

Wet Weather Program Management Update

Planning Committee

October 8, 2019

Agenda



- Review of Wastewater System and Wet Weather Operation
- Recap of 2018/2019 Season Performance
- Next Steps

Wastewater Systems in Special District No. 1



- EBMUD has:
 - Twenty-nine miles of gravity interceptors
 - Fifteen pump stations
 - Eight miles of force mains
 - Main Wastewater Treatment Plant (MWWTP)
 - Three Wet Weather Facilities (WWFs)



- Satellites: about 1,600 miles of regional collection system
- Property Owners: about 1,600 miles of private sewer laterals

Wet Weather Facilities (WWFs)



Point Isabel
(N. Interceptor)

Provides about 3 million gallons of storage

San Antonio Creek
(S. Interceptor)

Oakport
(S. Interceptor)
Provides about 3.5 million gallons of storage



2018/2019 Performance

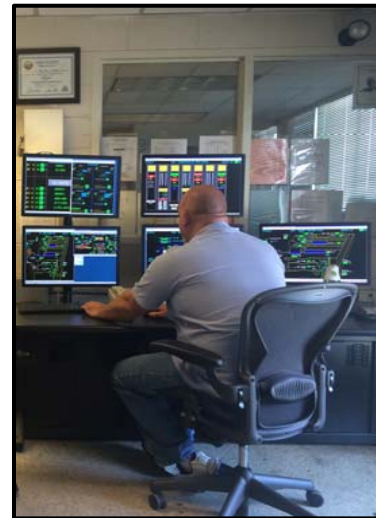


- One pH exceedance measured during intense rain event
 - Stormwater suppresses pH
 - Modified chemical dosing to prevent a reoccurrence
- All other regulatory requirements were met at all wastewater facilities throughout the 2018/2019 wet weather season

Key Areas of Success



- Conducting ongoing WWF refresher trainings during the wet weather season strengthened operators' confidence and skills when operating the WWFs
- Exercising equipment allowed staff to bring the WWFs online during storms without issue



Key Areas of Success (cont'd.)



- Coordinating and documenting MWWTP and remote facility staffing and operating strategies prior to each storm ensured a common approach
- Including an additional supervisor during intense rain events improved communication and oversight of the systems



Key Areas of Success (cont'd.)



- Monthly sanitary sewer overflow table top exercises provided opportunities for new staff to become familiar with the process while reinforcing existing staff's knowledge



Key Areas of Success (cont'd.)



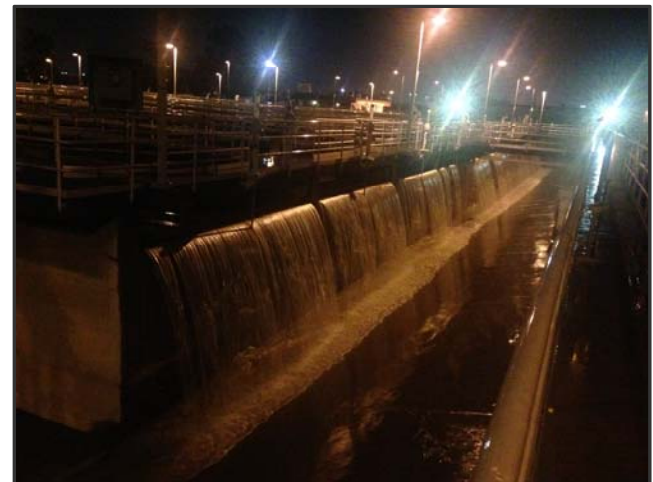
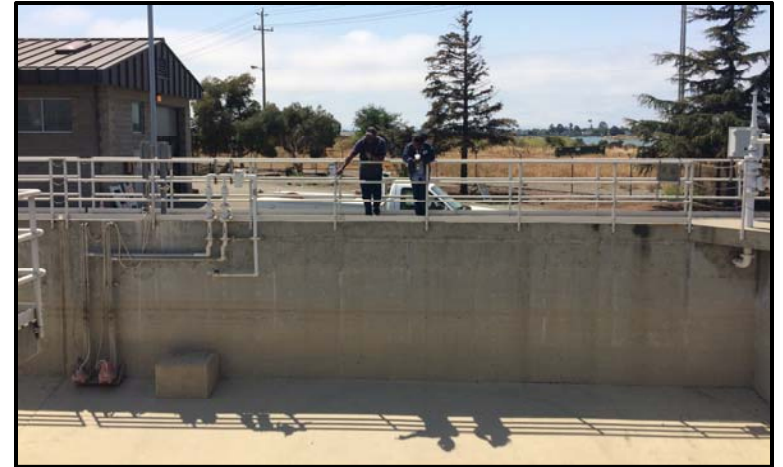
- Training all supervisors and increasing the number of operations staff trained on WWF operation improved knowledge depth in the organization
- Refreshing training materials keeps them up to date and allows incorporation of lessons learned from the previous wet weather season
 - Includes focused information on pH limits at WWFs



Areas for Improvement



- Continue to identify projects that improve reliability at the MWWTP when managing wet weather flows
- Ensure monthly WWF refresher training is conducted even if WWFs are operated
- Provide opportunities for hands on operation of WWFs during storm events to a broader pool of individuals



Next Steps



- Maintain a readiness mindset
 - Provide refresher training through the season
 - Conduct wet tests monthly to ensure equipment readiness
 - Conduct table top exercises

Thank you



Electrical Engineering Support

Planning Committee
October 8, 2019

Presentation Overview



- Current Electrical Engineering (EE) staffing levels & vacancies
- Update on EE recruitment efforts and challenges
 - Working Group on EE recruitment efforts
 - New initiatives to improve EE recruitment
- Need for EE support services agreements
 1. Specialized services for design and operations and maintenance support for upcountry powerhouse facilities
 2. Engineering support for O&M distribution facilities
- Next steps & long-term goals for EE support

Current EE Staffing Levels, Trends, and Vacancies



Engineering & Construction

3 Workgroups
18 FTEs
3 vacancies

Operations & Maintenance

2 Workgroups
13 FTEs
3 vacancies

Wastewater

2 Workgroups
6 FTEs
0 vacancies

- 37 FTE (Regular) Electrical Engineers (junior to senior)
- Majority of EEs are Associate positions (19 FTEs)
- Staffing Trends: District ramped up its in-house capabilities, increasing Associates in E&C/O&M from 10 to 18 since FY05
- 2 EE positions recently filled externally & 2 internal transfers
- 6 remaining (Regular) vacancies: 3 assistants, 3 associates

Update on EE Recruitment Efforts & Challenges



- District continues to face ongoing recruitment challenges, similar to other public agencies and private sector firms
- New Working Group on District's electrical engineer recruitment efforts has met monthly since August 2019
 - Managers, supervisors, Local 2019 representatives, and HR analysts
 - Tasked with discussing current issues and concerns related to recruitment and retention of electrical engineers



Recent EE Recruitment Initiatives and Approaches



- Implementing new recruitment approaches
 - ✓ Flex-staffing
 - ✓ Use of positions that allow for promotions within a workgroup
 - ✓ Open-continuous recruitments for Assistant and Associate Electrical Engineer job classifications
 - ✓ Simplified application process for hard to fill positions
- Making progress filling vacancies and adding a new electrical engineer position to O&M
- Establishing a new Industrial Control Systems Specialist job classification

Need for EE Support Services Agreements



- Time needed to fill vacancies and build expertise for powerhouse facilities
- Two agreements needed to provide continued electrical engineering support services
 - Agreement #1 (\$550k): Design and maintenance support services for upcountry powerhouse facilities
 - Agreement #2 (\$160k): O&M Engineering support for distribution facilities



EAST BAY MUNICIPAL UTILITY DISTRICT

REQUEST FOR RFP#551-19-01

ELECTRICAL DESIGN AND SUPPORT SERVICES
FOR POWERHOUSE IMPROVEMENTS

SUBMITTED BY:



Next Steps and Long-Term Goals



- **October 8, 2019:** Consider consultant agreements w/EETS Inc.
 - Electrical Design and Support Services for Powerhouse Facilities
 - O&M Electrical Engineering Support for Distribution Facilities
- **Continue open dialogue with L2019 on ideas & options**
- **Fall 2019 to Summer 2020 (FY20):**
 - Fill current vacancies and assign new electrical engineers in O&M to manage engineering services agreements for upcountry powerhouse facilities and distribution facilities
 - Identify training needs to build in-house expertise
- **Summer 2020 to Fall 2021 (FY21/22):** Transition responsibilities for day-to-day electrical engineering support services from consultants to District staff

Questions?

