



# Valley Water

Clean Water • Healthy Environment • Flood Protection

# Maximo User Group Meeting – March 2024

Presented by: Colin Kortman, Associate Water Resources Specialist



# Agenda

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- I. Asset Management Program Overview
- II. Maximo Support
  - I. General User Support
  - II. Site Implementations
  - III. Watershed Site
  - IV. Mobile Maximo – DataSplice
- III. Current Efforts
- IV. Moving Forward

# Board Policy

- E-2.1. Current and future water supply for municipalities, industries, agriculture, and the environment is reliable.
- E-2.2. Raw water transmission and distribution assets are managed to ensure efficiency and reliability.
- E-2.3. Reliable high-quality drinking water is delivered.
- EL-6. The Board Appointed Officers shall protect and adequately maintain corporate assets.
  - 6.4. Maintain an Asset Management Program

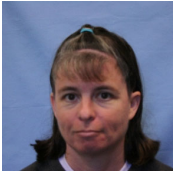
# Asset Management Program Goals

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- Optimize asset renewal strategies
- Minimize total cost of owning assets
- Continue to provide expected service levels
- Operate at an acceptable level of risk
- Help make sound financial investments
- Plan for major aging infrastructure replacements
- Prevent loss of asset specific knowledge
- Help substantiate rate increases

# Maximo Core Team

Software Services Unit



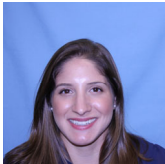
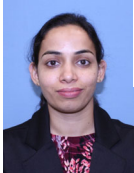
District-wide Asset Management Unit



Liaisons



Consultants



# Program History

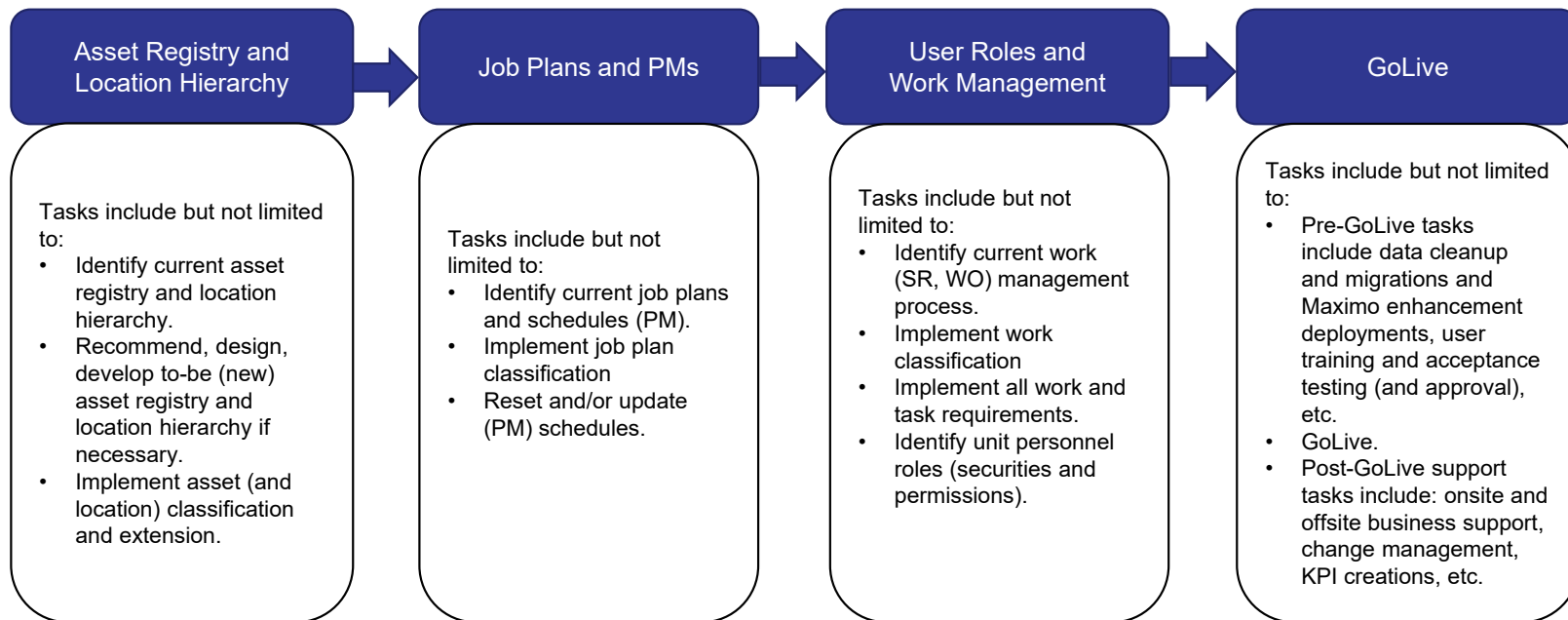
2012-2015	2016-2019	2020-2024
<b>Asset Registries</b>		
<ul style="list-style-type: none"> <li>Refined Water Utility (WU) and Watersheds asset registries</li> <li>Established asset and location hierarchies</li> </ul>	<ul style="list-style-type: none"> <li>Expanded asset registry for Water Treatment Plants, Raw Water, and Watersheds</li> <li>Doubled registry to over 21,000 assets</li> </ul>	<ul style="list-style-type: none"> <li>Split out Watersheds and Water Measurement registries</li> <li>Refined hierarchies and classifications</li> </ul>
<b>Condition and Risk Assessment</b>		
<ul style="list-style-type: none"> <li>Established condition assessment schedules for treatment plant assets</li> <li>Updated Business Risk Exposure (BRE) scores of Water Utility and Watersheds assets</li> </ul>	<ul style="list-style-type: none"> <li>Implemented WTP condition assessment program every two-years</li> <li>Updated WU asset management strategies</li> </ul>	<ul style="list-style-type: none"> <li>Modernized Watersheds field inspection tool (ESRI Collector)</li> <li>Formalized process of calculating reach-scale probability of failure (POF) from discreet conditions</li> </ul>
<b>Optimizations and Modernizations</b>		
<ul style="list-style-type: none"> <li>Launched mobile condition assessment program</li> <li>Upgraded Maximo from version 4.2 to 7.1</li> <li>Transitioned from CARA to Asset Management Planning Tool</li> </ul>	<ul style="list-style-type: none"> <li>Upgraded Maximo from version 7.1 to 7.6</li> <li>Streamlined and documented business and maintenance processes</li> <li>Configured Maximo sites for WTPs and Raw Water business functions</li> </ul>	<ul style="list-style-type: none"> <li>Upgraded Maximo from version 7.6 to 7.61</li> <li>Configured Maximo sites for Watersheds and Water Measurement</li> <li>Implemented mobile Maximo</li> <li>Augmented system integrations</li> </ul>

# Maximo Roadmap





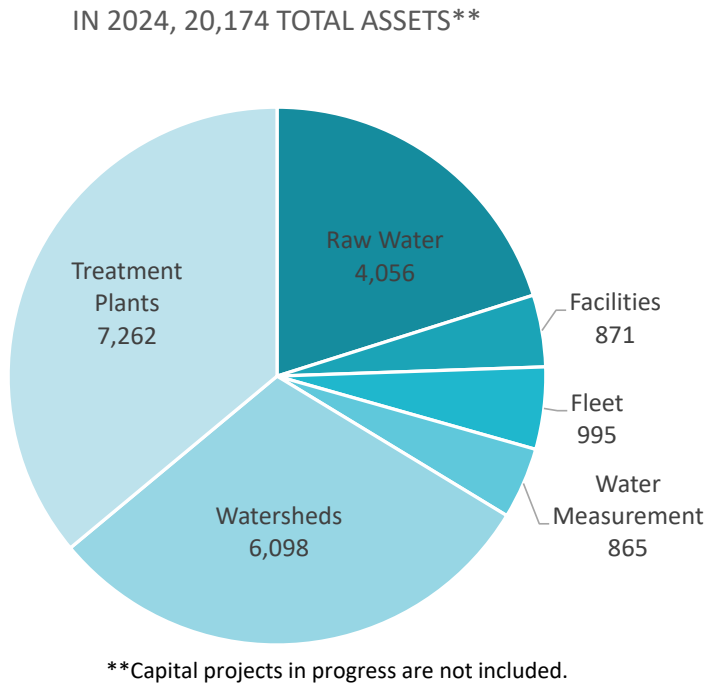
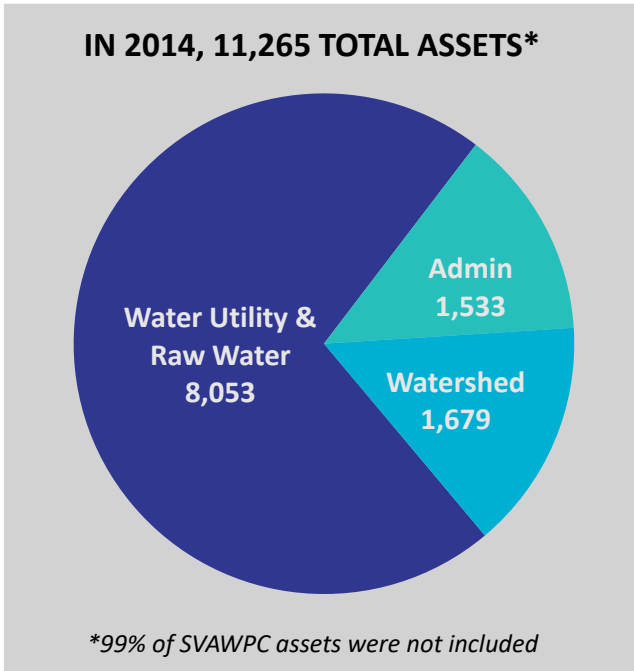
# Site Implementation Roadmap



# Site Implementation Status

#	Description	Responsible Units	Status
I.	Treatment Plants	Treatment Plan Maintenance Unit, North Water Treatment Operations, South Water Treatment Operations, District-wide Asset Management Unit, Utility Electrical and Control Systems Unit, Utility Maintenance Engineering Unit	Completed
II.	Raw Water	Raw Water Field Operations and Pipeline Maintenance Unit, Utility Maintenance Engineering Unit, Raw Water Operations Unit, Watershed Field Operations Unit, District-wide Asset Management Unit, Utility Electrical and Control Systems Unit.	Completed
III.	Watersheds	Watersheds Field Operations Unit, Environmental Mitigation and Monitoring Unit, Vegetation Management Unit, Stream Maintenance Program Unit, Operation and Maintenance Engineering Support Unit, District-wide Asset Management Unit	Phase I – Completed Phase II – Initiated
IV.	Wells & Water Measurement	Wells and Water Measurement Unit, District-wide Asset Management Unit	Completed
V.	Fleet	Equipment Management Unit, District-wide Asset Management Unit	FY 2024
VI.	Facilities	Facilities Management Unit, District-wide Asset Management Unit	FY 2025

# Asset Inventory Improvements



*Note: The asset register is up to date reflecting assets included in completed Capital Improvement Projects, Small Caps, and Maintenance projects.*

# Watersheds Site Development



## Background

- **Watersheds O&M Division**
  - 5 units & 112 staff members
  - 295 miles of creek managed under fee & easement
  - Flow conveyance, flood protection & ecological functions
  - SMP programmatic permitting coverage
- **Unique Considerations**
  - Office specialists > planners, schedulers, biologists, performers
  - Linear asset hierarchy
  - Multiple system integrations

# Watersheds Site Planning/Development

## Process

- Stakeholder Engagement
  - Met with division deputy, unit managers, and select staff
  - Collected feedback on existing workflows, pain points and potential improvements
  - Identified relevant internal & external reporting requirements
- Maximo Project Team
  - Outlined span of changes to Maximo objects
  - Documented new and updated workflows
  - Defined integrations between Maximo, GIS, Infor, DataSplice, etc.

# Maximo Integrations

14

SMP database



# Watersheds Site Implementation Phase I Accomplishments

- Streamlined and documented and Maximo-related workflows
- Augmented asset and location hierarchies
- Consolidated job plans (>1000 to <100)
  - Organized similar work into routes
- Established cross-site functionality between Raw Water and Watersheds

# Watersheds Site Implementation Phase I Accomplishments

- Moved biological review into Maximo
- Improved integration with SMP database

SMP Biological review conducted for WSH1012568: MECHANICAL WEED ABATEMENT / CALABAZAS CREEK - PROSPECT TO COMER / 53,300.00 - 54,500.00 / CALABAZAS CREEK MITIGATION SITE VEGETATION MANAGEMENT - FY24,

Notes: The work area on CALABAZAS CREEK - PROSPECT TO COMER (STA: 53,300.00 - 54,500.00) was surveyed by Griffin Hunt on August 14, 2023 to determine whether any ecological impacts are likely to result from work activities associated with this mitigation site vegetation removal project. **This work is cleared to proceed as planned.**

This survey is valid for a period of 14 days and will expire at the end of the day on August 31, 2023. **No work may occur under this clearance after August 31, 2023.**

Stream Maintenance Program

Home NPW - ASR SUBMITTAL MAXIMO WO Analysis Administration SMP-2 Subsystems Summary Reports Useful Links

NPW - ASR \ Assessments Copy to Current Submittal Show SMP Response Biologist Summary Cancel Print Page

NPW: 14-SS-001

2 of 10 (rows on page)

Agency Jurisdiction Edit

Agency	Jurisdiction
California Department of Fish and Wildlife (CDFW)	Yes
Central Coast Regional Water Quality Control Board - Region 3 (RWQCB3)	-
National Marine Fisheries Service (NMFS)	Yes
SF Bay Conservation and Development Commission (BCDC)	-
San Francisco Regional Water Quality Control Board - Region 2 (RWQCB2)	Yes
U.S. Army Corps of Engineers (USACE)	Yes
U.S. Fish and Wildlife Service (USFWS)	Yes

NPW Item Edit

Item number 14-SS-001  
 Work Order  
 Year 2014  
 Submittal No 1  
 Revision No 0  
 Item Name Sediment Removal along Guadalupe River Upstream of Coleman Avenue 2014  
 Status ASR Created  
 Activity Sediment Removal  
 GIS ID 30150





# Watersheds Site Implementation

## Phase I Accomplishments



- Implementation of mobile Maximo

### Phase I

- Mobile Deployment
- Maximo Integration
- Work Order Execution
- Mobile Device Deployment

### Phase II

- Condition Monitoring/Forms
- Integrate GIS capabilities into mobile application

# Watersheds Site Implementation Phase II Accomplishments

- Continued optimization of workflows
- Implement communication templates
- Transition legacy reports and streamline reporting data structures
- Modify routes & streamline annual work re-issuance
- Expanded cross-site functionality
- Improve Maximo/SMP/GIS/CRM integrations
- Ongoing targeted user group meetings

# Administration Maximo Sites

## Overview

- Fleet and Equipment Management
  - Streamlined maintenance program
  - Built vehicle and tool checkout
- Facilities
  - Completed asset registry and configured in Maximo
  - Utilized maintenance work order system in place
- KPIs for both

# Upcoming Program Priorities

- Expand and enhance condition assessment program (GIS, mobile)
- Develop additional Asset Management Plans for specific asset classes
- Expand use of BREs/Risk Assessment tools to
  - Establish condition-based replacement schedule while accounting for redundancy
  - Provide critical data for Infrastructure Master Plans
- Optimize maintenance work and enhance efficiencies – improve PM schedules, job plans, routing, and mapping
- Improve business area coordination and analyses related to asset replacement, refurbishment, run-to-failure strategies and trade-offs
- Update District-Wide Asset Management Plan
- Establish long-term financial projections

# QUESTIONS





# Valley Water

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