Communities Protecting Drinking Water Sources:

Planning for Source Water Protection

Nancy Hess Supervising Land use Planner December 1, 2011

RHODE ISLAND DIVISION OF PLANNING



Statewide Planning Program in a Nutshell

- Central state planning agency since 1961
- Established by R.I. General Laws (42-11) to plan for Rhode Island's physical, economic, and social development
- Comprised of ...

TITI

- State Planning Council
- Technical Committee & subcommittees
- staff within RI Dept. of Administration

What We Do

Statewide Planning's Mission is to:

No. of the local division of the local divis

- plan for the physical, economic, and social development of the state
- coordinate the activities of government agencies, private individuals and others within SGP framework
- provide planning assistance to the Governor and General Assembly
- provide technical planning advice to other state agencies & municipalities
- oversee the RI Comprehensive Planning System per CHAPTER 45-22.2

RI Comprehensive Planning and Land Use Act

State Guide Plan

29 Elements addressing functional areas

- (Some by state legislative and or federal mandate)
 - Functional areas: utilities, land use, open space & recreation, natural resources, housing, transportation, energy, and economic development
- Addresses issues and provides goals & policies for actions
- Each element developed with stakeholder and public involvement
 - <u>2 methods</u>: in-house by staff or by request through Memorandum of Agreement between parties
- All have public hearing prior to adoption by SPC

ALC: NOT A

 Ongoing review and updated when necessary to address emerging concerns or new mandates

Applicable SGP Elements



Applicable SGP Elements

State Guide Plan Element 125

Scituate Reservoir Management Plan (1989)

Policies are established with respect to: insure the long-term protection of water quality in the Scituate Reservoir Watershed

The plan emphasizes:

mitigating existing water quality contamination sources setting compatible land uses and densities for watershed protection developing development controls to protect water quality from future growth





DEVISION OF PLANNING HODE ISLAND DEPARTMENT OF ADMINISTRATH PHOVIDENCE, HHODE ISLAND 02908-5872







&1997)

dema. I management supply management emergency management planning and institutional issues

The plans emphasize:

DE PLAN ELEMENT 721

ienc

set fc

NATER SUPPLY POLICIES

HODE ISLAND

 ground and surface water resources as components of the overall water supply system for the State

2, [†] *Rh*

in f

 need for careful consideration of water supply capacities and delivery systems is stressed with allocations for land use and development based upon these capacities

establishes a framework for responses to water emergencies

Applicable SGP Elements

State Guide Plan Element 724 *RI Drought Management Plan* (2002)

Policies are set forth that establish coordinated procedures for the State 's response to severe drought episodes.

The plan established:

- 7 drought-planning regions
- 5 phases of drought

• a response framework staffed by the WRB and overseen by a Drought Steering Committee



Scituate Reservoir, Scituate, RJ, June, 2000

Water Resources Board

STATEWIDE PLANNING PROGRAM Rhode Island Department of Administratio Information Services One Capitol Hill, Providence, RI 02908 www.planning.state.rl.us

Applicable SGP Elements

Executive Summan

Land Use 2025

State Guide Plan Element 121 Land Use 2025: State Land Use Policies and Plan (2006)

Policies are established with respect to:

- General Land Development
- Economic Development
- Water Resources
- Transportation
- Energy
- Recreation and Open Space

ALC: NOT THE REAL PROPERTY OF

Housing

The plan emphasizes:

•relating development to land capability and to the level of public services available

•increasing the capacity of municipal government to carry out its land use responsibilities, and encouraging innovative development techniques



Addressing Drinking Water in Comp Plans

§ 45-22 Rhode Island Comprehensive Planning and Land Use Regulation Act

- Criteria and requirements for the formulation, adoption and state acceptance of comprehensive plans
- Required elements are specified, and the general areas for each are summarized
- The procedure for adoption is set forth
- The procedure for state review of plans is outlined
- Coordination of state agencies with authority in areas relating to the goals of the Act is established

Addressing Drinking Water in Comp Plans

- Land Use
- Natural and Cultural Resources
- Services and Facilities

Addressing Drinking Water in Comp Plans

§ 45-22.2-6 Required Elements of Comprehensive Plan

Handbook on the Local Comprehensive Plan (Handbook 16) 2003

- All comprehensive plans are required to be consistent with all applicable elements of the State Guide Plan
- "emphasis will be given to the development of comprehensive plans that will satisfy criteria for state acceptance and, at the same time, satisfy local need for a process that can form the basis for local development actions and decisions consistent with local needs and objectives."

Addressing Drinking Water in Comp Plans

§ 45-22.2-6 Required elements of comprehensive plan

Natural / Cultural Resources

 Shall provide an inventory of the significant natural resource areas such as water, soils, prime agricultural lands, natural vegetation systems, wildlife, wetlands, aquifers, coastal features, flood plains and other natural resources and the policies for the

protection and management of such areas.

Addressing Drinking Water in Comp Plans

§ 45-22.2-6 Required elements of comprehensive plan

Services & Facilities

 Shall provide an inventory of existing and forecasted needs for facilities and services used by the public such as, but not limited to, educational facilities, public safety, water, sanitary sewers, libraries and community facilities

Addressing Drinking Water in Comp Plans

§ 45-22.2-6 Required elements of comprehensive plan

Land Use

 Designates the proposed general distribution and general location along with the inter-relationship of land use for residential, commercial, industrial, open space, recreational, community facilities and other categories of public and private uses of land. The Land Use Element is based upon the other elements and it shall relate the proposed standards of population density to the capacity of the land and available or planned facilities and services.

Review processes by SPP

Draft (Informal)

- Initial conference if desired
- As many or as few elements as completed
 - Ensure complete elements
- •Comments on preliminary SGP consistency, content, & internal consistency
- Maybe other agency comments
- Other planning ideas, advise, projects

Formal

- Acceptable > Approval
- Not acceptable
 - Coordination with DEM, DOH, WRB
 - Feedback to Town
 - Response from Town
 - Review
 - Acceptable >
 Approval
 - Not acceptable

Smithfield (North Central)

East Smithfield WD, Greenville WD, Smithfield WD Private Wells Lincoln WSB

- GOAL Land Use-5: Consider the natural capacity of the land to support future development, population, and the existing quality of life
 - Objective LU-5.1 Promote land development which is sympathetic to the existing landforms
 - Action LU-5.1d Ensure that development projects consider the capacity of water resources in the area
 - Objective LU-5.3 Promote stormwater best management practices targeted land acquisitions to prevent contamination of the Town's surface water resources and ensure maintenance of water quality
 - Action LU-5.3b Amend Town's Land Development and Subdivision Review Regulations to include requirements for Low Impact
 Development

Other Points: Coordination of Districts, Water Emergency Response Plan and Drought Management Planning

Tiverton (East Bay)

Stone Bridge Fire District, North Tiverton Fire District Private Wells Reservoir for Newport Water Department

Community Services & Facilities

- Goal: To provide community services and facilities which respond to the public safety, educational, governmental, infrastructure and informational needs of Tiverton's residents in a timely, efficient and cost effective manner.
- Objectives:
 - Preserve, maintain and improve reliable sources of high quality, affordable drinking water.
 - Plan for a comprehensive wastewater management strategy that encompasses limited sewer expansions where needed, along with the establishment of wastewater management districts to regulate on-site sewage disposal systems

Other Points: watershed protection overlay district for reservoirs, on-site wastewater management ordinance, encourage unified management plan

South Kingstown (South County)

- URI, Kingston WD, South Kingston WD, South County WD, United Water, Narragansett WD
- Private Wells²

Natural / Cultural Resources Goal 1: To protect and to preserve the quality and quantity of the Town's potable water supply

- **Policy 1.1** The Town recognizes that most of its drinking water is from a Sole Source Aquifer and that no reasonable alternate source exists. Therefore a Town priority is the protection of the groundwater resources
- **Policy** 4.2 The Town recognizes that the supply of potable water from the aquifers is limited. The Town will work toward protecting the quantity of potable water and will link growth management plans to the amount of water available for both residential and non-residential uses.
- Policy 1.3/- The Town will give priority use to drinking water
- Policy 1.4 The Town recognizes that a watershed management approach to resource protection and utilization is necessary. It is therefore necessary to plan on both a Townwide and regional basis based upon watershed boundaries to coordinate resource management issues

Other Points: Groundwater Protection Overlay District (1991), endorse State legislation to regulate groundwater withdrawal, protect lands overlying groundwater reservoirs through its Open Space acquisition program, Coordination with Water Supply Agencies, Deicing Practices, Public Education, Underground Storage Tanks (UST), Stormwater Management -RIPDES Phase I

DRAFT 10.21.11

State Guide Plan Consolidation: Potable Water Elements

Rhode Island Water 2030







DRAFT 10.21.11

Rhode Island Water 2030



Rhode Island Water 2030

DRAFT 10.21.11

Part 1: Key Points:

- Precipitation provides all the water we use.
- The State's waters are shared, interconnected natural resources.
- The sources of water currently available are surface water and groundwater resources.
- Economic prosperity in the State has and will be tied to our water resources.
- Several state agencies along with federal agencies, municipalities, public suppliers and citizens affect the use of water in the State.
- ♦ RI has a total of 490 public water supply systems(2010). The 490 systems vary widely from small rural restaurants to large municipal suppliers.
- Areas of significance to the water supply of the State are the Scituate Reservoir, the Big River Area, and the 4 groundwater aquifer systems classified as "Sole-Source Aquifers" by EPA

♦ This Plan is intended to serve as the foundation of potable water supply policies for future water management decisions to be made across multiple jurisdictional levels.

DRAFT 10.21.11

Rhode Island Water 2030

Part 2: Key Points:

 Rhode Island has sufficient supplies but needed or available in sufficient quantities for

- North / Central: have generally adequate su
- South County: groundwater is not always a
- East Bay: has generally adequate supplies
- Islands: (Jamestown & Block Island) most li

♦16 of 39 RI communities depend upon the way or another

- Managing summer peak use is now the biggest water supply issue.
- Sprawling development as identified in *Land Use 2025* is detrimental to the long term sustainable future of water supply for the State.
- A system of understandable information is needed for making informed and predictable land use decisions based on water availability among other factors.
- Technology, data, management and financing of water systems are coping but need more support.
- Our water resources are finite and require managing for sustainability as well as public health.
- Our water rates compared to our neighboring states are relatively lower.

Rhode Island Water 2030

DRAFT 10.21.11

Part 3: Key Points:

- ♦ The vision
- Goals and policies exist in 2 over arching categories:
 - Integrated Management and Planning
 - Water Resources Management
- The 2 over arching categories were divided into 10 subthemes:
 - Integrated Management and Planning
 - Water Resource Management
 - Resource Assessment
 - Water Quantity
 - Water Quality
 - Demand Management
 - ♦ Climate Change
 - Potable Supply Management
 - Drought Planning
 - Emergency Management
- Strategies are presented for each policy under each subtheme
- Timeframes were set for strategies;
 - As Needed
 - Ongoing
 - Short term (1-2 years)
 - Medium term (3-5 Years)
 - Long term (more than 5 years)
- ♦ More than 30 Partners were identified for lead or supporting roles.

DRAFT 10.21.11

Rhode Island Water 2030

Implementation Matrix

2 over arching categories: Integrated Management and Planning Water Resources Management

7 major goals

205 Strategies

10 themes 18 policies

30 Responsible partners









Questions & Discussion

Nancy Hess 222 - 6480

Nancy.Hess@doa.ri.gov

http://www.planning.ri.gov/landuse/water.pdf