



Board of Directors  
Sheldon G. Berger, President  
Lynn E. Maulhardt, Vice President  
Catherine P. Keeling, Secretary/Treasurer  
Keith Ford  
Mohammed A. Hasan  
Steve Huber  
Gordon Kimball

General Manager  
Mauricio E. Guardado, Jr.

Legal Counsel  
David D. Boyer

**AGENDA**  
**ENGINEERING and OPERATIONS COMMITTEE MEETING**

**Thursday, November 7, 2024, at 9:30 a.m.**  
**UWCD Headquarters, First Floor, Board Room**  
**1701 N. Lombard Street, Oxnard, CA 93030**

**OPEN SESSION - ROLL CALL**

**1. Public Comment**  
**Information Item**

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 October 3, 2024, Engineering and Operations Committee meeting minutes.

**3. November 13, 2024, Board Meeting Motion Agenda Items**

Review, discuss, and make a recommendation on the following agenda items for approval at the November 13, 2024, Board meeting:

**3.1 Resolution Authorizing a Funding Agreement with the U.S. Bureau of Reclamation for the Freeman Diversion Rehabilitation Project (CIP 8001)**

(Environmental Services Department, Marissa Caringella)

Recommend approval of the Resolution authorizing and designating United Water Conservation District's General Manager, Mauricio Guardado, to enter into a funding agreement with the United States Department of Interior, Bureau of Reclamation, and to accept and expend \$20 million in federal funds under the WaterSMART Aquatic Ecosystem Restoration Projects grant program for the Freeman Diversion Fish Passage Rehabilitation Project.

**3.2 Authorize Amendment No. 2 to the Professional Consulting Services Agreement with GEI Consultants, Inc. for the Final Design of the Santa Felicia Dam Outlet Works Improvement Project (CIP 8002)**

(Engineering Department, Maryam Bral)

Authorize the General Manager to execute Amendment No. 2 with GEI Consultants, Inc. in the amount of \$1,075,060 for the Final Design of the Santa Felicia Dam Outlet Works Improvement Project (CIP 8002)

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

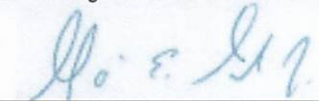
Receive and review the monthly reports from the Engineering, Environmental Services, and Operations and Maintenance Departments as well as receive a verbal presentation of its highlights.

- 4.1 **Engineering Department Update** (Maryam Bral)
- 4.2 **Environmental Services Department Update** (Marissa Caringella)
- 4.3 **Operations and Maintenance Department Update** (Craig Morgan)

5. **Future Agenda Items**

**ADJOURNMENT**

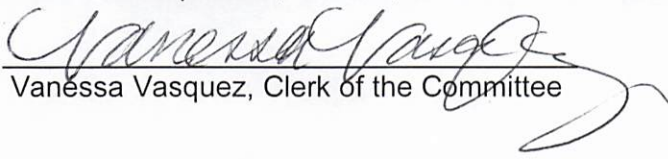
*The Americans with Disabilities Act provides that no qualified individual with a disability shall be excluded from participation in, or denied the benefits of, the District's services, programs or activities because of any disability. If you need special assistance to participate in this meeting, or 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

This agenda was posted Friday, November 1, 2024, at 11:00 a.m. at the United Water Conservation District Headquarters, Oxnard, CA and [www.unitedwater.org](http://www.unitedwater.org).

  
Vanessa Vasquez, Clerk of the Committee

**MINUTES  
ENGINEERING AND OPERATIONS COMMITTEE MEETING**

**Thursday, October 3, 2024, at 9:30 a.m.  
UWCD Headquarters, First Floor, Board Room  
1701 N. Lombard Street, Oxnard, CA 93030**

**OPEN SESSION**

The meeting was called to order at 9:30 a.m.

**Committee Members Roll Call**

All Committee members were present (Huber, Maulhardt, and Keeling).

The Clerk of the Committee announced the title change to Agenda Item 3.4 deleting Pumping Through Pipeline (PTP).

**1. Public Comment**

No public speakers.

**2. Approval of Minutes**

**Motion**

Action: M/S/C (Keeling, Huber) to approve the July 3, 2024, minutes.

Vote: Ayes: Huber, Keeling, and Maulhardt; Noes: None; Absent: None

**3. October 9, 2024, UWCD Board of Directors Meeting Agenda Items**

**3.1 Resolution Adopting the California Environmental Quality Act Initial Study-Mitigated Negative Declaration and issuance of the Notice of Determination for the Groundwater Recharge Capacity Expansion Project – Ferro Recharge (CIP 8018)**

**Motion**

Director Huber suggested staff internally discuss notifications to residents within the vicinity of the Groundwater Recharge Capacity Expansion Project – Ferro Recharge about upcoming construction.

Action: M/S/C (Keeling, Maulhardt) Recommend to the full Board of Directors under Consent Calendar, to adopt Resolution, a resolution approving and adopting the California Environmental Quality Act Initial Study-Mitigated Negative Declaration and issuance of the Notice of Determination for the Groundwater Recharge Capacity Expansion Project – Ferro Recharge (CIP 8018)

Vote: Ayes: Keeling, Maulhardt, and Huber; Noes: None; Absent: None



**3.2 Resolution Adopting the Revised Owner's Dam Safety Program and Overarching Dam Safety Program Policy dated October 2024 (CIP 8002-8003)  
Motion**

Director Huber requested a short recess to review the confidential documents presented to the Committee members at the start of the meeting or to postpone this item for a future Board meeting.

Action: M/S/C (Huber, Keeling) Recommend to the full Board of Director's to adopt the Revised Owner's Dam Safety Program and Overarching Dam Safety Program Policy dated October 2024 (CIP 8002-8003).

Vote: Ayes: Huber, Keeling, and Maulhardt; Noes: None; Absent: None

**3.3 Authorize the Execution of an Amendment to the Professional Services Agreement with Cramer Fish Sciences for Final Analyses and Deliverables Associated with the Santa Felicia Dam Fish Passage Program Pre-Implementation Study Plan in the Amount of \$149,687  
Motion**

Committee members requested staff re-evaluate the approval process for contracts that can potentially fall within the General Manager's approval authority to save staff time.

Action: M/S/C (Keeling, Huber) Recommend approval of the motion item to the full Board authorizing the General Manager to execute an amendment to the professional consulting services agreement with Cramer Fish Sciences in the amount of \$149,687 to develop final project analyses and deliverables associated with the Santa Felicia Dam Fish Passage Program Pre-Implementation Study Plan.

Vote: Ayes: Keeling, Huber, and Maulhardt; Noes: None; Absent: None

**3.4 Recycled Water Connection – Laguna Road Pipeline Project Construction Contract in the Amount of \$5,092,286 (CIP 8043)  
Motion**

Action: M/S/C (Huber, Keeling) Recommend approval of the motion item to the full Board authorizing the General Manager to execute a construction contract with Toro Enterprises, Inc., in the amount of \$5,092,286 for the construction of the Recycled Water Connection – Laguna Road Pipeline Project (CIP 8043). Authorization for the General Manager to execute a construction contract is contingent upon the Project receiving additional grant funding in the amount of \$2.12 million to cover the budget shortfall.

Vote: Ayes: Huber, Keeling, and Maulhardt; Noes: None; Absent: None



**4. Monthly Department Updates**  
**Information Items**

**4.1 Engineering Department Update**  
**Information Item**

Received and reviewed the Engineering Department monthly update (presentation attached).

Chair Maulhardt would like the wording changed from Butterfly Redundancy Project to Butterfly Control Redundancy Project on slide forty, *Dam Safety Program Needs* as the title can be misleading.

**4.2 Environmental Services Department Update**  
**Information Item**

Received the Environmental Services Department monthly update (presentation attached).

**4.3 Operations and Maintenance Department Update**  
**Information Item**

Received the Operations and Maintenance Department monthly update (presentation attached).

**5. Future Agenda Items**

No future agenda items offered.


**ADJOURNMENT**

The meeting was adjourned at 11:24 a.m.

I certify that the above is a true and correct copy of the minutes of the UWCD Engineering and Operations Committee Meeting of October 3, 2024.


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

**Water Supply and System Reliability**



**Motion Item 3.1  
RESOLUTION**


Approving the CEQA Initial Study-Mitigated Negative Declaration and Issuance of the Notice of Determination for the Groundwater Recharge Capacity Expansion Project – Ferro Recharge



03 Oct 2024


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**Water Supply and System Reliability**



**Project Description & Purpose**

- Construct an undercrossing beneath Vineyard Avenue to connect the Noble Basin to the Ferro Basin
- Purpose: recharge groundwater during wet conditions when additional flows are available
- Project would not modify United’s existing water right and would not involve diverting additional water from the Santa Clara River beyond existing permitted operations



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**Water Supply and System Reliability**

## CEQA Findings


**Potentially significant impacts identified in the CEQA analysis:**

- Air Quality
- Biological Resources
- Cultural Resources
- Geology/ Soils
- Noise

} All mitigated to less than significant impact

**Mitigation Measures:**

- Pre-Project: NOx emission reduction and nesting bird surveys
- During Project: Nesting bird avoidance (if necessary); unanticipated discovery (cultural resources and paleontological resources); and nighttime construction noise reduction measures



United Water Conservation District


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**Water Supply and System Reliability**

**Request to the Engineering and Operations Committee**

Recommend that this item go to the Board to consider adoption of a Resolution to approve the CEQA findings and issue a Notice of Determination

 *Questions*



United Water Conservation District

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**Regulatory Compliance**

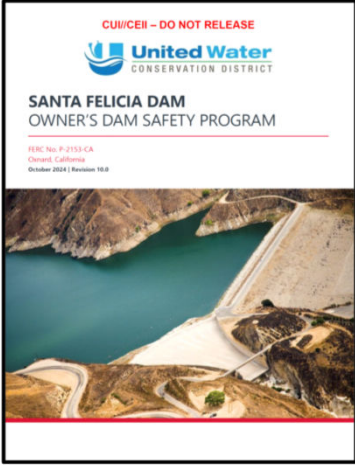
**Resolution Adopting  
the Revised Owner's Dam Safety Program Document  
October 2024**

**3.2 A Resolution of the United Water Conservation District Board of Directors Adopting the Revised Owners Dam Safety Program and Overarching Dam Safety Program Policy**




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**Revised ODSP Document – October 2024**

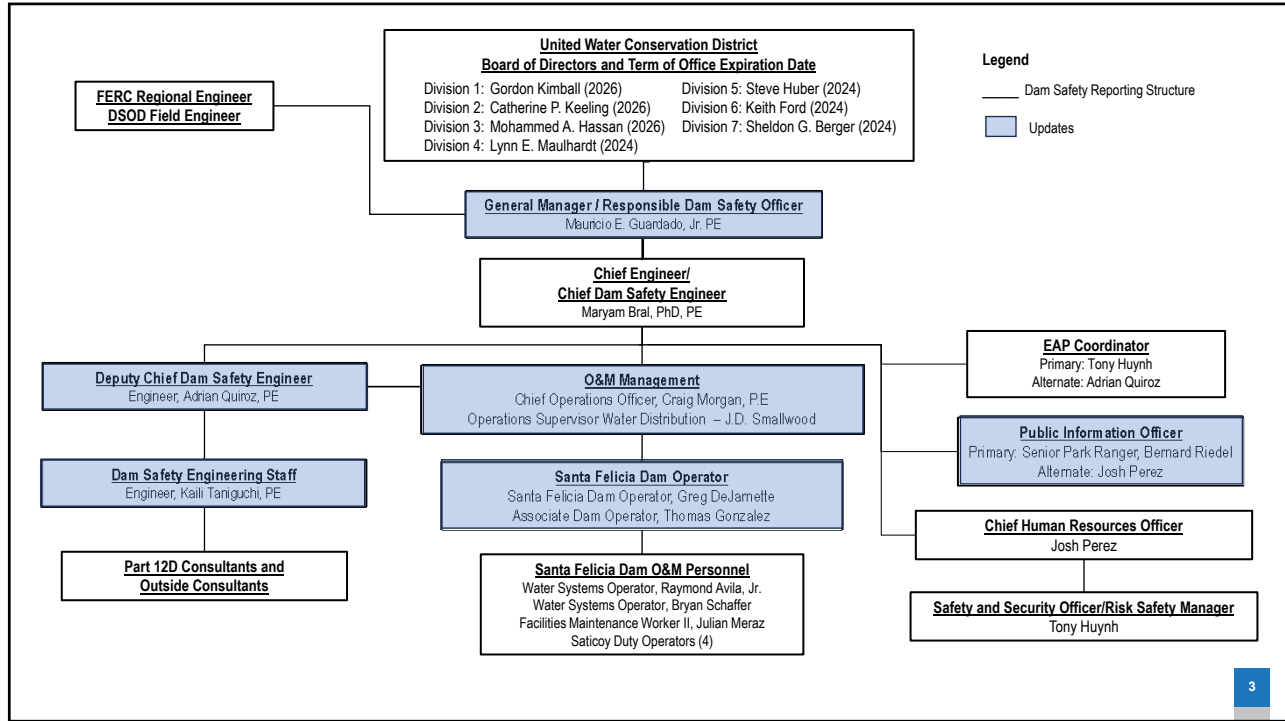


**ODSP Additions and Revisions**

- ODSP expanded to serve as the District's Overarching Dam Safety Program Policy (See Policy Synopsis Document)
- Preparation of Annual Dam Safety Report to the Board
- Development of Dam Safety Awareness Training Program
- Development of Dam Safety Mentorship Program and Succession Planning
- Development of Annual ODSP Self-Audit Guidelines



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**QUESTIONS**

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Regulatory and Environmental Compliance

## Motion Item 3.3

### Authorize Approval of Amendment No. 9 to the Contract Cramer Fish Sciences for Services Related to Santa Felicia Dam Fish Passage Pre-implementation Studies

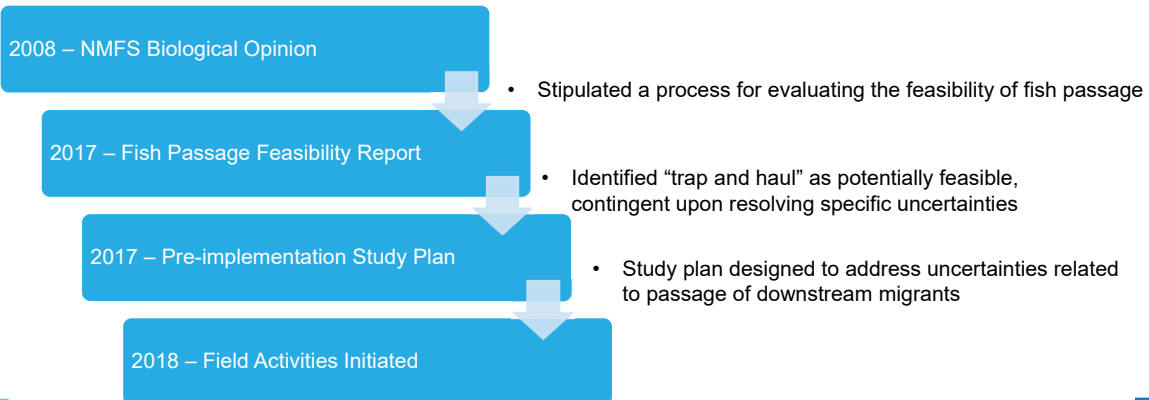
- Committee to consider recommending approval of the motion to the Board, to authorize the General Manager to execute an amendment to the PCS agreement with Cramer Fish Sciences
- Contract relates to FERC license compliance associated with the 2008 Biological Opinion from National Marine Fisheries Service
- Amendment amount: \$149,687



Regulatory and Environmental Compliance

### Engineering and Operations Committee Meeting Motion Item 3.3

## Project Background




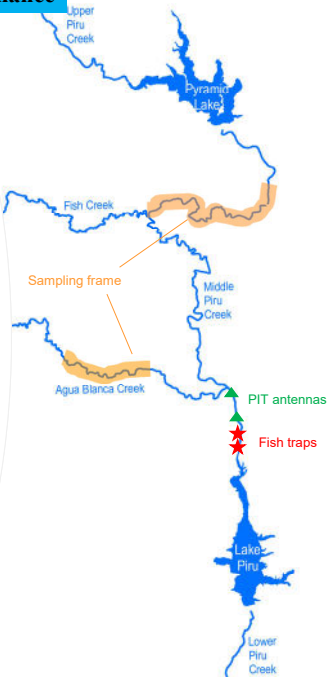
**Regulatory and Environmental Compliance**


## Study Plan Overview

- ✓ Spring-fall field sampling – yrs 1-3  
Population, demographics, movement, genetic sampling✓
- ✓ Operate Passive Integrated Transponder (PIT) antennas – yrs 1-3  
Movement
- ✓ Operate low-tech fish traps – yrs 2-3  
Test trap designs, movement, genetic sampling

Develop technical reports and analysis








Middle Piru Creek – February 2022


3

**Regulatory and Environmental Compliance**


## Project Timeline

- 2017 prepare study plan
- 2018 begin fieldwork
- 2019 wildfire adjustments
- 2020 COVID interruption
- 2021-22 resume fieldwork
- 2023 partially lost season to flood
- 2023-24 complete fieldwork
- 2024-25 final analysis & reports







Middle Piru Creek – February 2023



November 2022



October 2023



Middle Piru Creek – February 2022

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**Regulatory and Environmental Compliance**

## Contract History

Agreement	Date	Amount	Activity
Orig. contract	12/17/2017	\$60k	develop pre-implementation study plan
1 <sup>st</sup> Amendment	5/11/2018	\$278k	implement first phase of study plan; field activities
2 <sup>nd</sup> Amendment	5/21/2019	\$24k	increase scope due to limited participation by UWCD staff
3 <sup>rd</sup> Amendment	6/19/2019	\$23k	correct accounting error in 2 <sup>nd</sup> amendment
4 <sup>th</sup> Amendment	7/11/2019	\$449k	complete second phase of field activities (COVID interruption)
5 <sup>th</sup> Amendment	7/13/2021	\$0	extend contract period (4 <sup>th</sup> amend expired)
6 <sup>th</sup> Amendment	12/16/2021	\$441k	complete second phase of field activities
7 <sup>th</sup> Amendment	10/10/2022	\$426k	complete third phase of field activities (partially lost to flood)
8 <sup>th</sup> Amendment	1/25/2024	\$196,054	complete third phase of field activities
9 <sup>th</sup> Amendment	Pending	\$149,687	complete final data analyses and prepare deliverables
<b>TOTAL</b>		<b>\$2.05M</b>	



**Regulatory and Environmental Compliance**

## Motion Item 3.3

### **Authorize Approval of Amendment No. 9 to the Contract Cramer Fish Sciences for Services Related to Santa Felicia Dam Fish Passage Pre-implementation Studies**

- Committee to consider recommending approval of the motion to the full Board to authorize the General Manager to execute an amendment to the PCS agreement with Cramer Fish Sciences
- Contract relates to FERC license compliance associated with the 2008 Biological Opinion from National Marine Fisheries Service
- *The amendment will complete data analyses and final project deliverables which is critical to fulfill the purpose and value of the study*
- Amendment amount: \$149,687



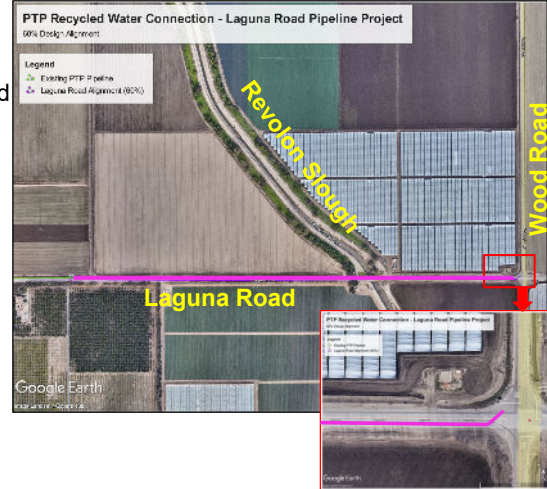
Water Supply and System Reliability

**Motion Item 3.4**

**Authorize the General Manager to Execute a Construction Contract with Toro Enterprises, Inc., in the amount of \$5,092,286 for the construction of the Recycled Water Connection – Laguna Road Pipeline Project contingent upon the Project receiving additional grant funding to cover the budget shortfall.**

- ❑ Construction of approx. 3,500 feet (24-inch and 18-inch dia.) pipeline along Laguna Road
- ❑ Connect to to PVCWD system at the intersection of Wood Road and Laguna Road
- ❑ Engineering Estimate: \$4.12M - \$5.03M
- ❑ Four Construction Bids received on September 10

Prospective Bidder	Bid
<b>Toro Enterprises, Inc.</b>	<b>\$5,092,286</b>
J Vega Engineering, Inc.	\$5,277,450
Blois Construction, LLC	\$7,345,250
Dominguez General Engineering, Inc.	\$7,623,940



Water Supply and System Reliability

**Motion Item 3.4**

**Proposed Construction Schedule:**

Date	Activity
Oct 9, 2024	Construction Contract Award
<b>Oct 19, 2024</b>	Execution of Construction Contract
Oct 23, 2024	Administrative Notice to Proceed
Nov 06, 2024	Construction Notice to Proceed 1 (Horizontal Directional Drilling)
Dec 12, 2024	Construction Notice to Proceed 2 (Remaining Pipeline)
Mar 15, 2025	Complete Construction and Implementation
<b>Mar 31, 2025</b>	<b>Complete Grant Administration Activities</b>

**↑ Requirement of the SGM Grant Funding Program**



**Water Supply and System Reliability**

### Motion Item 3.4

**Table 2: Project's (CIP 8043) Detailed Budget**

Type	Project Budget through FY 2024-25	Current Expenses to-date	Total Projected Expenses through FY 2024-25
Project Administration	\$214,569.18	\$144,899.74	\$174,569.00
Design	\$847,934.21	\$405,622.50	\$630,000.00
Survey	\$24,687.12	\$8,128.50	\$20,000.00
Geotechnical	\$71,922.91	\$23,632.61	\$50,000.00
CEQA/Permits	\$115,600.00	\$78,741.87	\$115,600.00
Construction	\$3,676,000.00	--	--
Management	--	--	\$470,969.00
Contractor	--	--	\$5,092,286.00
<b>Subtotal</b>	--	<b>\$660,824.22</b>	<b>\$6,553,424.00</b>
Contingency		--	\$254,614.30 (5% of Construction Contractor Award)
<b>Total</b>	<b>\$4,950,713.42</b>	<b>\$660,824.22</b>	<b>\$6,808,038.30</b>

**Lowest Responsible Construction Bid**

3

**Water Supply and System Reliability**

### Motion Item 3.4

**Table 3: Project (CIP 8043) Summary of Budget and Shortfall Amount**

Description	Amount
CIP Budget through FY 2024-25	\$4,950,713
Current Expenses to-date	\$660,824
<b>Total Projected Expenses through FY 2024-25</b>	<b>\$6,808,039</b>
<b>Funding Sources</b>	
PT Pipeline (United)	\$1,697,242
Grants (USDA NRCS and DWR SGM)	\$2,998,821
<b>Total Funding Sources</b>	<b>\$4,696,063</b>
<b>Total Budget Shortfall for FY 24-25</b>	<b>\$2,111,975</b>
SGM Grant (Oxnard Subbasin Transfer – Pending)	\$1,456,592
SGM Grant (Pleasant Valley Basin Transfer – Pending)	\$700,000
<b>Total Anticipated Additional Funding for FY 24-25</b>	<b>\$2,156,592</b>

**Secured to Date**

**Budget Shortfall**

**Pending Approval by DWR**

**Total Anticipated Grants: \$5,155,413 potentially covering 76% of Projected Expenses**

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Water Supply and System Reliability

**Motion Item 3.4**

**Project Highlights and Strategic Benefits**

- A Regional Water Sustainability Project
- Recognized by OPV Stakeholders as a top-five project to receiving DWR SGM Grant Funding aimed at improving management of critically overdrafted basins
- Mutually beneficial in conjunction with PVCWD’s Interconnection Project and Supporting the City of Oxnard AWPf Operation
- Operational flexibility benefiting EBB Water Project
- Supported by FCGMA
  - 2021 Oxnard Subbasin Annual Report
  - 2024 GSP Update for Oxnard Subbasin and Pleasant Valley Basin
- Supported by both State and Federal grant funding sources
- Presented at the 2020, 2021, 2022, 2023 Water Sustainability Summits



Water Supply and System Reliability

**Motion Item 3.4**

Approval of this Motion Item:	Non-Approval of this Motion Item:
Ensures enough time for construction completion by March 31, 2025, with no margin for delays.	<b>Loss of Secured Project-Related Grants:</b> \$347,321 – USDA NRCS \$2,651,500 – DWR SGM ----- \$2,998,821
Construction is nearly 100% grant funded:  59% of funding secured 41% of funding pending approval by DWR	<b>Potential Loss of Secured Basin-Related Grants:</b> \$1,456,592 – DWR SGM (Oxnard Subbasin) Up to \$700k – DWR SGM (PV Basin) ----- \$2,156,592
	May have to pay back approximately \$343,099 in design/permitting costs
	Decreased benefit for PVCWD’s interconnection project
	Potential challenge seeking grant funding in the future



Water Supply and System Reliability

## Motion Item 3.4

### RECAP

Authorization of the General Manager to execute a construction contract in the amount of \$5,092,286 contingent upon the Project receiving additional grant funding to cover the budget shortfall.

- Project has a track record of receiving OPV Stakeholders Support
- Project has received State and Federal grant funding totaling \$2.99 million
- Additional SGM grant funding is available but needs to be formally secured to cover budget shortfall





# ENGINEERING DEPARTMENT Monthly Update October 3, 2024

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 A. WATER SUPPLY  B. SYSTEM RELIABILITY

## Freeman Conveyance System Upgrade

- Inverted Siphon Replacement**
  - Demobilized bypass pumps
  - Began water deliveries through new bridge
  - Project Completion projected in October



DWR Site Visit on September 24



9/16/24

Partially Completed Bridge Replacement

2

 A. WATER SUPPLY

## EBB Water – Phase 1

- Monitoring Wells**
  - Completed**
    - 10 Semi-Perched Wells
    - 6 Oxnard/4 Mugu Wells
    - 1 Fox Canyon Piezometer
    - 2 Exploratory Boreholes
  - Remaining Work**
    - Surface Completions, Pumping Tests, Demob.
- DWR Site Visit on September 24**
- Phase 1 Design**
  - Electrical Site Visit on September 10



Top: DWR Site Visit, Bottom: Electrical Site Visit



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 F. COMMUNICATIONS AND COMMUNITY OUTREACH

## Public Outreach



September 12 – Regional Defense Partnership Meeting



September 17 – City of Oxnard Council Water Workshop Presentation



September 24 – Annual Public Safety Agency Coordination Meeting



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## Owner Dam Safety Program CDSE's Annual Dam Safety Program Report

Reporting Period – October 1, 2023, through September 30, 2024



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## Chief Dam Safety Engineer's Annual Dam Safety Program Report

*The report documents dam safety events and accomplishments over the past year. (Ref: [2024 Annual Dam Safety Program Report](#))*

### **Topics:**

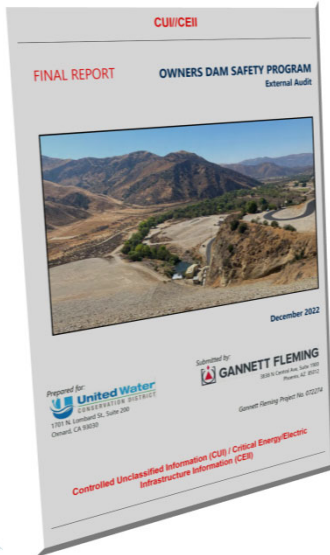
- ✓ 2022 ODSP Audit Report Findings
- ✓ Dam Safety Incidents / EAP Activations
- ✓ Critical Inspection Findings
- ✓ Surveillance and Monitoring
- ✓ Evaluations and Assessments
- ✓ EAP Exercises and Updates
- ✓ Dam Safety Trainings
- ✓ Public Outreach
- ✓ Current and Projected future Dam Safety Program Needs



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## 2022 Owners Dam Safety Program External Audit Report Findings



- External Auditor provided 16 recommendations for improving the SFD ODSP
- Most recommendations are addressed as part of the Motion Item recommended to the Board on October 9, 2024.

### Key Recommendation:

Develop an **overarching dam safety policy** that states UWCD's commitment to public safety through the implementation of an effective dam safety program.



## Dam Safety Incidents – Seismic Events

- None To Report (none with adverse impacts to SFD)
- Seven post-earthquake inspections performed during reporting period, no adverse impacts to SFD detected.



5.3 M Earthquake – 49 miles N-NW of SFD  
August 6, 2024



## Dam Safety Incidents – Spillway Flow Events



- No spillway flow events observed during the reporting period
- March and April 2024 – multiple occasions when reservoir water entered the spillway due to wave action caused by strong wind events.



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## Critical Inspection Findings



Spillway slab seepage  
March-April 2024.



DSOD Annual Inspection  
completed on June 5,  
2024.



Annual FERC Inspection  
completed on August 26,  
2024.



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## Surveillance and Monitoring



### 2023 Spillway Underdrain Inspection - October 2023

- Improved techniques enabled 22.6% increase in pipeline inspection compared to 2022 inspection (Approx. 23.5% of total drain system inspected).
- Drain system functional and in fair condition.
- Hydraulic Analysis confirmed that drains are adequately sized, and flow not obstructed by mineral deposits.



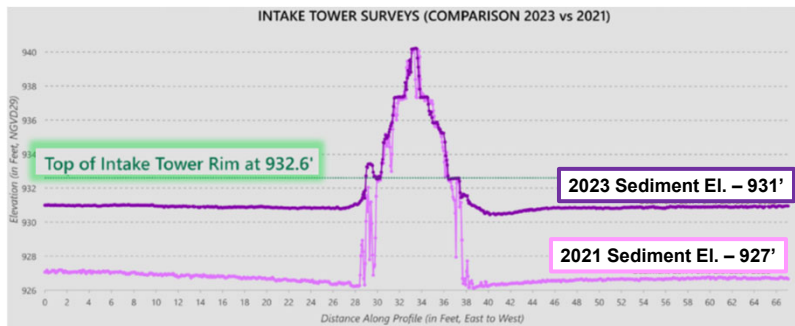
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## Evaluations and Assessments

### 2023 Lake Piru Bathymetric Survey - November 2023

- Sediment reduced storage capacity in Lake Piru by 1,533 acre-feet
- Sediment build up 1.5 feet below rim of intake tower

#### SFD Intake Tower Profile – Multibeam Scan



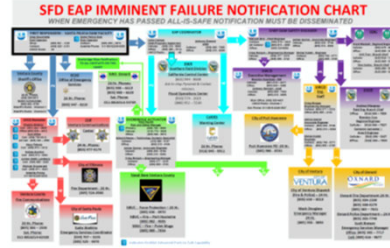
#### Lake Piru Reservoir Storage Capacity (Acre Feet)

2020	2023
82,067	80,524



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## EAP Exercises and Training



**2023 SFD/Saticoy Duty Officer Dam Safety Cross-Training**  
**October 25, 2023**

25 UWCD Staff Members Participated  
 (5 Eng, 4 Rec, 16 O&M)

**2024 DWR Pyramid Dam Functional Exercise**  
**June 6, 2024**

13 UWCD Staff Members Participated

**2024 EAP Call-Down Drill**  
**June 19, 2024**

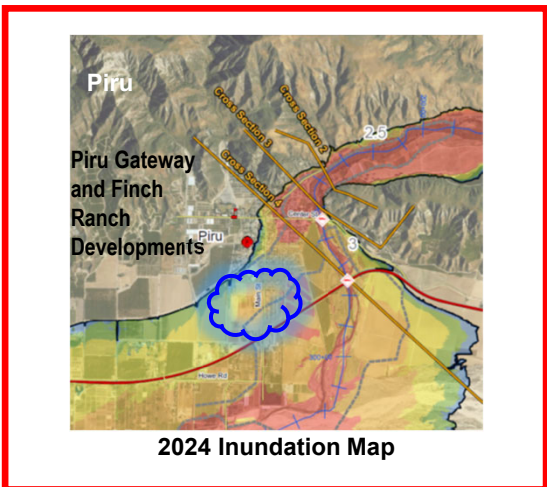
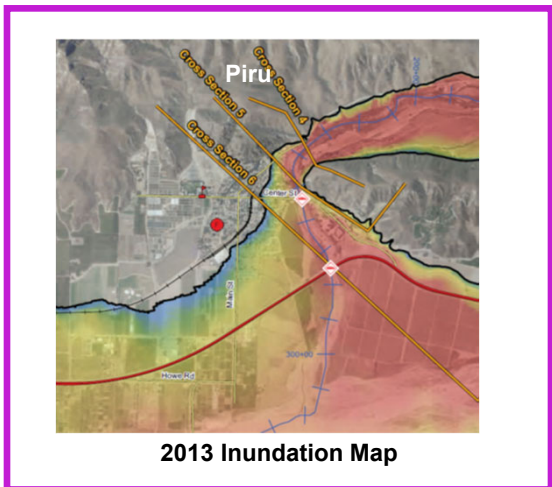
Notified 15 external agencies in 13 minutes

- Upcoming Trainings:**
- 2024 SFD EAP Seminar scheduled for October 30, 2024
  - SFD/Saticoy Duty Officer Cross-Training scheduled for November 20, 2024



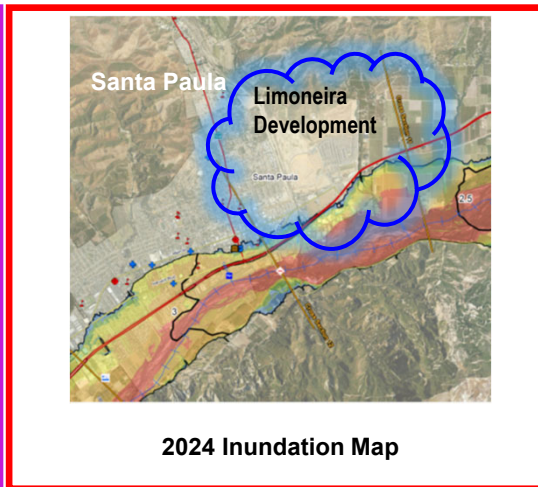
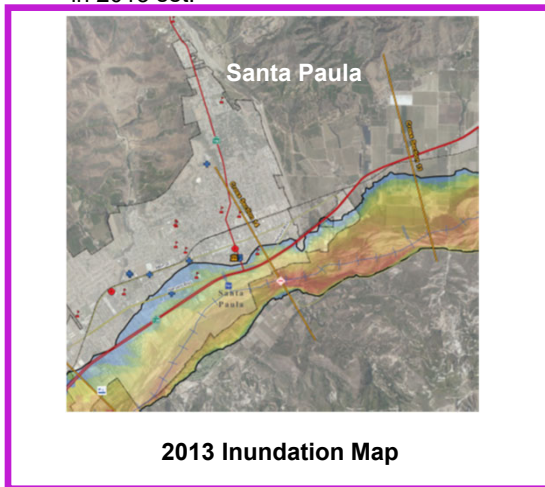
## 2024 EAP Updates

- SFD EAP Inundation Map Update per DSOD Requirements
- To be Completed by October 30, 2024



## 2024 EAP Updates

- Smaller scale maps will be more detailed. Set of maps will include 15 maps up from 4 maps in 2013 set.



## Public Outreach



- Building Better and Safer Dams - AWA Waterwise Information Breakfast Series – May 16, 2024

*By Chief Engineer, Maryam Bral & Engineer, Adrian Quiroz*



- Piru Neighborhood Council Meeting – August 23, 2024

*By Chief Engineer, Maryam Bral  
Engineer, Adrian Quiroz  
Engineer, Kaili Taniguchi  
Senior Park Ranger, Bernie Riedel*



## Dam Safety Program Needs

### SFD Outlet Works Improvement Project

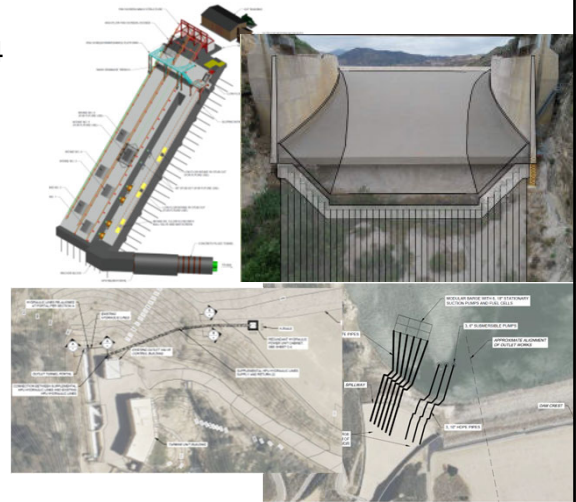
- 100% Design Phase – Completed August 2024
- Final Design Phase – Anticipated Completion March 2025

### SFD Spillway Improvement Project

- 60% Design Phase – Completed November 2023
- 90% Design Phase – Anticipated Completion April 2025

### SFD Interim Risk Reduction Measures

- 72" Butterfly Valve Redundancy Project - Anticipated Completion – October 2024
- Lake Piru Reservoir Drawdown Contingency Plan - Submitted to FERC – July 2024





# ENVIRONMENTAL SERVICES DEPARTMENT UPDATE

October 3, 2024



1



## Santa Felicia Dam

**SFD Safety Improvement Project Environmental Compliance Document Submission to FERC**

- Draft Biological Assessment for National Marine Fisheries Service
- Draft Biological Assessment for US Fish and Wildlife Service
- Draft Environmental Assessment for NEPA



2

## Santa Felicia Dam

Marina removal → Quagga decontamination → Quagga burial



3

## Freeman Diversion

**Awarded \$20 Million  
in grant funding!**

*from*  
**USBR WaterSMART  
Aquatic Ecosystem  
Restoration Project  
Program**

*for*  
**Freeman Diversion Fish  
Passage Rehabilitation  
Project (Hardened Ramp)**



— BUREAU OF —  
**RECLAMATION**

4

# Thank You!



5

**OPERATIONS AND  
MAINTENANCE  
DEPARTMENT  
UPDATE**



October 3, 2024

1

## Santa Felicia Dam



2

## Lake Piru Water Treatment Facility



3

3

## Freeman Diversion



4

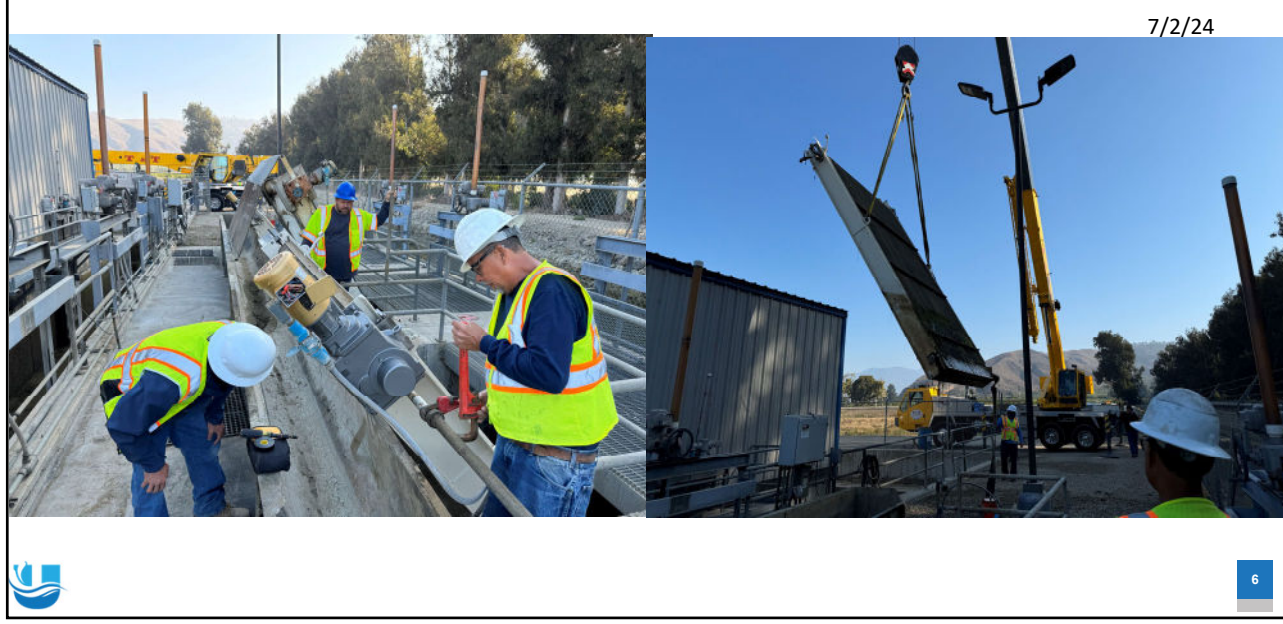
4

# Inverted Siphon Project



5

# Moss Screen Facility



6

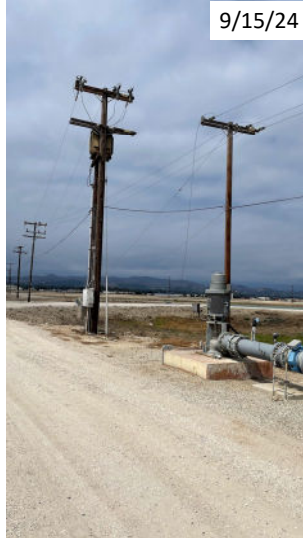
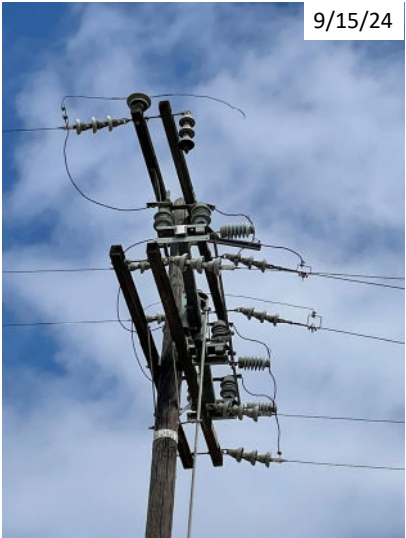
## Rose and Noble Basin



7

7

## El Rio WTGRF



8

8

# Control Systems Activities



9

# Questions?



10

10



## STAFF REPORT

**To:** Engineering and Operations Committee Members

**Through:** Mauricio E. Guardado, Jr., General Manager  
Anthony A. Emmert, Assistant General Manager  
Maryam Bral, Ph.D., P.E., Chief Engineer

**From:** Marissa Caringella, Environmental Services Manager  
Randall McInvale, Principal Environmental Scientist

**Date:** October 29, 2024 (November 7, 2024, meeting)

**Agenda Item:** 3.1 Resolution Authorizing a Funding Agreement with the U.S. Bureau of Reclamation for the Freeman Diversion Rehabilitation Project (CIP 8001)  
**Motion**

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### **Staff Recommendation:**

The Committee will recommend that the Board adopt a Resolution authorizing and designating United Water Conservation District's General Manager, Mauricio E. Guardado, to enter into a funding agreement with the United States Department of Interior, Bureau of Reclamation (Reclamation), and to accept and expend \$20 million in federal funds under the WaterSMART Aquatic Ecosystem Restoration Program for the Freeman Diversion Fish Passage Rehabilitation Project (Project).

### **Discussion:**

The District was selected for a \$20 million dollar grant under the Reclamation WaterSMART Aquatic Ecosystem Restoration Projects grant program. Prior to the execution of a funding agreement, the District is required to adopt a resolution authorizing an agent, or representative, to sign the funding agreement, amendments, and requests for disbursement on behalf of the District, and to carry out other necessary Project-related activities. As part of the grant application, United has requested funding to cover the partial cost of the hardened ramp construction activities. Projects awarded funding under this grant funding program must be complete by September 30, 2029.

### **Mission Goal:**

The Project meets mission-related Goal A (Water Supply), Goal B (System Reliability), Goal C (Regulatory and Environmental Compliance), and Goal D (Fiscal Responsibility).

### **Fiscal Impact:**

There is no impact on the fiscal year 2024-25 budget. The Project cost will be included in the future Capital Improvement Projects budget, currently projected to begin in fiscal year 2026-27.

### **Attachment:**

A – Resolution

# ATTACHMENT A

## RESOLUTION

### **A RESOLUTION OF THE BOARD OF DIRECTORS OF UNITED WATER CONSERVATION DISTRICT AUTHORIZING AND DESIGNATING UNITED WATER CONSERVATION DISTRICT'S GENERAL MANAGER, MAURICIO E. GUARDADO, TO ENTER INTO A FUNDING AGREEMENT WITH THE UNITED STATES DEPARTMENT OF INTERIOR, BUREAU OF RECLAMATION, AND TO ACCEPT AND EXPEND FEDERAL FUNDS FOR THE FREEMAN DIVERSION FISH PASSAGE REHABILITATION PROJECT**

**WHEREAS**, the United Water Conservation District ("District") has submitted an application to the United States Department of Interior, Bureau of Reclamation for funding of the Freeman Diversion Fish Passage Rehabilitation Project ("Project"); and

**WHEREAS**, the District's General Manager has reviewed and supports the application the District submitted to the United States Department of Interior, Bureau of Reclamation for funding of the Project; and

**WHEREAS**, prior to the United States Department of Interior, Bureau of Reclamation's executing a funding agreement, the District is required to adopt a resolution authorizing an agent, or representative, to sign the funding agreement, amendments, and requests for disbursement on behalf of the District, and to carry out other necessary Project-related activities;

**WHEREAS**, the Board believes and hereby determines it to be in the best interest of the District to authorize and designate the General Manager, to complete negotiations and execute or amend the funding agreement and any subsequent amendments referred to herein consistent with the intent of this Resolution, and further complete the negotiation and execution of such other documents and agreement(s) that may be necessary to receive said funding for the Project contemplated thereby; and

**WHEREAS**, the Board believes and hereby determines it to be in the best interest of the District to authorize and designate the General Manager, to represent the District in carrying out the District's responsibilities under the funding agreement, including certifying invoices and disbursement requests for Project costs on behalf of the District and compliance with applicable state and federal laws.

### **NOW, THEREFORE, BE IT RESOLVED AND ORDERED THAT:**

1. The recitals set forth hereinabove are true and correct and are incorporated herein.
2. The General Manager, Mauricio E. Guardado, is hereby authorized and designated to complete negotiations and execute or amend the funding agreement for the Project on behalf of the District with the United States Department of Interior, Bureau of Reclamation and any subsequent amendments referred to herein consistent with the intent of this Resolution.

3. The General Manager, Mauricio E. Guardado, is hereby authorized and designated to represent the District in carrying out the District's responsibilities under the funding agreement, including certifying invoices and disbursement requests for Project costs on behalf of the District and compliance with applicable state and federal laws; and
4. The District will work with the United States Department of Interior, Bureau of Reclamation to meet established deadlines for entering into a grant or cooperative agreement.

**PASSED, APPROVED, AND ADOPTED** this 13<sup>th</sup> day of November 2024.

ATTEST: \_\_\_\_\_  
Sheldon G. Berger, Board President

ATTEST: \_\_\_\_\_  
Catherine P. Keeling, Board Secretary/Treasurer



### **Staff Report**

**To:** Engineering and Operations Committee Meeting

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

**From:** Maryam Bral, Ph.D., P.E., Chief Engineer  
Adrian Quiroz, Engineer

**Date:** October 30, 2024 (November 7, 2024, Committee Meeting)

**Agenda Item:** **3.2 Authorize Amendment No. 2 to the Professional Consulting Services Agreement with GEI Consultants, Inc. for the Final Design for the Santa Felicia Dam Outlet Works Improvement Project (CIP 8002)**  
**Motion**

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#### **Staff Recommendation:**

The Engineering and Operations Committee will consider recommending that the full Board authorize the General Manager to execute Amendment No. 2 with GEI Consultants, Inc. in the amount of \$1,075,060.00 for the Final Design for the Santa Felicia Dam Outlet Works Improvement Project (CIP 8002).

#### **Background:**

The United Water Conservation District (UWCD) entered into a Professional Consulting Services Agreement (PCSA) with GEI Consultants, Inc. (GEI) on June 9, 2023, in the amount of \$867,980.00 to develop final design documents, prepare final bid documents, and support the bid phase for the Santa Felicia Dam Outlet Works Improvement Project (Project).

On December 13, 2023, the Board of Directors approved (1) a motion authorizing the General Manager to execute an amendment (Amendment No. 1) to the PCSA with GEI in the amount of \$1,158,211.00 (including 4.73% of total fee allocated to optional tasks and 17.3% contingency) to continue the development of the final design phase of the Project, (2) a supplemental appropriation, and (3) a fund transfer using the EPA Water Infrastructure Finance Innovation Act (WIFIA) low-interest loan to support the supplemental appropriation. Consequently, the total contract amount was increased to \$2,026,191.00 and the contract term was extended to December 31, 2024.

Due to ongoing design refinements, required design support for environmental permitting efforts related to agency consultations, extensive design modifications and analyses driven by regulatory agency design review comments and actions required in response to the outcome of the Design Potential Failure Mode Analysis (PFMA), and DSOD's concerns over the new sloping intake slope stability, GEI was authorized to use \$215,070.00 from the optional tasks and contingency budget under Amendment No. 1, as of June 13, 2024 to respond to these changes and requests.

### **3.2 Authorize Amendment No. 2 to the Professional Consulting Services Agreement with GEI Consultants, Inc. for the Final Design for the Santa Felicia Dam Outlet Works Improvement Project (CIP 8002)**

#### **Motion**

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To continue advancing the final design without delaying the project schedule, on September 16, 2024, GEI was further authorized to use the remaining \$55,208.00 contingency and optional tasks budget and reallocate and utilize \$176,852.00 from the bid documents preparation and bid phase support services budget. Consequently, the total contract budget of \$2,026,191.00 is anticipated to be exhausted by October 31, 2024.

#### **Discussion:**

The advancement of the final design of the Project is currently in progress and requires additional effort to be completed by March 2025 per the proposed project schedule that was submitted to FERC on August 6, 2024. Furthermore, additional analyses are required to satisfy the FERC Design PFMA process as well as DSOD's concerns regarding the stability of the sloping intake slope. This Amendment No. 2 provides for an additional budget to continue these efforts and to stay on track with the proposed project schedule. Additionally, the execution of Amendment No. 2 will allow the contract term to be extended to July 31, 2025. The proposed amendment will increase the contract budget to a total not-to-exceed contract amount of \$3,101,251.

<b>Contract and Amendments</b>	<b>Contract Amount</b>	<b>Execution Date</b>
Original Contract	\$867,980	June 9, 2023
Amendment No. 1	\$1,158,211	December 13, 2023
Amendment No. 2	\$1,075,060	November 9, 2024 (tentative)
<b>Total Contract Amount</b>	<b>\$3,101,251</b>	

Due to uncertainties associated with the completion of environmental permitting for the SFD SIP, the scope of work associated with Task 2 – Final Bid Documents, and Task 3 – Bid Phase Support, under the original agreement, will be removed from this PCSA and deferred to a later date under a separate agreement.

Staff recommend that the Committee consider recommending that the Board authorize the General Manager to execute the proposed Contract Amendment No. 2, which is attached herein as Attachment A, and further details the associated scope of work and schedule of fees.

#### **Mission Goal:**

Meets Mission-Related Goal B, System Reliability, and Goal C, Regulatory and Environmental Compliance.

#### **Fiscal Impact:**

There are sufficient funds in the FY 2024-25 budget (Account No. 051-400-81080-8002-815) to cover the proposed additional fee of \$1,075,060.00 associated with Amendment No. 2.

**3.2 Authorize Amendment No. 2 to the Professional Consulting Services Agreement with GEI Consultants, Inc. for the Final Design for the Santa Felicia Dam Outlet Works Improvement Project (CIP 8002)**  
**Motion**

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**Attachments:**

Attachment A – Draft Amendment No. 2 to the Professional Consulting Services Agreement with GEI Consultants Inc. for the Final Design of the Santa Felicia Dam Outlet Works Improvement Project.

# ATTACHMENT A

## AMENDMENT NO. 2

### TO THE PROFESSIONAL CONSULTING SERVICES AGREEMENT

The Professional Service Agreement (hereinafter referred to as "Agreement") for the purpose of providing professional design consultation services in connection with the **Development of Final Design Documents, Prepare Final Bid Documents, and Support Bid Phase of the Santa Felicia Dam Outlet Works Improvement Project (Project)**, made effective on **June 9, 2023** by and between the **United Water Conservation District (hereinafter "UNITED")** and **GEI Consultants, Inc., (hereinafter "CONSULTANT")** is hereby amended as follows:

#### SCOPE OF SERVICES

This Amendment (Amendment No. 2) dated **November \_\_, 2024**, hereby provides for additional services generally described as Supplemental Design services as set forth in Exhibit "A". CONSULTANT shall perform such services in addition to the scope of services as set forth in the Agreement. The scope of work associated with Task 2 – Final Bid Documents, and Task 3 – Bid Phase Support, under the Agreement, is hereby removed from this Agreement and will be deferred to a later date under a separate agreement

#### CONTRACT TERM

Amendment No. 2 extends the term of the Agreement currently set to expire on December 31, 2024, to **July 31, 2025**.

#### COMPENSATION

The maximum not-to-exceed amount for the additional services authorized by Amendment No. 2 is **one million seventy-five thousand and sixty dollars (\$1,075,060.00)**. Therefore, the maximum not-to-exceed amount of total charges for services authorized by the Agreement and Amendment No. 2 is \$3,101,251.00 as follows:

<u>Item</u>	<u>Amount (Not-To-Exceed)</u>
• Original Agreement	\$867,980.00
• Amendment No. 1 (including 4.7% of total fee for optional tasks and 17.3% contingency)	\$1,158,211.00
• Amendment No. 2 (including 1.5% of total fee for optional tasks and 4.6% contingency)	\$1,075,060.00
<b>Total</b>	<b>\$3,101,251.00</b>

CONSULTANT shall complete those tasks specified in the Agreement and this amendment and provide all services shown on Exhibit "A" within this maximum not-to-exceed authorization. A detailed schedule of charges is provided in Exhibit "B."

The conditions of the original Agreement dated June 9, 2023, shall remain enforce except as amended herein.

#### UNITED WATER CONSERVATION DISTRICT

By \_\_\_\_\_  
Mauricio E. Guardado, Jr., General Manager

#### GEI CONSULTANTS, INC.

By \_\_\_\_\_  
Tom Keller, Vice President

**AMENDMENT NO. 2**

**TO THE PROFESSIONAL CONSULTING SERVICES AGREEMENT**

**EXHIBIT "A" – ADDITIONAL SERVICES**

**AMENDMENT NO. 2**

**TO THE PROFESSIONAL CONSULTING SERVICES AGREEMENT**

**EXHIBIT "B" – SCHEDULE OF CHARGES**

### Fee Estimate Detail

United Water Conservation District  
 Outlet Works Improvement Project  
 Final Design - Amendment 2  
 GEI Consultants, Inc.  
 10/23/2024

Task	GEI Labor Hours <sup>1)</sup>										GEI Total Labor Hours	GEI Costs				GEI Cost	Subconsultant Costs	Total Fee (2024 GEI Labor Rates)	
	Engineer/Geologist/Scientist Professional Grade									CADD Drafter/ Designer		Techn./ Admin.	Labor	Direct Expenses	Service Charge 15%				GEI Total
	8	7	6	5	4	3	2	1	2024 Rate \$/Hr										
<b>BASE SERVICES</b>																			
<b>Task 1 - Sloping Intake Stability Analysis per DSOD</b>	248	0	24	382	24	0	0	0	8	8	704	\$187,898	\$1,400	\$2,260	\$191,558	\$191,558	\$16,000	\$208,558	
1.1 Meetings with UWCD to discuss approach, strategy, results	8			8							16	\$4,576		\$0	\$4,576	\$4,576	\$0	\$4,576	
1.2 Site Visit & Documentation - joint roughness mmt. Grab core samples <sup>2)</sup>	4			4							8	\$2,288		\$0	\$2,288	\$2,288	\$0	\$2,288	
1.3 Site Visit with DSOD (two GEI geologists)	12			12							24	\$6,864	\$1,400	\$0	\$8,264	\$8,264	\$0	\$8,264	
1.4 Lab Testing - direct shear for residual friction angles - 10 tests	8			8							16	\$4,576		\$2,250	\$6,826	\$6,826	\$15,000	\$21,826	
1.5 3D subsurface modeling of sloping intake	12			80							92	\$22,368		\$0	\$22,368	\$22,368	\$0	\$22,368	
1.6 Develop revised "data set" to send to DSOD	16			16							32	\$9,152		\$0	\$9,152	\$9,152	\$0	\$9,152	
1.7 Recommend joint shear strength parameters for design	16			12							28	\$8,240		\$0	\$8,240	\$8,240	\$0	\$8,240	
1.8 Swedge analyses to "replicate" DSOD analysis	4			24							28	\$6,848		\$0	\$6,848	\$6,848	\$0	\$6,848	
1.9 Identify set of critical wedges below intake slab for further evaluation	16			32							48	\$12,800		\$0	\$12,800	\$12,800	\$0	\$12,800	
1.10 Analyze stability of critical wedges. Identify yield accelerations	8			16							24	\$6,400		\$0	\$6,400	\$6,400	\$0	\$6,400	
1.11 Perform Newmark-type deformation analysis of wedges	8		24		24						56	\$13,600		\$0	\$13,600	\$13,600	\$0	\$13,600	
1.12 Evaluate influence of proposed anchors on wedge stability	16			12							28	\$8,240		\$0	\$8,240	\$8,240	\$0	\$8,240	
1.13 Evaluate stability of existing slopes	24			40							64	\$17,376		\$0	\$17,376	\$17,376	\$0	\$17,376	
1.14 Report - Sloping Intake Rock Slope Stability Analysis	80			120					8	8	216	\$57,280		\$0	\$57,280	\$57,280	\$0	\$57,280	
1.15 Virtual meeting with DSOD to discuss approach & findings	16			8							24	\$7,328		\$0	\$7,328	\$7,328	\$0	\$7,328	
<b>Task 2 - Final Design Plans and Specifications</b>	234	638	44	272	24	0	0	0	472	8	1,892	\$438,614	\$1,000	\$10,280	\$447,904	\$447,904	\$88,000	\$516,604	
2.1 Structural design finalization	20			64	24						108	\$26,104		\$0	\$26,104	\$26,104	\$0	\$26,104	
2.2 Drawings to final submittal level	60	160	40	40					340		640	\$147,720		\$6,900	\$154,620	\$154,620	\$46,000	\$200,620	
2.3 3-D visualizations		4							40		44	\$8,108		\$0	\$8,108	\$8,108	\$0	\$8,108	
2.4 Technical specifications to final design submittal level	40	300		40							380	\$114,980		\$3,390	\$118,370	\$118,370	\$22,600	\$140,970	
2.5 Coord w/ UWCD on Division 00 (PLA, legal comments) (allowance)	20	20									40	\$13,020		\$0	\$13,020	\$13,020	\$0	\$13,020	
2.6 Responses to B&V comments on 100% design (allowance)	40	40		40							120	\$35,160		\$0	\$35,160	\$35,160	\$0	\$35,160	
2.7 Site development evaluation integration (allowance)	8	24		24					24		80	\$19,720		\$0	\$19,720	\$19,720	\$0	\$19,720	
2.8 New release channel DPP integration	2	2							4		8	\$1,990		\$0	\$1,990	\$1,990	\$0	\$1,990	
2.9 Haz Mts Mngmt & Contaminated GW Plan Integration (allowance)	4	8									12	\$3,832		\$0	\$3,832	\$3,832	\$0	\$3,832	
2.10 Physical security additions, per FERC discussions (allowance)	4	16		16					24		60	\$14,064		\$0	\$14,064	\$14,064	\$0	\$14,064	
2.11 B&V 5/30/2024 O&M Considerations TM (allowance)	8	40		40					40		128	\$31,032		\$0	\$31,032	\$31,032	\$0	\$31,032	
2.12 Updates to DSOD Comment Tracking Sheet	4	8		8							20	\$5,656		\$0	\$5,656	\$5,656	\$0	\$5,656	
2.13 Presentation to UWCD Board (Optional)	24	16	4							8	52	\$15,228	\$1,000	\$0	\$16,228	\$16,228	\$0	\$16,228	
<b>Task 3 - Final Reports</b>	140	184	88	40	0	0	0	0	0	28	488	\$142,216	\$0	\$0	\$142,216	\$142,216	\$0	\$142,216	
3.1 Geotechnical Baseline Report	24	40									68	\$21,048		\$0	\$21,048	\$21,048	\$0	\$21,048	
3.2 Basis of Design Report	16	16									36	\$10,928		\$0	\$10,928	\$10,928	\$0	\$10,928	
3.3 Design Report (also include PFMA resolution)	24	24	8	8							68	\$20,032		\$0	\$20,032	\$20,032	\$0	\$20,032	
3.4 Constructability Evaluation Report	24		40								68	\$19,128		\$0	\$19,128	\$19,128	\$0	\$19,128	
3.5 Reservoir Operating Plan for Construction	32	8		8							52	\$15,800		\$0	\$15,800	\$15,800	\$0	\$15,800	
3.6 Operations & Maintenance Manual	8	80	8	8							108	\$31,720		\$0	\$31,720	\$31,720	\$0	\$31,720	
3.7 Update OPOC; Engineer's Estimate for Bid Items	12	16	40	16							88	\$23,560		\$0	\$23,560	\$23,560	\$0	\$23,560	

## STAFF REPORT

**To:** Engineering and Operations Committee

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

**From:** Maryam A. Bral, Chief Engineer  
Robert J. Richardson, Engineering Manager

**Date:** October 28, 2024 (November 7, 2024, meeting)

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

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### Staff Recommendation:

The Engineering and Operations Committee will receive this summary report from the Engineering Department regarding its activities for the month of October 2024. Please refer to the end of the report for a list of acronyms.

### Discussion:

#### 1. Santa Felicia Dam Safety Improvement Project

- September 30 – Draft USFW BA, NMFS BA, and NEPA EA documents were e-filed with FERC.
- October 2-4 – GEI was on-site performing geologic mapping of the slope behind the east spillway wall.
- October 3 – DSOD Inspection Report for the June 5 inspection of SFD was received. DSOD is requesting the recoating of cone valves.
- October 3 – Construction Agreement with MDJ for construction of the 72" BFV Redundant Control Project was executed.
- October 4 – GEI collected boring cores from the 2020 drilling program for lab testing to support kinematic stability analyses of ICF slope.
- October 10 – Preconstruction Meeting for 72" BFV Redundant Control Project was conducted.
- October 14 – Construction started for the 72" BFV Redundant Control Project (see **Figure 1**).
- October 16 - Response letter associated with FERC comments on 2024 Annual Dam Safety Inspection e-filed with FERC.
- October 22 – PCSA executed with Stantec for New Release Channel Drilling Program Plan.

#### 4.1 Engineering Department Monthly Report Information Item

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- Grants: See the Grants section as part of this report.

#### 2. Lake Piru Recreation Area FIP

- October 8 – Staff received 30% plans from Stantec. District staff is targeting to provide comments by mid-November.

#### 3. Freeman Diversion Expansion

- Staff continue to meet with special advisors and consultants.
- Please see the Monthly Environmental Services Department Report for updates on the Project's environmental compliance and permitting process.

#### 4. Freeman Conveyance System Upgrade – Freeman to Ferro

##### Three Barrel Culvert Replacement:

- October 18 – Comments received from USACE. The District and Northwest Hydraulic Consultants are preparing a response.
- Grants: See the Grants section as part of this report.

##### Inverted Siphon Replacement:

- Granite Construction completed (see **Figure 2**):
  - Bridge Barrier
  - Lloyd Butler davit crane installation
  - AC Pavement and Base
  - Guard Rail Systems
  - Slurry Seal
  - Road Opened
- October 10 – FDRE Diversion data was submitted to DWR.
- Grants: See the Grants section as part of this report.

##### Vineyard Avenue Crossing:

- Please see the Monthly Environmental Services Department Report for updates on the Project's environmental compliance and permitting process.

#### 5. SWP Interconnection Pipeline Project

- Stantec is planning to perform cultural resources shovel test pits at 28 selected locations along the proposed interconnection between E Vineyard Avenue and Santa Clara Avenue. The work will be coordinated with the District and adjacent property owners, as the City has secured right-of-entry agreements with the property owners. In addition, the City has submitted three legal descriptions of easements granted by the District for the District's review.

#### 4.1 Engineering Department Monthly Report Information Item

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6. OH Well 14 Energy Efficiency Upgrade
  - October 18 – Received utility research package from MNS.
7. OH Water Well No. 20
  - No updates to report for October.
8. Iron and Manganese Treatment Facility
  - Held Monthly Operations, Maintenance, and Monitoring Meetings with O&M staff.
  - Received initial return wash water solids sampling results for further evaluation and determination of appropriate disposal methods.
  - Construction of appurtenant pressure-relief station for Well Nos. 12, 13, and 14 completed by Travis Ag and O&M staff (see **Figure 3**).
  - October 14 – Received response letter from GSE Construction related to final accounting for the project. District staff are preparing a response.
  - Grants: See the Grants section as part of this report.
9. California American Water Emergency Use Interconnection to the OH Pipeline
  - Coordination with GPRS for pipeline inspection services.
  - October 1 – Staff met with CalAm to discuss the November 23-26 OH Pipeline shutdown.
10. Rice Avenue Grade Separation Project and Impact on PTP
  - The Rice Avenue and Fifth Street Railroad Grade Separation Project (Project) will enhance safety, reduce congestion, and improve access to the Port of Hueneme.
  - At the October 29 City of Oxnard Council meeting, City Staff presented bid results for the Project with Security Paving Company, Inc. (SPVI) identified as the lowest bidder. The total project cost is \$80,349,567.20, including a \$76,523,397.20 construction contract and a 5% contingency.
  - Under two separate contracts, City Staff recommended MNS Engineers, Inc. to provide Construction Management Services under a \$12,298,039.51 contract for a year from October 29, 2024, to October 29, 2029. Furthermore, Staff recommended approval of a 7<sup>th</sup> Amendment for \$1,938,398.28 to the ongoing engineering design agreement with HDR, Inc. for a total of not to exceed \$11,816,253.53 to perform engineering design support during construction. Funded by over \$135 million in grants, including \$94.6 million from the State Senate Bill 1 Trade Corridor Enhancement Program. The Project has also received a \$15 million grant from the California State Transportation Agency's Port and Freight Infrastructure/High-Priority Grade Crossing Improvement and Separation program, and \$5 million from CPUC Section 190 Grade Separation Program

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

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funding. The state grants will be used for the construction contract and construction management/design support contracts.

- Construction is tentatively scheduled from November 2024 to June 2028, featuring a new six-lane bridge, traffic signals, bicycle lanes, sidewalks, and ADA improvements. General project information, including traffic updates (such as lane closures and detours), will be available on a dedicated webpage and social media. Additionally, the Project will have 24-hour streaming video of the construction progress.
- Approximately 810 linear feet of the 30-inch PTP will be reinforced and reconstructed as part of the Project. The City of Oxnard and United will be coordinating the work on the PTP line.

#### **11. PTP Metering Improvement Project**

- No updates to report for October.

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

- October 15 – Execution of USDA NRCS Contract Number 749104203XJ (Grant) Engineering Docket in connection with the Recycled Water Connection – Laguna Road Pipeline Project.
- October 15 – Execution of PCSA with MKN & Associates, Inc. for Engineering Services during Construction in connection with the construction of the Recycled Water Connection - Laguna Road Pipeline Project.
- October 17 – Staff finalized and submitted a letter to K/J (consultant managing the grant agreements on behalf of the FCGMA) and DWR related to SGMA Grant funding transfers from the Oxnard Subbasin and Pleasant Valley Basin grant agreements to cover the budget shortfall.
- October 17 – Staff submitted a Notice of Award to Toro Enterprises (Contractor).
- Grants: See the Grants section as part of this report.

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

- Staff requested a time extension with CNRSW for the submittal of the legal description/plat related to the Phase 1 Project outgrant easement request. The time extension allows for further evaluation of the area needed for electrical improvements.
- Staff prepared a solicitation package related to potholing for the design of pipelines and conduits for the Phase 1 Project.
- Staff prepared a solicitation package for a power study of several existing NBVC electrical circuits that are candidates for connections for the Phase 1 Project.
- October 15 – The District provided comments on Discharge Alternative TM to K/J.

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

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- CEQA/NEPA/Permits: Please see the Monthly Environmental Services Department Report for updates on the Project's environmental compliance and permitting process.
- Geotech/Hydrogeology: Please see the Monthly Water Resources Department Report for updates on the construction of new monitoring wells.
- Grants: See the Grants section as part of this report.

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

- October 8 – The proposal period closed to conduct a limited asset management pilot project. Proposals were received from HDR and Atkins.

#### 15. **Grants:**

- October 4 – Quarterly report (June to August) submitted related to OLDCC FY21 DCIP grant (Iron and Manganese Treatment Project).
- October 15 – NOI for FEMA BRIC and FEMA FMA Grant Programs submitted related to the Santa Felicia Dam Safety Improvement Project.
- October 15 – Debrief meeting with OLDCC staff regarding FY24 DCIP grant application related to the EBB WTP Project (not awarded).
- October 21 – Application for DWR 2024 Dam Safety and Climate Resilience Local Assistance Program submitted for final design of Spillway Improvement Project.
- October 24 – Quarterly reports (July to September) submitted related to DWR SGM grant-funded projects:
  - Ferro-Rose Artificial Recharge of Groundwater (Inverted Siphon Replacement and Three Barrel Culvert)
  - Laguna Road Recycled Water Interconnection
  - Monitoring Well Construction and Data Collection (EBB WTP Project)

#### 16. **Trainings and Conferences**

- October 10 – CoLAB 2024 Annual Meeting. Maryam Bral was in attendance.
- October 23 – Received notice that the EBB WTP Project abstract was accepted for the 2025 CalDesal Annual Conference on February 5 to 6.
- October 28-29 – Associate of Military Engineers Installation Innovation Forum 2024. Maryam Bral was in attendance.

#### 17. **Public Outreach**

- October 3 – Regional Defense Partnership Meeting. Captain Dean Allen provided an update on NAVFAC EXWC.
- October 16 – UWCD Facilities Site Tours with Foley & Lardner.
- October 17 – 2024 Water Sustainability Summit (see **Figure 4**).

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

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- October 23 – Maryam Bral presented updates on the District’s projects receiving DWR SGM grant funding at the FCGMA regular BOD meeting (see **Figure 5**).
- October 24 – AWA WaterWise Breakfast – “Recharge or Legal Charge: Making the Not So Friendly Adjudication a Little More Friendly (or at Least a Little Less Expensive).

4.1 Engineering Department Monthly Report  
Information Item

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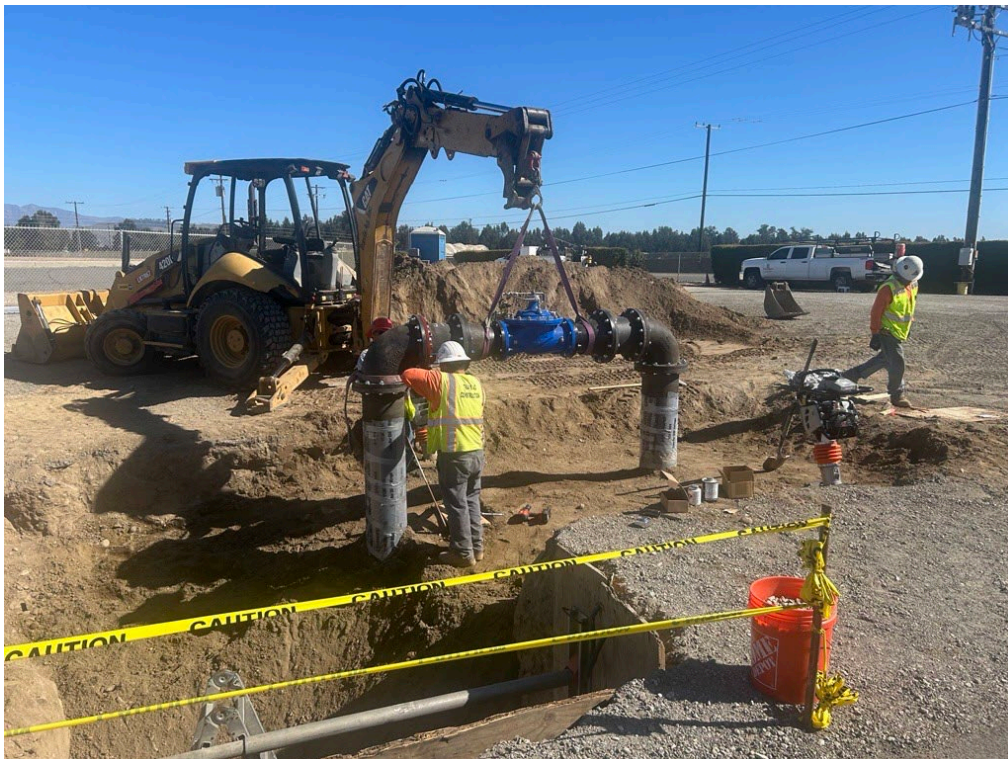
**Figure 1 – 72” BFV Redundant Control Project (dated October 14)**

#### 4.1 Engineering Department Monthly Report Information Item

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**Figure 2 - Drone Image of Inverted Siphon Replacement Project (dated October 22)**



**Figure 3 - Pressure Relief Station Under Construction at El Rio WTP (dated October 22)**

#### 4.1 Engineering Department Monthly Report Information Item

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**Figure 4 - Maryam Bral presenting the EBB Project at the 2024 Water Sustainability Summit on October 17**



**Figure 5 - Maryam Bral presenting at FCGMA BOD Meeting on October 23**

**4.1 Engineering Department Monthly Report  
Information Item**

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**Acronym Index**

<b>Acronym</b>	<b>Definition</b>
AgWUE	Agricultural Water Use Efficiency
AM	Asset Management
APWA	American Public Works Association
BA	Biological Assessment
BFV	Butterfly Valve
BOC	Board of Consultants
BOD	Board of Directors
BRIC	Building Resilient Infrastructure and Communities
BWRDF	Brackish Water Reclamation Demonstration Facility
CalAm	California American Water
Cal-OSHA	California Division of Occupational Safety and Health
CEQA	California Environmental Quality Act
CNRSW	Commander Navy Region Southwest
CoLAB	Ventura County Coalition of Labor Agriculture and Business
CPUC	California Public Utilities Commission
DBW	Division of Boating and Waterways
DCIP	Defense Community Infrastructure Program
DDW	Division of Drinking Water
DFA	Division of Financial Assistance
DSOD	Division of Safety of Dams
DWPR	Drinking Water Purification Research Program
DWR	California Department of Water Resources
EAP	Emergency Action Plan
EBB	Extraction Barrier and Brackish
ESA	Environmental Science Associates
ESD	Environmental Services Department
FCGMA	Fox Canyon Groundwater Management Agency
FDRE	Flood Diversion and Recharge Enhancement
FEMA	Federal Emergency Management Agency
FERC	Federal Regulatory Commission
FGL	Fruit Growers Laboratory
FIP	Facility Improvement Project
FMA	Flood Mitigation Assistance
GEI	GEI Consultants
GF	Gannett Fleming

**4.1 Engineering Department Monthly Report  
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<b>Acronym</b>	<b>Definition</b>
GPRS	Ground Penetrating Radar Systems, LLC
GSE	GSE Construction Company, Inc.
GTF	Grant Task Force
GW	Ground Water
GWGP	Groundwater Grant Program
ICF	Intake Control Facility
IRWM	Integrated Water Management Plan
IS-MND	Initial Study/Mitigated Negative Declaration
K/J	Kennedy Jenks Consultants
MDJ	MDJ Management, LLC
MKN	MKN & Associates
MNS	MNS Engineers, Inc.
NAVFAC	Naval Facilities Engineering Systems Command
NAVFAC EXWC	Naval Facilities Engineering and Expeditionary Warfare Center
NBVC	Naval Base Ventura County
NEPA	National Environmental Policy Act
NHC	Northwest Hydraulic Consultants
NMFS	National Marine Fisheries Service
NOI	Notice of Interest
NRCS	Natural Resources Conservation Service
O&M	Operations and Maintenance
OH	Oxnard-Hueneme
OLDCC	Office of Local Defense and Community Cooperation
OMMP	Operation, Maintenance, and Monitoring Plan
PCSA	Professional Consulting Services Agreement
PFMA	Potential Failure Mode Analysis
PHWA	Port Hueneme Water Agency
PTP	Pumping Trough Pipeline
PVWCD	Pleasant Valley County Water District
QCIP	Quality Control and Inspection Program
RFI	Request for Information
RFP	Request for Proposals
SAME	Society of American Military Engineers
SFD	Santa Felicia Dam
SGMA	Sustainable Groundwater Management Act
SIP	Safety Improvement Plan
SWRCB	State Water Resources Control Board

#### 4.1 Engineering Department Monthly Report Information Item

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<b>Acronym</b>	<b>Definition</b>
TM	Technical Memorandum
USACE	United States Army Corps of Engineers
USBR	United States Bureau of Reclamation
USDA	United States Department of Agriculture
USFW	U.S. Fish and Wildlife
VCWPD	Ventura County Watershed Protection District
VFD	Variable Frequency Drive
WM	Waste Management
WTP	Water Treatment Plant
WUE	Water Use Efficiency



## 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:** October 29, 2024 (November 7, 2024, meeting)

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

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### **Staff Recommendation:**

The Committee members will receive this summary report from the Environmental Services Department (ES) staff regarding its activities for the month of October 2024.

### **Discussion:**

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

#### *Santa Felicia Dam Safety Improvement Project (SFDSIP)*

On September 30, 2024, United Water Conservation District (United) submitted three SFDSIP environmental compliance and permitting documents to FERC. The documents included two Biological Assessments to support Endangered Species Act (ESA) Section 7 Consultations with U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS). In addition, an Environmental Assessment was submitted in compliance with the federal National Environmental Policy Act. On October 17, 2024, FERC moved the USFWS Biological Assessment forward and requested formal consultation under Section 7 of the ESA with USFWS for the project. This starts a 135-day timeline for USFWS to issue a Biological Opinion.

#### *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 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. The measured cumulative rainfall for the current

## 4.2 Environmental Services Department Monthly Report Information Item

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water year has exceeded the triggers for enhanced habitat water releases through October 1, 2024. The minimum required habitat water release from June 1 through October 1, 2024, is nine cubic feet per second (cfs). The minimum required water release from October 2, 2024, through January 1, 2025, is seven cfs.

### *Historic Properties Management Plan (HPMP)*

On September 30, 2024, ES staff filed the annual HPMP report with FERC and provided the document to stakeholders for review (State Historic Preservation Office, the Los Padres National Forest, the Angeles National Forest, the Santa Ynez Band of Chumash Indians, and the local Chumash Indian community). The annual report documents all work conducted under the HPMP within the reporting period of October 1, 2023, through September 30, 2024, including built environment property findings, activity specific cultural resource surveys, a summary of conducted screened activities, and a summary of exempt work activities conducted utilizing cultural resource avoidance and mitigation measures.

### 2. Freeman Diversion Operations

During the month of October, ES staff supported Freeman Diversion operations and maintenance activities by coordinating with and providing notifications to resource agencies as needed, assisting with sediment management activities, conducting surveys of dewatered areas, and providing on-site biological monitoring. The fish ladder remains operational.

On October 3, 2024, the California Department of Fish and Wildlife (CDFW) sent United the third revision of the draft Lake and Streambed Alteration Agreement (LSAA) for Freeman Diversion Routine Maintenance activities. On October 11, 2024, ES staff submitted minor suggested revisions to CDFW; the LSAA is expected to be finalized in November 2024.

On October 24, 2024, ES staff submitted an annual report to CDFW regarding operation of the Freeman Diversion brown-headed cowbird trap. This marks the completion of the second year of a three-year Cowbird Trapping Program being conducted as a mitigation requirement associated with the CDFW LSAA for 2020 Freeman Sediment Management activities. During 2024, the cowbird trap successfully removed 39 cowbirds. Cowbirds are nest parasites for a wide variety of native riparian bird species (including federally endangered least Bell's vireo) and their removal improves nesting success for native bird species.

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

On September 30, 2024, staff attended a hearing in Judge Carter's courtroom along with representatives from the Wishtoyo Foundation, NMFS, and CDFW. Following the hearing, United submitted a response brief on October 14, 2024. Judge Carter is anticipated to issue an order in the near future.

## 4.2 Environmental Services Department Monthly Report Information Item

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### 4. Quagga Mussel Management

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

On October 17, 2024, ES staff submitted a revised QMMCP (last revised January 2023) to CDFW. The revised QMMCP includes updates to United's Quagga Mussel Monitoring Program at Lake Piru, additional information on lower system monitoring, and information from recently published scientific papers. The revised version will be implemented beginning January 2025.

### 5. Capital Improvement Project Permitting and California Environmental Quality Act (CEQA) Support

During the month of October, ES continued to support Engineering Department staff with environmental permitting and CEQA compliance. On October 10, 2024, ES staff filed the Notice of Determination for the Groundwater Recharge Capacity Expansion Project – Ferro Recharge (Vineyard Undercrossing Project) with the State Clearinghouse and Ventura County Clerk. The final CEQA documents are on United's website.

### 6. Grant Efforts

On September 24, 2024, United received notification from the U.S. Bureau of Reclamation (USBR) that the Freeman Diversion Fish Passage Rehabilitation Project was selected for an award of \$20 million through the WaterSMART Aquatic Ecosystem Restoration Projects grant funding program. United is currently coordinating with USBR to complete the requirements for a grant award agreement.

On October 21, 2024, United submitted a grant application to the Department of Water Resources 2024 Dam Safety and Climate Resilience Local Assistance Program requesting \$1.8 Million dollars for the Santa Felicia Dam Safety Improvement Project Spillway and New Release Channel Design.

### 7. Miscellaneous

- On October 10, 2024, the California Fish and Game Commission voted that listing the western burrowing owl as threatened or endangered may be warranted and it is now a candidate species under the California ESA. CDFW will prepare a status review.

## 4.2 Environmental Services Department Monthly Report Information Item

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- On October 21 and 22, 2024, ES staff attended a training hosted by the U.S. Fish and Wildlife Service regarding preparing Biological Assessments in accordance with Section 7 of the ESA.
- On October 26, 2024, Channel Islands Restoration hosted a community volunteer day for noxious weed removal at Lake Piru. ES and Recreation staff supported hosting the event. During the week of October 21, 2024, Channel Islands Restoration also conducted additional grant-funded noxious weed removal (without volunteers) upstream of Lake Piru on both U.S. Forest Service and United-owned lands.

## 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:** October 30, 2024 (November 7, 2024, meeting)

**Agenda Item:** 4.3 Operations and Maintenance Department Monthly 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 October 2024.

### 1. Major Facilities Update

- **Santa Felicia Dam**
  - On September 1<sup>st</sup>, 2024, the lake level was 1043.25' and on September 30<sup>th</sup>, 2024, the lake level had reduced to 1031.20' and is currently dropping due to reduced inflows, evaporation, and SFD Conservation releases.
  - Santa Felicia Dam release flows varied from approximately 20 CFS to 350 CFS throughout September due to Habitat Flow requirements and Conservation Releases.
  - Weed abatement activities are ongoing and continuing at both the Piru Spreading Grounds and Lake Piru Recreation Area.
  - Starting on October 3<sup>rd</sup>, 2024, at approximately 12:40 p.m., the Felicia Fire incident kicked off. During the fire event, O&M staff worked tirelessly to ensure that the fire crews had an ample supply of water to combat the flames. Under generator power, the SFD Team was able to operate the Lake Piru Water Treatment Plant and provide approximately 270,200 gallons of water for firefighting purposes.
  - SFD staff is hosting MDJ Management LLC for the SFD 72-Inch Butterfly Valve Redundancy and Seismic Resiliency Project.
  - Travis Ag assisting with multiple recreation area water line leaks caused by the Felicia Fire Incident.
  
- **Freeman Diversion, Saticoy, and El Rio Recharge Facilities**
  - District staff operated the Freeman Diversion throughout the month of October, harvesting Santa Clara River flows, accommodating fish ladder by-pass flows, and delivering surface water to El Rio, PTP and PV pipelines.

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

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- Various Freeman maintenance activities taking place around the Saticoy Facility.
- Saticoy O&M staff facilitating with the Inverted Siphon Project.
- Saticoy O&M staff, along with assistance from the SFD, El Rio, and the Lake Piru Recreation Team, have been relentlessly performing sediment removal as part of our Desilt Project.
- Various clean-up activities are taking place around the Saticoy facility and the Freeman Diversion.
- Herbicide application tasks are ongoing and continuing near the Freeman Diversion and the Saticoy Spreading Grounds / Noble Basins.
- Various cleanup activities performed by the Saticoy and SFD teams at the Rose and Nobles Basins.
- Static water levels (distance of water from the well pad to the water table):

	<b>2024</b>	<b>2023</b>	<b>2022</b>
Saticoy	30'	14'	149'
El Rio	63'	77'	146'
PTP	67'-113'	78'-106'	132-180'

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

- El Rio operators assisted Travis Ag. Construction with installation of new pressure station for Fe/Mn Plant.
- El Rio staff assisted Oilfield Electric Co. with repairs to overhead power lines after bird strike caused failures to El Rio well field power grid.
- El Rio staff obtained annual DDW mandated PFAS samples from various OH wells.
- El Rio operators installed new overflow piping between percolation basins 2 and 3.
- EL Rio operators assisted with new drainage work along the roadway between percolation basin 9 and Fe/Mn Plant.
- El Rio staff removed and replaced two sample return pumps to ensure redundancy for maintaining accurate chlorine injection rates.

- **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).
- 12% sodium hypochlorite injection continues at Saticoy's Moss Screen facilities for quagga mussel control.
- A new metal cover for the pipeline vault was constructed and installed at the PV Reservoir site.

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

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- **Pumping Trough Pipeline (PTP)**
  - During August, the PTP system demand was met with surface water and PTP wells.
  - UWCD staff took photos of construction work for Recycled Water pipeline installation near Laguna Rd. and Wood Rd.
  - Completed quarterly SRWQCB report for PTP and PV systems.
  - El Rio operators performed monthly operational tests for the PTP emergency generators.
  
- **Control Systems**
  - Trenching and Conduit work for OH MLM Replacement and New Meter Install has been Completed
  - Control Systems and UWCD Grant Task Force team have submitted a Grant Application to Cal OES
  - Moss Screen Level Control Automation
  - Attended CISA's Logging Made Easy Webinar
  - PTP Environmental Control HVAC Installations have been Completed
  - Meet with OH O&M to Evaluate needed pipework for PV Clamp-on Meter Install
  - Participated in VC Regional Radio Technical Subcommittee Meeting
  - Kicked Off Discussion for OH Well #14 Repair or Replacement
  - Refined OT Security Plan with Security Partner Fortinet
  - Security Systems, Radio, and Tech Site Visit - CMWD & UWCD
  - Participation in VC Regional Radio System Project Stakeholder Meeting
  
- **Lake Piru Water System**
  - All chlorine residuals and turbidity readings for the drinking water system were within proper ranges for October.
  - 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.
  - SFD staff operated the Lake Piru Water Treatment plant during the Felicia Fire Incident. Under generator power, the staff members were able to provide approximately 270,200 gallons of water to assist with fire suppression activities all throughout the Lake Piru Recreation Area.

## **2. Operations and Maintenance Projects Update**

- El Rio completed the monthly DDW Drought Tolerance report.
- El Rio staff continued to obtain drone footage of the Inverted Siphon Replacement project.
- El Rio operators worked with HACH Co. technician on quarterly service of continuous monitoring water quality analyzers.
- Staff performed weed abatement at PTP and PV reservoirs.

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

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- UWCD staff continued to work on a plan to automate isolation valves that will serve as a pressure relief station for the Iron/Manganese Plant raw water pipeline.
- El Rio operators made operational adjustments to comply with Voltus Demand Respond energy curtailment for OH well field.

**3. Other Operations and Maintenance Activities**

- 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.

**4. Safety and Training**

- Staff attended a safety meeting that focused on heat exhaustion.
- Tailgate safety meetings were conducted at all individual O&M field locations and the topics 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 September

**OPERATIONS LOG v 10/28/24**

DATE	SANTA FELICIA DAM								FREEMAN DIVERSION**					RECHARGE				IRRIGATION						O-H			
	SFD El.	Stor.	Surface	Evap.	Inflow Balance	Outflow USGS	Hydro	Rain 106E	River	Diverted	Fish*** Facility	Bypass Channel	Crest	El Rio	Saticoy Facility	Noble/Rose	Piru	T.I.D.	P.T.P.	PVCWD	L.P.	Saticoy Wells	Total	Ci2			
	Ft.	A/F	Acres	Inches	Av. CFS	Av. CFS	Kw	Inches	Av. CFS	Av. CFS	Av. CFS	Av. CFS	Av. CFS	Av. CFS	Misc CFS†	Weir CFS	Av. CFS	Av. CFS	A/F	A/F	A/F	%	A/F	A/F	A/F	Lbs.	
<b>A/F*</b>		66877			101,642	80,552		30.02	366,776	82,172	32,653	45,495		25,223	48805	22445	0.4	9,467	5,684	5,979		0.0	1,321	11,259	97,714		
9/1/24	1043.22	66843	1112	0.260	8	19.5	0	0.00	65	35	30.1	0	0	0	9	27.08	0	0.0	19.9	n/a	n/a	####	0.0	21.6	24.8	296	
9/2/24	1043.18	66799	1111	0.288	4	19.5	0	0.00	69	36	33.6	0	0	0	9	27.11	0	0.0	20.2	n/a	n/a	####	0.0	21.6	32.9	363	
9/3/24	1043.15	66765	1111	0.320	11	20.9	0	0.00	59	35	24.5	0	0	0	9	27.13	0	0.0	18.4	n/a	n/a	####	0.0	21.6	32.4	349	
9/4/24	1043.10	66710	1111	0.290	-1	19.5	0	0.00	53	26	19.1	8.5	0	0	4	21.84	0	0.0	21.6	n/a	n/a	####	0.0	21.6	32.1	257	
9/5/24	1043.07	66676	1110	0.308	10	19.5	0	0.00	50	26	23.7	0	0	3.27	-1	11.07	0	0.0	47.1	n/a	n/a	####	0.0	22.0	34.8	235	
9/6/24	1043.02	66621	1110	0.336	0	19.5	0	0.00	46	22	23.8	0	0	3.65	0	0	0	0.0	58.0	n/a	n/a	####	0.0	22.0	38.1	268	
9/7/24	1042.99	66588	1110	0.320	10	19.5	0	0.00	45	21	23.9	0	0	2.83	2	0	0	0.0	54.3	n/a	n/a	####	0.0	21.9	38.4	267	
9/8/24	1042.94	66532	1109	0.314	-1	19.7	0	0.00	44	20	23.9	0	0	5.47	-1	0	0	0.0	51.1	n/a	n/a	####	0.0	21.8	43.4	311	
9/9/24	1042.90	66488	1109	0.312	6	20.9	0	0.00	30	6	24	0	0	0	-55	54.44	17.33	0.0	34.6	n/a	n/a	####	0.0	21.5	56.6	392	
9/10/24	1042.85	66432	1109	0.310	160	181	0	0.00	28	4	24.2	0	0	0	5	0	0.33	0.0	19.1	n/a	n/a	####	0.0	21.2	44.4	377	
9/11/24	1042.35	65879	1104	0.320	28	300	0	0.00	79	54	24.6	0	0	0	-25	79.93	48.65	0.0	18.8	n/a	n/a	####	0.0	20.5	36.5	347	
9/12/24	1041.97	65459	1101	0.200	93	300	0	0.00	169	144	24.5	0	0	36.38	4	84.21	54.04	0.0	50.3	n/a	n/a	####	0.0	10.8	24.6	368	
9/13/24	1041.23	64646	1095	0.230	-105	300	0	0.00	169	132	20.8	16.2	0	50.17	-12	58.89	37.61	0.0	69.0	n/a	n/a	####	0.0	0.0	34.2	272	
9/14/24	1040.65	64012	1090	0.207	-15	300	0	0.00	200	175	24.5	0	0	66.4	17	59.25	28.33	0.0	63.7	n/a	n/a	####	0.0	0.0	32.1	208	
9/15/24	1040.10	63414	1085	0.210	3	300	0	0.00	217	193	24.5	0	0	64.02	21	86.56	24.07	0.0	41.5	n/a	n/a	####	0.0	0.0	31.1	266	
9/16/24	1039.62	62894	1081	0.190	42	300	0	0.00	225	201	24.4	0	0	73.99	22	82.78	21.94	0.0	43.6	n/a	n/a	####	0.0	0.0	36.0	333	
9/17/24	1039.11	62343	1076	0.241	26	299	0	0.00	221	196	24.5	0	0	62.97	24	79.94	20.2	0.0	59.0	n/a	n/a	####	0.0	0.0	35.1	359	
9/18/24	1038.53	61720	1072	0.215	-11	299	0	0.00	227	203	24.5	0	0	80.27	18	70.35	19.39	0.0	67.2	n/a	n/a	####	0.0	0.0	36.5	266	
9/19/24	1037.96	61110	1067	0.205	-3	300	0	0.00	233	209	24.4	0	0	86.79	22	68.43	19.53	0.0	62.4	n/a	n/a	####	0.0	0.0	34.4	225	
9/20/24	1037.42	60534	1063	0.164	13	300	0	0.00	233	201	22	10.4	0	82.84	11	74.71	17.4	0.0	63.2	n/a	n/a	####	0.0	0.0	35.8	251	
9/21/24	1036.85	59929	1059	0.130	-3	300	0	0.00	244	220	23.7	0	0	88.35	24	78.13	15.69	0.0	58.7	n/a	n/a	####	0.0	0.0	31.0	223	
9/22/24	1036.31	59358	1055	0.261	16	299	0	0.00	253	229	24.3	0	0	97.55	26	95.88	26.59	0.0	17.5	n/a	n/a	####	0.0	0.0	27.9	204	
9/23/24	1035.76	58778	1051	0.214	40	328	0	0.00	257	232	24.6	0	0	83.83	29	100.13	33.81	0.0	37.8	n/a	n/a	####	0.0	0.0	31.3	218	
9/24/24	1035.17	58159	1047	0.224	37	345	0	0.00	268	243	24.6	0	0	81.24	22	115.67	19.66	0.0	47.9	n/a	n/a	####	0.0	0.0	24.9	207	
9/25/24	1034.49	57448	1041	0.198	-11	344	0	0.00	268	189	18.4	61.3	0	66.87	-26	123.13	16.33	0.0	48.1	n/a	n/a	####	0.0	0.0	29.8	284	
9/26/24	1033.82	56752	1034	0.210	-5	342	0	0.00	266	241	24.6	0	0	64.81	17	130.55	9.54	0.0	56.9	n/a	n/a	####	0.0	0.0	23.5	316	
9/27/24	1033.17	56082	1027	0.214	12	346	0	0.00	267	242	24.6	0	0	66.72	20	130.05	0	0.0	50.7	n/a	n/a	####	0.0	0.0	21.2	202	
9/28/24	1032.52	55416	1020	0.198	16	348	0	0.00	280	256	24.7	0	0	75.93	23	138.13	0	0.0	35.9	n/a	n/a	####	0.0	0.0	22.1	156	
9/29/24	1031.86	54745	1013	0.207	13	347	0	0.00	291	266	24.8	0	0	91.66	30	141.38	0	0.0	6.5	n/a	n/a	####	0.0	0.0	41.4	301	
9/30/24	1031.05	53930	999	0.258	-56	350	0	0.00	295	270	24.7	0	0	82.32	31	141.28	0	0.0	31.2	n/a	n/a	####	0.0	0.0	54.3	402	
														0							0.00	0.0					
<b>TOTAL CFS</b>					335	6707		0.00	5150	4325	729	96	0	1418	280	2108	430	0.0									
<b>AVERAGE CFS</b>					11	224			172	144	24	3	0	47	9	70	14	0.0									
<b>TOTAL A/F</b>					663	13279			10197	8564	1442	191	0	2808	555	4174	852	0.0	1274	0	0		0	248.1	1022	8523	
MONTHLY REVENUE TO DATE (approx.)																											
<b>AVERAGE A/F</b>					22	443			340	285	48	6	0	94	18	139	28	0.0	42	#DIV/0!	#DIV/0!	####	0	8.0	34	284	
<b>WATER YEAR TOTALS A/F</b>					102,305	93,830		30.02	376,972	90,736	34,095	45,686	0	28,031	53,534	23,297	0.4	10,741	5,684	5,979		0	1,569	12,280	106,237		
* Input total A/F previous month																											
** Daily averages imported from Ranch Systems																											
***Fish facility flows include Denil fishladder, aux pipe and smolt bypass pipe																											
† Includes Ponds A, C, E, and I overflows, temporary storage in the desilting basin and Pond B, JLB diversions, losses between meters. Negatives mean prior storage from pond B or desilting basin is discharging to other metered sources.																											

\*PTP MLM not communicating

\*turned off Sat Wells mid-day