

## Private Property Inflow Removal: Frequently Asked Questions

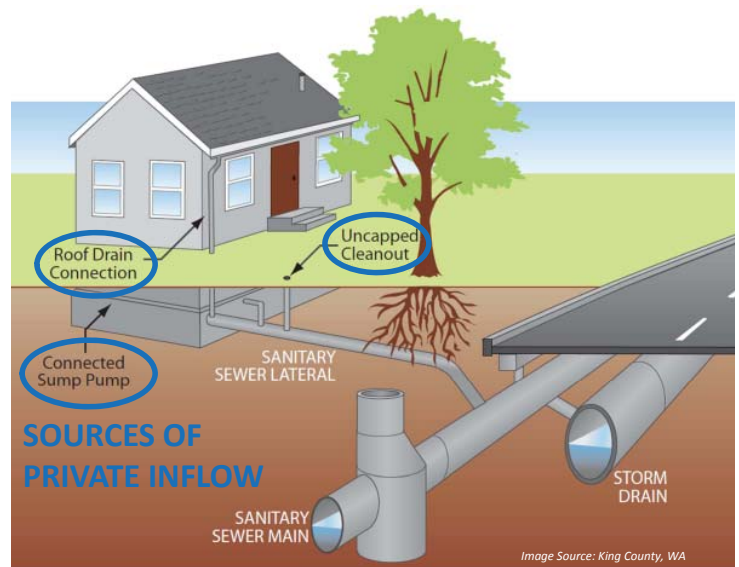
### 1. What is inflow and why is it a problem?

Inflow is water that flows into sewer pipes from various stormwater sources. Stormwater inflow occurs when rain water enters sewer pipes from gutter downspouts, internal roof drains, area or driveway drains, foundation drains, and sump pumps connected to the sewer.

Inflow comes from sources in the public way or on private property. Inflow from sources on private property is commonly described as “private inflow.”

Inflow is a problem because:

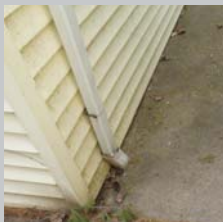
- It takes up capacity in the sewer pipes. Many older sewers are not large enough to handle the additional volume of flow in a major rain storm. When a major storm hits, the pipes may surcharge and backup into basements, flood streets, and/or discharge into waterways through combined sewer overflows (CSOs) negatively impacting homeowners and the environment.
- It is treated along with the sewage when it arrives at the wastewater treatment plants, resulting in significantly greater volumes to be treated and greater treatment costs.
- If inflow is not removed, new sewers must be designed to handle greater volumes in anticipation of peak flows from storm events, resulting in more expensive capital projects.



### What Does Private Inflow Look Like?

Photos of common types of private inflow sources

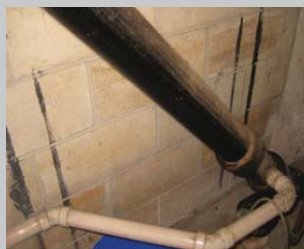
A. Downspout/  
roof leaders  
disappearing



Downspout/roof leader going  
into basement foundation



B. Sump pumps hard-piped  
to sanitary sewer service



C. Driveway catch basin



D. Basement floor  
drain



## 2. Why is removal of inflow sources on my property part of the Huron B project?

The City is working toward separating the combined sewer (sewer and storm flow) system in your neighborhood to fulfill the requirements of a court-ordered cleanup of the Boston Harbor by preventing combined sewer overflows (CSOs) into the Alewife Brook.

By separating the combined system into designated sanitary sewer and storm drain systems we will see:

- Improved water quality in the Alewife Brook, Mystic River and Boston Harbor;
- Improved sewer and stormwater systems level of service, meaning a lower likelihood of backups; and
- Reduced treatment costs via reduced sewer user fees.

In order to meet the court-ordered reduction in CSOs, the City of Cambridge, in coordination with the Massachusetts Water Resources Authority (MWRA), is responsible for removing sufficient sources of inflow to meet those CSO reduction goals. Eighty-two (82) properties have been designated in the Huron B neighborhood for inflow removal.



Alewife Brook Reservation

## 3. Why is this work being done at my property and not my neighbor's?

Hydraulic analyses were performed to determine how much inflow the City must remove from the system. Then, a feasibility analysis was performed to determine which inflow sources would be targeted with the least amount of disruption to private property. Eighty-two (87) properties in the Huron B neighborhood have been designated for inflow removal to meet the necessary reduction.

## 4. What is involved in removing inflow sources on my property?

Each property will require different measures to remove the inflow from the sewer system. The modifications have been conceptually designed, based on extensive field investigations and the information gathered during the building inspection program conducted last year.

Please refer to the conceptual construction plan included in this mailing for information specific to your property.

### How Is Inflow Removed?

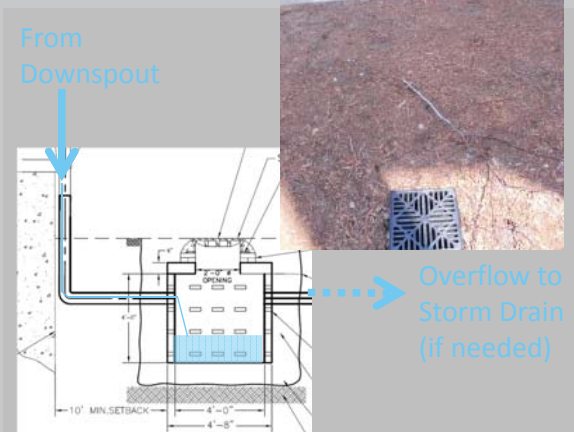
Examples of inflow removal methods



A. Downspout disconnected. Elbow capped.



B. Drywell installed with overflow to the storm drain



Overflow to Storm Drain (if needed)



**5. Am I responsible for the cost to remove inflow sources on my property?**

There is no cost to the homeowner for removing the inflow and restoring the areas of your property affected by construction activity; however, should a homeowner not allow the work to be done as part of this project he or she will become responsible for its cost if inflow removal is required at a later date.

**6. Will I need to hire someone?**

No. All work under this project will be done by the City's designated contractor and coordinated with the homeowner by way of a right of entry document.

**7. When will the sources of inflow on my property be modified?**

Inflow removal work is expected to begin in or around April 2014. The date is subject to the contractor's schedule. Completion of the work within the project schedule will be the responsibility of the City's contractor.

**8. Will the contractor be insured to do work on private property?**

The contractor's insurance policy will extend to cover work on private property, and each homeowner will be listed as additionally insured on the contractor's certificate of insurance.

**9. How will my property be restored?**

Properties will be restored to a condition equivalent to or better than that currently existing.

**10. How long will the work take?**

The City's contractor is expected to restore properties as soon as practical after completing the work. Depending on the extent of work involved at each property, inflow removal is expected to take 1-5 days and surface restoration is expected to take up to another 2 days. Property owner impacts will be minimized to the extent possible. The schedule specific to your property will be reviewed with you prior to construction.

## How Does the City Remove Private Inflow?

Recent example from Whittemore Avenue Neighborhood



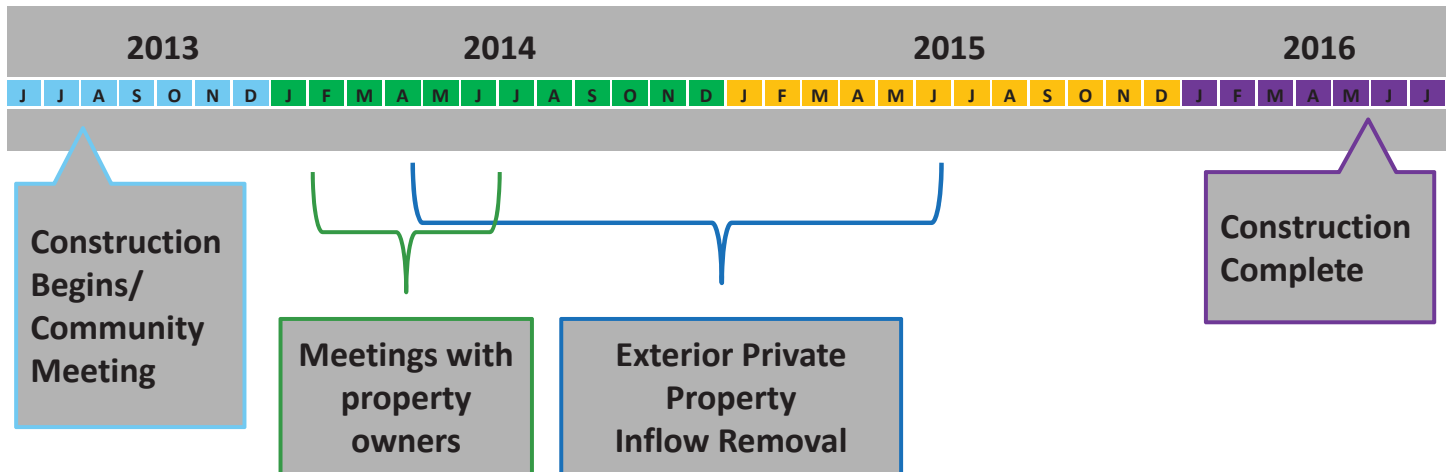
**BEFORE:** Downspout disappeared into foundation; connected to sewer



**AFTER:** Downspout reconnected to new drain lateral with cleanout access. Sidewalk and driveway restored.

## 11. What happens next?

- Informational meeting to be held Wednesday, February 27 at 6:30 p.m. at the Tobin School cafeteria to discuss private property inflow work.
- Construction of the Huron B project anticipated to commence in August 2013. A community open house to be held just prior to construction start.
- The City and the contractor will meet with you at least 6 weeks prior to construction in order to finalize the conceptual plans and sign right of entry documents (anticipated January-June 2014)
- Inflow removal will occur along with construction in public ways (anticipated April 2014-April 2015)



## 12. Who can I contact for more information?

For additional information, please contact:

**Kara Falise**, Cambridge DPW Project Manager  
(617)349-4827 or [kfalise@CambridgeMA.gov](mailto:kfalise@CambridgeMA.gov)

**KyAnn Anderson**, Community Relations Manager  
(617)498-4708 or [kanderson@kleinfelder.com](mailto:kanderson@kleinfelder.com)

Information is also regularly updated on the project web site at [www.cambridgema.gov/theworks/HuronB](http://www.cambridgema.gov/theworks/HuronB).