Executive Director's Message

The Susquehanna River Basin Commission (SRBC) is pleased to release the ***2013 State of the Susquehanna*** report, which provides a snapshot look at data and trends for seven overarching water resource indicators. The indicators are: (1) Water Use and Development, (2) Floods and Droughts, (3) Stormwater, (4) Mine Drainage, (5) Sediment and Nutrients, (6) Human Health and Drinking Water Protection, and (7) Habitat and Aquatic Resources.

SRBC's goal is to provide data and let the data speak for themselves, not to rate or rank conditions.

This report would not be possible without monitoring data, collected by both SRBC and the agencies of its member jurisdictions. Monitoring is a core expertise of SRBC and provides data that are invaluable not only to SRBC's management decisions but to others as well.

This expertise includes all aspects of monitoring – from using approved methods, to collecting data that follow protocols for quality assurance and quality control, to carefully recording and analyzing the data. It also extends to providing monitoring results to agencies and policy makers in the interest of science-based decision-making as well as to watershed organizations and the general public.

We hope you will find the data and information included in this report useful. As you will see, some of the indicators show improving or virtually unchanged trends while others show declining trends for the assessment periods covered.

Good Progress to Date, Much More Is Needed

Based on analyses of SRBC's nutrient and sediment monitoring data, the health of the Susquehanna River Basin overall is improving. The mainstem Susquehanna River meets or exceeds its designated uses along most of its 444 miles. The basin includes many pristine watersheds with unimpaired water quality – of the more than 49,000 miles of stream miles in the basin, less than 14 percent are impaired for aquatic life uses. More and more communities are applying best management practices to reduce stormwater runoff and several agencies, SRBC included, are encouraging the reuse of mine drainage and other lesser quality waters.

But we know that is by no means the full story. There is much more progress to be made as we face increasing demands on the basin's water resources. More than 2,000 miles of streams are still impacted by mine drainage. The prevalence of disease in the smallmouth bass population has continued to increase since 2005. The percentage of the basin's assessed stream miles impaired for microbial pollutants doubled between the 2010 and 2012 assessment periods.

Greatest Threat to Water Resources Management

Today, I believe the greatest threat to water resources management in the Susquehanna basin is the ongoing uncertainty over funding for the network of stream gages throughout the Susquehanna River Basin. This is not a new concern. However, with the loss of line-item funding in the federal budget starting in fiscal year 2011 for the Susquehanna Flood Forecast and Warning System, it has been a growing concern.

A more viable, sustainable way of funding the stream gages needs to be secured. The gages, which are operated by the U.S. Geological Survey (USGS), generate real-time data that are vital for SRBC and numerous other water resource management agencies.

The tracking of virtually all seven indicators described in this State of the Susquehanna report and others not mentioned is directly or indirectly tied to USGS stream gages. Without these data, we would literally be "flying blind."

For example, SRBC would not be able to determine when major water users need to cease water withdrawals to safeguard other water users and the aquatic environment during times of low flow. The National Weather Service would not be able to provide timely and accurate predictions of when flooding is expected to impact communities throughout the basin. SRBC would not be able to assess whether pollutant loads in the basin are increasing or decreasing.

Those are just three of the many examples of how water resource management functions would be severely impeded should stream gages be lost.

We are familiar with physical infrastructure such as roads and bridges, water and wastewater systems and railway lines, and we know the consequences of not maintaining this infrastructure for public health, safety and welfare. Stream gages are no different. They are the "hidden infrastructure" that water resource managers rely upon extensively. If they are no longer operated and maintained, the result is that public health, safety and welfare is likewise jeopardized.

SRBC has been at the forefront for some years urging the federal government to adequately fund the stream gages. I cannot stress enough just how incredibly vital the stream gaging network is for the communities and citizens of the Susquehanna basin. I sincerely hope the importance of gages can be fully appreciated BEFORE this hidden infrastructure is lost to us.

Long Term Sustainable Water Resources Management

SRBC will continue to advocate for reliable stream-gage funding as part of its overall goal of sustainable water resources management for the Susquehanna basin. Through pro-active planning, management and cooperation among governmental and non-governmental affiliates, I truly believe we can set our sights to achieving that goal.

Paul O. Swartz
Executive Director
Susquehanna River Basin Commission