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Legal Counsel
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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

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(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

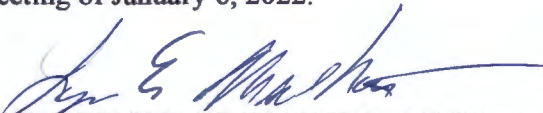
None were offered

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.*



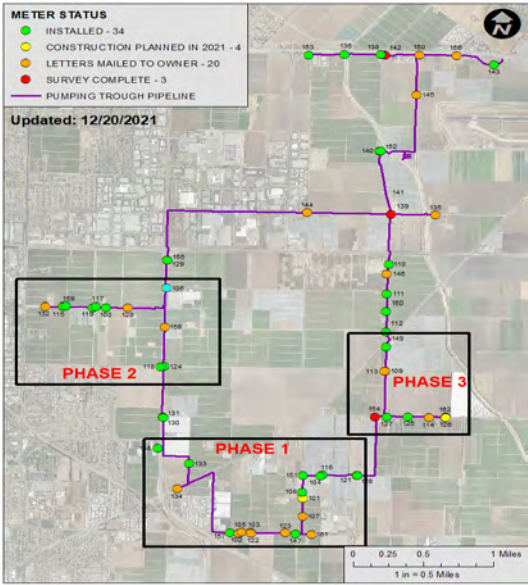
Motion Item 3.2

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

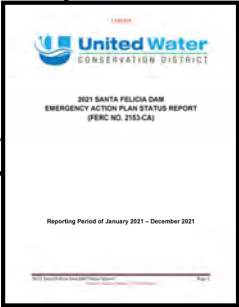

Projects will help modernize water infrastructure for 25 million Americans while creating up to 49,000 jobs




2

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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.




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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

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



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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



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SANTA FELICIA DAM EAST ROAD





2

2

FREEMAN DIVERSION

SEASON'S FIRST HARVEST



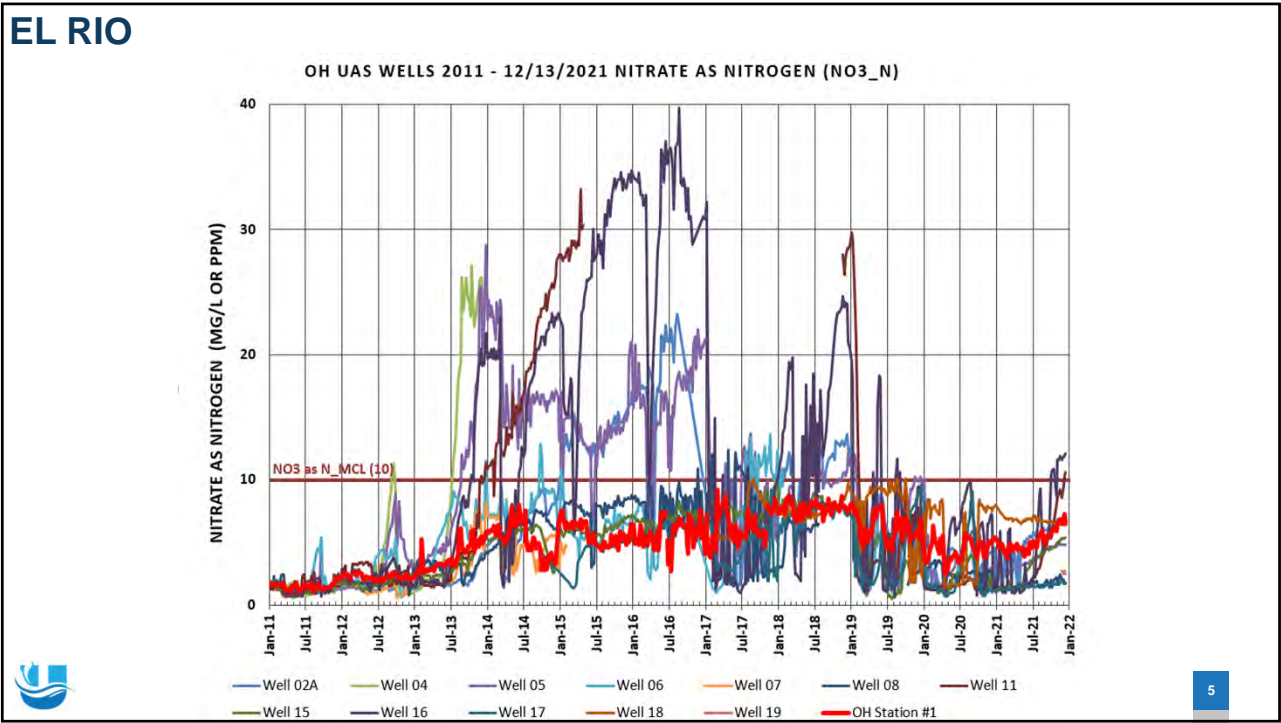


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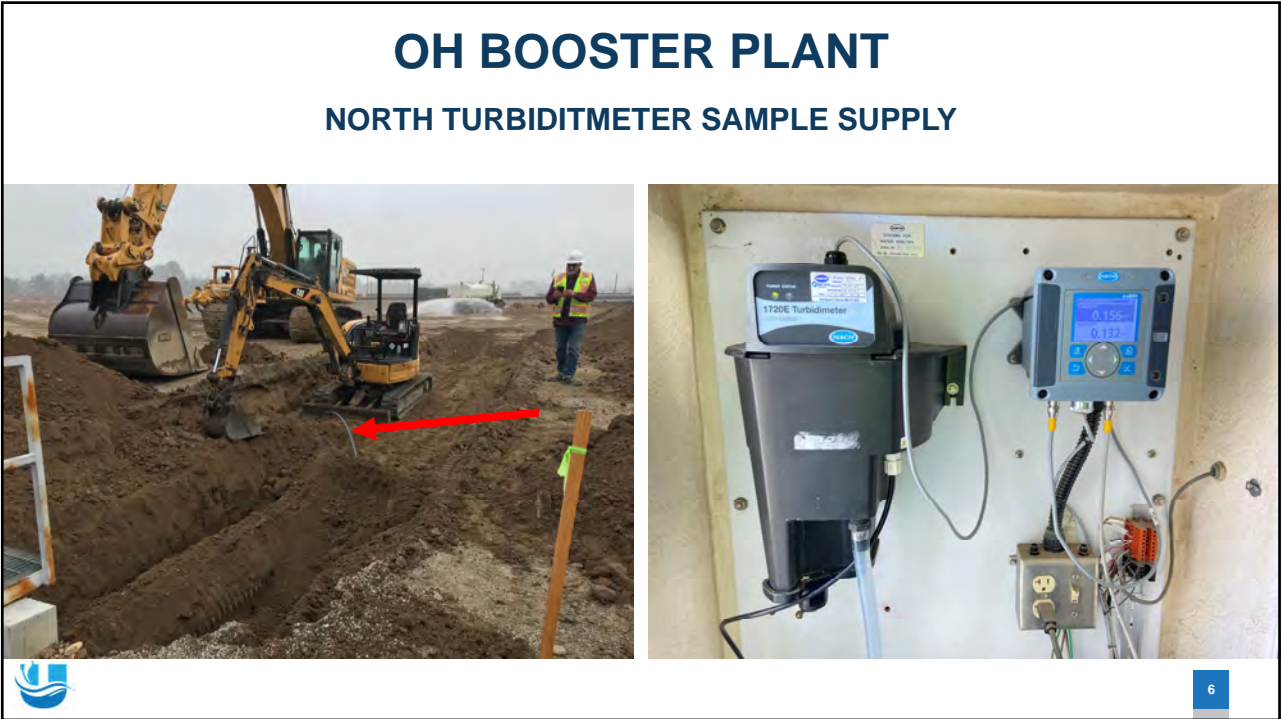
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PTP 30" RESERVOIR FILL VALVE REPLACEMENT







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?



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