



# Citizen Based Water Quality Monitoring in the Milwaukee River Basin

Friends of Milwaukee's Rivers (FMR) has a goal of establishing a watershed-wide network of citizen volunteers who are trained to monitor area streams and rivers, and who collect water quality information in a consistent and useable format. This project assessed existing citizen-monitoring programs for water quality in the Milwaukee River Basin.



Currently, there are a small number of citizen water quality monitoring programs in the watershed, but they are not coordinated and are not using similar protocols, or protocols that are useful to the Wisconsin Department of Natural Resources (DNR) for management decisions.

Groups with existing water quality monitoring programs include:

- Friends of Milwaukee's Rivers (Tier I)
- Water Action Volunteers (WAV) Program (Tier I)
- Riveredge Nature Center's Testing the Waters Program (Tier I), WAV Program (Tier I), and Riveredge Creek Water Quality Monitoring Program (Tier II or III)
- Ulao Creek Partnership (Tier I)
- Wisconsin Lutheran College (Tier II or III)
- University of Wisconsin-Milwaukee (Tier II or III)
- World Water Monitoring Day Program (Tier I)
- Lakes Monitoring Programs including the Self-Help Lake Monitoring Program (Tier I and II)
- the EPA Volunteer Monitoring Program (Tier I)

These programs have been successful in their primary goal to educate citizens and students about water quality and effects of land use, and to inspire citizens to become stewards of their local waterways.



- Information was collected through a combination of internet searches, phone calls, and interviews.
- Interviewees were asked about volunteer recruitment and training, monitoring protocols, datasheet templates, geographic scope, and future monitoring plans.
- To the extent possible, we also determined whether changes to existing programs would likely be needed to allow water quality data to be more useful and useable to the DNR.
- We also assessed the likely "tier" level of each monitoring program under the DNR's proposed "Citizen Based Water Resources Monitoring Proposal":
  - Tier I—Baseline Monitoring;
  - Tier II- Targeted Evaluation Monitoring; &
  - Tier III-Management Effectiveness Monitoring.



There is a sizeable pool of volunteers that have been involved in past monitoring activities, and there is great potential for these volunteers to be more effectively utilized in the future to collect useable data for DNR management decisions.

In the future, all programs should use the same monitoring protocol (as determined by DNR to meet their needs) and input data into the same publicly accessible database. Training and equipment should be provided to enable volunteer participation in Tier II/III monitoring activities.