



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 Army Corps of Engineers 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 with the evaluation and planning of measures for soil conservation and non-point source pollution prevention. 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: The Energy & Water Appropriations Act of FY 2008 provided \$830,000 for this program and the Administration's Budget Request for FY 2009 includes \$900,000 for this program. The optimal annual funding for this program is \$1.5 million. Additional funds would be used to accelerate completion of ongoing modeling.

Coordination: This program is being implemented in close coordination with the Great Lakes Commission, an interstate compact of the eight Great Lakes states. Tributary models are developed in partnership 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. These partnerships guide the scope and focus for the model to meet individual watershed needs.

Accomplishments: Completed models are 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. A list of completed models is provided on the attached table. Also provided is the status of ongoing model development.

In addition to models for individual tributaries or sub-watersheds, 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. In addition to the models, two special reports have been prepared by this program. The Corps completed a report to Congress in 2005 on the status of this program. In 2007, a research paper on the known and potential impacts of increased farming of corn for ethanol production was released.

For More Information: Information on tributary models and reports are available online at:
www.glc.org/tributary/

Point of Contact: Jan A. Miller USACE, Great Lakes & Ohio River Division
111 North Canal Street, Chicago, IL 60606-7205
(312) 353-6354 jan.a.miller@usace.army.mil

Status of Great Lakes Tributary Modeling Program

State	Tributary	Status
Illinois	Waukegan River	Under development
Indiana	Grand Calumet River	Completed. Model used by State for planning nonpoint source pollution controls
	Burns Ditch/Trail Creek	Completed. Being used to evaluate impacts of urban development
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	Completed.
	Grand River	Completed.
	Sebewaing River	Completed.
	Battle Creek	Under development
	Rouge River	Scoping
Minnesota	Nemadji River	Completed. Model being used by county and NRCS to evaluate impacts of forestry practices.
	Knife River	Under development
New York	Buffalo River	Completed. Model being used to evaluate pollution prevention and sediment cleanup options.
	Genessee River	Completed.
	Eighteen Mile Creek	Completed
	Cattaraugus Creek	Under development
	Cayuga Creek	Under development
	Oak Orchard Creek	Under development
Ohio	Auglaize River	Completed. Model being used to focus buffer strips and other conservation measures on priority areas.
	Black River	Completed
	Cuyahoga River	Under development
	Blanchard River	Under development
	Swan Creek	Under development
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
	Whittlesey Creek	Under development
	Manitowoc River	Under development