

water environment federation

Private Property Virtual Library

www.wef.org/PrivateProperty

Water Environment Federation Collection System Committee

With assistance from FMSM Engineers

Introduction

As the collection systems in the US age, inflow and infiltration (I/I) is a significant problem. It is estimated that 27% of all sanitary sewer overflows are caused by I/I. Some cities estimate that as much as 60% of the flow that overfills their sanitary sewers comes from service connections (EPA 832-K-96-001). The WEF Collection Systems Committee (CSC) recognizes that private property I/I sources and lateral maintenance are some of the most difficult issues that many wastewater utilities face. To support utilities in managing private property issues, the WEF CSC has information on successful private property programs and is making this information available in a virtual library.

Why is Private Property an issue?

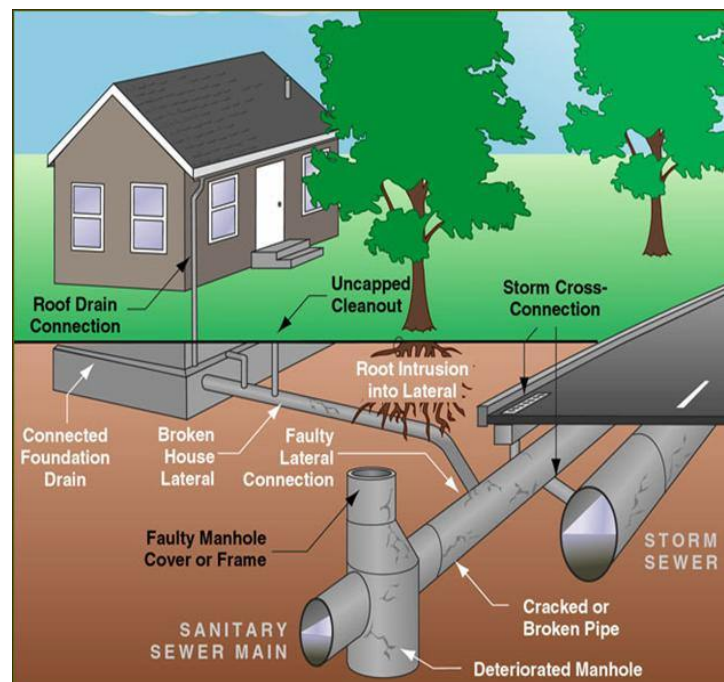
Regulatory authorities are requiring utilities to eliminate overflows. One approach to eliminating overflows is removing I/I. However, if removing public I/I sources alone is not enough, utilities are faced with the dilemma of constructing large storage structures or going onto private property.

There are many potential private property I/I sources including:

- Illicit connections to the public sewer main, such as downspouts, basement sumps, and foundation drains, and
- Breaks and open joints in the private laterals sewer that result from improper construction, improper repair, or lack of maintenance.

Additionally, many state regulatory agencies are requiring utilities to include sewer lateral installation, inspection and maintenance issues in their Capacity, Management, Operations and Maintenance (CMOM) programs.

There are many roadblocks that prevent utilities from implementing a private property program. Many communities don't know where to begin. Often it is difficult working on private property because of legal issues as well as easements and defining ownership. Funding the program is another common challenge because of limited funds to undertake the necessary repairs as well as the question of spending public money on private property. Additionally, it can be difficult to gain stakeholder support to initiate the programs.



Private Property Virtual Library (PPVL) Project Objective and Approach

In August 2005, WEF conducted a webcast on private property issues that was the highest viewed webcast WEF had ever sponsored. Participants requested example ordinances, letters, and other documents from speakers, which led the WEF CSC to begin this project to collect and share this type of information.

The project objective was to develop a virtual library of private property program-related resource materials to be available through the internet. It was decided that initial project efforts should focus on “successful” private property programs targeting sanitary lateral repair or replacement, I/I source detection and elimination, and lateral condition assessment. Building a dynamic library repository and virtual library website were also part of the initial project efforts.

To date, over 20 utilities have shared detailed information on their successful programs from California to South Carolina, from Texas to Michigan. WEF CSC intends to update and expand the information as more communities share their successes. As other private property related challenges are identified (e.g., sewer easements), the library will be modified to accommodate additional issues. Data will continue to be collected and uploaded by the WEF CSC as it becomes available.

Private Property Virtual Library (PPVL) Content

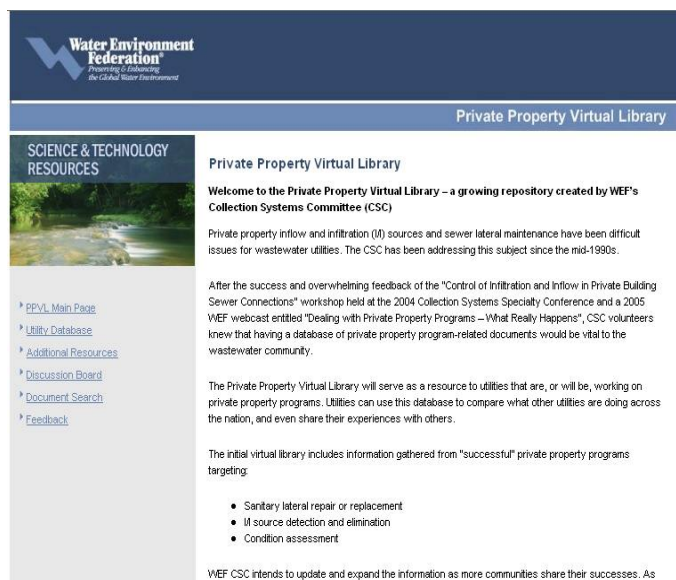
The PPVL includes information on several different types of programs that have been implemented. Some communities opted to implement programs that included full replacement of the sanitary lateral, replacement from sewer main to right-of-way or curb, repair using pipe liners (these methods are completed in conjunction with sewer main replacement or rehabilitation), and emergency repairs. Some communities implemented maintenance programs that focused on sanitary lateral cleaning and cleanout installation.

Another group of communities implemented programs that focused on less direct municipal construction. These programs included enforcement of homeowner repairs, dye testing of all connections, downspout extension or disconnection, sump pump disconnection, footing drain disconnection, and installation of backflow prevention devices.

How to Access the Private Property Virtual Library (PPVL)

The PPVL is located at:
www.wef.org/PrivateProperty.

Documentation online includes completed questionnaires and supporting documentation, such as public education materials, letters to residents, ordinances and codes, operating and maintenance procedures, design details and specifications. The library has multiple search options, such as utility location, program type, supporting documents. A discussion board focused on private property issues is also included.



Water Environment Federation
Preserving, Enhancing, the Global Water Environment

Private Property Virtual Library

SCIENCE & TECHNOLOGY RESOURCES

Private Property Virtual Library
Welcome to the Private Property Virtual Library – a growing repository created by WEF’s Collection Systems Committee (CSC)

Private property inflow and infiltration (I/I) sources and sewer lateral maintenance have been difficult issues for wastewater utilities. The CSC has been addressing this subject since the mid-1990s.

After the success and overwhelming feedback of the “Control of Infiltration and Inflow in Private Building Sewer Connections” workshop held at the 2004 Collection Systems Specialty Conference and a 2005 WEF webcast entitled “Dealing with Private Property Programs – What Really Happens”, CSC volunteers knew that having a database of private property program-related documents would be vital to the wastewater community.

The Private Property Virtual Library will serve as a resource to utilities that are, or will be, working on private property programs. Utilities can use this database to compare what other utilities are doing across the nation, and even share their experiences with others.

The initial virtual library includes information gathered from “successful” private property programs targeting:

- Sanitary lateral repair or replacement
- I/I source detection and elimination
- Condition assessment

WEF CSC intends to update and expand the information as more communities share their successes. As

If your utility has a private property program in place and is willing to share related information, please contact PPVL Project Chair Laurie Sharon (614.844.4004 lsharon@fmsm.com) or PPVL Project Vice-Chair Jaime Davidson (716.541.0745 Jaime.davison@parsons.com).