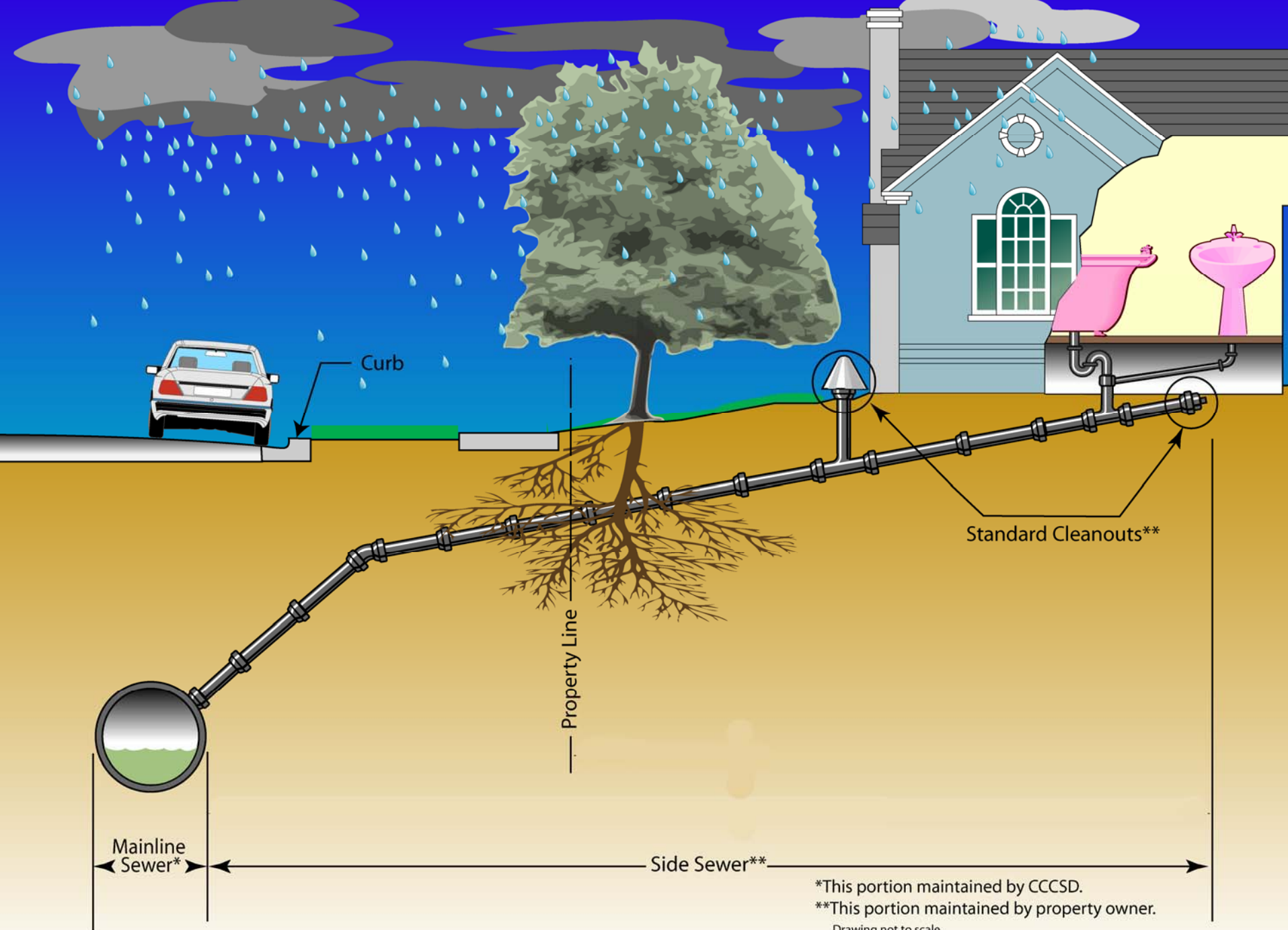


2007 WEF Sanitary Sewer Collection System
Specialty Conference
Portland, Oregon
Pre-conference Workshop



Sewer Laterals - Technical Realities & Public Policy in San Francisco Bay Area

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The engineering issue

- Laterals fail or are abused
 - age/ material of construction
 - stressors —
 - illegal connections, trees, ground movement, loads, construction
- More Inflow & Infiltration (I&I) is conveyed by pipe network
- More “wastewater” must be treated at the plant

The public policy issues

- To expand housing, sewer and treatment capacities are needed
- Protection from house backups is a good thing
- Costs are involved – to the homeowner and to collection system agency
- Benefits are not clear in all situations
- Regulators weigh in...

Lateral ownership

- Homeowner owns upper & lower lateral and agency owns neither
- Homeowner owns upper, not lower agency owns lower, not upper
- Public agency owns both
- Public agency buys both, rehabs, sells back
- Other configuration?

Testing methods

- Smoke testing – finds I & I sources, not just lateral issues
- Closed Circuit Television (CCTV) – inspection – finds offset joints, root intrusion, cracks, inflow
- Water test – holds X inches of water pressure for Y minutes
- Air test – holds Z inches of air pressure for W minutes
- Flow monitoring of neighborhood may indicate leaky laterals

About those inspections/ tests...

- First – which is the appropriate evaluation method?
- Second – when to conduct evaluation? Point of Sale (POS), individual homeowner's major construction, neighbors all together, ...
- Third – what costs are there (agency staff, permit, inspection, repair, if needed) & who will pay?

Regulators may issue a policy statement

- Options:
We [endorse] [or require] [or don't care] about laterals
- What regional baseline is there – other agencies
- Public policy: seek clarity on benefit being sought

In SF Bay, regulators do speak out ...

... BE IT RESOLVED

that this Water Board *supports and encourages* local communities and sanitary sewer collection system agencies, especially those experiencing significant infiltration and inflow from private sewer laterals, *to have a program* that requires inspection and rehabilitation of private sewer laterals.

(full text available in handout)

Examine the "whereas" statements

- Sewer laterals that are in poor condition or have illegal connections may allow entry of storm water and groundwater into the system. This additional water can cause surcharging of public sewers and overload pump stations and wastewater treatment facilities. *These problems can result in a discharge from the sewer system to waters of the State including the San Francisco Bay.*

Examine the "whereas" statements

- Both the California Regional Water Quality Control Board (San Francisco Bay Region) and the Bay Area Clean Water Agencies (BACWA) agree that the discharge from the sanitary sewer system to the environment, may, in some cases, *pose localized human health and environmental risks.*

The baseline in the SF Bay region

Many of the collection system agencies have code components which are cited to justify actions in the field vis a vis lateral ownership and maintenance.

(handout contains examples)

Baseline (SF Bay region) – testing methods currently used

- Flow monitoring of neighborhood may indicate leaky laterals, especially relevant re: reclaiming capacity
- Smoke testing – can find inflow sources
- CCTV – inspection – issue: who okays the tape?
- Water test – holds X inches of water pressure for Y minutes – inspector present in some communities
- Air test – holds Z inches of air pressure for W minutes – why in the world?

The baseline in the SF Bay region

Explore why agencies have established and maintained these policies...

- Cost of sewer maintenance

- Cost of claims

- Public health issue (?)

- Environmental issue (?)

The baseline in the SF Bay region

Enforcement of the lateral policies is not uniform

- Reminder letters to subset of the residences annually
 - Physical inspection on a "random" basis
 - Physical inspection at point of sale
 - Policy stated, but not enforced at all
- (a few examples are contained in the handout)

The baseline in the SF Bay region

Costs:

- staff
- permits
- inspections
- compliance with requirements (plumbing)
- other

Conclusions

Appropriate public policy includes thoughtful setting of that policy

Is there an issue for your agency?

What's the most reasonable cost-appropriate way to resolve it?