



Regional Sediment Management Program Rock Island District (MVR): Sedimentation Impacts at the Confluence of the Sangamon and Illinois Rivers



Description

The Sangamon River flows into the Illinois River near Beardstown, IL. In an effort to develop sediment management strategies for this area, a system wide approach of understanding land use patterns and sediment transport throughout the watershed will be taken.



Sangamon River Watershed and Vicinity Map

Issue/Challenge To Address

The Illinois River was recognized by WRDA '86 as “a nationally significant ecosystem and commercial navigation system.” As with most navigable waterways, dredging must occasionally be performed in certain areas to maintain required depths. One significant area that requires frequent dredging on the Illinois River is at the confluence with the Sangamon River. In 1949, the mouth of the Sangamon River was relocated from river mile 98 to 89 of the Illinois River near a backwater area called Muscooten Bay. Over time, Muscooten Bay has filled with sediment, impacting the local boat harbor and inhibiting its use. In the last 20 years, the sediment has started to deposit in the main channel of the Illinois River, impacting navigation. As the dredging costs in this area have increased over the years and become a larger part of our channel maintenance budget, alternative methods to address sediment management in the watershed are needed.

Successes Lessons Learned

Lessons learned will be compiled during the duration of this study.

Expected Products

- Conceptual Modeling Workshop and written meeting summary
- Town Hall Meeting and written meeting minutes
- HEC-RAS model of the Sangamon River
- Presentation at the annual Regional Sediment Management – Engineering With Nature In Progress Review and Working Meeting
- Technical Note describing the work completed to date

Stakeholders/Users Stakeholders include the local residents and members of the hunting and duck clubs in the area, and local, county, state, and federal agencies, including the Illinois Department of Natural Resources.

Projected Benefits Potential benefits include the reduction of the amount of sediment delivered to the Illinois River and the volume and frequency of dredging required in the navigation channel, thus conserving channel maintenance funds. Another potential benefit is improved management of sediment within the watershed and the development of beneficial uses of the sediment. Improved sediment management could also result in potential ecological benefits such as the preservation of backwater habitat that would otherwise be lost due to sedimentation. It is expected that the Conceptual Modeling Workshop and Town Hall Meeting planned for this year will result in more robust partnerships and collaboration between the USACE and citizens, non-governmental agencies, and local, state, and other federal agencies.

Leveraging Opportunities The Illinois Department of Natural Resources is collaborating with USACE in the collection of survey data for use in the HEC-RAS model.

Points of Contact Toby Hunemuller
CEMVR-EC-HH
Supervisory Hydraulic Engineer
309-794-5222
Toby.J.Hunemuller@usace.army.mil

Nicole Manasco
CEMVR-OD-T
Channel Maintenance Coordinator
309-794-5558
Nicole.M.Manasco@usace.army.mil

Participating Partners Please refer to Stakeholders/Users