



Local governments and groups work together to protect drinking water

Local governments and conservation groups in Southwest Ohio are working together to protect drinking water supplies of the Great Miami River valley.

In a \$119,000 project sponsored by the Ohio-Kentucky-Indiana Regional Council of Governments (OKI), 10 project partners have agreed to pool their talents for identifying potential sources of drinking water pollution in Butler and Hamilton counties. The Ohio EPA will reimburse \$69,000 of the work with federal funds and the project partners will provide \$50,000 worth of in-kind services.

The relationship between surface water and ground water underlies project plans. The Great Miami River and its tributaries replenish an underground aquifer that provides drinking water to more than a 500,000 people in a 15-county region. When public water systems pump water from riverside wells drilled into that aquifer, they may increase the likelihood that surface water pollutants can become ground water pollutants through a hydrogeological process known as induced infiltration.

The Village of New Miami, an upriver neighbor to the City of Hamilton, has joined the project to develop a drinking water protection plan for the village's public water system. For technical guidance, New Miami has access to a project team that includes a groundwater protection coordinator for the Hamilton to New Baltimore Ground Water Consortium. Since the 1960s, the Consortium has set the standard for regional cooperation among public water systems that pump drinking water from the Great Miami aquifer.

Other key people working on this project are two hydrogeologists, a civil engineer, a monitoring technician, a public water system operator, a village board president, a geographic information systems manager, an environmental planner, a Miami University project director and a University of Cincinnati professor of aquatic ecology.

Project partners will be aided by the latest technology, including a tablet personal computer, a digital camera, GPS (global positioning system), detailed digital mapping, and computerized inventory forms to document potential pollution

sources with geographically referenced photos and database entries.

Much of the work will be accomplished during outdoor expeditions on foot or in canoes. The biggest challenge may not be technical or scientific, but simply the need to never drop, dunk or damage the sensitive computer gear.

Potential pollution sources will be sought along these waterways:

- Great Miami River, from New Miami in Butler County to New Baltimore in Hamilton County
- Four Mile Creek in Butler County
- Banklick Creek in both counties
- Pleasant Run in both counties
- Indian Creek in Butler County
- un-named tributary in Butler County

The project also will sponsor a monitoring well and other work by Miami Conservancy District, Butler County Water Festival, Friends of the Great Miami, Three Valley Conservation Trust, Butler Soil and Water Conservation District, and Hamilton County Soil and Water Conservation District.