



Regional Sediment Management Program Buffalo District (LRB) Lake Erie Sediment Budget and The Sediment Budget Analysis System (SBAS)



Description

The Lake Erie Sediment Budget project has been ongoing in analysis of bluff line change and harbor sedimentation for the purpose of determining sediment movement along the lakeshore for better planning of shoreline management.



Issue/Challenge To Address

The southern lakeshore of Lake Erie functions as a 300+ mile long system with 19 Federal Projects and numerous state/local projects all acting together to affect the shoreline and sediment processes. Analysis and development of a regional framework is nearing completion and will ultimately lead to better decision making for planning for maintenance dredging and harbor structure projects to reduce sedimentation in Federal channels as well as providing ecological benefits.

Successes Lessons Learned

The work already completed has been integrated into other district projects, including for analysis at Sturgeon Point, New York and the Presque Isle 204 project, as well as by the USACE Regulatory staff in permit evaluations. Additionally, the work is being used to investigate methods of reducing district O&M costs.

Expected Products

- Finalized Lake Erie Technical Report
- Full SBAS Dataset
- Attendance at the 2015 RSM In-Progress-Review and Working Meeting

Stakeholders/Users

The project has involved the participation with ODNR through data collection and document reviews. Preliminary data has already been shared with and put to use by both ODNR and consulting firms involved with projects along the lakeshore.

Projected Benefits

Better understanding of the Lake Erie shoreline processes
Coordinated management of sediment resources
Ability to assess impacts of shoreline projects on sediment transport



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Leveraging Opportunities

The Sediment Budget has been developed as a collaborative effort between the Buffalo District and ERDC, with inputs from the State of Ohio. Data management has given the opportunity to test and refine the Sediment Budget Analysis System (SBAS) software

Points of Contact

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