

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

Great Lakes Dredging Team

Fall Webinar

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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



U.S. Environmental Protection Agency, Washington, DC

U.S. Army Corps of Engineers, Washington, DC

EPA-Corps Joint Guidance:

<https://www.epa.gov/cwa-404/role-federal-standard-beneficial-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.
- **Federal Standard**: **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

1. 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**

Maximizing Reuse Within the Federal Standard: Region 9 Experience

- ***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)

Maximizing Reuse Within the Federal Standard: Region 9 Experience

- ***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

Maximizing Reuse Within the Federal Standard: Region 9 Experience

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

Maximizing Reuse Within the Federal Standard: Region 9 Experience

- ***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...***