

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:

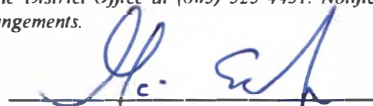
Lynn Maulhardt, Chair
Edwin T. McFadden III
Daniel C. Naumann

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, 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.

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.*



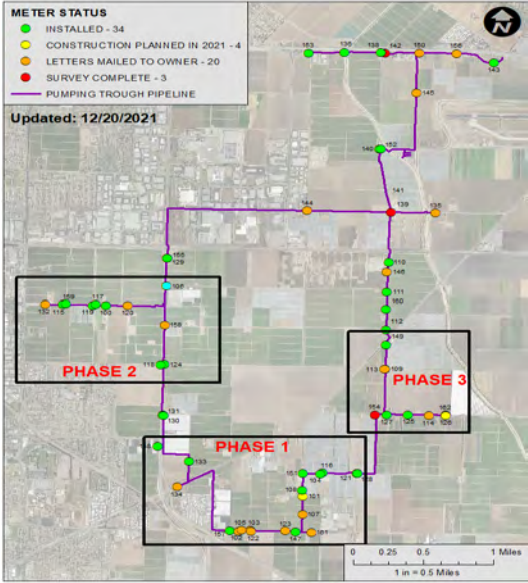
Motion Item 3.2

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

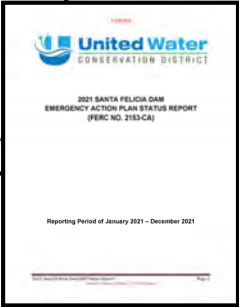

Projects will help modernize water infrastructure for 25 million Americans while creating up to 49,000 jobs

2


2

1

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

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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

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

8

QUESTIONS



9



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

2

FREEMAN DIVERSION

SEASON'S FIRST HARVEST



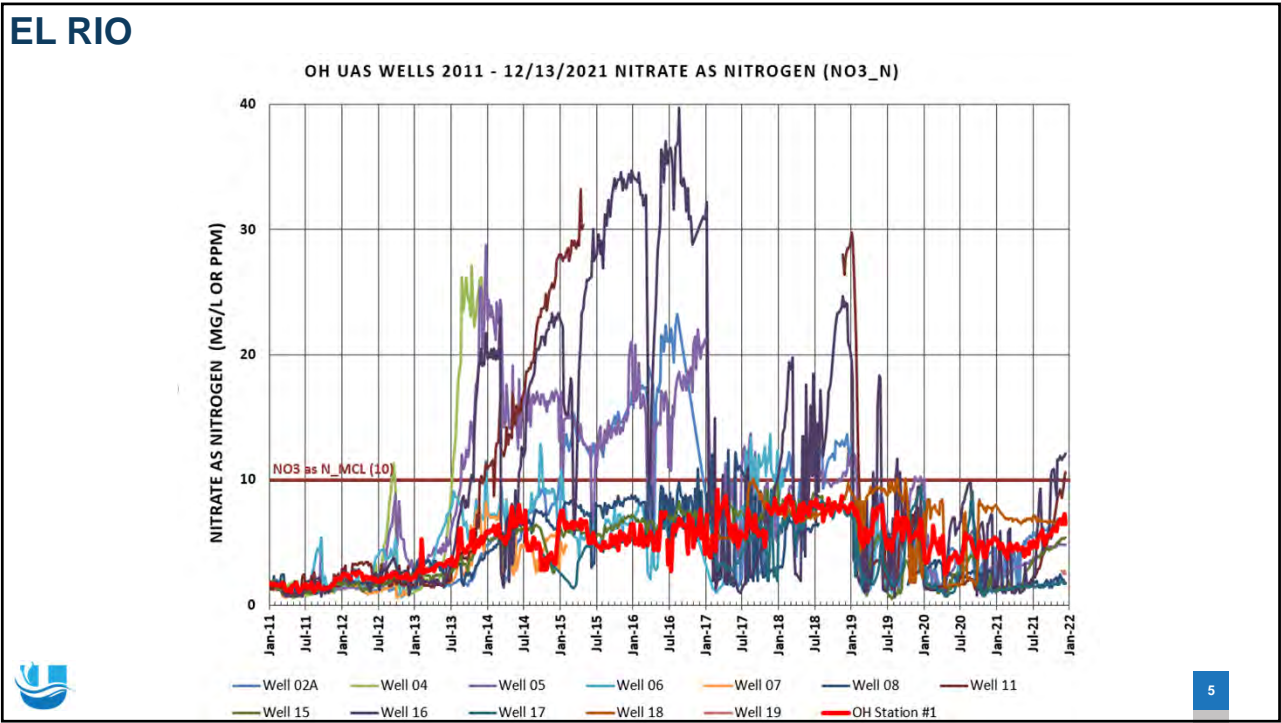


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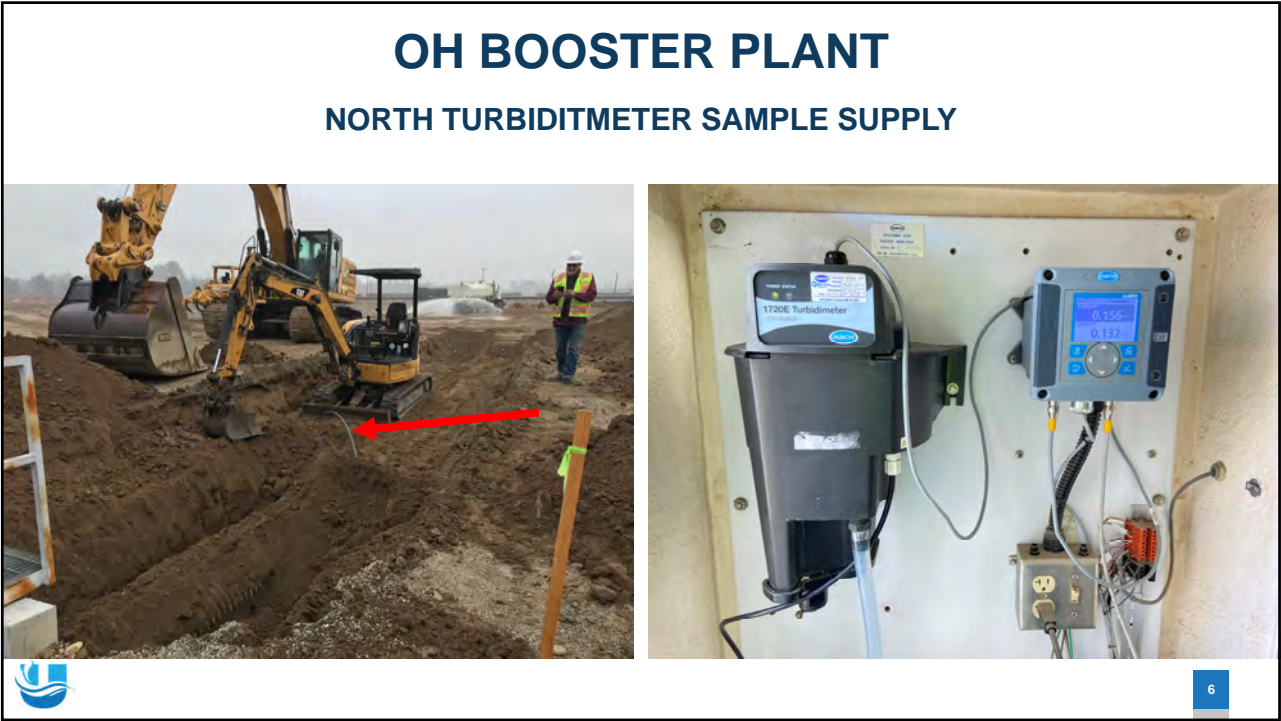
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4



5



6

PTP 30" RESERVOIR FILL VALVE REPLACEMENT







7


MODELING

Completed 1:24-Scale Model




Flow Visualization (River = 30,000 cfs)





IIHR – HYDROSCIENCE & ENGINEERING



8

1:24 MOD-6 Flushing Removed





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	Risk Mitigation
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	