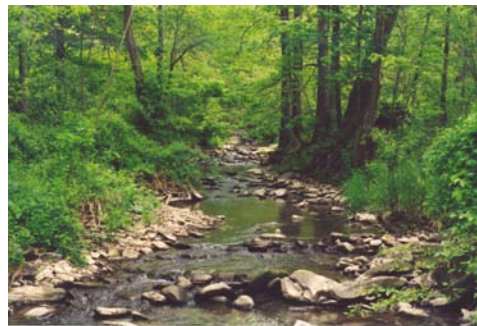
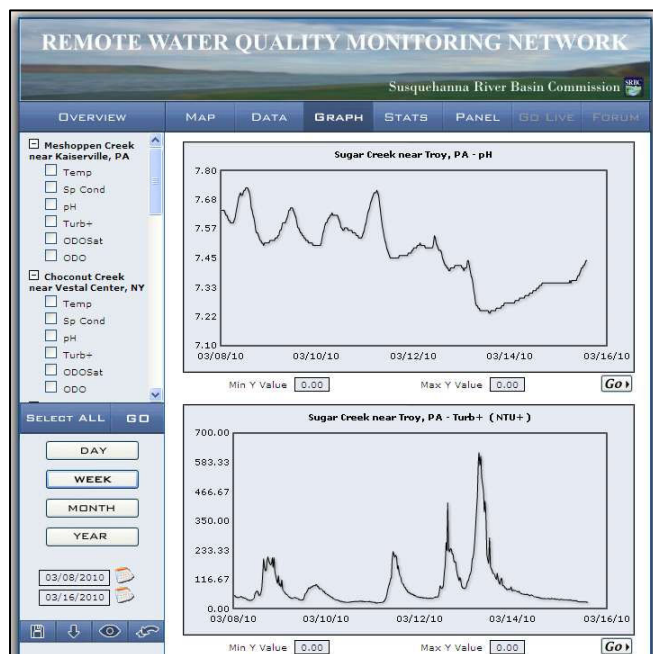


Susquehanna River Basin Commission Information Sheet

Remote Water Quality Monitoring Network



Network Overview – The Susquehanna River Basin Commission (SRBC) initiated a network designed to remotely monitor water quality conditions to maintain and protect surface waters in select portions of the Susquehanna basin. The monitoring network uses state-of-the-art monitoring and communication technology to collect and transmit real-time water quality data. Increasing demands for water throughout the basin, coupled with increasing wastewater flows, require the application of this advanced technology to effectively monitor rapid changes in water quality conditions. SRBC previously operated and maintained such a system only on the mainstem of the Susquehanna River for the purpose of monitoring drinking water sources; however, expanding the existing system meets a greater need to track water quality conditions within smaller rivers and streams throughout the basin where existing/proposed water demands are increasing.



Internet-accessible data provided by the monitoring network

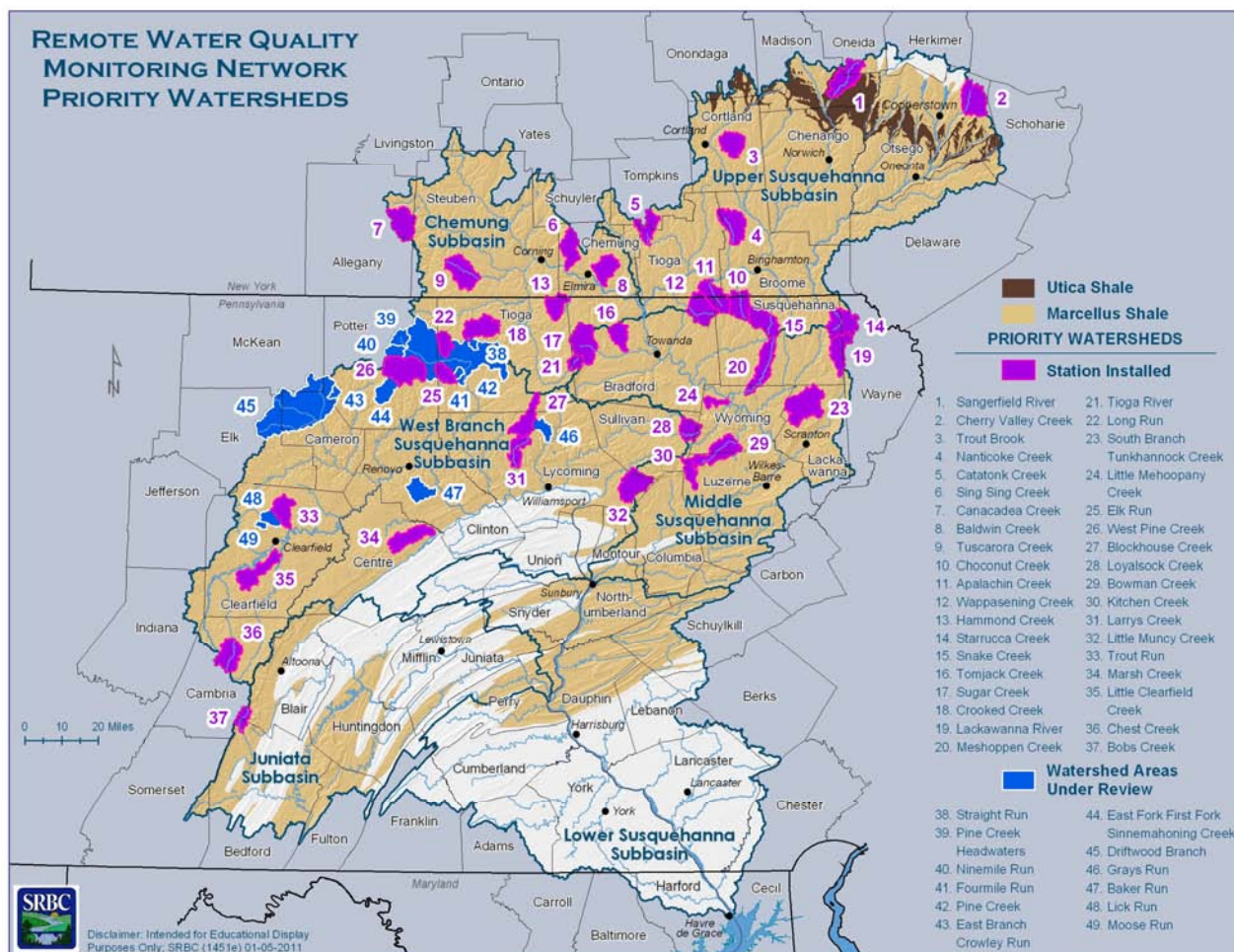
Network Implementation – The network will consist of fifty (50) monitoring stations in the Pennsylvania and New York portions of the Susquehanna basin, with all the stations installed by June 2011. The stations will continuously monitor and record the following five parameters: temperature, pH, conductance, dissolved oxygen, and turbidity. In addition, water depths will be recorded to establish a relationship with stream flows at select stations. These data will enable water resource agencies, water users, and the public to make informed decisions regarding management and use of the resource.

Each monitoring station includes a datasonde and data platform, powered by a solar panel or other power source. Observations may be made as frequently as five-minute intervals, with transmission to a web site at predetermined intervals. The web site interface also provides user-friendly access to other critical information and tools, such as tables, graphs, maps, and statistics.

The implementation process includes SRBC staff:

- Determining optimal locations for monitoring stations and obtaining access approval;
- Installing and maintaining 50 monitoring stations;
- Establishing a data management system for the monitoring network; and
- Providing a framework for data sharing among partners.

(over)



Network Coverage – The network area mostly spans the northern portion of the Susquehanna basin, with additional focus along the Pennsylvania–New York border. A remote water quality monitoring network that uses instrumentation sensitive enough to detect subtle changes, at frequent intervals, is required to effectively manage the water resources of this area.

The network is to provide enhanced capability for maintaining and protecting the quality and reliability of water resources in the basin, and foster communication and data sharing among partners. These goals represent those supported by SRBC’s Comprehensive Plan, with respect to the *Priority Management Areas* related to water quality, water supply, ecosystems, and coordination. A contribution from East Resources provided the initial funding for the project. In 2010, the New York State Energy Research and Development Authority provided additional funding for the expansion of the network into the New York portion of the basin. SRBC is covering the ongoing maintenance costs for the entire network.

Operation and Maintenance – SRBC staff will visit each station at approximately six- to eight-week intervals to perform routine maintenance. At certain times, some stations may require additional visits depending on site-specific conditions. During any such site visits, staff will collect additional data to assist with characterizing water quality conditions (i.e., streamflow measurements, water samples for lab analysis).

Contact – For more information on the network, please contact **Andrew Gavin**, Manager, Restoration and Protection, at (717) 238-0426 extension 107, or agavin@srbc.net.

For further information or to view “real-time” data for the stations installed to date, please visit the SRBC web page: www.srbc.net/programs/remotenetwork.htm.