater than 45 feet, where the non-federal share is 50% of the costs beyond those which would be incurred for a project with a depth of 45 ft or less).
- 2. Constructing land-based and aquatic disposal facilities:

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3. Operating and maintaining land-based and aquatic disposal facilities: Federal share is 100%.†

^{*} The non-federal share includes 10%, 25%, or 50% to be paid during construction. It may include an additional 10% share of the total project costs to be paid over 30 years. The value of lands, easements, rights-of-way, and relocations required for the project is credited to this 10%, which is to be paid over 30 years.

[†] In some cases, the federal cost may be determined by legislation authorizing construction and maintenance of the confined disposal facility.

Role of Federal Standard in Beneficial Use Projects (continued)

- Possible that B.U. option can be the Federal Standard.
- If B.U. is not the Federal Standard, B.U. option may still be selected.
 But...
 - ➤ B.U. costs beyond navigation costs ("incremental costs") are further shared: 25-35% depending of type of use

Incremental Cost Share by Use

Placement of Dredged Materials on Beaches.

Section 145 of WRDA 1976: incremental cost share 65% Fed/35% non-Fed

• Improvement of the Quality of the Environment.

Section 1135 of WRDA 1986: incremental cost share 75% Fed/25% non-Fed

• Protection, Restoration, or Creation of Aquatic and Related Habitat.

Section 204 of WRDA 1992: incremental cost share 75% Fed/25% non-Fed

Achieving Environmental Benefits.

Section 207 of WRDA 1996: incremental cost share 75% Fed/25% non-Fed

- > Problem: Limited national appropriations, & competition for it
- Solution: Get increment as small as possible, and find partner(s) to pay it directly

•LTMS Plan (our RDT) for San Francisco Bay:

Limits in-Bay (CWA §404) disposal to 20% of historic annual volume Targets 40% beneficial use where practicable Ocean disposal (MPRSA) as "safety valve"

- Corps is our largest dredger: 13 Fed channels
 - 0.8-2.5 million cy/yr depending on channels dredged (average ~ 1.5 mcy)
- Corps annual "base plan" has mix of placement sites

3 channels have ocean disposal as Federal Standard (~\$25/cy)
Other channels have in-Bay (§404) as Federal Standard (~\$10-15/cy)

Reuse usually costs more than the Federal Standard site

Larger tidal wetland restoration sites: ~\$25-35/cy (clean sediment)

A Region 9 advantage:

LTMS Plan covers CWA, MPRSA, and wetland/reuse sites EPA won't concur in ocean disposal if reuse is practicable

• Reality #1:

Incremental costs between ocean disposal and reuse are fairly small

Reality #2:

Incremental costs between in-Bay disposal and reuse are fairly large

Reality #3:

So main focus is the 3 Fed Channels with ocean disposal as their base plan These 3 channels average ~1mcy/yr

Under current Federal Standard, Corps cannot pay **EVEN \$0.01** more than "base plan" cost. Other benefits to taxpayer (habitat, infrastructure protection from SLR, etc.) don't count. So...

•Strategies to help level the cost of disposal vs reuse:

- 1. Require 2 bid schedules!
- Gov't estimates notoriously bad for reuse
- Separate bids are ONLY way to compare actual costs and establish "increment"
- Corps executes least cost option, OR uses partner cost-share
- 2. Include any "exigent" (non-contract) costs to Corps
- Testing and Monitoring
- Load limits or other operational restrictions (on dredging or disposal)
- Environmental work windows or weather delays, etc.
- 3. NMFS Bio. Op. allows work outside Window if sediment reused

- May also reduce contract costs with:
- Multi-year contracts
- Multi-project contracts
- Separate contracts for dredging/transport, and for the reuse site(s)
- Establish a cost-share partner for increment:
- Example: New Measure AA for San Francisco Bay restoration
- Still need to watch for contractor price "gaming"!
- WRDA 2016 may help some, if it survives...