Oakland Public Works Informational Sanitary Sewer Program Report

> December 3, 2019 Presenter Jimmy Mach

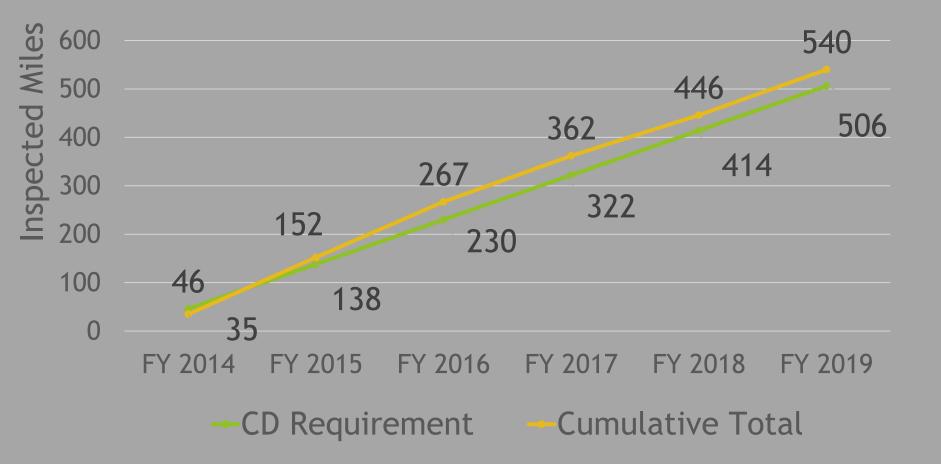
Overview

Annual Report FY 2019

- Work Related to the Reduction of Sanitary Sewer Overflows (SSOs)
- Work Related to the Reduction of Infiltration & Inflow (I/I)
- Regional Compliance Status of Consent Decree

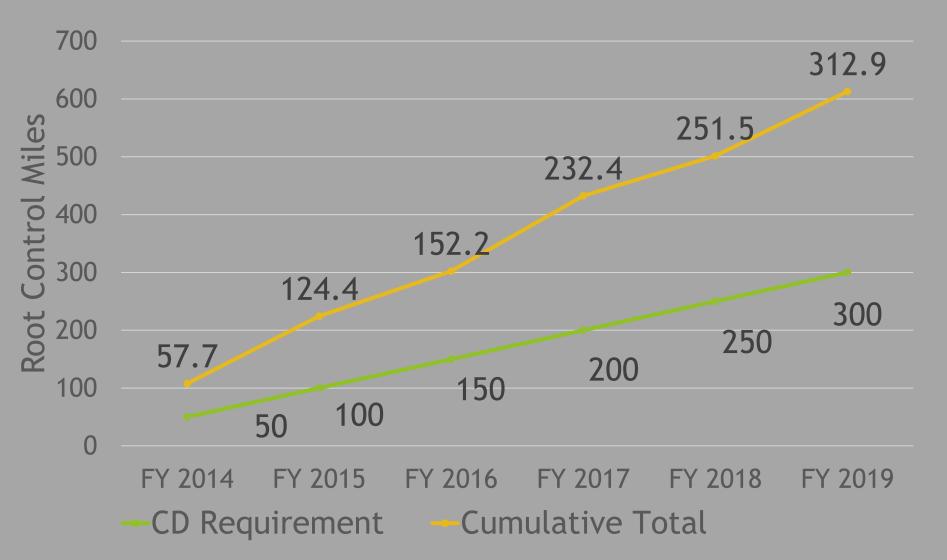
Reducing SSOs-Cleaning

Clean the entire sewer system by 2018 and 180 miles per year thereafter

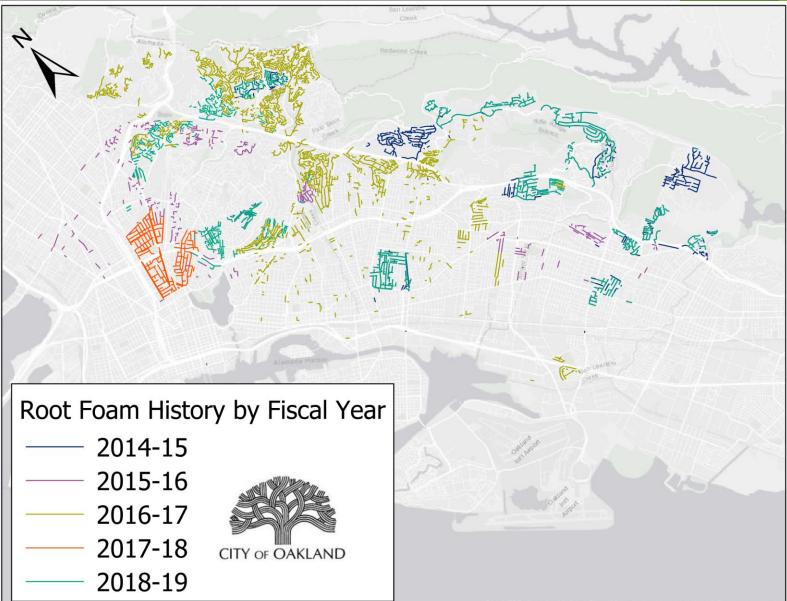


Reducing SSOs-Root Control

Root foam 50 miles of sewer pipes per year



Reducing SSOs-Root Control



Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

SSO Reduction - Capacity Assurance Monitoring

- 12 Locations per Consent Decree
- 7 Locations completed capacity improvements
- **5** Locations continually monitored

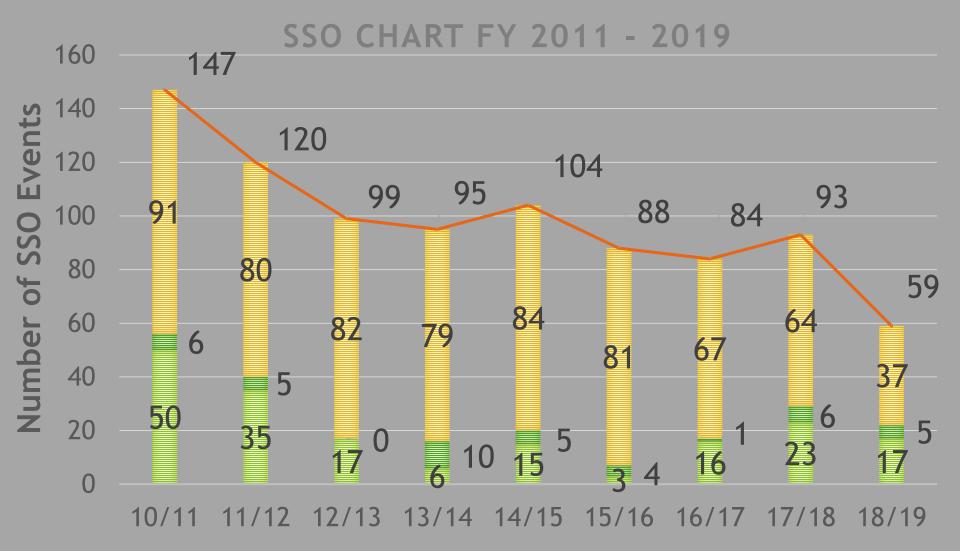
SSO Reduction - Category Terms

Cat 1 – Reached US Water

Cat 2 – 1,000 gallons or greater not reached US Water

Cat 3 – All other discharges of untreated or partially treated

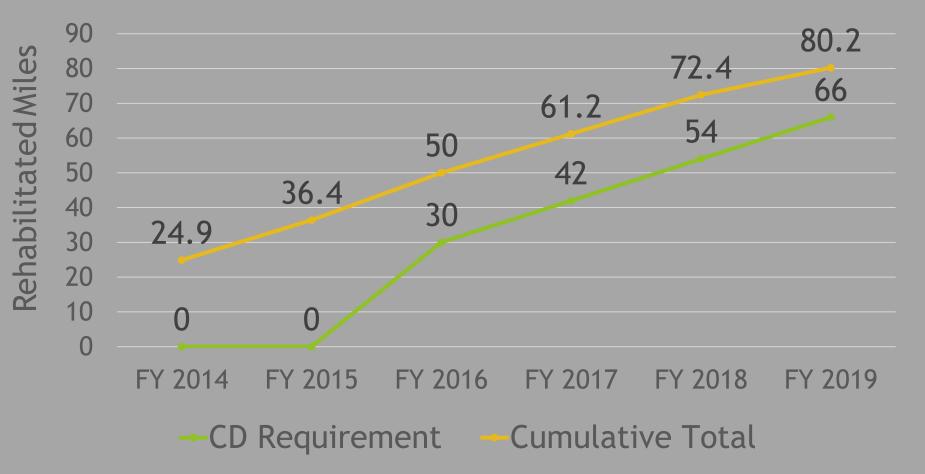
SSO Reduction - How Are We Doing?



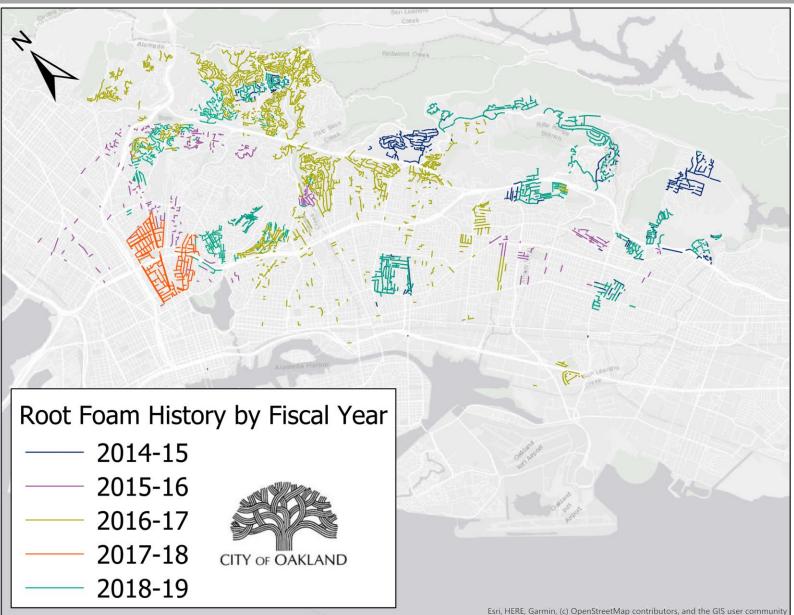
Cat 1 ■Cat 2 ■Cat 3 —Total

Reducing I/I - Sewer Main Rehabilitation

Rehabilitate average of 12 miles of sewer pipes per year in targeted subbasins

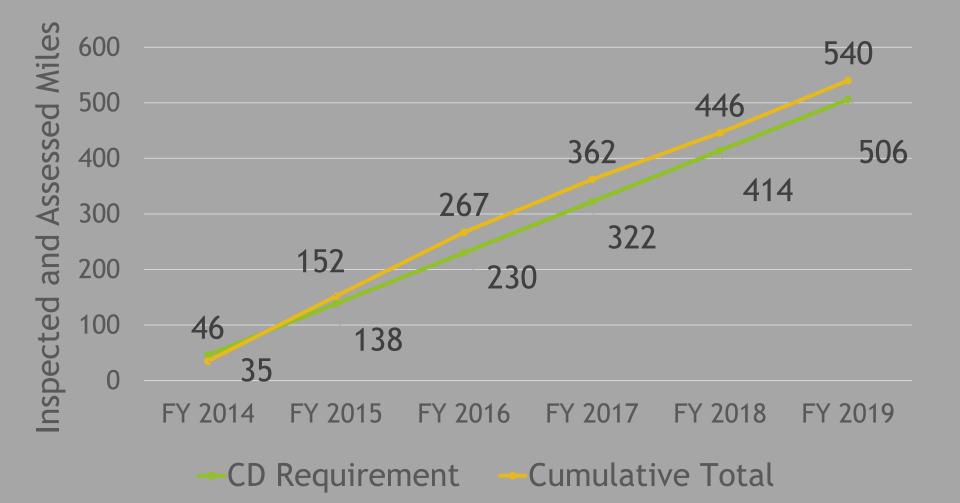


Reducing I/I - Sewer Main Rehabilitation

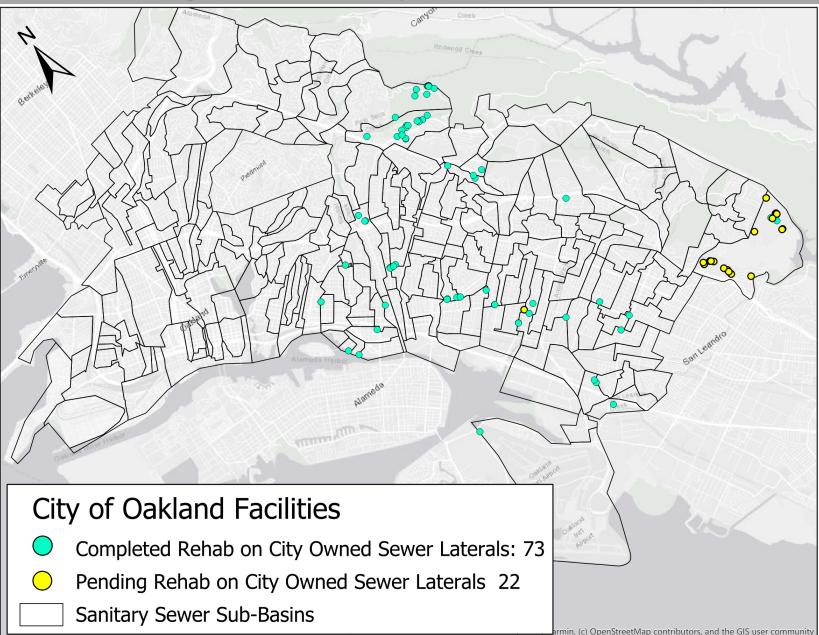


Reducing I/I - Sewer Main Inspections

Inspect no less than 92 miles of total footage of sewer pipes per year



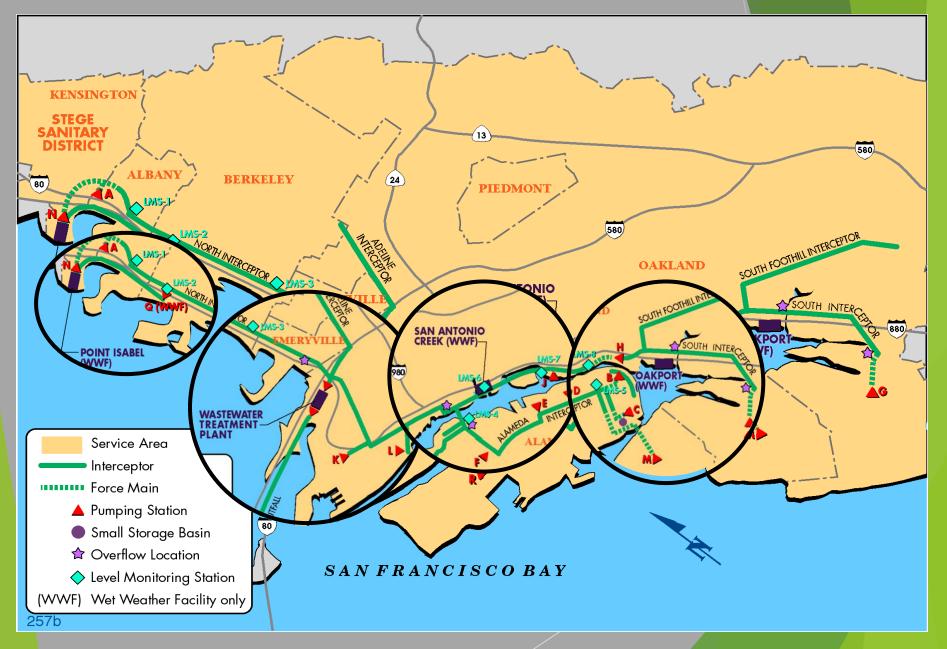
Reducing I/I - City-Owned Laterals



Reducing I/I - How Are We Measured Regionally?

- I/I Reductions are measured by the Output Ratio
- FY10 and FY11 Wet Seasons were used to establish a Baseline
- The predicted volume of discharge for the storm event at each WWF is known as the Baseline WWF Output
- This comparison of the annually calculated discharge volumes to the Baseline WWF Output is referred to as the Output Ratio

East Bay Collection



Reducing I/I - How Are We Doing Regionally?

3-Year Average Output RatiosPoint Isabel Wet Weather Facility

100%

Target for FY18 70%0% by 2034

Reducing I/I - How Are We Doing Regionally?

3-Year Average Output RatiosOakport Wet Weather Facility

79%

Target for FY18 78%
0% by 2036

Reducing I/I - How Are We Doing Regionally?

3-Year Average Output RatiosSan Antonio Wet Weather Facility

78%

Target for FY18 64%
0% by 2028

Infiltration & Inflow Sources

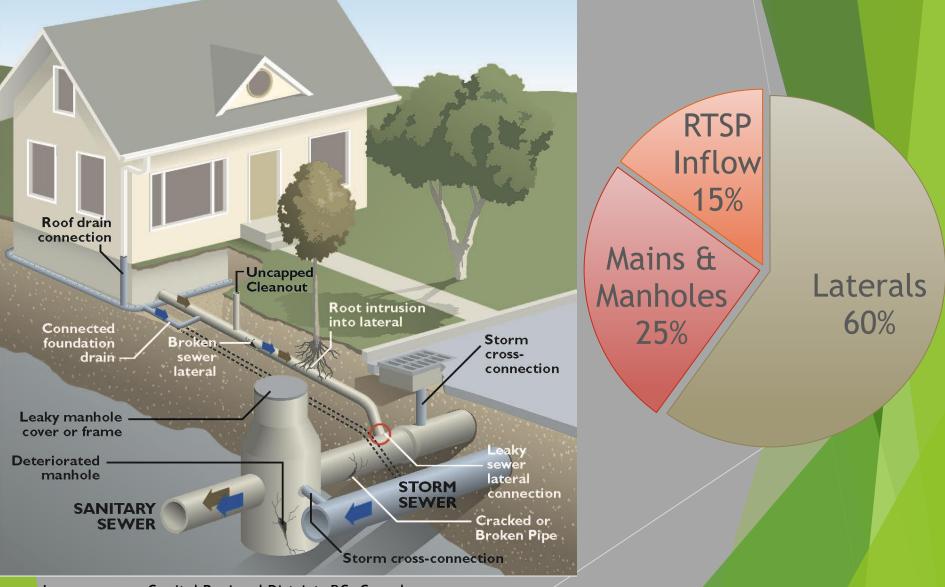


Image source: Capital Regional District, BC, Canada

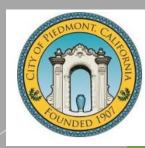
Collaboration

- 7 Satellite Agencies, EBMUD, EPA, and RWQCB are working together for longterm improvements throughout the East bay region.
 Continually meet and monitor
- Continually meet and monitor progress.
- Determine alternative work plans if necessary.









CITY OF OAKLAND



NICIPAL UTILITY DISTRICT

EAST BAY

