

**REPORT OF THE**

**STATE WATER COMMISSION**

**TO THE GOVERNOR AND  
THE GENERAL ASSEMBLY OF VIRGINIA**



**REPORT DOCUMENT NO. 99**

**COMMONWEALTH OF VIRGINIA  
RICHMOND  
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## **EXECUTIVE SUMMARY**

In 2003, upon the recommendation of the State Water Commission, legislation was enacted that required localities to develop water supply plans that were then to be incorporated into a statewide water resources plan. Since the passage of this law, the Commission has received periodic updates on the progress of the development and implementation of these plans. In 2006, the Commission received a briefing from the Department of Environmental Quality (DEQ) on the water supply initiative and testimony from local officials on their efforts to develop local water supply plans.

Mr. David Paylor, Director of DEQ, stated that the development of local water supply plans will improve our understanding of (i) water supply needs over the next 30 or more years, and (ii) the availability of groundwater, and characterize the level of stream flows, which are necessary to support living resources and other uses. The goal of this planning effort is to create a water planning partnership among state, local, and regional governments, and public and private interests.

The local officials who testified before the Commission represented both urban and rural localities throughout the Commonwealth, including the Hampton Roads District Commission, Fairfax County, the Town of Amherst, and the Central Shenandoah Planning District Commission. They all commented on the difficulty of the task facing their localities but were appreciative of the technical assistance and the \$800,000 in grant funds provided by DEQ. This is especially the case with respect to the smaller localities that neither have the financial resources nor staff to develop a comprehensive water supply plan. All the speakers suggested that for a plan to be effective it must be regional in nature. Acknowledgement of this has resulted in the widespread development of regional water supply plans rather than individual plans for each county or city.

# **REPORT OF THE STATE WATER COMMISSION**

**To**

**The Honorable Timothy M. Kaine, Governor  
And  
The General Assembly of Virginia  
Richmond, Virginia**

## **ANNUAL REPORT OF THE STATE WATER COMMISSION**

The State Water Commission is a 15-member legislative body, established by statute that is charged with (i) studying all aspects of water supply and allocation problems in the Commonwealth, and (ii) coordinating the legislative recommendations of all state entities that have responsibilities with respect to water supply and allocation issues. In 2003, legislation was recommended by the State Water Commission, and subsequently enacted into a law, that required the development of local, regional, and state water supply plans. Since the passage of this law, the Commission has monitored the administrative and regulatory procedures put in place to ensure that water supply plans are developed and implemented.

On January 9, 2007, the Water Commission held a meeting to examine the status of the state and local/regional water plans. The Commission received testimony from Mr. David Paylor, Director of the Department of Environmental Quality (DEQ) and four representatives of local and regional governments which are engaged in the preparation of water supply plans. The local officials represented urban and rural water suppliers. Mr. Paylor indicated that the water supply planning effort has two goals: (i) to meet the water needs of the citizens of the Commonwealth, and (ii) to meet these needs in an environmentally sustainable way without overtaxing the resource. He noted that the development of local and state water supply plans will improve our understanding of (a) local water supply needs for the next 30 or more years, and (b) groundwater availability and stream flows that are necessary to support living resources and other beneficial uses. The aim is to create a water planning partnership among state, local and regional governments, and public and private interests through a comprehensive and continuous planning process guiding the use of Virginia's water resources.

Under the original legislation, localities are required to submit plans to the State Water Control Board on a schedule based on population. Localities with a population of 35,000 or more are required to submit its plan by 2008; those with a population between 5,000 and 34,999 are to submit a plan by 2009; and localities with a population of less than 15,000 have until 2010 to submit a plan. The Department has promoted the concept of regional water supply planning and, so far, 234 localities have participated in the development of 25 regional plans. There are incentives for those localities involved in regional water supply planning, including not requiring the submission of such regional plans until 2011 and a preference in funding from DEQ.

In January 2007, six new staff persons were hired by DEQ to provide local assistance through DEQ's regional offices to 183 counties, cities, and towns in meeting the requirements of the regulations. The Department is also developing program guidance and providing grants totaling \$800,000 to those involved in water supply planning. The grants range from \$15,000 to \$50,000.

The integration of the various local and regional plans will result in the development of a state water resources plan. This state plan will guide policies for (i) optimizing the use of water by identifying long-term needs of the various beneficial uses of water resources and (ii) identifying conflicts among water users and uses. In addition, the plan will enable the Commonwealth to reduce the risk of water shortages that might otherwise result from inefficient water use and drought.

Among the future challenges facing local and state government, according to Mr. Paylor, is (i) developing a more detailed characterization of Virginia's water resources, particularly crucial is determining how much groundwater is available west of Route 95, realizing water reuse opportunities, accommodating growth, integrating water supply with local land use management, establishing the appropriate relationship between local/regional plans and future permit decisions, and resolving conflicts among users. Mr. Paylor concluded his remarks by emphasizing that the state's role in water supply planning is not to dictate solutions but to facilitate the discussions to resolve potential conflicts.

Representatives of local and regional governments discussed their efforts to develop water supply plans. The Fairfax County Water Authority serves 1.5 million people in Northern Virginia. Mr. Charles Murray, General Manager of the Authority, indicated that his organization has engaged in such planning since 1966, but it has been done in conjunction with agencies in the District of Columbia and Maryland. Currently, under cooperative agreements, the Authority receives water supplies from the Patuxent, Potomac and the Occoquan Rivers. Reservoirs have been constructed on the three rivers, with the Authority sharing the operation and maintenance costs of those reservoirs. Because of its history of developing cooperative agreements to share water supplies, the Authority is familiar with the process that is now mandated in Virginia. The only thing that would change for the Fairfax County Water Authority would be the incorporation of other jurisdictions as partners in a new regional plan. Thus, instead of working solely with water utilities located north of Northern Virginia, as is now the case, the Authority would be working with localities in Virginia, some of which have their own water utilities and others who purchase raw water from other sources. The development of this new plan may be complicated by the fact that data on groundwater resources, including private wells, would have to be collected and become part of the water supply plan. While Mr. Murray noted the complexity of the task, there is an organization, the Northern Virginia Regional Commission, which will assist in the collection of such data and in the coordination of the plan's development.

The Hampton Roads Planning District Commission (HRPDC) serves the 16 cities and counties of Hampton Roads. Mr. John Carlock, Deputy Executive Director for the Physical Planning of the HRPDC, described the Commission's initiatives to develop a regional water supply plan. The region has been involved in the provision of water supplies since 1969. For the last 15 years, the localities in the region have participated in a regional water resources

management program that involves discussions related to policy and regulatory issues, groundwater management, watershed management, wastewater programs, and regional educational programs.

The requirement to develop a water supply plan has several implications for Hampton Roads. It will require a comprehensive water supply plan covering all water uses in each locality and for the region. Currently, most local water supply plans only address a public utilities service area. The Hampton Roads localities are now engaged in establishing a framework for regional cooperation in the form of a water supply planning memorandum of agreement. So far, 19 of the 24 localities in the region have signed the agreement to develop a regional plan. The framework consists of a multi-phase program, with the first phase being data collection. The agreement's participants are currently gathering data on existing public and nonpublic supply systems and environmental resources. Upon the completion of this phase, they will proceed to an analytical phase that will include (i) the identification evaluation of water conservation options, (ii) the development of a drought response plan, (iii) a determination of future needs, and (iv) the identification and evaluation of alternatives, including technology. The data collected and the analysis will form the basis of the plan. Under the memorandum of agreement, a regional plan will be completed by November 2008.

Mr. Carlock indicated that state grant assistance has been helpful in completing the data collection phase as has been DEQ's guidance, which has provided a format for reporting the data that will be incorporated ultimately as part of the state plan. He noted that this has been a complex process because of the varying levels of planning sophistication among the 24 localities.

Mr. A. Ray Griffin, Executive Director of the Central Shenandoah Planning District Commission, identified financial, technical, and political issues a number of localities in the region are experiencing. From a financial perspective, the cost of meeting the state's water planning mandate is greater than was projected by the localities in the region. The initiative to meet the criteria has also turned out to be more complex than anticipated. Towns within the region are experiencing costs of \$4,100 to \$8,000 for phase 1, with the costs for cities being \$10,000 to \$20,000, counties about \$30,000 to \$50,000. The state's financial assistance of \$50,000 has helped to cover the costs of completing phase I of the plan.

Various technical issues have arisen regarding how best to develop a unified database. Currently, there are differences among various water suppliers in how they collect data, classify users, and manage their systems. The collection and presentation of data is especially problematic for small localities. Although he identified various problems in developing a water supply plan, Mr. Griffin commended the state for providing the needed financial and technical assistance to respond to this mandate.

On the political side, the plan will require the collection of data from private water systems that localities have no authority or control over. The regulation of private water systems is the province of the State Health Department. The retrieval and compilation of data from the Health Department may involve significant staff time and expense. The Commission members suggested that DEQ and the Health Department coordinate these data collection activities. Hopefully, that will minimize the cost of plan development for smaller localities that faced the

very real option of having to raise water rates to meet all of the plan's requirements. Mr. Griffin suggested that a statewide conference should be held to address some of the plan-related issues and to discuss how the state's regulations could be implemented more effectively.

Mr. Thomas Fore, Superintendent of Plants for the Town of Amherst, informed the Commission that the town has joined the other localities surrounding Lynchburg in developing a regional plan. Twelve local government and four service authorities are participating in this effort, which is being coordinated and staffed by the Region 2000 Local Government Council (planning district commission). The town has a population of 2,251 and the water system has 1,060 water connections, with a service population of 5,750. The source of the town's water supply is the Buffalo River, which ran completely dry during the drought of 2002. Because of the town's limited financial capacity, it was necessary to join other localities in the region to develop a water supply plan. Mr. Fore complimented DEQ for the technical assistance its staff provided during the development of the plan. What has resulted from this effort is a regional plan that includes cost allocations for each locality to implement the various elements of the plan. He suggested that it is not practical for every locality to develop a separate plan for the same resource. In fact, the regional planning effort that has occurred has resulted in promoting regional infrastructure planning.

While the four representatives of local/regional governments were concerned with the cost and staff time involved in developing local and regional plans, each recognized the need for such plans and was complimentary of the technical and financial assistance provided by DEQ. The Commission will continue to review the development and implementation of local and regional water supply plans and the state's water resources plan.