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Engineer Research and Development Center

Regional Sediment Management Program

Omaha District RSM Opportunities in Flood Recovery

Description

Significant changes were made to the sediment regime of the Missouri River during the 2011 flood. Channel sandbars were scoured and re-deposited, banks eroded, and levees failed by high water and toe erosion. As part of the reconstruction of the federal infrastructure to support navigation and flood control, Regional Sediment Management principles are being integrated into the recovery efforts. The RSM integration hopes to reduce time and cost, find beneficial uses for existing sediment deposited during the flood, and mitigate impacts due to the return of sediment to the river post-flood.

RSM Project Opportunities

- *Levee Reconstruction within the Bank Stabilization and Navigation Project (BSNP)*
- *Managing Regulatory Permits for Sediment Return to prevent Localized Impacts*
- *On-Site Support Sediment Management – assisting local municipalities with post flood damage recovery and creative uses for flood fighting materials*
- *River Change Assessment – determining flood impacts to the navigation project*
- *Beneficial Use of Dredge Material from Federal Projects – finding beneficial uses for over 1M CY of material to be dredged from spillways*

Currently, a clear path forward has not been developed for all the RSM efforts. By May 2012, it should become clear as to which projects provide the greatest opportunity in use RSM principles. The final fact sheet will reflect just the projects selected for RSM.

Successes Lessons Learned

Levee reconstruction is a continuing effort, a number of streamlined permits for sediment return to the river have been developed. Design of beneficial uses for large amount of sediment at Oahe and Garrison dams is under design.

Expected Products

- RSM Report on Flood Recovery Projects
- RSM Flood Recovery presentation
- Technical Note on RSM principles in flood recovery
- Coordination for continuing RSM effort in FY13

Potential Users

Inland USACE districts, State regulatory offices,

Projected Benefits

Expected benefits, expected change in management of sediments, potential volume of material moved.

Leveraging Opportunities

All of these projects overlap with O&M and CG efforts currently being carried out in the district. RSM funding will pay for staff time and the other business lines will provide the construction funding.

Points of Contact

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Participating Partners

USACE Missouri River Project, Oahe Dam Project, Garrison Dam Project, States of Nebraska, South Dakota, North Dakota, and Iowa.