

**AGENDA**  
**ENGINEERING and OPERATIONS COMMITTEE**  
**Thursday, January 6, 2022, at 9:00 am**  
**Boardroom, 1701 North Lombard Street, Oxnard CA 93030**

**Call to Order – Open Session**  
**Committee Members roll call**

**1. Public Comment (Proposed Time: 5 minutes)**

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 (Proposed Time: 5 minutes)**

**Motion**

The Committee will review and consider approving the Minutes from the December 2, 2021 Engineering and Operations Committee meeting.

**3. January 12, 2022 Board Meeting Motion Agenda Items**

The Committee will review and discuss the following agenda items to be considered for approval at the January 12, 2022 Board meeting. The Committee will formulate a recommendation to the entire Board based on its discussions with staff. The Committee will discuss the following items:

**3.1 Authorize the General Manager to Approve Proposed Change Orders in response to adjusted Material and Equipment Costs related to the Buy American Act compliance for the Iron and Manganese Removal Project (Engineering Department, Maryam Bral) (Proposed Time: 10 minutes)**

The committee will review and consider recommending approval of the motion item, authorizing the General Manager to approve change orders proposed by GSE Construction in response to the 2021 Defense Community Infrastructure Program grant special conditions, regarding compliance with the Buy American Act for the Iron and Manganese Removal Project resulting in contract cost increase up to one million dollars, to the full Board.

**3.2 Engineering Services to Support the Hardened Ramp Physical Modeling (Engineering Department, Craig Morgan) (Proposed Time: 5 minutes)**

The committee will consider recommending approval of the motion item, awarding a consulting engineering contract to Northwest Hydraulic Consultants, in the amount of \$341,254 and authorize the General Manager to execute the contract with Northwest Hydraulic Consultants for providing engineering services in support of the hardened ramp physical model, to the full Board.

**3.3 Designating authorization to the District's General Manager to Execute a Modified Utility Easement Deed Related to the PTP Metering Improvement Project for Select Properties (Engineering Department, Maryam Bral) (Proposed Time: 5 minutes)**



The committee will consider recommending approval of the motion item, authorizing the General Manager to serve as its agent for the execution and acceptance of a modified utility easement deed for select properties related to the District's Pumping Trough Pipeline Metering Improvement project, to the full Board. The Board previously authorized the General Manager to execute and accept utility easement deeds under Resolution 2020-22.

#### 4. Project Highlights

**4.1 Engineering Department Monthly Update** (Engineering Department, Maryam Bral)  
(Proposed Time: 15 minutes)

**4.2 Environmental Services Department Update** (Environmental Services, Linda Purpus)  
(Proposed Time: 15 minutes)

**4.3 Operations and Maintenance Department Update and Modeling Presentation**  
(Operations and Maintenance Department, Brian Collins) (Proposed Time: 15 minutes)

#### 5. Future Agenda Topics

#### ADJOURNMENT

##### Directors:

Lynn Maulhardt, Chair  
Edwin T. McFadden III  
Daniel C. Naumann

##### Staff:

Mauricio E. Guardado Jr.	Dr. Maryam Bral
Anthony Emmert	Brian Collins
John Carman	Craig Morgan
Michel Kadah	Robert Richardson
Adrian Quiroz	Linda Purpus
Randall McInvale	Evan Lashly
Hannah Garcia-Wickstrum	Tessa Lenz

*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, please contact the District Office 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

\_\_\_\_\_  
Brian Collins, Chief Operations Officer

Posted: (date) December 22, 2021

(time) 4:45 pm (attest) Destiny Rubio

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

Posted: (date) December 22, 2021

(time) 5:00 p.m.

(attest) Destiny Rubio

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



Board of Directors  
Michael W. Mobley, President  
Bruce E. Dandy, Vice President  
Sheldon G. Berger, Secretary/Treasurer  
Mohammed A. Hasan  
Lynn E. Maulhardt  
Edwin T. McFadden III  
Daniel C. Naumann

General Manager  
Mauricio E. Guardado, Jr.

Legal Counsel  
David D. Boyer

**MINUTES**  
**ENGINEERING AND OPERATIONS**  
**COMMITTEE MEETING**  
**Thursday, December 2, 2021, 9:00 A.M.**

**COMMITTEE MEMBERS PRESENT:**

Chair Lynn E. Maulhardt  
Director Edwin T. McFadden III  
President Michael Mobley (substitute for Director Naumann)

**STAFF ATTENDING**

Dr. Maryam Bral, chief engineer  
Anthony Emmert, assistant general manager  
Brian Collins, chief operations officer  
John Carman, operations and maintenance program supervisor  
Michel Kadah, engineer  
Tessa Lenz, associate environmental scientist  
Craig Morgan, engineering manager  
Josh Perez, chief human resources officer  
Ambry Tibay, senior accountant

**PUBLIC PRESENT**

No members of the public were present at the meeting

**OPEN SESSION: 9:00 a.m.**

Chair Maulhardt called the Engineering and Operations Committee Meeting to order at 9:00 a.m.

**Committee Members Roll Call**

Clerk called the roll. Committee members: Chair Maulhardt, Director McFadden, and Director Mobley were present.

**1. Public Comment**

Chair Maulhardt asked if there were any public comments for the Committee. None were offered.

**2. Approval of Minutes**

Motion to approve the Minutes from the November 4, 2021 Engineering and Operations Committee meeting, Director McFadden; Second, President Mobley. Voice vote: three ayes (Maulhardt, McFadden, Mobley); none opposed; Motion carried, 3/0.

**3. December 8, 2021 Board Meeting Motion Agenda Items**

**3.1 Supplemental Appropriation for Freeman Diversion Rehabilitation**

Engineering Manager Craig Morgan addressed the committee and provided a slide presentation (see attached) regarding staff's request that the Committee recommend

authorizing the General Manager to initiate a supplemental appropriation for CIP 8001 to allow for the continued advancement of the Freeman Diversion Expansion project as new federal court mandated deadlines have led to the depletion of the project budget for fiscal year 2021-2022, to the full Board.

President Mobley asked if these costs can be attributed to consultants working overtime. Mr. Morgan stated that the University of Iowa and the Bureau of Reclamation have incurred additional fees due to the need to expedite the modeling projects to meet the Court's deadline. He added that the amount budgeted for the next 2.5 year period of work has now been condensed. Chief Operations Officer Brian Collins stated that it has not been determined whether a fifth model will be required, but that cost, if needed, has also been included in the supplemental appropriation.

The committee members agreed to recommend approval of the motion item to the full Board.

#### **4. Project Highlights**

##### **4.1 Engineering Department Monthly Update**

Chief Engineer Dr. Bral provided updates and slides (see attached) on the Engineering department's activities for the month.

Chair Maulhardt inquired as to why the District was excluded from receiving funding for the High Hazard Potential Dams Grant Program and if staff was aware of which projects did receive funding. Dr. Bral stated that limited funding was made available to California and that the list of funded projects had not yet been published. Chair Maulhardt recommended that staff complete forensics on the application process to be better prepared for additional funding opportunities.

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

Associate Environmental Scientist Tessa Lenz provided updates and slides (see attached) on the Environmental Services department's activities.

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

Chief Operations Officer Brian Collins provided updates and slides (see attached) on the Operations and Maintenance department's activities for the month.

Chair Maulhardt asked about the material from the desilt basin cleanout. Mr. Collins stated that it was relocated to the Dos Diegos area. Chair Maulhardt asked if staff has tested the soil and mentioned that the County is looking for fill dirt. Mr. Collins stated that there is a deposit of sediment near the Saticoy Shop that staff had analyzed and which is now available to be sold for a low cost. Mr. Collins stated that United has 20,000 cubic yards total. Chair Maulhardt mentioned the infrastructure bill and stated that it will be difficult to find fill dirt in the future. He recommended that staff complete an analysis of the fill and make it available. Mr. Collins stated this was a great idea and planned to look at it as a long-term option.

Director Mobley asked for an update on PTP Well No. 4. Mr. Collins stated that staff caught a preliminary bearing failure on PTP Well No. 2., and then removed PTP Well No. 2's motor for repairs. Shortly after, PTP Well No. 4 went out. PTP Well No. 4's motor was then sent out for an expedited rewind. At this point in time, staff leveraged well OH Well No. 12 at Rose and Central to convey water back to the PTP System. Staff is now working through administrative items to ensure that enterprise funds are appropriately managed.

Chair Maulhardt recommended that future meetings be held at facility locations or a tour of the facilities in the future.

#### **5. Future Agenda Topics**

No future agenda topics were offered.

#### **ADJOURNMENT 9:57 a.m.**

Chair Maulhardt adjourned the Engineering and Operations Committee meeting at 9:57 am.

I certify that the above is a true and correct copy of the minutes of the Engineering and Operations Committee Meeting of December 2, 2021.

**ATTEST:** \_\_\_\_\_  
Lynn Maulhardt, Chair

Motion Item 3.1


Supplemental Appropriation for Freeman Diversion Rehabilitation

Cost Breakdown		
Physical Modeling	USBR	\$668,929
	Iowa	\$1,004,495
Engineering Design including physical model support	NHC	\$341,254
	Stantec	\$155,300
	Misc. Engineering Services	\$170,000
Staff Time including travel		\$287,294
MSHCP support studies		\$100,000

☐ Need: \$2,727,272

☐ 10% Contingency: \$272,727

☐ Supplemental Appropriation Total: \$3,000,000



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# ENGINEERING DEPARTMENT MONTHLY UPDATE

December 2, 2021



## SFD Safety Improvement Project



- NEPA Permitting - Proposed Release Channel
  - Technical Assistance (Virtual) Meeting with FERC, NMFS, CDFW, and SWRCB to review the 30% design and hydraulic modeling results on November 29.



- 2021 HHPD Grant Application
  - Nine (9) California dams classified as extremely high hazard dams were included in the DSOD application to FEMA. SFD was not selected due to limited funding made available to California.



## Lake Piru WTP Slope Repair and Drainage Improvement Project

- Bid Opening held on October 28, three (3) bids received.
  - Summer Construction: \$91,480
  - Quality Ag: \$69,774
  - J&H Engineering: \$69,100
- Preconstruction meeting with J&H scheduled for December 2.
- Construction through December 2021.
- Earth Systems Pacific will perform the material and compaction testing for the work.



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## Freeman Diversion Rehabilitation

- The field portion of the Geotechnical Investigation is complete.
- The Geotechnical Engineering Report is due in March 2022 in support of the fish passage design.



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## Iron and Manganese Removal Project

- Dr. Bral was invited to provide project updates and feedback on the DCIP process at the ADC 2021 Installation Innovation Forum (San Antonio, TX).



- DOD OLDCC has completed NEPA for the Project and issued the NTP to the District.
- GSE Construction mobilized on November 29. Project is anticipated to be complete by January 2023.



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## OH System Backup Generator Project

- Construction is nearing completion.
- Material delivery delays
  - Delivery and installation of two appurtenances required to complete the work is pending.
- Time extension request submitted to CalOES, requesting project completion to be on May 25, 2022.




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## Coastal Brackish Groundwater Extraction and Treatment Plant

- October 19 - Agreement with GEI executed on for CEQA documentation of the project.
- October 19 - CEQA Kickoff Meeting and Site Tour at Navy Base Point Mugu.
- November 17 - Letter to Regional Water Quality Control Board regarding Water Quality Sampling.



Pictured left to right: Ginger Gillin (GEI), Nick Tomera (GEI), Tessa Lenz (UWCD), Nathan Jacobsen (USNBVC), and Robert Richardson (UWCD)



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## Water Sustainability Projects inclusion in DWR SGM Grant Round 1

- Ferro Rose Artificial Recharge of Groundwater
- Laguna Road Recycled Water Pipeline/Connection
- Nauman Road Recycled Water Pipeline/Connection
- SWP Interconnect Turnouts
- Freeman Expansion
- Coastal Brackish Groundwater Extraction and Treatment Plant





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QUESTIONS





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ENVIRONMENTAL SERVICES  
DEPARTMENT

Project Highlights


Environmental Services Manager, Linda Purpus  
December 2, 2021



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Summary Updates

- Freeman Sediment Management Project
- Historic Properties Management Plan
- End of Year Activities and Reports



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## Key Highlight

FERC Fish Passage Pre-implementation Studies  
(fall surveys complete)

- 750 total O. mykiss captured (genetic samples)
  - 630 fish tagged
  - 120 fish too small to tag
- Traps installed November 30





# Operations and Maintenance Update

## December 2, 2021



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# SANTA FELICIA DAM WATER TREATMENT PLANT AND GROUNDS





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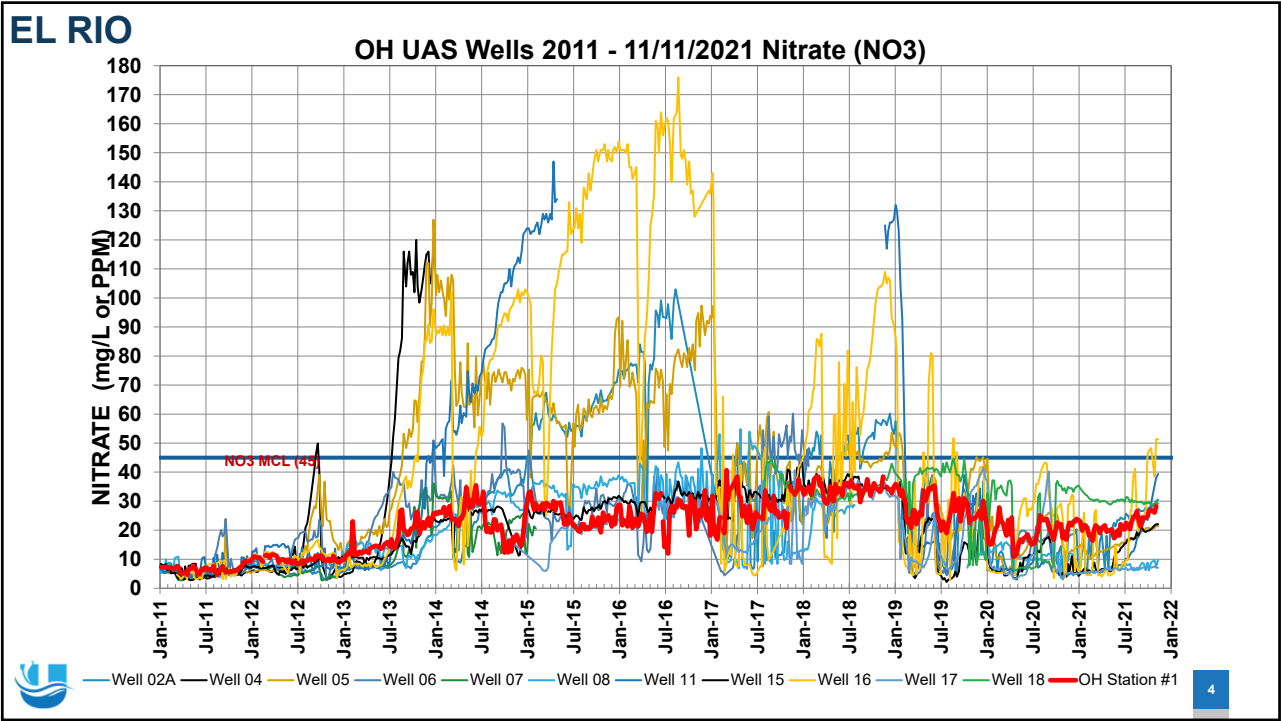
# ANNUAL DESILT BASIN CLEANOUT



As of 12-1-21  
1809 LOADS  
43,416 CUBIC YARDS


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OH PIPELINE PORT HUENEME WATER  
AGENCY METER REPLACEMENT



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PTP 48" MAINLINE METER  
REPLACEMENT



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# INSTRUMENTATION



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# QUESTIONS?



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### **Staff Report**

**To:** Engineering and Operations Committee Members

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

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

**Date:** December 28, 2021 (January 6, 2022, Meeting)

**Agenda Item:** 3.1 Authorize the General Manager to Approve Proposed Change Orders in response to adjusted Material and Equipment Costs related to the Buy American Act compliance for the Iron and Manganese Removal Project, CIP No. 8007  
**Board Motion**

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#### **Staff Recommendation:**

The Engineering and Operations Committee members will consider recommending authorizing the General Manager to approve change orders proposed by GSE Construction Company, Inc. in response to the 2021 Defense Community Infrastructure Program grant special conditions regarding compliance with the Buy American Act for the Iron and Manganese Treatment Project resulting in a construction contract cost increase up to one million dollars (\$1,000,000).

#### **Discussion:**

On May 28, 2021, the Department of Defense's (DOD) Office of Local Defense Community Cooperation (OLDCC) issued a Federal Funding Opportunity (FFO) seeking proposals for approximately \$60 million in grants which was made available as part of the Fiscal Year (FY) 2021 National Defense Authorization Act for community infrastructure projects under the Defense Community Infrastructure Program (DCIP). The FFO noted that priority would be given to projects that enhanced military value, military installation resilience and military family quality of life.

On July 8, 2021, the District received a letter of support from the Commanding Officer of Naval Base Ventura County for its FY 2021 DCIP application for financial assistance. On July 12, 2021, the District submitted a pre-application for \$4,371,450 in federal assistance under the DCIP. On August 17, 2021, the OLDCC formally invited the District to submit a full application for grant funding. On August 27, 2021, the District completed a full proposal and submitted its application to the OLDCC. On September 21, 2021, the District received notice through Congresswoman Julia Brownley's Office that the OLDCC approved a federal grant in the amount of \$4,230,133 to the District under the DCIP. On September 23, 2021, the DCIP grant agreement was fully executed with a project completion date of August 31, 2023.

**Agenda Item 3.1      Authorize the General Manager to Approve Proposed Change Orders in response to adjusted Material and Equipment Costs related to the Buy American Act compliance for the Iron and Manganese Removal Project, CIP No. 8007**  
**Board Motion**

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The DCIP grant agreement includes special terms and conditions including the DOD's National Policy Requirements, General OLDCC Terms and Conditions and the DCIP Specific Terms and Conditions. The District's legal counsel reviewed these special terms and conditions and considered them reasonable. The National Policy Requirements includes compliance with the Buy American Act (Title 41, Chapter 83 of the United States Code) for all construction projects.

The Buy American Act (BAA) was passed by the U.S. Congress in 1933 and it relates to Federal procurements or Federal financial assistance. The BAA requires that goods, products and materials be produced in the United States, including iron, steel and manufactured goods. Goods, products and materials that are BAA compliant are known as either domestic end products or domestic construction materials which are determined by a two-part domestic content test as follows:

1. For domestic end products or construction materials that consist of iron and/or steel exceeding fifty (50) percent of the total cost of all components, the domestic content must constitute at least ninety-five (95) percent of the total cost of all components used to make the item.
2. For domestic end products or construction materials that consist of iron and/or steel that does not exceed fifty (50) percent of the total cost of all components, the domestic content must constitute at least fifty-five (55) percent of the total cost of all components used to make the item.

A waiver is offered to the BAA two-part domestic content test for commercially available off-the-shelf (COTS) items which applies to any item or construction material that is a commercial item sold in substantial quantities in a commercial marketplace and is offered to the government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace. Additionally, an exemption to the BAA requirement applies to construction contracts over \$7,008,000 for goods, products and materials to be procured from countries that have signed an internal trade agreement with the United States under the Trade Agreements Act (TAA).

On May 14, 2021, the District solicited the Iron and Manganese Treatment Plant (Phase 1) project for construction bids. On June 23, 2021, the District received four (4) construction bids. On July 14, 2021, the District's Board of Directors awarded a construction contract in the amount of \$9,342,900 to GSE Construction Company, Inc. (GSE) with a construction completion date of October 30, 2022. The agreement with GSE was fully executed on August 26, 2021. The Contract Documents for which contractors placed their construction bids was prepared before the OLDCC's FFO and did not include the BAA requirement.

On August 30, 2021, the District issued Work Directive Change (WDC) No. 1 that notified GSE of the invitation to apply for a DCIP grant and that the special conditions included compliance with the BAA. GSE advised the District that its construction bid included goods, products and

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**Agenda Item 3.1      Authorize the General Manager to Approve Proposed Change Orders in response to adjusted Material and Equipment Costs related to the Buy American Act compliance for the Iron and Manganese Removal Project, CIP No. 8007**  
**Board Motion**

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materials that did not meet the BAA requirement. Therefore, WDC No. 1 requested that GSE provide alternate submittals and additionally quantify all cost and schedule impacts related to meeting the BAA requirement. On November 16, 2021, the District issued Change Order No. 1 which fully incorporated the BAA requirements into the Contract Documents, provided a BAA compliance certification form for all submittals, and extended the construction completion date to January 3, 2023.

On November 19, 2021, GSE submitted a preliminary change order calculation of \$757,000 as it relates to ensuring all goods, products and materials comply with the BAA requirement. This amount comprises less than ten (10) percent of the original contract amount. This preliminary change order calculation was incomplete and was missing a response from a few vendors. An update to this change order calculation is anticipated from GSE. GSE is required to provide justification for all cost and schedule impacts. The final cost must be negotiated between the District and GSE per the process set forth in the Contract Documents.

To expedite the process and minimize construction delays, District staff is recommending that the Board of Directors authorize the General Manager to approve change orders proposed by GSE as it relates to BAA compliance up to the amount of one million dollars (\$1,000,000). At this point in time, it is not expected that this amount will be exceeded.

**Fiscal Impact**

There is no fiscal impact to the adopted Capital Improvement Project (CIP) Budget which includes \$7,698,441 under construction for FY 2021-22 and an additional \$2,580,647 under construction in FY 2022-23 for a total construction budget of \$10,279,088. There are three (3) active grant agreements related to this project: (1) \$300,000 WaterSmart grant from the United States Bureau of Reclamation (USBR), (2) \$2,500,000 Integrated Regional Water Management (IRWM) grant from the Department of Water Resources (DWR), and (3) \$4,230,133 DCIP grant from the OLDCC. The total Federal and State grant funding amount is \$7,030,133. With an existing construction contract in the amount of \$9,342,900 and a not-to-exceed amount of \$1,000,000 for change orders related to the BAA, the District's local contribution is approximately \$3,313,000 which is well below the construction CIP budget for FY 2021-22 and 2022-23.

It should be noted that the applicability of the \$300,000 WaterSmart grant from the USBR is currently unknown. On August 26, 2021, the USBR informed the District that "additional Federal Funding is not allowable on this project due to Financial Assistance Law and Authorizing Legislation that prohibits multiple Federal funding sources to cover the same scope of work". A joint meeting was held on November 18, 2021, with the Federal funding agencies; the USBR and OLDCC. It was recommended that the District apply for a time extension until a further determination could be made. On December 15, 2021, the District submitted a letter to the USBR requesting a time extension.

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**Staff Report**

**To:** Engineering and Operations Committee Members

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

**From:** Maryam A. Bral, Chief Engineer  
Craig Morgan, Engineer Manager

**Date:** December 28, 2021 (January 6, 2022, Meeting)

**Agenda Item:** 3.2 Contract with Northwest Hydraulic Consultants for the  
Freeman Diversion Hardened Ramp Physical Modeling Support  
**Board Motion**

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**Staff Recommendation:**

The Engineering and Operations Committee members will consider recommending authorizing the General Manager to execute a professional services agreement with Northwest Hydraulic Consultants (NHC) in the amount of \$341,254 to provide analysis and support for the physical modeling of the Hardened Ramp as a Freeman Diversion Fish Passage Facility alternative.

**Discussion:**

Due to the accelerated schedule that calls for the physical modeling to be complete by October 31, 2022, there will be continued need for NHC's technical support. This technical support will include providing support with the design, construction, and implementation of alternative configurations, as necessary. NHC will continue to participate in meetings with the Bureau of Reclamation (Bureau), National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife (CDFW). NHC will also be required to travel to the Bureau's lab in Denver to witness physical model runs.

Staff recommends the Committee recommend authorizing the General Manager to execute a contract with NHC to provide analysis and support for the physical modeling of the Hardened Ramp as an alternative Fish Passage Facility at the Freeman Diversion.

**Fiscal Impact:**

The physical modeling support, hydraulic design and analysis of the Freeman Diversion Fish Passage Facility is included in the Fiscal Year 2021-22 Budget (421-400-81020 Project 8001), and sufficient funds are available to provide for the \$341,255.

Attachment A: NHC's Physical Model Support Proposal  
Attachment B: Professional Services Agreement

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NHC Ref. No. 6004761

15 November 2021

**United Water Conservation District**

1701 Lombard Street  
Oxnard, CA 93030

**Attention:**     **Craig Morgan, P.E.**  
Engineering Manager

**Via email:**     [craigm@unitedwater.org](mailto:craigm@unitedwater.org)

**Subject:**        **Hardened Ramp Physical Modeling and Design Evaluation Budget Augmentation**

Northwest Hydraulic Consultants (NHC) has developed preliminary design drawings and reporting for the Hardened Ramp Fish Passage Alternative (Hardened Ramp) at Vern Freeman Diversion Dam (VFD) for United Water Conservation District (United Water). NHC previously provided 30% designs for the Hardened Ramp MOD-6 configurations in the Design Development Report (2020) and for the MOD-9 configuration within the Basis of Design Report (2021).

The Hardened Ramp alternative is being modeled by the Bureau of Reclamation Hydraulics Laboratory (USBR) to further design development. The USBR modeling plan includes baseline testing of both the MOD-6 and MOD-9 conditions using 1:24 and 1:12 scale models. Design development will follow the baseline testing to refine and advance the Hardened Ramp alternative. Refinements to the Hardened Ramp design during this process are expected to include a combination of some or all the following: baffle configuration, intake location/orientation, sediment and debris management alternatives, debris boom design, hydraulic training structures and gate optimization.

United Water has requested that NHC provide continuing review, hydraulic design, and coordination to the Hardened Ramp physical modeling and design refinement process, which is expected to extend through October 2022. The services to be provided can be described to some degree at present but will be adapted depending on needs identified as physical modeling moves forward. The work will be directed by United and coordinated in regular weekly meetings. A description of work tasks and budgets to support the expected level of effort are provided below.

## TASKS

NHC has identified four tasks related to upcoming work on the Hardened Ramp physical modeling and design development until October 2022. Should the Hardened Ramp design proceed to detailed design, additional work will be required on the design downstream of the current model – including the fish screens and cleaning systems, fish monitoring and assessment works, canal gate and ancillary works.

### Task 1: Physical Model Review

This task includes direct support for the physical modeling activities.

NHC expects to provide the following services under this task:

- Support to address ongoing questions for the 1:24 scale model
- Support for the development of the 1:12 Model Design construction and boundary conditions
- Attendance and input for a 1:12 Baseline Demonstration and agency visit
- Attendance and input for the Design Development testing on the 1:12 and 1:24 scale models, likely 2 trips to USBR laboratory

### Task 2: Hydraulic Design Support

Over the next year design development for the Hardened Ramp will take place through a combination of concept development outside of the physical models and testing in the models.

In this task NHC will develop and analyze alternative configurations and modifications to the design to improve diversion, fish passage, and sediment management performance. Options may be screened in numerical models and advanced or eliminated for further consideration in the physical model testing program. The details and level of effort for individual items will depend on findings from the physical model and input from the design team (United, USBR, Larry Weber) and regulatory agencies. NHC expects that work may be completed in the following areas under this task:

- Modeling of preferred intake geometry and design alternatives in CFD and estimation of yield for varying gate configurations
- Refinement of the ramp design including the baffle spacing and orientation; crest alternatives; sediment and debris management; and low flow channel optimization
- Testing of sediment management options including the flushing channel and other sluicing or training wall options
- Debris Boom preliminary design and alternative concepts for testing in the physical model

- Dam crest spillway and apron design designment including potentially attraction/distraction flows and refinement of flow splits between the dam, crest and intake

NHC will provide documentation through short technical memorandums and design drawings as needed for the items listed above.

### **Task 3: Meetings and Coordination**

This task includes regular online meetings and coordination through October 2022. NHC attends standing meetings on the Hardened Ramp for 2 hours every week. The meetings include coordination with United to direct the work effort, review of physical modeling results and approach, coordination with fisheries agencies, and discussion of the hydraulic design development work effort in Task 2. Time is included for regular attendance of these meetings for two individuals and anticipated as-needed attendance for other members of the NHC project team.

### **Task 4: As-Directed Items**

NHC recognizes that other tasks may be necessary or further detail may be needed for tasks described above outside of our estimates in this document. This task provides as-directed funds that may be used in consultation with United Water to address topics or needs not currently defined. This task budget will be spent only as authorized by United.

## **SCHEDULE**

The overall schedule of work extends through the physical modeling period, ending in October 2022. The schedule for individual tasks and activities within tasks will be coordinated with United as the work proceeds. NHC understands that timely input to United and USBR throughout the process is needed to support the ongoing physical modeling activities and maintain the overall project schedule.

## **BUDGET**

The costs for the tasks outlined above were estimated based on the expected level of effort for design and analysis of potential solutions that are presently anticipated. Depending on initial development and review of potential solutions with the United team and the fisheries agencies, cost allocations may need to be shifted between tasks. The total budget augmentation requested takes into account remaining funds from the Hardened Ramp Design Modifications and Hardened Ramp 30% Design task orders. The remaining funds are estimated based on an estimate of billed hours from October 2021. A cost breakdown by task

is given below. NHC is requesting an augmentation of \$341,254 for design services through October 2022.

**Proposed Tasks and Budget:**

#	Task	Budget
1	Physical Model Review	\$146,720
2	Hydraulic Design Support	\$249,790
3	Meetings and Coordination	\$67,320
4	As-Directed Items	\$39,180
	Budget Remaining from Previous TO	(\$161,756)
	<b>Augmentation Requested</b>	<b>\$341,254</b>

A detailed cost breakdown can be provided upon request.

**CLOSURE**

We hope the approach outlined above and the estimated schedule meets United's needs for contracting purposes. Please call or email with any questions or comments.

Sincerely,

**Northwest Hydraulic Consultants Inc.**



Barry Chilibeck, P.Eng.  
Principal



Brady McDaniel, P.E.  
Principal

## SCHEDULE OF STANDARD CHARGES (Effective April 2021)

Labor Category	Fee Rate (\$US/hour)
Principal .....	255
Principal T3 .....	235
Sr. Project Engineer/Scientist .....	215
Sr. Engineer/Scientist 1 .....	190
Sr. Engineer/Scientist 2 .....	165
Engineer/Scientist 1 .....	145
Engineer/Scientist 2 .....	125
Jr. Engineer/Scientist .....	115
GIS Analyst 1 .....	145
GIS Analyst 2 .....	110
Sr. Engineering Technician .....	145
Engineering Technician.....	115
Jr. Engineering Technician .....	90
Sr. Engineering Lab Technician .....	135
Sr. Contract Administrator .....	170
Sr. Technical Editor .....	150
Technical Editor .....	115
Office Administrator .....	90

### Handling Charges /

#### Fees

Markup on Subconsultants.....	10%
Markup on Reimbursables .....	10%
Markup on Travel/Subsistence .....	10%

#### Photocopies    \$/sheet

B&W 8½ x 11 .....	\$0.10
B&W 11 x 17 .....	\$0.15
Color 8½ x 11 .....	\$1.00
Color 11 x 17 .....	\$2.00

#### Plotting            \$/sheet

Plots, bond, 11 x 17 .....	\$2.00
Plots, bond, D size .....	\$4.00
Plots, oversize (running foot) .....	\$2.00

*Labor costs subject to annual escalation adjustment in October to reflect cost of living and merit salary increases. Refer to separate schedules for field and laboratory equipment charges.*

## **AGREEMENT FOR PROFESSIONAL CONSULTING SERVICES**

THIS AGREEMENT (“Agreement”) is made and entered into on \_\_\_\_\_, 2022, by and between the **United Water Conservation District**, Ventura County, California, (hereinafter “**UNITED**”), and Northwest Hydraulic Consultants, (hereinafter “**CONSULTANT**”).

### **RECITALS:**

WHEREAS, UNITED desires to obtain professional services in connection with the support of the physical modeling efforts associated with the Hardened Ramp Fish Passage Alternative (“Project”); and

WHEREAS, UNITED has selected CONSULTANT to provide such services; and

WHEREAS, CONSULTANT represents that it has the skills, experience, license, and expertise to perform these professional services for UNITED; and

WHEREAS, UNITED is desirous of engaging the services of CONSULTANT to perform these services;

NOW, THEREFORE, based on the terms and covenants set forth herein, UNITED and CONSULTANT mutually agree as follows:

### **1. EMPLOYMENT**

A. UNITED hereby employs CONSULTANT to perform and complete the professional engineering services as set forth in Exhibit “A” (“Scope of Work/Schedule of Charges”). CONSULTANT shall perform such professional services as set forth in Exhibit “A” and shall furnish or procure the use of incidental services, equipment, and facilities reasonably necessary for the completion of services.

B. Any extra work over and above that included in the Scope of Work included in Exhibit “A” shall be in compliance with Section 3D.

C. CONSULTANT represents that its services shall be performed, within the limits prescribed by UNITED, in a manner consistent with the level of care and skill ordinarily exercised by other engineering professionals under similar circumstances at the time and in the vicinity its services are performed.

D. **Barry Chilibeck** shall: (a) personally perform or supervise the performance of services on a day-to-day basis on behalf of CONSULTANT; and (b)

maintain direct communication with UNITED's **Craig Morgan** or designee in the performance of CONSULTANT's services.

E. CONSULTANT in the performance of services hereunder shall fully comply with any and all local, state and federal laws, regulations, ordinances, and policies applicable to its work, including any licensing laws applicable to CONSULTANT's profession and anti-discrimination laws pertaining to employment practices.

F. In the event of any conflict between the terms and conditions set forth in Exhibit A (Scope of Work/Schedule of Charges) versus those terms and conditions set forth in this Agreement, the terms and conditions set forth in this Agreement shall govern and the conflicting terms and conditions in Exhibit A shall not apply.

## **2. TERM OF AGREEMENT**

Unless otherwise earlier terminated as specified in Section 8, this Agreement shall commence on the date set forth above and shall expire on **October 31, 2022**.

## **3. COMPENSATION**

Payment by UNITED for the consulting services shall be considered as full compensation for all personnel, materials, supplies, and equipment used in carrying out the work.

A. Compensation and payments to the CONSULTANT shall be as described below:

1. UNITED shall compensate CONSULTANT on a time and expenses basis not to exceed **three hundred forty-one thousand two hundred fifty four dollars (\$341,254)** for performing all services authorized and required by this Agreement and specified in Exhibit "A." UNITED shall compensate CONSULTANT only for actual costs incurred on a time and expenses basis, but in no event shall the total compensation be greater than the not to exceed amount above. However, the total amount paid on a time and expenses basis may be lower than the not to exceed amount above based on actual costs incurred. Payment shall be made in accordance with CONSULTANT's Schedule of Charges submitted to UNITED, included in Exhibit "A" attached and incorporated by reference herein.

2. CONSULTANT shall provide UNITED with monthly itemized invoices. Invoices shall include the categories and identities of CONSULTANT's employees performing services, a description of the services, the number of hours spent performing services, the hourly rate for each employee, CONSULTANT's actual costs and expenses, and the total amount of compensation requested by CONSULTANT for that month. Upon UNITED's request, CONSULTANT shall include with its monthly invoices a detailed verification, including accounting

records, of the work actually performed and costs and expenses incurred, along with any other documents or information reasonably requested by UNITED.

B. UNITED shall pay CONSULTANT within thirty (30) days after receipt of CONSULTANT's invoices, with the exception of any disputed amounts which shall be withheld until resolution of the dispute. If UNITED has reasonable grounds to believe that CONSULTANT will be unable to materially perform the services under this Agreement, or there exists or may exist a claim against CONSULTANT arising out of CONSULTANT's negligence or intentional acts, errors, omissions, or material breach of any provision of this Agreement, then UNITED may withhold payment of any reasonable amount due to CONSULTANT which is directly related to such negligence, intentional act, error, omission or material breach. No payment made under this Agreement shall be conclusive evidence of CONSULTANT's performance of the Agreement, either wholly or in part, and no payment shall be construed to be an acceptance by UNITED of CONSULTANT's work.

C. CONSULTANT shall notify UNITED in writing of the need for additional services required due to the circumstances beyond the CONSULTANT's control ("Additional Services"). The CONSULTANT shall obtain written authorization from UNITED before rendering any Additional Services. Compensation for all approved Additional Services shall be negotiated and approved in writing by UNITED before such Additional Services are performed by CONSULTANT. No compensation shall be paid to the CONSULTANT for any Additional Services that are not previously approved by UNITED in writing.

D. Reimbursable expenses, if applicable, are in addition to compensation for services outlined in the Scope of Work and Additional Services, and shall be paid to the CONSULTANT in accordance with the guidelines specified on Exhibit "B". Reimbursable expenses are paid at the actual costs, without mark-ups, incurred by the CONSULTANT and the CONSULTANT's employees in conduct of Agreement activities.

#### **4. SCHEDULE OF WORK**

CONSULTANT shall complete and deliver services and deliverables to UNITED in a diligent and professional manner, in accordance with the Project schedule set forth in Exhibit "A" attached and incorporated by reference herein. Time is of the essence in CONSULTANT's performance of services hereunder.

CONSULTANT's Project Manager shall keep UNITED's **Craig Morgan**, or designee informed as to the progress of work by informal reports. Neither party shall hold the other responsible for damages or delay in performance caused by acts of God, strikes, lockouts, accidents, or other events beyond the reasonable control of the other or the other's employees and agents.

## **5. ASSIGNMENT OF CONTRACT**

This Agreement is a professional services contract. CONSULTANT shall not assign this Agreement or any portion of the work without the prior written approval of UNITED. Any such assignment without UNITED's prior written approval shall be void. UNITED may withhold such approval for any reason in its sole discretion.

## **6. INDEMNIFICATION**

To the fullest extent permitted by law, CONSULTANT agrees to indemnify and hold UNITED entirely harmless from all liability arising out of:

1. Workers' Compensation and Employer's Liability. Any and all claims under Workers' Compensation acts and other employee benefit acts with respect to CONSULTANT's employees or CONSULTANT's subconsultant's employees arising out of CONSULTANT's work under this Agreement; and

2. General Liability. To the extent arising out of, pertaining to, or relating to the negligence, recklessness, or willful misconduct of the CONSULTANT, the CONSULTANT shall indemnify, defend and hold UNITED harmless from any liability for damages for (1) death or bodily injury to person; (2) injury to, loss or theft of property; (3) any failure or alleged failure to comply with any provision of law; or (4) any other loss, damage or expense arising under either (1), (2), or (3) above, sustained by the CONSULTANT or UNITED, or any person, firm or corporation employed by the CONSULTANT or UNITED upon or in connection with the Project, except for liability resulting from the sole or active negligence, or willful misconduct of UNITED, its officers, employees, agents, or independent consultants who are directly employed by UNITED. The CONSULTANT, at its own expense, cost, and risk, shall defend any and all claims, actions, suits, or other proceedings (other than professional negligence covered by Section A3 below) that may be brought or instituted against UNITED, its officers, agents, or employees, to the extent such claims, actions, suits, or other proceedings arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the CONSULTANT, and shall pay or satisfy any judgment that may be rendered against UNITED, its officers, agents, or employees, in any action, suit or other proceedings as a result thereof. Any costs to defend under this Section A2 shall not exceed the CONSULTANT's proportionate percentage of fault; and

3. Professional Liability. To the extent arising out of, pertaining to, or relating to the negligence, recklessness, or willful misconduct of the CONSULTANT, the CONSULTANT shall indemnify and hold UNITED harmless from any loss, injury to, death of persons, or damage to property caused by any act, neglect, default, or omission of the CONSULTANT, or any person, firm, or corporation employed by the CONSULTANT, either directly or by independent contract, including all damages due to loss or theft, sustained by any person, firm, or

corporation, including UNITED, arising out of, or in any way connected with, the Project, including injury or damage either on or off UNITED property; but not for any loss, injury, death, or damages caused by sole or active negligence, or willful misconduct of UNITED. With regard to the CONSULTANT's obligation to indemnify for acts of professional negligence, such obligation does not include the obligation to provide defense counsel or to pay for the defense of actions or proceedings brought against UNITED, but rather to reimburse UNITED for attorneys' fees and costs incurred by UNITED in defending such actions or proceedings brought against UNITED, and such fees and costs shall not exceed the CONSULTANT's proportionate percentage of fault.

## **7. INSURANCE**

A. CONSULTANT shall procure and maintain for the duration of this Agreement, and for injuries which occur and claims which are made after the services herein are provided, insurance policies in accordance with the requirements set forth in Exhibit "C" attached and incorporated by reference herein. CONSULTANT shall also provide UNITED with a certificate of insurance attesting to its professional liability (errors and omissions) coverage and all required additional insured endorsements.

B. Submission of insurance certificates or endorsements or other proof of insurance shall not relieve CONSULTANT from liability under the indemnification provisions of Section 6. CONSULTANT's obligations in accordance with Section 6 shall apply whether or not such insurance policies shall have been determined to apply to any of such claims, damage, lawsuits, losses or liabilities covered by Section 6.

C. By its signature hereto, CONSULTANT certifies that it is aware of the provisions of California Labor Code Section 3700 which requires every employer to be insured against liability for workers compensation' or to undertake self-insurance as specified. CONSULTANT shall comply with these provisions before commencing work under this Agreement.

## **8. TERMINATION OF AGREEMENT**

### **A. Termination for Cause**

1. UNITED may terminate CONSULTANT's services for cause, whereupon this Agreement shall terminate immediately. Termination may occur regardless of whether CONSULTANT's services are completed. Any termination or special instructions from UNITED shall be made in writing.

2. Termination for cause may occur upon any of the following events: (a) CONSULTANT's material breach of this Agreement; (b) abandonment or lack of diligence in performance of the work by CONSULTANT; (c) cessation, suspension,

revocation or expiration of any license needed by CONSULTANT to provide services hereunder; (d) failure of CONSULTANT to substantially comply with any local, state or federal laws, regulations, ordinances or policies applicable to its work hereunder; (e) filing by or against CONSULTANT of bankruptcy or any petition under any law for relief of debtors; or (f) conviction of CONSULTANT or its principal representative or personnel for any crime other than minor traffic offenses.

3. Subject to the provisions of Section 3.B herein, CONSULTANT shall be paid for all approved services performed and approved expenses incurred to the date of termination for cause supported by documentary evidence, including payroll records and expense reports, up to the date of the termination. In the event of termination for cause, all damages and costs associated with the termination, including increased consultant and replacement consultant costs, shall be deducted from any payments due to CONSULTANT.

4. In the event a termination for cause is determined to have been made wrongfully or without cause, then the termination shall be treated as a termination for convenience in accordance with Section 8.B below, and CONSULTANT shall have no greater rights than it would have had if a termination for convenience had been effected in the first instance. No other loss, cost, damage, expense or liability may be claimed, requested or recovered by CONSULTANT.

B. Termination Without Cause/For Convenience. This Agreement may be terminated without cause by UNITED or for UNITED's convenience upon fourteen (14) days' written notice to the CONSULTANT. In the event of a termination without cause, UNITED shall pay the CONSULTANT for all approved services performed and all approved expenses incurred under this Agreement supported by documentary evidence, including payroll records and expense reports, up until the date of the notice of termination. In addition, CONSULTANT will be reimbursed for reasonable termination costs through the payment of 3% beyond the sum due the CONSULTANT under this section through 50% completion of the CONSULTANT's portion of the Project and, if 50% completion is reached, payment of 3% of the unpaid balance of the contract to CONSULTANT as termination cost. This 3% is agreed to compensate the CONSULTANT for the unpaid profit CONSULTANT would have made under the Project on the date of termination and is consideration for entry into this termination for convenience clause.

C. In the event of termination with or without cause, CONSULTANT shall promptly provide to UNITED all Project Documents as defined in Section 9 below within five (5) calendar days from the effective date of termination. Failure to provide all Project Documents as required shall be deemed a material breach of this Agreement.

D. In the event of a dispute as to the performance of the work or an interpretation of this Agreement, or payment or nonpayment for work performed or

not performed, the parties shall attempt to resolve the dispute. Pending resolution of the dispute CONSULTANT agrees to continue the work diligently to completion. If the dispute is not resolved, CONSULTANT agrees it will neither rescind the Agreement nor stop the progress of work, but CONSULTANT's sole remedy will be to submit such controversy to determination by a court having competent jurisdiction of the dispute as required by this Agreement after the Project has been completed and not before.

## **9. PROFESSIONAL SERVICES**

A. The CONSULTANT is employed to render a professional service(s) only and any payments made to it are compensation solely for such services as it may render and recommendations it may make in the performance of services.

B. All plans, specifications, construction documents, data, records, files, communications, information, reports and/or other documents that are prepared, generated, reproduced, maintained and/or managed by the CONSULTANT or CONSULTANT's subconsultants arising from or in any way related to the services provided under this Agreement (regardless of medium, format, etc.) shall be and remain the property of UNITED ("Project Documents"). UNITED may provide the CONSULTANT with a written request for the return of the Project Documents at any time. Upon CONSULTANT's receipt of UNITED's written request, CONSULTANT shall return the requested Project Documents to UNITED within five (5) calendar days. CONSULTANT may make copies of the work generated. Failure to comply with any such written request above shall be deemed a material breach of this Agreement. Nothing in this paragraph shall be deemed a waiver of any copyright in the Project Documents prepared by the CONSULTANT. Any unauthorized reuse or modification of such Project Documents other than for purposes intended by CONSULTANT or for the Project shall be at UNITED's risk and liability.

C. CONSULTANT agrees that all dealings of the parties under this Agreement shall be confidential and no Project Documents or information developed, prepared or assembled by CONSULTANT under this Agreement, or any information made available to CONSULTANT by UNITED, shall be revealed, disseminated or made available by CONSULTANT to any person or entity other than UNITED without the prior written consent of UNITED, unless otherwise required by subpoena or applicable law or regulatory authority.

## **10. INDEPENDENT CONTRACTOR RELATIONSHIP**

It is expressly understood between the parties that no employee/employer relationship is intended, the relationship of CONSULTANT to UNITED being that of an independent contractor. UNITED shall not be required to make any payroll deductions or provide Worker's Compensation Insurance coverage or health benefits to CONSULTANT. CONSULTANT is solely responsible for selecting the means,

methods and procedures for performing its services hereunder as assigned by the UNITED and for coordinating all portions of the work so the results will be satisfactory to UNITED. CONSULTANT will supply all tools and instruments required to perform its services under this Agreement.

#### **11. ASSISTANCE BY UNITED**

It is understood and agreed that the UNITED shall, to the extent reasonable and practicable, assist and cooperate with CONSULTANT in the performance of CONSULTANT's services hereunder. Such assistance does not include, in any manner, the exercise of professional judgment for which CONSULTANT is being retained herein. Such assistance and cooperation to be provided by UNITED as applicable includes, but shall not be limited to, providing right of access to work sites; providing material available from the UNITED's files such as maps, as-built drawings, records and operation and maintenance information; and rendering assistance in determining the location of existing facilities and improvements which may be affected by the Project. CONSULTANT shall otherwise be responsible for giving all notices and complying with all applicable laws, ordinances, rules, regulations and lawful orders of any public authority relating to the work.

#### **12. ADDITIONAL PROVISIONS**

##### **A. Examination of Records**

CONSULTANT agrees that UNITED shall have access to and the right to examine at any reasonable time and on reasonable notice CONSULTANT's documents, papers and records, including accounting records, relating to its performance under this Agreement.

##### **B. Notice**

All notices or other official correspondence relating to contractual matters between the parties shall be made by depositing the same as first-class, postage paid mail addressed as follows:

To CONSULTANT:	Barry Chilibeck Principal Northwest Hydraulic Consultants 30 Gostick Place North Vancouver, BC V7M 3G3
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To UNITED:	Craig Morgan Engineering Manager United Water Conservation District 1701 North Lombard Street, Suite 200
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Oxnard, CA 93030

or such other address as either party may designate hereinafter in writing delivered to the other party. All notices shall be agreed to have been received three (3) days after mailing.

C. No Waiver

No failure or delay by UNITED in asserting any of UNITED's rights and remedies as to any default of CONSULTANT shall operate as a waiver of the default, of any subsequent or other default by CONSULTANT, or of any of UNITED's rights or remedies. No such delay shall deprive UNITED of its right to institute and maintain any actions or proceedings which may be necessary to protect, assert or enforce any rights or remedies arising out of this Agreement or the performance of this Agreement.

D. Integration

This Agreement constitutes the entire agreement between the parties pertaining to the subject matter hereto, and supersedes all prior agreements, oral or written, and all prior or contemporaneous discussions or negotiations between the parties.

E. Modification

No alteration or variation of the terms of this Agreement shall be valid unless made in writing and signed by the parties.

F. Rules of Interpretation

The terms of this Agreement have been negotiated by the parties and the language used in this Agreement shall be deemed to be the language chosen by the parties to express their mutual intent. This Agreement shall be construed without regard to any presumption or rule requiring construction against the party causing such instrument to be drafted, or in favor of the party receiving a particular benefit under this Agreement. No rule of strict construction shall be applied against any party to this Agreement.

G. Partial Invalidity

If any term, covenant, condition, or provision of this Agreement is found by a court of competent jurisdiction to be invalid, void, or unenforceable, the remainder of the provisions hereof shall remain in full force and effect, and shall in no way be affected, impaired, or invalidated thereby.

H. Incorporation of Recitals and Exhibits

The foregoing recitals and exhibits are incorporated herein as though fully set forth.

I. California Law; Dispute Resolution; Venue

This Agreement shall be interpreted and construed pursuant to the laws of the State of California, regardless of whether this Agreement is executed by any party in another state or otherwise. If a dispute arises between the parties related to this Agreement or the breach thereof, the parties shall first attempt in good faith to settle the matter through discussion, and if unsuccessful may in their discretion mutually agree to mediate the dispute prior to filing a judicial action. The costs of a third party mediator, if utilized, shall be borne equally by the parties. If either party elects to file an action in court, such action shall be filed and heard in a court of competent jurisdiction in the County of Ventura.

J. Counterparts

This Agreement may be executed in multiple counterparts, a complete set of which shall be deemed to be an original and all of which together shall comprise but a single document. Signatures may be given via facsimile transmission and shall be deemed given as of the date of facsimile transmittal of the executed Agreement by one party to the other.

IN WITNESS WHEREOF, this Agreement has been executed by the parties hereto.

UNITED WATER CONSERVATION DISTRICT

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

Northwest Hydraulic Consultants Inc.

By \_\_\_\_\_  
\_\_\_\_\_

**EXHIBIT “A” TO AGREEMENT FOR  
PROFESSIONAL CONSULTING SERVICES**

CONSULTANT shall provide professional engineering consultation services under this Agreement in accordance with work described in the attached **Scope of Work** and **Schedule of Charges**.



### **Staff Report**

**To:** Engineering and Operations Committee Members

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

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

**Date:** December 28, 2021 (January 6, 2022, meeting)

**Agenda Item:** **3.3 Designating authorization to the District's General Manager to Execute a Modified Utility Easement Deed Related to the PTP Metering Improvement Project for Select Properties**  
**Board Motion**

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#### **Staff Recommendation:**

The Engineering and Operations Committee members will consider recommending authorizing the General Manager to serve as its agent for the execution and acceptance of a modified utility easement deed for select properties related to the District's Pumping Trough Pipeline Metering Improvement project. The Board previously authorized the General Manager to execute and accept utility easement deeds under Resolution 2020-22 (November 2020).

#### **Discussion:**

The District is working on acquiring utility easement deeds for various turnout locations on the PTP system in order to complete the Pumping Trough Pipeline (PTP) Irrigation Efficiency Meter Replacement Project (Capital Improvement Project No. 8022) and fulfill a grant requirement for the project.

The Board previously approved Resolution 2020-22 authorizing General Manager to serve as its agent for the execution and acceptance of utility easement deeds related to the District's Pumping Trough Pipeline metering replacement project.

Several owners have requested changes to the easement deeds related to this project (PTP Turnout Nos. 113, 114, 135, 139, 144, 145, 146, 147, 150, 156, 158, and 161). Modifications have been made to accommodate the requests of the owners as a group. Authorizing the General Manager to accept and execute the modified utility easement deeds expedites the recordation process.

#### **Fiscal Impact**

The District would not incur any new costs related to this item.

Attachments: A – Modified Utility Easement Deed  
Attachments: B – Resolution 2020-22

RECORDING AT REQUEST OF

Hamner, Jewell & Associates

AND WHEN RECORDED MAIL TO:

United Water Conservation District  
1701 N. Lombard Street, Suite 200  
Oxnard, CA 93030

APN: 216-0-040-595

SPACE ABOVE THIS LINE IS FOR RECORDER'S USE

Exempt from the \$75 Building and Jobs Act Fee per Gov't Code § 27388.1(2)(D) Public Agency  
No Fee Required: Govt. Code Sec. 6103 & 27383  
No Transfer Tax Due: R&T Code Sec. 11922

## UTILITY EASEMENT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

***Helm Ranch, LLC a California limited liability company (hereinafter referred to as "Grantor")***

Hereby GRANT(S) to:

UNITED WATER CONSERVATION DISTRICT (hereinafter referred to as "Grantee")

a perpetual non-exclusive easement ("Easement Area") in gross to construct, use, maintain, operate, alter, add to, repair, replace, reconstruct, inspect and remove at any time and from time to time subsurface non-potable water pipeline(s) and related facilities which is/are connected to and provide service from Grantee's Pumping Trough Pipeline (PTP) system, including but not limited to such surface installations and devices that are appurtenant to said non-potable water pipeline(s) as well as the right of pedestrian and vehicle ingress and egress to access such pipelines and related appurtenances, in, on, over, under and across that certain real property as described and depicted in Exhibit "A" and Exhibit "B" (herein after the "Easement Area") attached hereto and incorporated herein which is located in the County of Ventura, State of California.

Grantor further grants to Grantee the right of assignment, in whole or in part, to others, without limitation, and the right to apportion or divide any of the rights, including but not limited to access and ingress and egress, granted to the Grantee by this Grant of Easement. This right of assignment by Grantor is limited to [successor's to Grantee or other district, government or public entities and utilities in conjunction with the operation of the PTP system.](#)

Grantor agrees for his/herself, his/her heirs and assigns not to erect, place or maintain, nor permit the erection, placement or maintenance of any structures or improvements within the Easement Area that may unreasonably impair, affect, restrict, prevent, or hinder the use of the easement granted herein, including Grantee's right to gain access to the Easement Area for the purposes described herein. Grantee, and its contractors, agents and employees shall have the right to trim or cut tree roots or other vegetation as may endanger or interfere with said pipelines and related appurtenances and shall have free access to said pipelines and related appurtenances at all times. [Grantee's right to trim trees and cut roots or other vegetation is limited to within the Easement Area or along the boundary of the Easement Area.](#) Grantee shall have the right, but not the obligation, to construct a fence or other barrier along the perimeter of the Easement Area or within

the Easement Area for purposes of protecting said pipelines and related appurtenances, provided that Grantee provides Grantor with whatever keys, combinations or codes are necessary to gain entry through the fence or barrier.

Any construction, operation, repair, and maintenance of the improvements installed within the Easement Area by Grantee shall be kept in good condition and repair, in compliance with all applicable laws, regulations, ordinances.

Grantee shall be solely responsible for and shall indemnify, defend and hold Grantor and Grantor's property harmless from and against all costs, expenses, damages, claims, liens, causes of action, losses, liabilities, including reasonable attorneys' fees, or injuries arising from or incident to the construction, installation, use, maintenance, operation, alteration, improvement, repair, replacement, reconstruction, inspection, and/or removal of Grantee's facilities within the Easement Area, or resulting from any action or inaction of Grantee or its agents, employees, contractors, invitees or assignees in connection with any entry on Grantor's property for the purposes described herein.

If any legal action or proceeding arising out of or relating to rights, terms and conditions of this instrument is brought by either party due to the actions or omissions of the parties to this instrument, the prevailing party shall be entitled to recover from the non-prevailing party, in addition to any other relief that may be granted, its reasonable attorneys' fees, costs and expenses incurred in the action or proceeding by the prevailing party.

Unless earlier terminated by mutual written agreement of the parties or their respective successors in a subsequent written instrument, the easement granted herein shall continue until such time that Grantee's facilities within the Easement Area are no longer used by Grantee or any successor or assign with an intent to permanently abandon the use thereof, excluding however any temporary cessation of use for any period of time for the purpose of performing maintenance, improvements or repairs or for any other reason within the reasonable operation of Grantors' facilities.

In exercising its rights under this Grant of Easement, Grantee shall act in such a manner to cause the least injury to the surface of the ground and shall restore the surface to as near the same condition as it was prior to such work as is practicable.

IN WITNESS WHEREOF, the undersigned has/have executed this Utility Easement Deed as of \_\_\_\_\_, 20\_\_\_\_.

GRANTOR:  
***Helm Ranch, LLC a California limited liability company***

By: \_\_\_\_\_  
Name:  
Title:

By: \_\_\_\_\_  
Name:  
Title:

## **ACKNOWLEDGMENT**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of \_\_\_\_\_

On \_\_\_\_\_ before me, \_\_\_\_\_, Notary Public, personally appeared \_\_\_\_\_, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signatures(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature \_\_\_\_\_ (Seal)

**ACKNOWLEDGMENT**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of \_\_\_\_\_

On \_\_\_\_\_ before me, \_\_\_\_\_, Notary Public, personally appeared \_\_\_\_\_, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signatures(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature \_\_\_\_\_ (Seal)

## EXHIBIT "A"

### LEGAL DESCRIPTION

**PUBLIC AGENCY CERTIFICATE OF ACCEPTANCE**  
**(Government Code Section 27281)**

This is to certify that the interest in real property conveyed by the Utility Easement Deed dated \_\_\_\_\_, \_\_\_\_\_, from ***Helm Ranch, LLC a California limited liability company*** ("Grantor"), to the UNITED WATER CONSERVATION DISTRICT ("Grantee"), is hereby accepted by the undersigned officer on behalf of the UNITED WATER CONSERVATION DISTRICT, pursuant to authority conferred by Board action dated \_\_\_\_\_, \_\_\_\_\_, and the Grantee consents to recordation thereof by its duly authorized officer.

**DATED:** \_\_\_\_\_ **UNITED WATER CONSERVATION DISTRICT**

By: \_\_\_\_\_

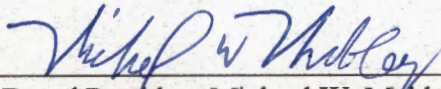
Its: \_\_\_\_\_

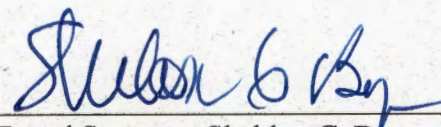
**RESOLUTION 2020-22**

**A RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE UNITED WATER CONSERVATION DISTRICT  
AUTHORIZING GENERAL MANAGER TO SERVE AS ITS AGENT  
FOR THE EXECUTION AND ACCEPTANCE OF UTILITY EASEMENT DEEDS  
RELATED TO THE DISTRICT'S PUMPING TROUGH PIPELINE  
METERING REPLACEMENT PROJECT**

**BE IT RESOLVED** by the Board of Directors of the United Water Conservation District that General Manager Mauricio E. Guardado, Jr., is hereby authorized to serve as the Board's agent for the execution and acceptance of utility easement deeds related to the District's Pumping Trough Pipeline Metering Replacement project.

**PASSED, APPROVED and ADOPTED** this 10<sup>th</sup> day of November, 2020.

ATTEST:   
Board President Michael W. Mobley

ATTEST:   
Board Secretary Sheldon G. Berger





### **Staff Report**

**To:** Engineering and Operations Committee Members

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

**From:** Maryam A. Bral, Chief Engineer  
Craig A. Morgan, Engineering Manager  
Robert J. Richardson, Senior Engineer  
Michel Kadah, Engineer  
Adrian Quiroz, Associate Engineer  
Erik Zvirbulis, GIS Analyst

**Date:** January 4, 2021 (January 6, 2022, 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 December 2021.

#### **Discussion:**

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

- Spillway Improvement Project
  - The 30% design phase activities continued during the month of December. Staff attended bi-weekly progress meetings with GEI, reviewed GEI responses to the Board of Consultants (BOC) comments from the BOC meeting No. 5, reviewed design phase schedule and monthly expenditure forecast received from GEI, and prepared Earned Value monthly progress reports.
  - On December 7, GEI design staff along with Staff visited Santa Felicia Dam to collect rock core samples for additional laboratory testing and to make more site observations to support the constructability analysis efforts.
- Outlet Works Improvement Project
  - The above updates reported for the Spillway Improvement Project are also applicable to the Outlet Works Improvement Project.
  - On November 23, Staff received a letter from the California Department of Water Resources Division of Safety of Dams (DSOD) which acknowledged the receipt of the District's application for the review and approval of the 30% design along with the filing fee of \$78,400. The letter also indicated that DSOD would inform the District about the progress of the application review by December 1 and notify the District if

#### 4.1 Monthly Engineering Department Report Information Item

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additional information would be required. As of December 22, the District has not received any update from DSOD.

- FERC License Amendment Application and NEPA Documentation
    - Upon the completion of the November 29th virtual technical assistance meeting with the regulators (i.e., FERC, NMFS, CDFW and State Board), NMFS requested to review the draft biological assessment (BA) report, including the 30% design plans of the new release channel. Alternatively, Staff suggested to FERC to consider providing the 30% design plans and a technical memorandum describing the basis of design for the new release channel (i.e., design documents) to NMFS for review in order to complete NMFS technical assistance with the design of the new release channel. Staff believes this approach helps expedite the permitting process and advancing the dam safety improvement project. FERC appears to be in favor of this approach. Once the review of the design documents is complete, the final design documents will be included in the draft BA and submitted to FERC for further review and process.
    - Catalyst started working on the design documents post the November 29 meeting and submitted the draft design documents to the District for review on December 29. Staff is planning to submit comments to Catalyst by mid-January for inclusion in the final design documents which will be submitted to FERC by February 1.
  - Loan and Grant Applications
    - Staff continued to search for federal and state grant funding opportunities.
    - On December 7, Staff attended EPA WIFIA Program – the WIFIA Application Experience webinar provided to the 2021 selected borrowers to learn more about the terms and conditions of the Water Infrastructure Finance and Innovation Act (WIFIA) loan.
    - On December 14, Task Order (TO) #2 in the amount of \$2,900 was issued to Kennedy Jenks Consultants (KJ) as part of KJ's On-Call Services Agreement with the purpose of receiving support from KJ during the preparation and submittal of a Notice of Interest (NOI) to CalOES for the 2021 FEMA Hazard Mitigation Grant Program (HMGP). The 2021 FEMA HMGP includes support of large projects (greater than \$10 million) that can be implemented over 36 months subsequent to the grant award.
    - On December 23, Staff submitted an NOI to CalOES which included a request for support to implement the new outlet works with a total project cost of \$52 million (with the federal share comprising 75% of the total project cost). If selected, the District will be invited to submit a sub-application to CalOES in March 2022. The list of selected projects is expected to be announced in the summer of 2022, and the grants are expected to be awarded in 2023.
  - Santa Felicia Dam Safety
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#### **4.1 Monthly Engineering Department Report Information Item**

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- On December 9, Staff asked OPS to suspend the weekly inspections of the spillway seepage area after receiving DSOD's field engineer approval. The spillway seepage area has been dry since August 2021, nevertheless Staff continued monitoring this area on a weekly basis per the DSOD's field engineer's request. Staff informed FERC about suspension of the weekly inspection activities via email on December 9.
- On December 15, Staff finalized and submitted the 2021 SFD Dam Safety Surveillance and Monitoring Report (DSSMR) to FERC and DSOD.
- On December 15, Staff finalized and submitted the 2021 Annual Security Certification Compliance Letter to the D2SI Security Branch of FERC.
- On December 14, Staff finalized and submitted the 2021 SFD EAP Status Report to FERC.

#### **2. Santa Felicia Dam Sediment Management Project**

- Staff has received a proposal from Earth Systems Pacific (Earth Systems) to perform the geotechnical work related to the Lake Piru Reservoir sediment sampling and testing plan. This includes preparation of test pit logs during the test pit excavation work, geotechnical laboratory testing, and preparation of a summary report. Staff will prepare and execute an agreement for this work by January 2022. The test pit excavation work is on track to be performed in mid-February after the appropriate environmental permits are obtained.
- The Notification of Lake or Streambed Alteration was submitted to CDFW on October 19 for the excavation work related to the Lake Piru Reservoir Sediment Sampling. This initiated the 90-day timeline to receive a Lake or Streambed Alteration Agreement for the test pit excavation work. On November 8 CDFW requested additional information and an additional fee to continue the application review. Staff mailed the check for the additional fee on November 12. As of December 22, the receipt of the Lake or Streambed Alteration Agreement was still pending.
- The Notice of Intent to the Los Angeles Regional Water Quality Control Board (LARWQCB) for the Lake Piru Sediment Sampling Project for the excavation work related to the Lake Piru Reservoir Sediment Sampling was submitted on October 19. On December 3, Staff received notice from LARWQCB that the District may proceed with this project per the terms and conditions of the General Order.

#### **3. Pothole Trailhead Parking Area**

- Staff reached out to the Fernandeño Tataviam Band of Mission Indians (FTBMI) to explore collaboration opportunities for public education and outreach at or near the project site. The FTBMI's response to the District's request has been positive and indicates interests in future collaboration.

#### **4. Lake Piru Water Treatment Plant Slope Evaluation**

- On December 14, a Notice to Proceed with construction was issued to J&H Engineering and General Contractor's Inc. (J&H).
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#### 4.1 Monthly Engineering Department Report Information Item

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- On December 16, construction began with J&H removing the existing road base material (See Figure 1). Construction is expected to be completed during the first week of January 2022.

#### 5. Freeman Diversion Rehabilitation/Fish Passage Facility

- USBR completed baseline model runs in its laboratory for the 1:24 scale Hardened Ramp Mod 6 physical model.
- University of Iowa started shakedown in its laboratory for the 1:24 scale Vertical Slot physical model.
- Staff, USBR, University of Iowa, Stantec and NHC participate in rotating weekly calls with NMFS and CDFW to provide updates on physical modeling, CFD modeling and design alternations.

#### 6. Iron and Manganese Removal at the El Rio Water Treatment Plant

- Grants:
    - USBR WaterSMART Drought Response Program (\$300k)
      - i. December 15, 2021 – Prepared and issued letter to USBR requesting 6-month time extension (expires July 1, 2022) until further agreement can be reached on how to maintain both sources of Federal funding for the Project. A decision from the USBR is pending.
    - DWR Integrated Regional Water Management (IRWM) Prop 1 (\$2.5M)
      - i. Project Monitoring Plan in development (due Jan 31, 2022)
      - ii. 3<sup>rd</sup> Quarterly Progress/Financial Reports in progress (due Jan 31, 2022)
    - DOD OLDCC Defense Community Infrastructure Program (\$4.23M)
      - i. December 29, 2021 – Prepared and submitted 1<sup>st</sup> Quarterly Progress/Financial Report
  - Meetings:
    - Weekly coordination meetings between Staff and the District's construction manager (HDR, Inc.)
    - Weekly construction progress meetings hosted by HDR and attended by GSE Construction and Staff.
  - GSE Construction has submitted approximately 105 out of a total of 302 submittal packages anticipated for the project. HDR and design engineer (Kennedy Jenks Consultants) have been providing responses to these submittals including a requirement to comply with the Buy American Act.
  - GSE Construction has submitted 17 Requests for Information (RFI) to date. HDR, KJ and the District have been providing responses.
  - GSE Construction continued construction activities, including potholing and rough grading operations (See Figures 2-4)
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#### 4.1 Monthly Engineering Department Report Information Item

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- The tentative date for construction completion and implementation is January 3, 2023. A total of four (4) inclement weather days have been counted.
- Projected construction activities for the next few months are:
  - Completion of rough grading
  - Excavation and installation of the 20" backwash supply pipeline
  - Installation of electrical conduits for building
  - Excavation for installation of filter drain pump station
  - Excavation and installation of 6" sewer line
  - Excavation and installation of footing for washwater recovery tank

#### 7. El Rio Well Replacement

- Staff provided the required documents to the Division of Drinking Water (DDW) for a permit amendment and the permit amendment is in for review by DDW.

#### 8. OH System Backup Generator at the El Rio Booster Plant

- On December 1, Staff received CalOES approval letter for a time extension allowing the construction to be complete by February 25, 2022, and the entire project, including a three-month grant close out period, to be complete no later than May 25, 2022.
- On December 6, Engineering and OPS Staff performed a job walk along with the construction contractor (Oilfield) and the construction manager (Phoenix Civil Engineering). Staff checked the work completed to date and prepared a preliminary punch list for the outstanding items to be completed by the construction contractor.
- The completion of the project is pending the installation of the two long lead items, including two high voltage switches. The equipment delivery and subsequent equipment installation is expected to be complete by January 19, 2022.

#### 9. PTP Turnout Metering System Improvement

- Total number of meters installed: 34 of 61 or 55.7% complete. (+1 meter)
  - An additional three (3) meter installations are planned in Winter 2022. (no change)
  - Easement acquisition completion: 18 of 42 obtained or 42.9% complete (+1 obtained)
  - Three (3) owner-signed easements require recording with the County Recorder's office.
  - Agenda Item 5.5 relates to authorizing the General Manager to serve as its agent for the execution and acceptance of a modified utility easement deed for select properties (PTP Turnout Nos. 113, 114, 135, 139, 144, 145, 146, 147, 150, 156, 158, and 161).
  - There are legal issues preventing the land owners from signing easement deeds at PTP Turnout Nos. 107 and 132. Staff is exploring alternatives.
  - March 31 – Staff transmitted Quarterly Invoice No. 11 to DWR AgWUE grant requesting reimbursement in the total amount of \$22,491.34.
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#### **4.1 Monthly Engineering Department Report Information Item**

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- Staff is currently exploring a new option involving electromagnetic flow meters with integrated batteries for challenging locations that lack space for solar power.

#### **10. Recycled Water Update**

- December 29 – Reviewed proposal from Kennedy/Jenks Consultants for Preliminary Design Report related to the Laguna Road Recycled Water Pipeline and provided comments.

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

- Stantec continues to work on the design of the interconnection and is currently developing a hydraulic model which will be made available for review by the City, the District and other agencies.

#### **12. Rice Avenue Grade Separation Project**

- District Staff allowed the City of Oxnard's contractor, GUIDA Surveying Inc. to access PTP Well Site No. 4 on December 2, 4 and 6 to conduct survey work pertaining to the project.
- Staff's comments on the 100% design plans pertained to the PTP facilities were submitted to Kennedy Jenks.
- Staff has provided project updates and information regarding the Project to WREA Consulting who is working with the property owner whose property on the southeast corner of S. Rice Avenue and E. 5<sup>th</sup> St. is impacted by the Project.

#### **13. Coastal Brackish Groundwater Extraction and Treatment Project**

- Meetings:
  - December 6 – Water Resources staff led a public workshop related to the groundwater modeling work under the Proposition 1 Round 1 Groundwater Grant Program (GWGP)
  - December 7 – Water Resources, Engineering and Environmental Services staff held Technical Advisory Committee (TAC) Meeting No. 4, the last and final meeting to conclude groundwater modeling work conducted under the Prop 1 Round 1 GWGP.
  - December 16 – Progress Mtg. 16 with Navy and District staff. Discussed public workshop, TAC Mtg. No. 4, regulatory engagement strategies, planned PHWA Board Meeting project presentation, planning for new monitoring wells at NBVC Point Mugu, CEQA/NEPA strategy, and status of Memorandum of Understanding between the District and the Navy.
- Grants:
  - Prop 1 Round 1 GWGP

#### 4.1 Monthly Engineering Department Report Information Item

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- December 29 – Water Resources staff completed the report entitled, “Extraction Barrier and Brackish Water Treatment Project Feasibility Study: Groundwater Modeling” completing the deliverable for this grant.
- Prop 1 Round 3 GWGP
  - The State Water Resources Control Board was originally anticipating invitations in November 2021, but it has been pushed back to “early 2022”. The District has not received an invitation from its concept proposal to date.
- Sustainable Groundwater Management Grant Program
  - Water Resources and Engineering staff have been preparing information related to the Phase 1 project (construction of six monitoring wells) for submission to the Department of Water Resources through the Fox Canyon Groundwater Management Agency. Applications are due February 18, 2022.
- Design:
  - December 6 – Received draft Technical Memorandum related to Product Water Distribution Alternatives Analysis from Kennedy/Jenks Consultants. Engineering and Water Resources staff reviewed and have been providing comments.
  - January 6, 2022 – Held comment review meeting with Trussell Technologies on Technical Memorandum entitled, “Extended Desktop Modeling Evaluation for Coastal Brackish Groundwater Extraction and Treatment Project”. The report generally describes relevant regulations, source and product water quality, preliminary treatment design and future pilot testing considerations.
  - Reviewed proposal from Carollo Engineers for brine management evaluation as it relates to potential discharge into the Calleguas Salinity Management Pipeline (SMP).
- CEQA/NEPA:
  - Held bi-weekly meetings with GEI Consultants to review draft project description and Initial Study (IS) development related to CEQA.
  - December 14 – Held a permitting matrix kick-off meeting with GEI Consultants.
  - December 21– Held a joint District/Navy meeting to coordinate CEQA/NEPA responsibilities, strategies, and next steps.
- Upcoming (scheduled and tentative dates):
  - January to March – Potential invitation to submit full proposal for State Water Resources Control Board (SWRCB) Proposition 1 Groundwater Grant Program (GWGP) Round 3 Implementation Grants.
  - January – Conduct baseline sampling and video inspect monitoring well CM1A
  - January to February – Receive draft Memorandum of Understanding with U.S. Navy
  - February – Well Siting Tour No. 3 to review additional extraction well sites
  - February – Meeting No. 4 with U.S. Navy Leadership

#### 14. Asset Management

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#### 4.1 Monthly Engineering Department Report Information Item

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- December 1 – EOS Arrow Gold quote was approved and the purchase of the GNSS is in progress. A Mid-December delivery date was originally given but the unit has been delayed due to manufacturing delays (See Figure 5).

#### 15. California American Water (CalAm)

- CalAm is in the process of drafting a response to the District related to a resilience/emergency connection between Rio Plaza and the Oxnard Hueneme (OH) Pipeline at the intersection between Rose Avenue and Simon Way to support the Rio Plaza small water system.
- CalAm is expected to notify the District when ready to discuss a draft contract agreement.
- Staff provided CalAm as-built drawings for the OH system which indicates the location of available turnouts at Rose Ave. and Simon Way and Rose Ave. and Collins Drive intersections.

#### 16. CalOES Community Power Resiliency Grant Program

- No updates to report.

#### 17. Other Topics, Meetings and Training

- November 30 to December 1, 2021 – Craig Morgan, Robert Richardson, Michel Kadah, and Adrian Quiroz attended Confined Space Entry training in Simi Valley.
- December 15, 2021 – Staff attended OPS monthly safety meeting.
- December 16, 2021 – Staff attended the District Christmas Party.
- December 19-20, 2021 – Maryam Bral attended the leadership retreat and coaching.



Figure 1 – Removal of the existing road base material at Lake Piru Water Treatment Plant

#### 4.1 Monthly Engineering Department Report Information Item

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Figure 2 – GSE Construction’s subcontractor Damar Construction performing rough grading for Iron and Manganese Treatment Plant project site



Figure 3 – GSE Construction’s subcontractor Damar Construction building up washwater recovery tank pad for Iron and Manganese Treatment Project

#### 4.1 Monthly Engineering Department Report Information Item

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Figure 4 – GSE Construction crew performing vacuum potholing of utility crossing with proposed sewer line and back wash supply pipeline



Figure 5 – A borrowed EOS Arrow Gold receiver was tested in the field prior to purchasing a new equipment.



### **Staff Report**

**To:** Engineering and Operations Committee Members

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

**From:** Linda Purpus, Environmental Services Manager

**Date:** January 4, 2022 (January 6, 2022, 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 staff report from the Environmental Services Department regarding its activities for the month of December 2021.

#### **Discussion:**

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

- 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 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 7 cubic feet per second (cfs). As of January 1, 2022, the trigger for enhanced habitat water releases have been met through March 2022. The minimum required habitat water release for the month of January is 15 cfs.

2022 Habitat water release trigger date	Trigger criteria (total cumulative precipitation on trigger date)	Minimum required water release if trigger is met	2022 Measured cumulative precipitation	Actual minimum required habitat water release for month
January 1	4.80 inches	15 cfs	12.48 inches	15 cfs
February 1	8.10 inches	20 cfs	TBD	20 cfs

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## Monthly Environmental Services Department Report

### Information Item

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<b>March 1</b>	12.00 inches	20 cfs	TBD	20 cfs
<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 9 cfs through October 1, at which time, minimum required water release will be 7 cfs through January 1 of next calendar year.

At approximately 3:00 pm on December 28, 2021, a minor reduction of flow was recorded at the Santa Felicia outlet works. The temporary reduction was attributed to an obstruction within the west low-flow valve, that reduced flow by approximately 1 cfs, dropping below the minimum required habitat water release of 7 cfs. The reduction of flow was recognized at 06:30 am on December 29, 2021, and flow was restored by 6:45 am. In accordance with the Santa Felicia Water Release Ramping Rate and Implementation Plan, a notification of accidental lapse in water release was submitted to the National Marine Fisheries Service (NMFS), FERC, and State Water Resource Control Board (State Water Board) on December 29, 2021. The minor reduction of flow is not expected to result in any significant environmental impacts. A formal report outlining details of the event, United's response to restore flows, evaluation of environmental impacts, any comments received by regulatory agencies, and United's response to such comments, will be submitted to FERC by January 28, 2022.

- Santa Felicia Fish Passage Pre-Implementation Studies

Environmental Services staff participated with Cramer Fish Sciences in installing and operating fish traps (fyke net trap and rotary screw trap) in middle Piru Creek. Traps were deployed in advance of the December 7, 2021, delivery of the District's State Water Project (SWP) water and operated throughout the December rain events. No *O. mykiss* were captured during these increased flow events. The fyke net trap was damaged during higher flows resulting from the series of storm events in mid-December. The USGS stream gage near the site malfunctioned during this period and the magnitude of flow is not known. The fyke net was repaired and is operational.

- Increased Importation of State Water – Piru Creek Pulsed Flow Study

Within this reporting period, Environmental Services staff concluded facilitated planning and implementation of an inter-agency collaborative study intended to evaluate the effects of a pulsed water release in middle Piru Creek on the non-native aquatic species community. The purpose of the study is to assess the hypothesis that, given appropriate structure and timing, increases in flow can serve as a management tool to displace non-native aquatic species to the benefit of native species. Information obtained from the study may support the District's efforts to eliminate the 3,150 acre foot limitation on United's SWP water deliveries from Pyramid Lake under the FERC license for the South State Water Project. The inter-agency group consisted of United staff, U.S. Geological Survey (USGS) herpetology experts, U.S. Fish and Wildlife Service (USFWS) staff, faculty and

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students from University of California Los Angeles, and staff from Cachuma Operations and Maintenance Board. The group conducted field sampling on December 5-6 and 11-12; before and after the SWP delivery initiated on December 7, 2021. For each field sampling event there were approximately 22-25 participants. Field sampling methods included seining, trapping, electrofishing, and nighttime bullfrog surveys. Prior to the SWP release, invasive species were collected, marked, and replaced. The same sites were sampled after the release. Collected data is currently being analyzed.

- **Historical Properties Management Plan**

The District is developing a Historical Properties Management Plan (HPMP) with a programmatic structure intended to protect cultural and historical resources when performing ongoing operations and maintenance activities, and support federal consultations under Section 106 of the National Historic Preservation Act for future projects under the FERC license. Recent actions in this iterative consultation process include receipt of written comments from tribal stakeholders on August 18, 2021, and Los Padres National Forest on September 7, 2021. United addressed stakeholder comments and submitted a revised draft HPMP to the California State Historic Preservation Office (SHPO) for review and comment on November 30, 2021. On December 21, 2021, SHPO responded with additional comments and expressed a lack of clarity on the subject of the federal undertaking. United scheduled a meeting with SHPO to address their recent comments on January 4, 2022. On December 29, 2021, United requested an additional 90-day extension of time to complete the consultation and submit a final HPMP to FERC by March 29, 2022.

2. **Multiple Species Habitat Conservation Plan (MSHCP)**

- **Geotechnical Exploration for the Freeman Fish Passage Facility**

The Geotechnical Exploration Project was conducted under the authorization of a Lake and Streambed Alteration Agreement (LSAA) with the California Department of Fish and Wildlife (CDFW). The LSAA prescribed compensatory mitigation that consisted of habitat restoration (planting and irrigation of willow and mulefat cuttings), control of non-native plant species, accompanied by monitoring and reporting for a five-year term. In November 2021 Environmental Services staff planted a total of 26 willow and mulefat cuttings in the designated area of Santa Clara River. Storm flow from the December 14, 2021, rain event scoured the restoration site and removed all but two of the restoration plants. Per the terms of the LSAA, United is not required to replant, but will continue efforts related to controlling non-native plant species in the restoration area and conducting surveys to inform annual reports for a period of five years.

### 3. Freeman Diversion Operations

- Programmatic Sediment Management, Freeman Diversion

United consulted with CDFW to negotiate a final LSAA for phase 1 of the Programmatic Sediment Management Project on November 30, December 2, and December 8, 2021. In anticipation of reaching agreement, Environmental Services staff conducted a pre-project survey and submitted a notification to of intent to proceed accompanied by a pre-project survey report to CDFW on December 10, 2021. On December 13, 2021, United received and executed a revised LSAA from CDFW. On the same day, United received a Water Course Permit from Ventura County, completed a pre-construction project site inspection with County staff, and received a Notice to Proceed from the US Army Corps of Engineers for the project. On December 14, 2021, substantial rainfall in the region resulted in flows exceeding 1,000 cfs in the Santa Clara River in the vicinity of the Freeman Diversion and inundating the project site. This storm, in combination with additional forecasted storms, precluded United's ability to conduct the project under the recently received permits. During the week of December 20, 2021, staff issued notifications to the relevant regulatory agencies that the project was unlikely to proceed in 2021. Staff is continuing pursuit of authorizations for the full "programmatic" approach. Much of the material developed for consultation on the "streamlined" (phase 1) version of the project will be directly applicable to the "programmatic" approach and agency staff have been notified to expect these submittals.

### 4. Lake Piru Sediment Sampling Project

Environmental Services staff is supporting the environmental regulatory elements for the Lake Piru Sediment Sampling Project. On November 22, 2021, United received verification from U.S. Army Corps of Engineers authorizing the project under Clean Water Act (CWA) Section 404, Nationwide Permit (NWP) 6. On December 3, 2021, United received approval to conduct the project from Los Angeles Regional Water Resources Control Board under CWA Section 401, NWP 6. On December 6, 2021, CDFW informed United that our Section 1600 LSAA application for the project was complete. CDFW has a 60-day timeline to draft the project agreement.

### 5. Coastal Brackish Groundwater Extraction and Treatment Project

United executed a contract with GEI Consultants for Phase 1 CEQA Documentation and Processing for the Coastal Brackish Groundwater Extraction and Treatment Project. On December 14, 2021, United staff, including the Engineering, Environmental Services, and Water Resources departments, held a kick-off meeting for the state and federal permitting components of the project. The team is currently developing a project description and starting CEQA level project analysis.

**6. Annual Reporting**

Environmental Services staff submitted annual reports in compliance with CDFW LSAA's permitting routine maintenance activities for Lake Piru Recreation Area on December 21, 2021, and the Freeman Diversion Facility on December 23, 2021.

**7. Quagga Mussel Management**

- **Monitoring**

Environmental Services staff continues to conduct routine monitoring under the Quagga Mussel Monitoring and Control Plan (QMMCP) including monthly water quality sampling; monthly veliger (microscopic planktonic larvae) sampling; monthly artificial substrate sampling in Lake Piru (plate sampling); and natural substrate sampling in Piru Creek (surface surveys). Surface surveys were also performed at locations accessed through Rancho Temescal property.

**8. Miscellaneous**

- On December 2, 2021, United submitted comments to the California Fish and Game Commission addressing shortcomings with CDFW's evaluation of CalTrout's petition to list southern California steelhead under the California Endangered Species Act (CESA) and requested that the Commission remand the evaluate back to CDFW to conduct a more thorough assessment of the petition, including consideration of comments provided by United and other stakeholders on the petition. On December 15, 2021, United participated with other stakeholders in providing verbal comments to the Commission reiterating the request to remand the assessment back to CDFW and providing scientific justifications. At the December 15, 2021, meeting, the Commission received CDFW's evaluation of the petition.
- On December 11, 2021, Hannah Garcia-Wickstrum participated with Zachary Hanson and Chris Hendricks in presenting information regarding United's operations and water resource management efforts at the Oxnard Union High School District's 5th Annual STEAM Day.

**Staff Report**

**To:** Engineering and Operations Committee Members

**Through:** Mauricio E. Guardado, Jr., General Manager  
Brian Collins, Chief Operations Officer

**From:** John Carman, Programs Supervisor

**Date:** December 22, 2021 (January 6, 2022, 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 staff report from the Operations and Maintenance department regarding its activities for the month of December.

1. Water Releases, Diversions and Deliveries

- Lake Piru rose 9.09 feet in December to 18,074 acre-feet (AF) of storage.
- 4,957 AF of water was diverted by the Freeman Diversion facility in December.
- 2,818 AF of water was diverted to the Saticoy recharge basins in December.
- 1,860 AF of surface water was delivered to the El Rio recharge basins in December.
- 38 AF of surface water was delivered to the PTP system in December.
- 15 AF of surface water was delivered to Pleasant Valley County Water District in December.

2. Major Facilities Update

- **Santa Felicia Dam**
    - Lake Piru rose 9.09 feet December 1, 2021 through January 1, 2022, to 18,074 AF of storage.
    - On January 1, 2022 the lake level was 71.2 feet below the spillway lip.
    - Habitat water releases from Santa Felicia Dam (SFD) were maintained at 7 cubic feet per second (cfs), for the month of December, as per the Water Release and Ramping Rate Implementation Plan for lower Piru Creek.
    - Staff cleared corrugated pipe drains and access to East Road due to December 14<sup>th</sup> storm event rock slides.
    - High flow pulse release of 1,420 acre feet, consisting of state water, from Lake Pyramid was delivered into Lake Piru.
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**Agenda Item: 4.3 Monthly Operations and Maintenance Department Report –  
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- **Freeman Diversion, Saticoy, and El Rio Recharge Facilities**

- Flows at the Freeman Diversion averaged 81 cfs for the month of December, with 357 cfs of surface water being diverted on January 1, 2021.
- During the month of December, 2,818 AF of surface water deliveries were made to the Saticoy Recharge Facility.
- During the month of December, 1,860 AF of surface water deliveries were made to the El Rio Recharge Facility.
- Static water levels (distance of water from the well pad to the water table):

	<b>2021</b>	<b>2020</b>	<b>2019</b>
Saticoy	145'	122'	123'
El Rio	138.4'	119.2'	128.5'
PTP	115' - 154'	110' - 149'	118' - 153'

- **Noble/Rose/Ferro Basins**

- 0 AF of surface water was delivered to the Noble & Rose basins during December.

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

- El Rio staff assisted with North Turbidity supply line repairs.
- Staff serviced El Rio Booster Plant emergency natural gas engines.

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

- During the month of December PVCWD received 15 AF of surface water from United and PVCWD continued to receive surface water from the Conejo Creek Project and also received some highly treated recycled water from the City of Oxnard's Advanced Water Purification Facility (AWPF).

- **Pumping Trough Pipeline (PTP)**

- During the month of December PTP system demand was met with a combination of surface water from the Freeman Diversion and PTP wells.
- Staff installed new Endress Hauser meter at Turnout 118 as part of the grant funded PTP Meter upgrade project.
- Staff collaborated with contractors Travis Ag and R&B Automation replacing PTP reservoir fill valve.

- **Instrumentation**

- Instrumentation staff troubleshoot and replaced OH Booster Plant VFD programmable logic control cards, the result of Edison power supply interruptions.
- Staff commissioned PTP turnout 118 Endress Hauser 8" meter.
- PTP #5 VFD fan replaced by staff.

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

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- **Lake Piru Water System**

- All chlorine residuals and turbidity readings for the drinking water system were within proper ranges for the month of December.
- 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.
- Staff assisted contractor J&H Engineering with crack repair on treatment plant access road.

**3. Operations and Maintenance Projects Update**

- Grading and potholing ongoing as the Iron and Manganese grant funded project is underway at El Rio Booster Plant.

**4. Other Operations and Maintenance Activities**

- The Santa Felicia Dam Emergency Action Plan sirens located in Piru were exercised on December 3, 2021.
- On December 15, 2021 staff attended the Santa Paula Chamber of Commerce board meeting.
- Flocculation and Freeman control room buildings were re-roofed by contractor Rayco Roofing.
- El Rio treatment facility pre-chlorine sample pump replaced.
- The monthly inspection of Santa Felicia Dam was performed.
- Monthly bacteria samples were obtained for the PTP system.
- Monthly meter readings were obtained for the OH, PTP, and PV Pipelines.
- Completed and electronically transmitted the monthly OH Pipeline 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.
- Action priority update biweekly meetings for operations staff were continued.

**5. Safety and Training**

- During the month of December, approximately 3400 hours of work, within the O & M department, were performed with no reportable accidents. The department's YTD safety record is 1 recordable injury.
- One Safety Meeting was conducted via Microsoft Teams in order to maximize social distancing in light of COVID-19. Two videos were provided to staff entitled *Ventix MX4 Bump Test* by Industrial Scientific *Supervisor Safety Tip: Confined Spaces* by Industrial Hygiene and Safety News (IHSN). The primary objective was to provide awareness of driving safety. AWWA safety handout entitled on "Climb into Confined

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

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Space Safety” was briefed to staff. The purpose was to provide confined space refresher training, with specific emphasis on atmospheric hazards and rescue.

- 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. The online Target Safety assignments for November was “Water Industry Confined Space Entry.” A COVID-19 situational update was also briefed to staff, with emphasis on the most recent variant.

Attachments: A - Operations Log for December

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