WWE Operations
Wastewater System Overview

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Treatment Facilities Project Manager

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RBOC
Brick Sewers Built During the Gold Rush
100-year-old system: 1,000 miles of pipes, 3 treatment plants and 27 pump stations
Treatment Capacity

- Average day without rain: 80 MGD

- Maximum wet-weather treatment capacity: 583 MGD + 197 million gallons of storage

*Clarifier at Southeast Treatment Plant*
Stormwater collects in gutters and catch basins.

During major storms wastewater discharges to the Bay or Pacific Ocean.

Domestic sewage (sinks, showers, toilets, etc.)

Pumped to Treatment Plant

Transport/Storage Box
Sunnydale Pump Station
100-year-old system: 1,000 miles of pipes, 3 treatment plants and 27 pump stations
Treatment Facilities

Oceanside Plant
Deep-Water Outfall (4 Miles from OSP)
100-year-old system: 1,000 miles of pipes, 3 treatment plants and 27 pump stations
Treatment Facilities

North Point Facility
100-year-old system: 1,000 miles of pipes, 3 treatment plants and 27 pump stations
Treatment Facilities

Southeast Plant
During major storms wastewater discharges to the Bay or Pacific Ocean
Stormwater collects in gutters and catch basins

Domestic sewage (sinks, showers, toilets, etc.)

Pumped to Treatment Plant

Sewer Main

Transport/Storage Box

During major storms wastewater discharges to the Bay or Pacific Ocean
0 Minutes into Treatment Process
10 Minutes into Treatment Process
15 Minutes into Treatment Process
20 Minutes into Treatment Process
120 Minutes into Treatment Process
Biosolids (Byproduct of Digestion)
Biosolids for Beneficial Reuse

Biosolids used for land application and non-food crops
Cogeneration (Byproduct of Digestion)
Southeast Plant - a Work-Horse for the City is Vulnerable to Failure
Our Sewer System is Aging and Failing: Waller St. at Divisadero St.
May 6, 2013: Sinkhole Lake St. at 2nd Ave.
Sewer System Improvement Program (SSIP)

Grey

SYSTEM & SEISMIC RELIABILITY & REDUNDANCY

Green

INNOVATIVE STORMWATER MANAGEMENT SOLUTIONS

Clean

PROTECTING PUBLIC HEALTH & THE ENVIRONMENT
SSIP Phase 1 Projects:
Southeast Treatment Plant Upgrades
Treatment Facilities

Southeast Plant – Upcoming Projects
Treatment Facilities

Oceanside Plant & Westside Pump Station

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Treatment Facilities

North Point Facility
THANK YOU.

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