



FY21/22 Strategic Initiatives, Annual Performance Report Update

Board of Directors Meeting
July 13, 2022



TRANSFORMING WASTEWATER TO RESOURCES

Overview

Strategic Planning Activities



Staff identified ten **FY21/22 Strategic Initiatives** to support Strategic Plan implementation

- Good overall progress with **7 of 10** to be completed by August 2022

Staff developed a new District **Annual Performance Report** for FY21/22

Strategic Plan Goal Areas

- ➊ Infrastructure Investment
- ➋ Environmental Stewardship
- ➌ Fiscal Responsibility
- ➍ Organizational Change
- ➎ Workforce Development
- ➏ Customer Services and Engagement

FY21/22 Strategic Initiatives

Goal 1 Infrastructure Investment

Ensure the long-term effectiveness and reliability of critical District infrastructure through prioritized, cost-effective capital investment and maintenance

1. Develop a formalized **Asset Management Program Implementation Roadmap**, including vision, goals, priorities, key actions, and resource needs



Completed

Significant positive organizational benefit

2. Engage an inter-divisional team to identify and implement measures to improve **capital project delivery** via enhanced coordination, collaboration, communication, risk management, and integration of key “lessons learned”



Completed

Major organizational focus area in FY21/22 with ongoing process established going forward

FY21/22 Strategic Initiative

Asset Management Program Roadmap



		Pre-FY22/23	FY22/23	FY23/24	Post-FY23/24
<p>Vision</p> <p>Implement formalized, comprehensive business processes to ensure prioritized, cost-effective, and risk-based maintenance and renewal of infrastructure assets in the wastewater collection, conveyance, and treatment systems to meet operational effectiveness and reliability needs for our customers.</p> <p>Key Goals</p> <ul style="list-style-type: none"> Expand CMMS utilization, implement reliability-centered maintenance (RCM) approach to support reliability-based AM activities, data-driven decision making, and efficiency Intensify organizational focus on applying AM principles to linear assets to ensure proactive (versus reactive) infrastructure renewal Formally integrate risk-based AM principles (e.g., LoS, LoF, CoF) into prioritized 5-year CIP development process to ensure effective use of limited ratepayer funds <p>Guiding Principles</p> <ul style="list-style-type: none"> Provide a prioritized, achievable, and sequenced approach to AMP development/implementation that considers available resources Assign highest priority to inspecting and assessing condition of critical infrastructure elements in wastewater conveyance system Embrace change, empower team members, provide training, and emphasize focus on teamwork, ownership, and accountability Provide periodic, meaningful communications regarding AMP purpose, benefits, performance Maintain a long-term, sustained organizational focus to effectively implement multi-year process improvements Ensure AMP development is driven by District, and supported by consultants (not vice versa) <p>CIP Planning and Development</p> <ul style="list-style-type: none"> Decide whether to upgrade or replace existing CMMS based on specific criteria, operational needs, and IT considerations Determine technology platform (e.g., GIS) for organizing, storing, and accessing linear asset description, inspection, condition assessment, and repair information; and CMMS integration Determine required near-term changes to existing CMMS data collection/entry, whether to implement prior to CMMS upgrade/replacement 	<p>Program Management</p> <p>Established Vision, Goals, Guiding Principles, Roadmap, Oversight (AMP Steering Committee [AMPSC])</p> <p>Engaged w/Key Staff to Understand Challenges, Opportunities; Conducted Gap Analysis and Baseline "Report Card" for Key AM Focus Areas</p>	<p>Develop Asset Management Policy w/Roles, Responsibilities, Authority, Accountability</p> <p>Identify Organizational Structure, Resources</p> <p>Identify Consultant Support Needs/Contracts</p> <p>Identify, Measure, and Report on AMP Key Performance Indicators</p>	<p>Prepare Formalized AMP Plan, Annual Report</p>	<p>Prepare Formalized AMP Plans, Annual Reports that Reflect Continuous Improvement Principles, Lessons Learned, and New Information</p> <p>Review and Revise Asset Management Policy, As Needed</p>	
	<p>Vertical Asset Maintenance (WWTP, RWF, Pump Stations)</p> <p>Reviewed Asset Inventory, Asset Hierarchy, Business Processes with Associated Recommendations for Improvement</p> <p>Conducted Business Risk and Vulnerability Analysis Workshops; Developed Risk Matrix; Established Level of Service Requirements</p> <p>Identified Existing CMMS Software and Architecture as Obstacle to Successful AMP Implementation</p>	<p>Define and Implement Clear Changes Required to CMMS Data Collection and Asset Hierarchy</p> <p>Evaluate CMMS Upgrade or Replacement Options and Present to AMPSC for Decision</p> <p>Implement Migration to Upgraded or New CMMS</p> <p>Conduct "Pilot" RCM/Criticality Review of Selected WWTP Process with Recommendations for Improving Future RCM Reviews</p> <p>Evaluate Opportunities to Implement Advanced Maintenance Tools (Vibration, Oil Analyses)</p>	<p>Implement Priority, High Value Business Process and Workflow Improvements</p> <p>Identify and Implement IT Enhancements to Better Support AMP/CMMS Implementation</p> <p>Conduct RCM/Criticality Reviews for 1-2 Selected WWTP Process Areas</p> <p>Implement Advanced Maintenance Tools (Vibration, Oil Analyses), SCADA Integration</p>	<p>Consider Initiating Integration of Enterprise Resource Planning (ERP) System and CMMS</p> <p>Conduct RCM/Criticality Reviews for 2-3 Selected WWTP Process Areas per Year</p>	
	<p>Linear Assets (Force Mains, Gravity Sewers)</p> <p>Completed Multiple Sewer (Bay Point Ph.1-4) and Force Main Repair Projects</p> <p>Conducted Extensive CCTV Inspection, Condition Assessment Work in Shore Acres Interceptor</p> <p>Completed "Desktop" Review of Wastewater Conveyance System Condition</p> <p>Identified Antioch PS and Conveyance System Improvements as Priority Project</p>	<p>Develop "Active Maps" of Wastewater Conveyance System Inspection/Condition Info</p> <p>Assign Internal "Champions" to Manage At-Risk Sections of Wastewater Conveyance System</p> <p>Develop Plan to Address Force Main and Gravity Sewer Access Constraints</p> <p>Incorporate CIP Funding for Targeted Condition Assessment Activities; Implement Internal Inspection Schedule for At-Risk Gravity Sewers</p> <p>Identify and Implement Technology Platforms for Organizing, Storing, and Accessing Asset Description, Inspection, Condition Assessment, and Repair Information; and CMMS Integration</p>	<p>Conduct RCM/Criticality Review of Wastewater Conveyance System</p> <p>Continue to Maintain Internal "Champions" to Drive Organizational Focus on At-Risk Sections</p>		
	<p>CIP Planning and Development</p> <p>Developed Risk-based Criteria and Project Evaluation Methodology; Applied to Selected New Projects Identified in RRF Master Plan</p> <p>Formed Capital Project Delivery Steering Committee to Drive Organizational Improvement, Support Effective Prioritization, Issue Resolution</p> <p>Developed "Lessons Learned" Template for Capital Projects, PM Guide for Engineering</p>	<p>Screen Existing CIP for Projects Potentially Requiring Future Business Case Evaluations (BCEs) and/or CMMS Data Analysis</p> <p>Apply Formalized Risk-based Criteria and Project Evaluation Methodology to All CIP Projects</p> <p>Integrate Risk-based AM Approach/Concepts into Capital Project Delivery (Scopes, Contracts, Basis of Design, PM Guide)</p> <p>Implement Formal Process to Identify/Prioritize Infrastructure Condition Activities in CIP</p>	<p>Apply Business Case Evaluations (BCEs) to Identified CIP Projects Using CMMS Data</p> <p>Expand Use of CMMS Data to Guide CIP Development, BCEs,</p> <p>Identify and Implement Opportunities to Further Integrate AM Approach/Concepts into Capital Project Delivery and CIP Prioritization Process</p>		
	Pre-FY22/23	FY22/23	FY23/24	Post-FY23/24	

CIP = Capital Improvement Program
 CMMS = Computerized Maintenance Management System
 CoF = consequence of failure
 GIS = geographic information system
 IT = information technology
 LoF = likelihood of failure
 LoS = level of service
 PM = project management

Asset Management Program (AMP) Development Roadmap

dated June 23, 2022

FY21/22 Strategic Initiatives

Goal ② Environmental Stewardship

Meet or surpass environmental and public health requirements to maintain public trust

3. Advocate for development of a **regional nutrient “trading” program** via active engagement as a member of the Bay Area Clean Water Agencies (BACWA) “Nutrient Strategy Team”



Completed

Continued advocacy in BACWA context, but trading program development likely would not occur for several years

Goal ③ Fiscal Responsibility

Manage financial resources effectively to meet funding needs and maintain fair and reasonable rates

4. Develop recommended updates to District’s **Capital Facilities Capacity Charges** to ensure effective cost recovery and appropriate allocation to customers



Not Completed

Delayed, in progress, likely to be carried forward as an FY22/23 Strategic Initiative

FY21/22 Strategic Initiatives

Goal 4 Organizational Change

Embrace innovation, engagement, and change to enhance service delivery, work processes, and use of technology to drive sustained improvement in organizational effectiveness and efficiency

5. Effectively implement **prioritized, value-added IT enhancements** to improve contract administration, budget/cost tracking and reporting, human resources management, e-records management, and customer payment processing (i.e., e-payment for permits)



Completed

Significant benefits achieved; new IT enhancements to be identified for FY22/23

Goal 5 Workforce Development

Support development of an engaged, skilled workforce that is dedicated to organizational excellence and exceptional service delivery

6. Implement a streamlined, effective approach to the **performance planning and appraisal process** that supports supervisor-employee engagement and aligns with District needs, behavioral values, and strategic goals and objectives



Not Completed

Initiated staff engagement, but likely to be carried forward as FY22/23 Strategic Initiative

FY21/22 Strategic Initiatives



Goal 6 Customer Services and Engagement

Deliver an exceptional customer service experience and embrace opportunities to enhance service value through engagement and collaboration

7. Implement a process to ensure customers can provide feedback and an evaluation of **customer service experiences** with District



In Progress

Expected to be completed by end of August 2022

8. Update **Strategic Communications Plan** (Oct 2019) to align with District's Strategic Plan



Completed

Incorporated comprehensive updates based on staff input

9. Identify critical **emergency response scenarios** and conduct associated tabletop exercises (minimum of two) with key internal stakeholders



In Progress

Expected to be completed by end of August 2022

10. Enhance public awareness of key District and regional (i.e., Bay Area Pollution Prevention Group) **pollution prevention activities** through targeted website, community event, and direct contact communications



Not Completed

Generated near-term activities for FY22/23, but some currently limited by COVID-19 restrictions

FY21/22 Annual District Performance Report



Highlights Key Resource Recovery Attributes

Notes Key Regulatory Compliance Outcomes

Provides an Overview of Infrastructure Investments

Annual District Performance Report: Fiscal Year 2021/2022

Resource Recovery

14.1 MGD of wastewater treated (5,143 MG total)

49% of WWTP power needs met via on-site renewable energy production

7.6 MGD of recycled water produced (2,781 MG total)

38 tpd of biosolids produced (13,724 tons total)

100% beneficial use via land application and composting

The District continues effectively "Transforming Wastewater to Resources" by **reducing local potable water demand** via water recycling, **generating on-site renewable energy** via biogas utilization, and **recovering valuable nutrients** to improve soil health via biosolids reuse.

Regulatory Compliance/Safety

- WWTP NPDES permit violations
- Recycled Water Facility Title 22 permit violation
- Air permit violations
- SSOs in Bay Point collection system
- COVID-19 outbreaks in the workplace

- Experienced three NPDES permit violations for effluent copper and mercury concentrations in July/August 2021. Engaged with Calpine to investigate potential causes associated with recycled water return flow and modified plant operations to successfully prevent a recurrence. Anticipate being awarded the NACWA Silver Peak Performance Award for excellent regulatory compliance record in 2021.
- Despite critical staffing level challenges, the Operations Division maintained NPDES permit-mandated staffing requirements to support both 24/7 facility operation and a significant number of active capital projects in construction. Maintenance Division staff completed critical activities in the District's wastewater conveyance system, including pump system upgrades at the Shore Acres and Antioch Pump Stations, while effectively reducing the preventative maintenance activity backlog. Laboratory Division staff completed a successful ELAP accreditation renewal (via third-party audit) and progressed toward TNI standard compliance.
- Effectively responded to multiple critical, emergency events in the wastewater conveyance system without an SSO or disruption of service to customers

Infrastructure Investment



District's Wastewater Resource Recovery Facility, includes:

- Wastewater Treatment Plant
- Recycled Water Facility



Wastewater Gravity Sewer Rehabilitation via Structural Cured-in-Place Pipe (CIPP) Installation

- Made significant progress toward completing construction of critical capital projects (bold = completed, total project cost in parentheses):
 - **Headworks Improvements** (\$14.9M)
 - **Sodium Bisulfite Tank Replacement** (\$0.9M)
 - **Electrical Switchgear Replacement** (\$12.2M)
 - **Primary Clarifier Area Improvements** (\$4.4M)
 - **Pump Station Facilities Repair** (\$14.3M)
 - **Permanent Brine Transfer Facility** (\$1.4M)
- Intensified focus on addressing significant gravity sewer condition vulnerabilities in the Shore Acres Interceptor System via multiple emergency repair efforts (\$0.9M)
- Adopted new 5-year CIP (FY22/23-FY26/27) totaling \$135.9 million to continue effectively guiding prioritized capital infrastructure investment
- Formed a cross-divisional team to engage in effective management of key challenges with active construction projects, and conduct a comprehensive review of the capital project delivery process that yielded ten prioritized organizational improvements
- Prepared an Asset Management Program Development Roadmap to prioritize key activities and support effective program implementation (FY21/22 Strategic Initiative)
- Prepared an informative "Investing in Critical Wastewater Infrastructure" fact sheet to support effective public communications during the 5-year CIP development process

FY21/22 Annual District Performance Report (cont'd)



Highlights Key Workforce Development Activities

Captures Fiscal Responsibility Focus

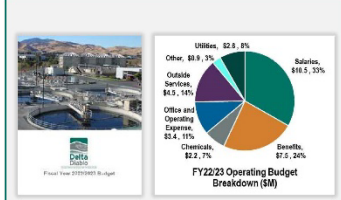
Annual District Performance Report – Fiscal Year 2021/2022

Workforce Development

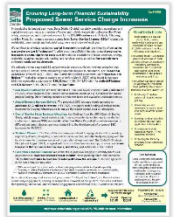
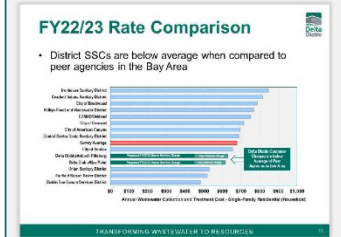


- Incorporated Workforce Development Goal (“Support development of an engaged, skilled workforce that is dedicated to organizational excellence and exceptional service delivery”) in Strategic Plan
- Nine staff members earned well-deserved promotions to continue supporting critical work functions and succession planning needs
- Maintained staff certification levels, complied with mandatory training requirements, and enhanced tracking of specific training needs for new and existing staff members
- Enhanced Maintenance Training Library and reference materials
- Utilized a new Operations Support/Construction Coordinator Retired Annuitant to support staff training/development, knowledge capture, comprehensive SOP updates in Operations Division, and capital project construction coordination
- Utilized a Finance Professional/Retired Annuitant to support staff training/development and special projects in the Finance Division
- Initiated development of revamped employee performance planning and appraisal process (FY21/22 Strategic Initiative)
- Held multiple Employee Recognition Events to celebrate team achievements

Fiscal Responsibility



- Effectively managed operating expenditures and maintained organizational focus on cost control during FY21/22 and the FY22/23 operating budget development process
- Implemented an FY22/23 SSC increase of 4.5% for customers to generate an additional \$1.2 million in annual revenue to meet capital investment and operating financial needs
- Prepared an FY20/21 Annual Comprehensive Financial Report, which yielded a “clean” financial audit opinion with no recommendations for improvement, and an FY22/23 Budget Book to enhance reader context and public transparency
- Continued administration of grant and low-interest loan funded capital projects, and anticipate receipt of future federal and/or state funding for COVID-19 relief and two capital projects (~\$1M)
- Received four awards from GFOA in recognition of excellence in financial reporting and budget preparation
- Prepared excellent “Proposed Sewer Service Charge Increases” fact sheet and FAQs documents to support effective public communications during the FY22/23 SSC/budget approval process



FY21/22 Annual District Performance Report (cont'd)



Emphasizes Strategic Planning Approach

Notes Activities Supporting Organizational Excellence

Highlights Industry Recognition Awards

Annual District Performance Report – Fiscal Year 2021/2022

Strategic Planning



- Completed a new District Strategic Plan (dated August 2021) following extensive engagement with employees that directly contributed to new Mission, Vision, and Behavioral Value statements, as well as detailed Goals, Strategies, and Objectives for the next few years
- Identified ten FY21/22 Strategic Initiatives to support Strategic Plan implementation with good completion progress (7 of 10)
- Continued progress toward completing a Resource Recovery Facility Master Plan that addresses long-term, strategic planning considerations regarding future regulatory and infrastructure investment needs and drivers
- Developed an action-based Asset Management Program Development Roadmap to ensure a strategic, prioritized, and integrated approach to support successful program development

Sustaining Long-term Organizational Excellence



- Continued organizational focus on expanding use of IT applications to support workflow improvements, and data access and integration
- Implemented a new web-based Development Permit Module
- Implemented new records management technology and process to provide enhanced document access and storage
- Reorganized procurement function and warehouse workgroup under Business Services Department
- Conducted in-depth review of maintenance workflow processes, assessed CMMS data input needs, and initiated CMMS upgrade or replacement evaluation as part of Asset Management Program
- Customer Services and Engagement
 - Updated Strategic Communications Plan (dated June 2022) (FY21/22 Strategic Initiative)
 - Initiated development of Customer Service feedback survey form for deployment in early FY22/23

Industry Association Awards (Utility Vision/Leadership, Regulatory Compliance, Financial Reporting)



- NACWA 2021 Utility of the Future Today Award
- NACWA 2020 Silver Peak Performance Award
- GFOA Distinguished Budget Presentation Award for FY21/22
- GFOA Certificate of Recognition for Budget Preparation for FY21/22
- GFOA Certificate of Achievement for Excellence in Finance Reporting for FY19/20
- GFOA Award of Financial Reporting Achievement for FY19/20



Next Steps

- Receive comments on FY21/22 Strategic Initiatives status report and Annual Performance Report
- Staff will present proposed Strategic Initiatives for FY22/23 in September 2022

