

Sonoma Valley County Sanitation District

Proposed Sewer Ordinance Amendment



Tonight's Agenda

- What is the problem and how can we fix it?
- What is a sewer lateral?
- What is Infiltration and Inflow (I/I)
- Correlation Between Rainfall & I/I
- Property Owner's Responsibilities
- What is the Proposed Ordinance Amendment?
- How will the of Amendment help?
- Inspection & Repair Program
- Estimated Repair Costs

The problem & a proposed solution

PROBLEM:

- Inflow and infiltration contribute to sanitary sewer overflows
- Overflows pollute local creeks
- Result in costly fines to the District's ratepayers
- Last year the District paid a \$732,000 fine for a series of sanitary sewer overflows



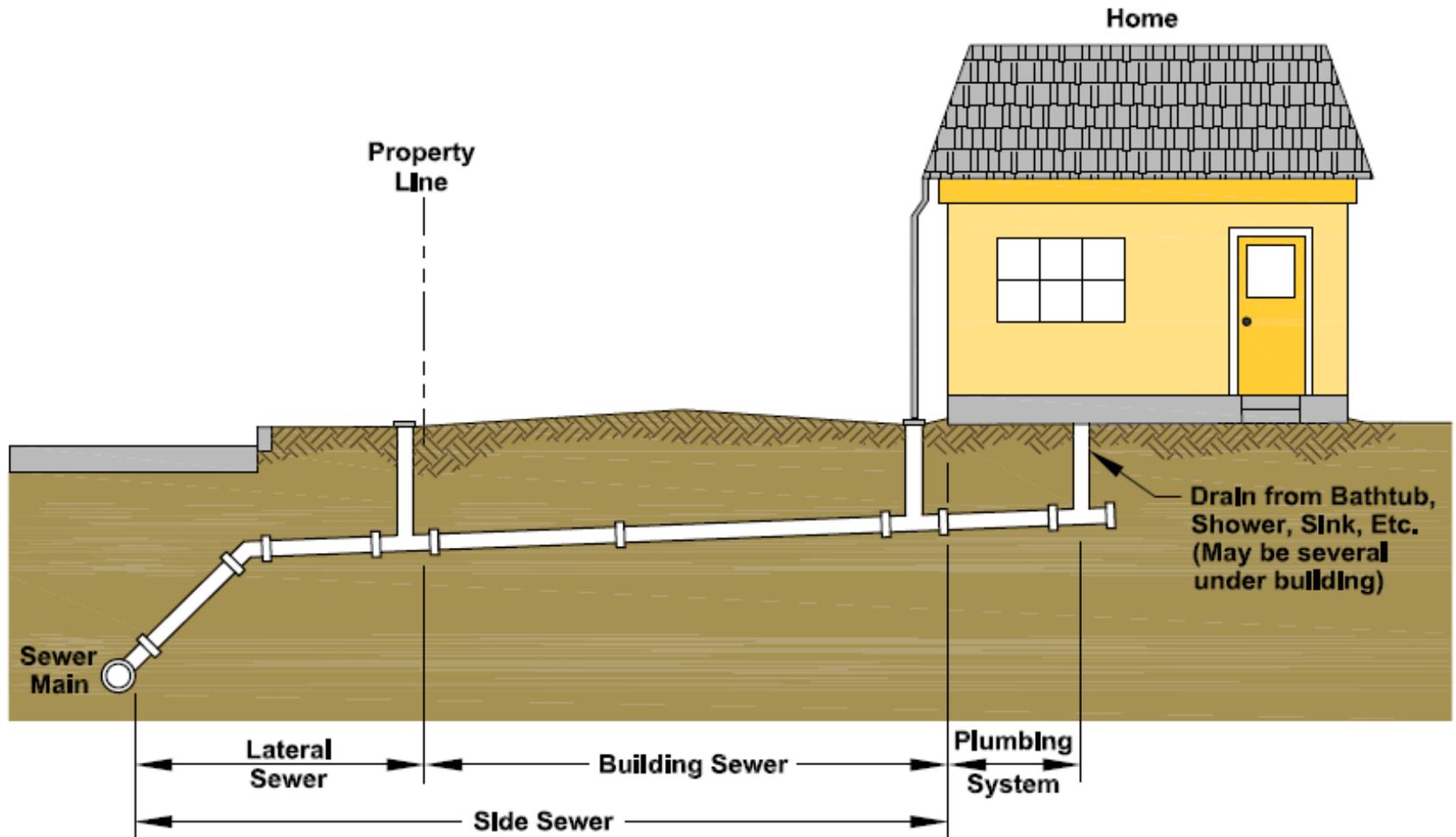
The problem & a proposed solution

PROPOSED SOLUTION:

- Inspect private sewer laterals and require repairs if needed to reduce I/I



Sewer Layout



What is Inflow?

- Surface water that enters the system through improper connections
 - Roof drain connection
 - Uncapped cleanout
 - Storm sewer cross-connection
 - Faulty manhole covering
 - Connected foundation drain



Infiltration

- Groundwater that enters through breaks and leaks in the pipe
 - Broken house lateral
 - Root intrusion
 - Deteriorated manhole
 - Cracked or broken pipe

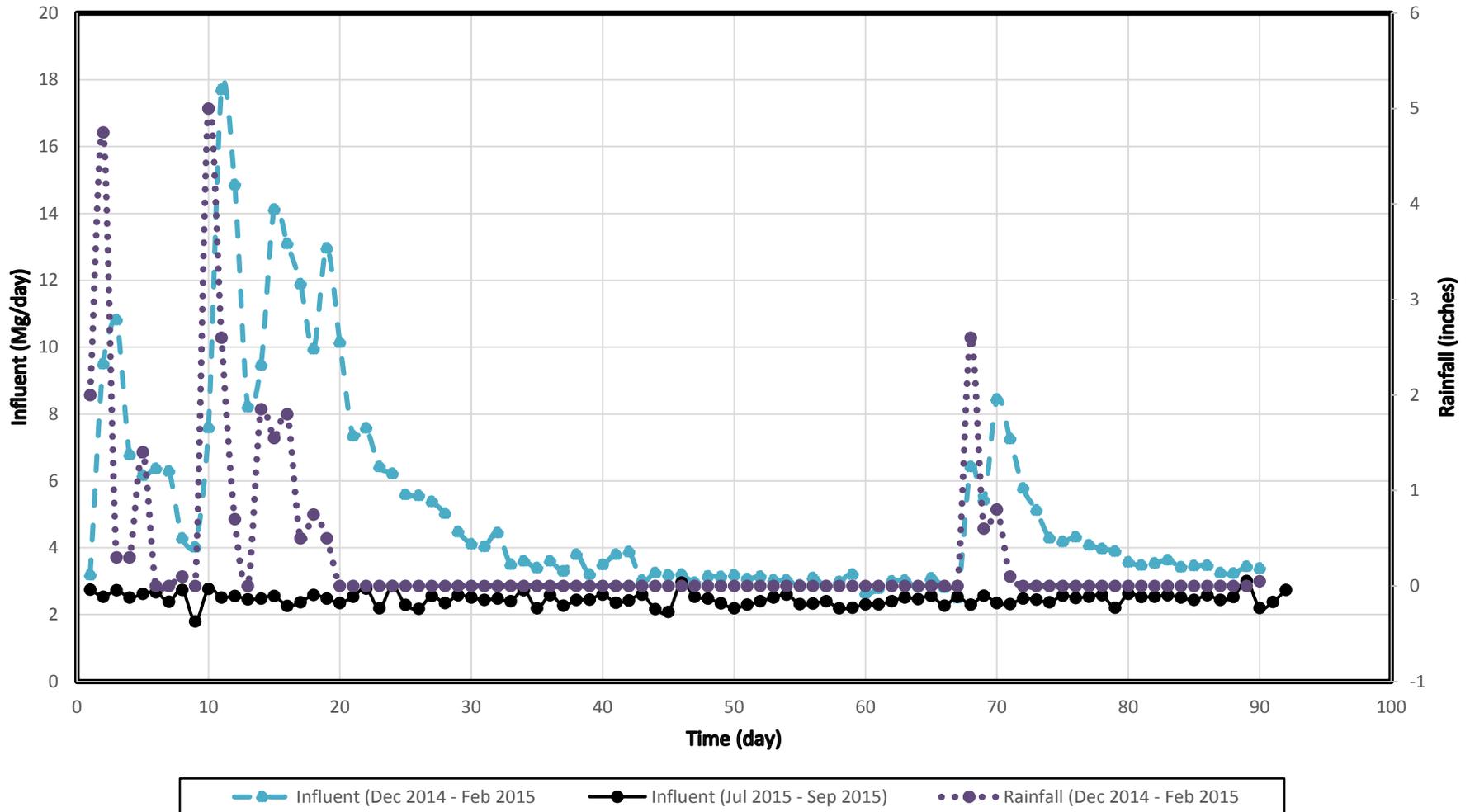


Correlation between Rainfall and I/I

- The highest amounts of inflow and infiltration occur during the wet season, especially during heavy rains
- This results in:
 - Sanitary Sewer Overflows
 - Increased cost for wastewater conveyance and treatment
 - Damage to private property

Sonoma Valley CSD 2014 to 2015

SVCSO 2014/2015 Influent and Rainfall Data

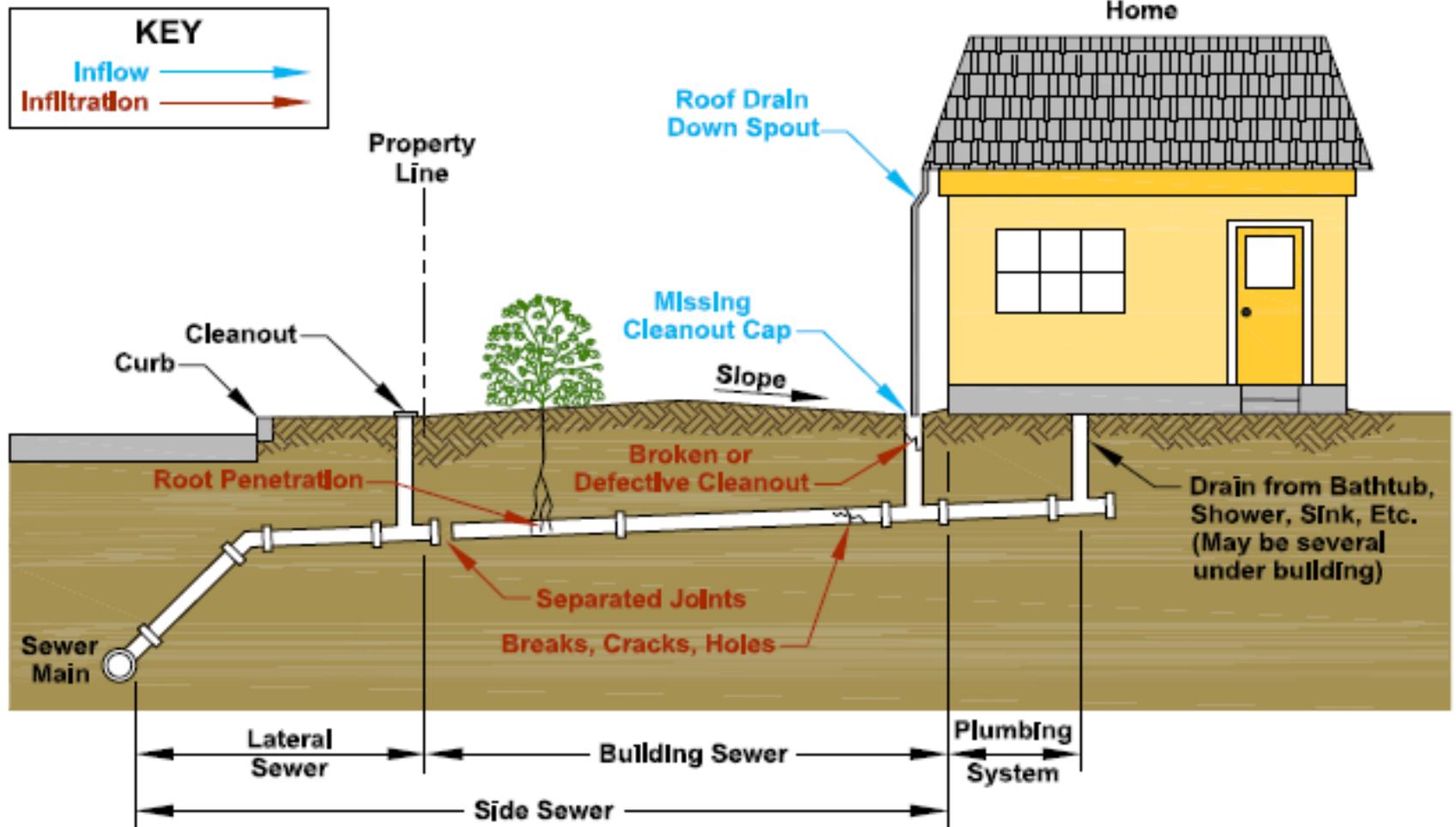


User Responsibilities Sanitation Code 3.22

Property owners are responsible for maintenance of their private sewer lateral, including:

- Installation and connection
- Cleaning and clearing
- Maintained to be free from roots, grease deposits, and other deposits which may impede the flow or obstruct the transmission of waste
- Joints maintained in good condition

Potential Side Sewer Problems



Purpose of Ordinance Amendment

- Reduce inflow and infiltration (I/I)
- Prevent sanitary sewer overflow and reduce influent into treatment plant
- Requirement of settlement agreement with Regional Water Quality Control Board
- Requirement of River Watch lawsuit

Bay Area Sanitation Districts with Sewer Lateral Ordinances

Agency	Point of Sale	Remodeling	Projects	Additional/Change in Plumbing Fixtures	Meter size	Determination of City/Agency	Change of use of house	Age Sensitive
Tiburon and Belvedere	X	X	X					
Ross Valley	X	X						
City of Pacifica	X	X		X	X			
City of Hercules	X	X		X		X	X	
Tamalpais	X	X				X		
Mill Valley	X	X	X	X		X		
Oakland (EBMUD)	X	X			X			
Burlingame	X			X				
City of Berkeley	X	X				X		
City of Richmond	X	X		X		X		
City of Belmont		X			X			
City of Millbrae	X							
Stege Sanitary District	X	X			X			
San Bruno	X							X
Pinole	X			X		X	X	X
Graton Community Services District	X							
Ukiah	X							

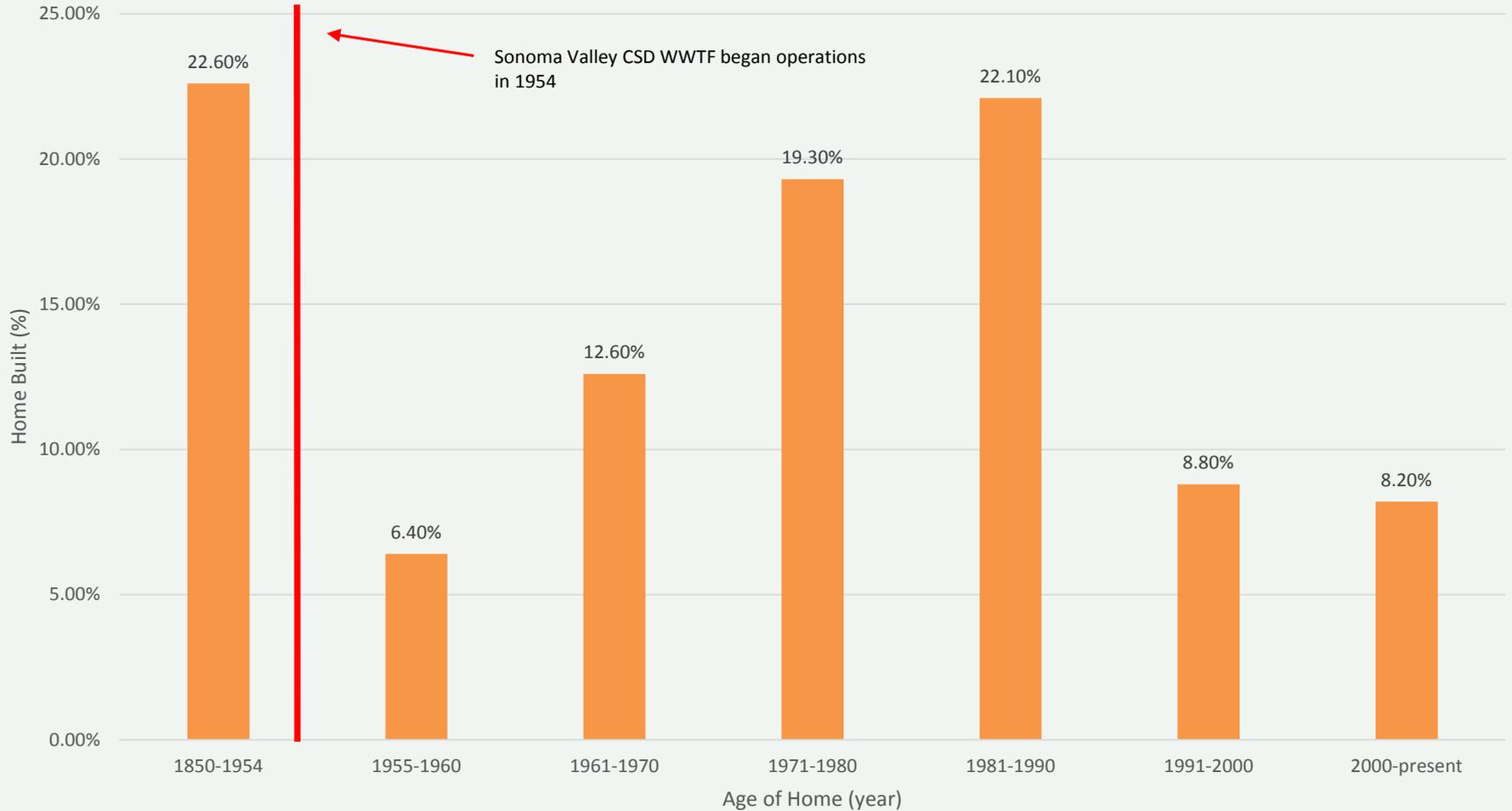
Potential Triggers for Sewer Lateral Testing

The District is considering potential conditions that would require a sewer lateral to be tested:

- May require inspection of any side sewer (building sewer and lateral sewer) that is 30 years old or older
- District may require testing if:
 - It is necessary for the protection of public health, safety, or welfare
 - A sewer lateral has known problems
 - There is a higher-than-average wastewater flow in a neighborhood or area

Housing Stock Age in Sonoma Valley

Sonoma Valley County Sanitation District
Percentage of Homes Built



Inspection & Repair Program

- Identify neighborhoods upstream of overflows
- Plumbing contractor performs inspections
- Inspections paid for by District
- District notifies landowner of need for lateral repair or replacement

Inspection & Repair Program

- Repair cost borne by landowner
- District will provide up to \$1,000 rebate for the associated costs (on a limited basis)
- Landowner will be able to participate in the District's direct installation water conservation program
- Loan program may be available to assist in the repair cost

Estimated Inspection and Repair Costs

Inspection					
	Air Testing		Video		Hydrostatic Testing
	Min	Max	Min	Max	X
Repair cost	\$270	\$800	\$225	\$300	\$350
Average Cost	\$554		\$263		\$350

Repair/Replacement							
	Spot Repair		Lining	Pipe Bursting		Trenching	
	Min	Max		Min	Max	Min	Max
Repair cost	\$800	\$2,500	\$7,500	\$5,000	\$6,750	\$2,500	\$6,750
Average Cost	\$1,650		\$7,500	\$4,600		\$4,600	

Conclusion

The proposed ordinance amendment will:

- Reduce inflow and infiltration (I/I)
- Prevent sanitary sewer overflow (SSOs)
- Reduce influent into treatment plant

Contact Information

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