# Susquehanna Nutrient Assessment Program

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**Biographical Sketch of Author**

Kevin McGonigal is a Water Quality Program Specialist in the Watershed Assessment and Protection division of the Susquehanna River Basin Commission (SRBC) in Harrisburg, PA. For the past two years, he has worked as project manager of the Susquehanna Nutrient Assessment Program at SRBC, which monitors nutrient and suspended-sediment concentrations at six sites throughout the Susquehanna River Basin. Kevin is also working with the Chesapeake Bay Program's Non-tidal Water Quality Workgroup to establish a uniform basin wide monitoring network encompassing all six Bay states; Virginia, West Virginia, Maryland, Delaware, Pennsylvania, and New York.

**Abstract**

Due to excessive inputs of nutrients and suspended sediment, the Chesapeake Bay has been placed on EPA's Section 303(d) list of impaired waters. The Chesapeake Bay Program, a volunteer based program tasked to reduce nutrient and sediment inputs to the Chesapeake Bay, is currently working with the six Bay states in an effort to improve water quality and remove the Bay from the 303(d) list. This effort involves the use of computer models to quantify the amounts of these constituents entering the bay annually. The accuracy of these models is very dependent on consistent monitoring data to calibrate the system. The Chesapeake Bay watershed consists of six states each having varied monitoring programs and objectives resulting in water quality data that currently are inconsistent.

The Susquehanna River Basin Commission manages a comprehensive program to quantify the amount of nitrogen, phosphorus, and suspended sediment reaching the Bay from areas upstream of six monitoring sites on the Susquehanna River and major tributaries in Pennsylvania. SRBC's monitoring program involves sampling at these sites bimonthly as well as during high flow events. These six sites are critical calibration sites for the Chesapeake Bay model and watershed model being utilized in the Bay restoration effort. Currently there is collaboration between all the bay states to adjust current monitoring programs to mimic the SRBC program to produce a uniform monitoring network for the entire Bay. This effort entails the collective development of consistent monitoring goals regarding parameters, methods, frequencies, and site locations. Specific goals include establishing a routine sampling regime to allow for proper trend analysis and sampling during various high flow events to allow for better load estimation.