

Water Resources Management

Background: There can be little doubt that Pennsylvania's rich and diverse economy and environment is dependent upon and sustained by its relatively abundant water resources. The Commonwealth's surface and ground waters lie at the foundation of virtually every major industry and activity, from steelmaking to recreation, energy production to agriculture, fishing and hunting to navigation and global trade. Our water resources provide a basis for a high quality of life for Pennsylvania's residents, thriving ecosystems, and economic prosperity across the Commonwealth. Water is, indeed, one of the resources that make Pennsylvania a keystone state, and differentiate this state from many others in terms of potential for sustainable long-term development and opportunity. Key to this objective, however, is an understanding and commitment to long-term, science-based, and thoughtful stewardship of our water resources – built upon acknowledgment that water is a shared resource which in our region can and is used over and over again throughout the hydrologic cycle.

Pennsylvania's Challenges: At the same time, our state's water resources face growing challenges. Irrespective of the debate over its origins, the fact is that changing climate conditions portend to impact the timing, quantity and availability of water across the Commonwealth. While models indicate that the total amount of average annual precipitation might not change substantially, increasingly intensive storms and prolonged dry periods are anticipated to result in the dual challenges of more frequent and intense floods and stormwater challenges, and also increased droughts. Meeting these challenges will require a clearheaded evaluation of our water uses and demands, now and into the future, water availability in each aquifer and watershed under varying climatic conditions, identification of potential problems and use conflicts, evaluation of flood and stormwater management problems vulnerabilities, and identification of practical alternatives for addressing the water supply, flooding, stormwater and other water challenges – assuring an adequate quantity and quality of water necessary to sustain and support uses (fish and wildlife, recreational, agricultural, municipal, commercial, energy and others) that share these resources.

Pennsylvania's current approach to water management rests upon a jumble of disparate programs, each adopted in their day to address a particular issue. These include, for example, municipal sewage facilities planning under Act 537, county-based watershed stormwater planning under Act 67, floodplain management plans and regulations at the local and state level, to name a few. Notably, with the exception of programs administered by the Delaware and Susquehanna River Basin Commissions, planning for and managing water withdrawals is like a crazy quilt. The Commonwealth requires permits for surface water withdrawals by public water systems, a sector that represents around 10% of the state's total water use. More recently, withdrawals by oil and gas extraction companies have come under regulation via the Oil and Gas Act; but data show that the total of all such oil and gas withdrawals is less than one major power plant or the water consumed by Commonwealth golf courses.

Adopted in 2002, the Water Resources Planning Act (WRPA or Act 220) was targeted to address this gap in Pennsylvania's approach to water resources by providing a comprehensive

framework at both the regional and state levels to evaluate needs, identify problems, and recommend solutions. The WRPA requires preparation and updating of the State Water Plan every five years, and stipulates a list of items that the plan must address.

Unfortunately, the WRPA's mandate and what has been achieved in reality are widely divergent. In the initial "five years," the achievements of the State Water Plan as released in 2009 were largely limited to establishment of a water use registration data base and watershed water availability evaluation tool, coupled with a set of recommendations for future planning and consideration of certain statutory changes. Due to budgetary resource and personnel constraints, virtually no effort was made to evaluate anticipated future water use trends and requirements, or to recommend specific improvements or investments to address gaps and needs. The 2009 State Water Plan offered some laudable recommendations on priority efforts, including that (1) efforts to collect, interpret, and disseminate water resources information should continue into the future; (2) an integrated approach to managing water resources should be encouraged and sustained; and (3) the Commonwealth should adopt policies that encourage technologic advances designed to conserve and enhance water resources.

Since issuance of that initial "five year" State Water Plan in 2009, the WRPA effort has largely lain fallow. Personnel assigned to the function have dwindled to basically one professional assigned to maintaining the water use registration data system. The statutorily-created Statewide Water Resources Committee has not been convened for nearly four years. As other near-term issues (such as shale gas) have loomed to absorb the public, legislative and executive attention, broader efforts to develop a sustainable approach to overall water quality and quantity management have been largely ignored.

Policy Considerations: The proverb aptly observes: "You never miss the water till the well runs dry." Given the myriad of enterprises, communities, eco-systems and interests who are so dependent on Pennsylvania's water, we cannot afford to let the well run dry. The multiple interests who banded together to support bipartisan passage of the WRPA in 2002 reflected that understanding – and the point is more true today. Pennsylvania is on the crest of a wave of energy-based development where water is a key factor in our attractiveness and success. Balancing all of our water needs and uses, and framing appropriate investments to assure that our water supplies and related infrastructure are up to meeting those needs, is essential.

Hence, the Council strongly recommends a renewed priority and commitment be given to once again examining and updating our approach to water resources management, renewing and reinvigorating the State Water Plan effort, with the expectation that this time we will truly fulfill the concept envisioned in the Water Resources Planning Act – with a deliverable product that provides specific recommendations for public and private investments and actions to assure water quantity and quality challenges are addressed for the long-term.