



US Army Corps of Engineers
Great Lakes & Ohio River Division

Fact Sheet

Great Lakes Tributary Modeling

Authority: Section 516(e), Water Resources Development Act of 1996, as amended

Purpose: This authority enables the Corps to develop sediment transport models for tributaries to the Great Lakes that discharge to Federal navigation channels or Areas of Concern (AOCs). These models are being developed to assist state and local resource agencies evaluate alternatives for soil conservation and non-point source pollution prevention in the tributary watersheds. The ultimate goal of this program is to support state and local measures that will reduce the loading of sediments and pollutants to tributaries, thereby reducing the need for, and costs of navigation dredging and promoting actions to delist Great Lakes AOCs.

Funding: Congress has provided between \$500,000 and \$1 million annually for this program in fiscal years (FY) 1998, 1999, and 2001 through 2006. The Administration's Budget Request for FY 2007 includes \$900,000 for this program. The Corps' capability for this program in FY 2007 is \$2 million. Additional funds would be used to accelerate completion of ongoing modeling.

Coordination: A program strategy was developed in cooperation with the Great Lakes Commission, an interstate compact of the eight Great Lakes states. State priorities were surveyed twice and tributaries selected for modeling based on state input. Before any model development is started, a working group is convened with representatives of agencies and organizations from the watershed, including Soil and Water Conservation Districts, Remedial Action Plans committees, municipal and regional planning agencies, navigation interests, state and federal resource agencies. This working group guides the scope and focus for the model to meet individual watershed needs.

Accomplishments: Models that have been developed are already being used by local, state and federal agencies for watershed and ecosystem planning, forestry management, navigation maintenance planning, and water quality compliance evaluations. State and county agencies are also using models to identify the most effective locations for buffer strips or wetland restoration projects and assess impacts of urban sprawl on sedimentation. Specific applications of completed models are listed on table 1, along with the status of ongoing coordination and model development.

In 2005, the Corps completed a report to Congress on the status of this program. This report is available online: www.glc.org/tributary

Future Activities: Modeling will be completed for eight tributaries in FY 2006. In FY 2007, modeling will be continued at three tributaries and initiated at six more. In addition to development of models for individual Great Lakes tributaries, the Corps is developing a web-based tool that can be used by any local resource agency in the Great Lakes Basin to do support watershed planning at smaller tributaries and sub-basins.

Table 1. Status of Great Lakes Tributary Modeling Program

State	Tributary	Status
Illinois	Waukegan River	Coordination and scoping.
Indiana	Grand Calumet River	Completed. Model being used by State for planning nonpoint source pollution controls
	Burns Ditch/Little Cal	Under development (complete in 2006)
	Trail Creek	Under development (complete in 2006)
Michigan	Saginaw River	Completed. Model used to evaluate feasibility of sediment trap for navigation channel
	Clinton River	Completed. Model being used by state and county to manage urban stormwater and bank erosion
	St. Joseph River	Completed.
	Dead River	Under development (complete in 2007)
	Grand River	Under development (complete in 2006)
	Sebewaing River	Under development (complete in 2006)
Minnesota	Nemadji River	Completed. Model being used by county and NRCS to evaluate impacts of forestry practices on soil and streambank erosion
	St. Louis River	Coordination and scoping
New York	Buffalo River	Completed. Model being used to evaluate pollution prevention and sediment cleanup options.
	Genessee River	Under development (complete in 2006)
	Eighteen Mile Creek	Under development (complete in 2006)
	Cattaraugus Creek	Coordination and scoping
Ohio	Auglaize River	Completed. Model being used by federal and state agencies to focus buffer strips and other conservation measures on priority areas.
	Black River	Under development (complete in 2006)
	Cuyahoga River	Under development (complete in 2006)
	Sandusky River	Coordination and scoping
Pennsylvania	Mill & Cascade Creeks	Completed. Model used by RAP group to plan and design project for streambank restoration and support AOC delisting.
Wisconsin	Menomonee River	Completed. Model being used by local agencies to manage urban growth and assess river restoration projects

For More Information: www.glc.org/tributary/

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