

Rhode Island Department of Health

Beach Program

**2011 Land and Water
Conservation Summit**

The Beach Program-History

- ▶ No Beach Monitoring Plan Prior to 1999 in Rhode Island
- ▶ USEPA Awards Rhode Island the EMPACT Grant to Development a Comprehensive Management Plan
- ▶ HEALTH established a public notification system:
 - Website
 - Telephone Hotline
 - Beach Signage System
- ▶ HEALTH evaluated conditions in Upper Narragansett Bay effected by:
 - Urban Runoff
 - Point Source Discharges
 - Combined Sewer Overflows
- ▶ Sampled 23 Stations in the Upper Bay:
 - Additional sampling was needed to adequately protect the public.
 - North of Conimicut Point in Warwick and Nayatt Point in Barrington were deemed unsuitable for licensing.

The Beach Program-History



- ▶ In 2000, Congress enacted the **Beaches Environmental Assessment and Coastal Health (BEACH) Act**, an amendment to the Federal Water Pollution Control Act (a.k.a. The Clean Water Act).
- ▶ **BEACH Act Requirements:**
 - Tiered categorization of beaches according to risk
 - Identification and mitigation of pollution sources
 - Risk communication plan
 - Specific beach monitoring information
- ▶ Since 2000 the USEPA has provided HEALTH with over \$2 million in beach grants to manage Rhode Island's Beach Program.

Monitoring Program

- ▶ Memorial Day through Labor Day at **114** licensed facilities
- ▶ **72** Licensed Saltwater Beaches
- ▶ **42** Licensed Freshwater Beaches
- ▶ All licensed beaches are required to sample their facility based on size and risk
- ▶ HEALTH provides all saltwater beaches with supplemental sampling
- ▶ Over 2000 samples are collected by the Beach Program every summer
- ▶ An additional 1000 samples are collected by volunteers, beach owners and managers, and Universities.

Monitoring Program

- Bacterial Testing (Enterococci)
- Daily Beach Surveys
- Precipitation
- Wind Speed and Direction
- Water Temperature
- Air Temperature
- Tidal Cycles
- Lunar Cycle
- Seaweed
- Illness Complaints
- Sewage Discharges

36%  in Closure Events
73%  in Closure Days

2006

- ▶ **256 Closure Days**
- ▶ **76 Closure Events**
- ▶ **At 22 Beaches**
- ▶ **Total Rain = 15.54"**
- ▶ **Significant Rain Events: 7**

- ▶ **(351 Total Closure Days Including Freshwater beaches)**

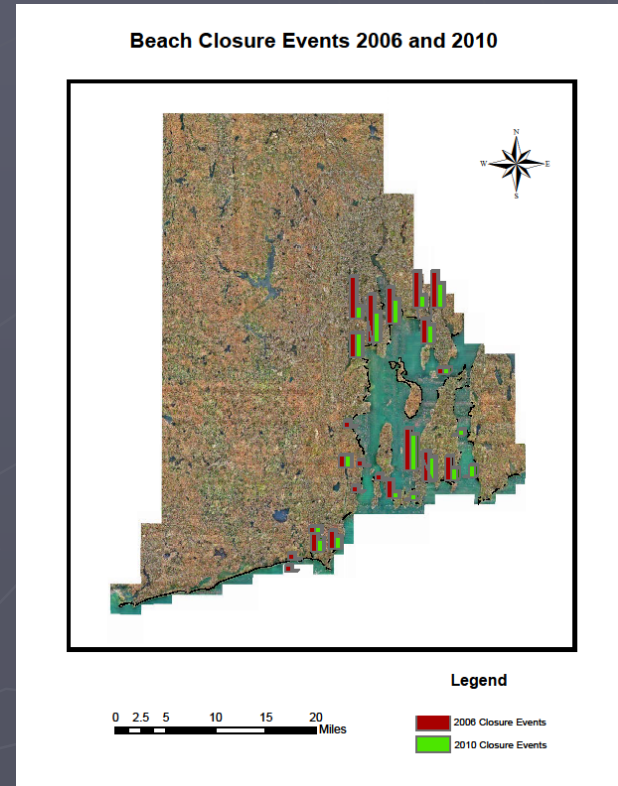
2010

- ▶ **70 Closure Days**
- ▶ **49 Closure Events**
- ▶ **At 19 Beaches**
- ▶ **Total Rain = 13.27"**
- ▶ **Significant Rain Events: 11**

- ▶ **(150 Total Closure Days Including Freshwater beaches)**

How Are RI Beaches Doing?

- ▶ Improvement in water quality and decrease in beach closures can be attributed to:
 - Implementation of the Providence CSO Tunnel Project
 - Connection of approximately 8000 homes to the sewer system in Greenwich Bay
 - Towns such as Bristol, Middletown, Newport, Saunderstown, and Warren approving and implementing multimillion dollar projects to address point source contamination at the beach



2010-Moving Forward

Taking the next step in Beach Monitoring

▶ Urban Beach Initiative

- Water Quality in the Upper Bay: Is it Safe?

▶ Pet-Waste Study

- Sources of Bacteria we may be missing

▶ Water Use Survey

- Are people becoming ill from swimming in RI waters?

Urban Beach Initiative

- ▶ To identify and investigate public access points in Upper Narragansett Bay and determine if these points are safe for recreational use.

**Sabin's Point
East Providence**



**Rosa Larisa Park
East Providence**



**Gaspee Point
Warwick**



Urban Beach Initiative

Data Collected

- ▶ Water Samples (Enterococci)
- ▶ Daily Beach Surveys
- ▶ Sanitary Surveys
- ▶ Personal Interviews with beach Goers



Urban Beach Initiative

Results:

- All 3 locations showed to have visitors throughout the summer.
- Public access available at all locations.
- The main use of all 3 locations was for dog walking.
- 164 samples were collected.



Sabin's Point: 11%

Rosa Larisa: 8.8%

Gaspee Point: 14.5%

Urban Beach Initiative

▶ 2011

- Sampling frequency will increase to 2x per week.
- A Total of 175 Samples will be collected.
- All sampling will occur on days when licensed beach samples are collected for comparison.
- Goals for 2011:
 - ▶ Investigate at least one additional Urban Public Access Point
 - ▶ Speak with the Towns on the possibility of licensing these facilities.

Pet Waste Study

► Why Investigate Pet Waste?

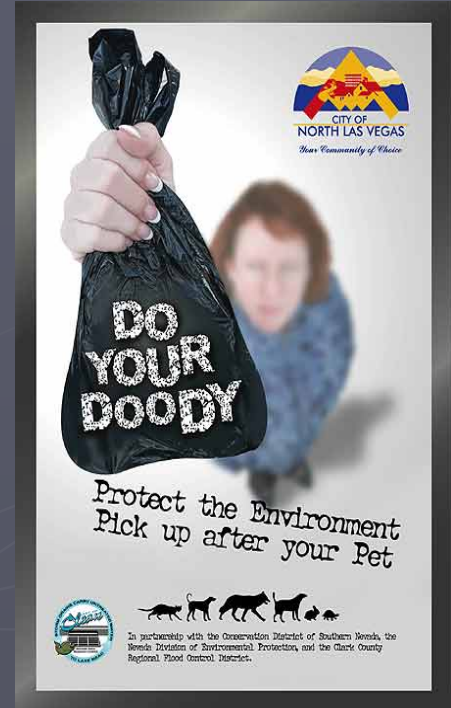
- As of 2000, 1 in 4 homes include at least one dog. For an estimated total of 68 million dogs.
 - 45% of these dogs are 40 pounds or more
- 1 gram of dog waste contains 23 million fecal coliform bacteria. stormwatercenter.net
- One dog produces an estimated 275 pounds of waste per year. Zerowasteusa.com
- Dog Waste is **57%** more toxic than human waste
USEPA, 1993
- Studies have found that roughly **40%** of Americans don't pick up their dogs' feces (women are more likely to do so than men). *USA Today*
- A Zero Waste USA survey found that installing pet waste stations increases waste clean-up by over 200%!



Pet Waste Study

Questions:

- ▶ Is wet waste a problem at Rhode Island beaches?
- ▶ How many dogs are in RI?
 - How much waste do they produce?
- ▶ What are the dangers associated with wet waste?
- ▶ What current messages are being given to the public?
- ▶ What are other states doing?
- ▶ Does Rhode Island care about pet waste at their beaches?
- ▶ What if anything are neighborhood groups, volunteers, and towns doing to address this issue in RI?



Pet Waste Study

Actions:

- ▶ Survey area beaches
 - Identify the most heavily impacted areas.
- ▶ Identify pet laws and ordinances by beach/town.
- ▶ Evaluate different pet waste disposal systems.
- ▶ Create comprehensive database for pet waste mgt.
- ▶ Identify local dog parks that may be influencing nearby beaches.
- ▶ Identify other state management plans.
- ▶ Create educational tools to increase awareness.
- ▶ Work with identified towns and beaches to address the issue.
- ▶ Work with volunteers and the public to understand their need.



2011 Water User Survey

- ▶ Currently all beach related illness information is submitted to HEALTH on a volunteer basis.

Shortfalls:

- ▶ All information provided to HEALTH is not mandatory
 - Beach Name
 - Contact Info
 - Symptoms
- ▶ Difficult to identify if illness is related to beach water or another factor such as food.
- ▶ If the individual does not visit their Doctor it is difficult to identify and diagnose illness and its severity.

2011 Water User Survey

- ▶ Conduct a year round survey with a focused group of saltwater users to gather information regarding year round water usage, conditions, and possible associated health risks/illness.
- ▶ Where and when are individuals accessing the water?
- ▶ Are they becoming ill from swimming in Rhode Island waters?
- ▶ Is there a need for a more rigorous illness strategy?



2011 Water User Survey

▶ OBJECTIVES:

- ▶ Participants will complete a 3-5 minute survey within 3 days following saltwater exposure throughout the course of one calendar year.
- ▶ If an illness is observed, an additional 3-5 minute survey must be completed.
- ▶ The information gathered in this study will help HEALTH to better understand state wide year round water use and associated health risks.

Volunteers

- ▶ Surfrider Foundation: >25 Volunteers @ 14 Locations
- ▶ Clean Ocean Access: >25 Volunteers @ 8 Locations
- ▶ URI Watershed Watch: >150 Volunteers @ 105 Locations

- ▶ Thank you volunteers for everything you do to help protect public health and help clean up our waters



THE END

FOR QUESTIONS OR COMMENTS PLEASE
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