City of Santa Barbara  
Public Works Department  

Memorandum

DATE: March 28, 2019

TO: Water Commission

FROM: Gaylen Fair, Acting Wastewater System Manager

SUBJECT: Sewer Lateral Inspection Program Update

RECOMMENDATION:

That Water Commission receive an update from staff on the Sewer Lateral Inspection Program.

DISCUSSION:

Background

The City of Santa Barbara operates and maintains a 256-mile wastewater collection system with sewer mains that range in size from 6 to 46 inches in diameter. This publically owned infrastructure is maintained by a combination of City staff and private contractors. Approximately 25,000 privately owned sewer laterals connect private property plumbing fixtures to the City’s wastewater collection system. Unfortunately, many of these laterals are old, poorly maintained, or damaged. The age and material of the sewer lateral can be vulnerable to roots, which may cause blockages and backups within the sewer lateral or within the City’s sewer system. In 2018, there were 26 private sewer lateral spills that the City was made aware of, some of which reached public water ways. Staff estimates there are more than 300 miles of private sewer laterals in the City.

The City expends significant resources to operate and maintain City-owned mains and has been successful in reducing sewer overflows. However, without routine maintenance on private laterals, the City’s ability to sustain the reduction and further reduce overflows will not be achievable. Failing private sewer laterals result in water intrusion into the sewer system and opportunities for root intrusion, both of which can lead to raw sewage overflows into local streets, storm drains, and creeks.

The Sewer Lateral Inspection Program (SLIP) was created in 2006 to target failing private laterals and increase public awareness of the need to maintain private laterals. The SLIP Ordinance No. 5396 requires property owners to inspect their laterals in the following situations:
Prior to issuance of a building permit for addition of:
  o 400 square feet or more
  o Two or more new plumbing fixtures;
• Chronic problems – if the lateral has been blocked more than once in a 12-month period;
• When there is a private lateral sewer discharge;
• When a defect is identified by smoke testing;
• When, during inspection of City main lines, roots, excess clear water, or other problems are identified as coming from the lateral;
• Once every ten years for all commercial properties, condominiums, and other properties with three or more dwellings sharing private sewer pipes; and
• Upon direction of the Public Works Director, when there is reasonable cause to believe there may be a problem with, or illegal connection to, the sewer lateral.

In November 2006, Council passed a resolution to encourage property owners to proactively maintain their private sewer lateral by offering an incentive of $150 to inspect their sewer lateral, and a rebate of up to $2,000 and waiving of permit fees if the lateral needed to be repaired or replaced. The incentives were very popular with residents; however, after several years of growth with the SLIP, it was determined the $1.5 million annual program would require a 7% rate increase to generate the revenue necessary to support it. Additionally, the original goal of the SLIP to subsidize costs for homeowners was being undermined by the skyrocketing prices for repair work, negating the incentive the City was offering.

In December 2010, Council eliminated cash incentives for SLIP. As an alternative to the incentive, the City would continue to waive City permit fees in instances where property owners are required to repair or replace their lateral. At that time, this reduced the annual cost of the program to $150,000.

The SLIP has operated through this model for the better part of a decade; however, the number of private sewer laterals needing inspection and/or repair has increased tremendously. In 2010, it was estimated that 75 property owners per year would require lateral inspection or repair. In 2012, the City entered into a Consent Decree and committed to inspecting the entire collection system within ten years. Staff efforts were focused on inspecting new portions of the collection system, and SLIP staff began reviewing the CCTV data coming in from the collection system assessment. The additional data gave staff new information and evidence of defective laterals, which resulted in a sizeable increase in SLIP inspection notices. In 2018, over 850 property owners were required to have their laterals inspected, and of those 850, over 500 were required to repair or replace their sewer lateral. It is this surge in activity that has staff reviewing all aspects of the SLIP for ways to improve communication and education, and to provide cost controls and financial assistance.
Enhanced Communication

The increase in active SLIP cases has left a large number of property owners with many questions and limited information about why they are receiving a letter requiring inspection and what the next steps are. The lack of available information about the SLIP and limited staff resources for individual assistance has damaged public perception of the City and the program.

In fall 2018, the City entered into a contract with a Katz & Associates (Katz), a public relations firm specializing in strategic communication, public involvement, and community relations. With the help of Katz, City staff is currently developing enhanced communication material about the SLIP and the importance of sewer lateral maintenance. Material that Katz has helped develop includes:

- Revised inspection notification letters
- Pamphlets explaining the process for both inspection and repair
- Infographics of lateral ownership and lateral life expectancy

Another essential aspect of enhanced communication with the public is the development of a new SLIP website. Ownership of the sewer lateral continues to be a crucial topic needing clarification. The infographics prepared by Katz will assist with conveying this information. The new website, which went live on March 11, 2019, describes the SLIP process from receipt of the first letter, to additional work required, to receipt of a certificate of compliance. This will inform the property owner about what to expect throughout the process. The new website also has a Frequently Asked Questions section. The hope is that the public will visit the website for more information about the SLIP, reducing the amount of calls staff receive from property owners who receive a letter.

Although the new website and enhanced informational material will assist with many questions, there is still a need for individual support for property owners. Staff is exploring the following for public assistance:

- Regular office hours
- Monthly public meetings
- Site visits with the homeowner

By offering individualized customer service, staff will have the opportunity to earn the trust and high regard of the community, modeling the program after the free water check-up program.

Financial Assistance

Unlike a leaking roof, a defective lateral typically cannot be seen by the untrained eye. When property owners are informed they need to repair a defective lateral, it often comes as a surprise, and property owners are unprepared for such a major expense. Although some have the financial means or the option to obtain a home equity line of credit, some property owners may not have the equity in their home, or are on a fixed income, or cannot
qualify for a personal loan. To reduce the burden of such a large expense, the City is researching options that can be offered to assist property owners, such as a low-interest loan program and a third-party partnership with a utility services insurance company.

The loan option is challenging on several fronts, including: Proposition 218 funding limitation, risk of loan default, and administration and loan services. At this time, staff is working with the City Finance Department to develop options. We have also been discussing the potential for a larger low-interest loan program that in addition to the SLIP might also support other City policy goals such as solar array installations, water wise landscaping, and septic tank removal.

Partnering with a third-party utility services insurance company is another option being explored. Staff recently met with a warranty company that offers repair and replacement reimbursements up $8,500 per incident. Property owners sign up with the company and pay a low monthly fee for the warranty service. The partnership is intriguing as the company is backed by the National League of Cities. Staff is still gathering information, and the insurance company is reviewing our service area to see if their services would be applicable to our community.

The incentive program the City offered from 2006 to 2010 was exceptionally successful; however, it required a large increase to wastewater rates. The size of the SLIP today would require a substantial increase to rates, which is not an option being explored at this time.

Cost Control

Even if a property owner can afford the repair or replacement of their sewer lateral, the variability in quotes from different plumbing contractors can be confusing. The uniqueness of each property and sewer lateral leads to an extreme variability in the costs for both inspection and repair. To compound the frustration, many will inquire with neighbors and friends who have had lateral work done, only to find out they are paying $5,000–10,000 more.

Since 2013, City staff has managed a contract with a local contractor to replace the connection from the private sewer lateral to the main, ensuring it is done in a quality manner. It is time to re-bid that contract, and staff is evaluating related work items to help simplify the process and possibly provide competitive pricing for the following items to be included in the bid:

- Cleaning and Inspection (Class A contractor or plumbing contractor)
- Wye Replacement with Excavation (Class A contractor)
- Rehab/Repair/Replace Lateral (Class A contractor or plumbing contractor)

There are many other options being explored to increase awareness of sewer lateral ownership and to make property owners more proactive in inspection and maintenance of their laterals. When the SLIP was being developed in 2005, many “trigger” options that would require inspection of laterals were explored. One of those trigger options was the sale of a property. At that time, however, the real estate market was uncertain, and this trigger
was rescinded. The City has been revisiting this option in discussions with the Association of Realtors.

Conclusion

There are numerous concerns and hurdles to overcome as the SLIP is being overhauled. Staff is investigating numerous ways to build a multi-pronged approach to assist the public with education, outreach, cost controls, and possible financial assistance.

SUSTAINABILITY IMPACT:

Defective laterals increase the risk of raw sewage seeping into surrounding soils and groundwater, contaminating private property and local creeks, beaches, and oceans. By requiring property owners to maintain their private sewer laterals, the City can further reduce the potential for spills, both public and private.
PUBLIC WORKS DEPARTMENT
WATER RESOURCES DIVISION - WASTEWATER
SEWER LATERAL INSPECTION PROGRAM UPDATE

Water Commission - March 28, 2019
Presentation

Overview

Background

Enhanced Communication

Financial Assistance

Cost Control

Next Steps

Sewer Lateral Inspection Program (SLIP)
BACKGROUND
Collection System Information

- Sewer Mains: 256 miles
  - 90% 6” & 8” Diameter
- Sewer Manholes: 6,2453
- 7 Lift Stations
- 2 Miles of Force Main
- All City-owned infrastructure
Sewer Lateral Information

• **Sewer Laterals:** ~300 miles (24,737)
  • The sewer lateral connects the building’s sanitary plumbing to the City’s sewer main
  • Homeowner responsible for maintenance and repair including connection to sewer main (wye, tee or connection fitting)
  • Privately-owned infrastructure
Sewer System Maintenance Programs

- Cleaning Program
- Acoustic Program
- FOG Management
- Sewer Lateral Inspection Program (SLIP)
Sewer System Maintenance Programs

- Cleaning & Inspection Program
  - System Wide Cleaning
  - Root Control Program
  - Inspection/CCTV
  - City staff responsible for maintenance

- Acoustic Program
  - Identifies potential blockages in pipes
  - Prioritizes cleaning resources
  - City Staff responsible
Sewer System Maintenance Programs

- **FOG Management**
  - Food Service Establishments (FSE) required to divert FOG
  - FSEs inspected routinely
  - Outreach by City staff

- **SLIP**
  - Property owners required to inspect lateral
  - Property owner required to repair (as needed)
  - Outreach by City staff
2018 SSO Events By Cause

- Total 7 Sewer System Overflows (SSOs)
- All 5 SSOs caused by roots from laterals
SLIP History

• Developed in 2006 to target failing laterals and increase public awareness of the need to maintain private laterals.
• In 2006, Ordinance No. 5396 was passed requiring property owners to inspect their private sewer laterals under certain conditions.
  - Commercial
  - Residential
• Program began 2007
**Sewer Lateral Inspection Program**

**Incentive Program**
- Reimburse up to $2,000 for property owners proactively repairing/replacing lateral

**Current Sewer Lateral Inspection Program**
- Reestablished with the goal to inspect all commercial properties by 2023
- No longer offer incentive/rebate
- Permit fees are waived if City requires inspection
SLIP COMMERCIAL PROPERTIES

• 10 year re-inspection frequency
  • Required every 10 years regardless of condition
• Condominiums and Multi-Unit residential are included in “Commercial”
SLIP RESIDENTIAL PROPERTIES

• Permit Initiated
  - Addition of 400sf, or
  - Addition of two (2) or more new fixtures

• Defect observed during City main inspections

• Private Lateral Spill
Why is lateral inspection/maintenance important?

Proper maintenance and elimination of defects is important because:

- Spills = Exposure to sewage which is a public health concern
- Impacted creeks, beaches and waterways
- Private property damage is costly

Roots & Grease

Broken pipe, Separated joints, voids & infiltration
Private Spills

- Also known as Private Lateral Sewer Discharges (PLSDs)
- Reported to the State Water Resources Control Board
SLIP Program

- The SLIP continues to grow
- The number of repairs have increased
SLIP Process

• What is the process?
• Why is it so confusing?
SLIP Process

**Commercial/Industrial**
- **Inspection Notification Letter**
- Property Owner hires Certified Plumber
- Plumber inspects lateral and submits video
- SLIP Coordinator reviews video for defects

**Residential Defect or PLSD**
- 45 days to submit video

**Repair Notification Letter**
- Property Owner decides on solution
- Property Owner hires plumber/contractor to complete repair work

**Certificate of Compliance Issued**
- *Repair, Rehabilitate, Replace Connection?
- *Extensions may be approved on a case by case basis

90 days to make repairs*
SLIP Process - Inspection

**Inspection Letter Received**
- Property owner has 45 days to submit video

**Property Owner Hires Certified Plumber**
- Plumber inspects lateral

**Plumber submits lateral video to City**
- SLIP Coordinator review video for defects
SLIP Process - Repair

Repair Notification Letter Received
Property owner has 90 days to make repairs

Property Owner Decides on Repair Solution
Repair? - Rehabilitate? - Replace? - Include wye?

Plumber/contractor completes repair work
Proof of repairs submitted – Certificate of Compliance Issued
ENHANCED COMMUNICATION
Enhanced Communication

• Hired a public relations firm – Katz & Associates
• Develop a new website
  - SLIP
  - Wastewater System
• Improved Customer Support
Katz & Associates – Public Relations

Informational Pamphlets

Infographics

Improved Notification Letters

The City of Santa Barbara has initiated a program to reduce sewer spills by requiring property owners to inspect their internal laterals. Private laterals connect private structures to the network of City-owned mains. Problems from laterals, such as roots, gaskets, or erosion, water leaking into pipes during normal pipe usage result in spills in the public sewer system. While City Code has always required property owners to maintain private laterals in good working order, only a small percentage of property owners are aware of this requirement.

REVISED
Website Updates

• Wastewater System Website Updates
Improved Customer Support

Regular Office Hours

Monthly Public Meetings

Site Visits with Property Owner
Regular Office Hours

• Availability Sessions to review SLIP Case
  - One-on-One explanation of process
  - Review inspection video
  - Discuss Repair vs. Rehabilitate/Replace
Monthly/Quarterly Public Meetings

- Informational Meetings
- Lateral Maintenance & BMP Classes
Site Visits with Property Owner

• Modelled after Water Conservation
• Individual Support
• Discuss Repair vs. Rehabilitate/Replace
FINANCIAL ASSITANCE
Financial Assistance Options

Low Interest Loan Program

Third Party Partnership

Cost Control
Low Interest Loan Program

- Would offer a low-interest loan to property owners to pay for lateral repair/rehab/replacement up to certain dollar amount ($10,000-20,000)
- Could be paid through water bill or property tax bill
- Evaluating a joint program for lateral repair, installation of solar arrays, or drought resistant landscaping

Challenges:
- Proposition 218 Funding Limitations
- Loan Default Risks
- Administration of Loan
Third Party Partnership

- Staff met with Third Party Utility Insurance/Warranty Company
  - Pay monthly fee of $6 for water or $9 for wastewater insurance
  - Offers repair and/or replacement up to $8,500 per incident
  - Backed by National League of Cities

- Challenges
  - Requires voluntary participation by property owner
  - SLIP may not be conducive to warranty company policy
Cost Controls

• Variability of lateral construction gives way to a wide range in repair costs

• Evaluate repair solutions
  - Repair
    - Rehabilitate
    - Replace
## Repair Options

<table>
<thead>
<tr>
<th>Description</th>
<th>Point Repair</th>
<th>Replacement</th>
<th>Rehabilitate (Renew)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Excavate small pit to repair isolated defects</td>
<td>Conventional dig/replace entire pipe or pipe burst to replace full length of lateral from house to connection to main</td>
<td>Establish access point either through excavation or cleanout and insert cured in place pipe liner</td>
</tr>
<tr>
<td>Benefits</td>
<td>Repairs only the required defects</td>
<td>Replaces entire lateral</td>
<td>Improves condition of entire lateral without multiple excavations</td>
</tr>
<tr>
<td>Includes connection replacement?</td>
<td>Yes</td>
<td>Yes</td>
<td>Typically no</td>
</tr>
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Competitive Bid Options

• One “all-inclusive” bid includes:
  - CCTV & Cleaning,
  - Wye Replacement,
  - Rehabilitation

• All work would be coordinated with and conducted by the contractor

• Offers a cost control & simplicity to property owner
  - Compare bid prices to private quotes received
  - Opt to use City-bid contractor for all needs (inspection and repair)
NEXT STEPS
Next Steps

• Receive feedback and recommendation from Water Commission

• Return to Water Commission in May 2019 with updates
  - Cost control options
  - Financial assistance options
  - Evaluation of staff workload
  - Enhanced communication
Discussion