City of Newport CSO (Combined Sewer Overflow) Program Quarterly Newsletter

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.

Wellington Avenue Construction

In This Issue:

Recent CSO Program Accomplishments

- Sewer system metering program continuing and areas of increased inflow & infiltration (I/I) are being identified
- GIS collection system mapping on-going
- Water Pollution Control Facility Optimization Study on-going
- Wellington Ave. interceptor replacement construction initiated
- Thames St. interceptor rehabilitation construction contract awarded
- Stormwater I/I field work initiated
- Capacity, Management, Operations and Maintenance (CMOM) report submitted to EPA & RIDEM
- CMOM Corrective Action Plan submitted to EPA & RIDEM
- Building a computer model of all the major sewers in the City to help make decisions on the best way to manage sewer flows and reduce CSOs
- Pump Station & Force Main Evaluation Report submitted to EPA & RIDEM

Upcoming Projects & Activities

- Thames St. interceptor rehabilitation construction. Field survey November 2010 – December 2010. Interceptor sliplining to begin January 2011.
- Smoke testing, building inspections and manhole inspections to identify sources of stormwater I/I. (Please see more information in this newsletter.)
- Establishing new sampling stations at the Wellington and Washington CSO Outfalls.

Stormwater Infiltration & Inflow Identification Field Work

The purpose of the CSO control activities is to identify and remove sources of stormwater flow from the collection system in an effort to reduce the number of CSOs. General goals of a conveyance assessment program are to find and reduce defects in the wastewater collection system, help control wet-weather flows, eliminate future wastewater overflows and backups, and aid in infrastructure improvement and rehabilitation. Eliminating wet-weather induced problems helps reduce costs of excessive relief sewer construction and protects the health and well being of the public and the environment. In an effort to identify sources of stormwater flow in the collection system, the City has initiated a number of field activities including:

- Smoke testing
- Building inspections
- Manhole Inspections

Field Work Statistics through November 19, 2010

Linear feet of sanitary sewer system smoke tested: 37,867

Building inspection attempts: 1003

Building inspections performed: 342

Manholes inspected: 72

Smoke Testing

Smoke testing is an effective way to locate and identify problems and defects in the collection system that can contribute to CSOs and decrease the existing capacity and efficiency of the collection system infrastructure. A smoke test is the process of injecting artificially produced smoke into a blocked off pipeline segment to see where the smoke emerges. If the sewer is in good condition then the forced smoke will emerge at the other end of the line. However, if the line has defects, the smoke will find the break and try to escape through the break. It is not unusual to see plumes of smoke issuing up from peculiar places, such as cracks in the street, or in residential yards during smoke testing.

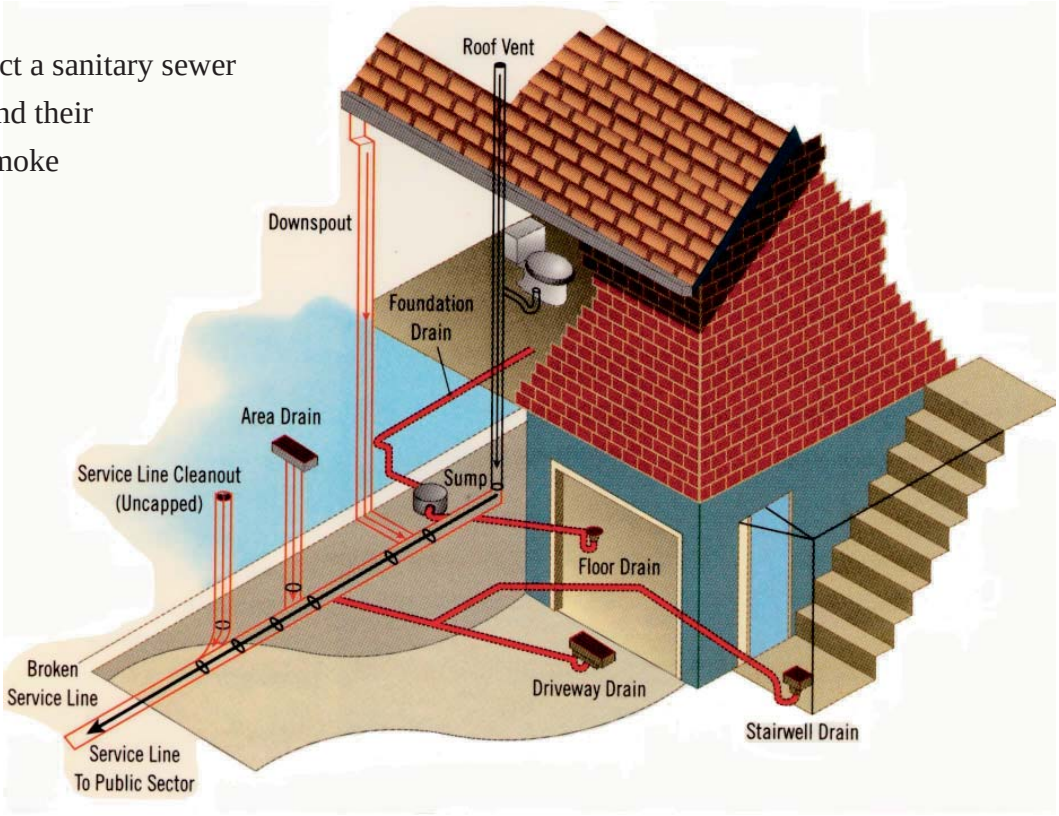
It can be expected to see smoke coming from a building's sewer vent pipe (see example in photo above). This is normal and does not indicate a stormwater connection to the sanitary system.

Public Notification of Smoke Testing

- Public door hanger notification for smoke testing of sanitary sewer lines in the City's study area will be distributed to residents and commercial areas approximately 24-72 hours prior to smoke testing.
- For more information about the smoke testing program as well as the monthly schedule for smoke testing please visit the smoke testing page that has been set up on the City's web-site: http://www.cityofnewport.com/departments/utilities/pollution_control/stp.cfm

Building Inspections

There are many ways to inspect a sanitary sewer system to determine defects and their locations. Among these are Smoke Testing, Dyed-Water Testing, and Closed-Circuit TV Inspections. Frequently though, even these methods cannot conclusively locate every defect on private property. In these cases, door-to-door surveys are performed. The goal of building surveys is to determine potential inflow and infiltration sources such as: sump pumps, floor drains, roof drains and driveway drains that might permit influx of stormwater into the sewer line.



How is my residence connected to the sanitary sewer system?

When a residence is built, a segment of pipe (a "service lateral") is laid to connect the residence's wastewater products—toilets, showers, sinks—to the sanitary sewer system. Driveway drains, stairwell drains, foundation drains and sump pumps should not be connected to this service lateral, as these carry stormwater and not wastewater. However, it is frequently the case that when a house is built, these drains are routed into the service lateral. These drains may also be routed to a building's sump pump, and instead of discharging the stormwater onto the ground, the sump pump discharges the stormwater into the service lateral.

Building Inspection Process

- Notification via letter prior to starting building inspections.
- A building survey team, typically consisting of two people, will be going door-to-door to conduct inspections.
- The inspectors will arrive in well-identified field vehicles and have ID badges.
- A minimum of three attempts will be made to conduct the inspection at each building.
- After three unsuccessful attempts, the City may contact the property owner via doorhanger, letter or phone call in an attempt to complete the building inspection.

For more information, please visit the building inspection page that has been set up on the City's web-site: http://www.cityofnewport.com/departments/utilities/pollution_control/bip.cfm

CSO Program Stakeholder Workgroup

A commitment to participate on the CSO Program Stakeholder Workgroup has been received from the stakeholder groups listed below.

Proposed CSO Stakeholder Workgroup Representatives
Ad Hoc Wastewater and Stormwater Committee
Alliance for a Livable Newport
Beach Commission
City Planning Department
City Department of Public Services
Town of Middletown
Naval Station Newport
Newport County Chamber of Commerce
Newport County Convention & Visitor's Bureau (NCCVB)
Newport Harbor Master
RIDEM & EPA
Roger Williams University - School of Engineering
Save the Bay

In addition to these representatives, the City Council will be appointing resident-at-large participants as well as a liaison from the City Council.

The council is still looking for representatives of business, fishing, and marine industries.

The CSO Program Stakeholder Workgroup will begin meeting as soon as the final members are determined.

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.

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

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 within each stakeholder's organization to aid the City in its efforts to communicate CSO Program information.

To support the CSO Programs's public education efforts through participation in CSO Program public education activities.

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.