

Developing a Water Resources Management Decision Support System for the Great Lakes

The Great Lakes Commission is leading a large scale collaborative effort to provide the region, in unprecedented detail, a status assessment of Great Lakes water resources, an inventory of the sources and use of Great Lakes water, and enhanced understanding of the ecological consequences of such use. A multi-agency, multi-disciplinary collaborative has been formed to accomplish this task and brings the expertise and resources of the Great Lakes Commission, its ten member states and provinces, multiple U.S. and Canadian federal agencies, regional organizations, and academic institutes to bear on the issue. The Great Lakes Commission and its team of collaborators are laying the framework for a state-of-the-art decision support system that will provide the data, information and process required to ensure timely and well-informed public policy decisions concerning the use and management of surface and groundwater in the Great Lakes system. The products provided by this Great Lakes Protection Fund supported initiative will strengthen water quantity decisionmaking and management processes in the Great Lakes-St. Lawrence region.

The project work plan is founded upon seven premises that are guiding project methodology and outcomes:

- ▶ All project activities and outcomes will be state and province driven; representatives of these jurisdictions will have a role in all project elements and in shaping all project deliverables.
- ▶ The project is ensuring that Great Lakes Protection Fund support is leveraged to the greatest extent possible, through significant direct and in-kind contributions from project partners.
- ▶ Access to and use of existing and planned initiatives by project partners and other collaborators is being maximized.
- ▶ A number of interim products with immediate applicability to the water resources management needs of the states and provinces have recently been completed.
- ▶ The assembly and synthesis of existing data and information is a priority, and will be complemented by the identification of gaps, unmet needs and means to address them.
- ▶ Project outcomes will be practical, pragmatic and additive, providing a strong foundation for necessary follow-up work yielding the structural and operational characteristics of a water resources decision support system.
- ▶ All project activities and outcomes will be directed at the sustainability of data and information gathering, analysis, and application well beyond the conclusion of project.

A Project Management Team was established early in the project and provides overall leadership and direction in the design and conduct of all project elements. It is comprised of representatives from all ten Great Lakes states and provinces (10); the Council of Great Lakes Governors; one representative each from the several U.S. and Canadian federal agencies with major roles in primary project elements (i.e., U.S. Geological Survey; National Oceanic and Atmospheric Administration; U.S. Army Corps of Engineers; Environment Canada); and several Great Lakes Commission staff members who are providing secretariat support. All have a working familiarity with, and responsibility for, all aspects of water use monitoring, data analysis, management and policy in their jurisdiction. The eighteen member body, chaired by Richard S. Bartz, Assistant Chief, Division of Water, Ohio Department of Natural Resources, has been meeting quarterly to provide leadership and direction, guide project element implementation, advise the Project Secretariat and, generally, ensuring that project commitments are met fully and in a timely manner. Project Management Team members are also involved in ongoing regional discussions concerning water resources management policy and ensure that project activities and products are consistent with/contribute to these discussions.