

# **Rhode Island**

# **Special Area Management Plans**



COASTAL RESOURCES MANAGEMENT COUNCIL

# **CRMC Jurisdiction**

- All tidal waters out to 3 miles
- All shoreline features and the 200 foot contiguous area
- Inland Activities
- Federal Consistency Review (All coastal towns)
- Special Area Management Plans (SAMP)







# **Special Area Management Plans**

Coastal Zone Management Act of 1972 16 U.S.C. § 1452 (Section 303)

(3) "to encourage the preparation of special area management plans which provide for increased specificity in protecting significant natural resources, reasonable coastal-dependent economic growth, improved protection of life and property in hazardous areas, including those areas likely to be affected by land subsidence, sea level rise, or fluctuating water levels of the Great Lakes, and improved predictability in governmental decision making;"



Figure 9. Existing and Candidate Special Area Management Plans

The "Marine Resources Development Plan" directs the CRMC to develop SAMPs to cover all coastal regions of the state.





# **CRMC Special Area Management Plans**





# Pawcatuck River Estuary and Little Narragansett Bay SAMP

stonington, ct

The Nation's <u>first</u> interstate SAMP
Primary purpose to coordinate actions between Connecticut & Rhode Island



Pointer 41°20'01.85" N 71°52'22.44" W elev 0 ft

Image © 2007 DigitalGlobe Image RIGIS Image © 2007 TerraMetrics

'Google''

Streaming ||||||||| 100%

Eye alt 31791 ft

# Salt Ponds Region SAMP (1984) An ecosystem-based management approach











# **RI Coastal Resources Management Council** Salt Pond SAMP Jurisdiction

• Activities in tidal waters or w/in 200 feet of a coastal feature

#### Watershed Activities

- Major development projects of 6 or more units
- New areas of impervious surface  $\geq$  40,000 SF
- Construction or extension of municipal water and sewer lines
- Onsite sewage disposal systems ≥ 2000 GPD
- All roadway construction and upgrade projects
- Development affecting FWW in the vicinity of the coast





# 1997 Salt Pond Region SAMP Cumulative & Secondary Impact Study Found:

- 1. Increased abundance of marine phytoplankton, macroalgae, and bottom sediment organic material
- 2. Green Hill Pond closed to shellfish harvesting in 1994; eastern end of Ninigret Pond closed in 1996
- 3. Concentration of Total Nitrogen beneath densely developed areas is 100 times higher than in undeveloped areas of the watershed
- 4. Sedimentation from nonpoint sources and breachways have covered shellfish and SAV habitat
- 5. Between 1960 and 1992 the aerial extent of Eelgrass beds in Ninigret Pond decreased by 41% (Short et al. 1996)



# Shellfish Harvesting Closure Areas









# 1999 Salt Pond Region SAMP Revisions to Address Cumulative & Secondary Impacts

- Density requirement modified from 2 to 3 acre per housing unit in Lands of Critical Concern
- Denitrification requirement for all projects not meeting density requirements or within LDBCC (many lots preplatted at 5000 SF)
- Incorporate provisions of RI's federally approved Coastal Nonpoint Pollution Control Program
- Towns adopted Wastewater Management Programs and modified zoning to reflect CRMC density standards





## **Recent studies supported by CRMC**



Prepared in cooperation with the Rhode Island Coastal Resources Management Council

Hydrogeology and Simulated Ground-Water Flow in the Salt Pond Region of Southern Rhode Island



Scientific Investigations Report 2006–5271

U.S. Department of the Interior U.S. Geological Survey



#### **Final Watershed Management Plan**

for Green Hill and Eastern Ninigret Ponds, South Kingstown and Charlestown, Rhode Island

April 18, 2007



Submitted to:

Rhode Island Department of Environmental Management; the Salt Ponds Technical Advisory Committee; nod the Salt Ponds Coalition

#### **Advanced Onsite Wastewater Treatment Systems**





Orenco<sup>®</sup> Advantex system

Bio-Microbics® FAST system

#### RI has 5 approved nitrogen removal systems

http://www.dem.ri.gov/programs/benviron/water/permits/isds/index.htm



#### Permeable Nitrogen Trench Method





# \$4 million habitat restoration project









# Narrow River SAMP (1986)

Ecosystem-based management strategy to address:

- Degradation of water quality
- High rate and density of ISDS failures
- Development pressure encroaching into unsuitable areas (i.e., steep slopes, poor soils, wetlands, etc.)
- Protection of critical habitat (e.g., wetlands and rare species)



# Greenwich Bay SAMP (2005)

- Water quality concerns (nutrients and fecal bacteria)
- High number of onsite wastewater systemsShellfish resources and beaches (wet-weather
  - driven closures)
- Marina expansion
- Public Access



#### **GREENWICH BAY**

Special Area Management Plan



Rhode Island Coastal Resources Management Counci Stedman Government Center 4808 Tower Hill Road Wakefield. RI 02879-1900 Wakefield. RI 02879-1900

# Greenwich Bay SAMP – Accomplishments

Mandatory sewer connection program
Water type classification changes in coves
Development of suburban buffer/LID program
Adoption of Clean Marina Program
Greenwich Bay Public Access Guide



# Providence Harbor (Metro Bay Region) SAMP (1983)

#### Local economic development plans

• Water type derassifications

• Water quality – stormwater management

## • Improved public access

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# Metro Bay Region SAMP





**Metro Bay Region SAMP – Accomplishments**  Adoption of Urban Coastal Greenway Policy (2006) Over 1 mile of new public shoreline access gained Water Type Classifications to address proposed uses Marine debris identification and removal Internet Mapping Service – publicly accessible webbased data source (orthophotos, GIS coverages, etc.) Urban Coastal Greenways Policy Sea level rise and storm hazard issues For the Metro Bay Region







douted by the RI Coastal Resources Management Council COR n October 10, 2008





# Example of a Restored Coastal Buffer Save The Bay – Fields Point, Providence



Initial planting – May 2005



June 2006



**Photos courtesy of Save The Bay** 

# **Aquidneck Island SAMP**

Being developed in cooperation with: RI Sea Grant/URI CRC; Aquidneck Island Planning Commission; and communities of Newport, Middletown, & Portsmouth







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**Questions?** 

