

Storm Sewer and Sanitary Sewer Annual Reports



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Introduction

Storm Sewer System

- 1,100 miles of pipes
- 4,500 miles of curb & gutter
- 26,000 manholes
- 33,000 laterals
- 32,200 inlets
- 1,510 outfalls
- 31 pump stations



Sanitary Sewer System

- 2,030 miles of pipes
- 10 miles of force mains
- 39,469 manholes
- 202,000 laterals
- 17 pump stations



Storm Sewer Key Initiatives

■ Storm Water Quality

- Trash / Debris
- Toxins / Sediments
- Green Stormwater Infrastructure
 - ✓ River Oaks Stormwater Capture

■ Master Planning

- Capacity Assessment
- ✓ Charcot – Preliminary Phase
- GSI Integration Opportunity

■ System Rehabilitations

- Outfalls
- Pump Stations, LTC Structures
- Basic Repair and Rehabilitation



River Oaks Stormwater Capture Project

River Oaks Stormwater Capture Project

- Funded by Measure-T and \$3.2M State Grant
- Transforms the facility from detention to bio-filtration
- Treats run-off from over 340 acres of land
- Design: Spring 2021
- Construction: Spring 2022
- Beneficial Use: Summer 2023



River Oaks Stormwater Capture Project

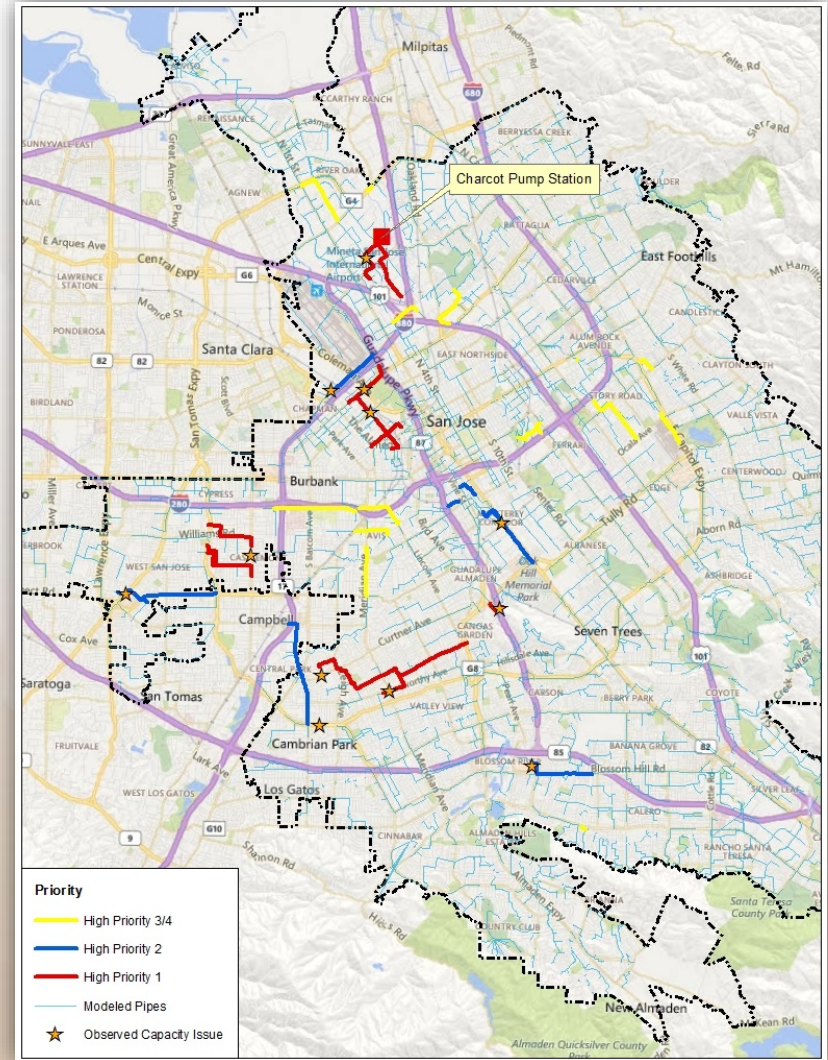
Storm Drain Master Planning

■ Phase I – Citywide

- ✓ Completed in 2017
- ✓ Estimated 22 projects - \$215 M

■ Phase II – Expand & Focus

- ✓ Refining model using more accurate land use and hydraulic information
- ✓ Refining boundary condition with post 2017 updated Valley Water riverine model
- ✓ Refining and identifying project alternatives for North San Jose (\$78M) and Diridon Area (\$55M)



Charcot Area System Improvement

- Measure T funding of \$35M
- Low ground, high creek water level and insufficient system capacity
- Rerouting stormwater to existing Rincon II PS
- Design: Spring 2021
- Construction: Summer 2022
- Completion: Winter 2023



Large Trash Capture

- Regional Stormwater Permit mandated trash load reduction
- Phases I - VI completed
 - ✓ 32 large trash capture devices installed to date
 - ✓ Retrofits a few LTC to support O&M activities
- Phase VII – working with Caltrans for location and funding



Large Trash Capture Installation

2019-20 Winter Storm Season Preparation

- Coordination with Valley Water
- Pump Station Maintenance
- Charcot Temporary Pumps
- Storm Inlet Cleaning
- Debris Basin Cleaning
- Portable and Temporary Pumping
- Storm Monitoring and Incident Management



Temporary Pumping at Charcot near Coyote Creek

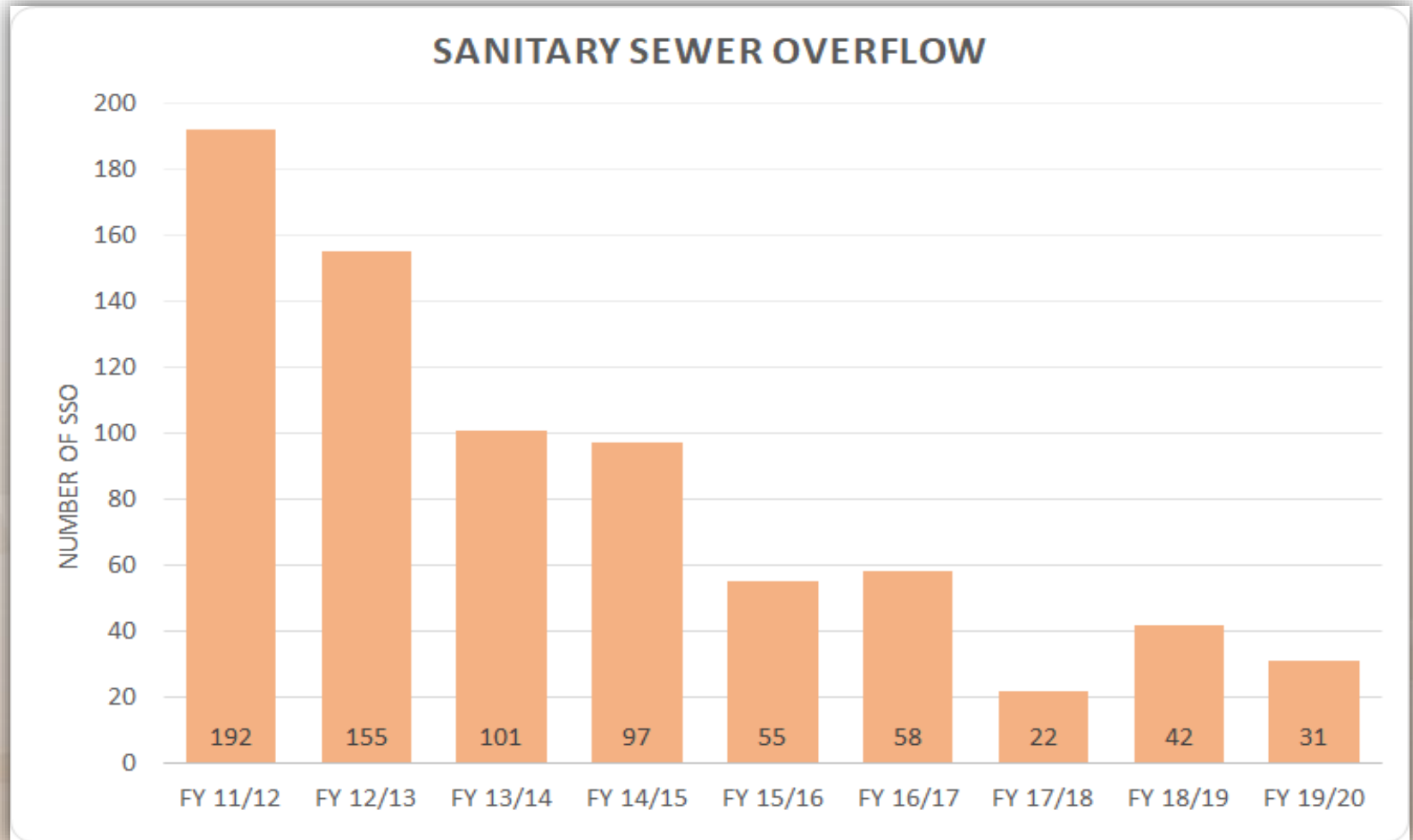
Sanitary Sewer Key Initiatives

- Capacity Master Planning
 - Decrease SSO's
 - Support General Plan 2040
 - Watershed Protection / Regulatory Compliance
- Condition Assessment
 - Decrease SSO's
 - Risk Based Approach (78% complete)
- System Improvement & Rehabilitations
 - Decrease SSO's
 - Neighborhood Sewer Focus
 - Capacity Improvements



60-inch Brick Sewer

Sanitary Sewer Overflow Data



Goals

- ✓ Focus on GP 2040 capacity demands to support economic development
- ✓ Increased investment into the systems to address infrastructure backlogs
- ✓ Prioritized Capital Improvement Programs to:
 - Lower operational costs
 - Ensure capacity / Prevent spills
 - Improve system reliability

Recommendation

Accept the Storm Sewer and Sanitary Sewer Annual Reports highlighting investments, activities and capital improvements to the City's storm sewer and sanitary sewer collection systems for Fiscal Year 2019-2020

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