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**MINUTES**  
**ENGINEERING AND OPERATIONS**  
**COMMITTEE MEETING**  
**Thursday, October 7, 2021, 9:00 A.M.**

**COMMITTEE MEMBERS PRESENT:**

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

**STAFF ATTENDING**

Dr. Maryam Bral, chief engineer  
Anthony Emmert, assistant general manager  
Brian Collins, chief operations officer  
Linda Purpus, environmental services manager  
Josh Perez, human resources manager  
Craig Morgan, engineering manager  
Robert Richardson, senior engineer  
Adrian Quiroz, associate engineer  
Michel Kadah, engineer  
Erik Zvirbulis, GIS analyst  
Randall McInvale, environmental scientist regulatory affairs  
Tessa Lenz, associate environmental scientist  
Ambry Tibay, senior accountant  
Daryl Smith, controller  
Dan Detmer, water resources manager  
Murray McEachron, principal hydrologist  
Zachary Plummer, IT administrator

**PUBLIC PRESENT**

None

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

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

**Committee Members Roll Call**

Administrative Assistant Destiny Rubio commenced Roll Call. Committee members: Chair Maulhardt, Director Naumann and Director McFadden were present.

**1. Public Comment**

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

## **2. Approval of Minutes**

Motion to approve the Minutes from the September 2, 2021 Engineering and Operations Committee meeting, Director Naumann; Second, Director Maulhardt. Voice vote: three ayes (Naumann, Maulhardt, McFadden); none opposed; Motion carried, 3/0.

## **3. October 13, 2021 Board Meeting Motion Agenda Items**

### **3.1 Authorize a Contract with GEI Consultants, Inc. to Develop the 60 percent Design Phase of the Santa Felicia Dam Outlet Works Improvement Project**

Chief Engineer Maryam Bral addressed the committee and provided a slide presentation (see attached) regarding staff's request to recommend authorizing the General Manager to execute an agreement with GEI Consultants, Inc. in the amount of \$1,715,706.00 to Develop the 60 percent Design Phase of the Santa Felicia Dam Outlet Works Improvement Project to the full Board.

Chair Maulhardt inquired about the project and if the existing outlet works will be abandoned in place. Dr. Bral stated that it is not possible to use the existing outlet works, the seismic deficiencies deem it unusable. Director McFadden asked for more detail on the abandonment of the outlet works. Dr. Bral stated that the plan is to abandon it in place and fill the penstock which will prevent dam safety issues. She added Engineering will gain a better understanding on how this will be done as they advance through the detailed design.

Assistant General Manager Anthony Emmert stated that staff has also considered interim risk reduction measures. Dr. Bral explained that in submitting a request to FERC for approval of the project schedule, FERC then posed the question of what would occur in the interim and requested plans for interim risk reduction measures (IRRM) while the schedule is extended. Chair Maulhardt requested that staff inform the committee of future IRRM discussions so that they have some visibility of the process. Dr. Bral thanked Chair Maulhardt for his comments and stated that Engineering will report back to the Committee with the IRRMs that are discussed with FERC.

Director Naumann inquired about the project timeline. Dr. Bral stated that Engineering has requested an extension from FERC to complete the design of the Outlet Works by December 2023, prepare for the bid process, and plan to begin construction in August 2024 for completion by 2026. She added that Spillway improvements will be lagging in parallel, the construction of the spillway would begin in 2026 and end in 2028.

Director Naumann then asked if this process includes the hydro plant. Dr. Bral stated that as part of the design process staff evaluated the size of hydropower units and presented options to the Board back in 2019. Staff also consulted with FERC. Director Naumann then requested that staff keep both the committee and Dennis Cardoza informed of these activities, for grant opportunities.

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

**3.2 Authorize a Contract with GEI Consultants, Inc. to Develop the 30 percent Design Phase of the Santa Felicia Dam Spillway Improvement Project**

Dr. Bral addressed the committee and provided a slide presentation (see attached) regarding staff's request to recommend authorizing the General Manager to execute an agreement with GEI Consultants, Inc. in the amount of \$579,948.00 to Develop the 30 percent Design Phase of the Santa Felicia Dam Spillway Improvement Project to the full Board. Director Naumann asked how much more the spillway capacity will be increased. Dr. Bral stated that the goal is to pass an inflow design flood of 220,000 cfs.

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

**3.3 Resolution 2021-18 Adopting the California Environmental Quality Act (CEQA) Initial Study-Mitigated Negative Declaration (IS-MND) and approving Phase I of the Freeman Diversion Sediment Management Project and its Implementation**

Environmental Services Department Manager Linda Purpus addressed the committee and provided a slide presentation (see attached) regarding staff's request to recommend adoption of the CEQA IS-MND for Phase I of the Freeman Diversion Sediment Management Project and approve Phase I of the Project, authorizing its implementation by the General Manager, and directing the Environmental Services Manager to file a Notice of Determination in accordance with CEQA for the Phase I of the Freeman Diversion Sediment Management Project to the full Board. Ms. Purpus then introduced Environmental Scientist Evan Lashly to provide details on the Project.

Mr. Lashly presented the findings of the CEQA analysis for the Project. He stated that the District is prioritizing Phase 1 of the project for implementation this fall and staff will return to the full Board regarding adoption of the CEQA findings for Phase 2 at a later date. Director McFadden asked about the timing for the second phase of the project. Mr. Lashly stated that it is dependent on the success of Phase 1 and should be expected within the next year or two.

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

**4. Project Highlights**

**4.1 Engineering Department Monthly Update**

Dr. Bral provided updates and slides (see attached) on the Engineering department's monthly updates. She then introduced Chief Operations Officer Brian Collins to provide updates on the physical modeling progress.

Chair Maulhardt inquired about a block depicted in one of the photos, and Engineering Manager Craig Morgan stated that it was implemented as a cleaning mechanism. Director Maulhardt then inquired about a portion of the model and asked how staff plans to transport machinery there. Mr. Morgan stated that it will be developed in the design. Chair Maulhardt asked if the 40,000 cfs depicted in the photo reflects the sediment loading and rocks or boulders hitting the concrete. Mr. Collins stated that the sediment and cobble transport will

## UWCD Engineering and Operations Committee Meeting MINUTES

October 7, 2021

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be evaluated in the physical model process and the damage not evident in the modeling will be evaluated in other ways such as computational fluid dynamics modeling. Director Naumann asked if a diversion was performed. Mr. Collins stated that there were administrative challenges with the drawings and the Bureau of Reclamation had not received the update in time to make the modifications. Director Naumann then asked about the University of Iowa's modeling progress. Mr. Collins stated that they have initiated construction of the 1:12 model.

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

Ms. Purpus provided updates and slides (see attached) on the environmental services department's monthly updates and then introduced Randall McInvale to present the key highlights.

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

Mr. Collins provided updates and slides (see attached) on the operations and maintenance department's activities for the month. Chair Maulhardt inquired about the expected life of the microscreens. Mr. Collins stated that he does not have the answer at this time, but that they are in good shape and are better maintained now. Chair Maulhardt then inquired about the dollar amount of the chlorine scrubber replacement, to which Mr. Collins responded the cost to replace the chlorine scrubber is approximately \$250,000 dollars.

## **5. Future Agenda Topics**

No future agenda topics were offered.

## **ADJOURNMENT 10:44 a.m.**

Chair Maulhardt adjourned the Engineering and Operations Committee meeting at 10:44 am.

I certify that the above is a true and correct copy of the minutes of the Engineering and Operations Committee Meeting of October 7, 2021.

ATTEST:

  
\_\_\_\_\_  
Lynn Maulhardt, Chair



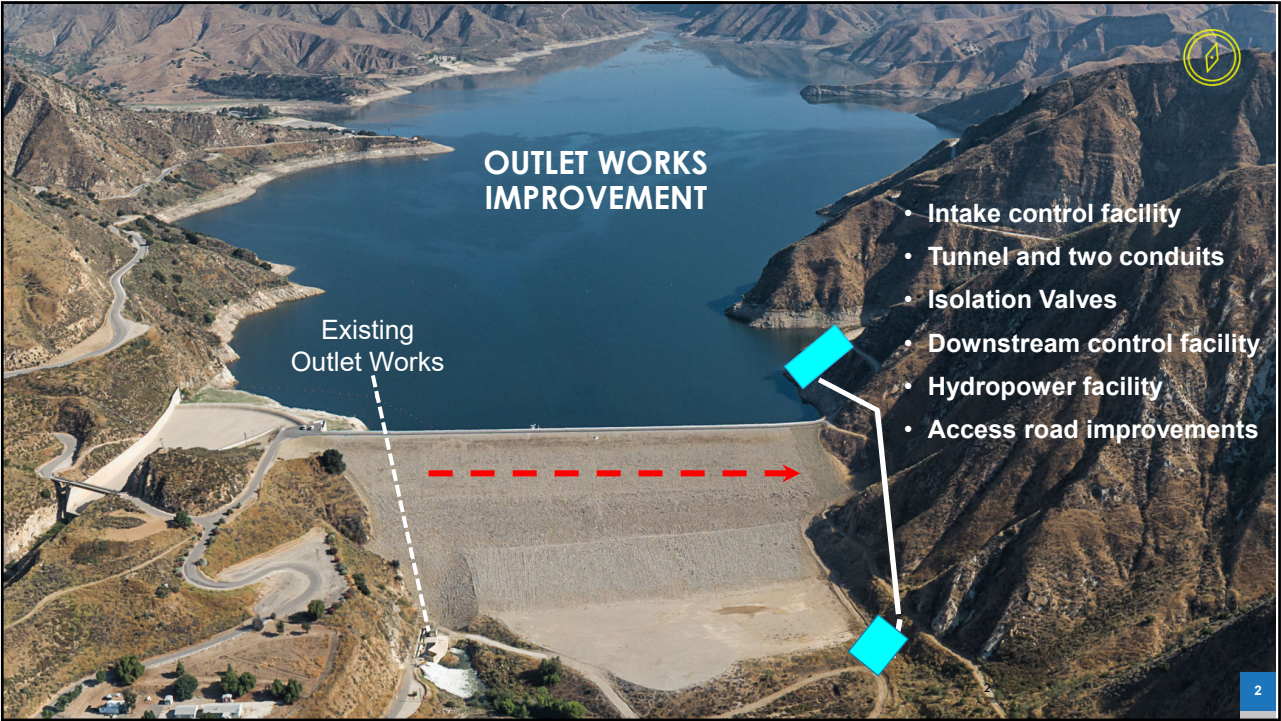
# Engineering And Operations Committee Meeting

October 7, 2021

## Motion Item 3.1

Authorize a contract with GEI Consultants, Inc. to Develop  
the 60 percent Design Phase of the Santa Felicia Dam Outlet  
Works Improvement Project

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### OUTLET WORKS IMPROVEMENT

Existing Outlet Works

- Intake control facility
- Tunnel and two conduits
- Isolation Valves
- Downstream control facility
- Hydropower facility
- Access road improvements

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## Outlet Works Improvement Project - 60% Design

❑ Scope of Work:

➤ Design and Analyses

➤ Plans and Specifications

➤ Geotechnical Baseline Report (GBR)

➤ Updated Cost Estimate and Constructability Report

➤ BOC Meeting # 6

❑ Fee:

➤ \$1,715,706

❑ Schedule:

Oct 15, 2021 –  
July 26, 2022

10%

30%

60%

90%

100%

Bid  
Award

CONSTRUCTION

BOC #3

BOC #4

BOC #5

BOC #6


BOC #7

BOC #8

BOC #9


August 2022

UWCD REQUEST FOR  
TIME EXTENTION  
PENDING FERC  
APPROVAL



3

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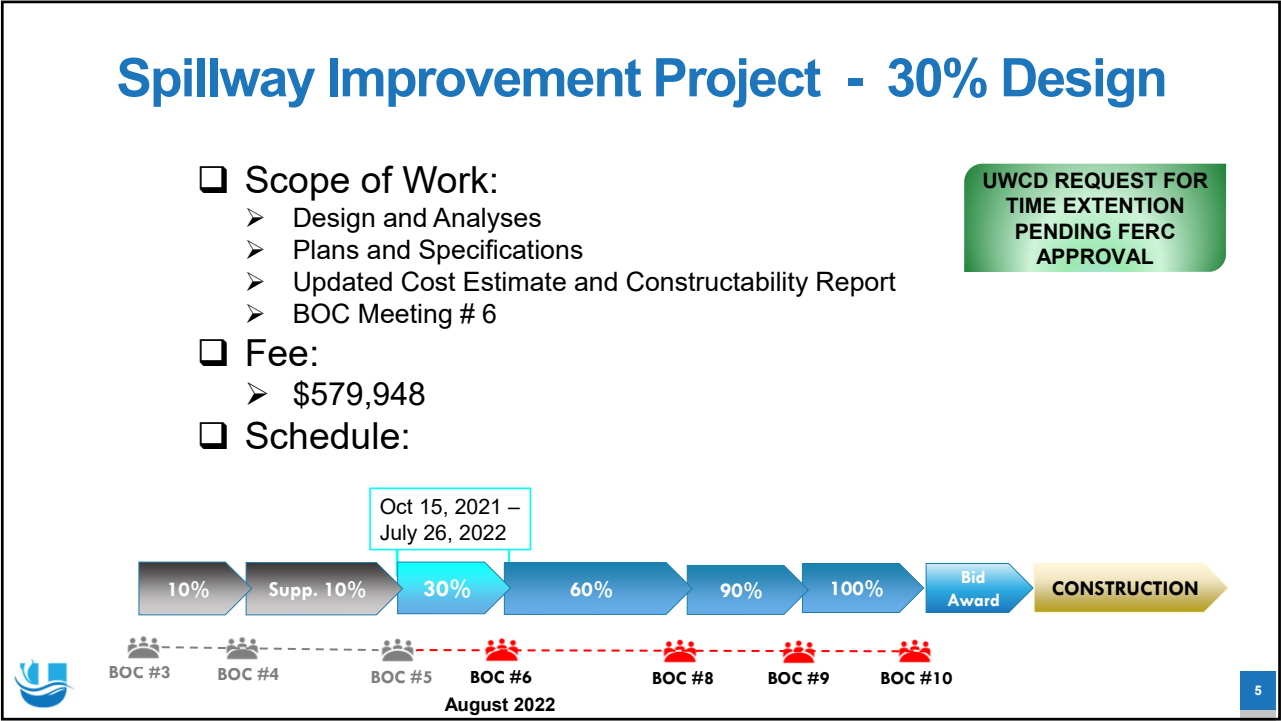


Motion Item 3.2

Authorize a Contract with GEI Consultants, Inc. to Develop the 30 percent Design Phase of the Santa Felicia Dam Spillway Improvement Project

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# Resolution 2021-18

## Freeman Diversion Sediment Management CEQA Analysis

ENGINEERING AND OPERATIONS COMMITTEE | OCTOBER 7, 2021

AGENDA ITEM 3.3

**Recommendation for Board consideration in adopting the California Environmental Quality Act (CEQA) Initial Study-Mitigated Negative Declaration (IS-MND) and Approve Phase One of the Freeman Diversion Sediment Management Project and its Implementation**



1

# CEQA Analysis


## Two-phase Sediment Management Project to Provide for Operational Reliability


Phase 1

- Avoid water completely, “streamlined approach”
- Single, defined event planned for Fall 2021

Phase 2

- Long-term program
- Address future changed conditions
- Larger area



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# CEQA Findings

## Potentially Significant Impacts

*less than significant with mitigation incorporated*

- Biological Resources
- Cultural Resources
- Geology/Soils
- Tribal Cultural Resources


## Significant findings:

- The project will not have a significant impact on the environment
- The project will not make or contribute to significant cumulative impacts
- The project would not have a significant impact on humans


## Less Than Significant or No Impacts

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Energy
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Mandatory Findings of Significance


- Mineral Resources
- Noise
- Population/Housing
- Public Services
- Recreation
- Transportation
- Utilities/Service Systems
- Wildfire

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# Mitigation Measures




Pre-project



During project



Post-project

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# Request to E&O Committee:

**Consider recommending that the Board adopt a Resolution to approve the CEQA Findings, approve Phase One of the Project and its implementation**

*Questions*





United Water Conservation District

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ENGINEERING DEPARTMENT  
MONTHLY UPDATE

October 7, 2021



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Santa Felicia Dam Safety Improvement Project

Board of Consultants Meeting No. 5 held September 21 – 23

☐ 30 percent design of outlet works

☐ Supplemental 10 percent design of spillway improvements

☐ 2020 drilling program results

☐ Federal and state permitting

☐ Design of new release channel technical assistance meetings and discussions

☐ United to proceed with the next design phases

Oct 15, 2021 –  
July 26, 2022

Outlet Works

10%

30%

60%

90%

100%

Bid Award

CONSTRUCTION

Spillway

10%

Supp. 10%

30%

60%

90%

100%

Bid Award

CONSTRUCTION

BOC #3

BOC #4

BOC #5

BOC #6

BOC #7

BOC #8

BOC #9

BOC #10


August 2022

2

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## Santa Felicia Dam Safety Improvement Project Funding Applications

- ❑ 2021 High Hazard Potential Dams (HHPD) Grant Program
  - Supports dam rehabilitation planning and design costs
    - ✓ DSOD application to Federal Emergency Management Agency (FEMA) in June 2021
    - ✓ Request for \$1.365 million to fund the next design phase
    - ✓ Federal Share: 65%, Local match: 35%
- ❑ 2021 EPA Water Infrastructure Finance and Innovation Act (WIFIA)
  - UWCD application for a low interest loan to support SFD SIP construction costs on July 23, 2021
    - ✓ Request for a loan up to \$51.6 million (50% of anticipated construction costs)
- ❑ SFD SIP has received the state legislature representative support



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## Iron and Manganese Removal Project

**Submittal process underway (GSE Construction)**

**August 25**  
Preconstruction meeting with GSE


**August 26**  
Execution of \$9.3429 Million construction contract with GSE


**August 30**  
Issued work directive change No. 1 to GSE (Buy American Act)

**September 20**  
Issued administrative Notice to Proceed to GSE

**September 24**  
Co-signed DCIP grant agreement for \$4.21 Million with OLDCC

**September 29**  
Earthwork pre-construction meeting

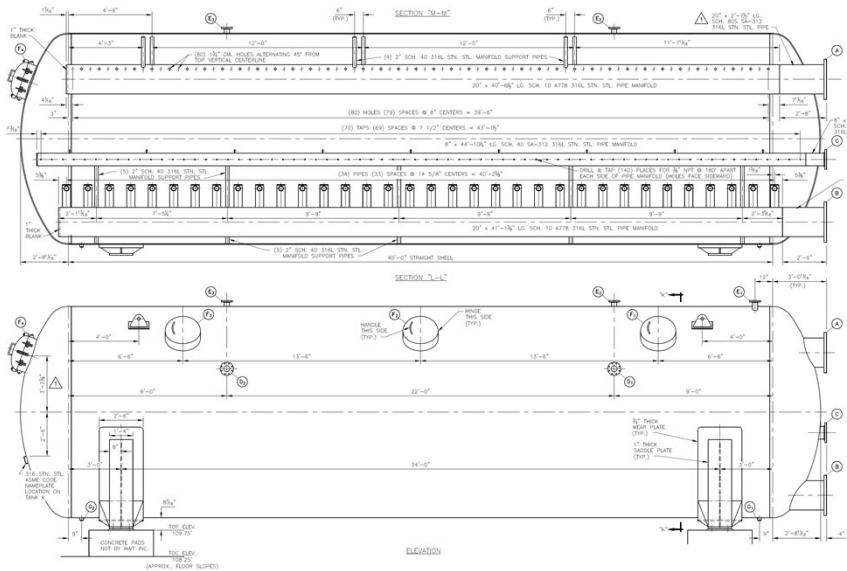




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## Iron and Manganese Removal Project

- Approximately 30 submittal packages received from GSE Construction to date and under review.
- Nearly 250 submittal packages anticipated in total.



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## OH System Backup Generator Project

- ❑ Three transformers were installed
- ❑ Existing fuel tank cleaning completed on August 31
- ❑ Four light poles were installed
- ❑ PLC cabinet was replaced
- ❑ Delay in manufacturing and delivery of remaining electrical cabinets
- ❑ Construction completion by Dec 23
- ❑ The 3rd quarterly report and 3<sup>rd</sup> reimbursement report due October 15
- ❑ \$66,690.72 has been received to date

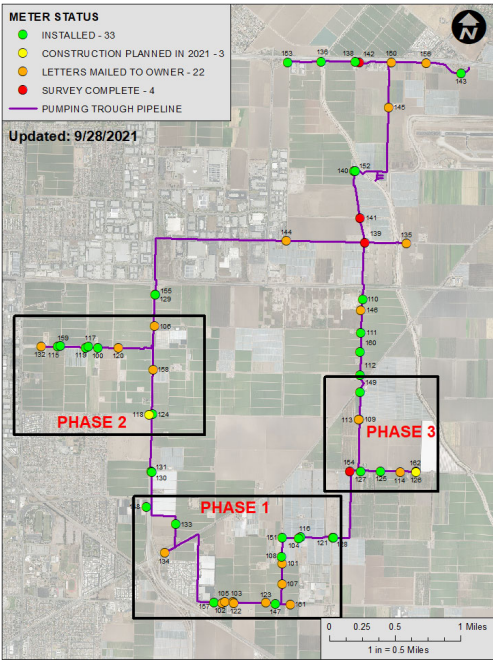


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# PTP Metering Improvement Project

	CY 2016-2020	CY 2021	Total
Installations	20	13	33
Easements Obtained	12	4	16
Letters to Owners	33	6	39
Field Surveys	48	0	48



# SWP Interconnection Project

**September 16 - 22**

- ☐ The City obtained applicable permits for geotechnical work in the river
- ☐ United allowed the City to proceed with the drilling work
- ☐ Bio survey prior to preconstruction meeting
- ☐ Preconstruction meeting
- ☐ Work to be completed over two weeks



Funding Applications Status		
Grant Program	Grant Program Summary	Deadline
DOD – DCIP Defense Community Infrastructure Program	Ask: \$4.37 M	<ul style="list-style-type: none"><li>Initial application, July 12</li><li>Invitation to apply, August 16</li><li>Final application, August 27</li></ul>
FEMA HHPD High Hazard Potential Dams - California, DSOD: Applicant UWCD: sub applicants	Planning and design Total grant program: \$11.6 M Ask: \$1.37M (60% Design/30% Design) Federal Share: 65% Non-federal Match: 35%	<ul style="list-style-type: none"><li>Initial HHPD application on July 16</li><li>Final application date pending</li></ul> <div>Congress Woman Julia Brownley's Letter to FEMA supporting funding SFD SIP on Sept 7</div>
EPA WIFIA Water Infrastructure Finance and Innovation Act	Low Interest Rate Loan Total Grant Program: \$5.5 B Federal Share: up to 49% Ask: \$51.7 M	<ul style="list-style-type: none"><li>Initial WIFIA application on July 23</li><li>Final application date pending</li></ul>
DWR Prop 1 Groundwater Grant Program Round 3	Implementation Projects for groundwater clean up and WQ improvements State Match: 50% Ask: \$4.225 M	<ul style="list-style-type: none"><li>Initial application submitted on September 7</li><li>Final Application due in Nov 2021</li><li>Preliminary Award Date: Summer 2022</li></ul>
CalOES Community Power Resiliency Allocations to Special Districts Program	Financial support for furnishing and installing backup generators at 3 locations within the Service Area.	<ul style="list-style-type: none"><li>Received grant award for \$198,612</li></ul>

Freeman Diversion Rehabilitation	
<input type="checkbox"/> Geotechnical services contract in place to inform the engineering design of the hardened ramp.	
<input type="checkbox"/> Physical modeling of hardened ramp fish passage in progress	



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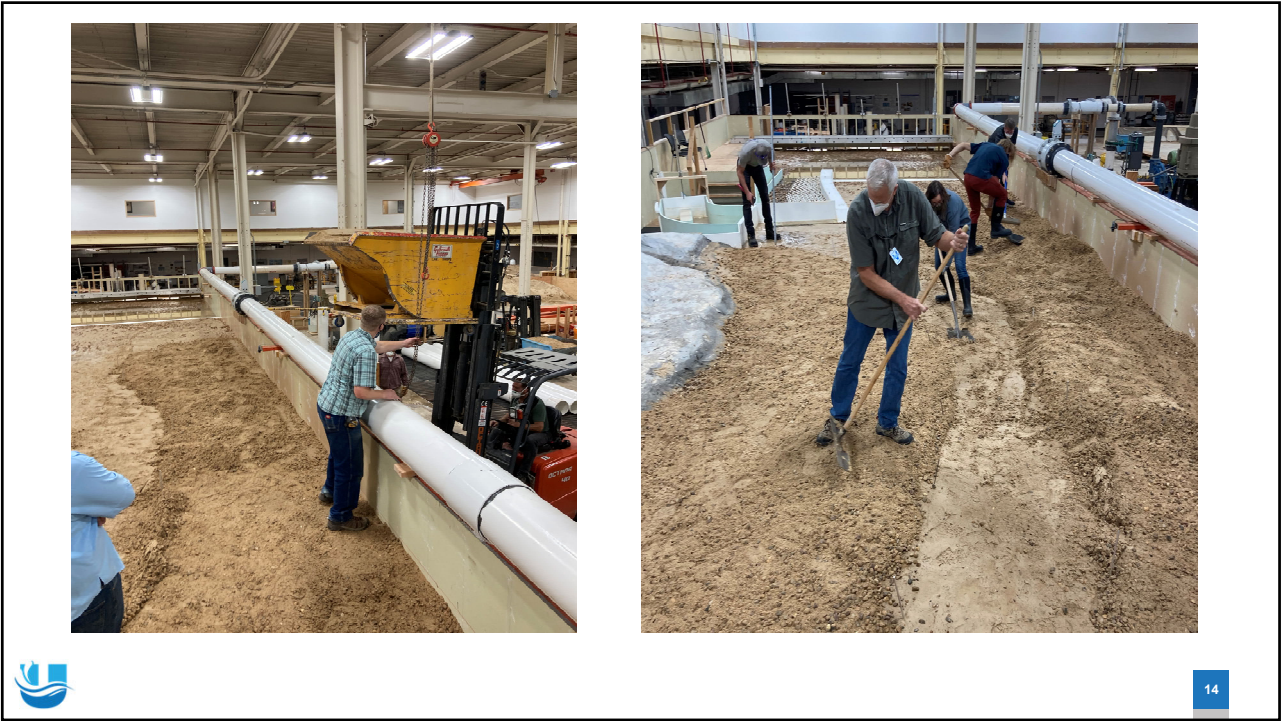


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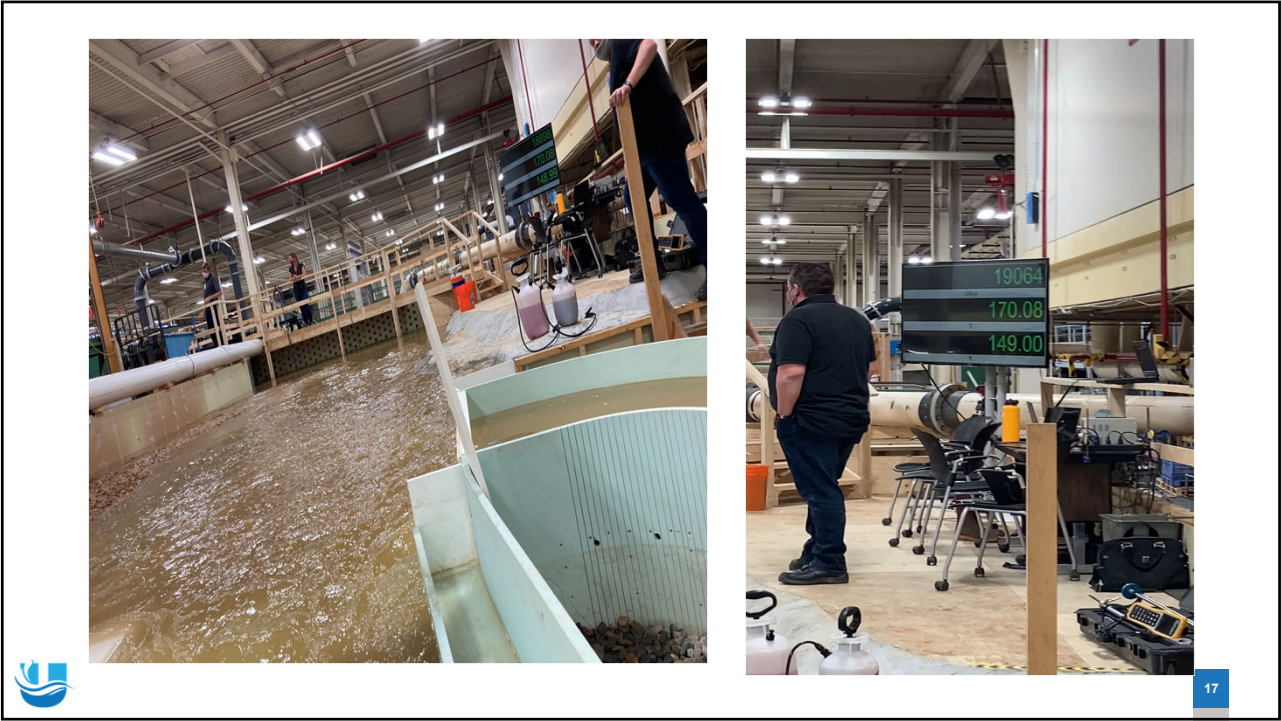
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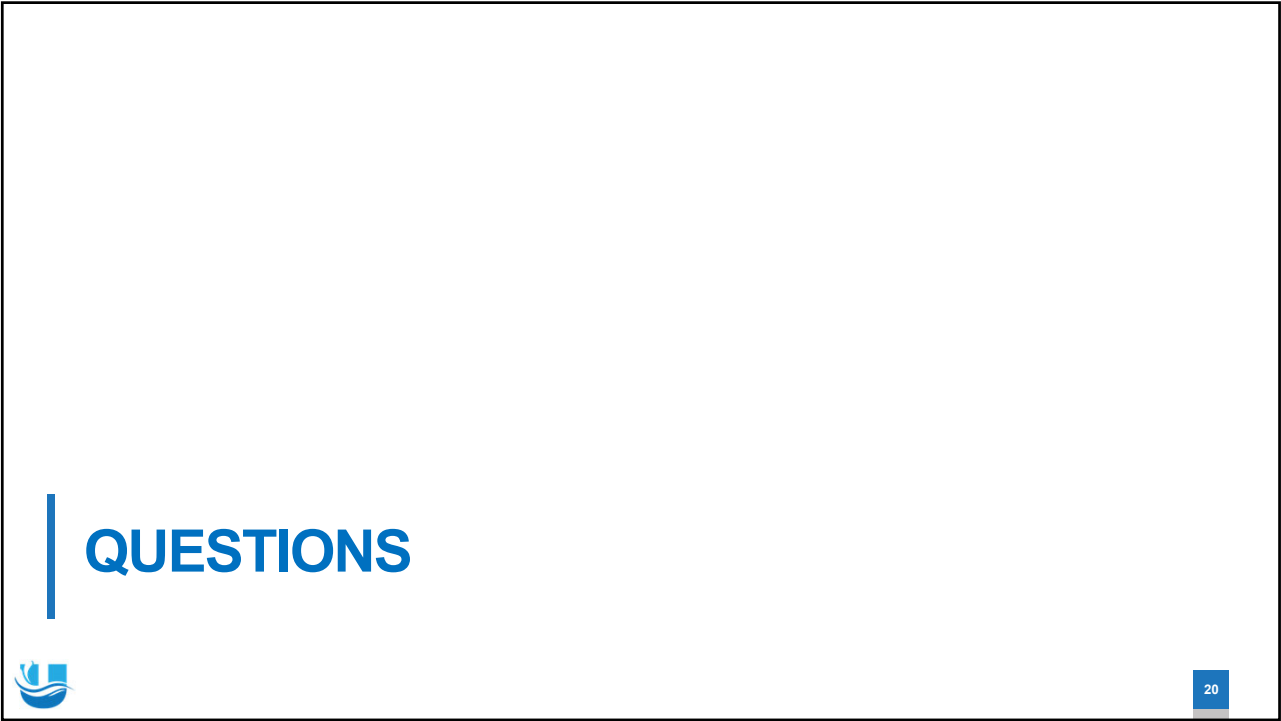


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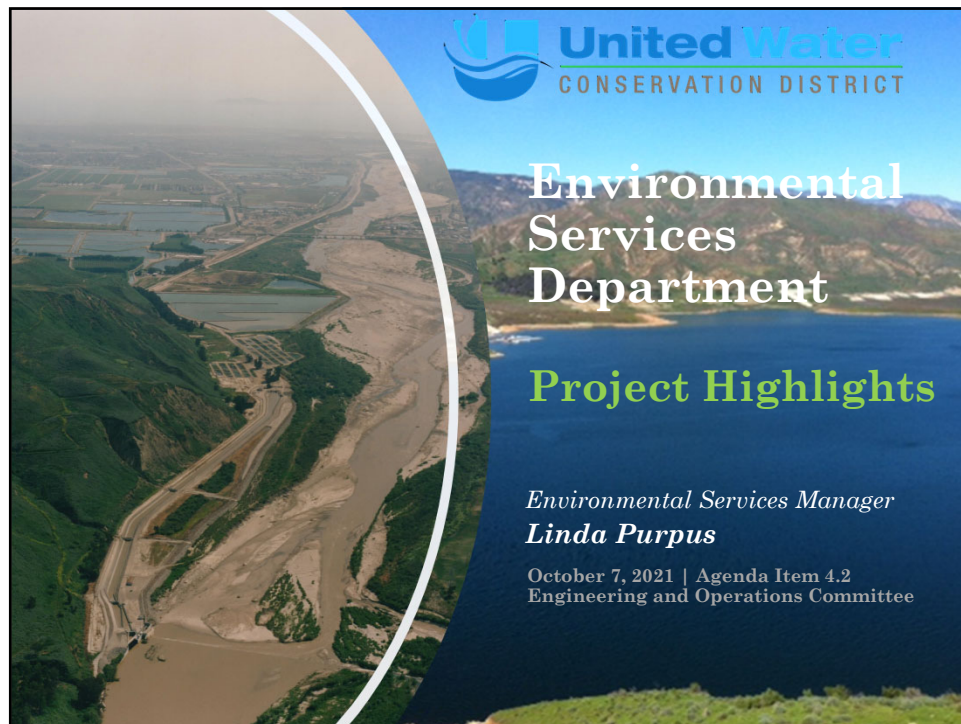
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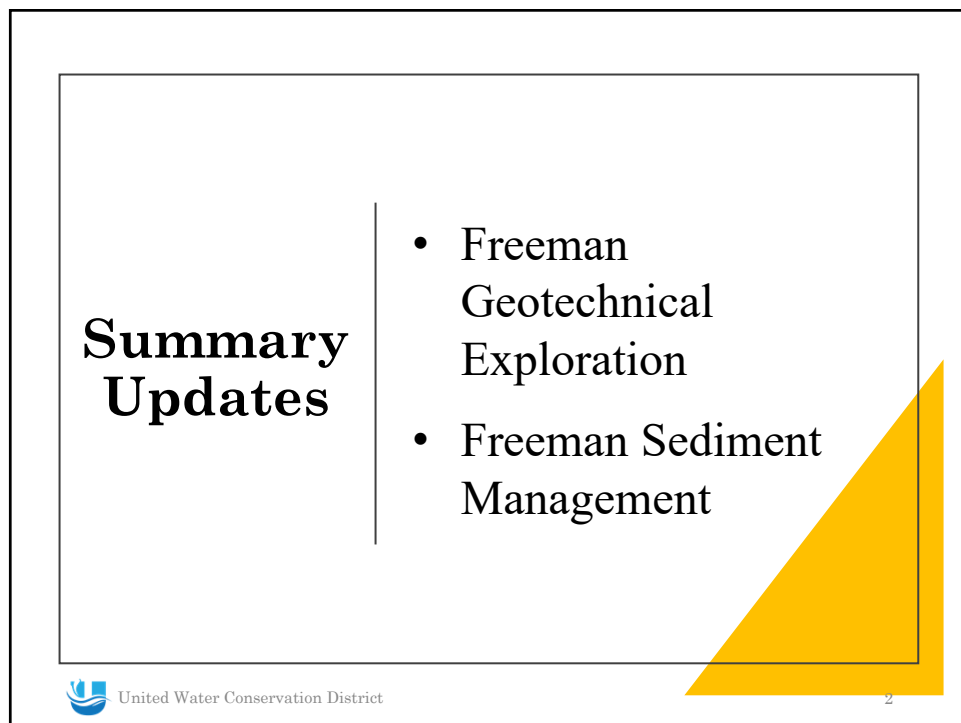


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# Key Highlight

*Presented by:*  
**Randall McInvale**  
*Associate Environmental Specialist*

## Southern California Steelhead CESA Listing Petition


 United Water Conservation District

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## Listing Petition Background

- **June 14, 2021:** Fish and Game Commission (Commission) received the listing petition from CalTrout
- **July 16, 2021:** Commission published notice of receipt
- **August 18, 2021:** Commission officially received petition at meeting and granted 30-day extension to Dept. of Fish and Wildlife (CDFW) for evaluation of the petition
- **December 15-16, 2021:** Commission scheduled to receive the CDFW 90-day evaluation
- **February 16-17, 2022:** Commission determines if listing may be warranted

 United Water Conservation District

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## Contents of the Petition

- Southern California Coast Distinct Population Segment (DPS)
- “Endangered” status
- Follow the federal listing status above and below barriers



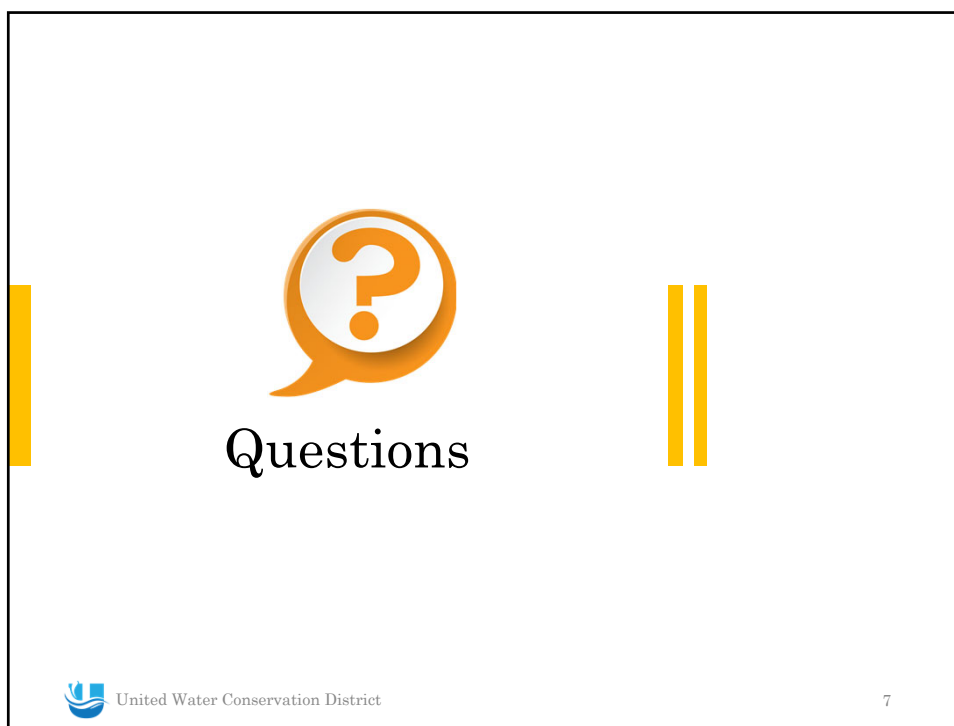
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## Process and Challenges Ahead

- Stakeholder involvement
  - To date and next steps
- Commission decision
- If listing is warranted, then what?
  - State Incidental Take Permit



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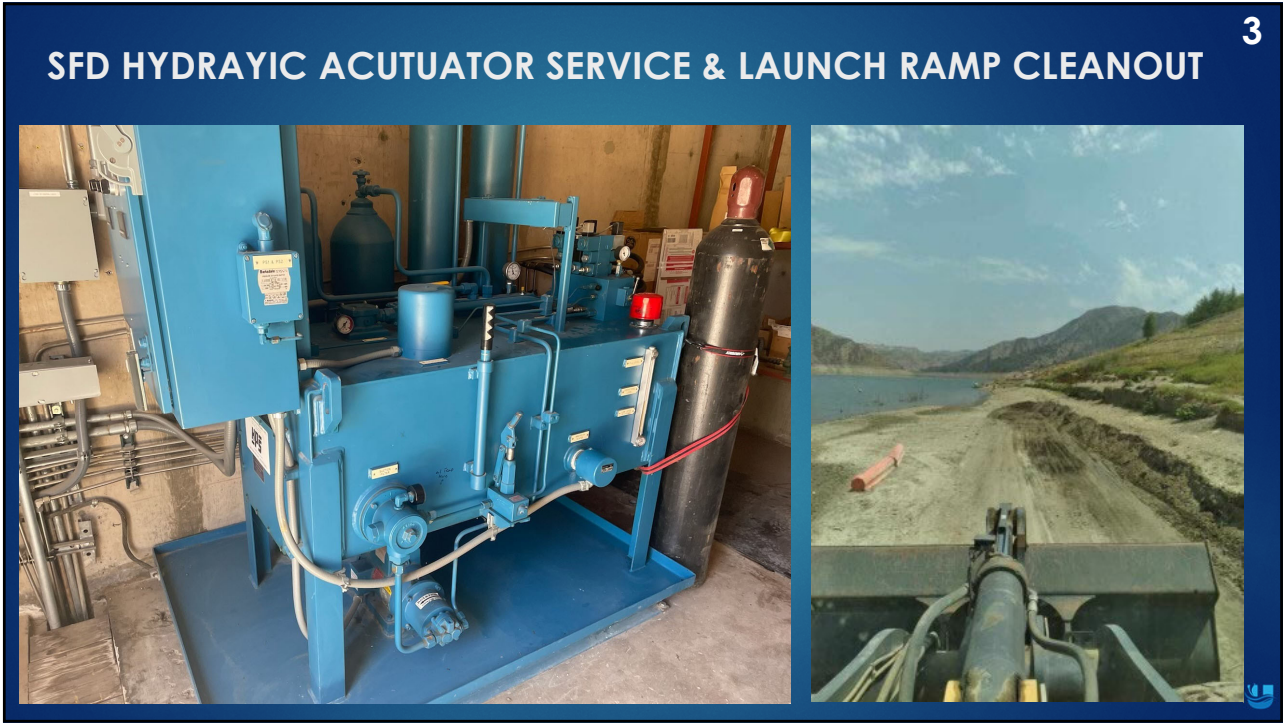




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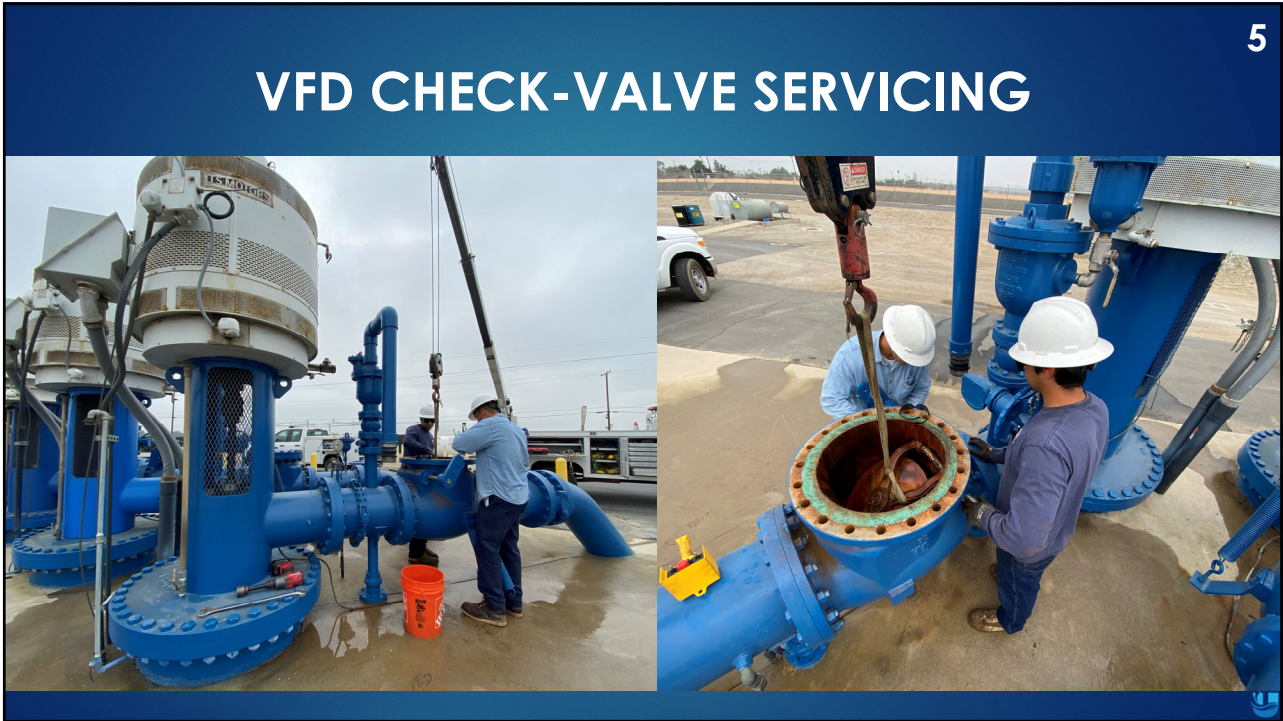
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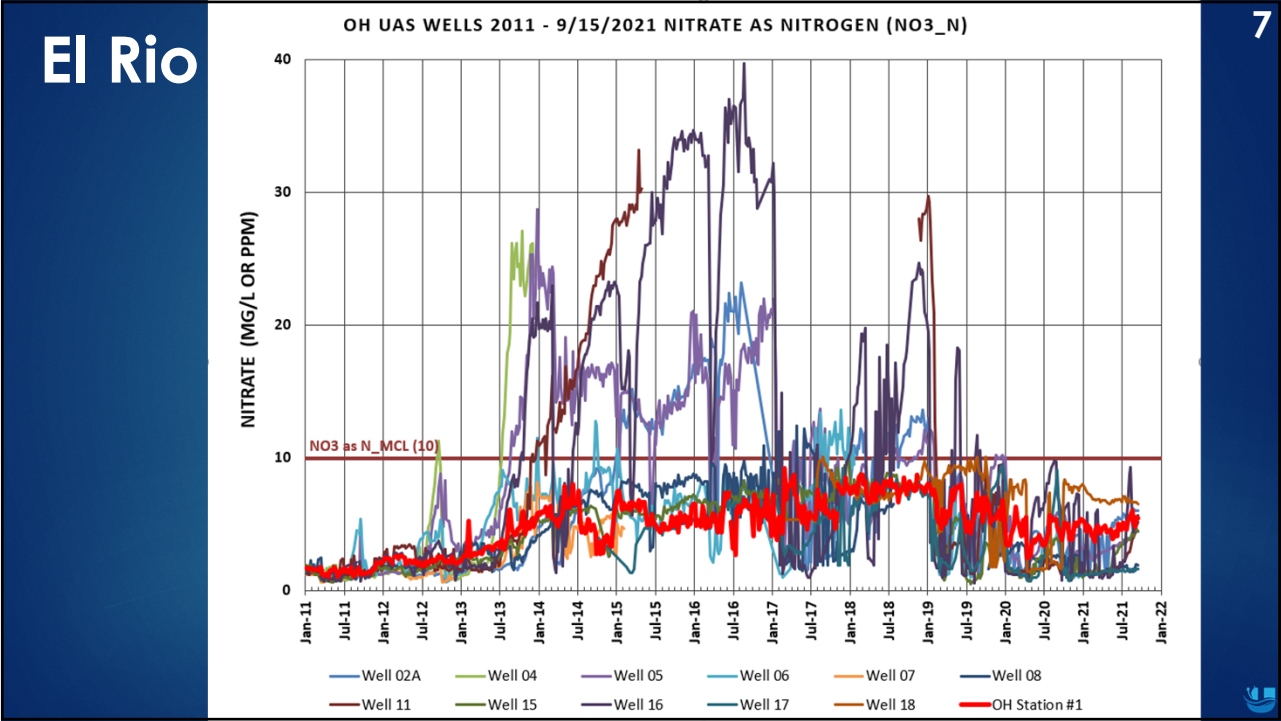
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