



## **Our Water Aquidneck Island**

People and their businesses in three towns rely on public water from Newport Water Utility's island reservoirs and the back-up supplies, owned by the utility in Little Compton. Agricultural use of public water for producing nursery stock remains significant, the Navy still has demands, and limited industrial use continues. Increasing residential and commercial development has converted more than half of the island's former agricultural lands creating more demand and less open areas to replenish streams and reservoirs.

### **Water Resources on the Island**

Aquidneck Island receives the least precipitation of any area in Rhode Island -- less than 46 inches per year. The craggy shoreline hints at the closeness of the bedrock to the land's surface. This means there are only small pockets of glacial soils to hold precipitation in groundwater. Cracks in the top of the bedrock also hold and transmit small amounts of groundwater. Streams on the island, Bailey Brook, Maidford River, Paradise Brook have been dammed for supply system before they flow into the ocean. Three ponds in the Lawton Valley provide major storage before treatment.

### **Stewarding the Water Supply**

Approximately 85% of island water is publicly supplied from the reservoir system, and groundwater supplies one bottler of water in addition to individual wells on the island. Public water is used for agriculture (nurseries, vineyards, livestock), residential, institutional (Navy base, schools), tourism, and industrial purposes.

Currently all of the island's public water is supplied by Newport Water, operated as an enterprise fund separate from city budget and regulated by the Rhode Island Public Utilities Commission. Newport Water supplies its own residents and businesses as well as those in Middletown and a small section of Portsmouth, also wholesaling water to Portsmouth Water and Fire District and the Naval Base. The Lawton Valley water complex includes one of two treatment plants run by Newport, and both are supplied by nine surface water reservoirs, including Lawton, St. Mary's, Easton and Gardiner Ponds on the island and reservoirs in Little Compton connected by pipeline under the Sakonnet River.

### **Opportunities to Share and Manage Our Water**

In 2005 and 2006, Aquidneck Island lost over 360 acres to development, and previously, from 1985-1997, more than 1,400 acres of Aquidneck Island working farmland was lost to development. Aquidneck Island Planning Commission, Aquidneck Land Trust, and Newport Public Utilities have worked to protect watershed areas.

Newport Water has taken advantage of the conservation surcharge to create open space buffers around the storage reservoirs, and Aquidneck Land Trust has acquired conservation easements to put a second layer of protection. The land trust has also purchased land to protect the recharge areas. Sea Grant at the University of Rhode Island partnered with municipal government and organizations to create a land conservation strategy that has a water protection element. Stewardship decisions like these protect water quality in the reservoirs.

### **What You Can Do**

Support your town government in planning development that respects the island's limited water. Encourage "Green Hospitality." Use water wisely at home.

