

Protecting our Drinking Water

RHODE ISLAND WATER 2030

Executive Summary



EXECUTIVE SUMMARY

Got Water to Drink?

Did you know we have a state plan for that? Everyday you and more than a million other people use clean drinking water from local supplies in our State. Drinking water is essential to everyone including our environment and our businesses. *RI Water 2030* is a plan that outlines the actions for the State and others to take to make sure that there is drinking water for today and the future. As part of the State Guide Plan, the Plan addresses planning for and protecting the drinking water used by all Rhode Islanders, including private wells.

We get all of our drinking water from rain and or snow that collects either in surface water reservoirs or is stored underground in aquifers. The average water use statewide is 65 gallons per person per day year round. Currently, we have adequate supplies but drinking water is always vulnerable to contamination and **we have to take care of some of the oldest water systems in the Country**. The Plan stresses the need to reduce the demand for drinking water and to increase the protection of all drinking water sources. We also know that in some places in our State that drinking water is not always available in sufficient quantities for all uses at all times. This Plan calls for an integration of actions where municipal officials, state officials and water suppliers coordinate with each other in order to ensure that water demands match the amount of supplies available.

RI Water 2030 was written by Nancy Hess of the Division of Planning, in cooperation with an advisory committee of stakeholders. Work was begun in 2009 and the Plan was adopted by the State Planning Council on June 14, 2012. Many of the issues in the Plan, including the content of this Executive Summary, were formed from the opinions of the planning and water professionals on the advisory committee, state and municipal leadership, environmental stakeholders, and citizens. It also addresses an important recent law, the **Water Use and Efficiency Act**. This Law requires more coordination of water supply information between water suppliers and municipal land use planners to ensure a safe supply of drinking water for all.



The Plan has three parts. Within the three parts explanations are provided for:

- ◆ where our water comes from
- ◆ what supplies we have and how they get to us
- ◆ how we are using our supplies
- ◆ what will we need in the future
- ◆ how water systems need to meet public health requirements, and
- ◆ the operational, financial, and management issues faced by water systems.

Finally, the Plan has goals, policies and actions for all involved with planning for or providing drinking water to make sure that there will be enough safe and reliable drinking water for us and our children.

This document should be referenced as:

Rhode Island Department of Administration, Division of Planning, Rhode Island Statewide Planning Program, *RI Water 2030, Executive Summary*, 2012, One Capitol Hill, Providence, RI 02908.

Tel:(401-222-7901)

Website: <http://www.planning.ri.gov/>

The Vision

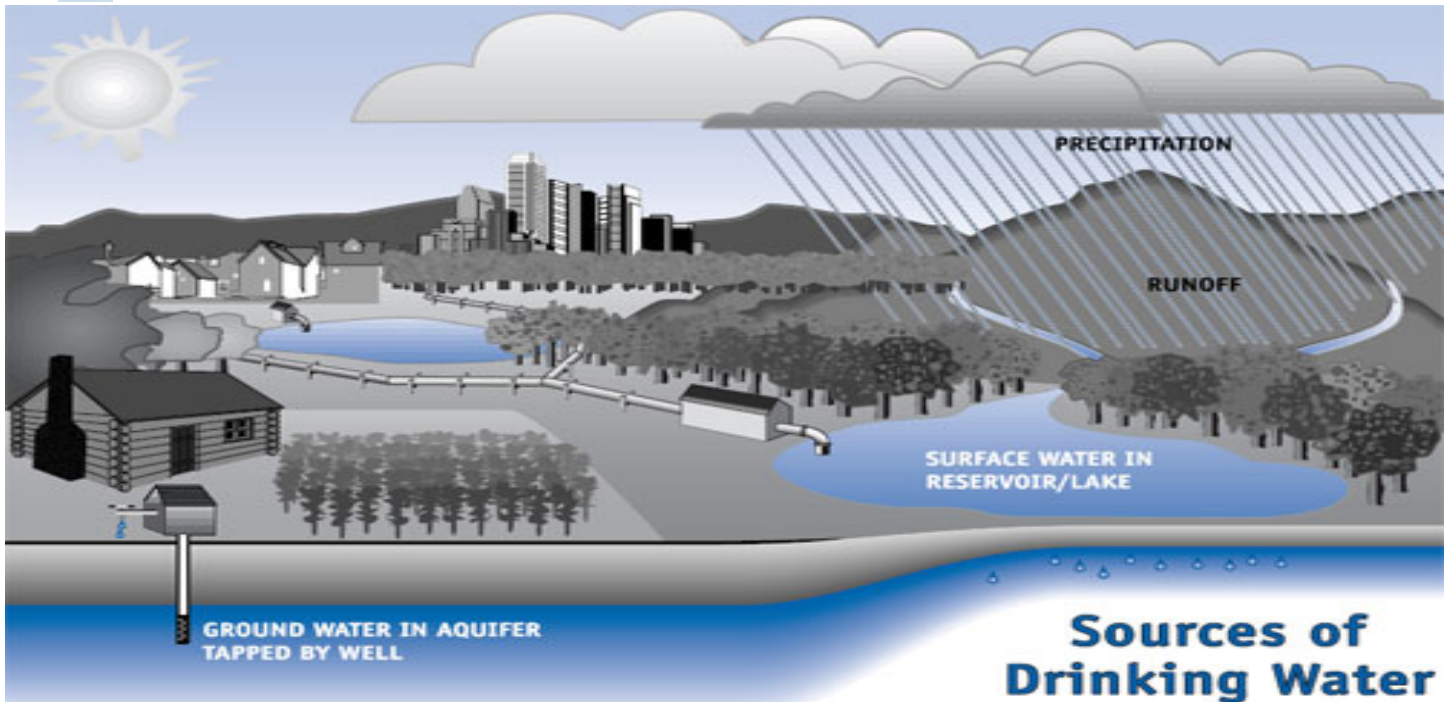
To ensure safe, reliable, ample water supplies to meet the State's short and long range needs while preserving the physical, biological, and chemical integrity of the water resources of the State

Rhode Island's Drinking Water Setting

- ◆ On average 53 inches of rain and or snow fall each year and this provides the source of our drinking water.
- ◆ Water is a shared, interconnected natural resource.
- ◆ Economic prosperity in the State has historically been and will be tied to our high quality water resources.
- ◆ Multiple state agencies along with several federal agencies, municipalities, public suppliers and citizens manage the use of drinking water in the State.
- ◆ Rhode Island has a total of 490 public water supply systems which vary widely from small rural restaurants to 28 large suppliers.
- ◆ The large majority of public drinking water in the State comes from:
 - ◆ Scituate Reservoir Watershed
 - ◆ Big River Area, and
 - ◆ 4 federally recognized groundwater systems that have no other source of water for drinking but ground-water.
- ◆ This Plan is intended to serve as the foundation of drinking water supply policies for all drinking water management decisions made statewide.

In addition to this Executive Summary, the full Plan is available on the Division of Planning's website.

EXECUTIVE SUMMARY



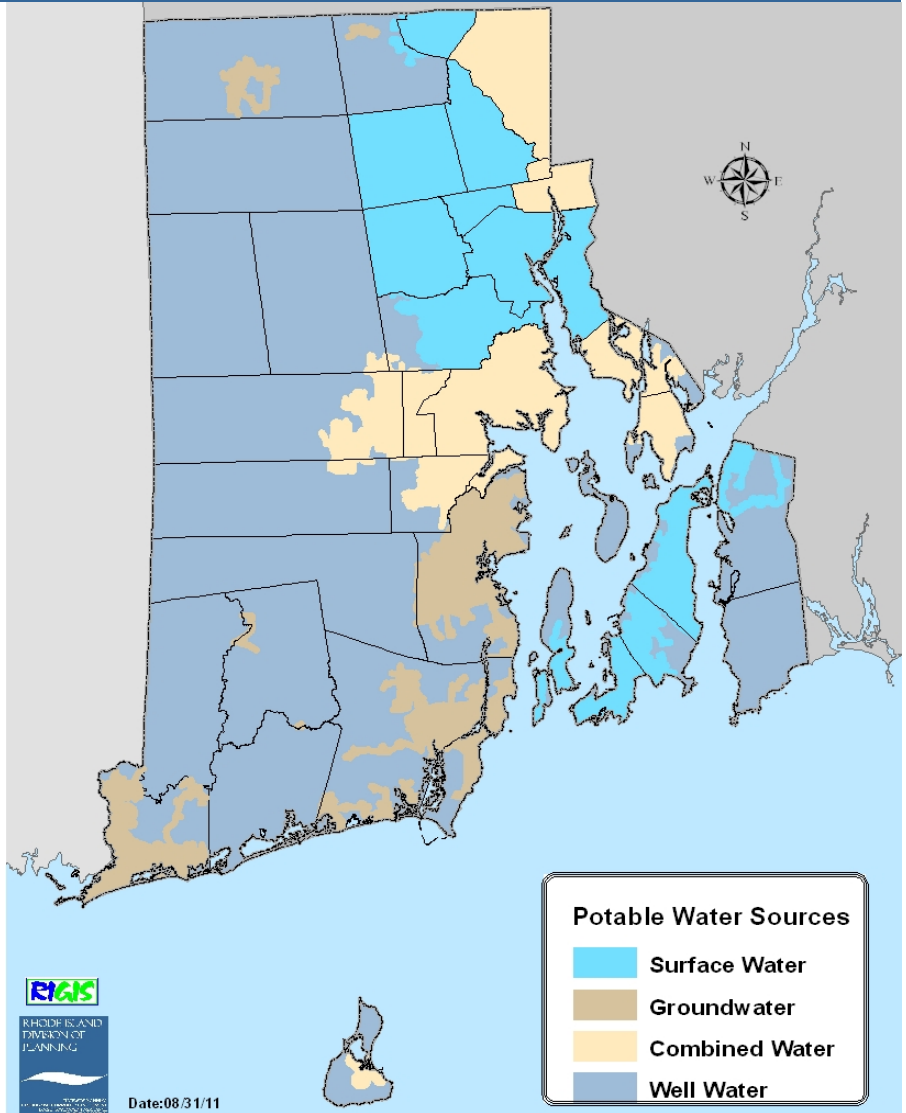
Drinking Water Issues for Today

- ◆ We usually have sufficient supplies but drinking water is always vulnerable to contamination and is not always located where it is needed or available in sufficient quantities for all uses at all times.
 - ◆ Northern RI has generally adequate supplies.
 - ◆ Southern RI is groundwater dependent and lacks storage capacity.
 - ◆ Aquidneck Island has shallow reservoirs with developed watersheds and raw water that is challenging to treat.
 - ◆ On other Islands, such as Jamestown and Block Island growth is stressing available supplies.
- ◆ 60% of Rhode Island's developed public water supply comes from the Scituate Reservoir Watershed.
- ◆ We have a few of the oldest water systems in the country that we have to upgrade and maintain.
- ◆ Increasing summer outdoor water use is one of our biggest demand management issues along with finding adequate water volumes for new large users.
- ◆ Understandable information on water availability is needed for everyone to make wise development decisions.
- ◆ Technology, management and the operation of water systems are coping but vary in sophistication and staff capabilities but generally need more financial support.
- ◆ Compared to our neighboring states RI has relatively lower water rates.

RHODE ISLAND WATER 2030 State Guide Plan Element 721

16 of 39 communities receive drinking water from the Scituate Reservoir:

Bristol
Barrington
Cranston
Coventry
East Greenwich
East Providence
Johnston
Lincoln
North Providence
Providence
part of Scituate
Smithfield
Warren
Warwick
part of West Greenwich



Everyone needs drinking water

We need to:

- ◆ Evaluate old infrastructure against current standards to make sure that good money does not follow bad.
- ◆ Ensure that all investments are cost effective.
- ◆ Create schedules for funding and maintenance of our water systems and stick to them.
- ◆ Ensure maximum efficiency from existing supplies and infrastructure before adding new sources.

EXECUTIVE SUMMARY

Assuring There's Drinking Water for Tomorrow

- ◆ Goals and policies are presented in two categories:

- ◆ Integrated Management and Planning
- ◆ Water Resources Management

The Water Resource Management category is further divided into nine sub themes:

- ◆ Water Resource Management
- ◆ Resource Assessment
- ◆ Water Quantity
- ◆ Water Quality
- ◆ Demand Management
- ◆ Climate Change
- ◆ Supply Management
- ◆ Emergency Management
- ◆ Drought Mitigation

- ◆ Strategies are presented for each with designated lead and supporting agencies and timeframes.

- ◆ The timeframes for the action are; As Needed, Ongoing, Short term (1-2 years), Medium term (3-5 Years) and Long term (more than 5 years)



The following goals and policies will help us to achieve *RI Water 2030*.

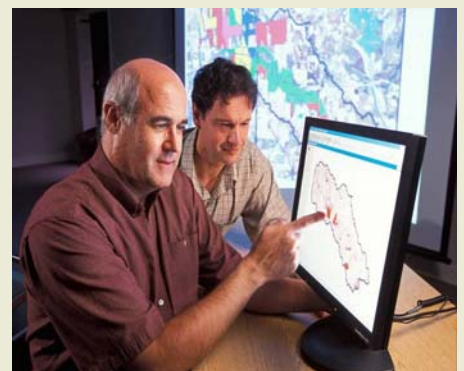
Integrated Management and Planning

The goals and policies under this category are challenges for the financial management, administration, planning for, and operation of water systems .

Goal: Plan for drinking water across all levels of jurisdictions

Policies:

1. Include water quality/quantity protection issues for drinking water in state and or local regulations.
2. Plan regionally for today's and tomorrow's water supply.



EXECUTIVE SUMMARY

Goal: Make sure water systems have the technical, managerial, and financial capacity needed

Policies:

1. Make sure our water systems have safe and reliable supplies.
2. Bills should include all costs of operating water systems.
3. Cooperate and regionalize when possible.



According to the EPA, Rhode Islanders spend, on average \$345 per year for drinking water, in contrast to an average of \$707 per year spent on carbonated soft drinks and other noncarbonated beverages.



Fixing Water Main Leak, Westerly



Bow Hunters Storage Reservoir, North Kingstown



EXECUTIVE SUMMARY

Goal: Plan for water systems that support *Land Use 2025*

Policies:

1. Consider water quality and the amount of water available in land use and development decisions.
2. Match future land use to available drinking water and infrastructure capacities.

Land Use 2025

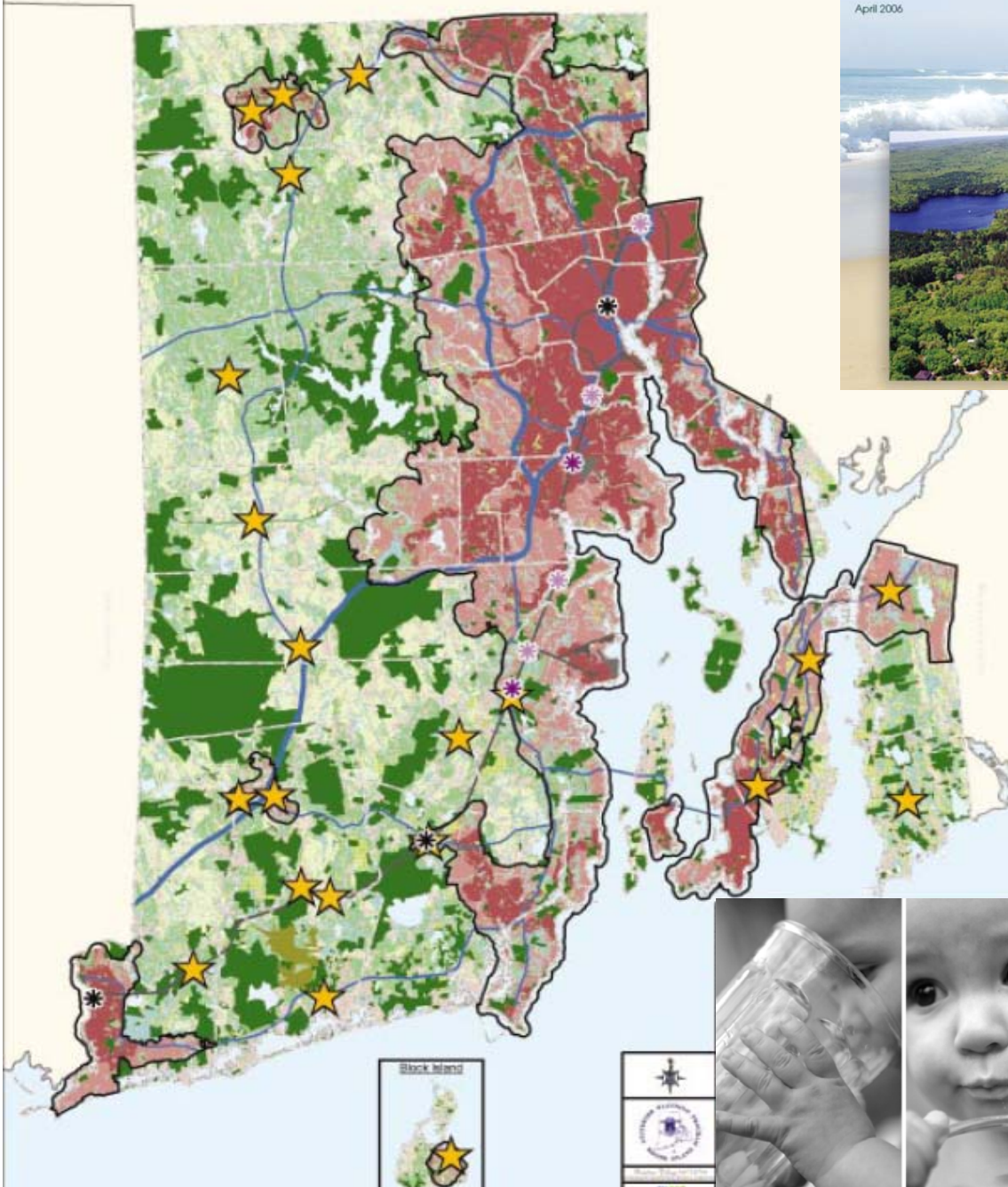
State Guide Plan Element 121
Report Number 109

Rhode Island
State Land Use
Policies and Plan

Rhode Island
Department of Administration
Division of Planning
Statewide Planning Program
April 2006



Future Land Use 2025

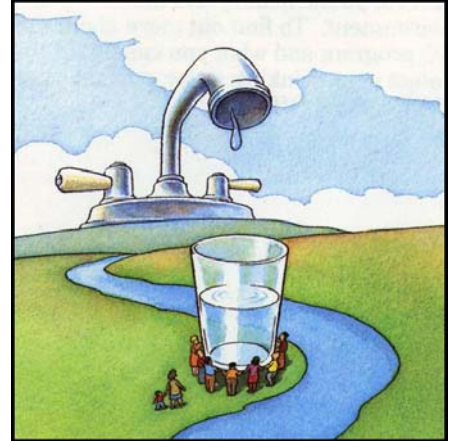


EXECUTIVE SUMMARY

Water Resources Management

The goals and policies under this category address:

- ◆ the need for understandable water data by everyone
- ◆ drinking water conservation
- ◆ managing the systems that deliver our water properly
- ◆ climate change impacts
- ◆ water quality of existing and future supplies
- ◆ water supplies designated as significant statewide resources
- ◆ long-term droughts



Goal: Plan for sustainable water use and balanced development of the State's drinking water resources

Policies:

Resource Assessment

Provide understandable data about how much drinking water we have to use and where.

Water Quantity

Manage the water we use based on how much we have while also protecting public health and nature.

Climate Change Include climate change in planning for water supply.

Supply Management

Public health and safety is the priority use of drinking water.

Drought Mitigation

1. Reduce Rhode Island's vulnerability to long-term drought.
2. Reduce the effects from drought on the public, businesses, and nature.



Scituate Reservoir June 2000



EXECUTIVE SUMMARY

Goal: Protect the quality and all functions of the State's water resources

Water Quality Policies

1. Prevent water contamination.
2. Make sure that water is available for drinking water and nature.
3. Protect water used for drinking water by prohibiting recreation on surface water supply reservoirs.



Crookfall Brook Watershed, Woonsocket



Storage Tower, Quonset Point, North Kingstown

Big River Watershed Policies

1. Keep the area as open space.
2. Keep it safe for all uses.
3. Prevent water contamination.
4. Use the groundwater to add to existing drinking water supplies.



Scituate Reservoir Watershed Policies

1. Prevent water contamination.
2. Keep it safe.
2. Work together to manage land use in the Watershed.



Photo: Beatrice Owen, Scituate High School
Scituate Reservoir Watershed Education Program

Goal: Protect public health, safety and welfare and drinking water during emergencies

Policies

1. Conserve drinking water during emergencies.
2. Keep people and businesses safe during emergencies.
3. Plan for and respond to drinking water emergencies and shortages.



EXECUTIVE SUMMARY

Goal: Manage water use to protect our supply of drinking water
Demand Management Policies

1. Reduce the demand for drinking water.
2. Encourage water conservation.



Rain Barrels can store water for later use



Water by hand to save water.



Our farms do not use public drinking water but sometimes they need water in dry months for crops and animals. This water may come from the same sources we use for drinking water putting additional stress on rivers and streams that contribute to drinking water supplies.

State Guide Plan Element 721



The Rhode Island Statewide Planning Program, Division of Planning, Department of Administration is established by § 42-11-10 of the Rhode Island General Laws as the central planning agency for Rhode Island. The State Planning Council, comprised of federal, state, local, public representatives, and other advisors, guides the work of the Program. The objectives of the Program are to:

- ◆ To prepare State Guide Plan Elements.
- ◆ To coordinate activities of the public and private sectors within the framework the State Guide Plan.
- ◆ To assist municipal governments with planning.
- ◆ To advise the Governor and others on physical, social, and economic planning related topics.
- ◆ To provide for cooperative development, conservation, and use of drinking water resources by the State, municipal agencies, public water systems, special water districts and privately owned public water systems.
- ◆ To review all plans and proposals for construction or installation of facilities for water supply for conformance with the State Guide Plan.

Design by: Nancy Hess, RI Division of Planning **Photos provided by:** Audubon Society of Rhode Island, Department of Management, RI Division of Planning, Smithfield Water Supply Board, Kingston Water District, North Kingstown Water Department, Providence Journal, United States Environmental Protection Agency, Flickr Photos, Bing.com, Better Photo.Com, United States Geological Survey, Beatrice Owen, Scituate High School, Scituate Reservoir Watershed Education Program