

FY21 RSM IPR

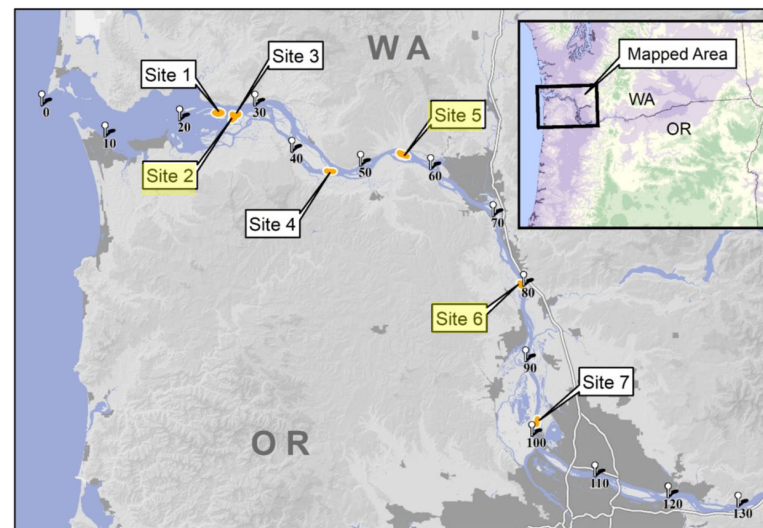


Portland District, Application of Reach-based Strategies for Beneficial Use of Dredged Material, Ryan Woolbright –TL Sarah Knowles – PM

BLUF: Criteria and corresponding decision matrix were created for vetting and prioritizing BUDM placement opportunities in the LCR. The PDT worked alongside stakeholders to select preferred sites and develop conceptual designs.

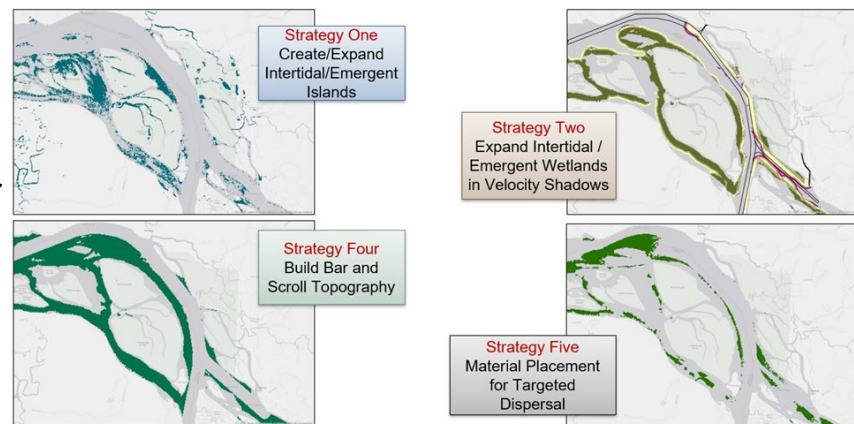
Challenge/Objectives

- Use GIS to locate potential sites that meet BUDM strategies
- Gain stakeholder concurrence on site selection criteria and ranking
- Develop conceptual designs for 3 sites



Approach

Building on prior RSM work developing a GIS methodology to identify sites meeting one of four BUDM strategies, the PDT worked with stakeholders to develop site selection criteria, rank potential sites, and note potential design considerations. From this work, three conceptual designs were developed.



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District/Other USACE PDT Members

Ballantine, Jeffrey	Moritz, Hans
Hudson, Austin	Stokke, Jessica
Herzog, Kat	Stolt, Rachel
Knowles, Sarah	Swanson, Doug
Littles, Chanda	Trachtenbarg, David
Mamrak, Adam	Woolbright, Ryan
McMillan, James	

Leveraging/Collaborative Opportunities:

Prior RSM and RME studies and partnerships in the Columbia River Estuary, 20-year DMMP currently in development, Ecosystem Management and Restoration Research Program, Ongoing Section 204 projects

Stakeholders/Partners

Port of Portland,
Port of Vancouver,
Port of Longview
Anchor QEA,
Port of Ilwaco
Pacific Northwest National Labs,
Cowlitz Tribe,
USFWS,
NOAA,
BPA,
CREST
Washington DFW, DNR, Ecology
Oregon DFW, DSL,
Whiting Environmental,
Moffit and Nichol,
PC Trask & Associates

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Accomplishments/Deliverables

- Identified potential BUDM sites that could be implemented under CAP or other authorities.
- Developed matrix-metric approach with stakeholders to identify “best” candidate BUDM sites.
- Screened potential sites with stakeholder input.
- Identified BMPs that could be applied to future BUDM opportunities
- Developed conceptual designs for three sites.
- Workshop presentations and meeting minutes.
- Tech Note (Draft)



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Challenges:

- Authorization and Funding
- Non-Federal Sponsor

Potential paths to construction:

- CAP 204
- Section 1122 (Pilot Projects for Beneficial Use),
- Section 536 (Lower Columbia River Estuary Program).
- Federal Navigation Channel O&M

Lessons Learned

- The GIS methodology developed by NWP in 2018 can be used to locate potential BUDM sites.
- Considering additional criteria resulted in a balanced approach for meeting dredge disposal needs while maximizing potential environmental lift at BUDM sites.
- Early engagement with stakeholders is crucial.

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How is this project benefiting the USACE and Nation?

- This RSM project is benefitting the USACE by continuing to develop working relationships with State, Federal, Tribal, and Private stakeholders and documenting feedback on BUDM applications, concerns, and strategies for minimizing potential adverse effects.
- It is a proof of concept that tools and methods developed from a previous RSM project can be leveraged to rank potential BUDM sites.
- The site selection methodology, design concerns, and conceptual designs may expedite the planning and design of future BUDM sites.
- While this project focused on the Lower Columbia River, the methodology for both identifying and ranking BUDM opportunities could be applied to other rivers along the Oregon coast and possibly estuaries throughout the nation.