



# Discharge Regulations and Future Impacts on the RWF

*Transportation and Environment Committee*

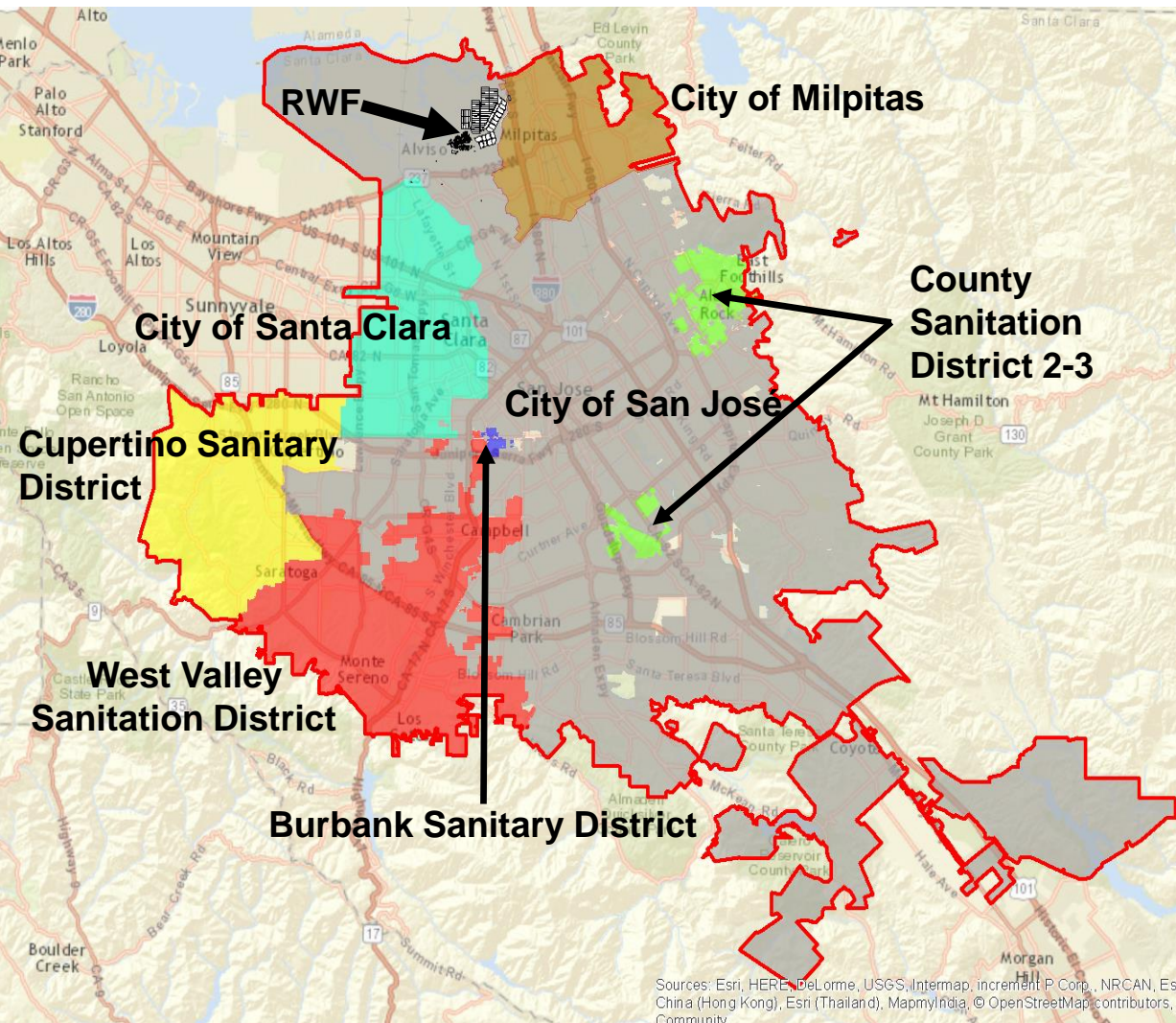
May 7, 2018



San José-  
Santa Clara  
Regional  
Wastewater  
Facility



# Regional Wastewater Facility



- Largest advanced wastewater facility on the West Coast
  - 167 MGD capacity
  - 2,600 acre site
- Serves
  - 1.4 million people
  - 17,000 businesses
  - 8 cities & County areas
- Continually operating 24/7 since 1956

# Regulatory Permits: Wastewater

## National Pollution Discharge Elimination System

- Regulated by EPA and San Francisco Bay Regional Water Quality Board
- Current Permit issued in 2014, renewal in 2019
- Specific Effluent Limits on Chemical Constituents and Ammonia
- Separate Nutrient-specific Permit requires monitoring and nutrient reduction evaluation studies.


# Regulatory Permits: Air

## **Title V and Permit to Operate**

- Regulated by EPA & the Bay Area Air Quality Monitoring District
- Current Permit Issued in 2017; Updates in Progress Facility Changes
- Criteria Pollutants, Greenhouse Gases, Toxic Air Contaminants



# Regulations on the Watch List

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- An aerial photograph of a wastewater treatment facility. A long, winding canal with a dark, vegetated bed runs through a body of water. The water is a murky green color. In the background, there are some buildings and a road.
1. Contaminants of Emerging Concern (Water)
  2. Chronic Toxicity (Water)
  3. Nutrient Reduction (Water)
  4. Toxic Air Contaminants (Air)
  5. Greenhouse Gases (Air)
  6. Fugitive Methane (Air)
  7. Short-lived Climate Pollutants (Biosolids)
  8. Laboratory Quality Assurance Standards (Water)

# Potential Regulations: CECs

- **Contaminants of Emerging Concern**
- **Pharmaceuticals**





# Potential Regulations: Chronic Toxicity Testing

- **Future regulations will impose numeric chronic toxicity limits**
- **Stringent Implementation may result in periodic permit violations and fines**



# Potential Regulations: Nutrient Limits

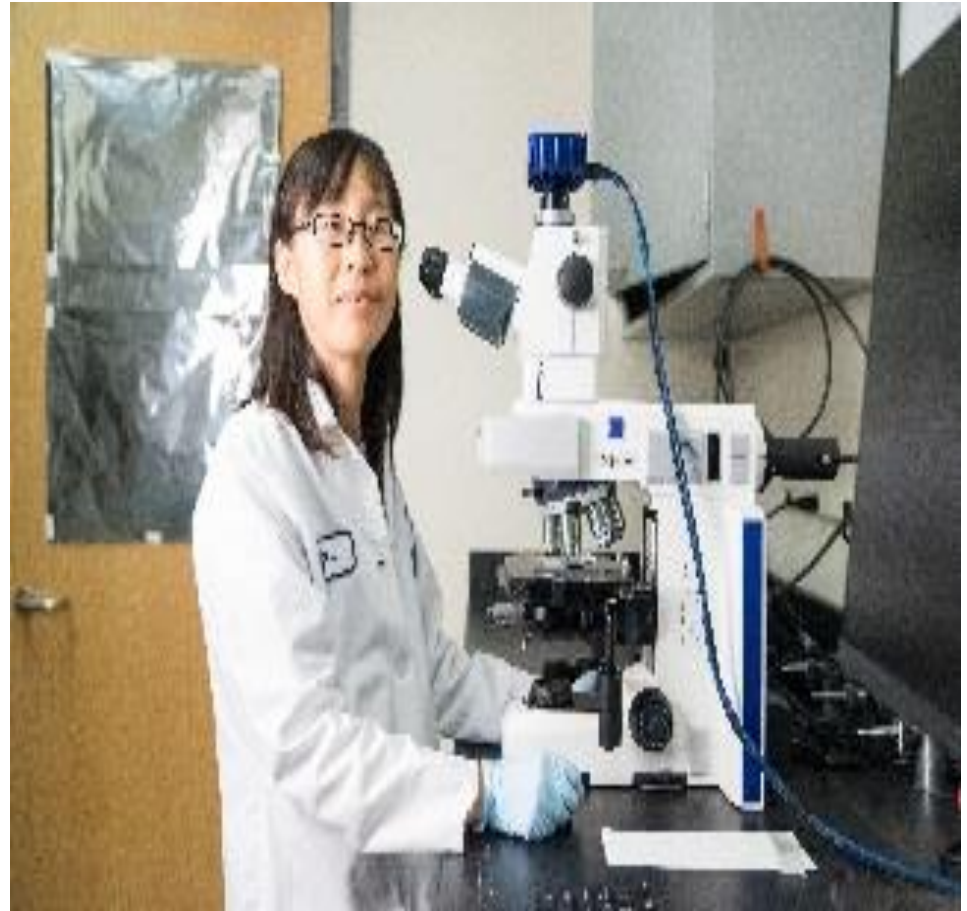
- **Specific limits unknown**
- **Bay science studies will inform future limits**
- **Aeration Tanks Rehab Project**
  - Phase 1
  - Phase 2





# Potential Regulations: Laboratory Standards

- **NELAC/TNI**
- **Costs of Accreditation**
- **Significant increase in documentation, administrative paperwork**
- **Equipment Needs**



# Potential Regulations: Toxic Air Contaminants

## Regulation 11 Rule 18

- Health Risk Assessment
- Cogeneration Facility



# Potential Regulations: Greenhouse Gases

## GHGs

- Cap & Trade
- Fugitive Methane

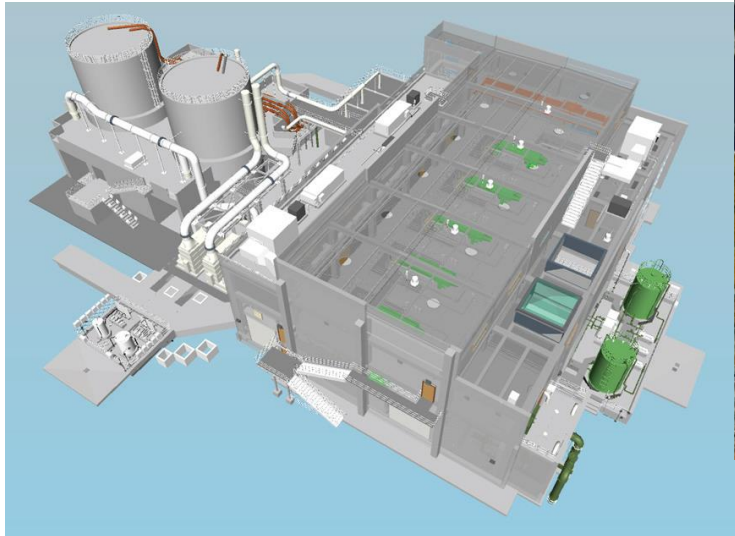




# Potential Regulations: Organics and Biosolids

## SB 1383

- Landfill Restrictions
- Dewatering Facility



# Looking Ahead

- **Tracking Potential Regulations and Legislation**
- **Leveraging Advocacy and Industry Groups**
- **Flexibility Built into Capital Projects**
- **Annual Update to the T&E Committee**



# Environmental Benefits





# Discussion

