



## CSO Program Stakeholder Workgroup Mission Statement



- To review proposed plans and projects for the CSO Program and *provide recommendations* to the City about the potential benefits and impacts of proposed plans and projects to all users of the system.
- To share CSO Program plans and project information with each stakeholder's organization to aid the City in its efforts to communicate CSO Program information.
- To support the CSO Program's public education efforts through participation in CSO Program public education activities.

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## Proposed Schedule CSO Stakeholder Meetings




	2011												2012											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Meeting #1 - Overview																								
CSO System Tours																								
Meeting #2 - Metering & Extraneous Flow Investigations																								
Meeting #3 - GIS, CMOM & WPCP																								
Meeting #4 - Harbor Water Quality																								
Meeting #5 - Financing & Rates																								
Meeting #6 - Alternatives Evaluation Process																								
Meeting #6a - Alternatives Evaluation Process Cont.																								
Meeting #6b - Alternatives Evaluation Process Cont. (if needed)																								
Meeting #7 - Draft Collection System Capacity Assessment & SMP																								
Meeting #8 - Updated SMP																								
SMP - Final to EPA																								

We are here

Proposed Extra Meetings


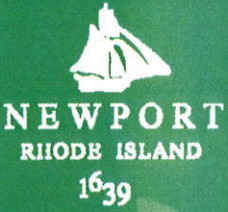
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## Proposed Meeting Agenda



- Overview of the CSO Program Schedule
- Approval of Previous Minutes
- Parking Lot Follow-up Items
- Key Meeting Topics
  - Alternatives Evaluation Process
  - Exercise on Identifying Priorities
- Questions
- Future Meetings

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## PREVIOUS MEETING'S MINUTES

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## Parking Lot Question #1



Is there an update on the number of verified catch basins?

Summary of Catch Basin Inspections Status			
Category	February 2011	May 2011	February 2012
<b>City of Newport</b>			
Connected to Sanitary Sewers		27	36
Connected to Storm Drains		911	1,622
Not yet confirmed	2,895	1,957	735
Subtotal	2,895	2,895	2,393
<b>Owned by others</b>			
Connected to Sanitary Sewers			2
Connected to Storm Drains			115
Not yet confirmed			272
Subtotal			389
<b>Total</b>	2,895	2,895	2,782

<sup>1</sup> Counts are based on the inventory in the GIS – which changes as inspections are performed.

## Parking Lot Question #2



Can an update on system improvements (WPCP, I/I removal, etc.) be provided?

- A large number of improvements were made at the WPCP and in the collection system during 2011.
- The Department of Utilities has plans to design and/or start additional improvements in 2012.
- See handout for a concise summary of completed and proposed improvements.

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KEY MEETING TOPIC

**ALTERNATIVES EVALUATION  
PROCESS**

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## Objectives for this Meeting



*The objective of this meeting is to collect your initial input toward prioritizing the criteria that will be used for evaluating proposed solutions.*

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## Group Exercise Weighting of Evaluation Criteria



### Objective of Exercise

- Rank the relative importance of evaluation criteria

### Perspective

- Evaluate importance for the constituents you represent

### Rules for Weighting

- Score each evaluation criteria using a scale of 0 to 10
- 10 -> highest importance
- 0 -> not at all important

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## Agenda Topics for Alternatives Evaluation Process



- Overview of Regulatory Framework
  - Required Documents
  - Sequence / timing of documents
- Factors Affecting Selection of Recommended System Improvements
  - Regulatory
  - WQ Benefits
  - Social Impacts
  - Costs and Affordability
- Exercise on Preferences for Evaluation Criteria

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## Regulatory Documents that Outline CSO Planning Requirements and Strategies



### Clean Water Act

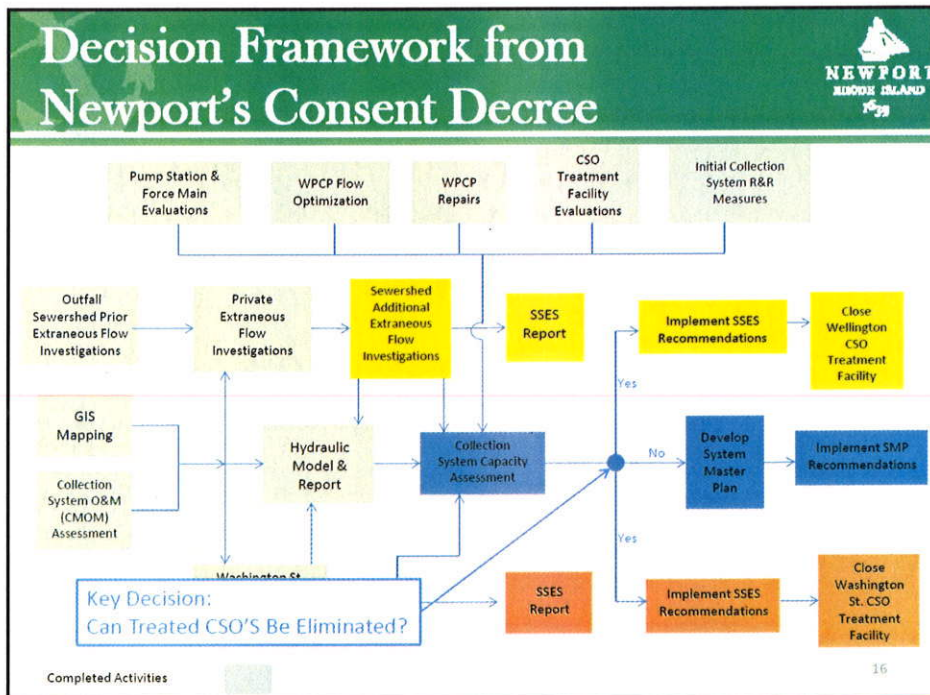
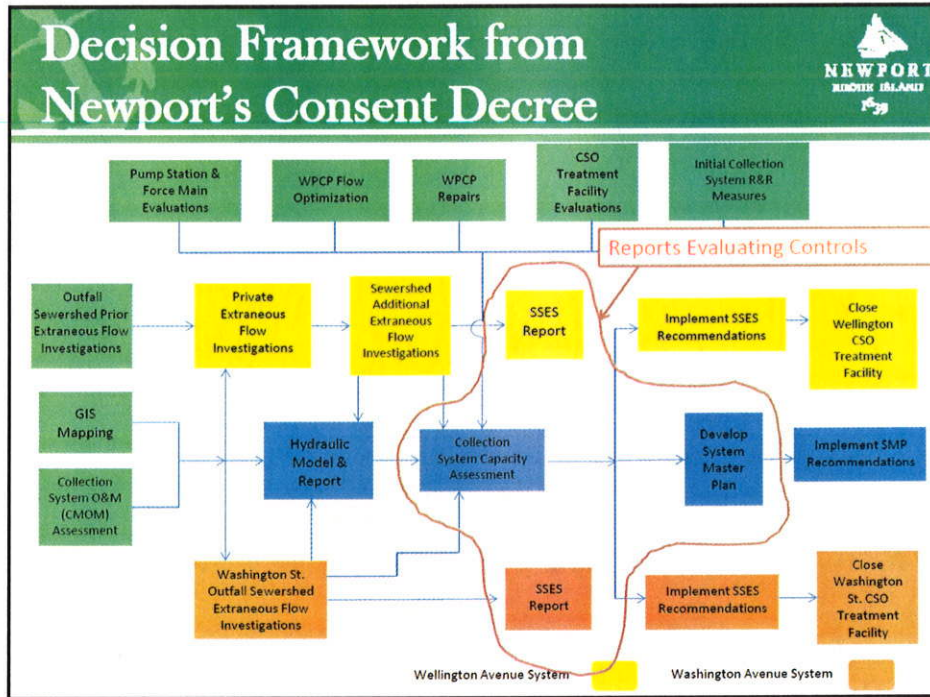
- Meet water quality standards
- Support designated uses


### EPA CSO Policy

- Eliminate or relocate CSO discharges to “sensitive use” waters
- “Equivalent primary treatment” is allowable for CSO discharges
- Maximizing flow to the WPCP is a required


### Consent Decree

- Dictates the deliverables and schedule of activities for the City of Newport to meet its regulatory requirements






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**FACTORS AFFECTING  
SELECTION OF CONTROL  
ALTERNATIVES**

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## CSO Program Goals



*Continue to identify and implement the most cost-effective solution for reducing the number of CSOs to a level protective of Newport Harbor and acceptable to the community and regulatory agencies.*

From Presentation to Newport City Council  
by CH2M HILL on March 2011

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## Factors Affecting Selection of Recommended Controls



- Regulatory Requirements
- Water Quality Benefits
- Social/Community Impacts
- Costs and Affordability
  
- Exercise on Weighting of Priorities

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## Regulatory Issues Affecting Controls



Newport's system has historically been treated by EPA and RIDEM as a "combined" system

- Newport's pipes were designed to carry storm water during wet weather
- Newport has storm drains connected to pipes designed to carry wet weather flows
- Newport has permits for 2 wet weather treatment facilities
- WPCPs serving combined sewer systems may receive a waiver from 85% removal provisions in NPDES permits

### Key Issues for Separate Sewer Systems

- Wet weather discharges, treated or untreated, from separate sanitary sewer systems are illegal
- All flows from separate sanitary sewer systems must receive full secondary treatment (CSO treatment facilities are not allowed)

## Water Quality Role in CSO Planning



- Permittees should develop Long-Term Control Plans (LTCP) ..... to meet the water quality-based requirements of the Clean Water Act <sup>1</sup>
- Permittees should give priority to environmentally sensitive areas. <sup>1</sup>
- Sensitive areas include:
  - National Marine Sanctuaries
  - Waters with threatened or endangered species or their designated critical habitat
  - Primary contact recreation waters, such as bathing beaches
  - Public drinking water intakes or their designated protection areas
  - Shellfish beds

<sup>1</sup> EPA CSO Guidance for Long-Term Control Plans

## Newport's Harbor Water Quality Monitoring Data



Year	Total Samples Collected	Total Enterococci Exceedances+	Enterococci Exceedances Associated w/ Rainfall (but No CSO Event)	Enterococci Exceedances within 2 days of a CSO Event	Enterococci Exceedances Preceded by at least 24 hrs of Dry Weather
2008*	130	9	0	6	3
2009	530	4	1	1	2
2010	520	10	4	5	1
2011*	300	2	2	0	0
Total	1480	25	7	12	6

\*2008 & 2011 are partial years.

## Summary of Newport's Water Quality Issues



- No raw sewage is discharged by City of Newport
- Wet weather discharges occur only at 2 RIDEM permitted treatment facilities
- The designated uses for the Harbor are SB and SB1 fishable/swimmable
- Analysis of water samples collected in the harbor shows that uses are not impaired due to CSOs
- State of Rhode Island reports that designated uses are "fully supported" <sup>1</sup> with the exception of non-related contaminated sediments issue

<sup>1</sup> State of Rhode Island, 2010 303(d) List, List of Impaired Waters, Final July 2011

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## Social/Community Impacts



- Reduction of Beach Closures/More Swimming Days
- Associated Public Improvements
- Protection of Public Spaces
- Inconvenience to Private Property Owners
- Reduce In-system Surcharging
- Basement Back-ups & SSOs
- Sustainability





## What Financial Burden Can Newport Afford per EPA?



- Newport is classified as Mid-range financial capability
- A High Burden for Newport would be when a household with median income has to spend more than 2% of annual income on all Water Pollution Control costs

Permittee's Financial Capability Indicators Score	Residential Indicator (Cost Per Household as a Percent of Median Household Income)		
	Low (Below 1 %)	Medium (Between 1% and 2%)	High (Above 2.0%)
Weak( Below 1.5)	Medium Burden	High Burden	High Burden
Mid- Range (Between 1.5 and 2.5)	Low Burden	Medium Burden	High Burden
High (Above 2.5)	Low Burden	Low Burden	Medium Burden

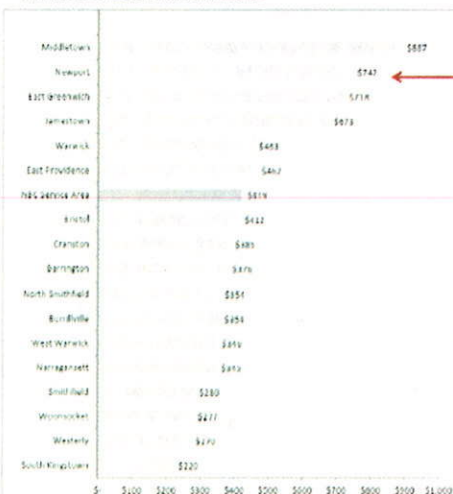
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## Wastewater Rates in Rhode Island



### Annual Residential Sewer Charges Rhode Island Cities & Towns

The survey shown below, conducted by the Narragansett Bay Commission (NBC) in 2010, compares the annual residential sewer charges for participating Rhode Island Cities & Towns. The survey shows NBC, with its current fee structure, ranks 12th lowest among participants.




Does not include CSO fixed fee of \$104 for 2010.

Source: 2010 Narragansett Bay Commission Residential Sewer User Survey


In this survey all Annual Residential Sewer Charges are based on standard consumption rate

Newport & NBC are the only CSO communities

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DISCUSSION

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NEXT MEETING

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## Next Meeting



Topic: System Behaviors and Control Technologies

- Infiltration / Inflow
- Conveyance
- CSO controls

Date: March 8, 2012 ← Date for new meeting

Time: 3:00 PM

Location: Council Chambers

NOTE: If necessary we will schedule a meeting in April.

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## Overview of System Behaviors and Control Technologies



### Infiltration and Inflow

- Total system inflow by Source
- Relative Contribution of Public and Private Sources
- Variations in Inflow by Location
- Candidate technologies for I/I reduction

### Conveyance Characteristics

- Overview of current characteristics
- Candidate technologies for improving performance

### CSO Control Projects

- WPCP upgrade
- Storage
- Other

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## Objective for the March Meeting



*The objective of the March meeting is to discuss critical system behavior and technologies best equipped to meet Newport's prioritized evaluation criteria.*

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## RESULTS FROM PRIORITIZATION EXERCISE

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