Learning more about the Root River

Researchers from the U.S. Geological Survey (USGS) and a team of professors and science students from the University of Wisconsin-Parkside are collecting water quality data at eight sites on a nearly 25-mile stretch of the Root River. The data will be used to understand the river's current water quality and biological conditions several years before treated water from Waukesha begins to flow into the river as part of the Great Water Alliance.

"This a great opportunity for our students to apply in the field the lessons learned in the classroom and laboratory," said John Skalbeck, Ph.D., a UW-Parkside geosciences professor leading the effort. "This is a project of international significance - that's quite a legacy that these students can be proud of."

The UW-Parkside students are testing for 15 standard parameters for water quality including dissolved oxygen, necessary for fish and aquatic life; nitrogen and phosphorus, which can contribute to algal growth; turbidity and total suspended solids, which measure water clarity; pH and conductivity, which measure the level of acidity and salinity. In addition, UW-Parkside will collect fish and macroinvertebrate samples later this summer and fall.

The Great Water Alliance involves a program to borrow water from Lake Michigan and return it… The return flow will come via a pipeline will return the water after use and treatment at the Clean Water Plant in Waukesha to an outfall into the Root River. From there, the water ultimately flows back into Lake Michigan.

"We are committed to environmental stewardship which is why we have started collecting data from the Root River years in advance of the Great Lake Compact Council's directive." said Dan Duchniak, general manager of the Waukesha Water Utility. "We're taking samples before that requirement so we will more fully understand the river's current condition and can better protect water quality in the river while enhancing the river's fisheries."