



## Facts about the Eastern Shore of Virginia's Groundwater

The Eastern Shore of Virginia depends **entirely** on ground water for drinking water supplies, as well as most other supplies such as irrigation water. The salt water that surrounds us causes our water to become brackish at relatively shallow depths (350 feet) in most areas. On the necks, it becomes brackish at even shallower depths. The total available ground water supply is limited to the amount of fresh water recharging the aquifers from precipitation directly falling on the Shore.

### *Sole-Source Aquifer*

In 1997, the US Environmental Protection Agency (EPA) designated the fresh ground water that supplies all drinking water on the Eastern Shore of Virginia as the Columbia and Yorktown-Eastover Multiaquifer System Sole Source Aquifer. The designation provides protection to the Shore's water supply by requiring the EPA to review proposed projects on the Shore that are receiving federal financial assistance to ensure they do not endanger the water source.

### *General Threats to Our Groundwater*

- Saltwater Intrusion
- Lowered Ground Water Level from Pumping
- Contamination

Saltwater Intrusion and Lowered Ground Water Level both reduce the volume of drinking water available to us. Contamination can render large amounts of our drinking water unusable.

### *What is being done to protect the ground water?*

Numerous federal, state, and local ground water protection laws and programs exist. Many are designed to protect ground water from chemicals, biological waste, or petroleum hydrocarbon releases. The Eastern Shore of Virginia Ground Water Committee was formed in 1990 to assist local governments and residents in understanding, protecting and managing the ground water resource. The Ground Water Supply Protection and Management Plan for the Eastern Shore of Virginia (1992) provides the basis and guidelines for protecting the ground water resource.

### *What needs to be done & what can I do?*

The ESV Ground Water Committee continues to encourage the use of the Columbia Aquifer instead of the Yorktown-Eastover Aquifer. The Committee is currently working with local farmers and farm agencies to reduce irrigation dependence on the Yorktown-Eastover. This will help protect that aquifer from saltwater intrusion and lowered ground water levels. Continuing education efforts are also very important. One of the simplest but most effective ways of reducing water use that one person can do is just fix any leaks that develop.

For more information about the Eastern Shore of Virginia's groundwater and what needs to be done to protect it, go to <http://www.a-npdc.org/accomack-northampton-planning-district-commission/ground-water-management/>.