



Phase IV GIS-based Sediment Quality Database for the St. Louis River Area of Concern (AOC)—Wisconsin Focus

What is the GIS-based sediment quality database? This project provides an innovative tool to assemble several types of sediment quality data in a database format, coupled with the ability to plot concentration ranges of these data on maps which contain an assortment of GIS watershed data (such as locations of marinas, industrial facilities, contaminated sediment areas, navigational dredging areas, and types of aquatic and near shore vegetation).

Who will use the GIS-based sediment quality database? Wisconsin Department of Natural Resources (WDNR), Minnesota Pollution Control Agency (MPCA), St. Louis River Citizens Action Committee (CAC), Minnesota Department of Natural Resources, Fond du Lac Band, Harbor Technical Advisory Committee of the Arrowhead Regional Development Commission, City of Superior, City of Duluth, Natural Resources Research Institute, Wisconsin and Minnesota Sea Grant offices, U.S. Army Corps of Engineers, National Oceanic and Atmospheric Administration, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency (EPA), EPA's Great Lakes National Program Office (GLNPO), International Joint Commission, environmental consulting firms, academic institutions, and businesses dealing with contaminated sediment issues in the St. Louis River AOC.

What sort of projects will benefit from it? Sediment assessment and remediation (clean-up) projects, storage and beneficial use of dredged material projects, total maximum daily load projects, habitat restoration projects, and fishery resource projects (through inclusion of information about the types of bottom-feeding organisms found in the sediments, which comprise part of the food chain for bottom-feeding fish).

Why is this project necessary? Fulfills a recommendation of the St. Louis River Remedial Action Plan (1995) to develop a sediment quality database and addresses certain strategies in the St. Louis River Habitat Plan (2002) for: 1) improving the ecological restoration of areas impacted by contaminated sediments, 2) to include the development and use of GIS to integrate sediment database information with site- and target-specific conservation strategies identified in the Habitat Plan, 3) to assist with efforts to develop a comprehensive port plan, and 4) to assist with efforts to develop a comprehensive dredge material management plan. In addition, this project is critical for Wisconsin and Minnesota state agencies and their partners to further develop an updated strategy for managing contaminated sediments in the St. Louis River AOC, including prioritizing areas for sediment remediation and habitat restoration.

Who has funded the different phases of this project? Phase I (completed September 30, 2003): \$81,000 from GLNPO plus 5% state match from the MPCA. Phase II (completed December 22, 2004): \$40,000 from GLNPO plus 5% state match from the MPCA. Phase III (database completed August 31, 2005): \$50,000 from Minnesota's Lake Superior Coastal Program and the National Oceanic and Atmospheric Administration (NOAA) plus 50% state match from the MPCA. Phase IV (to be completed by June 30, 2006): \$47,000 from the Wisconsin Coastal Management Program and NOAA to the St. Louis River CAC plus 60% state match from the MPCA.

Who is working on the Phase IV project? The Phase IV project team represents a collaborative effort between the St. Louis River CAC, WDNR, MPCA, and Exa Data & Mapping Services, Inc. (in conjunction with Premier Environmental Services, Inc. and Searay Environmental).

What products will be available from this project? Microsoft™ Access '97/2000 and Query Manager-compatible database files, ArcMap 9 map documents for a range of GIS watershed data, updated Help Sections for Database Users and ArcMap Users, updated Technical Documentation, a Sediment Quality Report, and presentations to state agency staff and stakeholders. The Phase IV project will encompass all of the sediment quality data and most of the GIS data sets included in previous phases of this project.

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