

Operations & Maintenance Wastewater 101 Part 2: Collections

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Collections Manager

Operations Committee Meeting
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OC SAN
ORANGE COUNTY SANITATION DISTRICT

1

Our Service Area

479
square
miles

~190
million gallons
per day

2.6
million
population

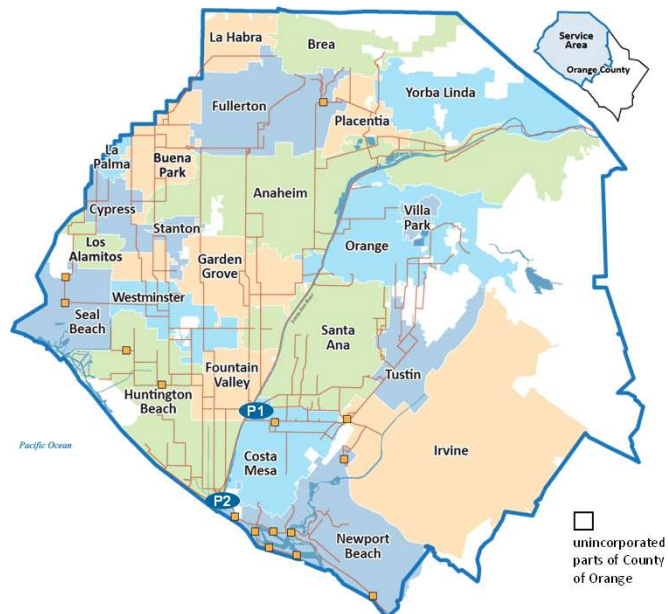
20
cities

4
special
districts

388
miles of
sewers

2
reclamation
plants

15
pump
stations



2

2

Gravity Sewers

- Various pipe materials
- Trunks, interconnections, reliefs
- Inverted siphons
- Diversions



3

3

Comparing Sewer Pipelines

Pipeline
Maintenance
Responsibilities:

- **Private Lateral**
Home/Business Owner
- **Local Sewer**
The City or Local Agency
- **Regional Trunkline**
Wastewater Agency

**Private
Lateral**

4 inch
diameter

**Local
Sewer**

4-12 inch
diameter

**OC San
Regional Trunkline**

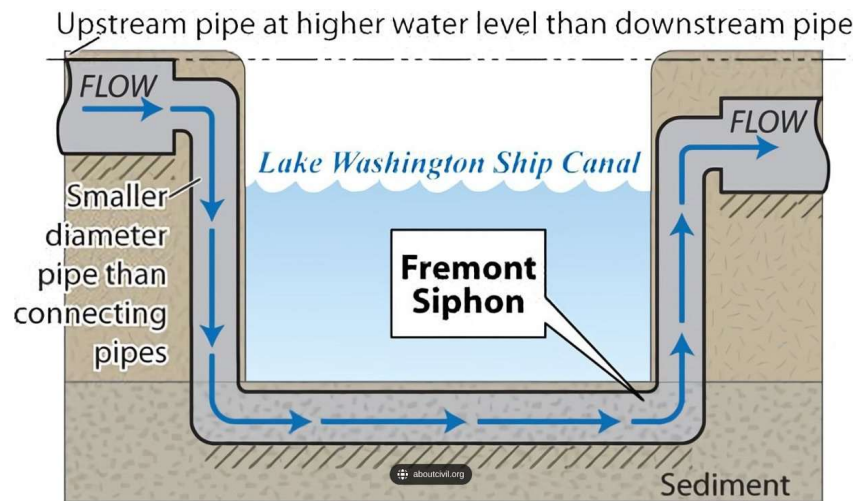
up to 10 ft diameter



4

4

Inverted Siphon



5

5

Pump Stations



Pressure Systems

6

6

Line Cleaning Types

- Flush work
 - Grit removal
 - Spill prevention
- Tire cleaning
 - Grit removal
 - Spill prevention
 - Line proofing



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7

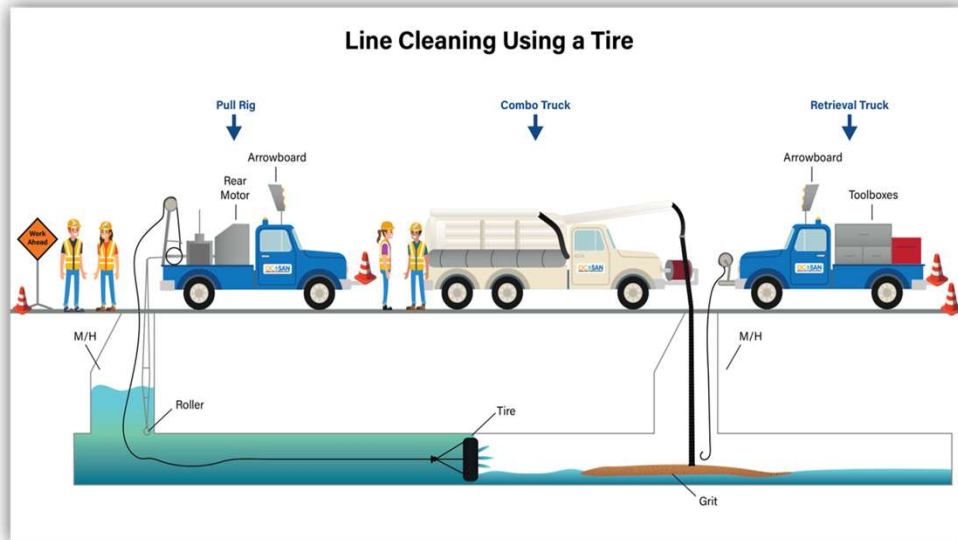
Line Flushing



8

8

Mechanical Cleaning - Tire



9

9

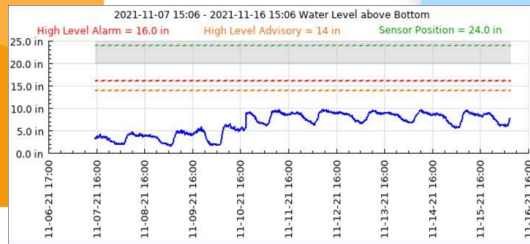
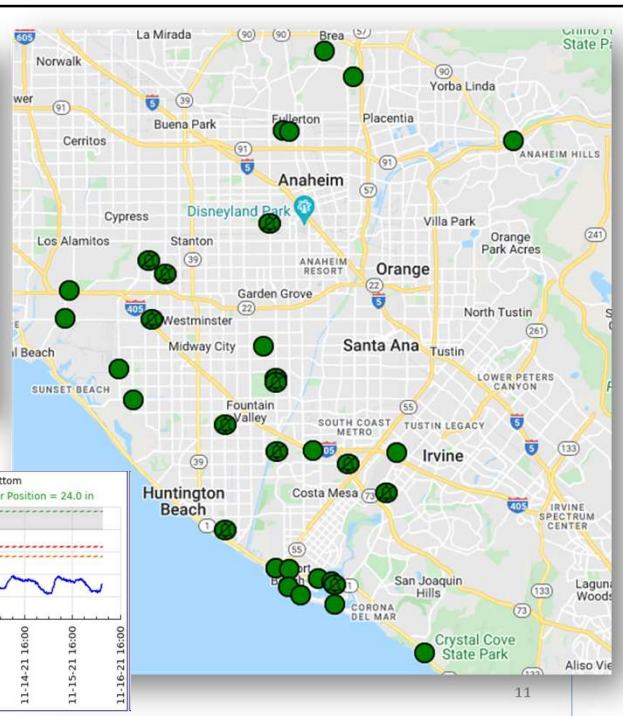
Mechanical Cleaning - Tire



10

10

Smart Manhole Covers



11

Underground Line Location

- State Enforcement
- Damage Prevention
- Other entity request
- Centralized system through state:
 - Dig-Alert system
- Field locating and marking



12

12

Regional Odor Control

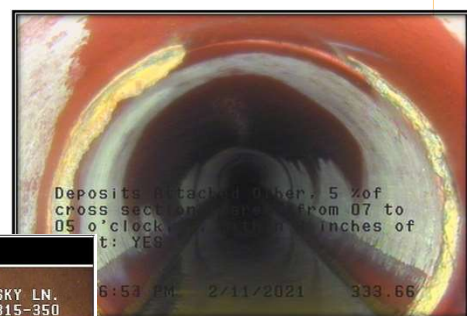


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CCTV

- Asset inspection
- Structural degradation and cleaning
- Project scoping
- Spill prevention

Distance	Fault Observation	Picture
74.6	Roots Medium Joint Position: 7 To 1 Severity: None Percent: 10 Joint Maint Weight: 3	



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Questions?

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