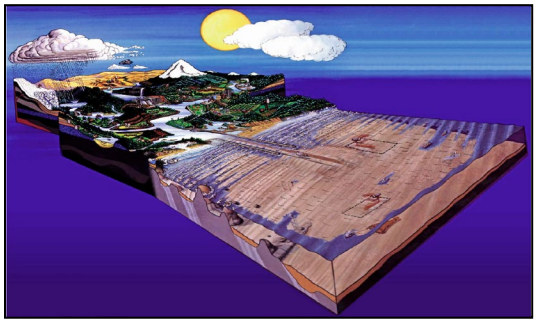
US Army Corps of Engineers®
Engineer Research and Development Center

National Regional Sediment Management Program

Description

Regional Sediment Management (RSM) addresses sediment issues and supports sustainable solutions to meet the needs across the Corps missions including Navigation and Dredging, Coastal and Flood Risk Management, and Ecosystem Restoration while also supporting emergency management operations. RSM also engages with other Federal and non-Federal agencies, academia, local stakeholders and partners, and non-governmental organizations to work collaboratively to improve the management and use of sediments. The goal is to create short-term and lifecycle economic savings while increasing environmental and social benefits through adaptive management of sediments from a regional perspective. Benefits of the RSM approach are reduced lifecycle costs, improved partnerships, improved regional and project sediment management, and improved environmental stewardship.



RSM utilizes knowledge of the regional sediment transport dynamics for managing projects and activities involving sediment. It recognizes sediment as a valuable resource that is integral to economic and environmental vitality. Stakeholder teams identify inter-related sediment resource needs and opportunities and collaboratively leverage programs, projects, data, information and other resources to balance sediment related objectives and take action to optimize the use of sediments both locally and regionally.

RSM has been shown through many examples to lead to significant cost savings, value, and benefits when fully exercised with the tools, lessons learned, and District commitment. The program continues to work closely with Districts to share knowledge, experience, and best practices while addressing issues and solving regional sediment management challenges.

Issue /Challenge To Address

Historically, the Corps has managed sediments and projects on a project-by-project basis. This approach may lead to unanticipated consequences if local project decisions do not consider the sediment transport within a regional context. To address these concerns, the Corps initiated the RSM program in 1999 with the objectives to implement regional management strategies that link the sediment management actions at authorized Corps projects with one another and to coordinate management activities with other Federal agencies, State, and local governments within the boundaries of physical systems including inland watersheds, rivers, estuaries, and the coast.

Successes Lessons Learned

The RSM Program works nationally with Districts (Coastal and Inland) and their stakeholders and partners to integrate the RSM principles and practices into new and existing projects, as well as enhance tools and technologies to understand system processes and evaluate RSM strategies. Since 1999, the program has supported over 200 RSM projects across the nation. RSM successes and lessons learned are documented in Technical Notes, Technical Reports, Journal Articles, Conference Proceeding, etc which are available on the RSM website: https://rsm.usace.army.mil.

US Army Corps of Engineers®
Engineer Research and Development Center

National Regional Sediment Management Program

Expected Products

- Enhance tools, technologies, models, and databases for RSM approaches
- Technical Notes, Technical Reports, Journal Articles, Newsletters, Conference Proceedings and Presentations, etc.

Stakeholders/Users

RSM benefits Corps practitioners, other Federal and non-Federal agencies, stakeholders, and partners with environmentally and economically balanced and sustainable solutions, which improve the management and use of sediments across multiple projects.

Projected Benefits Value Added

Managing sediment as a resource to benefit a region potentially lowers cost, allows use of natural processes to solve engineering problems, and improves the quality of the environment for projects and programs implemented by the U.S. Army Corps of Engineers. Under the RSM concept, sediment is considered a natural resource that provides environmental and economic benefits when it is managed effectively on a regional basis. The following are examples of benefits realized from RSM measures:

- Cost savings result from reduced rehandling of material; extended dredging cycles; sharing equipment in linked projects; shared information; and avoided duplication of data collection.
- Improved environmental conditions based on reintroduction of sediment into "sand starved" littoral systems reduce the requirement for beach nourishment and sustain habitat for threatened and endangered species.
- Shared regional-scale data management systems, models, and other tools improve project-level decisions and help achieve greater consistency in analytical results among studies and projects within a region.
- Improved interagency and stakeholder relationships produce opportunities for collaboratively leveraging financial and manpower resources to better understand the regional sediment processes, identify opportunities to improve the management of sediments, overcome challenges, and take action to implement and streamline strategies to optimize utilization of sediment locally and regionally.

Points of Contact

Katie Brutsché, PhD, RSM Program Manager, (601) 634-4174
Katherine.E.Brutsche@usace.army.mil

David May, Inland Deputy Program Manager, (601) 634-7543
David.P.May@usace.army.mil

Dave Perkey, Coastal Deputy Program Manager, (601) 634-2736
David.Perkey@usace.army.mil

Additional information can be found at https:/rsm.usace.army.mil
Email: rsm@usace.army.mil