

Bay Area Clean Water Agencies  
Collection System Committee

## Tips and Tricks for Easement Maintenance

Version 2.0

From Committee Discussions on March 3 and April 7, 2011

### Successful Practices

- **Provide communication and education** for the public regarding specific issues related to easements, such as:
  - The need for control of dogs
  - The need for access to easements generally
  - Trees and buildings should not be placed over easements
  - Show homeowners what would happen to, say, upstream neighbors if they had a blockage that the agency did not have access to clean or fix.
  - Agency code should be consulted for ideas, and can also be reinforced

Communication tools can include letters mailed to residents, newsletters to residents, bill stuffers, fact sheets, or handouts. Information about this topic can also be provided at pollution prevention events that the agency may be participating in (such as Earth Day, etc.)

- Place **easements on a regular root control** schedule (whether or not root control chemicals are used).
- Set up a contract for **root control services** if resources are not available in-house.
- Train staff to **protect homeowners' property** (especially landscaping) when possible.
- Maintain a **routine easement cleaning list and schedule**.
- **CCTV the easements before cleaning**, because if the line is already clean, don't need to clean it. Let the camera do the work. There is less damage to the pipe, and it helps with crew morale also because it is more efficient.
- Include language in **easement legal documents** (not just the agency's code) **that protect access rights of agency** (including prevention of buildings on easements).
- **If encroachment is discovered** (for example a tree or building in an easement), but **before there is a problem**, the agency can create a **separate agreement with the property owner** that states what the agency will do in an emergency, and that it will not include restoration.
- **Check creeks after wet weather events** to make sure sewer pipe is not exposed from stream route changes.
- Have crews to **set up in the street**, before entering the easement (as much as possible).

- **Use degree of access to determine which lines to replace**, and use Capital Improvements Program (CIP) to fund reconfiguration of lines to improve accessibility.
- Create Standard Operating Procedure (**SOP**) for access to private property.

### Practical Innovations

- Create a “**hot spot**” list using a **GIS layer**.
- Have **standard specifications** so you never have a 90° bend in the future, which is difficult to clean. This could be a supplemental manhole specification.
- Perform **easement maintenance in the summer, use temporary employees** to conduct cleaning. Obtain recommendations from existing regular employees for potential temporary employee candidates. This can also be a way to gain experience with an individual who could become a full-time employee.
- **Identify blockages due to vandalism** during flow monitoring.
- Install **manhole covers which use a different tool** to open, to prevent vandalism.
- **Hire a contractor to for weed and rubbish abatement** in easements.
- Build a turning tool for 90° bends, direct rod.
- **Mark trees** in easements **with stakes** (usefulness of this approach may depend on depth of sewer under tree).
- Add a **green reflector in the street to show** that a **manhole** is located **in the backyard** of the adjacent property.
- **Put tips for each property**, or property owner, encountered **in the GIS**.
- Install **Smart Cover alarms** in easement manholes in remote areas.
- Use stakes or GPS to identify location of easements. **Stakes are especially good at night**.
- **Glue AstroTurf to manhole cover in easements after conversation with homeowner**, so homeowner is less likely to build or plant something over it because it’s considered unsightly.
- **Use old aerial photos to find manholes** where the surrounding vegetation or buildings have changed, to make it easier to find them.
- Put a **photograph of each manhole location** with a person standing next to it, as well as some of the surroundings (for perspective and as a landmark), **in the GIS** (and maybe attach to the work order).

### Additional Notes

- Easement maintenance is a priority because sanitary sewer overflows (SSOs) from these locations are less easily noticed.
- One agency mentioned they experienced resistance to root control chemicals with Eucalyptus trees.