

**AGENDA**  
**ENGINEERING and OPERATIONS COMMITTEE MEETING**  
**Thursday, February 1, 2024, at 9:30 a.m.**  
**UWCD Headquarters, First Floor, Board Room**  
**1701 N. Lombard Street, Oxnard, CA 93030**

**CALL TO ORDER – OPEN SESSION 9:30 a.m.**

**Roll Call**

**1. Public Comment**

The public may comment on any matter not on the agenda within the jurisdiction of the Committee. All comments are subject to a five-minute time limit.

**2. Approval of Minutes**

**Motion**

Approve the January 4, 2024, Engineering and Operations Committee meeting minutes.

**3. February 14, 2024, Board Meeting Motion Agenda Items**

The Committee will review and discuss the following agenda items to be considered for approval at the February 14, 2024, Board meeting. The Committee will formulate a recommendation to the entire Board based on its discussions with staff.

**3.1 Inverted Siphon Construction Contract (CIP 8018)**

(Engineering Department, Dr. Maryam Bral)

Recommend the approval of the motion to the Board authorizing the General Manager to award a construction contract to the lowest responsible bidder, Granite, in the amount of \$891,000 for the construction of the Inverted Siphon Replacement Project a component of the Freeman Conveyance System Upgrade – Freeman to Ferro Recharge Basin (CIP 8018).

**4. Monthly Department Updates**

**Information Item**

The Committee will receive and review the monthly reports from the Engineering, Environmental Services, and Operations and Maintenance Departments as well as receive a verbal presentation of its highlights.

**4.1 Engineering Department Update (Dr. Maryam Bral)**

**4.2 Environmental Services Department Update (Marissa Caringella)**

**4.3 Operations and Maintenance Department Update (Craig Morgan)**

**5. Future Agenda Items**

**ADJOURNMENT**



# Engineering and Operations Committee Meeting Agenda

Thursday, February 1, 2024

Page 2

## Directors:

Chair Lynn E. Maulhardt  
Daniel C. Naumann  
Catherine P. Keeling


## Staff:

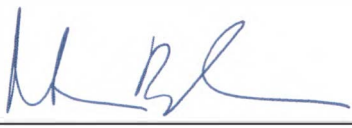
Mauricio E. Guardado, Jr.  
Anthony Emmert  
Dr. Maryam Bral  
Marissa Caringella  
Randy Castaneda


Craig Morgan  
Robert Richardson  
JD Smallwood  
Nathan Summerville  
Vanessa Vasquez

*The Americans with Disabilities Act provides that no qualified individual with a disability shall be excluded from participation in, or denied the benefits of, the District's services, programs or activities because of any disability. If you need special assistance to participate in this meeting, or if you require agenda material in an alternative format, please contact the District's offices at (805) 525-4431. Notification of at least 48 hours prior to the meeting will enable the District to make appropriate arrangements.*

Approved:

  
Mauricio E. Guardado, Jr., General Manager

  
Dr. Maryam Bral, Chief Engineer

  
Craig Morgan, Chief Operations Officer

**Posted: (date)** January 26, 2024

**(time)** 4:55 p.m.

**(attest)** Vanessa Vasquez

**At:** [www.unitedwater.org](http://www.unitedwater.org)

**Posted: (date)** January 26, 2024

**(time)** 4:55 p.m.

**(attest)** Vanessa Vasquez

**At:** United Water Conservation District Headquarters, 1701 N. Lombard Street, Oxnard CA 93030

**ENGINEERING and OPERATIONS**  
**COMMITTEE MEETING**  
**MINUTES**

**Thursday, January 4, 2024, at 9:30 a.m.**  
**UWCD Headquarters, First Floor, Board Room**  
**1701 N. Lombard Street, Oxnard, CA 93030**

**COMMITTEE MEMBERS IN ATTENDANCE**

Lynn E. Maulhardt, chair  
Catherine P. Keeling, director  
Daniel C. Naumann, director

**STAFF IN ATTENDANCE**

Mauricio Guardado, general manager  
Anthony Emmert, assistant general manager  
Dr. Maryam Bral, chief engineer  
Marissa Caringella, environmental services manager  
Clayton Strahan, interim chief operations officer  
John Lindquist, water resources supervisor  
JD Smallwood, water treatment supervisor  
Murray McEachron, hydrologist supervisor  
Craig Morgan, engineering manager  
Robert Richardson, principal engineer  
Vanessa Vasquez, clerk of the committee

**PUBLIC IN ATTENDANCE**

No members of the public in attendance.

**Call to Order – Open Session**

Chair Maulhardt called the committee meeting to order at 9:30 a.m. The clerk of the Committee called roll. Two Committee members were present (Maulhardt and Keeling). Director Naumann arrived a minute later at 9:31 a.m.

**1. Public Comments**  
**Information Item**

Chair Maulhardt asked for public comment. None were offered.

**2. Approval of Minutes**  
**Motion**

Motion to approve the Minutes from December 7, 2023, Engineering and Operations Committee meeting, Director Keeling; Second, Maulhardt. Voice vote: three ayes (Naumann, Maulhardt and Keeling); none opposed. Motion carries 3/0/0.



**3. January 10, 2024, Board Meeting Motion Agenda Item**

The Committee reviewed and discussed the following motion item to formulate recommendations to the full Board at its January 10, 2024, meeting.

**3.1 Recommend the Authorization of a Supplemental Appropriation of Funds for the Freeman Diversion Expansion Project (CIP 8001), Authorize Approval of a Contract with GEI Consultants, Inc. for the Hardened Ramp 90% Design** (Engineering Department, Craig Morgan) (presentation attached).

The Committee members asked for clarification regarding the amount of additional appropriation being requested. Engineering Manager Craig Morgan explained that a supplemental appropriation in the amount of 2.1 million dollars is being requested that would cover the 1,999,810 dollars for the GEI Consultants, Inc. contract, 90,000 dollars from the Northwest Hydraulic Consultants (NHC) Design Contract, and 10,190 dollars for special advisor time. The committee members requested a breakdown of the amounts be shown in an additional slide so that the amount being requested is easily understood.

When requesting funding, the Committee members asked staff to include a standard table in the committee packet that includes costs for each project phase and totals for overall project cost. The slides being presented should have clear labeling using key words, such as federally mandated to make constituents aware of the District's obligation to fulfill such requirements.

Chair Maulhardt asked for public comment, none offered.

The Committee members were all in favor of recommending approval of this motion to the full Board.

**4. Monthly Department Updates**  
**Information Item**

The Committee received and reviewed the monthly reports from the Engineering, Environmental Services and Operations and Maintenance Departments as well as receiving verbal presentations of highlights (presentations are attached).

**4.1 Engineering Department Update**

Dr. Maryam Bral presented department updates that included a 2023 Accomplishments Recap (CIP Projects) that covered Santa Felicia Dam (SFD), Letters of Support to FERC, SFD Emergency Action Plan, SFD End of Year Reporting to FERC, Oxnard- Hueneme Pipeline (OHP), Iron and Manganese Treatment Facility, Ribbon Cutting Ceremony, Well Replacement Program, Oxnard- Hueneme (OH) Water Well No. 20, OH Well 14 Energy Efficiency





Upgrades, Extraction Barrier and Brackish (EBB) Water Treatment Project, PTP Metering Improvement, PTP Recycled Water Connection – Laguna Road Pipeline, Condor Point Improvement – Swim Beach, Lake Piru Recreation Area Pavement Maintenance Program, Public Outreach including Key Presentations, Site Tours and a Look Ahead on Key and Critical Projects timeline, total costs, expenditures to date.

Director Naumann requested that Dr. Bral provide the sum of project costs in her presentation along with a footnote on the District's track record in receiving grants. The Committee agreed staff should label projects with color coordinating labels to identify whether they are mission based or federally regulated projects.

No further questions or comments.

#### **4.2 Environmental Services Department Update**

Environmental Services Manager Marissa Caringella presented Environmental Services department updates that included 2023 highlights covering Santa Felicia Dam and Lake Piru Recreation Area, Freeman Diversion and Districtwide Support. (presentation attached).

No further questions or comments offered.

#### **4.3 Operations and Maintenance Department Update**

Interim Chief Operations Officer Clayton Strahan presented Operations and Maintenance department updates that covered the South Fire at the Freeman Diversion, Saticoy Facility, Santa Felicia Dam and Lake Piru, El Rio Water Treatment Plant and the OH system. (presentation attached).

During Mr. Strahan's presentation on the south brush fire that occurred at Freeman Diversion the committee discussed preventative measures to protect District facilities and staff.

The following suggestions were made:

- On-Call Services Agreements with contractors that could be on standby
- Perimeter sprinklers
- 170-gallon tank available for use on site that could be utilized for the sprinkler system
- Attaching a booster pump to transfer water to a sprinkler system if installed

Director Keeling extended the Board's appreciation to staff for their bravery and efforts in combating the fire.



No further questions or comments.

**5. Future Agenda Items**

None offered.

**ADJOURNMENT 11:01 a.m.**

Chair Maulhardt adjourned the meeting at 11:01 a.m.


I certify that the above is a true and correct copy of the minutes of the Engineering and Operations Committee Meeting held on January 4, 2024.

**ATTEST:** \_\_\_\_\_  
Chair Lynn E. Maulhardt

Water Supply & Regulatory and Environmental Compliance

Motion Item 3.1

Authorization of a Supplemental Appropriation of \$2,100,000 for the Freeman Diversion Expansion Project (CIP 8001), and authorize approval of a contract with GEI Consultants, Inc. for the Hardened Ramp 90% Design



1

Water Supply & Regulatory and Environmental Compliance

Motion Item 3.1

1. Approval of Supplemental Appropriation due to insufficient funds in FY23/24 Budget

❖ On July 18, 2023, a joint stipulated order was written and delivered to the Federal Court. This joint stipulated order highlighted the selected fish passage alternative and called for the immediate forwarding of the design. United’s FY 2023-2024 budget had already been finalized and this accelerated schedule was not included.

❖ The supplemental appropriation would be funded from the Replacement, Capital Improvement and Environmental project reserves.

❖ Breakdown of \$2,100,000:


❖ GEI Consultants, Inc. design contract, \$1,999,810

❖ NHC design contract, \$90,000

❖ Staff time, special advisor time, \$10,190

2. Authorize the execution of a Contract for the Hardened Ramp 90% Design:

❖ Federal Court mandated completion date of June 10, 2024



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Water Supply & Regulatory and Environmental Compliance

Motion Item 3.1


Updated GEI Contract Fee:

60% Design Contract Amount:	\$1,752,670
90% Design Contract Amount:	\$1,999,810
Total Contract Fee to Date:	\$3,752,480

Updated NHC Contract Fee:

60% Design Contract Amount:	\$343,490
90% Design Contract Amount:	\$90,000
Total Contract Fee to Date:	\$433,490





# ENGINEERING DEPARTMENT

## Monthly Update - 2023 Accomplishments Recap

January 4, 2024

1



### 2023 Accomplishments Recap (CIP Projects)



2

2

# Santa Felicia Dam Safety Improvement Project

- ✓ 90% Design of new Outlet Works
- ✓ 60% Design of Spillway Improvements
- ✓ 60% Design of Environ. Mitigation
- ✓ Two BOC Meetings
- ✓ BV was retained to provide CM and Inspection Services for the Outlet Works
- ✓ Revised Draft BA to initiate formal ESA Section 7 consultation with NMFS
- ✓ Revised EA to initiate FERC NEPA Process
- ✓ Community Support



BOC Meeting No. 7

**Santa Felicia Dam Safety Improvement Project  
Spillway Improvements - 60% Design Phase**

**Board of Consultants  
Meeting No. 8**

UWCD Headquarters  
Oxnard, CA  
November 15-16, 2023



## Letters of Support to FERC



## SFD Emergency Action Plan



*Functional Exercise – February 2023*



*Dam Safety Hands-On Training – October 2023*



5

5



## Santa Felicia Dam End of Year Reporting to FERC

- ✓ Annual Security Compliance Certification (ASCC)
- ✓ SFD EAP Status Report
- ✓ SFD Dam Safety and Surveillance and Monitoring Report (DSSMR)
- ✓ Owner Dam Safety Plan and Schedule (ODSP)
  
- ✓ SFD EAP Call-Down Drill report to CalOES

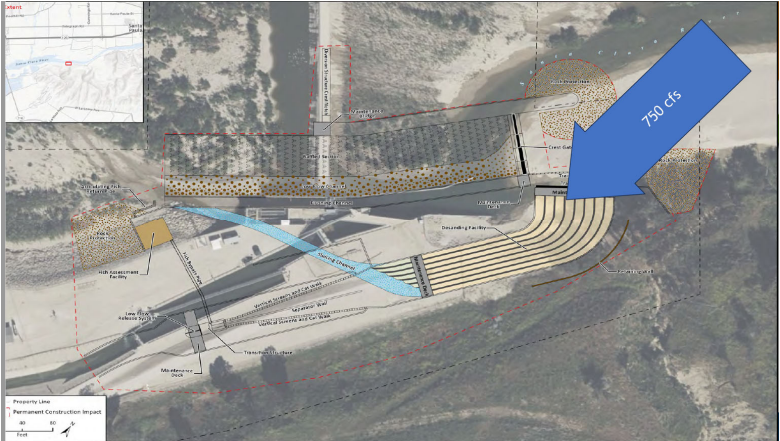


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### Freeman Diversion Expansion

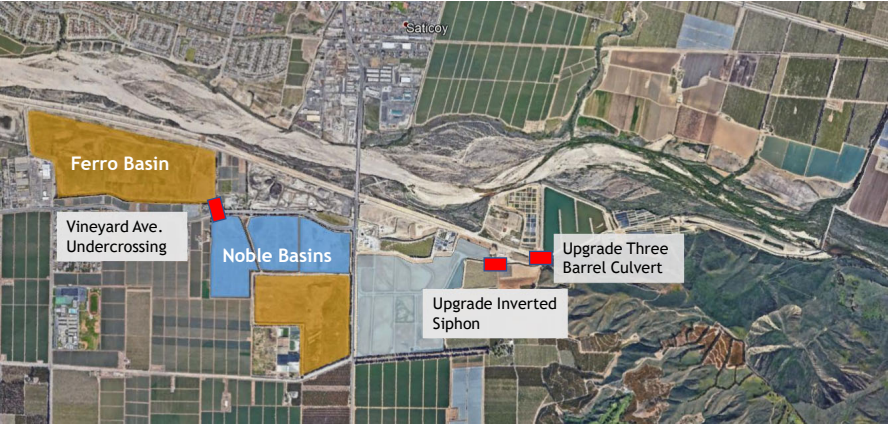


- ✓ Selected Fish Passage Alternative
- ✓ Advanced the 60% Design of Hardened Ramp




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### Freeman Conveyance System Upgrade



- ✓ Three Barrel Culvert – Completed 90% design upgrade, reinitiated the permit process with Ventura County Watershed Protection
- ✓ Inverted Siphon – Completed 100% Design and Released Bid Packet
- ✓ Vineyard Undercrossing – Completed Preliminary Design Report



8

## OHP Iron and Manganese Treatment Facility



March 2023



December 2023

- ✓ Substantial Completion of Construction Phase
- ✓ Successful 96-Hr Continuous Test with Iron and Manganese non-detect in Filtered Water



## Ribbon Cutting Ceremony

September 2023



March - District Open House Event



April - OLDCC Site Visit



July - Tour to City of Santa Paula



### Well Replacement Program OH Water Well No. 20





Drilling for New OH Well No. 20



Original OH Well No.5

11

### OH Well 14 Energy Efficiency Upgrades


Reduce Energy Demand at 3500 gpm supply to El Rio WTP.

- Discharge pipe replacement (12" to new 18")
- Rehabilitation of well, pump, and motor

✓ Consultant Selection



- Design Fee: \$219,610
- Design Completion: September 2024
- Bid Award and Construction: 12-18 months (by March 2026)







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### EBB Water


- ✓ EBB Water – Phase 1 was selected for \$8.4 million grant funding by SWRCB
- ✓ Phase 1 A License Agreement
- ✓ Letter of Request was submitted to the Navy
- ✓ Memorandum of Agreement (MOA)
- ✓ Design of Discharge Alternatives
- ✓ Design of Piping Alignment
- ✓ Design of new Monitoring Wells
- ✓ Project Description as Part of CEQA
- ✓ NEPA process initiated




March – Two-Day Permitting Charrette with the US Navy Staff and Counsel



April – OLDCC and United Site Tour, Greeting Capt. Kinnach III at Pt Mugu

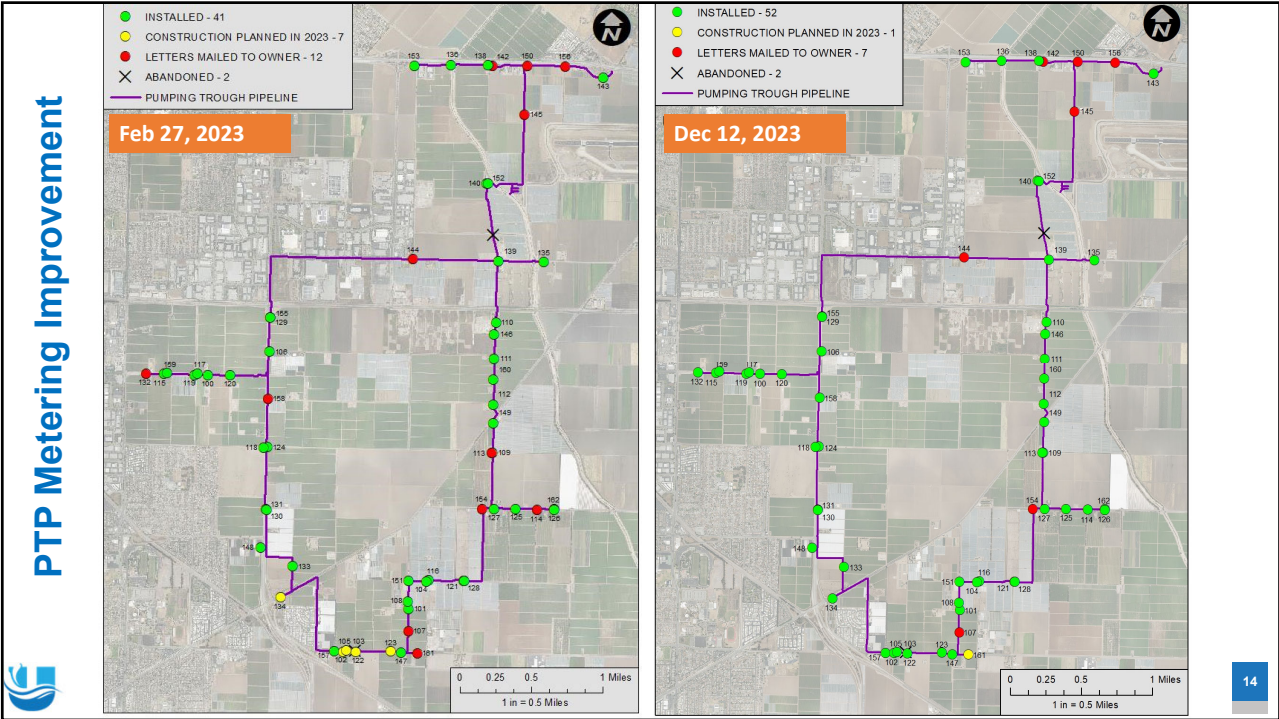


March Mauricio and Robert attended LAFCO Board Meeting



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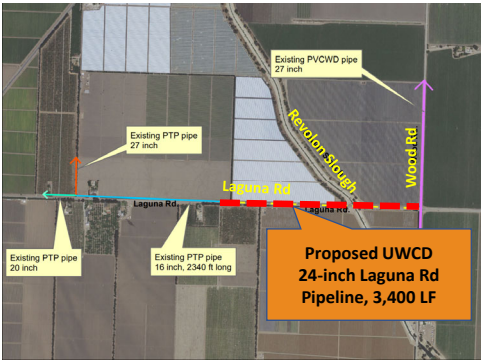


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### PTP Recycled Water Connection – Laguna Road Pipeline

- ✓ Developed draft Recycled Water Delivery Agreement with PVCWD
- ✓ Completed Preliminary Design Report



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### Condor Point Improvement - Swim Beach



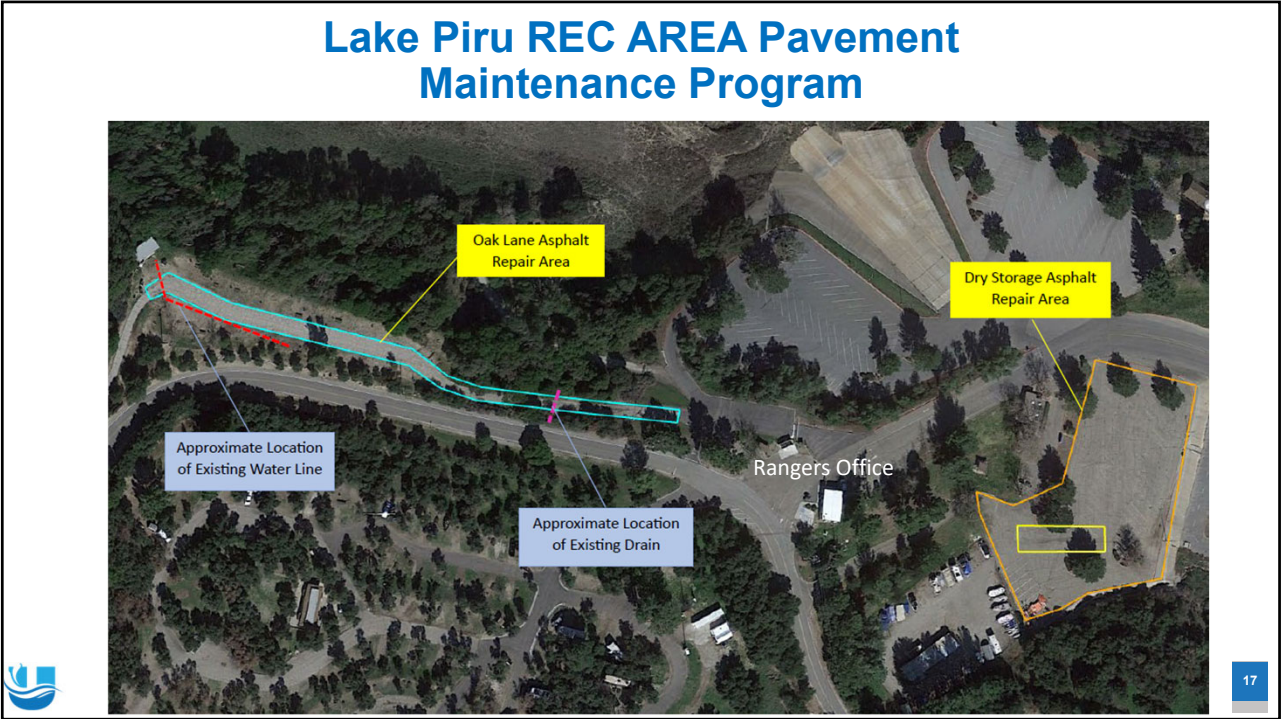
*Original Condor Point Swim Beach*

*Substantially Complete Plant on December 27, 2023*

16

16

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17



18



Key Presentations



2023 Oxnard-Ventura Post Business Opportunities Forum




2023 Water Sustainability Summit




2023 CalDesal Conference

19


Site Tours




North Pleasant Valley Groundwater Desalter - Camarillo



Newark Desalination Facility & Aquifer Reclamation Wells



Charles E. Meyer Desalination Plant – City of Santa Barbara



Perris II Desalter Tour of EMWD Desalination Complex

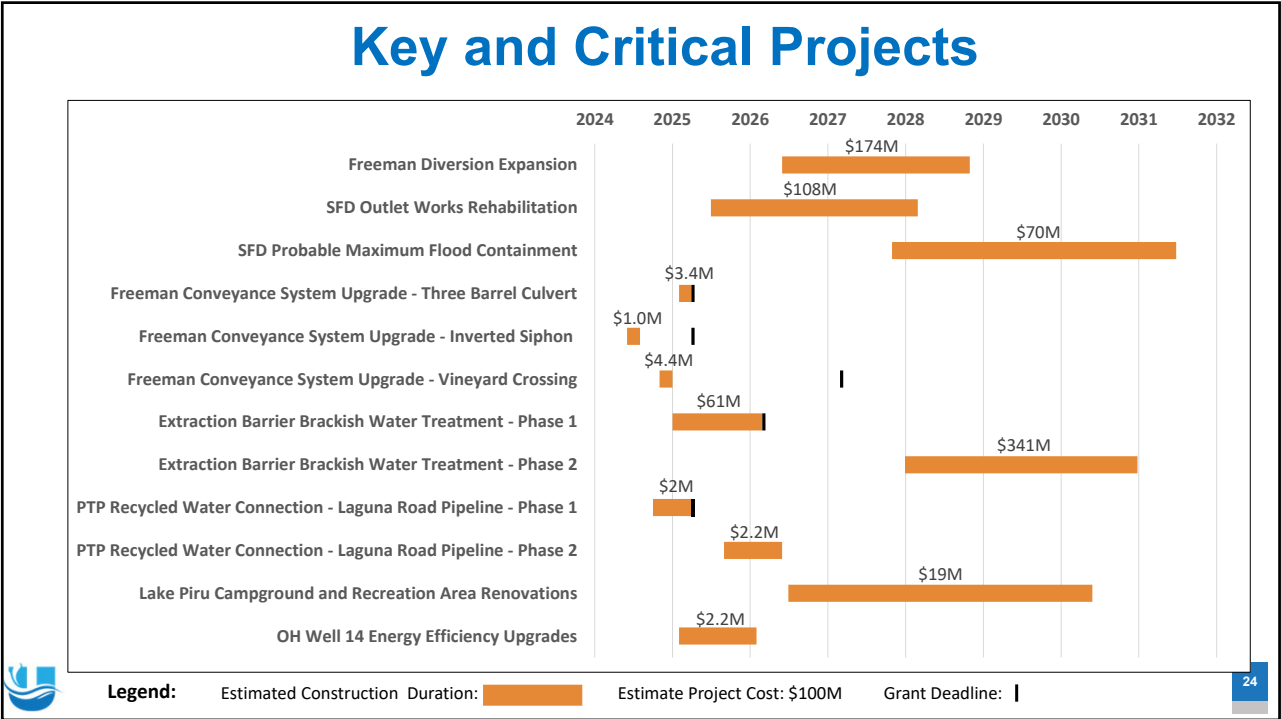
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Key and Critical Projects					
Progress and Schedule					
CIP No.	Project Name	Planning Progress	Design Progress	Estimated Construction Start	Estimated Construction Completion
8001	Freeman Diversion Expansion	<div></div>	<div></div>	Jun, 2026	Nov, 2028
8002	SFD Outlet Works Rehabilitation	<div></div>	<div></div>	Jul, 2025	Mar, 2028
8003	SFD Probable Maximum Flood Containment	<div></div>	<div></div>	Nov, 2027	Jul, 2031
8018a	Freeman Conveyance System Upgrade - Three Barrel Culvert	<div></div>	<div></div>	Feb, 2025	Mar, 2025
8018b	Freeman Conveyance System Upgrade - Inverted Siphon	<div></div>	<div></div>	Jun, 2024	Aug, 2024
8018c	Freeman Conveyance System Upgrade - Vineyard Crossing	<div></div>	<div></div>	Nov, 2024	Jan, 2025
8019a	Extraction Barrier Brackish Water Treatment - Phase 1	<div></div>	<div></div>	Jan, 2025	Feb, 2026
8019b	Extraction Barrier Brackish Water Treatment - Phase 2	<div></div>	<div></div>	Jan, 2028	Dec, 2030
8043a	PTP Recycled Water Connection - Laguna Road Pipeline - Phase 1	<div></div>	<div></div>	Oct, 2024	Mar, 2025
8043b	PTP Recycled Water Connection - Laguna Road Pipeline - Phase 2	<div></div>	<div></div>	Sep, 2025	Jun, 2026
8055	Lake Piru Campground and Recreation Area Renovations	<div></div>	<div></div>	Jul, 2026	Jun, 2030
8060	OH Well 14 Energy Efficiency Upgrades	<div></div>	<div></div>	Feb, 2025	Feb, 2026

Key and Critical Projects					
Cost and Funding					
CIP No.	Project Name	Total Estimated Cost	Spent To Date	Grant Funding	Grant Deadline
8001	Freeman Diversion Expansion	\$174M	\$13M		
8002	SFD Outlet Works Rehabilitation	\$108M	\$8M		
8003	SFD Probable Maximum Flood Containment	\$70M	\$5M		
8018a	Freeman Conveyance System Upgrade - Three Barrel Culvert	\$3.4M	\$0.1M	\$1.3M	Mar, 2025
8018b	Freeman Conveyance System Upgrade - Inverted Siphon	\$1.0M	\$0.1M	\$1.3M	Mar, 2025
8018c	Freeman Conveyance System Upgrade - Vineyard Crossing	\$4.4M	\$0.1M	\$1.0M	Mar, 2027
8019a	Extraction Barrier Brackish Water Treatment - Phase 1	\$61M	\$2M	\$8.4M	Feb, 2026
8019b	Extraction Barrier Brackish Water Treatment - Phase 2	\$341M	0		
8043a	PTP Recycled Water Connection - Laguna Road Pipeline - Phase 1	\$1.9M	\$0.2M	\$3.0M	Mar, 2025
8043b	PTP Recycled Water Connection - Laguna Road Pipeline - Phase 2	\$2.2M	\$0.0M		
8055	Lake Piru Campground and Recreation Area Renovations	\$19M	\$0.2M		
8060	OH Well 14 Energy Efficiency Upgrades	\$2.2M	0		









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2023

**SANTA FELICIA DAM AND LAKE PIRU RECREATION AREA**

- Increased State Water Imports: CEQA suspension & DWR FERC license variance
- January storms: secured permits for emergency work & supported FEMA process
- Kicked off final year of middle Piru Creek fish passage feasibility study
- Continued all other FERC compliance activities & met all annual reporting deadlines
- Submitted revised SFDSIP draft BA to FERC to initiate ESA Section 7 consultation with NMFS

**FREEMAN DIVERSION**

- Updated the MSHCP & EIR for hardened ramp fish passage project (due Feb 9)
- Coordinated sediment & habitat monitoring studies to support operations & MSHCP
- Reviewed & notified the agencies of 25 recorded upstream fish ladder detections
- Supported O&M in an unprecedented season of diversions & operations including 88 flushes

**DISTRICTWIDE SUPPORT**

- Prepared & filed six CEQA NOEs
- Led CEQA & NEPA coordination for the EBB project
- Expanded lower system quagga monitoring in response to water year needs
- Applied for multiple federal & state permits for operational needs at SFD & Freeman Diversion
- Participated in Grant Task Force

2



OPERATIONS AND MAINTENANCE  
DEPARTMENT UPDATE

January 4, 2023



1



South Fire – Freeman Diversion

12/9/23 through 12/12/23 – 2,715 Acres – United Water / Fire Department Teamwork



2





**Saticoy Facility**  
3 Barrel Brush Removal – J Pond Scraping – Can-Am Spraying Operations



3

3



**Santa Felicia Dam and Lake Piru**  
Cal OES / FEMA Marina Inspection – Condor Point Store Construction – Monthly Dam Inspection – Continuous Anchor Movement Due to Storm / Water Purchase Inflows



4

4



# El Rio Water Treatment Plant

Vault Installation For 42" OH Pipeline – SWRCB Tri-Annual Sanitary Survey of El Rio Treatment Infrastructure



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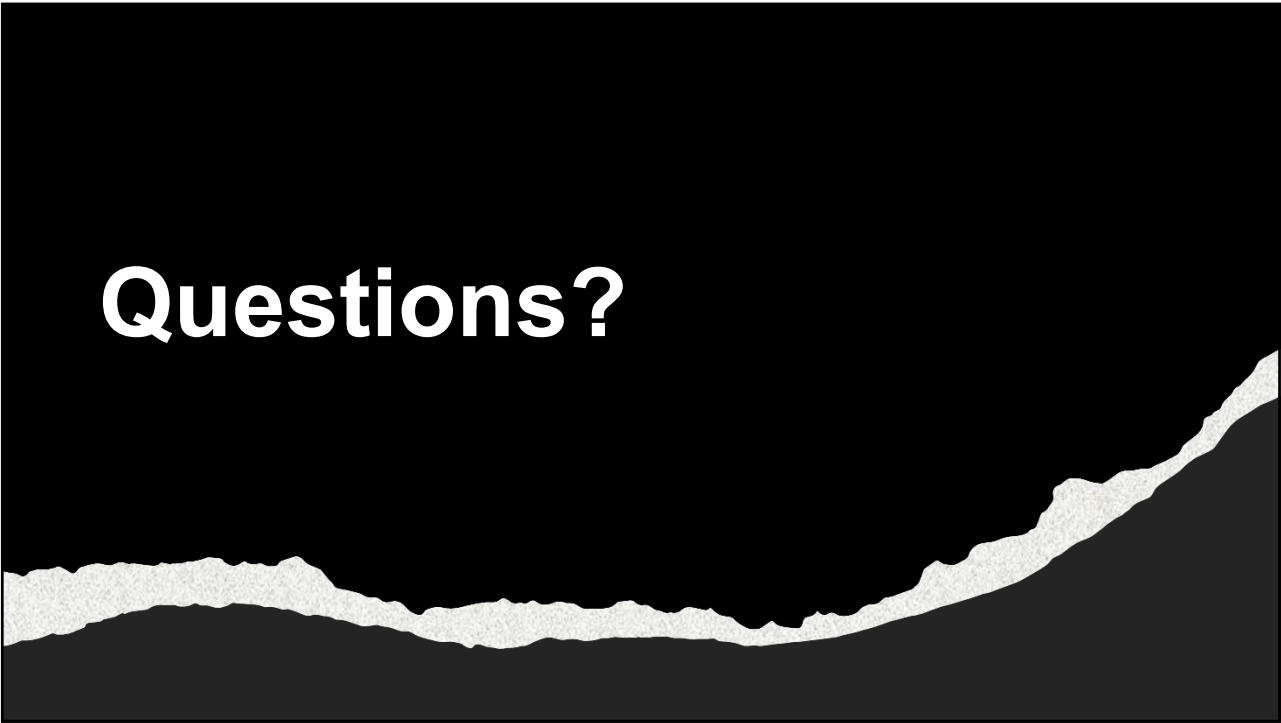
# OH System

In-House Discharge Piping Installation at New OH Well 20



6







### **Staff Report**

**To:** Engineering and Operations Committee Members

**Through:** Mauricio E. Guardado, Jr., General Manager

**From:** Maryam Bral, Chief Engineer  
Craig Morgan, Chief Operations Officer  
Nathan Summerville, Senior Engineer

**cc:** Brian Zahn, Chief Financial Officer

**Date:** January 23, 2024 (February 1, 2024, Committee Meeting)

**Agenda Item:** **3.1 Freeman Conveyance System Upgrade – Freeman to Ferro Recharge Basin – Inverted Siphon Replacement Project Construction Contract in the Amount of \$891,000**  
**Board Motion**

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#### **Staff Recommendation:**

The Committee will consider recommending approval of the motion item to the full Board that considers authorizing the General Manager to award a construction contract to the lowest responsible bidder, Granite Construction, in the amount of \$891,000 for the construction of the Inverted Siphon Replacement Project, a component of the Freeman Conveyance System Upgrade – Freeman to Ferro Recharge Basin Project.

#### **Background:**

The Inverted Siphon Replacement Project is a component of the Freeman Conveyance System Upgrade – Freeman to Ferro Recharge Basin Project. The concrete culvert structure adjacent to the Saticoy Yard was constructed around 1954 and is part of the Lower River System Main Supply Line. The existing structure consists of three 60-inch concrete pipes and is a hydraulic restriction in the system. The structure is also not capable of conveying larger flows under the potential future diversion of 750 cubic feet per second instantaneous flow. The proposed project consists of a pre-cast concrete arch culvert to replace the existing concrete structure. The project is substantially funded under the Sustainable Groundwater Management Grant Program with a completion deadline of March 31, 2025.

#### **Discussion:**

Public bidding for the Inverted Siphon Replacement Project was opened December 6, 2023, and closed January 11, 2024. The lowest responsible bid was provided by Granite Construction (Granite). A summary of the bid results is listed below.

**Agenda Item                      3.1 Freeman Conveyance System Upgrade – Freeman to Ferro Recharge Basin – Inverted Siphon Replacement Project Construction Contract in the Amount of \$891,000**

Granite	\$891,000
Taylor Jane Construction	\$912,978
Sam Hill & Sons Inc.	\$966,999
Toro Enterprises, Inc.	\$1,221,485
Union Engineering	\$1,398,333

Based on the information provided, staff have verified that Granite has satisfactory experience to perform the work.

Staff recommends approval of a construction contract with Granite for the Inverted Siphon Replacement Project. Construction will begin this summer and is expected to be completed over 90 calendar days.

**Mission Goal:**

Meets Mission-Related Goal B, System Reliability.

**Fiscal Impact:**

Sufficient funds to cover the proposed contract amount of \$891,000 are included in the Fiscal Year 2023/24 budget (Account No. 051-400-81020; Project 8018).



### **Staff Report**

**To:** Engineering and Operations Committee Members

**Through:** Mauricio E. Guardado Jr., General Manager

**From:** Maryam A. Bral, Chief Engineer

Robert J. Richardson, Principal Engineer  
Nathan Summerville, Senior Engineer

Adrian Quiroz, Engineer  
Kaili Taniguchi, Engineer

**Date:** January 26, 2024 (February 1, 2024, meeting)

**Agenda Item:** 4.1 Monthly Engineering Department Report  
**Information item**

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#### **Staff Recommendation:**

The Engineering and Operations Committee members will receive this summary report from the Engineering Department regarding its activities for the month of January 2024.

#### **Discussion:**

1. Santa Felicia Dam Safety Improvement Project

- Spillway Improvement Project
  - No updates to report.
- Outlet Works Improvement Project
  - Amendment No.1 to the Professional Consulting Services Agreement with GEI Consultants, Inc. (GEI) for the 100% Design Package and Bid Support Services was executed on January 16, 2024.
  - Staff scheduled a meeting with members of the Tri-Counties Building and Trades Council to discuss the upcoming construction on January 29, 2024.
- Design PFMA – 90% Outlet Works and 60% Spillway
  - Design PFMA Workshop - Staff prepared and submitted the Design Potential Failure Mode Analysis (PFMA) pre-meeting packet on January 2, 2024. The design PFMA workshop was conducted at District HQ from January 22 - 25,

#### 4.1 Monthly Engineering Department Report Information Item

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2024, with two virtual overflow days scheduled for February 2, 2024, and February 5, 2024 (See Figure 1). In attendance were District staff from the Engineering, Operations and Maintenance and Water Resources departments; the Federal Energy Regulatory Commission (FERC), the California Department of Water Resources Division of Safety of Dams; and subject matter experts from GEI Consultants, Inc. and Black and Veatch (BV). A Design PFMA Summary Report will be prepared by BV and submitted to the District for review in February 2024. Conducting a Design PFMA is required in accordance to FERC Engineering guidelines for the evaluation of hydropower projects, Chapter 17 – Potential Failure Mode Analysis (December 16, 2021). In general, *A PFMA is an exercise to identify all potential failure modes (PFMs) under normal, flood, earthquake, and other (ice, reservoir sedimentation, etc.) loading conditions, including all external loading conditions for water retaining and conveying structures, and to assess those potential failure modes that are significant enough to warrant continued awareness and attention to visual observation, monitoring, and remediation, as appropriate.*

- FERC License Amendment Application, NEPA Documentation and the Endangered Species Act Section 7 Consultation
  - Staff finalized the revised draft Biological Assessment (BA), revised draft Environmental Assessment (EA) and supplemental information of updates for the FERC license amendment application in coordination with Environmental Services Staff. The documents were e-filed with FERC on January 02, 2024. Please see the monthly Environmental Services Department staff report for additional updates.
- Loan and Grant Applications
  - Staff and Grant Task Force (GTF) responded to multiple Requests for Information (RFI) regarding the 2023 FEMA Flood Mitigation Assistant (FMA) grant sub-application. The revised sub-application was resubmitted to Cal OES on January 22, 2024.

#### 2. Condor Point Improvement Project

- MDJ Management, LLC. (MDJ), completed the Condor Point Swim Beach Project on December 28, 2023, including the newly graded swim beach (Figure 2) and the assembly and installation of new picnic tables for the Condor Point and Juan Fernandez picnic sites (Figures 3 and 4). Sand and gravel will be imported as needed per the US Army Corps of Engineers permit when the reservoir elevation is high enough for this site to serve as a swim beach for visitors. Documentation of completion was e-filed with FERC on January 18, 2024, well in advance of the May 02, 2024 deadline. This completed the Condor Point Improvement Project.

#### **4.1 Monthly Engineering Department Report Information Item**

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##### **3. Freeman Diversion Expansion**

- GEI delivered the Hardened Ramp 60% design plans to staff ahead of the court mandated deadline. Staff then delivered the plans to NMFS and CDFW.
- GEI delivered the updated Opinion of Probably Construction Cost with the estimated cost being \$195 Million.
- Staff continue to meet with the special advisors to provide data to be used in their sediment model.
- Staff continue to participate in meetings and discussions for the delivery of the Multi-Species Habitat Conservation Plan (MSHCP). Please see the monthly Environmental Services Department staff report for additional updates.

##### **4. Iron and Manganese Treatment Facility**

- Meetings:
  - Weekly coordination meetings between Staff and HDR.
- GSE has submitted approximately 386 out of a total of 411 submittal packages anticipated for the project (many remaining submittals relate to project close-out). HDR and KJ have provided responses on approximately 375 submittal packages including a requirement to comply with the Buy American Act (BAA).
- GSE has submitted approximately 148 RFIs to date. HDR, KJ and the District have been providing responses and two RFIs (Nos. 144 and 148) are currently open.
- Forty-Two (42) Change Orders (COs) have been fully executed to date amounting to a net total of \$1,473,222.18. This represents approximately 15.8% of the original contract amount (\$9,342,900). Four (4) of these COs amounting to \$662,910.19 or 7.1% of the original contract amount are directly related to compliance with the BAA which is a federal grant requirement (the project was not originally bid with this requirement in place) and \$810,311.99 or 8.7% of the original contract amount is related to all other COs that have resulted in additions or modifications to the original scope of work.
- GSE's work in this reporting period included the following:
  - Punchlist Items
  - Air Scour System Troubleshooting and Filter Vessel CAV Modifications (see Figure 6)
- The facility startup and testing activities will continue for a period of three months to comply with the Division of Drinking Water (DDW) requirements for demonstrating full treatment efficacy.
- Quarterly Progress Reports were submitted related to the \$2.5 million Integrated Regional Water Management (IRWM) grant and \$4.23 million Defense Community Infrastructure Program (DCIP) grant.

##### **5. PTP Metering Improvement Project**

- Total number of meters installed: 52 of 60 or 87% complete (no change).
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#### **4.1 Monthly Engineering Department Report Information Item**

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- One (1) meter installation is planned in Feb 2024 (Turnout No. 161).
- Easement acquisition completion: 33 of 41 obtained or 80.5% complete.
- There are eight (8) pending utility easement deeds:
  - One (1) partially signed (Turnout No. 120)
  - Six (6) that are under advisement by the property owner's legal counsel (Turnout Nos. 107, 142, 144, 145, 150, 156)
  - One (1) that has been rejected by the property owner (Turnout No. 154)

#### **6. PTP Recycled Water Connection – Laguna Road Pipeline Project**

- On January 11, UWCD and PVCWD Staff met to discuss draft terms of a recycled water delivery agreement and wheeling rates.
- On January 16, Staff and MKN Associates met with the Ventura County Public Works Watershed Planning and Permits Division representative to discuss the proposed horizontal directional drill (HDD) crossing of Revolon Slough and the County requirements of the water course permit application. The County requested that the 60% design plans along with the permit application to be submitted to the County for review and comment. The 60% design plans are scheduled to be completed in April 2024.
- On January 26, Staff and MKN Associates met to discuss the draft Hydraulic Technical Memorandum related to the pump station design.
- Staff completed their review of the draft Initial Study Mitigation Negative Declaration (IS-MND) and submitted comments to Rincon Consultants. The draft IS-MND is expected to be issued for public review and comments in February.
- Staff completed the Sustainable Groundwater Management (SGM) Grant quarterly Progress report covering the work completed between October 1 and December 31, 2023.

#### **7. Rice Avenue Grade Separation Project and Impact on PTP**

- On October 12, United filed a motion opposing CalTrans Order of Possession filed against Pegh Investments, LLC (Pegh), and other private companies and public agencies including United in Ventura County. United holds easement deeds on the property owned by Pegh. Along with the Motion, United also proposed a Stipulation. The Stipulation asked CalTrans to take the Pegh Property subject to United's easement (i.e., UWCD's easement rights would be protected). During the Court Hearing on December 6, 2023, both United's Motion and Stipulation were signed. During the second Court Hearing on January 23, the Court granted CalTrans the Motion for Possession and acknowledged the Stipulation between United and CalTrans.

#### **8. State Water Project (SWP) Interconnection Pipeline Project**

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#### **4.1 Monthly Engineering Department Report Information Item**

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- The City is in the process of finalizing the 90% design documents for the State Water Project Interconnection pipeline and will be seeking Staff comments on the portion of the pipeline that crosses Noble Basin No. 3 (Noble). This portion of pipe will be equipped with two blow offs to allow flushed water discharge to Noble.

#### **9. Freeman Conveyance System Upgrade - Freeman to Ferro**

- The final Preliminary Design Report for the Vineyard Avenue Crossing was completed on January 18, 2024. A contract for final design with HDR Engineering, Inc for \$227,000 is in process. Authorization for a contract up to \$350,000 was approved by the Board under Motion Item 5.11 at the December 13, 2023 Board Meeting.
- United and Calleguas Municipal Water District (Calleguas) entered into the Proposition 1 Round 2 Integrated Regional Water Management Plan (IRWM Plan) subgrant agreement on January 24, 2024. The Department of Water Resources (DWR), the grant administrator, has entered into a grant agreement with Calleguas who submitted a grant application on behalf of the Watershed Coalition of Ventura County to DWR. Calleguas as the grant recipient administers six subgrant agreements, including the United-Calleguas Subgrant Agreement. IRWM Plan provides one-million-dollar grant funding to the Ferro and Rose Groundwater Recharge project (which is essentially the same as the Vineyard Avenue Crossing project) and United will match the state grant with a million dollar.
- Public Bidding closed on January 11, 2024, for the Inverted Siphon Replacement Project. Request for approval of the construction contract is part of the motion item reports for the month of February.
- The staff executed a professional services contract for \$18,000 with PAX Environmental, Inc. to prepare a cultural study of the Three Barrel Culvert Replacement Project location. The study is in support of the 408 application to the United States Army Corp of Engineers that is required due to the project's impact to the levee.

#### **10. Extraction Barrier and Brackish Water Treatment Project**

- Agreements:
    - New Monitoring Wells: A succeeding license agreement that covers access, maintenance, operation, and data collection for existing monitoring wells (22, A1, A-2, CM-1, CM-2, CM-1A, CM-6 and Q2) and construction of new monitoring wells (EM-1 through EM-5) is pending site approval by the Navy which is expected in late 2023.
    - On January 25 Staff received a fully executed succeeding license agreement for Phase 1A that allows ingress/egress for land surveying, geotechnical exploration and environmental surveying at NBVC Point Mugu with a term extension through February 20, 2025.
    - On January 25 Staff received endorsement letter from Naval Base Ventura County's (NBVC) Commanding Officer directed to the Commanding Officer of
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#### **4.1 Monthly Engineering Department Report Information Item**

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Navy Region Southwest (CNRSW) for an outgrant easement for the Phase 1 project. This will initiate the CNRSW Real Estate acquisition process.

- Grants:
  - The District is currently working with the State Water Resources Control Board (SWRCB) Division of Financial Assistance (DFA) staff in development of a grant agreement for the \$8,449,062 Groundwater Grant Program (GWGP) grant that was approved on March 6, 2023, for the Phase 1 project. Execution of the grant agreement is anticipated by February 2024.
- Meetings:
  - Held regular progress meetings with District staff, Navy staff, Phase 1 project design team (KJ) and environmental documentation and permitting team (ESA Consultants).
  - On January 17 Water Resources Staff met with FCGMA staff as an information exchange and discussed a potential path forward on obtaining their support for operation of planned extraction wells.
- Design:
  - On January 10 Kennedy/Jenks Consultants (K/J) submitted the Well Site Suitability TM which is currently under review by District Staff.
- CEQA/NEPA/Permits:
  - Please see the Monthly Environmental Services Department Report for updates on the Project's environmental compliance and permitting process.
- Geotech/Hydrogeology:
  - On January 9, a Professional Services Agreement in the not-to-exceed amount of \$249,047 with Earth Systems Pacific was executed. Earth Systems will be providing geotechnical services at NBVC Point Mugu in support of the design for the Phase 1 project. Fieldwork is planned for March 2024.
- Land Surveying:
  - On January 25, Staff received proposals for land surveying services at NBVC Point Mugu in support of the design for the Phase 1 project. Staff anticipates evaluation and selection in February 2024 with work proceeding in March 2024.

#### **11. Asset Management/ CMMS System**

- The District executed a Small Utility Agreement with ESRI for GIS software, most notably unlimited access to ArcDesktop Advanced, 50 named users in ArcGIS Online, and ArcGIS Enterprise. The Small Utility Agreement is the first step to developing a formal asset registry, a key component of an Asset Management Program. The tools available under the agreement will also be immediately useful
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#### **4.1 Monthly Engineering Department Report Information Item**

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to District staff for regular activities. The annual fee is \$28,400 plus sales tax, which was budgeted for in the current fiscal year under CIP 8041.

##### **12. OH Water Well No.20**

- District O&M Staff completed the discharge piping for Well No.20 in late December 2023 (Figure 5). It is anticipated that General Pump will install the motor in February 2024.

##### **13. OH Well 14 Energy Efficiency Upgrade**

- The District executed a contract with MNS Engineers, Inc. for engineering services to replace the existing 12-inch well discharge pipe with an 18-inch well discharge pipe. The contract amount is \$219,610 and includes preliminary design, final design, survey, and geotechnical. The project kickoff meeting was held January 12, 2024.

##### **14. Other Topics, Meetings and Training**

- None to report this period.



**Figure 1 – SFD SIP Design PFMA Workshop**



**Figure 2 – Newly Graded Condor Point Swim Beach**



**Figure 3 – New Picnic Tables at Condor Point Picnic Sites**



#### 4.1 Monthly Engineering Department Report Information Item

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**Figure 4 – New Picnic Tables at Juan Fernandez Picnic Sites**



**Figure 5 – New Discharge Piping at OH Well No.20**



**Figure 6 – Installed 3” Electrically Actuated Valves at Filter Vessel No. 2**



### **Staff Report**

**To:** Engineering and Operations Committee Members

**Through:** Mauricio E. Guardado, Jr., General Manager  
Anthony A. Emmert, Assistant General Manager

**cc:** Dr. Maryam Bral, Chief Engineer

**From:** Marissa Caringella, Environmental Services Manager

**Date:** January 24, 2024 (February 1, 2024, meeting)

**Agenda Item:** 4.2 Monthly Environmental Services Department Report  
**Information Item**

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### **Staff Recommendation:**

The Engineering and Operations Committee members will receive this summary report from the Environmental Services Department regarding its activities for the month of January 2024.

### **Discussion:**

1. Santa Felicia Project Operations and Federal Energy Regulatory Commission (FERC) License Support

- Santa Felicia Dam Safety Improvement Project (SFDSIP)

On January 2, 2024, United submitted an environmental consultation package to FERC to inform consultation under Section 7 of the Endangered Species Act with the National Marine Fisheries Service (NMFS) and National Environmental Policy Act for the SFDSIP. The package included a revised draft Biological Assessment, revised draft Environmental Assessment, and supplemental information for United's license amendment application.

- Vegetation and Noxious Weed Management Plan

On January 16, 2024, Channel Islands Restoration continued treatment of tamarisk (*Tamarix ramosissima*) plants at the Santa Felicia Dam and Lake Piru Recreation Area in accordance with the FERC Noxious Weed and Vegetation Management Plan. An annual report will be submitted to FERC and the Los Padres National Forest on or before March 15, 2024.

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## 4.2 Monthly Environmental Services Department Report Information Item

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- Santa Felicia Fish Passage Pre-Implementation Studies

Trapping activities in middle Piru Creek continued in late December 2023 and January 2024. In early January, Cramer Fish Sciences staff, with support from Environmental Services staff (ES), completed repairs to the rotary screw trap (RST), successfully deployed the RST, and operated the RST for several days before flows in middle Piru Creek receded. Trap operations (both RST and fyke) are planned to continue through May 2024 as flows allow.

- Water Release Plan and Water Release and Ramping Rate Implementation Plan

Under the Water Release Plan and FERC license for the Santa Felicia Project, United Water Conservation District (United) is required to make certain water releases from the Santa Felicia Dam for steelhead habitat and migration when specific triggers are met. Triggers for habitat water releases are based on cumulative rainfall within the water year. United evaluates whether the trigger is met on the first day of each month, between January and June. The table below presents trigger criteria for each month and minimum required releases if those triggers are met. Each month that the trigger is not met, the minimum required habitat water release is seven (7) cubic feet per second (cfs). The trigger is not expected to be met by February 1, 2024. The minimum required habitat water release for the month of February is expected to be 7 cfs.

Habitat water release trigger date	Trigger criteria (total cumulative precipitation on trigger date)	Minimum required water release if trigger is met	2024 Measured cumulative precipitation	Actual minimum required habitat water release for month
<b>January 1</b>	4.80 inches	15 cfs	4.64 inches	7 cfs
<b>February 1</b>	8.10 inches	20 cfs	TBD	7 cfs (expected)
<b>March 1</b>	12.00 inches	20 cfs	TBD	TBD
<b>April 1</b>	14.90 inches	20 cfs	TBD	TBD
<b>May 1</b>	16.30 inches	10 cfs	TBD	TBD
<b>June 1</b>	17.50 inches	9 cfs*	TBD	TBD

\*If triggered, the minimum required water release will remain at nine (9) cfs through October 1, at which time, minimum required water release will be seven (7) cfs through January 1 of next calendar year.



## 4.2 Monthly Environmental Services Department Report Information Item

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- United Water Conservation District v. FERC, Court Case in Abeyance

On September 29, 2010, the U.S. Court of Appeals granted United a motion to hold the *United Water Conservation District v. FERC* court case in abeyance and directed United to file status reports every 60 days. United filed the case to challenge the biological opinion issued by NMFS on FERC's issuance of a license for the Santa Felicia Project. On January 9, 2024, the eightieth status update was filed with the U.S. Court of Appeals for District of Columbia Circuit.

- Annual Reporting and Notifications

**Santa Felicia Whitewater Boating Access Plan:** On January 15, 2024, ES filed the 2023 Whitewater Boating Annual Report with FERC. In 2023, there were no requests for whitewater boating on lower Piru Creek, and no comments were received on the annual report from whitewater boating stakeholders.

**Santa Felicia Recreation Trail Plan:** On January 15, 2024, ES filed the 2023 Santa Felicia Recreation Trail Plan Annual Monitoring Report with FERC. The Pothole Trailhead Parking Area had no major maintenance and no significant vandalism in 2023. There were multiple safety closures of Piru Canyon Road throughout 2023, however, there was still high demand and use of the Pothole Trailhead facilities during open periods with more passes issued in 2023 (253 passes) than in 2022 (220 passes).

**Notification of Intent (NOI):** On January 11, 2024, ES submitted an NOI to the California Department of Fish and Wildlife (CDFW) to perform routine maintenance activities at the Lake Piru Recreation Area (LPRA) and the Santa Felicia Project on an as-needed basis this year.

**404 Permit Reporting:** On January 30, 2024, ES submitted an annual report to the U.S. Army Corps of Engineers (USACE) for routine maintenance activities conducted at LPRA and the Santa Felicia Project for activities conducted in 2023 as required under Section 404 Clean Water Act (CWA) permit No. SPL-2022-00440.

## 2. Freeman Diversion Operations

During the month of January, ES supported Freeman Diversion operations and maintenance activities by conducting surveys of dewatered areas and providing on-site biological monitoring.

On January 16, 2024, ES received final approvals from CDFW and U.S. Fish and Wildlife Service (USFWS) for the placement of a brown-headed cowbird trap near the Freeman Diversion. The trap will be operated from April through June 2024, which is the second year of a three-year mitigation program for the 2022 Freeman Diversion Sediment Management Project.

## 4.2 Monthly Environmental Services Department Report Information Item

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On January 22, 2024, the Sespe trigger was met and United initiated bypass flows. The fish ladder was open by 7am January 23, 2024, and all surveillance cameras were on.

### 3. Freeman Diversion Multiple Species Habitat Conservation Plan (MSHCP)

On January 9, 2024, United held a pre-application meeting with the State Water Resources Control Board and USACE in accordance with CWA Section 401 water quality certification requirements.

On January 17, 2024, United participated in a status hearing in the *Wishtoyo et al. v. United* case, which resulted in a 60-day extension to the July 2023 stipulation deadlines, including the deadlines for the MSHCP, Environmental Impact Report, and regulatory applications. United, along with NMFS and CDFW, will engage in meetings with special master Judge Smith during the extension period to discuss outstanding issues related to the overall proposed project.

### 4. Quagga Mussel Management

Throughout the month of January, ES continued conducting all quagga mussel monitoring activities on Lake Piru, lower Piru Creek, and the spillway pool in accordance with the Quagga Mussel Monitoring and Control Plan. ES also continued quagga mussel veliger (larva) sampling in United's lower system. United staff continues to meet regularly with Pleasant Valley County Water District.

### 5. Grant Efforts

On January 23, 2024, United submitted an application to the U.S. Bureau of Reclamation WaterSMART Aquatic Ecosystem Restoration Projects grant program for funding for the hardened ramp fish passage facility. After significant outreach, United received letters of support for this grant funding from NMFS, CDFW, Wishtoyo Foundation, Center for Biological Diversity, The Nature Conservancy, CalTrout, Fox Canyon GMA, U.S. Senator Laphonza Butler, California Senator Monique Limon, California Assemblymember Steve Bennett, City of Ventura, Port Hueneme Water Agency, Pleasant Valley County Water District, Southland Sod, and CoLAB.

### 6. Miscellaneous

- On January 2, 2024, ES completed a field assessment of the Noble and Ferro Basins to support the California Environmental Quality Act requirements for the Vineyard Crossing Project.
- On January 11, 2024, ES staff attended the American Public Works Association seminar regarding field data collection application for GIS.

## 4.2 Monthly Environmental Services Department Report Information Item

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- On January 18, 2024, ES attended the AWA WaterWise seminar regarding seasonal weather predictions for 2024.

**Staff Report**

**To:** Engineering and Operations Committee Members

**Through:** Mauricio E. Guardado, Jr., General Manager

**From:** Craig Morgan, Chief Operations Officer  
Randy Castañeda, Operations Supervisor — Water Treatment  
J.D. Smallwood, Operations Supervisor — Water Distribution

**Date:** January 24, 2024 (February 1, 2024, meeting)

**Agenda Item:** 4.3 Monthly Operations and Maintenance Department Report  
**Information Item**

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**Staff Recommendation:**

The Engineering and Operations Committee members will receive this summary report from the Operations and Maintenance department regarding its activities for the month of January 2024.

**1. Water Releases, Diversions**

- Lake Piru rose 4.69 feet in January. Levels peaked at 46,079 acre-feet (AF) of storage but are currently decreasing as the district continues its water conservation releases from Santa Felicia Dam.
- 13,788 AF of water was diverted by the Freeman Diversion facility in January.
- 11,248 AF of water was delivered to the Saticoy recharge basins in January (metered plus unmetered, including Noble and Rose Basins).
- 5,550 AF of surface water was delivered to the El Rio recharge basins in January.
- 306 AF of surface water was delivered to the PTP system in January.
- 0 AF of surface water was delivered to C customers in January.
- 316 AF of surface water was delivered to Pleasant Valley County Water District in January.

**2. Major Facilities Update**

- **Santa Felicia Dam**
    - On January 1, 2024, the lake level was 1016.34 and reached a peak of 1021.03 on December 31st, 2023.
    - Conservation and migration releases from the Santa Felicia Dam (SFD) varied due to Freeman water harvesting activities and rainfall during the month of January, at a release rate of 7-295 cubic feet per second (cfs).
    - Pest prevention screens installed on SFD's Spillway subdrains.
    - SFD monthly inspection has been successfully completed.
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**Agenda Item: 4.3 Monthly Operations and Maintenance Department Report**  
**Information Item**

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- Saticoy staff assisting with SFD activities and inspections as part of our cross-training program.
- Siren test held and completed on Friday, January 5<sup>th</sup>.

- **Freeman Diversion, Saticoy, and El Rio Recharge Facilities**

- Diversion rates at the Freeman Diversion averaged 225 cfs for the month of January.
- District staff operated the Freeman Diversion throughout the month of January, harvesting increased Santa Clara River flows due to storm events, accommodating fish ladder by-pass flows, recharging basins, and delivering surface water to El Rio, PTP and PV pipelines.
- Staff performed various heavy equipment operations in preparation for storm events which included scraping of pond O, sediment removal and grading of roadways.
- Static water levels (distance of water from the well pad to the water table):

	2024	2023	2022
Saticoy	28'	63'	106'
El Rio	71'	130'	131'
PTP	80'-111'	100-119'	100-139'

- **Oxnard-Hueneme (OH) Delivery System**

- Staff monitored contractors as they replaced air vacuum valves and installed electrical conduit to improve backwash process at Fe/Mn Plant.
- EL Rio operators sent out RFPs to prospective contractors regarding upcoming projects for OH and PTP systems.
- Staff reinforced drain outlet at EL Rio Pond 8 and began to install new catch basin and drain piping at Pond 9.
- Staff assisted contractor with annual flow test verifications for miscellaneous OH turnout meters.
- EL Rio operators performed multiple percolation tests on EL Rio ponds to determine which ones will be scraped in upcoming months.
- Completed quarterly and annual NPDES reports which are required by Los Angeles Regional Water Quality Control Board to maintain our current discharge permits.
- Staff replaced non-operational air vacuum valves on OH well field north manifold.

- **Pleasant Valley County Water District (PVCWD)**

- PVCWD received United's surface water supply, surface supply from Conejo Creek Project and received highly treated recycled water from the City of Oxnard's Advanced Water Purification Facility (AWPF).



**Agenda Item: 4.3    Monthly Operations and Maintenance Department Report**  
**Information Item**

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- 12% sodium hypochlorite injection continues at Saticoy's Moss Screen facilities for quagga mussel control.
- Staff performed additional weed abatement at PV Reservoir after major brush clearing was completed last month.
- **Pumping Trough Pipeline (PTP)**
  - During the month of January, the PTP system demand was met primarily with surface water and supplemented with PTP wells.
  - Staff upgraded PTP Turnout meter #161 with Endress Hauser Electromagnetic meter.
  - Staff performed annual PM work on 6" pressure valves at PTP Reservoir.
  - Staff assisted QUINN CO. rectify alarm issues for PTP Well 5 emergency generator.
  - Staff researched possible locations for installing Quagga mussel inspection plate at PTP Reservoir.
- **Control Systems**
  - Control Systems staff began preparations to install new flow meter at Freeman Diversion Auxiliary Gate.
  - Staff replaced faulty level transducer at OH Well 19.
  - Staff has started to develop program to have remote capability of verifying accuracy for PTP and OH well flow meters
  - Staff programed and commissioned an Endress Hauser Electromagnetic flow meter at Turnout #161 off Laguna Road.
  - Staff performed troubleshooting at Saticoy Moss Screen that revealed motor for trash pump will need to be replaced in the near future.
  - Staff worked on EL Rio SCADA modifications for OH well energy efficiency program.
- **Lake Piru Water System**
  - All chlorine residuals and turbidity readings for the drinking water system were within proper ranges for the month of January.
  - Monthly pH, turbidity and coliform samples were obtained for Lake Piru, as part of the Long Term 2 Enhanced Surface Water Treatment Rule compliance monitoring.
  - Basic maintenance and inspections are ongoing and continuing.

**3. Operations and Maintenance Projects Update**

- EL Rio staff began training two new operators on OH and PTP operations.
  - Staff completed OSHA required HazWoper 40-hour training and SCBA fit-testing.
  - EL Rio operators, along with UWCD engineering staff, attended meeting with County of Ventura cross-connection specialist to discuss new regulations on backflow device testing and recording.
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**Agenda Item: 4.3    Monthly Operations and Maintenance Department Report**  
**Information Item**

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- Staff continued relocating items from current EL Rio break room into temporary storage containers.
- Staff assisted with upgrades by Dial Security, to alarm system for EL Rio buildings.
- Staff participated in a meeting with MNS construction management firm to discuss possible locations for new 18" pipeline that will be part of the OH Well 14 energy efficiency upgrade.
- Saticoy and El Rio staff unified to tackle and complete our herbicide application efforts at PV Reservoir.
- Saticoy pond "O" scraping efforts at 90% completion.

**4. Other Operations and Maintenance Activities**

- Staff continued oversight of the chemical injection process at the Moss screen for quagga control.
- Monthly bacteria samples were obtained for the PTP system.
- Monthly meter readings were obtained for OH, PTP and PV pipelines.
- Staff completed and electronically transmitted the monthly OH Surface Water Treatment Rule report to the State Water Resources Control Board Division of Drinking Water.
- Static water levels were obtained for all El Rio, Saticoy, and PTP wells.
- Weed abatement continued throughout the district.

**5. Safety and Training**

- The online Target Safety assignment for November was "Water Industry Industrial Ergonomics."
- Staff deployed new safety and security signs as part of the Santa Felicia Dam Public Safety Plan assessment.
- Tailgate safety meetings were conducted at all individual O&M field locations and the topic included refresher training on equipment used at the various O&M locations; specifically, tailgate safety meetings were conducted prior to every commencement of maintenance activities at the Freeman Diversion.

**Attachment:** Operations Log for January.