BENEFICIAL USE OF DREDGE MATERIAL



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CONTRACTOR OF STREET BY

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Dredge Material is a valuable resource

- · Increased dredging investments create beneficial use of dredge material management opportunities
- Benefits the ecosystem, economy, and can effectively and efficiently deliver the USACE mission.

There are opportunities to expand beneficial use within the Federal Standard

- Operational strategy should inherently include beneficial use placement options.
- If material is needed to implement a project, beneficial use from dredging operations should be considered as an option in the planning and execution strategy.

Partner collaboration is key to our success

Address

key obstacles

to execution

- Innovative pursuit, both internally and externally, with partners and stakeholders will: Maximize available solutions, strategies, and tools
 - Develop and apply new approaches and technologies

Identify,

develop,

and share

beneficial

use practices

Collaborate

on innovative financing



National Policy for Beneficial Use of Dredged Material

Congressionally established by section 125 of WRDA 2020 in doing so, Congress has underscored the importance of the Beneficial Use of Dredged Material Program

Dredged material is valued as a resource not to be wasted but used for benefits to the ecosystem, economy, and project delivery





Over the next 3-5 years, the Corps will expand the beneficial use of dredged material program. Achieving this vision will require all of us to be innovative and work alongside our partners, both internally and externally, to ensure we are finding the best use of sediments derived from our Navigation mission.





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SECTION 125 OF WRDA 2020



Renews the Congressional commitment to beneficial use (BU) of dredged material by:

- (a) establishing a national policy to maximize the beneficial use of material obtained from Corps projects; requiring the Corps to calculate the economic and environmental benefits of the beneficial use of dredged material when calculating the Federal Standard AND amending section 204(d) of WRDA 1992 to direct that other-than-least-cost placements of dredged material for certain purposes be funded using appropriations available for construction or operation and maintenance of the water resources development project producing the dredged material
- (b) increasing the number of beneficial use of dredged material demonstration projects to 35 projects (added more Section 1122 projects),
- (c) directing the Corps to develop **five-year regional dredged material management plans**, and
- (d) emphasizing greater coordination across the Corps' dredging contracts (extended regionalization to inland projects).



WHAT IS THE FEDERAL STANDARD?

33 CFR 335.7 Definitions.

"Federal standard means the dredged material disposal alternative or alternatives identified by the Corps which represent the least costly alternatives consistent with sound engineering practices and meeting the environmental standards established by the Clean Water Act Section 404(b)(1) evaluation process or ocean dumping criteria."



A state's desired dredging methods, placement locations, or other requirements that exceed the federal standard can usually be accommodated to "the maximum extent practicable," so long as the state or non-federal sponsor agrees to pay any difference between the cost of implementing the federal standard and the cost of implementing the state's requirements.



- Dredging
- Dredge Material Management
- Transport
- In-house Engineering
- Planning
- Contract Management and Oversight

Benefits

- 20-yrs
- Few environmental benefits
- Extending FRM Cycle
- Previously established (not adding benefits)

Direct Costs + Incidental Pre, During,

Post Dredging Costs

- Site selection
- Permitting
- Placement Site Construction
- Maintenance
- Monitoring & Reporting
- Surveying
- Dike Raising
- Offloading
- Real Estate
- Species Management
- Mitigation

- proofing
- Coastal Resiliency *behind the BU
- Habitat Value (quantity*quality = \$)
- Regional Economics
- Wild cards
 - Environmental Justice
 - Carbon Sequestration
 - Life Safety
 - · Public and Stakeholder Objectives
 - Watershed Approaches

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Sediment Beneficial Use Placement as an Economic–Social–Ecological Continuum



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Considering Ecosystem Goods and Services to BU Alternative Analysis

Maintenance Dredging

Placement Alternatives

- I. Upland containment sites (2)
- Beach nourishment sites (3)
- 3. Nearshore placement sites (2)
- 4. ODMDS (1)
- Island habitat (1*)
- * = hypothetical



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Questions?



Dredging project manager monitoring dredged sediment placement at the Jekyll Creek Marsh Restoration and Wetland Habitat development Beneficial Use of Dredged Material project, Georgia. (Photo by Clay McCoy, USACE Jacksonville)





PLACEMENT OF DREDGED MATERIAL





USACE tracks dredging data through the Dredge Information System and uses the Regional Sediment Management (RSM) viewer to track and analyze disposal of dredged material across the enterprise. (<u>https://arcg.is/1SG8b4</u>)

Note: Graphic shows actual 2012-2021 data from across the enterprise

Dredge Disposal (typical year)

~ 270 million cubic yards regulated under the Clean Water Act

Revolutionize USACE Beneficial Use (BU)

Goal of 70% material placed beneficially (currently at 40-45%)

Regional Sediment Management

Engineering with Nature

WRDA 2020 Section 125 Implementation Guidance

WRDA 16 Section 1122 Projects

WHAT IS BENEFICIAL USE OF DREDGED MATERIAL?

Authorized Beneficial Uses:

Land creation

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- Land improvement
- Berm creation
- Shore protection
- Replacement fill
- Beach nourishment
- Capping
- Construction materials
- Aquaculture
- Topsoil
- Wildlife habitats
- Fisheries improvement
- Wetland restoration
- Others



Beneficial uses are defined as "productive and positive uses of dredged material, which cover broad use categories ranging from fish and wildlife habitat development, to human recreation, to industrial/commercial uses" (Engineer Manual 1110-2-5025, 2015).

SECTION 125(c) IMPLEMENTATION GUIDANCE

Section 125(c) IG released October 2021 Supplemental Guidance for 5-yr DMMPs released July 2022

- Easy to understand and implement
- Emphasizes stakeholder engagement
- Clearly defines BU per EM 5025
- Integrates budget package submittals to show regionalization, optimization and cross BL opportunities
- Retains Federal Standard (FS), requires true cost of dredging combined with comprehensive benefits
- Establishes Beneficial Use Decision Document Integration (BUDDI) that is an addendum to the 20yr DMMP, can correct the FS, add BU sites, extend disposal capacity without reopening full 20-yr level study
- 5-yr approval at Division to ensure regional coordination



Baltimore District, Stakeholder Engagement and BU projects





SECTION 1122 UPDATE

Section 125(b) adds 10 Sec. 1122 projects (35 total)

- Implementation guidance is complete (3 Jan 2018) and will be updated after lessons learned have been captured from the first 10 pilot projects.
- -3 Projects Completed
 - Crab Bank Seabird Sanctuary, SC
 - Deer Island Lagoon, MS
 - Barnegat Inlet, NJ
- -5 Projects Work in FY23
 - Mississippi Upper Pool 4, WI (contract awarded)
 - Beach Protection in Four IL Communities, IL
 - San Francisco Strategic Placement, CA
 - Haleiwa Beach Restoration, HI
- 1 Project working through preferred plan, anticipate FY24 award, pending funds
 - Hickory Cove, TX
- -2 Projects Terminated
 - Grays Harbor South Jetty, WA
 - Condado Lagoon, PR

