

## **Regional Water Supply Plan Executive Summary**

In response to the requirements set forth in Virginia Regulation 9 VAC 25-780, the Middle Peninsula Planning District Commission (MPPDC) has developed a regional Water Supply Plan to address future water needs for the counties of Essex, King and Queen, King William, Mathews, and Middlesex, as well as the incorporated towns of Tappahannock, Urbanna, and West Point. The Plan evaluates existing water sources and water usage, as well as projected future growth in demand and the demands of competing uses, in order to ensure that sufficient water is available to meet the residential, commercial, industrial, agricultural and institutional needs of the Planning Region. The Plan analysis concluded:

- Over a 30-year planning period, water demand in the region is likely to grow by up to 5.1 million gallons per day, with the majority of the increased demand in King William County.
- The region is served by a combination of publicly-owned and privately-owned community water systems. All of the Region's community systems currently rely on groundwater sources.
- Every jurisdiction applies some form of demand management. Each jurisdiction has adopted the low-flow fixture requirements identified in the Virginia Uniform Statewide Building Code, and each jurisdiction conducts some form of public education in responsible water use practices. Various jurisdictions apply other forms of water demand management on an as-needed basis. Large private systems and users also report a variety of management practices.
- With the exception of King William County and West Point, existing water sources appear capable of supporting the projected increase in demand for the planning period.
  - The future needs of the Town of West Point can be resolved through permit amendments and/or upgrades to the Town's existing water pumping and storage equipment.
  - The future needs of King William County will require development of a significant new water source. While groundwater resources may be the best alternative to meet the County's short-term needs, development of a surface water source, such as the Pamunkey River, appears to be the best long term solution. Additional analysis of the feasibility of this option is needed.

The Plan also provides a framework for responding to droughts that may affect the region. The Plan analysis determined that:

- Deep wells that serve community systems in the region are typically buffered from meteorological drought; shallow wells are at greater risk, but are typically small private users who are self policing and addressed through education and voluntary action rather than public regulation.
- The Plan includes a model ordinance for adoption by each jurisdiction (King William County has previously adopted a drought contingency ordinance). The ordinance identifies four levels of drought, and provides discretion for County Administrators and Town Managers to respond to conditions as they develop:
  - Abnormally dry – monitor well conditions and usage;
  - Drought warning – monitoring, education, and voluntary conservation;
  - Drought watch – monitoring, education, voluntary conservation, conservation pricing allowed;

- Drought emergency – mandatory reduction or cessation of non-essential uses, penalties, conservation pricing.

Following a public hearing, each locality participating in the Regional Water Supply Plan must adopt the Plan prior to submittal to the Virginia Department of Environmental Quality. The Virginia State Water Control Board will evaluate the Regional Plan to determine that the Plan complies with 9 VAC 25-780. Once the Plan is determined to be in compliance, the Plan will be incorporated into the Virginia State Water Resources Plan.