

NEWPORT CSO Program Newsletter



NEWPORT
RHODE ISLAND
1639

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CSO Program Goals

Continue to identify & 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.



Newport Harbor

Recent CSO Program Accomplishments

- Completed the series of stakeholder workgroup meetings to collect information for the *System Master Plan* (see Page 4 for more information)
- Submitted the *CSO Collection System Capacity Assessment & System Master Plan* to EPA
- Completed inspection of all City-owned catch basins to identify sources of I/I (See Page 2 for more information)
- Inspected state-owned catch basins in the study area to identify sources of I/I (See Page 2 for more information)
- Completed a season of building inspections to identify sources of I/I (See Page 2 for more information)

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Collection System Capacity Assessment and System Master Plan

The City reached a major milestone on November 30, 2012 when the *Collection System Capacity Assessment & System Master Plan* was submitted to EPA. This submittal defines the City's long-term plan to address CSOs. Please see Page 3 for more information.

Field Inspection Program

Stormwater Infiltration and Inflow Identification Field Work

For the past several years the City of Newport has conducted a comprehensive program of inspections and testing to identify sources of infiltration and inflow into the city's sanitary sewer system. This program included Smoke Testing, Dyed Water Testing, Manhole Inspections and Closed Circuit TV Inspections, Flow Monitoring and Building Inspections.

The 2012 Field Program concentrated on two areas of Infiltration and Inflow, Catch basin Inspections and Building Inspections.

Catch Basin Inspections



Catch Basins are designed to handle large quantities of stormwater that can quickly accumulate on roadways and in open spaces during

a heavy rainstorm. This means that even a small number of catch basins connected directly to the City's sanitary sewer line have the potential to add a great quantity of rainwater to the system. Because of this it was decided that one of the priorities of the Field Program for 2012 would be to locate as many of the catch basins still connected to the sanitary sewer system as possible.

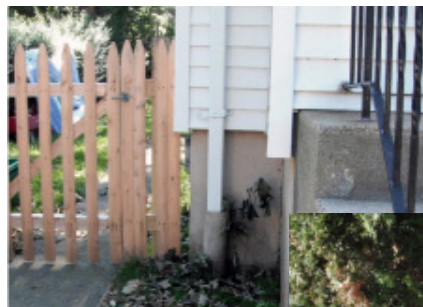
A total of 2609 catch basins within the City were inspected during the Field Program. Of this total, 2367 were owned by the City of Newport, 199 are owned by the State of Rhode Island and the remaining are privately owned. These totals represent over 99% of the Catch Basins in the City of Newport. Throughout the inspection program, a total of 57 catch basins owned by the City, 2 owned by the State of Rhode Island, and 3 privately owned were confirmed to be connected to the sanitary sewer system. The City is currently working on design plans to remove



the City-owned connections and requesting that the owners of the other connections disconnect them from the sanitary system.

Building Inspections

Inflow from public and private buildings is another major source of inflow into the sanitary sewer system. This inflow comes from sources of stormwater or groundwater that are connected directly to the building's sanitary sewer lateral such as downspouts, sump pumps, floor drains, foundation drains and driveway drains. Studies conducted during the program have indicated that downspouts in particular are one of the primary sources of inflow into Newport's sanitary sewer system. Removing these sources of inflow from the sanitary sewer system is a crucial part of the City's overall CSO Program.



Connected Downspout



Corrected Downspout

For 2012, Building Inspections concentrated on two areas. The first was completing inspections in Catchments (sections of the City divided up by drainage area) that were determined to have the most inflow. And second, to complete inspections of all the buildings owned by the City of Newport. A total of 1477 buildings were visited and 394 inspections were conducted. Inspections were also conducted on all major buildings owned by the City including all Schools and Fire Stations.

System Master Plan

The City reached a major milestone on November 30, 2012 when the *Collection System Capacity Assessment & System Master Plan* was submitted to EPA. This submittal defines the City's long-term plan to address CSOs. The SMP was developed over the course of 2 ½ years and was based upon system specific data, the priorities of the City based upon the feedback of the Stakeholder Workgroup and projected improvements as determined through the use of a hydraulic model.

As stated in the Mission Statement for the CSO Program, developing an SMP that meets the needs of the community was critical. In an effort to ensure that the SMP would meet these needs, the Stakeholder Workgroup identified 4 priorities for the SMP:

1. Meeting Clean Water Act Requirements
2. Maintaining Affordable Rates
3. Meeting Water Quality Standards
4. Compliance with Implementation Schedule
5. Supporting Designated Uses in Newport Harbor

To achieve these goals, the strategy for developing the recommended plan included:

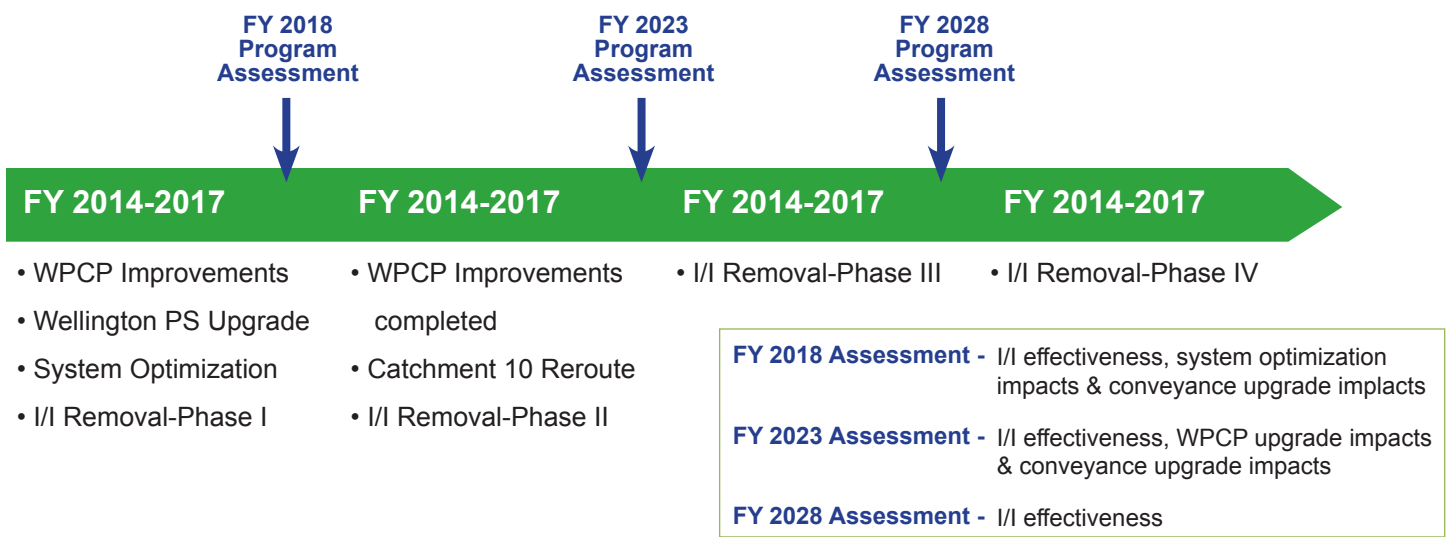
1. Complying with EPA and RIDEM negotiated CAP requirements
2. Achieving a reasonable application of water quality standards

3. Maximizing the use of existing facilities
4. Prioritizing capital repair & replacement projects to invest in the sewerage system for next generations
5. Controlling Operations & Maintenance (O&M) requirements and minimizing need for new capital facilities
6. Identifying a program & an implementation schedule that is affordable to Newport customers

By applying this strategy, the City and stakeholders devised a plan that includes:

- Conveyance system improvements and optimization
- An upgrade of the City's Water Pollution Control Plant (WPCP)
- An inflow elimination program that will target both public and private sources of inflow to the combined sewer system

In order to maintain affordability, the City has proposed implementing the program over a 20-year implementation period which has regularly scheduled assessment periods to determine if targets are being met and to make adjustments to the program if necessary. The figure below shows an overview of the proposed implementation schedule.



The 20-year program has an overall estimated cost of approximately \$100 million.

CSO Program Stakeholder Workgroup

The City would like to thank the members of the CSO Stakeholder Workgroup for all of their efforts in supporting the development of the SMP and for their commitment to the City and our outstanding water resources. Their commitment to learning about and

understanding the detailed technical issues involved with a CSO program made it possible for us to achieve the goals we set. The CSO Stakeholder Workgroup participants are listed below – if you see them, please say thanks for their efforts!

Affiliation	Representative	Alternate
Ad Hoc Wastewater & Stormwater Committee	Ray Smedberg	Dave McLaughlin
Alliance for a Livable Newport	John McCain	Roger Wells
Aquidneck Island Planning Commission	Tina Dolen	
Beach Commission	Charles Wright	Kathleen Shinnors
City Council	Justin McLaughlin	
Department of Public Services	Bill Riccio	Eric Earls
Department of Planning	Bill Hanley	
Harbor Master	Tim Mills	
Environmental Protection Agency	Mary E. Devers-Putnam	
Naval Station Newport	James Carlson	William Monaco
Newport County Chamber of Commerce	Jody Sullivan	Ed Lopes
Newport County Convention and Visitor's Bureau	Evan Smith	Cathy Morrison
Town of Middletown	Shawn Brown	Tom O'Loughlin
Rhode Island Department of Environmental Management	Eric Beck	Angelo Liberti
Roger Williams University	Jim Brunnhoeffer	B. Gokhan Celik
Save the Bay	Topher Hamblett	
Resident	Tom Cornell	
Resident	Stuart K. Mills Jr.	
Resident	Roger Slocum	
Resident	Ted Wrobel	

Key Terms & Acronyms

Combined Sewer Overflow (CSO) – the discharge of wastewater and stormwater from a combined sewer system directly to a receiving waterbody during wet weather.

Corrective Action Plan (CAP) – the activities listed in the consent decree that the City must meet to be in compliance.

Environmental Protection Agency (EPA) – federal agency that oversees regulations relating to sanitary sewer systems, combined sewer systems, CSOs and receiving waters.

Fiscal Year (FY) – the City's budgeting period.

Infiltration/Inflow (I/I) – the total quantity of water from both Infiltration and Inflow without distinguishing the source.

Operations & Maintenance (O&M) – the routine work performed to keep assets performing at the best level of service.

Rhode Island Department of Environmental Management (RIDEM) – state agency that oversees regulations relating to sanitary sewer systems, combined sewer systems, CSOs and receiving waters.

System Master Plan (SMP) – the plan/report submitted to EPA that defines the City's 20-year plan to address CSOs.

Water Pollution Control Plant (WPCP) – the treatment facility that cleans the City's sanitary sewage for disposal to Newport Harbor.

CONTACT:

Comments, suggestions and feedback can be provided at any time to the Department of Utilities at 401-845-5600.