



Discharge Regulations and Future Impacts on the RWF

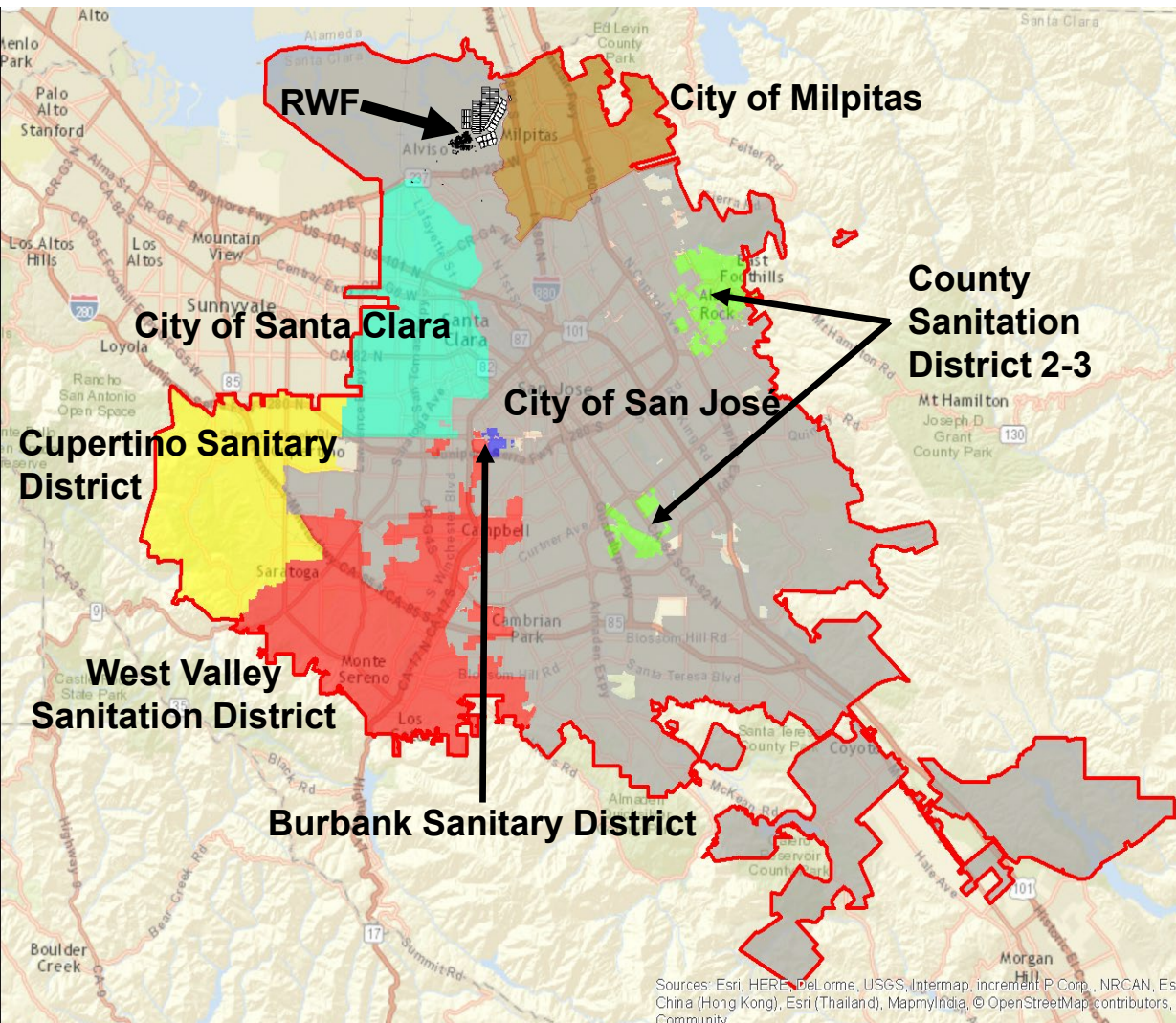
Transportation and Environment Committee

May 3, 2021



San José-
Santa Clara
Regional
Wastewater
Facility

Regional Wastewater Facility



- West Coast's Largest advanced wastewater facility
 - 167 MGD capacity
 - 2,600-acre site
- Serves
 - 1.5 million people
 - 17,000 businesses
 - 8 cities & County areas
- Continually operating 24/7 since 1956
- Subject to multiple permits

Regulations on the Watch List

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1. **Nutrient Reduction (Water)**
 2. **Constituents of Emerging Concern (Water)**
 3. **Chronic Toxicity (Water)**
 4. **Toxic Air Contaminants (Air)**
 5. **Greenhouse Gases (Air)**
 6. **Fugitive Methane (Air)**
 7. **Short-lived Climate Pollutants (Biosolids)**

Regulatory Permits: Wastewater

National Pollution Discharge Elimination System

- Regulator: San Francisco Bay Regional Water Quality Board
 - Through authority of Federal EPA and the State
- Individual Permit: February 2020
- Watershed Permits:
 - Nutrient-specific Permit: May 2019
 - Mercury & PCBs-specific Permit: January 2018



BACWA
(wastewater utilities)



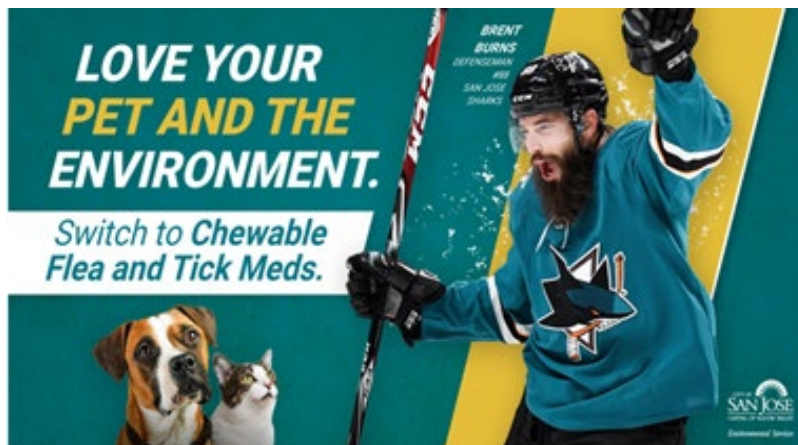
Potential Regulations: Nutrient Limits

- Nitrogen Limits 2024
- Bay science studies will inform need for further reductions
- Proactive monitoring and collaborative engagement by staff



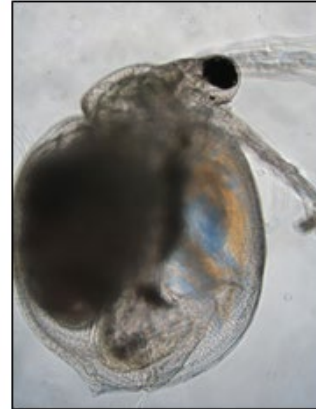
Potential Regulations: CECs

Constituents of Emerging Concern



Potential Regulations: Chronic Toxicity Testing

Test species 1994 – March 2020



- Future regulations will impose numeric chronic toxicity limits
- Stringent application of regulation may result in periodic permit violations & fines



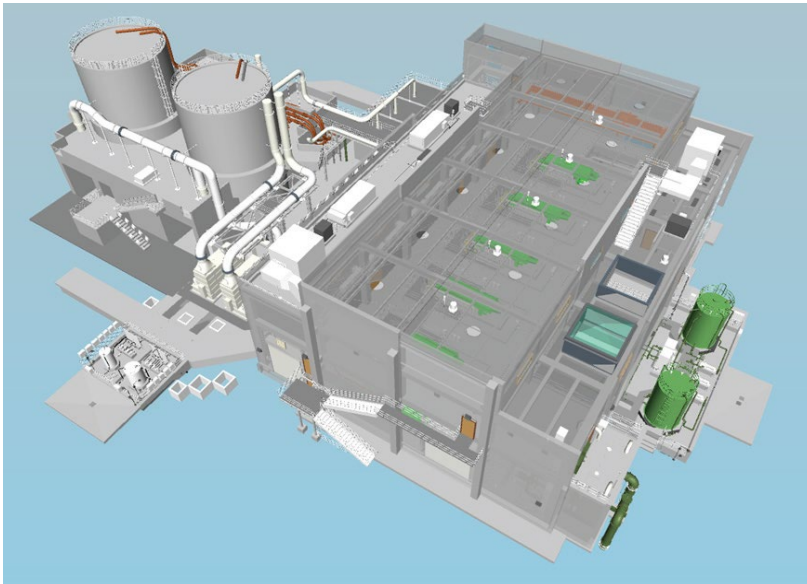
Test species April 2020 - present



Potential Regulations: Organics and Biosolids

SB 1383

- Landfill Restrictions
- Dewatering Facility



Regulatory Permits: Air

Title V Permit to Operate

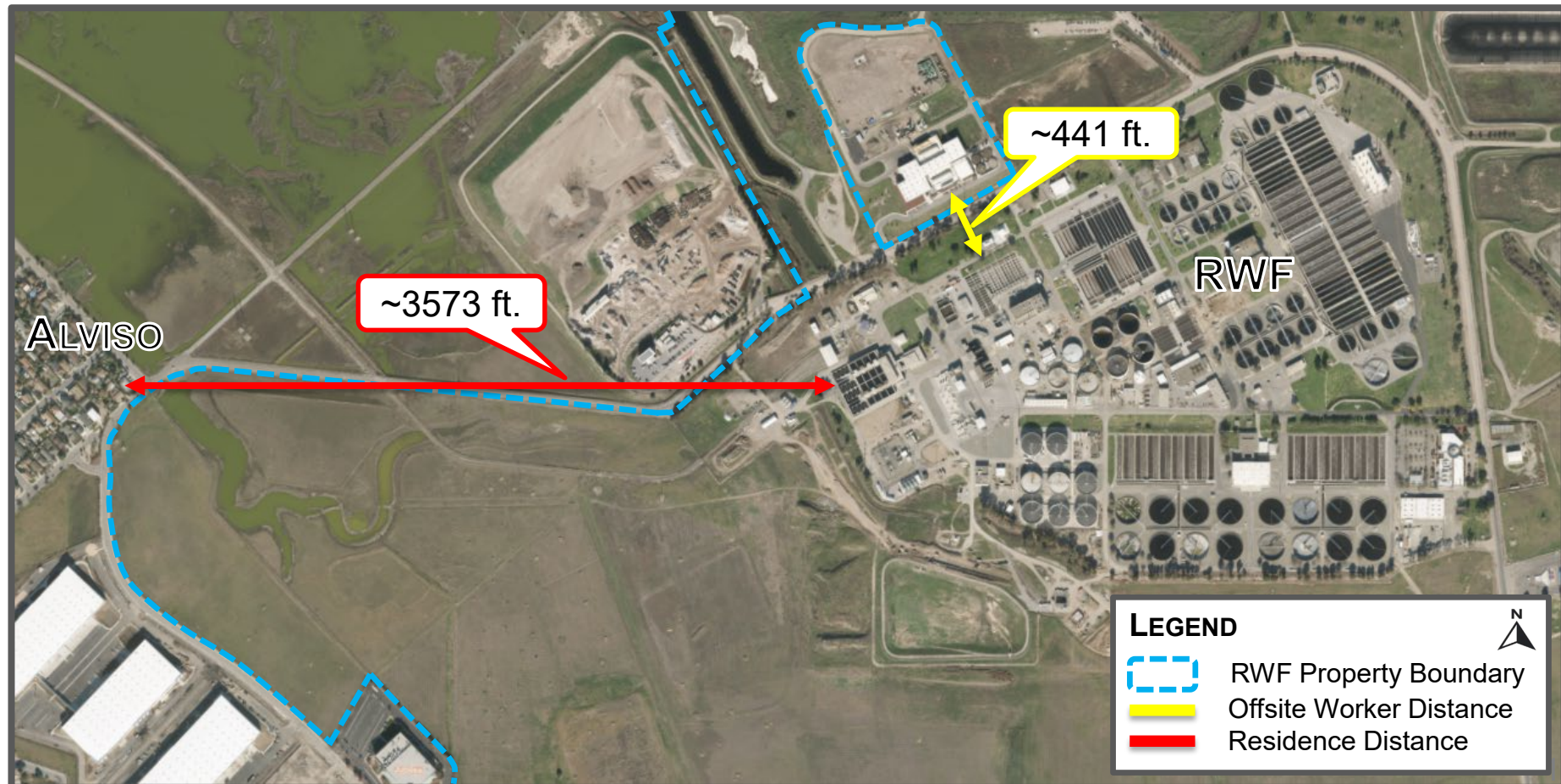
- Regulators:
 - EPA
 - Bay Area Air Quality Monitoring District
- Criteria Pollutants, Greenhouse Gases, Toxic Air Contaminants
- Current Permits:
 - Title V
 - Issued in 2017
 - Authority to Construct for Facility Changes



New Regulation: Toxic Air Contaminants

BAAQMD Regulation 11 Rule 18

Health Risk Assessment



Potential Regulations: Greenhouse Gases

GHGs

- Cap & Trade
- Fugitive Methane (BAAQMD Rule 13-4)



Looking Ahead

- **Tracking** Potential Regulations and Legislation
 - Ensure potential regulations and legislation are considered in discussion with Valley Water on recycled & purified water expansion
- **Established in-house research and science** programs inform and shape regulations
- **Leveraging** Advocacy and Industry Groups
- **Flexibility** Built into Capital Projects

Environmental Benefits



Discussion

