

Montecito Sanitary District's Response to the Thomas Fire 1/9 Debris Flow Event



RWQCB June 28, 2018

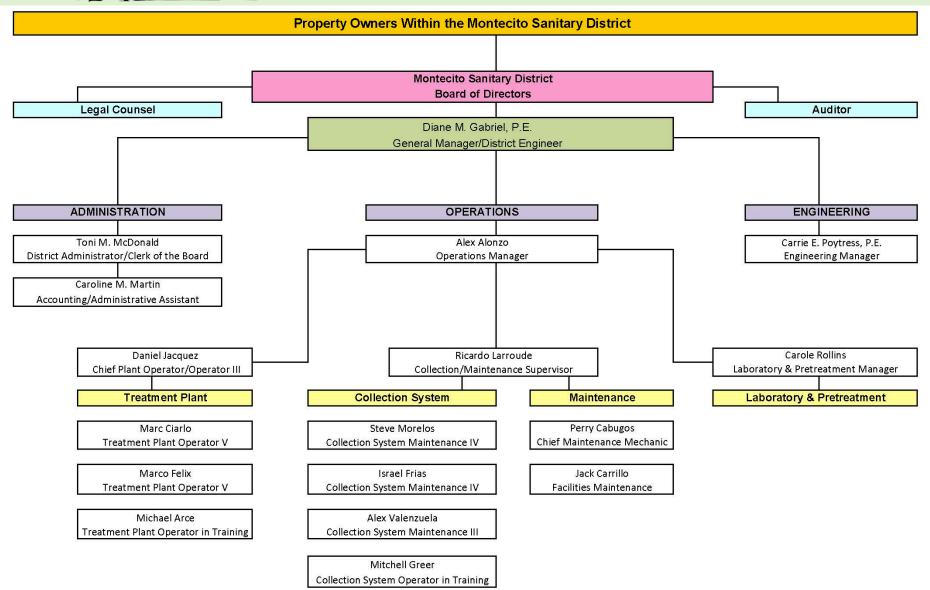


Outline of Presentation

- Background information on the District
- Overview of the Thomas Fire Debris Flow Event
- Impacts on the District's Collection System and Treatment Plant
- Preparedness Efforts for future Debris Flows
- Plans for continuing NPDES Permit Compliance
- Questions/ Answers



Organization Chart





Collection System

- Located in unincorporated area of Santa Barbara County
- 8.9 square mile service area
- District serves estimated population of 9,000 people
- District serves 3,109 properties
- 75 miles of sewer main
- Rehabilitated 26 miles of sewer main
- 2,034 manholes and cleanouts
- Zero District sanitary sewer overflows (SSO) from Dec.
 2015 to Jan. 9, 2018

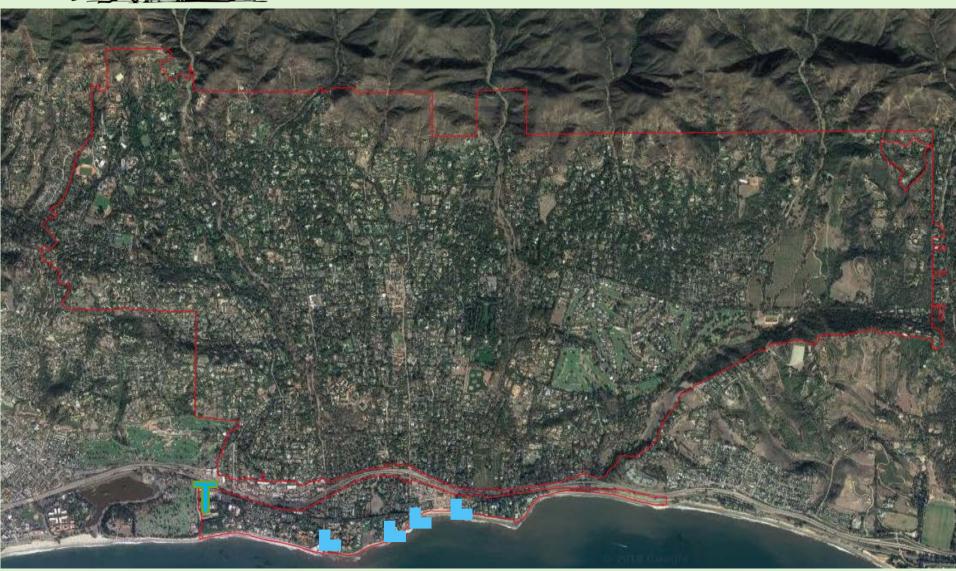


Treatment Plant

- NPDES Permit No. CA0047899, Order No. R3-2012-0016,
 Administrative Extension Issued February 7, 2018;
- 1.5 MGD permitted capacity
- Full secondary treatment
- 550,000 gpd Average Daily Flow prior to Thomas Fire
- 450,000 gpd currently
- Ocean outfall 1,500 feet long in 35 feet of water to the Pacific Ocean



District Service Area





Jan 8th Evacuation Order





1/9 Debris Flow Event

Video





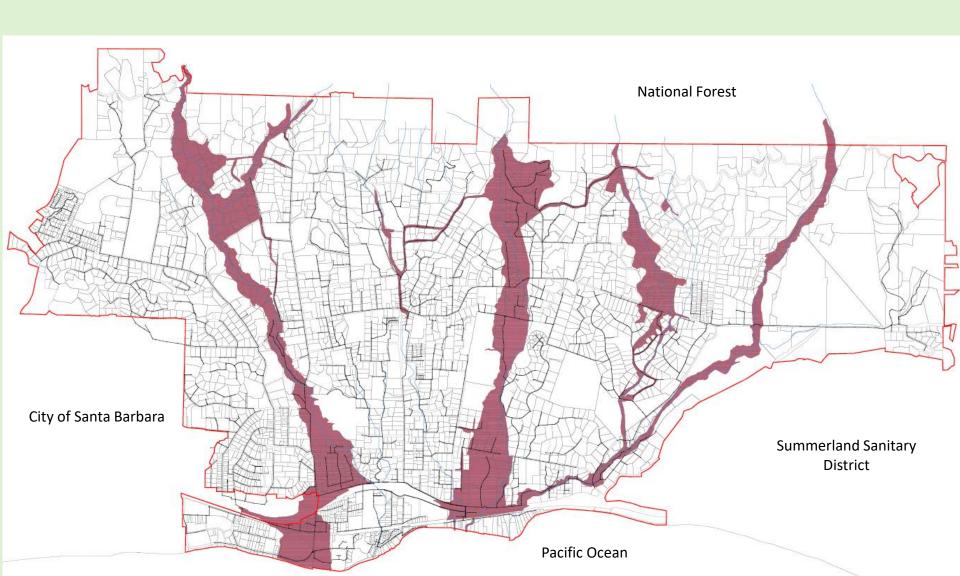


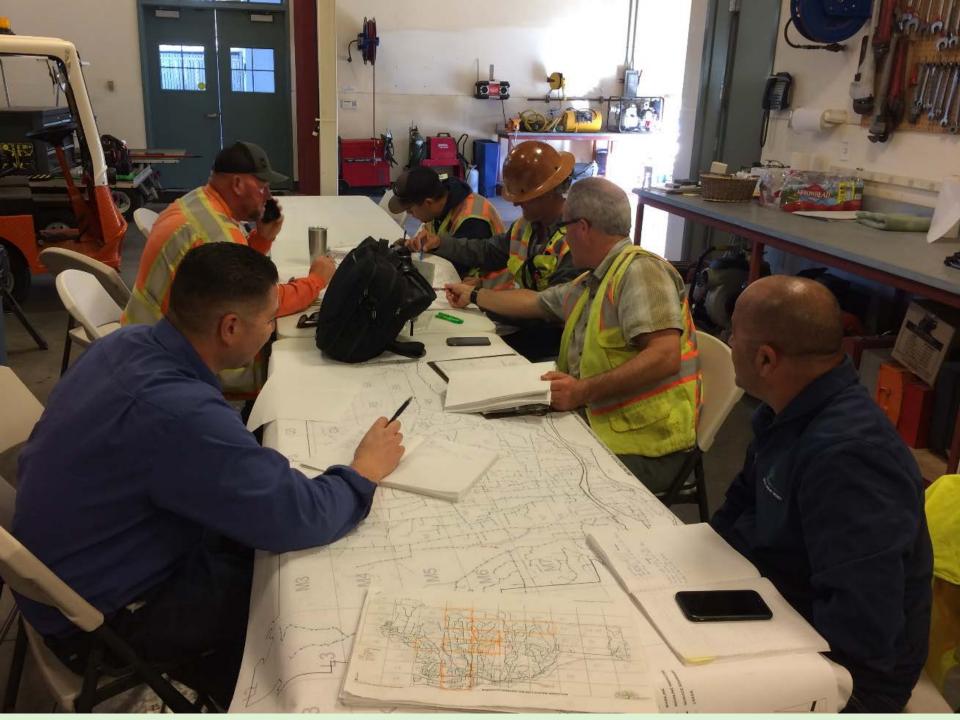






1/9 Debris Flow Event













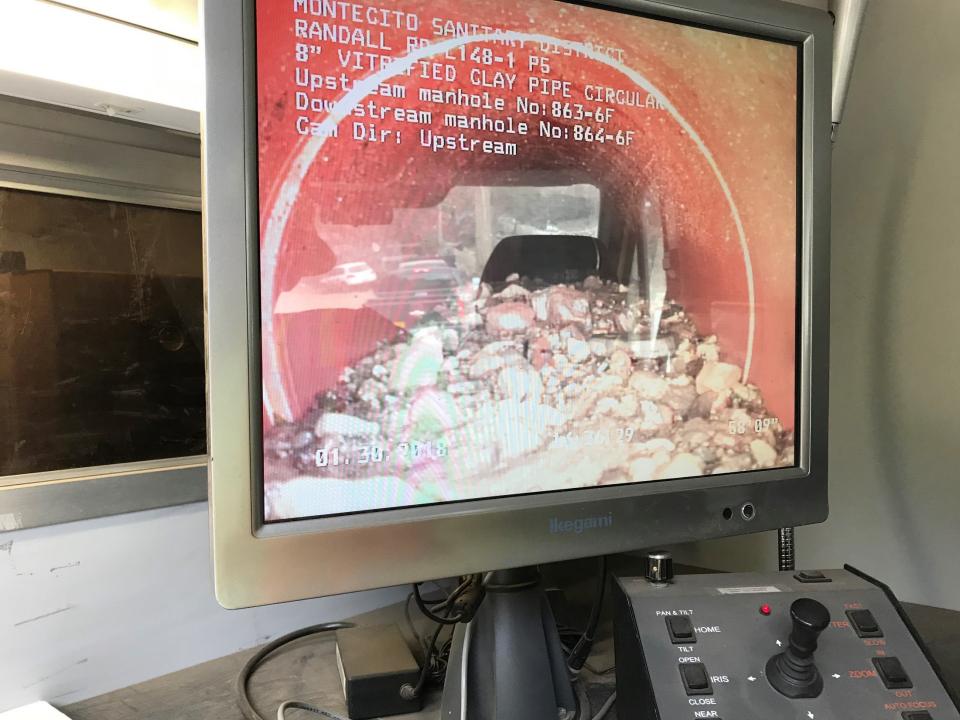










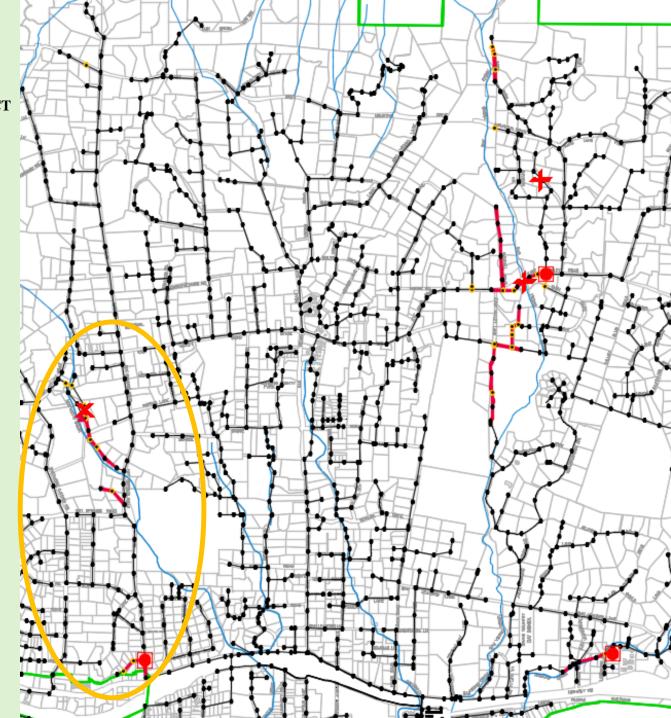








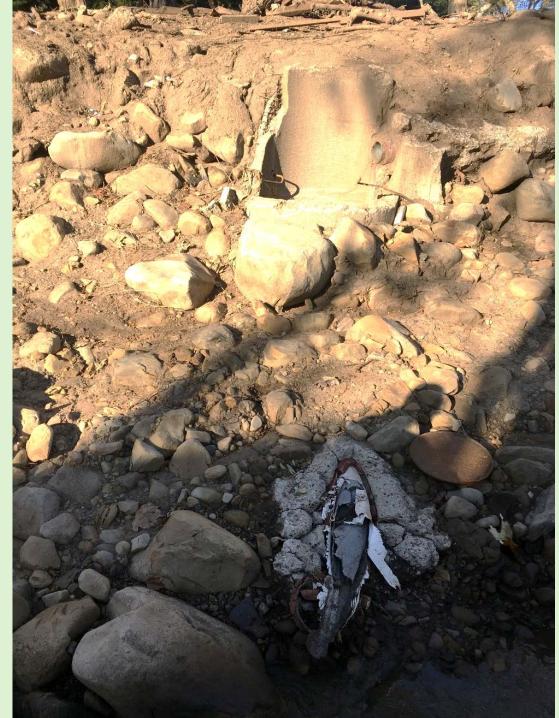
Collection
System
DamageMontecito
Creek





Montecito Creek

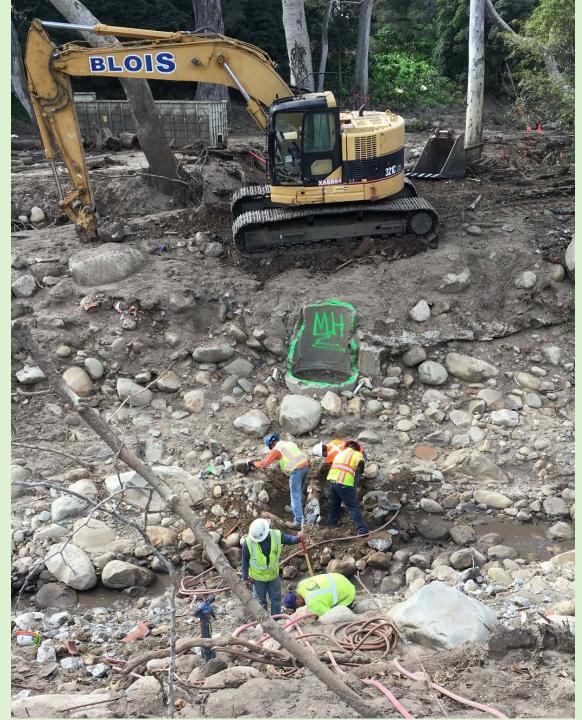
DAMAGED
MANHOLE AND
PIPELINE





Montecito Creek

REPAIRS UNDERWAY





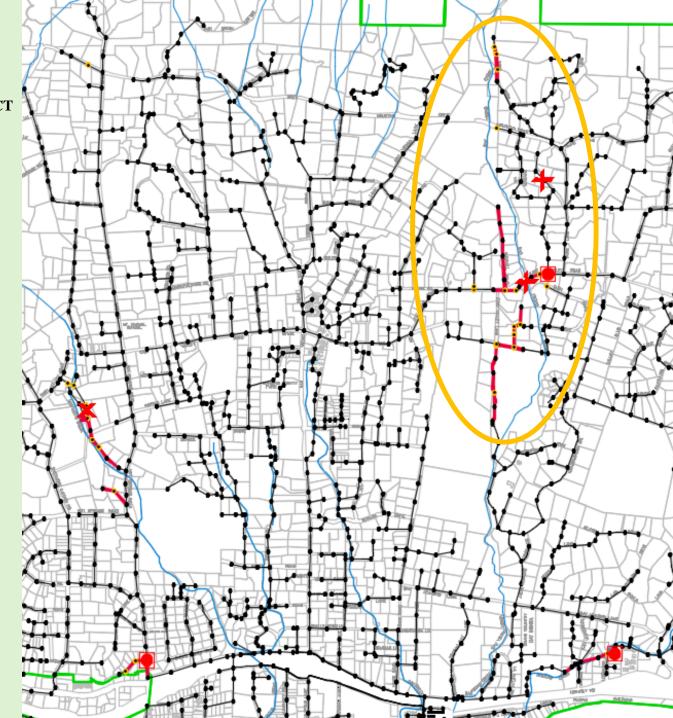
Montecito Creek

TODAY





Collection
System
DamageSan Ysidro
Creek



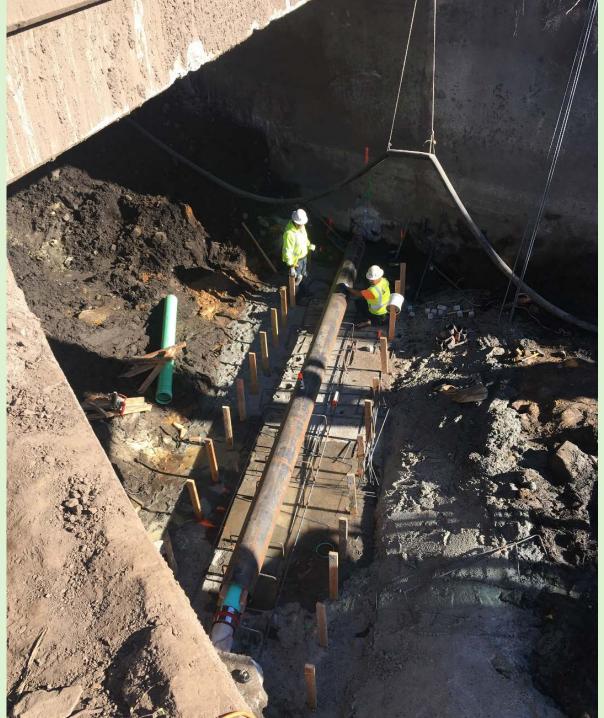


DAMAGED PIPELINE





REPAIRS UNDERWAY





ENCASED PIPELINE



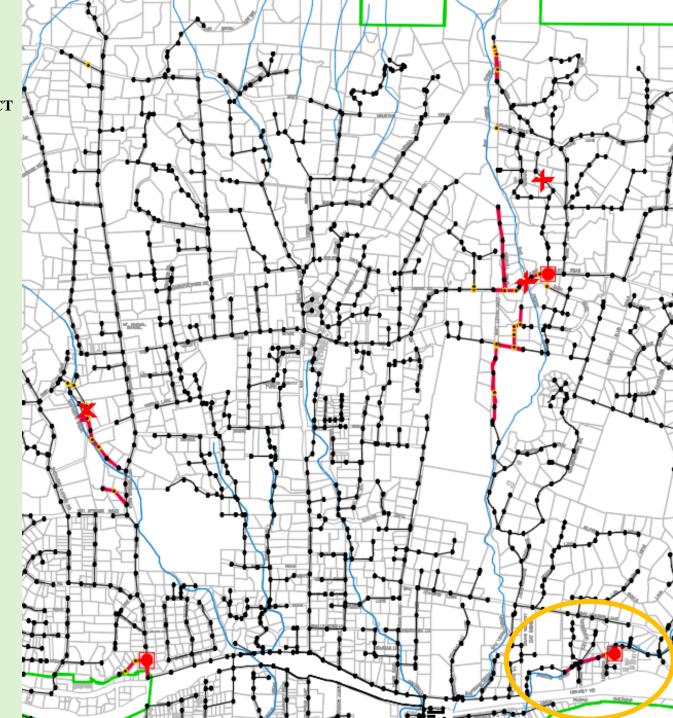


TODAY





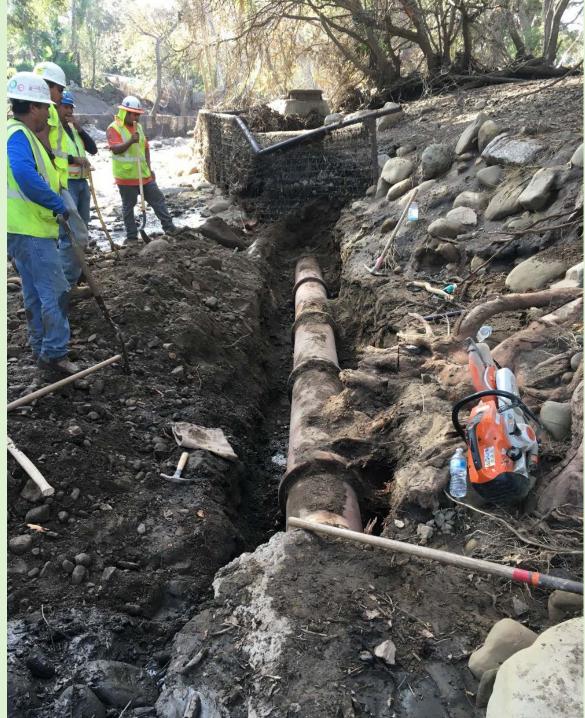
Collection System Damage-Romero Creek





Romero Creek

DAMAGED PIPELINE





Romero Creek

ENCASED PIPELINE





MSD Treatment Plant





Influent Flow



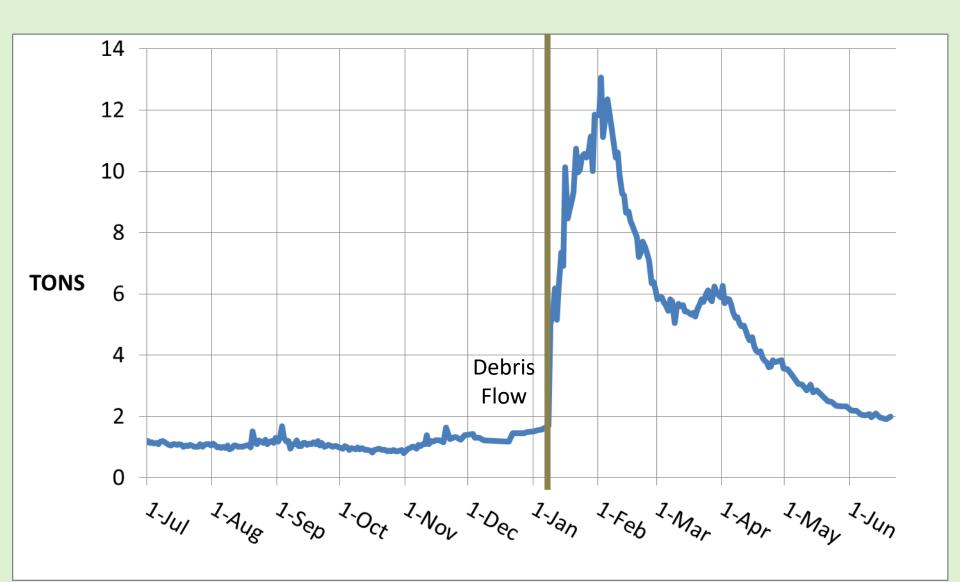
Typical Day



January 9, 2018

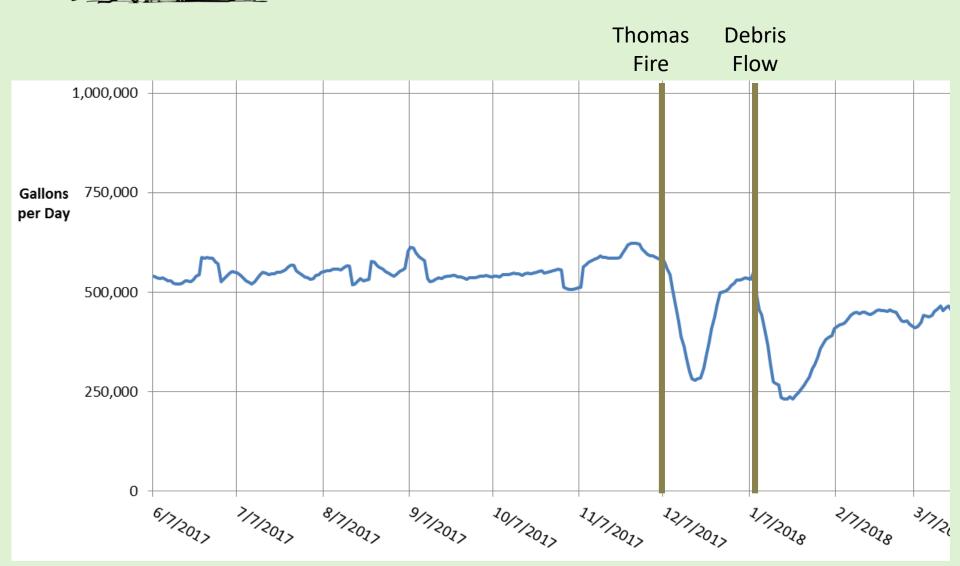


Inorganic Material in Treatment Plant





Plant Flow (gallons per day)





Adapting to flow reduction



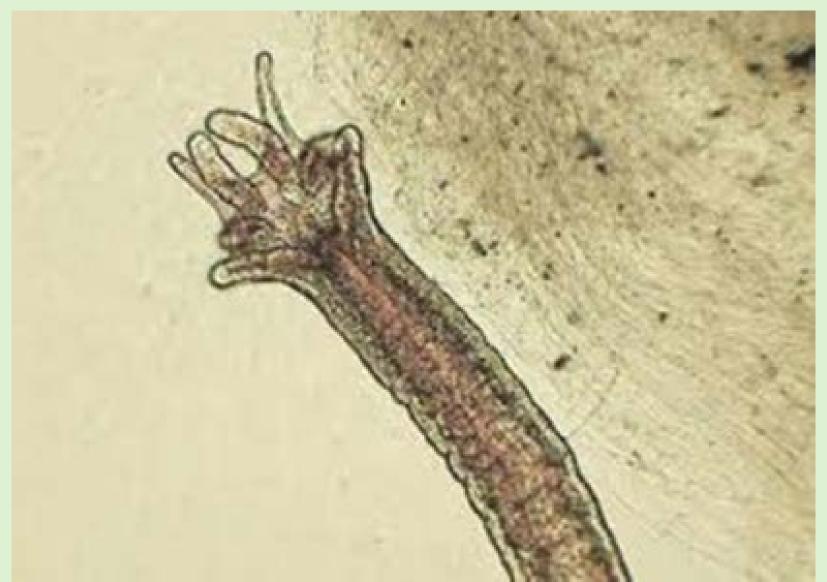


Sustaining Plant Microbiology





Preventing Worms



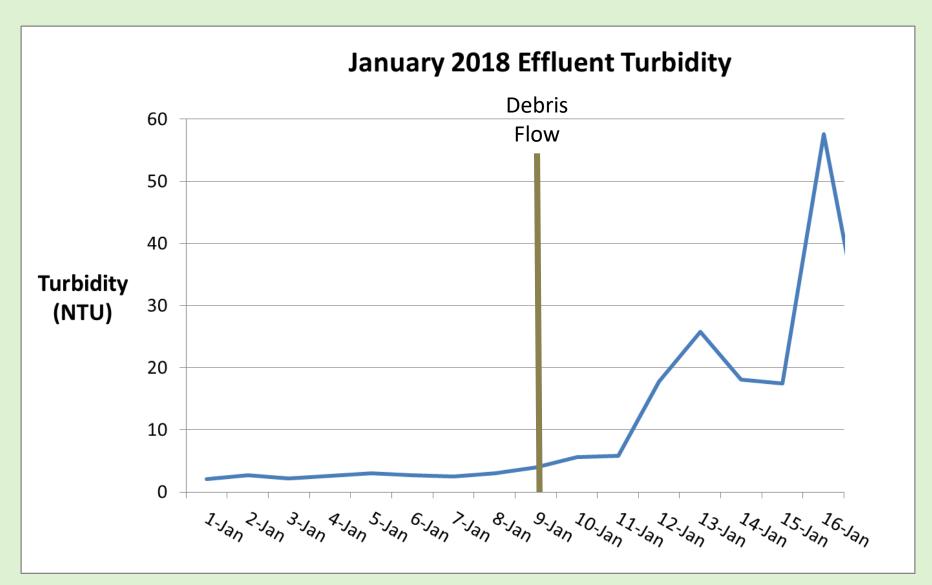


Sustaining Plant Microbiology



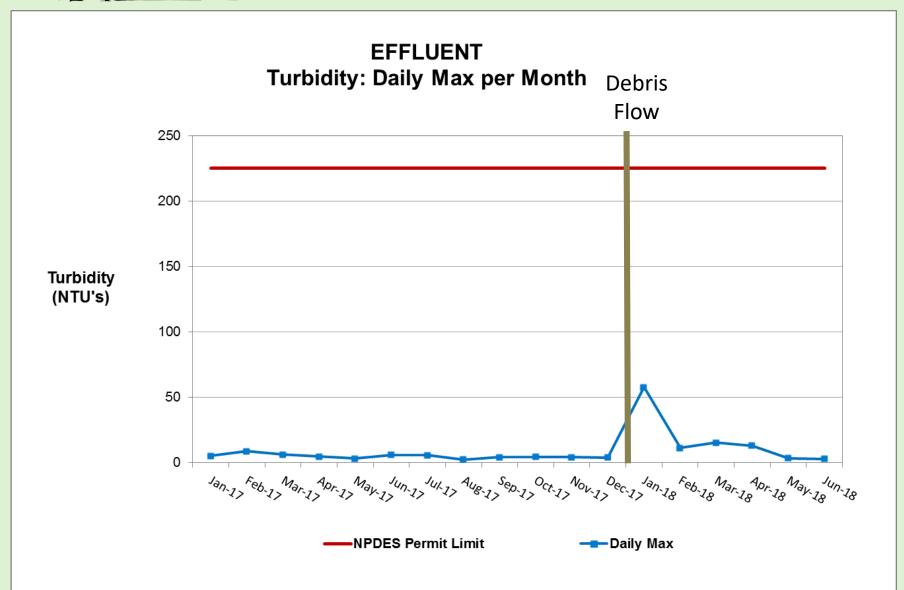


Analyzing Trends



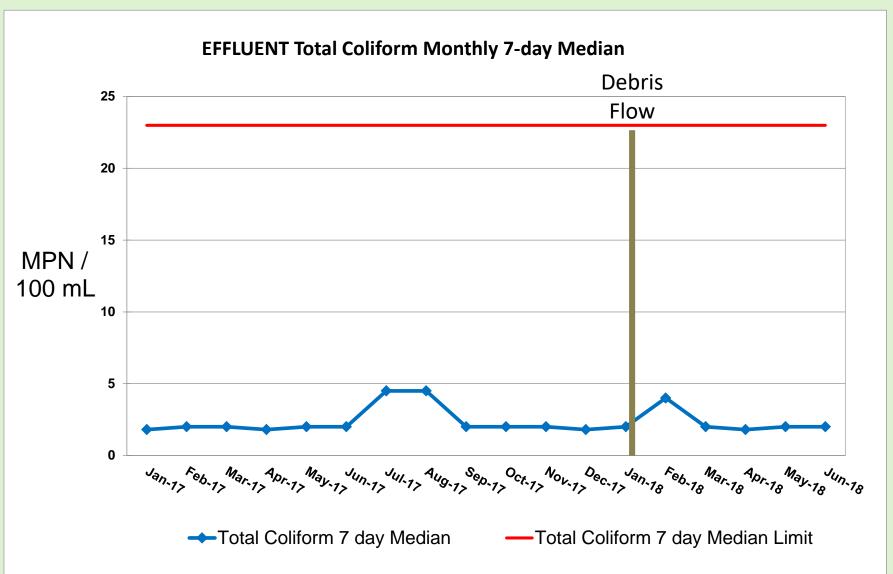


Effluent Turbidity



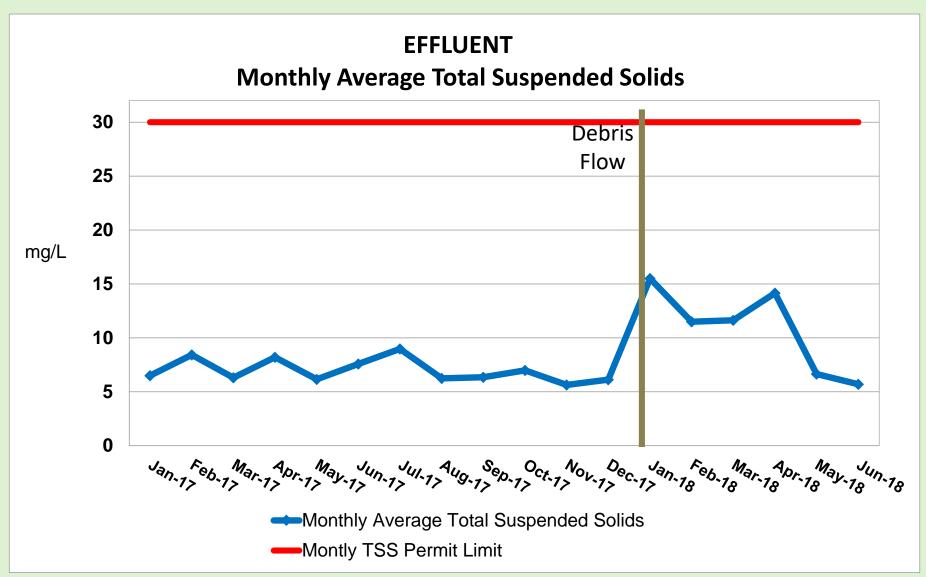


Total Coliform



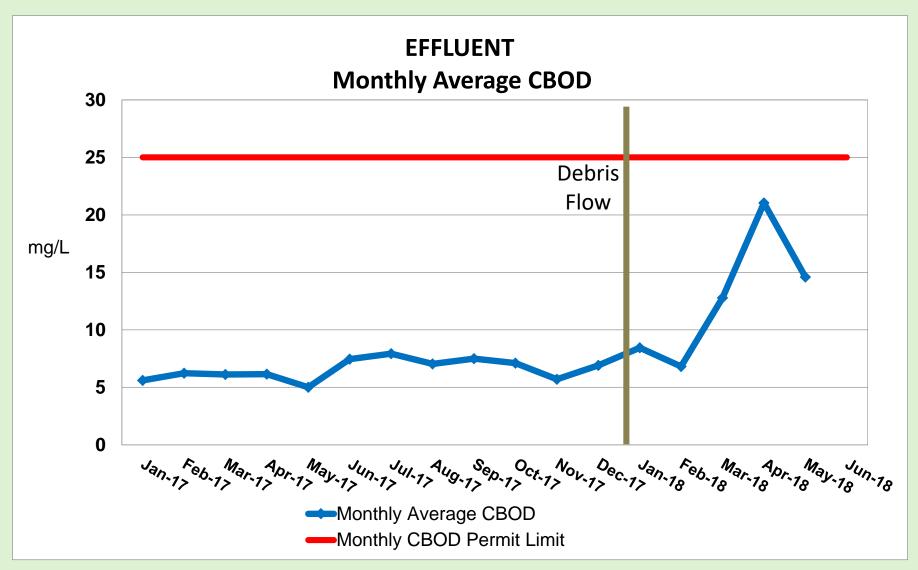


Effluent TSS





Effluent CBOD





Effluent Flow



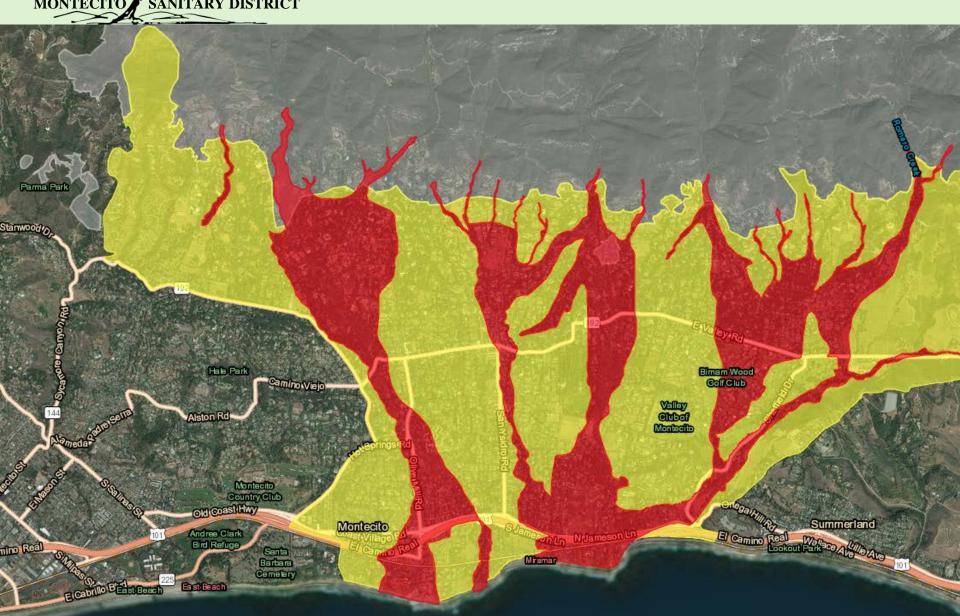
Typical Day



January 9, 2018



Risk Areas



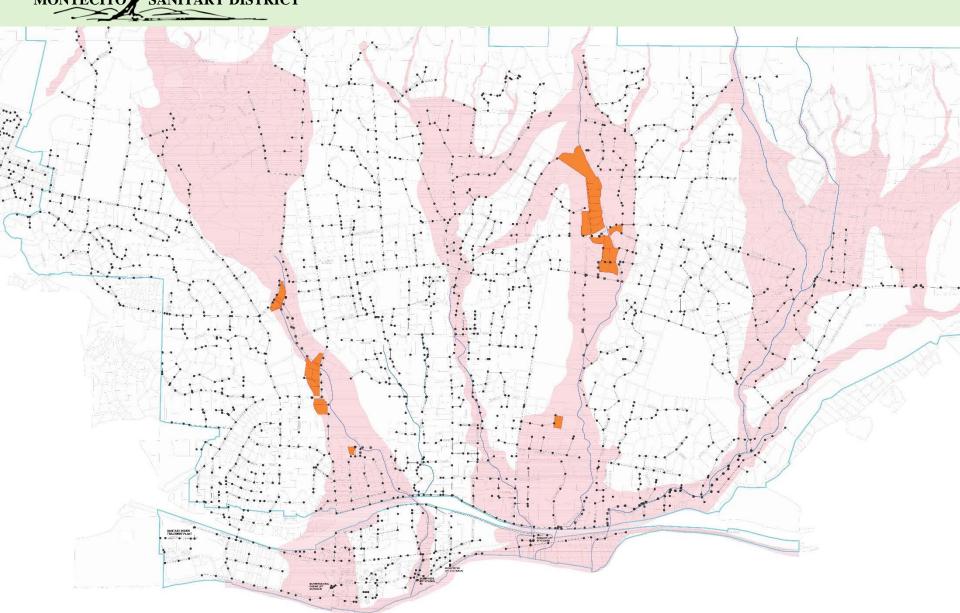


Leased Sewer Cleaning Machine





Capped Laterals





Pipeline Protectors







Pipeline Protectors







On-Site Diesel Storage





Backup Generator





Auxiliary Pump and Piping









Plans for FY-2018-2019

- Preparations for potential future debris flows
- FEMA reimbursement
- Sewer main extensions (1,700 lf)
- Replace DAFT at treatment plant
- Replace aeration blowers and motors at treatment plant
- Recycled water pilot project
- Continue full NPDES permit compliance



Questions?