

AGENDA
ENGINEERING and OPERATIONS COMMITTEE
Thursday, February 3, 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 January 6, 2022 Engineering and Operations Committee meeting.

3. February 9, 2022 Board Meeting Motion Agenda Items

The Committee will review and discuss the following agenda items to be considered for approval at the February 9, 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 an Amendment to the Bureau of Reclamation's Agreement for the Physical Modeling of the Hardened Ramp for the Freeman Expansion Project

(Operations and Maintenance, Brian Collins) (Proposed Time: 05 minutes)

The committee will review and consider recommending approval of the motion item, authorizing an amendment to the Bureau of Reclamation's (BoR) agreement for the physical modeling of the Hardened Ramp for the Freeman Rehabilitation Project in the amount of \$683,633, to the full Board.

3.2 Authorize an Amendment to the Iowa Institute of Hydraulic Research Contract for the Physical Modeling of the Vertical Slot for the Freeman Expansion Project

(Operations and Maintenance, Brian Collins) (Proposed Time: 05 minutes)

The committee will review and consider recommending approval of the motion item, authorizing an amendment to the Iowa Institute of Hydraulic Research (IIHR) contract for the physical modeling of the Vertical Slot for the Freeman Expansion Project in the amount of \$1,004,495, to the full Board.

3.3 Resolution 2022-06 A Resolution of the United Water Conservation District Board of Directors supporting the submission of the 2021 Sustainable Groundwater Management (SGM) Grant Program SGMA Implementation Round 1 application to the California Department of Water Resources (Engineering, Maryam Bral)

(Proposed Time: 05 minutes)

The committee will review and consider recommending approval of Resolution 2022-06, supporting the submission of a 2021 Sustainable Groundwater Management Act (SGMA)



grant program's SGMA Implementation Round 1 grant application to the California Department of Water Resources, to the full Board.

4. Project Highlights

4.1 Engineering Department Monthly Update (Engineering Department, Maryam Bral)
(Proposed Time: 10 minutes)

4.2 Environmental Services Department Update (Environmental Services, Linda Purpus)
(Proposed Time: 10 minutes)

4.3 Operations and Maintenance Department Update and Modeling Presentation
(Operations and Maintenance Department, Brian Collins) (Proposed Time: 10 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

Brian Collins, Chief Operations Officer

Posted: (date) January 31, 2022

(time) 8:45 am (attest) *Destiny Rubio*

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

Posted: (date) January 31, 2022

(time) 9:00 am (attest) *Destiny Rubio*

At: www.unitedwater.org



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

General Manager
Mauricio E. Guardado, Jr.

Legal Counsel
David D. Boyer

MINUTES
ENGINEERING AND OPERATIONS
COMMITTEE MEETING
Thursday, January 6, 2022, 9:00 A.M.
Board Room, UWCD Headquarters
1701 N. Lombard Street, Oxnard CA 93030

COMMITTEE MEMBERS IN ATTENDANCE

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

STAFF IN ATTENDANCE

Mauricio E. Guardado, Jr., general manager
Dr. Maryam Bral, chief engineer
Anthony Emmert, assistant general manager
Chris Hendricks, senior water treatment operator
Evan Lashly, environmental scientist
Josh Perez, chief human resources officer
Zachary Plummer, IT administrator
Linda Purpus, environmental services manager
Robert Richardson, senior engineer
Kris Sofley, executive assistant/clerk of the board

PUBLIC IN ATTENDANCE

None

Call to Order – Open Session

Chair Maulhardt called the Committee to order at 9:00a.m. All Committee members were present (Maulhardt, McFadden, Naumann)

1. Public Comments
Information Item

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

2. Approval of Minutes
Motion

Motion to approve the Minutes from the December 2, 2021, Engineering and Operations Committee meeting, Director Naumann; Second, Director McFadden. Voice vote: three ayes (Maulhardt, McFadden, Naumann). Motion carries unanimously 3/0.

Director Naumann stated that the Regional Defense Partnership for the 21st Century, whose meetings he attends every month, have invited him and Dr. Maryam Bral to present an update on the Coastal Brackish Groundwater Extraction and Treatment Plant project to its membership at the February 3 meeting. He said that Captain Kimmach made the announcement at this morning's

meeting, and the Captain reported that the base is adding 1,300 additional military personnel and 1,000 civilian personnel at Point Mugu and Port Hueneme.

Chair Maulhardt added that he read an opinion piece that suggested the U.S. Navy needs to give more recognition and funding to Mugu and Hueneme as these operations are growing in importance and operations and are equally if not greater in importance than China Lake, North Island and other training bases in the state.

3. January 12, 2022 Board Meeting Agenda Motion 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

Dr. Maryam Bral addressed the Committee and shared a slide regarding this motion item (see attached). She explained that the District was entered into a grant agreement with the OLDCC (Department of Defense) for \$4.2 million after the District had awarded the construction contract. As part of the OLDCC grant agreement, the construction company must agree to Buy American Act guidelines, which was not a stipulation in the original request for bid proposals. This requirement could potentially add an additional \$1,000,000 in construction costs, which is why staff is asking the Committee to recommend approval of the motion item, authorizing the General Manager to approve the change orders resulting from this requirement, to the full Board.

Chair Maulhardt asked if this was a Federal requirement and what the total cost of the project was. Dr. Bral said that yes, it was a Federal requirement, and that the construction project was estimated at \$9.4 million. Chair Maulhardt said the additional costs are essentially 10 percent of the project cost and that he was concerned, not for United, but for the end users who are paying for the project. He added that he would agree to recommend the approval to the full Board, but with restrictions. Since the project has already been awarded, the end users need to be notified of this change and how it impacts future costs.

General Manager Mauricio Guardado said that the Iron and Manganese project had already been presented to the OH users, who approved the project at a larger amount, \$11.5 million, as the project was presented to OH users prior to the District's being awarded the \$4.2 million grant. Staff worked diligently to secure grant funding to reduce the project costs to the District and thereby rate payers. Dr. Bral added that the District has secured \$6.7 million in federal and state grant funding for this project. Chair Maulhardt said staff is doing a yeoman's job in reducing costs and this is a "good message to constituents." He continued saying that rate payers' expectations need to be recognized and an outreach effort should be initiated as a courtesy to constituents. Director McFadden said if you review the numbers, this may add \$1 million and staff has secured grant funding of some \$6 million.

Dr. Bral said that at the stakeholder meeting in May 2021, the District reported a \$2.5 million grant from the State. Between that May meeting and September, staff secured another \$4.2 million in grant funding from the Federal government, which is a huge reduction in total costs. Chair Maulhardt asked if OH users are aware of this. Dr. Bral replied that staff reports activities and as part of the May 2022 Budget outreach efforts, the OH users will receive another update. Director McFadden suggested that instead of focusing on the potential \$1 million in additional costs, the project amount, offset by grants, is \$5 million. Chair Maulhardt stated that he understands end users and the District are ahead of the game, but he doesn't want people to be surprised. Director McFadden said the District needs to make sure it gets credit for the massive savings grants are providing on this project. Mr. Guardado said that there is a public relations effort across the entire service area, beyond the OH users.

Dr. Bral said that there is also a \$300,000 grant that was awarded to the project from the Bureau of Reclamation, but the Department of Defense said it couldn't have two federal agencies funding the same project, so staff have submitted a request for a six month extension to the Bureau of Reclamation to figure out how that grant award can be used for additional build out and/or efficiencies for the project. Director Naumann asked how that would impact the project timeline. Dr. Bral replied that the project was initially to be completed by October 30, 2022, and that the change order extends the completion date to January 3, 2023, which is basically a two-month extension. Director Naumann said to include that information in the outreach effort.

Director McFadden moved the Committee recommend approval of the change order to the full Board; Director Naumann concurred. Chair Maulhardt approved the recommendation for approval to the full Board.

3.2 Engineering Services to Support the Hardened Ramp Physical Modeling

Dr. Bral explained that staff was looking for support of awarding a consulting engineering contract to Northwest Hydraulic Consultants (NHC) in the amount of \$341,254 and authorize the General Manager to execute the contract with NHC for its providing engineering services in support of the hardened ramp physical model. Director Naumann moved to recommend approval to the full Board; Director McFadden concurred. Chair Maulhardt approved the recommendation of the motion item 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

Dr. Bral explained that although the Board approved Resolution 2020-22 authorizing the General Manager to execute utility easements for the PTP Metering Improvement Project on behalf of the full Board, Hamner Jewell, the consultant working on securing the utility easements from property owners with PTP turnouts, had made some minor modifications to the language of the PTP Utility Easement to expedite 12 easements which are part of this motion item.

District legal counsel recommended to bring the motion item back to the full Board for authorization of the General Manager to execute the modified easements. Director Naumann moved to recommend approval to the full Board; Director McFadden concurred. Chair Maulhardt approved the recommendation of the motion item to the full Board.

Chair Maulhardt said motion item 3.1 is an incredible message of great financial savings. Mr. Guardado said that Maryam Bral is a bulldog, leading the team to secure numerous grant funding opportunities to suppress costs for constituents. Director Naumann asked about the role of the District's consultants and legislative advocates. Mr. Guardado replied that consultants help with the application process and legislative advocates request support from legislators as appropriate, and staff is doggedly pursuing grant opportunities to offset costs. He mentioned that, as discussed during the Water Resources Committee meeting, staff identified projects for Fox Canyon GMA's \$15 million SGMA grant request and keeps plugging away.

4. Project Highlights

4.1 Engineering Department Monthly Update (see attached slides)

Dr. Bral made a presentation updating the Committee of the Engineering Departments activities during December, including NEPA permitting for the Santa Felicia Dam Safety Improvement project, adding that the permitting process did extend the timeline for the project, but staff is trying to keep on track with scheduling. The 30 percent design of the new release channel goes to FERC and NMFS on February 1 for a 30-day review period. She also said that the 2021 FEMA HMGP Grant application, if successful, will be awarded in 2023 and provides a 36-month window to implement the project. The Outlet Works portion of the project, estimated at \$52 million, meets the requirements for the grant, which if awarded, would provide 75 percent of the project costs in a federal funding grant, some \$39 million, with a 25 percent local match. Director Naumann asked if the District has received any assistance from the State. Dr. Bral replied that staff hasn't identified any State funding yet, focusing instead on Federal funding as it is typically higher awards. Mr. Guardado reminded the Committee of the State Infrastructure funding that will be available soon, and is considering a high hazard dam component, and will ask Dr. Bral to provide additional points regarding the WIFIA program, which could be accessed for design costs upfront.

Dr. Bral said the Water Infrastructure Finance and Innovation Act (WIFIA) provides low interest loans and the District has been accepted to apply, adding that the Santa Felicia Dam project was one of only 39 projects invited to apply for the loan. Chair Maulhardt stated that the District received a \$30 million low interest loan for building the Santa Felicia Dam which took 20 years to pay off. Dr. Bral continued, stating that the interest rate of the loan is determined at the time of the loan closing and pay back of the loan begins five years after construction is concluded. She added that there is an application fee of \$125,000 that the District needs to pay for EPA to process the WIFIA loan application. Dr. Bral said she has

asked the EPA program manager if the District is approved for the loan, can the WIFIA loan be used as a local match when applying for Federal grants and the answer is yes. Director McFadden said is it very encouraging to see staff chipping away at this and Chair Maulhardt added that it is impressive to get this level of funding. Mr. Guardado said that Senator Alex Padilla, Senator Dianne Feinstein, Congresswoman Julia Brownley and others have provided so much support, recognizing the safety issues and staying very well informed of the District's progress. Overall, he added, the District is in a very good position to secure additional funding opportunities. He then asked the Committee if it would like Dr. Bral to present highlights of the grant/loan process to the full Board and Chair Maulhardt said yes, highlights, reaffirming to staff the value of this effort.

Dr. Bral continued her presentation, reporting that staff had submitted all the annual reports required two weeks ahead of the deadline. The Lake Piru Water Treatment Plant slope repair project is underway and should be completed by the end of January. Upon completion of the Condor Point project 35 percent design, staff authorized the consultant to proceed to 100 design and it is planned to be completed by the end of June this year. Construction on the Iron and Manganese Treatment Plant project began November 29 and weekly meetings with the construction team began on December 8. Water Sustainability Projects for the DWR SGM grant, including Ferro Rose recharge, Laguna Road recycled water, Nauman-Hueneme Road recycled water interconnection and the Extraction Barrier and Brackish Groundwater Treatment project are being reviewed by the ad hoc Project Committee for possible inclusion in the annual report for each GSP. Dr. Bral also discussed the official opening of Camarillo Desalter project, a project that took 27 years to complete. Mr. Guardado asked the Committee if it would like Dr. Bral to present highlights of the Desalter project to the full Board. Chair Maulhardt said yes, as a brief mention. Director McFadden said it was one of the successes for regional water.

4.2 Environmental Services Department Update (see attached slides)

Environmental Services Department Manager addressed the Committee, offering project updates and key highlights, including efforts related to removing the 3150 acre foot release restriction from Pyramid's FERC license which would allow for increasing importation of State Water; staff training on fish ladder operations; continuing with the Freeman Sediment Management process with many consultation meetings. Ms. Purpus reported that staff received a draft Lake and Streambed Alteration Application from CDFW that included mitigation requirements that were not in proportion to the project. Staff held meetings with CDFW on November 30 and December 2, and December 10. On December 13, staff received a revised Lake and Streambed Alteration Agreement with agreeable mitigation measures. Staff conducted pre-project surveys, executed that Agreement on Monday, and Tuesday's storm event precluded the project. Staff is reaffirming efforts for the project and has notified CDFW and other agencies of a meeting request in February to pursue the programmatic phase of the project. Ms. Purpus then invited Evan Lashly to provide highlights of the Piru Creek Pulsed Flow Study project.

Mr. Lashly explained that the goal of the Pulsed Flow Study is to evaluate if State Water deliveries can be used in a manner to have a positive impact on the Arroyo Toad in Piru Creek. Partnering with USGS, USFWS, UCLA and Cramer Fish Sciences, the District is studying if pulsed flows may impact non-native species such as carp, crayfish, and other species, by flushing out these non-native species which may actually help arroyo toad populations. As part of the study, the team is conducting sampling for non-native species before and after pulsed flow releases. USGS and other agencies have contributed staff time, equipment and analysis. Chair Maulhardt asked what level of student participation is included in the study program and Mr. Lashly said all levels from undergrad to post doctorate research, and that the project is also providing valuable field work experience to many of the undergrad students. Mr. Lashly added that this is a pilot effort which came together very quickly. The water release was limited to 1450 acre feet, pre-release sampling was conducted December 5 and 6, the release began on December 7, and the team conducted post-release sampling on December 11 and 12. At this point in the presentation, Mr. Lashly showed a video produced by the District's John Carman, documenting the Pulse Flow study activities. At the conclusion of the video, Chair Maulhardt said the scope of work is breathtaking. He added that this program has to help the District's case and raise its status as it is doing what it has to do, and the collaborative study is just a part of *all* that the District does. He added that this message needs to be incorporated in the outreach efforts of the District, as these stories have a huge impact. Collaboration on projects, benefits of enhanced studies, all moving the District's mission forward and this video exemplifies this collaborative effort. Director McFadden agreed saying the video delivers a very special message.

Mr. Guardado acknowledged the importance of removing the 3150 limitation, given State Water Project delivery opportunities for all purchases, exchange or Article 21. This work will empower DWR with the knowledge that higher flow rates actually have a positive impact on arroyo toads. Director McFadden said using higher flow rates to mitigate non-native species is very creative and Chair Maulhardt added the District strategically selects efforts that address the issues.

4.3 Operations and Maintenance Department Update and Modeling Presentation (see attached slides)

Dr. Bral explained that Brian Collins was in Denver meeting with the Bureau of Reclamation so she would present the Operations and Maintenance Department update for December to the Committee.

She reported that on December 7, 1470 acre feet of water was released into Lake Piru *before* the latest storm events, which resulted in a nine-foot increase in the lake's elevation. As of January 1, lake elevation was at 983.8, with storage increasing from 15,000 to 18,000 between December and January. Staff cleared a section of the Santa Felicia Dam East road on December 14 after a minor rock/debris accumulation from the storm. Staff also cleaned out the pipe drains

(referred to as 3-barrel structure) and no impacts were sustained as a result of the mud and debris.

At the Freeman Diversion, Dr. Bral said a 24-hour diversion began on December 14, following the first storm event. A second storm event on December 23 and a third storm event on December 29 resulted in approximately 5000 acre feet being diverted. Of that, 47 percent was diverted to the Saticoy recharge basins, 38 percent was delivered as surface water to El Rio and of that, 40-acre feet was delivered through the PTP and 15-acre feet to Pleasant Valley. The water had a high sediment level. Dr. Bral then showed a video of the diversion.

Nitrate levels in the Upper Aquifer System at El Rio were on an upward trend but still under maximum acceptable levels. Two wells, #11 and #16 showed increasing nitrate levels, but those levels decreased with the recharge. The OH System north turbidity meter supply sample was damaged, repaired and put back online quickly. The PTP 30-inch Reservoir Fill Valve was replaced and modified to make valve replacement easier in the future.

Dr. Bral then addressed the Modeling efforts at University of Iowa, including the potential impacts and consequences of extreme conditions (modeling at 30,000cfs) and the MOD 6 1:24 model ran a 3,000 to 12,000 cfs to demonstrate the impact of flows on the fish passage without a flushing channel. Dr. Bral reported that the sediment laden water, without a flushing channel, would be a challenge. Mr. Guardado asked the Committee if it would be beneficial for the full Board to see the flow model portion of the O and M presentation? Chair Maulhardt said that the videos make it easy to see and explain results and thinks it would be helpful for the Board to see the video of the modeling portion.

5. Future Agenda Topics

None were offered

ADJOURNMENT 10:53a.m.

Chair Maulhardt adjourned the meeting at 10:53a.m.

I certify that the above is a true and correct copy of the minutes of the Engineering and Operations Committee Meeting of January 6, 2022.

ATTEST:

Lynn Maulhardt, Chair

Motion 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

*The **Buy American Act** requires Federal agencies to procure domestic materials and products. Two conditions must be present for the Buy American Act to apply:*

- (1) The procurement must be intended for public use within the United States; and*
- (2) The items to be procured or the materials from which they are manufactured must be present in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.*



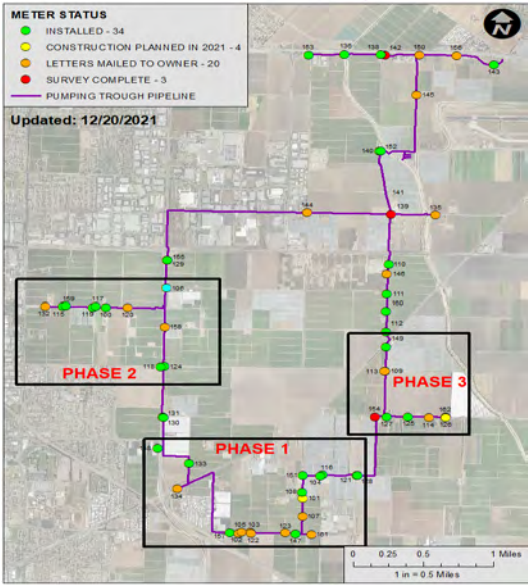
Motion Item 3.2

Engineering Services to Support the Hardened Ramp Physical Modeling

- ☐ Contract with Northwest Hydraulic Consultants for \$341,254
 - ☐ Physical Modeling Support to include:
 - ☐ Modeling result review
 - ☐ On-site model visits
 - ☐ Design alterations
 - ☐ CFD model runs to correlate physical model results.



Motion Item 3.3



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 MONTHLY UPDATE




January 6, 2022




1

SFD Safety Improvement Project




- NEPA Permitting - Proposed Release Channel
 - Completed Technical Assistance (Virtual) Meeting No. 4 with FERC, NMFS, CDFW, and SWRCB on November 29.
 - Next step – Submit the new release channel 30% design plans and TM to FERC and NMFS for a 30-day review period on February 1st.



- 2021 FEMA HMGP Grant Application
 - NOI to be submitted to CalOES for the design and construction of the new Outlet Works and release channel.

- WIFIA Program
 - Received invitation to apply for a \$52M WIFIA loan on October 27, 2021



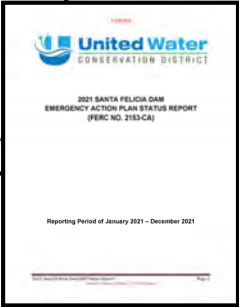

EPA Invites 39 New Projects to Apply for Water Infrastructure Loans

Projects will help modernize water infrastructure for 25 million Americans while creating up to 49,000 jobs


2

2

2021 SFD End of the Year Reporting All Submitted on December 15th



- 2021 Dam Safety Surveillance and Monitoring Report
- 2021 SFD Security Compliance Certification Letter
- 2021 Annual EAP Status Report



3

Lake Piru WTP Slope Repair and Drainage Improvement Project

- Construction began on December 16, 2021
- Completion by early January 2022





4

Recreation Area Condor Point Project



- MNS submitted 35% Design Plans
- Staff authorized MNS to proceed with the 100% design plans and specs



5

5

Iron and Manganese Removal Project



- GSE Construction mobilized on November 29, 2021.
- Weekly construction coordination meetings started on December 8, 2021.




6

6

Water Sustainability Projects inclusion in DWR SGM Grant Round 1

- Artificial Recharge
 - Ferro-Rose Artificial Recharge of Groundwater
- Recycled Water
 - Laguna Road Recycled Water Interconnection
 - Nauman-Hueneme Road Recycled Water Interconnection
- Extraction Barrier and Brackish Groundwater Treatment Project
 - Monitoring Well Construction and Data Collection





7

Other Activities

Confined Space Training



Camarillo Desalter Ribbon Cutting Ceremony

Long-awaited desalter facility opening in Camarillo



Kirstin Kain, center, design manager at engineering firm Brown and Caldwell, gives a tour of the recently opened North Pleasant Valley Groundwater Desalter in Camarillo on Tuesday. The plant is operating now for test purposes, but city officials expect it to be fully operational by summer. PHOTOS BY JUAN CARLOS THE STAR



8

QUESTIONS





Environmental Services Update

Department Updates: *Prep for Freeman Fish Passage Operations, Freeman Sediment Management Program*

Key Highlight: *Increased Importation of State Water*

January 6, 2022



1



Increased Importation of State Water - Piru Creek Pulsed Flow Study


Background

- Survey middle Piru Creek for invasive species before and after the December 7th Water Release (pulsed flow up to 600 cfs)

Goals

- Study the efficacy of pulsed water releases at flushing invasive species from sensitive habitats
- Collaborative effort to inform recommendation for state-wide management practice





2

Partners

- December 5-6
pre-release surveys
- December 11-12
post-release surveys
- Collaborative effort between
agencies, research
scientists, and students

3

3

Activities

4

4

Species Captured







5


5

Preliminary Findings

- Small quantity of captures overall, more captures in post-release efforts
- Pre-release survey: Largest quantity of captures occurred in most downstream survey sites
- Post-release survey: Largest quantity of captures occurred in upstream survey sites.
- Data being evaluated by UCLA research scientists and students

This was a first step –
Anticipate the collaborative effort to continue





6

6

QUESTIONS?





Operations and Maintenance Update

January 6, 2022



1

1

SANTA FELICIA DAM EAST ROAD





2

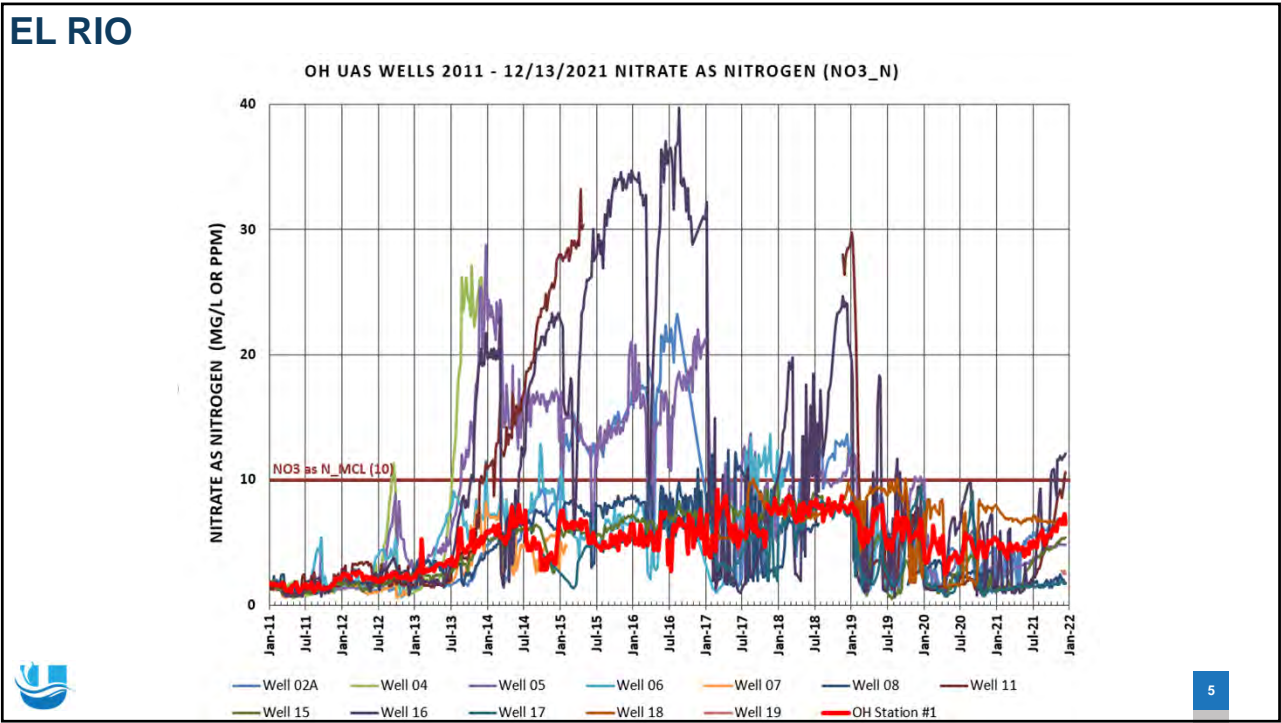
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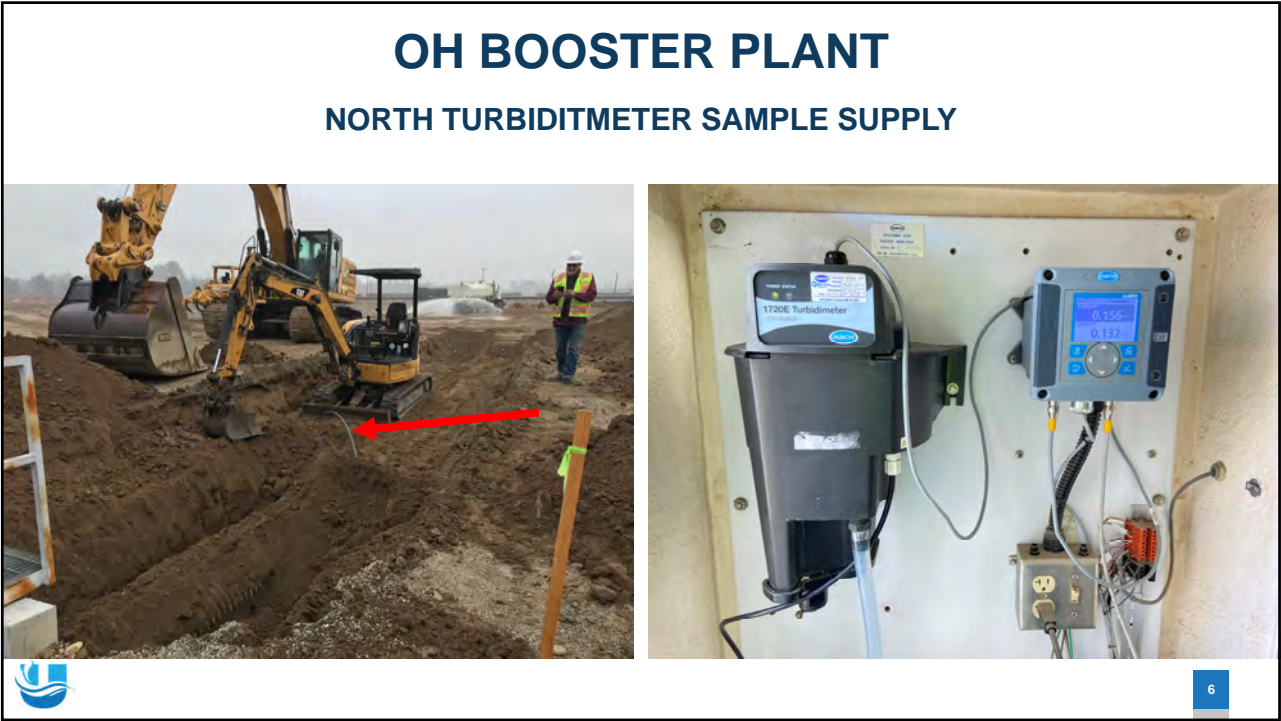
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4



5



6

PTP 30" RESERVOIR FILL VALVE REPLACEMENT







7


MODELING


Completed 1:24-Scale Model



Flow Visualization (River = 30,000 cfs)



**IOWA**
IHR – HYDROSCIENCE & ENGINEERING



8

1:24 MOD-6 Flushing Removed



3kcfs

6kcfs



12kcfs



12,000 cfs



9

QUESTIONS?



10



Staff Report

To: Engineering and Operations Committee

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

From: Brian Collins, Chief Operations Officer
Craig Morgan, Engineering Manager

Date: January 25, 2022 (February 3, 2022 Committee Meeting)

Agenda Item: **3.1 Authorize an Amendment to the Bureau of Reclamation's Agreement for the Physical Modeling of the Hardened Ramp for the Freeman Expansion Project**
Motion

Staff Recommendation:

The Engineering and Operations Committee will consider recommending approval of the motion item, authorizing an amendment to the Bureau of Reclamation's (BoR) agreement for the physical modeling of the Hardened Ramp for the Freeman Expansion Project in the amount of \$683,633, to the full Board.

Discussion:

On November 23, 2020, per a Federal Court order, staff delivered a physical model plan that contained a schedule to conduct physical modeling at one laboratory with a completion date of August 15, 2023. A Motion to Modify was filed with the Court to get relief of the November 1, 2021, physical model completion date listed in the Stipulation Order. A partial time extension was granted and the newly mandated completion date of October 31, 2022.

To complete the physical modeling, consisting of 1:12 and 1:24 model of the hardened ramp and a 1:8, 1:12 and 1:24 scale model of the vertical slot, within the mandated timeline two modeling labs are being utilized. The Bureau of Reclamation (BOR) is conducting the physical modeling for the hardened ramp and the Iowa Institute of Hydraulic Research (IIHR) is conducting the physical modeling for the vertical slot. Modeling is underway at both facilities.

The physical modeling effort at BOR will require the additional funding of \$683,633 to accomplish the hardened ramp modeling work by the court mandated deadline. As a condition of work performed by the BOR, in accordance with the contributed fund agreement terms, funding must be deposited in advance for the scope of work to be completed.

**Agenda Item: 3.1 Authorize an Amendment to the Bureau of Reclamation's Agreement
for the Physical Modeling of the Hardened Ramp for the Freeman
Expansion Project
Motion**

Fiscal Impact:

Approval of this item would result in an additional expenditure of \$683,633. Funding for this motion was approved in the December 8, 2021 Board supplemental appropriation, agenda item 4.2.

Attachments:

Attachment A – First Amendment to the Contributed Funds Agreement

Amendment No. 1 to the Contributed Funds Agreement

R21-CF-35-0006

Between United Water Conservation District

And

The Bureau of Reclamation

For the

Freeman Diversion Modeling Project, Modeling-Hardened Ramp (Phase II)

The United Water Conservation District and the Bureau of Reclamation entered into this CFA in August 2021. In this CFA, Section **V**, Period of Performance, sets the duration of this agreement not to exceed December 31, 2022.

Amendment No. 1 will change Section V, the completion date from December 31, 2022 to March 31, 2023. This will allow for completion of the work effort by Reclamation as defined in the change orders to the Project Management Plan. All other terms and conditions of the CFA are unchanged.

United Water Conservation District

Bureau of Reclamation

Southern California Area Office

Mr. Mauricio Guardado Jr.

General Manager

Mr. John E. Simes, Jr. (Jack),

Acting Area Manager

Date: _____

Date: _____



— BUREAU OF —
RECLAMATION

U.S. Department of the Interior

Bureau of Reclamation

Technical Service Center

Change Order

Job Name Freeman Diversion Modeling Project		Change Number CFA No. R21-CF-35-0006
		Date 1/11/2022
Accounting String (Fund & WBS) XXXR0680R1-RR175396S10004TSC (LCFDM) XXXR0680R1-RR175396S10006TSC (LCFD1) XXXR0680R1-RR175396S20006TSC (LCFD2)	WOID LCFDM, LCFD1, LCFD2	
TSC Team Leader Connie Svoboda / 86-68560 / (303) 445-2152	Reason for Change <input checked="" type="checkbox"/> Scope Change <input type="checkbox"/> Administrative Change <input type="checkbox"/> External Delay <input type="checkbox"/> Higher Priority Work <input type="checkbox"/> Resources not Available <input type="checkbox"/> Underestimated Budget/Schedule	
Group Manager Janet White / 86-68500 / (303) 445-2373	Client Group and Region Lower Colorado Basin Region Client Office Southern California Area Office	
Client Liaison Connie Svoboda / (303) 445-2152 Program Assistant Joy Ravenel / (303) 445-2577	Client Contact Leslie Cleveland / SCAO-7200 / (951) 695-5310	

1. Change Summary

A	Funding Change	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
	New WOID / Fund-WBS String			
B	Scope Change	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
C	Schedule Change	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Revised Completion Date	3/31/2023
D	Budget Change	Yes <input type="checkbox"/> No <input type="checkbox"/>	Approved SA Amount	\$1,241,950
			Change Amount	\$683,633
			New SA Total	\$1,925,583*
	* Additional \$25,000 allocated to Reclamation's Lower Colorado Basin Region for a total of \$1,950,583			
	Notice of Use of Contingency <input type="checkbox"/>			

2. Attachments (*Required)

- ☒ Revised PMP Scope See Note
- ☒ Revised PMP Schedule
- ☒ Revised PMP Budget
- ☐ ESAM Approved Service Agreement*
- ☐ ESAM Draft Service Agreement*
- ☐ MSR
- ☒ Other – “Physical Hydraulic Modeling Plan for the Hardened Ramp Fish Passage Alternative at Vern Freeman Diversion Dam”

3. Reason for Change

There are 3 components to this Change Order.

1.) Extended scope of work and schedule as requested by client

Five and a half additional months of physical model testing have been requested by the client to support design development for the hardened ramp alternative in the two physical hydraulic models. Reclamation's Hydraulics Laboratory developed the attached "Physical Hydraulic Modeling Plan for the Hardened Ramp Fish Passage Alternative at Vern Freeman Diversion Dam" as requested by United Water Conservation District (submitted 9/8/2021). This test plan expands the existing scope of work to include modeling of two design alternatives (MOD-6 and MOD-9) followed by a robust design development phase. A description of modeling approach, objectives, test matrix, instrumentation, limitations, communication plan, and schedule are detailed in the attached modeling plan.

The attached PMP outlines schedule, budget, and tasks. Some specific milestones vary from the Physical Hydraulic Modeling Plan, but key milestone dates are maintained, such as the end of baseline testing in the 1:24-scale model, end of baseline testing in the 1:12-scale model, conversion to the design development phase, and draft report submission.

The milestone for 1:12-scale model construction is listed as 12/10/2021. Due to staffing shortages, COVID-related impacts, unanticipated shop time required to support shakedown of the 1:24-scale physical model, and concurrent laboratory work, it is anticipated that 1:12-scale model construction will complete by 2/4/2022. The key milestone of 1:12-scale model baseline testing completion on 3/25/2022 is still expected to be met with draft report submission by 10/31/2022 and no overall project impacts. The overall period of performance in the PMP is listed as 3/31/2023 to allow staff to respond to client and regulatory comments and finalize the model report.

TSC Project Manager is aware that schedule is a critical success factor for the client and has explored various avenues to increase work speed. Construction delays are being partially mitigated by utilizing multiple staff from other areas of the TSC (i.e., technicians, interns) to assist with construction-related activities. TSC is also exploring opportunities to increase data collection speed.

Budget to support additional testing will include 2.5 full-time engineering and shop staff for 5.5 months. Testing in the original scope of work ended April 15, 2022. The 5.5-month period in the extended scope of work covers April 15, 2022 to September 30, 2022.

Schedule extension: 3/31/2023

Budget impact: \$420,145

Task	Staff Days		Labor Cost \$	Non-Labor \$	Fees \$
	Skill Level II (\$1,112/day)	Skill Level III (\$1,328/day)			
Data Collection and Analysis	180	120	\$359,520	\$2,000	
Laboratory Space Costs					\$58,625

Total \$420,145**2.) Scope creep related to agency requests**

The original scope of work includes hydraulic, sediment, and debris testing for the 30% design of the MOD-6 alternative specified in the Northwest Hydraulic Consultants Design Development Report (2020). While 1:24-scale model construction was underway, design modifications and refinements were presented by Northwest Hydraulic Consultants on the MOD-6 design in September 2021. TSC engineers coordinated with Northwest Hydraulic Consultants and United Water Conservation District to revise the MOD-6 physical model drawings and reconstruct model components. Preliminary flume tests were also requested by the client to verify sediment mobility prior to full sediment placement in the physical model.

The updated test plan requested by United Water Conservation District to address regulatory agency comments expands the scope of work to test both MOD-6 and an additional design called MOD-9, which was developed by Northwest Hydraulic Consultants. TSC engineers coordinated with Northwest Hydraulic Consultants and United Water Conservation District to create MOD-9 physical model drawings, construct flexibility into the model to convert between MOD-6 and MOD-9, and collect model data for both MOD-6 and MOD-9 configurations.

A task is added for 2 engineers to participate in 1 site visit to University of Iowa to view the physical models of the vertical slot alternative and ensure data collection and presentation is aligned between the modeling efforts. A task is also added for 1 engineer to travel to Sacramento, CA to meet with the client and agency representatives to discuss physical model data collection and results.

Budget impact: \$119,840

Task	Staff Days		Labor Cost \$	Non-Labor \$	Fees \$
	Skill Level II (\$1,112/day)	Skill Level III (\$1,328/day)			
Updated physical model test plan		4	\$5,312		
1:24-Scale Model Drawing Modifications for MOD-6 and Addition of MOD-9		10	\$13,280		
1:24-Scale Model Construction Modifications for MOD-6 and Addition of MOD-9	15	5	\$23,320		
1:24-Scale Model Data Collection for MOD-9	15	3	\$20,664		
1:12-Scale Model Drawing Modifications for MOD-6 and Addition of MOD-9		5	\$6,640		
1:12-Scale Model Construction to Convert Between MOD-6 and MOD-9	15	10	\$29,960		

1:12-Scale Model Data Collection for MOD-9	15	3	\$20,664		
Physical model visit to University of Iowa	3	3	\$7,320	\$2,100	
Agency visit to Sacramento, CA		3	\$3,984	\$1,300	

Total \$134,544

3.) COVID-19 related impacts to modeling work

The cost of materials for model construction and sediment was underestimated due to COVID-related cost increases throughout the industry. This item is listed in the original PMP risk register. The number of engineering and shop staff required during shakedown to load sediment into the model and operate the model was underestimated. An additional 3 staff is required during a 2-week shakedown period for each model.

Budget impact: \$128,944

Tasks	Staff Days		Labor Cost \$	Non-Labor \$	Fees \$
	Skill Level II (\$1,112/day)	Skill Level III (\$1,328/day)			
Model Construction Materials and Sediment				\$60,000	
Additional Staff Required to Operate Model	62		\$68,944		

Total \$128,944

4. Scope Change

The extended scope of work is well documented in the attached "Physical Hydraulic Modeling Plan for the Hardened Ramp Fish Passage Alternative at Vern Freeman Diversion Dam" as submitted to United Water Conservation District on 9/8/2021.

5. Schedule Change

Milestone	Current Approved Date	Revised Date
Start:		
Complete:		

Notes: **See PMP for schedule information.**

6. Budget Change

Funding has been provided through a Contributed Funds Agreement between United Water Conservation District and Lower Colorado Basin – Southern California Area Office.

Current Budget

\$1,266,950 Total

\$1,241,950 TSC physical modeling

\$25,000 Lower Colorado Basin Region administrative activities

Change Order

\$683,633 TSC physical modeling

New Budget

\$1,950,583 Total

\$1,925,583 TSC physical modeling effort

\$25,000 Lower Colorado Basin Region administrative activities

7. Updated Risk Register

	Risk	Risk Description & Potential Impacts	Severity	Probability	
1	See PMP for risk register information				
2					
3					
4					

8. Signatures

See TSCESASP site for signatures.

Definitions for Reason for Change

- Scope Change:** Change in schedule or budget because of improved understanding/direction of the work to be performed, scope creep, or due to existing agreement established with a preliminary scope, budget, schedule subject to change.
- Administrative Change:** Examples include:
- Incremental Funding:*** Job is funded incrementally (not completely at start of work).
 - Ongoing Work:*** Job is of an on-going nature (e.g. call-in work, performance monitoring, technical reviews, or general support).
 - Overestimated Budget:*** Need to de-obligate funds.
 - Change in Funding:*** A new account string is required and there is a transfer of unused funds (e.g. at the end of an FY).
- External Delay:** Change in schedule or budget because of external delay (e.g. data from others, input/reviews by others, contract delays, delays in funding, etc.).
- Higher Priority Work:** The client has identified a higher priority work effort that takes precedence over other work for the same client work, resulting in a schedule adjustment to the lower priority work. If the higher priority work affects other clients, TSC will mediate a discussion of resulting change orders with all affected clients.
- Resources not Available:** Resources TSC had identified to perform the work were not available (e.g. due to illness, attrition, etc.). Note that resource availability is a requirement of each service agreement. Tentative availability of resources will be identified on the PMP as a project risk with the potential remedy (e.g. delay of lower priority work) agreed to by the client at the start of the job.
- Underestimated Budget/Schedule:** TSC did not properly account for the cost/schedule of the work to be performed.

Staff Report

To: Engineering and Operations Committee

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

From: Brian Collins, Chief Operations Officer
Craig Morgan, Engineering Manager

Date: January 25, 2022 (February 3, 2022 Committee Meeting)

Agenda Item: **3.2 Authorize an Amendment to the Iowa Institute of Hydraulic Research Contract for the Physical Modeling of the Vertical Slot for the Freeman Expansion Project**
Motion

Staff Recommendation:

The Engineering and Operations Committee will consider recommending approval of the motion item, authorizing an amendment to the Iowa Institute of Hydraulic Research (IIHR) contract for the physical modeling of the Vertical Slot for the Freeman Expansion Project in the amount of \$1,004,495, to the full Board.

Discussion:

On November 23, 2020, per a Federal Court order, staff delivered a physical model plan that contained a schedule to conduct physical modeling at one laboratory with a completion date of August 15, 2023. A Motion to Modify was filed with the Court to get relief of the November 1, 2021, physical model completion date listed in the Stipulation Order. A partial time extension was granted and the newly mandated completion date of October 31, 2022.

To complete the physical modeling, consisting of 1:12 and 1:24 model of the hardened ramp and a 1:8, 1:12 and 1:24 scale model of the vertical slot, within the mandated timeline, two modeling labs are being utilized. The Bureau of Reclamation (BOR) is conducting the physical modeling for the hardened ramp and the IIHR is conducting the physical modeling for the vertical slot. Modeling is underway at both facilities.

The physical modeling effort at IIHR will require the additional funding of \$336,721 to accomplish the vertical slot (1:12 and 1:24) modeling work by the court mandated deadline. The modeling team will determine if a 1:8 (or similar) scale model will be required to examine the screening systems by May 1, 2022. If required, the screen model will require \$667,774 of additional funding. The total additional expenditure within this motion is \$1,004,495.

**Agenda Item: 3.2 Authorize an Amendment to the Iowa Institute of Hydraulic Research
Contract for the Physical Modeling of the Vertical Slot for the Freeman
Expansion Project
Motion**

Fiscal Impact:

Approval of this item would result in an additional expenditure of \$1,004,495. Funding for this motion was approved in the December 8, 2021 Board Meeting, supplemental appropriation, agenda item 4.2.

Attachments:

Attachment A – UWCD IIHR Freeman Expansion Vertical Slot PSA Amendment No. 1

**AMENDMENT No. 1
TO THE PROFESSIONAL SERVICE AGREEMENT**

The Professional Service Agreement (hereinafter referred to as “Agreement”) made effective September 3, 2021, by and between United Water Conservation District (hereinafter "United"), and the University of Iowa (hereinafter referred to a “Consultant”), for the purpose of providing professional construction and materials testing services in connection with Freeman Diversion Expansion Project, is here by amended as follows:

Agreement

On September 3, 2021, United Water Conservation District entered into an agreement with the University of Iowa to obtain professional construction and materials testing services provided in connection with Freeman Diversion Expansion Project.

Scope of Work

This amendment dated February __, 2022, provides for additional services consisting of an extension work scope timeline and a 1:8 or similar scale screen model. The scope of work is listed in more detail in the attached proposal.

Contract Term

There is no change in the term of the contract.

Compensation

The not to exceed cost for the additional work described above is \$1,004,495. The total amended contract amount is \$2,368,519. The conditions of the original Agreement dated September 3, 2021, shall remain enforce except as amended herein.

United Water
Conservation District

University of Iowa

Mauricio E. Guardado, Jr.
General Manager

Wendy Beaver
Executive Director, Sponsored
Programs

AMENDMENT No. 1
TO THE PROFESSIONAL SERVICE AGREEMENT
Attachment A – Scope of Work and Schedule



College of Engineering
IIHR—Hydroscience and Engineering
University of Iowa
100 C. Maxwell Stanley Hydraulics Lab
Iowa City, Iowa 52242-1385
319-335-5238
iihr.uiowa.edu

Brian Collins
Chief Operations Officer
United Water Conservation District
brianc@unitedwater.org

RE: Supplemental Services and Schedule Extension

Mr. Collins:

Below is the cost table for supplemental services and schedule extension. The proposed supplemental services includes the following scope of work items:

1. Sourcing 72 tons the fine sediment from Texas.
2. Increasing the sediment volume of the 1:12 model.
3. Increasing the AWS flow from 600 to 750 cfs.
4. Modeling a 1,200 cfs AWS flow condition through the fish entrance gates on the 1:24 model.
5. Simulating fish pipe discharge from fish counting stations on both models.

All costs associated with extending the project schedule to October 31, 2022.

Budget Breakdown

Cost Category	Labor	Non-labor	Total
Management/Travel	\$45,910	—	\$45,910
Construction	\$29,262	—	\$29,262
Model Ops	\$183,640	—	\$183,640
Materials/Supplies/Machine Rentals	—	\$77,910	\$77,910
Total	\$258,811	\$77,910	\$336,721

Please let me know if you have any questions, need additional information, or would like to discuss the scope of work, budget, or schedule. The budget and scope can be revised as needed in the future based on results from the other physical models and future decisions by United.

Sincerely,

Troy Lyons, P.E., Ph.D.
Director of Engineering Services
IIHR – Hydroscience & Engineering | The University of Iowa
319-335-5319 | 319-321-2669 (m)
iihrengineering.com | iihr.uiowa.edu



College of Engineering

IHR—Hydrosience and Engineering
University of Iowa
100 C. Maxwell Stanley Hydraulics Lab
Iowa City, Iowa 52242-1585
319-335-5238
ihr.uiowa.edu

Brian Collins
Chief Operations Officer
United Water Conservation District
brianc@unitedwater.org

RE: 1:8 screen model

Mr. Collins:

Below are the scope of work items and estimated cost for a 1:8 scale screen model to test the diversion and AWS screens for the vertical and hardened ramp options. This information is provided per your request for an estimated budget to complete this work should a decision be made to move ahead with this modeling next year. The scope of work includes the following items:

1. All administrative effort associated with the additional scope items.
2. A laboratory model box with appropriate flow conditioning to convey water through the screen systems.
3. The AWS and Diversion screens and associated flow baffling systems modeled as accurately as possible to replicate the headloss and flow distribution along the screens.
4. Flows through the AWS screens up to 720 cfs and flows through the diversion screens up to 750 cfs.
5. Fish bypass flow leaving each screen system.
6. Sediment injected into the model flow upstream of the screen system at specific rates.
7. Systems used to re-suspend sediment (such as spargers) or to capture sediment (such as floor drains) to the extent possible.
8. Flow tests without sediment to measure velocities near the screen surface to evaluate flow distribution along each screen. Velocities may be measured with ADV, LDV, or PIV methods.
9. Data to document flow patterns upstream and downstream of the screen systems. This may be done with LSPIV, ADV, dye releases, or other similar methods.
10. Flow tests with sediment to evaluate the conveyance, deposition, and management of sediment that enters the diversion and/or AWS channels upstream of the screens.
11. Key flow conditions documented with photo and video.
12. Underwater video to document sediment movement to the extent possible.
13. Headloss measured across the screens for various flow scenarios.
14. Terrestrial scans to document sediment deposition or changes for select cases.
15. Make alterations to the screens, sediment management systems, or other features to improve screen performance or sediment management as needed.

16. Remove the screen systems for the vertical slot option and replace with the hardened ramp option. The "model box" would be re-used and therefore only one option will be available for testing/viewing at a time.
17. Repeat the above tests, documentation, and improvements for the hardened ramp alternative.
18. Final report to document the model design, test approach, test conditions, test results, model performance of the VS and HR options, and any other pertinent information. Final report to be reviewed by United representatives.

The cost to complete this work is estimated to be \$667,774 as shown in the table below. The work would commence approximately May 1, 2022 and be completed prior to the October 31, 2022 deadline.

Budget Breakdown

Cost Category	Labor	Non-labor	Total
Management/Travel	\$47,579	—	\$47,579
Construction	\$270,314	—	\$270,314
Model Ops	\$199,197	—	\$199,197
Materials/Supplies/Machine Rentals	—	\$150,684	\$150,684
Total	\$517,090	\$150,684	\$667,774

Please let me know if you have any questions, need additional information, or would like to discuss the scope of work, budget, or schedule. The budget and scope can be revised as needed in the future based on results from the other physical models and future decisions by United.

Sincerely,



Troy Lyons, P.E., Ph.D.
Director of Engineering Services
IIHR – Hydrosience & Engineering | The University of Iowa
319-335-5319 | 319-321-2669 (m)
iihengineering.com; iihr.uiowa.edu



Staff Report

To: Engineering and Operations Committee

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

From: Maryam Bral, Chief Engineer
Craig Morgan, Engineering Manager

Date: January 25, 2022 (February 3, 2022 Committee Meeting)

Agenda Item: 3.3 **Resolution 2022-06** A Resolution of the United Water Conservation District Board of Directors supporting the submission of the 2021 Sustainable Groundwater Management (SGM) Grant Program SGMA Implementation Round 1 application to the California Department of Water Resources
Motion

Staff Recommendation:

The Engineering and Operations Committee will consider recommending approval of Resolution 2022-06, supporting the submission of a 2021 Sustainable Groundwater Management Act (SGMA) grant program's SGMA Implementation Round 1 grant application to the California Department of Water Resources, to the full Board.

Background:

Under the 2021 Sustainable Groundwater Management Act (SGMA) grant program, the Department of Water Resources (DWR) proposed to allocate up to \$7.6 million to each critically overdraft basin in the State of California. Both Oxnard basin and the Pleasant Valley basin are listed as critically overdraft basins and each is eligible for the \$7.6 million grant funding. While matching funds are not required a spending plan with a minimum of \$10 million per basin must be submitted. Only one application is accepted per basin. Funding can be used for updates to the Groundwater Sustainability Plans (GSP)s and Capital Improvement activities as listed within an adopted GSP. The financial assistance to be provided by DWR is specifically for projects that are included in the adopted GSPs that complement efforts of the GSPs. Funds can be used for planning, design, and implementation of the projects. The local groundwater management or sustainability agency will be the main applicant and project proponents will be sub-applicants. Projects awarded funding under this grant funding program will need to be fully implemented by June 30, 2025.

Discussion:

United has been collaborating with the Oxnard and Pleasant Valley (OPV) stakeholders and FCGMA for this effort. A total of 18 projects were proposed and ranked by FCGMA's consultants, Dudek and Kennedy Jenks using DWR's scoring criteria to determine which projects were most competitive in each basin. For the Oxnard basin, United's proposed projects include the Ferro-

Agenda Item: 3.3 Resolution 2022-06 A Resolution of the United Water Conservation District Board of Directors supporting the submission of the 2021 Sustainable Groundwater Management (SGM) Grant Program SGMA Implementation Round 1 application to the California Department of Water Resources
Motion

Rose Artificial Recharge of Groundwater, Laguna Road Recycled Water Interconnection, and Monitoring Wells Construction and Data Collection for Design of Extraction Barrier and Brackish Water Treatment. The City of Oxnard's proposed project include the Oxnard AWPf Improvements Phase II project. The FCGMA proposed four projects. All three projects proposed by United received the highest scores and were selected for the grant application. Two of FCGMA's proposed projects were selected for the grant application. The City of Oxnard retracted its proposed project for future grant funding opportunities. For the Pleasant Valley basin, Pleasant Valley County Water District (PVCWD) proposed two projects, FCGMA proposed three projects and the City of Camarillo proposed five projects.

The OPV ad hoc Projects Committee (Committee) met twice in the week of January 17 and selected five projects, including all three projects proposed by United and two of FCGMA's projects for the Oxnard basin. For the Pleasant Valley basin, the Committee selected both of PVCWD's projects, two of FCGMA's projects and one of Camarillo's projects.

The requested grant funding for United's projects makes up about 83% of the total grant funding (\$6.4 million of \$7.6 million) available for the Oxnard basin.

The FCGMA as the main applicant is planning to submit the two grant applications after the FCGMA Board of Directors meeting on January 26, 2022, and before the application due date on February 18, 2022. The enclosed attachments A and B are the documents required by DWR for inclusion in the SGMA grant agreement.

Fiscal Impact:

There is no impact to the budget this Fiscal Year. The projects are included in the upcoming FY 2022-23 CIP Budget.

Attachments:

Attachment A – Resolution 2022-06

Attachment B – Eligibility Criteria Self-Certification

Attachment C – List of Proposed Projects for Evaluation and SGM Grant Consideration

RESOLUTION 2022-06

RESOLVED BY THE UNITED WATER CONSERVATION DISTRICT, THAT AN APPLICATION BE MADE TO THE CALIFORNIA DEPARTMENT OF WATER RESOURCES TO OBTAIN A GRANT UNDER THE 2021 SUSTAINABLE GROUNDWATER MANAGEMENT (SGM) GRANT PROGRAM SGMA IMPLEMENTATION ROUND 1 GRANT PURSUANT TO THE CALIFORNIA DROUGHT, WATER, PARKS, CLIMATE, COASTAL PROTECTION, AND OUTDOOR ACCESS FOR ALL ACT OF 2018 (PROPOSITION 68) (PUB. RESOURCES CODE § 8000 ET. SEQ.) AND THE CALIFORNIA BUDGET ACT OF 2021 (STATS. 2021, CH. 240, § 80) AND TO ENTER INTO AN AGREEMENT TO RECEIVE A GRANT FOR THE: IMPLEMENTATION PROJECT FOR THE OXNARD SUBBASIN. THE EXECUTIVE OFFICER OF THE FOX CANYON GROUNDWATER MANAGEMENT AGENCY, OR DESIGNEE, IS HEREBY AUTHORIZED AND DIRECTED TO PREPARE THE NECESSARY DATA, CONDUCT INVESTIGATIONS, FILE SUCH APPLICATION, AND EXECUTE A GRANT AGREEMENT AND ANY FUTURE AMENDMENTS (IF REQUIRED), SUBMIT INVOICES, AND SUBMIT ANY REPORTING REQUIREMENT WITH THE CALIFORNIA DEPARTMENT OF WATER RESOURCES. PASSED AND ADOPTED AT A MEETING OF THE UNITED WATER CONSERVATION DISTRICT ON FEBRUARY 9, 2022.

Authorized Original Signature: _____

Printed Name: Bruce E. Dandy

Title: Board President

Clerk/Secretary: _____

CERTIFICATION

I do hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the United Water Conservation District held on February 9, 2022.

Clerk/Secretary: _____

Eligibility Criteria Self-Certification

Attachment 1: Eligibility Criteria Self-Certification Form

As a Grantee of General Obligation Bond grant funds with the Department of Water Resources' (DWRs) Financial Assistance Branch, you must complete this self-certification form to enter into a Grant Agreement with DWR to receive grant funds. Failure to meet and maintain these conditions and requirements may result in DWR revoking the grant award, withholding grant funding, stopping invoice payment, and/or terminating the Grant Agreement. Answers must be provided for the primary Awardee and all member agencies within the Groundwater Sustainability Agency (GSA). An answer of No to some questions below may make you ineligible to enter a contract with DWR.

A. Grantee Name: Fox Canyon Groundwater Management Agency

Member Agencies

United Water Conservation District

The Grantee, United Water Conservation District, is a GSA, a member agency of a GSA, or a member agency of an approved Alternative to a Groundwater Sustainability Plan (GSP).

☒ Yes ☐ No If no, DWR cannot enter into a Grant Agreement.

2. **Agricultural Water Management Compliance:** Is the Grantee or any member agency required to submit an Agricultural Water Management Plan (AWMP) to DWR? ☐ Yes ☒ No

If yes, list all member agencies required to submit the most recent AWMP (2015, 2020) and the date the AWMP was submitted to DWR. If yes and not submitted, DWR cannot enter into a Grant Agreement.

A.

Member Agency	Date AWMP Submitted to DWR
	enter date
	enter date
	enter date
	enter date
	enter date
	enter date
	enter date

Eligibility Criteria Self-Certification

3. **CASGEM:** Has the Grantee and all member agencies met the requirements of DWR's CASGEM Program and is current with all data reporting requirements for CASGEM? ☒ Yes ☐ No ☐ N/A
 A. List all member agencies required to meet CASGEM requirements. If not current, DWR cannot entry into an agreement.

Member Agency	Date
United Water Conservation District	12/20/2021
	enter date
	enter date
	enter date
	enter date
	enter date
	enter date

4. **Consistency with the Delta Plan:** Is the Project, in whole or in part, within the Sacramento-San Joaquin Delta (Delta) or Suisun Marsh (Marsh)?
- ☐ Yes, the Grantee and member agencies have engaged with the Delta Stewardship Council (Council) regarding the Council's regulatory policies that may be potentially applicable to the project and the consistency of the Project with the Delta Plan. (If yes and inconsistent, DWR cannot enter into an agreement.)
- ☐ No, the Project is within the Delta or Marsh, but the Awardee and member agencies have not engaged with the Council.
- ☒ N/A
5. **Open and Transparent Water Data:** The Grantee and member agencies will adhere to the protocols developed pursuant to subdivision (a) for data sharing, transparency, documentation, and quality control (Water Code §12406(b)).
- ☒ Yes, the Grantee and member agencies have systems in place that will adhere to the required protocols.
- ☐ No, the Grantee and member agencies do not have systems in place to adhere to the required protocols; however, those systems will be in-place within 90-days of an executed Grant Agreement.
- ☐ No, the Grantee and member agencies do not have systems in place to adhere to the required protocols and do not intend to have them in place. If so, DWR cannot enter into an agreement.
6. **Public Utilities and Mutual Water Companies:** A Project(s) proposed by a public utility regulated by the Public Utilities Commission or a mutual water company shall have a clear and definite public purpose and shall benefit the customers of the water system and not the investors (Water Code §79712(b)(1)).
- ☒ Yes, the Grantee and/or member agencies are a public utility regulated by the Public Utilities Commission or a mutual water company and the proposed Project will solely benefit the customers.
- ☐ No, the Grantee and/or member agencies are a public utility, but the investors will benefit from the proposed Project. If so, DWR cannot enter into an agreement.
- ☐ N/A

Eligibility Criteria Self-Certification

7. **Stormwater Resource Plan (SWRP) Compliance:** Is the proposed Project a stormwater, surface water, or dry weather capture project as defined by the State Water Resources Control Board (capture for reuse, treatment, and/or infiltration) and is required to be listed within a SWRP or functionally equivalent SWRP (FE-SWRP)?

☐ Yes ☒ No ☐ N/A

If yes, is the Project listed within a SWRP or FE-SWRP? ☐ Yes ☐ No
If no, DWR cannot enter into a Grant Agreement.

If yes, provide the name of the SWRP or FE-SWRP, a copy of the SWRP/FE-SWRP Self-Certification form, and proof that the SWRP or FE-SWRP is included in the local Integrated Regional Water Management Plan (IRWMP) as an attachment to this form.

Name of SWRP or FE-SWRP:

Page number(s) where Project(s) is listed:

Contact person and contact information for SWRP or FE-SWRP:

8. **Surface Water Diverter Compliance:** Is the Grantee or member agency a surface water diverter?

☒ Yes ☐ No

A. If yes, please list the name of the agency(-ies) that are surface water diverters.

Agency Name

United Water Conservation District

- B. Has the agency(-ies) submitted the surface water diversion reports to the State Water Resources Control Board in compliance with the requirements outlined in Part 5.1 (commencing with § 5100)?

☒ Yes ☐ No

- C. If not, please explain and provide the anticipated date for meeting the requirements. DWR may not be able to enter into an agreement.

--

Eligibility Criteria Self-Certification

9. **Sustainable Water Use and Demand Reduction:** SBx7-7 (Water Code §10608 et seq.) conditions the receipt of a water management grant or loan for urban water suppliers on gallons per capita per day reduction targets with the end goal of a 20% reduction by 2020. Is the Grantee and/or member agency an urban water supplier?

☐ Yes ☒ No ☐ N/A

- A. If yes, list the member agency(-ies) that are urban water suppliers.

Agency Name

- B. Is the agency(-ies) on track for meeting the SBx7-7 per capita water use targets? If not, DWR cannot enter into an agreement.

☐ Yes ☐ No ☒ N/A

10. **Urban Water Management Plan (UWMP):** An urban water supplier shall adopt and submit to DWR an UWMP in accordance with Water Code § 10610 et seq. to be eligible to receive SGM Grant Program funding. Eligible Urban Water Suppliers must have the most recent UWMP (2015, 2020) that has been verified as complete by DWR before a grant agreement will be executed. Per Executive Order B29-15, Urban Water Suppliers must provide the State Water Resources Control Board with monthly information on water usage, conservation, and enforcement on a permanent basis.

Does the Grantee and/or member agency that are Urban Water Suppliers submit an UWMP to DWR?

☒ Yes ☐ No ☐ N/A

Does the Grantee and/or member agency that are Urban Water Suppliers been submitting monthly information on water usage, conservation, and enforcement to the State Water Resources Control Board?

☐ Yes ☐ No ☒ N/A

If no to either question, DWR cannot sign an agreement with the Grantee.

11. **Water Metering Compliance:** Any Urban Water Supplier applying for State grant funds for wastewater treatment projects, water use efficiency projects, drinking water treatment projects, or for a permit for a new or expanded water supply, shall demonstrate that they meet the water meter requirements in Water Code § 525 et seq.

Is the Project a wastewater treatment projects, water use efficiency projects, drinking water treatment projects, or for a permit for a new or expanded water supply?

☐ Yes ☒ No

If so, does the Grantee and/or member agency that are Urban Water Suppliers meet the water meter requirements in Water Code § 525 et seq.?

☐ Yes ☐ No ☒ N/A

Eligibility Criteria Self-Certification

12. **Groundwater Sustainability Plan (GSP):** Does the Project(s) or Component(s) include activities associated with the implementation of an adopted GSP or approved Alternative and listed within an adopted GSP or approved Alternative?

☒ Yes ☐ No

If no, DWR cannot enter into an agreement.

I, _____, understand that the Department of Water Resources will rely on this signed certification in order to approve funding and that false and/or inaccurate representations in this Self-Certification may result in loss of all funds awarded to the Grantee and that reimbursement of any grant funds is reliant upon the Grantee and all member agencies within the Groundwater Sustainability Agency (-ies) continuing to meet all eligibility requirements outlined within this Self-Certification form, the 2019 Sustainable Groundwater Management Grant Program Guidelines, and the Grant Agreement terms and conditions. Additionally, for the aforementioned reasons, the Department of Water Resources may withhold disbursement of project funds and/or pursue any other applicable legal remedy.

Name of Authorized Representative
(Please print)

Signature

Title

enter date

Date

Projects Submitted for Grant Consideration

#	Project Name	Proponent	Primary Basin	Category	Yield (AFY)	CEQA completed?	Timeline	Total Project Cost	Max Grant Request (\$)	Max Grant Request (% of Total)	Matching Funds (based on Max Grant)	Min Grant Request (\$)	Min Grant Request (% of Total)
1	AWPF Improvements - Phase II	City of Oxnard	Oxnard	Planning/Design	N/A	N/A	2.5 Years	\$ 7,000,000	\$ 6,650,000	95%	\$ 350,000	\$ 6,650,000	95%
2	Ferro-Rose Artificial Recharge of Groundwater	United	Oxnard	Implementation	2,000 - 3,000	Neg Dec within 6-12 mos	3 Years	\$ 4,000,000	\$ 3,800,000	95%	\$ 200,000	\$ 1,900,000	48%
3	Laguna Road RW Pipeline Interconnect	United	Oxnard	Implementation	1,500 - 6,000	Neg Dec within 6-12 mos	3 Years	\$ 4,225,000	\$ 4,013,750	95%	\$ 211,250	\$ 2,000,000	47%
4	Monitoring Well Construction & Data Collection	United	Oxnard	Planning	N/A	Neg Dec within 6-12 mos	2 Years	\$ 2,100,000	\$ 1,995,000	95%	\$ 105,000	\$ 1,000,000	48%
5	Destruction of Wells to Reduce Interaction Between the Upper and Lower Aquifer Systems	Fox Canyon GMA	Oxnard	Planning	N/A	N/A	3 Years	\$ 1,008,664	\$ 820,000	81%	\$ 188,664	\$ 328,000	81%
6	Install Multi-Depth Monitoring Wells at Two Locations in the Oxnard Subbasin	Fox Canyon GMA	Oxnard	Planning	N/A	N/A	2 Years	\$ 1,700,580	\$ 1,305,000	77%	\$ 395,580	\$ 652,500	77%
7	Installation of 3 Monitoring Wells to Assess the Hydraulic Connectivity Between Surface Water Bodies, the Semi-Perched Aquifer, and the Principal Aquifers	Fox Canyon GMA	Oxnard	Planning	N/A	N/A	2 Years	\$ 493,442	\$ 382,500	78%	\$ 110,942	\$ 127,500	78%
8	Oxnard Subbasin Transducer Installation	Fox Canyon GMA	Oxnard	Planning	N/A	N/A	2 Years	\$ 158,762	\$ 110,700	70%	\$ 48,062	\$ 12,300	70%
OXNARD BASIN TOTAL								\$ 20,686,448	\$ 16,458,750		\$ 866,250	\$ 11,550,000	
1	RW Connection Pipeline	PVCWD	Pleasant Valley	Implementation	1,000-2,000	N/A	2 years	\$ 6,610,000	\$ 6,270,000	95%	\$ 340,000	\$ 6,270,000	95%
2	Private Reservoir Pilot Program	PVCWD	Pleasant Valley	Implementation	500-1,000	N/A	3 years	\$ 590,000	\$ 550,000	93%	\$ 40,000	\$ 550,000	93%
3	Camarillo Airport Regional Stormwater Project Feasibility Study	Camarillo	Pleasant Valley	Planning	N/A	N/A	2 years	\$ 300,000	\$ 285,000	95%	\$ 15,000	\$ 285,000	95%
4	Infiltration Basin near WRP Feasibility Study	Camarillo	Pleasant Valley	Planning	N/A	N/A	2 years	\$ 300,000	\$ 285,000	95%	\$ 15,000	\$ 285,000	95%
5	Stormwater Diversion to WRP Feasibility Study	Camarillo	Pleasant Valley	Planning	N/A	N/A	2 years	\$ 350,000	\$ 332,500	95%	\$ 17,500	\$ 332,500	95%
6	NPV Desalter Feasibility Study	Camarillo	Pleasant Valley	Planning	N/A	N/A	2 years	\$ 350,000	\$ 332,500	95%	\$ 17,500	\$ 332,500	95%
7	Camarillo Hills Drain Stormwater Diversion to WRP Feasibility Study	Camarillo	Pleasant Valley	Planning	N/A	N/A	2 years	\$ 300,000	\$ 285,000	95%	\$ 15,000	\$ 285,000	95%
8	Installation of 3 Monitoring Wells to Assess the Hydraulic Connectivity Between Surface Water Bodies and the Principal Aquifers in the Pleasant Valley Basin	Fox Canyon GMA	Pleasant Valley	Planning	N/A	N/A	2 Years	\$ 493,442	\$ 382,500	78%	\$ 110,942	\$ 127,500	78%
9	Install Multi-Depth Monitoring Wells at Three Locations in the Pleasant Valley Basin (PVB)	Fox Canyon GMA	Pleasant Valley	Planning	N/A	N/A	2 Years	\$ 2,550,158	\$ 2,107,500	83%	\$ 592,658	\$ 652,500	83%
10	Pleasant Valley Basin Transducer Installation	Fox Canyon GMA	Pleasant Valley	Planning	N/A	N/A	2 Years	\$ 123,798	\$ 86,100	70%	\$ 37,698	\$ 12,300	70%
PLEASANT VALLEY TOTAL								\$ 11,967,398	\$ 8,340,000		\$ 460,000	\$ 8,340,000	



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: February 1, 2022 (February 3, 2022 meeting)

Agenda Item: 4.1 Monthly Engineering Department Report
Information item

Staff Recommendation:

The Engineering and Operations Committee members will receive this summary report from the Engineering Department regarding its activities for the month of January 2022.

Discussion:

1. Santa Felicia Dam Safety Improvement Projects

- Spillway Improvement Project
 - The 30% design phase activities continued during the month of January. Staff reviewed GEI's initial hydraulic analysis results of the downstream end. Modifications were included in response to the Board of Consultants (BOC) recommendations.
 - Staff attended the bi-weekly progress meetings with GEI and prepared a Technical Memorandum (TM) Review Tracking sheet and discussed the TM review plan with the project team, and prepared the Earned Value monthly progress report.
 - Staff updated the Quarterly Finance Report to include the project updates from October through December 2021.
 - On January 24, Staff received a letter from FERC in response to the District's proposed plan and schedule for the interim risk reduction measures (IRRM's). FERC accepted the proposed plan and schedule for the IRRMs but requested United to provide an actual date, including the day, month and year for submitting the Contingency Plan to control Lake Piru Reservoir level.
- Outlet Works Improvement Project
 - The above updates reported for the Spillway Improvement Project are also applicable to the Outlet Works Improvement Project.

4.1 Monthly Engineering Department Report Information Item

- On January 11, Engineering and ESD Staff met to discuss Amiad Water Systems, a filtration process used for removal of Quagga Mussels from lake water and options for conducting a pilot scale test of the system. If effective, the system could be used at the new Downstream Control Facility for Quagga Mussel containment. On January 18, Engineering and ESD Staff met with Amiad Water System's regional sales manager and discussed the District's concerns regarding the filtered water quality and potential impact on the habitat downstream of Santa Felicia Dam. There are other questions related to the filtration system operations that need to be answered. Staff will continue to evaluate the data received from the vendor to determine the system effectiveness and basis for a pilot study.
 - Staff coordinated with GEI and OPS Staff the 60% design workshop. GEI will present the 60% design key elements during this workshop to the Engineering and OPS Staff. The workshop will be held on March 15.
 - FERC License Amendment Application and NEPA Documentation
 - 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 completed review of the draft design documents and submitted the review comments to Catalyst on January 17. Staff discussed the review comments with the consultant on January 21 and received the draft final copy of the design documents on January 26. Staff will efile the 30% design documents for the new release channel to FERC on February 1.
 - Loan and Grant Applications
 - Staff continued to search for federal and state grant funding opportunities.
 - On January 7, Staff received a notification from CalOES indicating that the Santa Felicia Dam Outlet Works Improvement Project's Notice of Interest (NOI) for the 2021 FEMA Hazard Mitigation Grant Program (HMGP) was accepted and the District was invited to submit a full sub-application to CalOES by April 8, 2022. CalOES will announce the selected projects for grant award in Summer 2022, and FEMA will award the selected projects in 2023. If the project is selected, the federal share cost will be \$39 million or 75% of the cost of the new outlet works.
 - Santa Felicia Dam Safety
 - Staff has begun planning for the 2022 SFD Vulnerability and Security Assessments. FERC requires these assessments to be conducted on a 5-year basis. Staff has conducted a series of planning meetings to develop a strategy for completing these assessments in 2022. Staff plans to complete a portion of these assessments using in-house resources.
 - Staff has received a proposal from Gannett Fleming, Inc. (GF) for performing the 2022 SFD Owner Dam Safety Program (ODSP) External Audit. FERC requires an external
-

4.1 Monthly Engineering Department Report Information Item

- audit of the ODSP on a 5-year basis. As required by FERC, the District must submit the resume of the proposed auditor to FERC for review and approval. District staff submitted the resume of the proposed GF ODSP auditor on January 28, 2022. The external audit will be performed by GF beginning in July 2022. The External ODSP Audit Report will be submitted to FERC by December 31, 2022.
- The FERC requires an Independent Consultant (IC) to conduct a Part 12D Inspection for SFD on a 5-year basis. In a letter dated May 26, 2021, FERC notified the District that the twelfth Part 12D Independent Consultant's Safety Inspection Report for SFD is due on November 1, 2022. Staff will issue a Request for Proposal/Qualifications to various consultants for the Independent Consultant for the 2022 SFD Part 12D Inspection. The RFP/Q will be issued in early February 2022, a consultant will be selected in March 2022 and the work will begin in late April 2022.
 - On January 13, Staff received a letter from FERC in response to the 12.10(a) incident report submitted by the District on August 13, 2021 for the seepage incident below the cantilevered section of the spillway chute. FERC requested to update the Dam Safety Surveillance and Monitoring Plan (DSSMP) to include the inspection frequency and inspection procedures for future monitoring of this intermittent seepage location. Staff is planning to update the DSSMP and include it in the 2021 Santa Felicia Dam Supporting Technical Information Document (STID), which will be submitted to FERC by the end of May 2022.
 - On January 20, Staff performed field observation for the rocks and debris slide from the adjacent hill along the east side of the spillway east access way around the third weekend in January following the recent rain and wind events. Staff discussed the debris removal plan with the Santa Felicia Dam Operator and is planning to evaluate further the existing wire mesh revetement.

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 February 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 January 26, 2022, the receipt of the Lake or Streambed Alteration Agreement was still pending.
-

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

3. Pothole Trailhead Parking Area
 - No updates to report at this time.
 4. Lake Piru Water Treatment Plant Slope Evaluation
 - Construction was halted through late December and early January due to the heavy rains that occurred during this time lapse. Construction will resume in late January 2022 and is anticipated to be complete by early February 2022.
 5. Freeman Diversion Rehabilitation/Fish Passage Facility
 - USBR completed all of the baseline model runs in its laboratory for the 1:24 scale Hardened Ramp.
 - University of Iowa has completed all of the baseline 1:24 scale Vertical Slot physical model runs.
 - 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. Decision from the USBR is still pending on a 6-month time extension.
 - DWR Integrated Regional Water Management (IRWM) Prop 1 (\$2.5M)
 - i. January 7, 2022 - Draft Project Monitoring Plan submitted by Kennedy/Jenks Consultants and is currently under review by District staff.
 - ii. January 27, 2022 - 3rd Quarterly Progress/Financial Reports submitted
 - DOD OLDCC Defense Community Infrastructure Program (\$4.23M)
 - i. December 29, 2021 – Prepared and submitted 1st 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, Taft Electric, Kennedy/Jenks Consultants and Staff.
 - GSE Construction has submitted approximately 133 out of a total of 299 submittal packages anticipated for the project. HDR and design engineer (Kennedy Jenks Consultants) have provided responses on approximately 117 submittal packages including a requirement to comply with the Buy American Act.
 - GSE Construction has submitted approximately 42 Requests for Information (RFI) to date. HDR, KJ and the District have been providing responses.
-

4.1 Monthly Engineering Department Report Information Item

- GSE Construction completed approximately 81 potholes and rough grading operations in Pond 8.
- GSE Construction start construction of the 4-inch HDPE sewer line.
- 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:
 - Excavation and installation of the:
 - i. 20" backwash supply pipeline
 - ii. 20" tank overflow
 - iii. 20" surface wash water/filter to waste
 - iv. 8" filter drain
 - v. 8" recycled wash water
 - vi. 4" sewer line
 - vii. 4" utility water
 - viii. Chemical lines
 - ix. Filter drain pump station
 - Installation of building
 - Installation of washwater recovery tank

7. El Rio Well Replacement

- The Division of Drinking Water (DDW) sent Staff the permit amendment that includes Well 19. Well 19 will now be in rotation for use when required.

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

- Grant
 - January 13, the quarterly report and the reimbursement report for the period of October through December 2021 were prepared and submitted to CalOES. The reimbursement requested amount for this period was \$154,147.
 - January 18, Staff received a Notification of Payment from Cal OES in the amount of \$104,049. The total amount received from Cal OES to date is \$584,478.
- Construction
 - January 19, the last long lead items (medium voltage switches) were delivered and installed at the site (see Figures 3 and 4).
 - January 24, Contractor performed testing and setting of the medium voltage switches.
 - The final functional and acceptance test is scheduled for two days on February 3 and 4.

9. PTP Turnout Metering System Improvement

- Total number of meters installed: 34 of 61 or 55.7% complete. (no change)
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4.1 Monthly Engineering Department Report Information Item

- An additional four (4) meter installations are planned in Winter 2022.
- Easement acquisition completion: 19 of 42 obtained or 45.2% complete (+1 obtained)
- Three (3) owner-signed easements require recording with the County Recorder's office.
- The Board authorized 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) at the January Board meeting (Agenda Item 5.5). Easement acquisition is currently underway.

10. Recycled Water Update

- January 10 – Meeting with Kennedy/Jenks Consultants to refine scope of work for Preliminary Design Report related to the Laguna Road Recycled Water Pipeline.

11. State Water Project (SWP) Interconnection Pipeline Project

- Stantec continues to work on the design of the interconnection and is currently developing a hydraulic analysis technical memorandum (TM) which will be made available for review by the City, the District and other partnering agencies. The City received the draft copy of the hydraulic analysis TM in January but will review and revise it before distributing it among the partner agencies for review.
- The final pipeline size(s) of the interconnection pipeline is yet to be determined. Once agreed by all parties, the City will prepare a letter agreement to be signed by all parties.
- Casitas Municipal Water District (Casitas) has hired a consultant and appointed an Ad Hoc Committee to help prepare and provide input on the "Exchange Agreement" between the City and Casitas. Casitas is planning to present the Exchange Agreement previously known as the in-lieu Agreement to its Board late January or early February. Once the Exchange Agreement is adopted, the partner agencies will resume work on the Interagency Agreement which was drafted a while back.

12. Rice Avenue Grade Separation Project

- Staff completed their comments on the 100% design plans pertained to the PTP facilities, discussed the comments with Kennedy Jenks who is going to include it in the final design documents.
 - Staff assisted project updates and information regarding the Rice Avenue Grade Separation Project to WREA Consulting who is working with Hailwood Inc., the property owner whose property on the southeast corner of S. Rice Avenue and E. 5th St. is impacted by the Project. Staff continued to provide responses to WREA questions regarding the new 8-inch irrigation pipeline. Staff informed WREA that the new 8-inch irrigation pipe downstream of United's turnout 129 on Rice Avenue does not belong to United. The Project has included the new but longer irrigation line due to the impact on Hailwood operations. Hailwood operations will be relocated from the corner of S. Rice Avenue and E. 5th St. farther east along E. 5th St.
-

4.1 Monthly Engineering Department Report Information Item

- United's utility relocation has not yet been adopted as part of the Project. Per United's General Manager's request, a meeting was held on January 10 with Assemblywoman Jacqui Irwin and her Staff to discuss the Project and United's utility relocation. The meeting was attended by United's General Manager and Chief Engineer, City of Oxnard's Public Works Director and Assistant City Attorney, Ventura County Public Works Director and other County Staff and CalTrans. The next step is for the Assemblywoman Jacqui Irwin's staff to request a meeting with the California Transportation Commission. The purpose of the meeting is to discuss and understand the concerns for including the cost of United's utility relocation in the Project costs.

13. Coastal Brackish Groundwater Extraction and Treatment Project

- Meetings:
 - January 20 – Progress Mtg. 17 with Navy and District staff. Discussed Navy's new project manager appointment (tentative), proposed license agreement for Phase 1, potential additional extraction well site locations, revised construction schedule and sequencing, upcoming meetings and presentations, grants, starting brine characterization, baseline groundwater sampling, and CEQA/NEPA updates.
 - Grants:
 - Prop 1 Round 1 GWGP
 - Work is complete.
 - 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:
 - January 25 – Provided maps and list of potential additional extraction well locations (36 in total) to Navy for preliminary review and screening. A site tour is scheduled on February 10.
 - January 19 – District provided comments on the draft Technical Memorandum related to Water Distribution Alternatives Analysis prepared by Kennedy/Jenks Consultants.
 - January 27 – Held a comment review meeting with Kennedy/Jenks Consultants. Discussed next steps.
 - CEQA/NEPA:
 - Held bi-weekly meetings with GEI Consultants to review draft project description and Initial Study (IS) development related to CEQA.
-

4.1 Monthly Engineering Department Report Information Item

- January 12 – Held a joint District/Navy meeting to coordinate CEQA/NEPA responsibilities, strategies, and next steps.
- Upcoming (scheduled and tentative dates):
 - February 10 – Tentative Well Siting Tour No. 3 to review additional extraction well sites
 - February 18 – Phase 1 (monitoring wells) grant application due to the Department of Water Resources (DWR) for the Sustainable Groundwater Management Act grants.
 - February – Receive, review and negotiate draft license agreement with U.S. Navy for the Phase 1 project
 - February 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.
 - February to April – Conduct baseline groundwater sampling at monitoring wells CM1A, Q2 and GP1.
 - March – Leadership Meeting No. 4 between District and U.S. Navy
 - April – Complete CEQA Initial Study and Permitting Matrix

14. Asset Management

- January 10– EOS Arrow Gold is delayed with an end of January shipping estimate from the EOS representative.
- Santa Felicia Dam monthly reporting Survey123 app integration for monthly and end of year reporting.
- PTP Turnout Metering System Improvement Project final punch list in Survey123 app is complete and ready for integration.

15. California American Water (CalAm)

- Staff reviewed a draft Emergency Contract Agreement proposed by the District’s Legal Counsel in response to CalAm’s request for related to a resilience/ emergency connection to the Oxnard Hueneme (OH) Pipeline at the intersection between Rose Avenue and Simon Way to support the Rio Plaza small water system.
- Before finalizing the agreement, CalAM and United will meet to discuss and agree on the terms and conditions set forth via this proposed agreement.

16. CalOES Community Power Resiliency Grant Program

- No updates to report.

17. Condor Point Improvement Project

Pursuant to Article 412 of the FERC license, by May 8, 2022 the District must rehabilitate and formalize the swim beach areas below Condor Point Picnic Area, to include the following at a minimum: (1) shoreline grade improvements; (2) clearance of brush just below the ordinary

4.1 Monthly Engineering Department Report Information Item

high water mark; (3) addition of sand and gravel as needed to create a smoother substrate for swimming and wading; (4) add amenities to at least five of the existing picnic sites to accommodate groups of 10-12 individuals; (5) install accessible paths and pads for at least one picnic site; (6) add shade ramadas to six picnic sites; (7) develop new flat-surfaced pads and pathways for picnic tables, barbecues, and shade ramadas; (8) plant additional trees; and (9) install a new 15 foot-long covered kiosk for information, safety, and interpretive signage. Two new shade ramadas and picnic facilities must also be added at the Juan Fernandez Boat Launch in the currently developed picnic area.

Staff are in the process of obtaining an extension of time from FERC to complete the swim beach element of the project. This is because the swim beach currently permitted under USACE General Maintenance Permit is located over 1000 feet away from the Condor Point Picnic Area and not immediately accessible to visitors of the improvements. In addition, the location of the currently permitted swim beach at the end of Reasoner Creek has resulted in many maintenance challenges. Therefore, Staff would like to relocate the permitted swim beach to be closer to the Condor Point Improvements. Staff submitted a request for a two year extension of time to FERC on October 29, 2021. This schedule extension would give staff enough time to apply for the required permits to relocate the swim beach. On January 5, 2021, FERC requested additional information to justify the need for a schedule extension. Staff met with FERC staff on January 21, 2022, to discuss the FERC's request for additional information. Staff will submit additional information to supplement the original request for extension of time by the end of January 2022.

In November 2021, staff executed an agreement with MNS Engineers, Inc. (MNS) for design services for the Condor Point Improvement Project. The 35% design plans were delivered to the District on December 9, 2021. The District is expecting to receive the 100% design plans from MNS during the first week of February 2022.

Engineering Staff are working with ESD staff to prepare an arborist report for the Condor Point Area as a requirement to obtain a Zoning Clearance for the project from Ventura County Planning. A tree survey was conducted on January 26, 2022. The arborist report will be submitted to Ventura County Planning along with a Conditional Use Permit minor adjustment application to Ventura County Planning in February 2022.

Other Topics, Meetings and Training

- January 13, 2022 – Staff reviewed and modified the Ventura County Hazard Mitigation Plan, (VC HMP) Volume 2, UWCD Annex, and resubmitted to Terta Tech. The VC HMP is expected to be released for public comments in February 2022.
- January 19, 2022 – Staff attended OPS monthly safety meeting.
- January 20, 2022 – Michel Kadah attended Changes to the Construction Cost webinar.

4.1 Monthly Engineering Department Report Information Item

- January 20, 2022 – Maryam Bral, Craig Morgan and Michel Kadah met at Santa Felicia Dam to inspect the damages to the catwalk on the east access way behind the east spillway wall due to the recent rocks and debris slide from the adjacent hill. Staff inspected the anchors holding the top of existing wire mesh revetement on the hill and planned to further evaluate the condition of the anchors and options to expand the wire mesh revetment to the north.
- January 19, 21, 26, 2022 – Engineering and Water Resources staff proposed three of United's water supplying projects to be included in the DWR Sustainable Groundwater Management (SGM) grant program. The grant funding is to support the State of California's critically overdrafted basins including the Oxnard and Pleasant Valley basins. Fox Canyon Groundwater Management Agency (FCGMA) is the main applicant. Each critically overdrafted basin will be eligible for \$7.6 million. United Staff met with the project proponents and FCGMA to discuss the list of projects proposed by the project proponents. United's proposed projects for the Oxnard basin, including the Ferro Rose Groundwater Recharge Basin, the new Recycled Water Pipeline along Laguna Road and Monitoring Wells Installation at or near Pt Mugu were all scored high and selected for inclusion in the grant application. The list of proposed projects for both basins was presented to and approved by the FCGMA Board of Directors on January 26, 2022. Applications are due February 18, 2022.

4.1 Monthly Engineering Department Report Information Item



Figure 1 - Rough Grading in Pond 8 complete. Excavation for installation of Filter Drain Pump Station underway (photo taken Jan 13, 2022)

4.1 Monthly Engineering Department Report Information Item



Figure 2 - Construction of 4-inch HDPE sewer line underway (photo taken Jan 27, 2022)

4.1 Monthly Engineering Department Report Information Item



Figure 3 - OH System Backup Generator Project - Delivery of Medium Voltage Switches (photo taken Jan 19, 2022)



Figure 4 - OH System Backup Generator Project - Installation of Medium Voltage Switches (photo taken Jan 19, 2022)

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: February 1, 2022 (February 3, 2022, meeting)

Agenda Item: 4.2 Monthly Environmental Services Department Report
Information Item

Staff Recommendation:

The Board will receive and file this staff report from the Environmental Services Department regarding its activities for the month of January 2022.

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). The trigger was met on February 1, 2022. The minimum required habitat water release for the month of February will increase to 20 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 mo.
January 1	4.80 inches	15 cfs	12.48 inches	15 cfs
February 1	8.10 inches	20 cfs	12.88 inches	20 cfs
March 1	12.00 inches	20 cfs	TBD	20 cfs
April 1	14.90 inches	20 cfs	TBD	TBD
May 1	16.30 inches	10 cfs	TBD	TBD
June 1	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 6:30 am on December 29, 2021, and flow was restored by 6:45 am. In accordance with direction from FERC, on December 29, 2021, staff submitted an email notification to National Marine Fisheries Service (NMFS), FERC, and State Water Resource Control Board (State Water Board). A follow-up report detailing the accidental lapse of water release was filed with FERC and submitted to NMFS and the State Water Board on January 26, 2022. Given the minor reduction of flow during the event, no environmental impacts were observed or expected to have occurred as a result of the event.

- Santa Felicia Fish Passage Pre-Implementation Studies

Throughout the reporting period, staff and our consultant, Cramer Fish Sciences, have operated the fyke net fish trap in middle Piru Creek. No *O. mykiss* were captured during this effort. On January 27, 2021, United received an updated Special Use Permit from the US Forest Service to continue Santa Felicia Fish Passage Program field activities in middle Piru Creek. The Special Use Permit authorizes United to conduct project activities on US Forest Service lands, including spring and fall sampling (i.e., electrofishing), PIT antenna operation and maintenance, and release of captured animals. The updated permit authorizes activities through June 30, 2023.

- Lower Piru Creek Herpetological Monitoring Plan and Arroyo Toad Protection Plan

On January 3, 2022, Environmental Services staff submitted to FERC the 2021 Annual Report for the Revised Lower Piru Creek Herpetological Monitoring Plan and Arroyo Toad Protection Plan for the Santa Felicia Project. The Annual Report documents activities conducted between January 1 and December 31, 2021. During the reporting period, United did not conduct activities on U.S. Forest Service land, and therefore no measures were triggered under the Arroyo Toad Protection Plan. Aquatic exotic species management activities prescribed under the Revised Lower Piru Creek Herpetological Monitoring Plan, were suspended from January through June 2021, due to the COVID-19 pandemic and associated State of California Executive Order N-33-20 and County of Ventura Stay Well at Home Order issued on March 19 and 20, 2020, respectively. The state and county orders were lifted in June 2021. Subsequently, United conducted exotic species management activities in July 2021 in pools below the Santa Felicia spillway. Specifically United conducted non-native species removal targeting crayfish, bullfrog and African clawed frog eggs and newly emerged tadpoles.

- Santa Felicia Recreation Trail Plan Update

On January 14, 2022, Environmental Services staff submitted to FERC the 2021 Annual Monitoring Report for the Updated Santa Felicia Recreation Trail Plan. The Annual Report documents activities conducted between January 1 and December 31, 2021, and quantifies recreational use of the Pothole Trailhead parking area facility, maintenance activities, vandalism incidents, and United's clean-up efforts. United reported that prior to development of the Pothole Trailhead parking facility (completion of construction in December 2020), approximately 10 passes were issued for access to the trailhead annually. Issuance of 228 passes during the reporting period indicates that the project facilities are meeting their intended recreational objective of enhancing public access to the Pothole Trailhead.

- Whitewater Boating Access Plan

On January 14, 2022, Environmental Services staff submitted to FERC the 2021 Santa Felicia Whitewater Boating Access Monitoring Report for the Whitewater Boating Access Plan. The Annual Report documents activities conducted between January 1 and December 31, 2021. During the reporting period, no whitewater opportunities were provided in lower Piru Creek associated with water releases from the Santa Felicia Dam. In addition, no requests for whitewater portage or access were received during the 2021 reporting period.

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

On September 29, 2010, the U.S. Court of Appeals granted the District a motion to hold the court case "United Water Conservation District v. FERC" in abeyance and directed the District to file status reports every 60-days. United filed the court case to challenge the biological opinion issued by National Marine Fisheries Service (NMFS) on FERC's issuance of a license for the Santa Felicia Project. On January 11, 2022, United filed the sixty-eighth status update with the U.S. Court of Appeals for District of Columbia Circuit.

2. District Facilities - Lake Piru Recreation Area, Santa Felicia Project, and Freeman Diversion Facility General Maintenance Permits

On January 3, 2022, Environmental Services staff sent CDFW a notification of intent (NOI) to perform work under Streambed Alteration Agreements for routine maintenance activities at the Lake Piru Recreation Area and Santa Felicia Project (1600-2015-0156-R5) and Freeman Diversion (1600-2013-0223-R5) facility throughout the 2022 calendar year.

3. Freeman Diversion Operations

- Freeman Diversion Fish Passage Facility

On January 1, 2022, United initiated bypass flows and fish ladder operations at the Freeman Diversion. Due to receding flows in the Santa Clara River, bypass flows at the Freeman Diversion were ceased and the fish ladder was shut down on January 10, 2022, in accordance with the Court Order¹. Environmental Services staff conducted stranding surveys of the fish passage facility during the fish ladder shutdown. In addition, staff conducted stranding surveys within the critical reach of the Santa Clara River downstream of the Freeman Diversion during the bypass flow ramp-down procedure on January 8, 9, and 10, 2022. No *O. mykiss* were observed during stranding surveys. Environmental Services staff issued notifications and updates to NMFS, NMFS- Office of Law Enforcement (OLE), and California Department of Fish and Wildlife (CDFW) staff throughout operations, including requesting on-site assistance for anticipated fish ladder shutdown operations and accompanying stranding surveys. No agency staff attended in-person. NMFS and NMFS-OLE staff agreed to be available via telephone.

During the week of January 3, 2022, Environmental Services Field Technicians and Assistants performed daily discharge measurements in the Santa Clara River to document river flow at the 118 bridge and the compliance point. Critical riffle surveys were also conducted at a new location under flow conditions recorded at approximately 260 cfs. Field Technicians collected depth measurements and drone footage of the site to document accessibility for fish passage.

4. 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).

In January, quarterly surface surveys were performed at The Nature Conservancy properties along the Santa Clara River and veliger surveys were performed at the Saticoy Moss Screen facilities. No adult mussels or veligers were detected at these locations. On January 28, 2022, scientific research divers conducted multi-depth, underwater veliger surveys in Lake Piru.

¹ Wishtoyo Foundation et al. vs United Water Conservation District (Case No.: CV 16-3869-DOC (PLAx) Document 248)

5. Miscellaneous

- On January 19, 2022, Randall McInvale provided a presentation to the CoLAB WHEEL Committee regarding the District's efforts to address and oppose CalTrout's petition to list southern California steelhead under the California Endangered Species Act (CESA).
- On January 24, 2022, Randall McInvale led a wetland delineation training at Lake Piru for Environmental Services staff. Collected data will be utilized to develop permit applications for general maintenance activities at Lake Piru under sections 401 and 404 of the Clean Water Act.

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: **January 31, 2022 (February 3, 2022, Meeting)**

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

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 January.

1. Water Releases, Diversions and Deliveries

- Lake Piru rose 1.35 feet in January to 19,696 acre-feet (AF) of storage.
- 4357 AF of water was diverted by the Freeman Diversion facility in January.
- 323 AF of metered water was diverted to the Saticoy recharge basins in January.
- 1159 AF of surface water was delivered to the El Rio recharge basins in January.
- 296 AF of surface water was delivered to the PTP system in January.
- 342 AF of surface water was delivered to Pleasant Valley County Water District in January.

2. Major Facilities Update

- **Santa Felicia Dam**
 - Lake Piru rose 1.35 feet January 1, 2022 through February 1, 2022, to 19,696 AF of storage.
 - February 1, 2022, the lake level was 69.1 feet below the spillway lip.
 - On January 1, 2022, the cumulative rainfall measured at rain station 160 was 12.28 inches which exceeded the January 1st 4.8 inch trigger; habitat water releases from Santa Felicia Dam (SFD) were increased to 15 cubic feet per second (cfs) for the month of January, as per the Water Release and Ramping Rate Implementation Plan for lower Piru Creek.
 - Staff cleared corrugated pipe drains and access roads from recent slide events.
 - Significant grading work of the Recreation overflow area and marina parking facility was performed by staff.
 - **Freeman Diversion, Saticoy, and El Rio Recharge Facilities**
-

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

- Flows at the Freeman Diversion averaged 71 cfs for the month of January, with 55 cfs of surface water being diverted on February 1, 2022.
- During the month of January, 323 AF of metered surface water deliveries were made to the Saticoy Recharge Facility.
- During the month of January, 1159 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):

	2022	2021	2020
Saticoy	107.2'	123.3'	150.2'
El Rio	121.7'	116.12'	105.31'
PTP	99' - 138'	102' - 134'	98' - 132'

- **Noble/Rose/Ferro Basins**
 - 0 AF of surface water was delivered to the Noble & Rose basins during January.
 - **Oxnard-Hueneme (OH) Delivery System**
 - El Rio staff changed oil filters and topped off oil make-up drums on all emergency booster pump natural gas engines.
 - **Pleasant Valley County Water District (PVCWD)**
 - During the month of January PVCWD received 342 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 January, the majority of the PTP system demand was met with surface water deliveries from the Freeman Diversion facility and was supplemented with PTP wells, as needed during peak demands.
 - Staff obtained Irrigation Suitability Semiannual samples from all supply wells and surface water supply.
 - January 18, 2022, staff responded to damaged air vac emergency in Rice Avenue median and isolated flow. Contractor Travis Ag is securing materials for repair.
 - **Instrumentation**
 - Instrumentation staff configured three remote work stations creating additional social distancing reducing potential outbreak of Covid 19 amongst Booster Plant Operators.
 - Instrumentation staff installed new VFD drive on Freeman Diversion traveling screen.
 - January 6, 2022, Saticoy Well #1 transducer was upgraded by Instrumentation staff.
 - Staff upgraded Freeman Diversion and Santa Felicia Dam SCADA emergency callout systems.
 - **Lake Piru Water System**
-

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

- All chlorine residuals and turbidity readings for the drinking water system were within proper ranges for the month of February.
- 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.

3. Operations and Maintenance Projects Update

- Staff continues to provide assistance to grant funded El Rio Booster Plant projects, Iron and Manganese Plant, and 850K emergency supply wellfield generator.

4. Other Operations and Maintenance Activities

- The Santa Felicia Dam Emergency Action Plan sirens located in Piru were exercised on January 7, 2022.
- On January 19, 2022 staff attended the Santa Paula Chamber of Commerce board meeting remotely.
- The monthly inspection of Santa Felicia Dam was performed.
- Staff performed annual oil service on all OH, PTP, and Saticoy well motors.
- 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 January, approximately 3100 hours of work, within the O & M department, were performed with no reportable accidents. The department's YTD safety record is 0 recordable injury.
- One Safety Meeting was conducted via Microsoft Teams in order to maximize social distancing in light of COVID-19. One safety video was provided to staff entitled *NPL 2'4'5' Trench Safety* by NPL Construction Co. The primary objective was to provide awareness of trench and excavation safety. AWWA safety handout entitled on "Trenching Safety" was briefed to staff. The purpose was to provide a refresher on the various hazards associated with trenching and excavation activities along with an emphasis on pre-planning and the implementing the necessary controls in place.
- 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 January was "Water Industry Excavation." A COVID-19 situational update was also briefed to staff, with a focus on updated isolation and quarantine guidelines.

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

Attachments: A - Operations Log for February