

CSO Program Stakeholder Workgroup: Meeting #7a System Master Plan Control Options (continued)





RHODE ISLAND
1639











STAKEHOLDER COMMENTS AND QUESTIONS













REGULATORY FRAMEWORK

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

From Stakeholders Meeting #6 February 9, 2012

Regulatory Framework for Evaluating NEWPORT System Improvements

Consent Decree Item #65

If the City determines that its proposed Collection System replacement and rehabilitation measures, its public infiltration/inflow, private rainfall induces infiltration and inflow removal programs, and its WPCP flow optimization will not result in the elimination of overflows, including the Wellington Avenue and Washington Street Outfalls, then the Capacity Assessment shall include an identification and evaluation of additional measures......

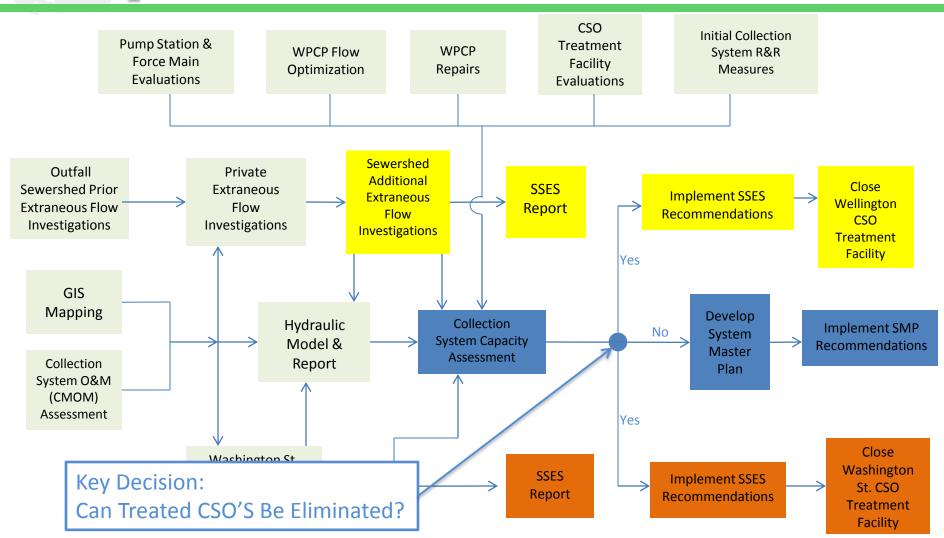
Decision Framework from Newport's Consent Decree

Completed Activities



From Stakeholders Meeting #6

February 9, 2012



Overview of System Behaviors and Control Technologies



Step 1 – Collection System Capacity Assessment (CSCA) Report

Infiltration/Inflow Reduction

- Control technologies for I/I reduction
- Model results for I/I reduction

Conveyance System and Plant Improvements

- Overview of current characteristics
- Control technologies for optimization of the existing system
- Model results for conveyance and plant optimization

Step 2 – System Master Plan (SMP)

CSO Control Projects

- New conveyance facilities
- Improvements to existing CSO treatment
- Increasing the design capacity of the WPCP
- In-line and/or Offline Storage
- Green technologies

The SMP applies if wet weather discharges cannot be eliminated cost effectively with CSCA technologies



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EVALUATION OF SCENARIOS

CSO Program Goals



Continue to identify & implement the most costeffective solution for reducing the number of CSOs to a level protective of Newport Harbor and acceptable to the community and regulatory agencies.

Strategy to Achieve the Goals of the CSO Program



- 1. Comply with EPA and RIDEM negotiated CAP requirements
- 2. Achieve reasonable application of water quality standards
 - Protect King Park Beach
 - Determine the best use of the Washington St. CSO Facility
- 3. Maximize use of existing facilities
- 4. Prioritize capital repair & replacement projects
 - Invest in sewerage system for next generations
- 5. Control Operations & Maintenance (O&M) requirements (minimize need for new capital facilities)
- 6. Identify a program & an implementation schedule that is affordable to Newport customers

Summary of Alternatives Evaluated

Revised August 14, 2012

S1

Scenario

S3

C1

M1

S2

for the SMP

RC

T1

T2

T3

BL

Control Technology

CSOT-1 Enhanced CSO Treatment (Wellington)

Recently Completed or Planned CIP Projects

WPCP-1 WPCP Upgrade & Expansion

OS-11 (Washington CSO Facility)

SO-1 WPCP Flow Optimization

CU-2 (Catchment 10 Reroute)

CSOT-2 Enhanced CSO Treatment

II-4 Downspout Disconnection

OS-19 (King Park, Wellington Ave by CSO

SO-2 Increased Pumping Capacity/Better Use

WPCP-2 CEPT

(Washington)

OS-2 (WPCP)

SO-3 Weirs

of System Capacity

Facility)

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M4

??

M3

M2



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NEXT MEETING

Summary of Selected Alternatives



		SCENARIO							
Evaluation Criteria	Weight	BL		?		?		?	
		Rating	Score	Rating	Score	Rating	Score	Rating	Score
Cost/ Affordability									
Water Quality Benefits									
Social Impacts									
Regulatory Compliance									
Engineering/ Flexibility									
Total Score									

Evaluate criteria weight and rating from 0-10, with 10 being best meets priority criteria and 0 being least meets priority criteria.

Next Steps for the SMP



- Refine alternatives
 - Mix of controls
 - Facility sizes
 - Run a typical year
 - Recalculate loads
- Prepare Implementation Plan
 - Strategies for implementation
 - Schedule for construction
 - Recalculate rate impacts

Next Meeting



Topic: System Master Plan Draft

Recommended Controls

Program Costs

Implementation Strategies

• Implementation Schedule

Date: September 6, 2012

Time: 3:00 PM

Location: Council Chambers



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DISCUSSION