

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.



Thames Street Interceptor Rehabilitation Project

Recent CSO Program Accomplishments

- Completed one year of sewer system metering
- Completed the Wellington Avenue interceptor replacement project
- Completed the Thames Street interceptor rehabilitation project
- Completed building a computer model of the major sewers in the City
- Awarded contracts for the Bliss Mine Force Main, Beach Pumping Station and Maple Avenue Pumping Station condition assessments

Upcoming Projects & Activities

To encourage improved stormwater management, the City will be providing a limited number of rain barrels to Newport property owners free of charge beginning in the Fall of 2011. Rain barrels collect rain water that runs off of roofs and down downspouts during storms to be used later during dry weather. Rain barrels offer numerous benefits to both the City and property owners such as:

- Stored water can be used for lawn and garden watering, reducing water consumption
- Storing some stormwater for use during dry periods improves groundwater recharge
- The availability of rain barrels will encourage more property owners to disconnect downspouts from the sanitary sewer collection system, thereby eliminating sources of stormwater

The City will provide more information about obtaining and installing the rain barrels as they become available.

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Stormwater Infiltration & Inflow Identification Field Work Progress

The City has been conducting the current stormwater I/I field investigations to identify and correct defects in the wastewater collection system to eliminate wet-weather induced problems since October 2010. The field investigations that the City has been conducting include:

- Smoke testing
- Building inspections and dye tests
- Manhole inspections
- Catch basin inspections
- Closed circuit television inspections

The figure below show the areas where smoke testing has been completed and where building inspections and dye tests are actively occurring.

For more information about the types of field investigations and where investigations are occurring, please visit the City's web-site at:

Smoke Testing: http://www.cityofnewport.com/departments/utilities/pollution_control/stp.cfm

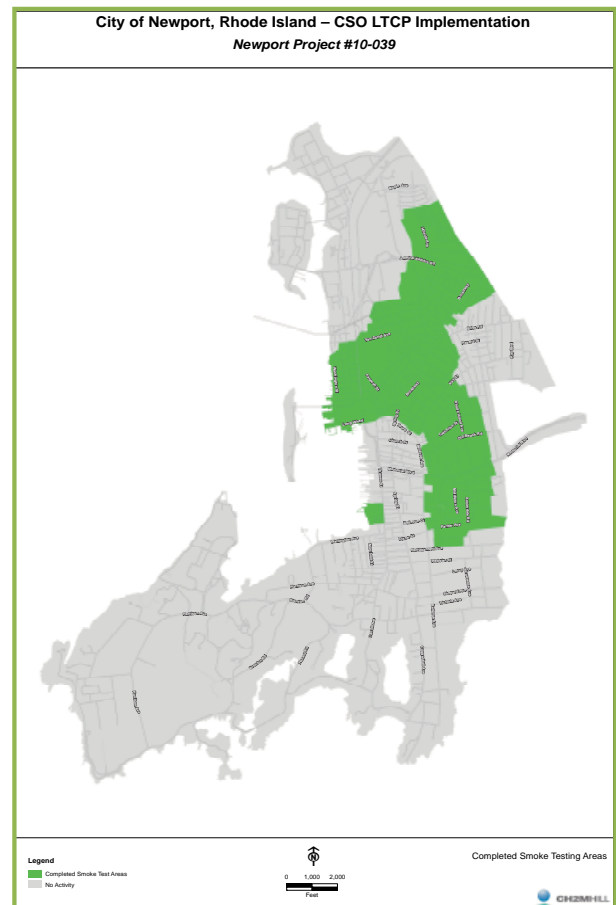
Building Inspection: http://www.cityofnewport.com/departments/utilities/pollution_control/bip.cfm

Field Work Statistics through June 3, 2011	
Linear feet of sanitary sewer system smoke tested	116,064
Catch Basin inspections	430
Manhole inspections	793
Building inspection attempts	4,845
Building inspections performed	1,470
Completed disconnected verifications from previous field work	119
Building dye tests	160

Field Work Investigations Follow-up

When a suspect defect (e.g. roof downspout) is identified at a private property during a building inspection, and it cannot be confirmed visually whether the defect is connected to the sanitary system or the stormwater system, the owner is notified via letter from the City requesting that they schedule an appointment with the City's contractor to perform a dye test. The dye test will confirm whether or not the defect is connected to the sanitary system. For more information on the dye test process please visit the City's web-site at: http://www.cityofnewport.com/departments/utilities/pollution_control/dye_testing.cfm

When defects found to be contributing stormwater flow to the sanitary system are identified at a private property, the property owner is contacted via letter by the City requesting that they correct the defect per the City's Sewer Use Ordinance. Once the property owner has corrected the defect, they are asked to make an appointment with the City's contractor to verify that the stormwater source has been permanently removed from the wastewater collection system.



GIS

Data collected through the I/I field inspection program as well as any other data about the collection system is stored in the City's Geographic Information System (GIS). A GIS integrates hardware, software, and data for capturing, managing, analyzing, and displaying all forms of geographically referenced information. The GIS allows us to view, understand, question, interpret, and visualize data in many ways that reveal relationships, patterns, and trends. By developing and maintaining an accurate and robust GIS, the City is able to answer questions and solve problems by looking at data in a way that is quickly understood thereby addressing issues more rapidly while saving time and money.

Recent Geographic Information System Activities

Over the past year, the City has been actively working to update and add data to its GIS. In order for the GIS to be a valuable tool for the City, it is important that historical data be added to the system as well as recently collected data. To ensure that the GIS includes both historically and recently collected data, the City's CSO Program team of CH2M HILL, United Water and Wright-Pierce have been performing the following activities with regards to the GIS:

- Adding as-built data from the 1970s sewer separation projects
- Adding data from CCTV inspections of the collection system
- Adding data collected from the I/I field investigation program
- Adding data about recently completed sewer improvement projects

By adding this data to the GIS, the City can easily identify information about its collection system such as:

- Age, material and condition of pipes
- Combined and separated portions of the collection system
- The status of properties with regards to I/I defects

The City recently submitted a series of maps developed from the GIS to EPA to show the City's progress on these efforts. The City will be submitting semi-annual updates of the collection system maps to EPA. The figure on this page shows an example of one of the maps recently submitted to EPA.



CSO Program Stakeholder Workgroup

The CSO Program Stakeholder Workgroup held its first three meetings on February 3, 2011; April 20, 2011; and July 14, 2011. The schedule below shows the planned frequency and topics for future meetings. In addition to the three meetings, Workgroup members also participated in a tour of the City's Water Pollution Control Plant (WPCP) and CSO

The CSO Stakeholder materials web address is:
http://www.cityofnewport.com/departments/utilities/pollution_control/stakeholders.cfm

Facilities in March. The purpose of the tour was to familiarize the Workgroup members with the City's CSO System. The next meeting is scheduled for September 8, 2011 in the Council Chambers at City Hall at 3:00 PM. All Stakeholder Workgroup meetings are open to the public.

	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 - Decision Science Process														■										
Meeting #7 - Draft Collection System Capacity Assessment & SMP																■								
Meeting #8 - Updated SMP																				■				
SMP - Final to EPA																								⚓

Key Terms & Acronyms

Capacity, Management, Operations and Maintenance (CMOM) - a program to establish a process and framework that allows collection system owners and operators to optimize the performance of their system.

Combined Sewer System - a system of pipes designed to capture both sanitary sewer flow as well as stormwater from rainfall events.

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) - a schedule of CSO control activities that is negotiated with EPA as a part of a consent agreement.

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

Geographic Information System (GIS) - a system that captures, stores, analyzes, manages and presents data with reference to geographic location data

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) - A plan to reduce CSO's to Newport Harbor that takes into account technical issues, regulatory requirements, and cost for the overall program.

Water Pollution Control Plant (WPCP) - the City's Wastewater Treatment Facility which is located on J. T. Connell Highway.

CONTACT:

Comments, suggestions and feedback can be provided at any time to the Department of Utilities at 401-845-5600 or by e-mail to NewportCSOProgram@cityofnewport.com.