Sewer System Operation and Infrastructure Update

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Public Works Commission
System Overview

- Age of the System: 1920 to Present
- Size: Approx. 100 mi. (97.8 mi.)
- Daily Flow: 3.5-3.7 MGD
- Treatment: Hyperion Wastewater Treatment Plant; contract with LA expires 2029
- Operation: Sewer Maintenance Division
  - Also maintains the storm water system
Regulations

• Requirement – Adopt Sanitary Sewer Management Plan (SSMP)
• Goal of the SSMP: Sanitary Sewer Overflows (SSOs) are preventable through continuous evaluation and system improvements.
Goals of the 2017 SSMP

• Establish target goal of < 6 SSO per year
• Implement Asset Management (Infor) for maintenance, operation and asset management
• CCTV Inspection –
  • Pipe Condition
  • “Hot-Spots”
• Rehabilitate Pipe and Manholes
• Utilize Smart Cover Systems to warn for potential Sanitary Sewer Overflows (SSO’s)
• Hire emergency contractor for pipe repair and SSO support
• Address potential capacity issues (started in IWRMP)
Operational Update

- Implement Asset Management System (Infor)
  - Record miles of sewer maintenance
  - Record miles of CCTV inspection
  - Record defects and used for future CIPs.
  - Prioritize cleaning schedule
  - Accountability
No Rating
0 - None
1 - Light
2 - Medium
3 - Heavy
City Limit

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Beverly Hills CA

SMARTCOVER® MONITORING SYSTEM

You are logged in as: idesalzo :: Super Admin :: Logout

Map  SmartTrend®  Alarms and Alerts  System Operations  Multi Graphs  Super Admin  Support  Contact

SmartCover® Unit Location  1156 Calle Vista

Application: Collection Level

Charts  Management  Status  Alarm Settings  Info  Maintenance

1156 Calle Vista


High Level Alarm = 15.0 in  High Level Advisory = 10 in  Sensor Position = 20.0 in

Interactive Charts

Level  Time Period:  Adjust Scale  Long Filter
- PowerPack Voltage
- Signal Strength
- Signal Quality
- Last Month
- From: 2020-07-11 13:27
- To: 2020-08-11 13:27
- Max Y: 20.0
- Min Y: -5.0
- Gaps
- Fill Gaps
- No Filter
Declining SSO Events

Total No. of SSO by FY

- 16-17
- 17-18
- 18-19
- 19-20
Sewer System CIP

- Lining of 19.7 miles of sewer system
- Pipe inspection by CCTV, especially high flow/large trunk lines.
- Rehabilitate 80 manholes
- Spot repair (pipe replacement)
- Hire an emergency contractor and SSO support
• 8.5 miles of sewer mains lined
• 16.1 miles CCTV inspected
• 78 manholes rehabilitated by coating and replaced 7 manhole cover rings
• Install 1 new manhole
Next Steps

• System capacity evaluation included in the IWMP

• Integrated water management approach:
  – Dry weather diversion structures (stormwater)
  – Water-use efficiency evaluation using sewer flows (conservation and emergency water management)
Wastewater Field Staff (Photos taken Pre-COVID)
Discussion