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David D. Boyer

ENGINEERING and OPERATIONS
COMMITTEE MEETING
MINUTES

Thursday, December 7, 2023, at 9:30 a.m.
UWCD Headquarters, First Floor, Board Room
1701 N. Lombard Street, Oxnard, CA 93030

COMMITTEE MEMBERS IN ATTENDANCE

Lynn E. Maulhardt, chair
Catherine P. Keeling, director
Daniel C. Naumann, director

STAFF IN ATTENDANCE

Mauricio Guardado, general manager
Anthony Emmert, assistant general manager
Dr. Maryam Bral, chief engineer
Marissa Caringella, environmental services manager
Clayton Strahan, interim chief operations officer
Randy Castaneda, water treatment supervisor
Murray McEachron, hydrologist supervisor
Craig Morgan, engineering manager
Evan Lashly, senior environmental scientist
Michel Kadah, engineer
Kaili Taniguchi, engineer
Vanessa Vasquez, clerk of the committee

PUBLIC IN ATTENDANCE

No members of the public were in attendance.

Call to Order – Open Session

Director Naumann called the committee meeting to order at 9:39 a.m. The clerk of the Committee called roll. All Committee members were present (Naumann, Maulhardt, and Keeling).

Before public comments Director Naumann announced that the Regional Defense Partnership of the 21st Century (RDP-21) will be sending a support letter for the Santa Felicia Dam Safety Improvement Project. Chair Maulhardt then proceeded to recognize the importance of the date of the committee meeting in remembrance of Pearl Harbor.

1. Public Comments
Information Item

Director Naumann asked for public comment. None were offered.



2. Approval of Minutes

Motion

Motion to approve the Minutes from the October 5, 2023, Engineering and Operations Committee meeting, Director Naumann; Second, Maulhardt. Voice vote: three ayes (Naumann, Maulhardt and Keeling); none opposed. Motion carries 3/0/0.

3. December 13, 2023, Board Meeting Motion Agenda Item

The Committee reviewed and discussed the following motion items to formulate recommendations to the full Board at its December 13, 2023, meeting.

3.1 Authorize Contract Amendment to the Professional Consulting Services Agreement with GEI Consultants, Inc. for the Development of the Final Design Phase of the Santa Felicia Dam Outlet Works Improvement Project (CIP 8002), Approval of a Supplemental Appropriation to Cover Fees Associated with the Amendment, and Approval to Fund the Supplemental Appropriation Using the EPA WIFIA Loan

Chief Engineer Dr. Maryam Bral presented motion item 3.1 (presentation attached).

No further questions or comments.

The Committee members were all in favor of recommending approval of this motion to the full Board.

3.2 Approve Resolution Determining the Three Barrel Culvert Replacement Project is Exempt from the Provisions of the California Environmental Quality Act and Approve the Project

Engineering Manager Craig Morgan presented motion item 3.2 (presentation attached).

No further questions or comments.

The Committee members were all in favor of recommending approval of this motion to the full Board.

3.3 Approve Resolution Determining the Inverted Siphon Replacement Project is Exempt from the Provisions of the California Environmental Quality Act and Approve the Project

Engineering Manager Craig Morgan presented motion item 3.3 (presentation attached).

No further questions or comments.



The Committee members were all in favor of recommending approval of this motion to the full Board.

3.4 Authorize Approval of a Contract with HDR Engineers, Inc. to Develop the Final Design of the Freeman Conveyance System Upgrade – Freeman to Ferro Recharge Basin (CIP 8018)

Engineering Manager Craig Mogan presented Motion Item 3.4 (presentation attached).

No further questions or comments.

The Committee members were all in favor of recommending approval of this motion to the full Board.

3.5 Authorize Approval of a Contract Amendment to the Professional Consulting Services Agreement with Cramer Fish Sciences to Complete Pre-Implementation Studies

Senior Environmental Scientist Evan Lashly presented motion item 3.5 (presentation attached).

Director Keeling asked for clarification on the dollar amount listed in the motion item slide (different than the amount listed on the agenda). Mr. Lashly confirmed that the motion item slide reflected the correct amount, and this amount would be the amount presented to the Board.

No further questions or comments.

The Committee members were all in favor of recommending approval of this motion to the full Board.

4 Monthly Department Updates
Information Item

The Committee received and reviewed the monthly reports from the Engineering, Environmental Services and Operations and Maintenance Departments as well as receiving verbal presentations of highlights (presentations are attached).

4.2 Engineering Department Update

Dr. Maryam Bral presented department updates that covered status updates on 2023 Water Sustainability Summit, Santa Felicia Dam (SFD) Safety Improvement Project (SIP) Board of Consultants (BOC) Meeting No. 8, SFD SIP Updated Project Schedule, SFD SIP Regulatory Compliance and the Proposed Permitting Timeline, SFD SIP LAFCo Support Letter, SFD SIP Intake Design Modification – Yield Increase, SFD SIP Historical Low Reservoir Levels and Releases, SFD SIP Low Reservoir Levels and Modified Intake Elevations,



SFD SIP Projected Reservoir Siltation for High-Flow Intakes and Extraction Barrier and Brackish (EBB) Water Treatment Project – Phase 1 Memorandum of Agreement (MOA) (presentation attached).

During Dr. Bral's presentation regarding Santa Felicia Dam Safety Improvement Project Intake Design Modification – Yield Increase, slide seven, Chair Maulhardt suggested a graphic illustrating the motion of the water through the intake, perhaps in a three-dimensional form would better depict the process of the intake design to the public.

Dr. Bral explained that GEI Consultant's Inc. scope of work includes a three-dimensional design currently under development.

Director Naumann had to excuse himself for an appointment at 10:45 a.m.

No further questions or comments.

4.3 Environmental Services Department Update

Environmental Services Manager Marissa Caringella presented Environmental Services department updates that included Santa Felicia Dam, Lake Piru, Middle Piru Creek, Freeman Diversion Operations and Training and Tour (presentation attached).

During slide one of the presentation Ms. Caringella had Mr. McEachron present state water imports.

No further questions or comments offered.

4.3 Operations and Maintenance Department Update

Interim Chief Operations Officer Clayton Strahan presented Operations and Maintenance department updates that covered Santa Felicia Dam, Freeman Diversion Maintenance, Saticoy Well Field, and the PTP System (presentation attached).

No further questions or comments offered.

Mr. Strahan verbally introduced the Operations and Maintenance Refined Valve Exercise Program.

The Committee then discussed revisions to the current system of reporting to the Committee and Board. Director Keeling suggested a chart reflecting approved and expected expenditures for current projects that are being presented to the Committee and Board.



Streamlining Board approval process and efficient use of staff time for multi-year, and long-term projects was discussed, General Manager Mauricio Guardado suggested that staff meet to review policies and consider opportunities to streamline processes. Staff will conduct internal discussions and develop recommendations for the Committee and Board considerations.

No further questions or comments.

5 Future Agenda Items

None were offered.

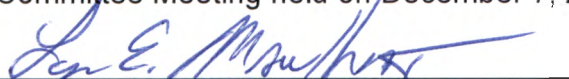
No further questions or comments.

ADJOURNMENT 11:30 a.m.

Chair Maulhardt adjourned the meeting at 11:30 a.m.

I certify that the above is a true and correct copy of the minutes of the Engineering and Operations Committee Meeting held on December 7, 2023.

ATTEST:



Chair Lynn E. Maulhardt

Regulatory and Environmental Compliance

Motion Item 3.1

Authorize Contract Amendment to the Professional Consulting Services Agreement with GEI Consultants, Inc. for the Development of the Final Design Phase of the Santa Felicia Dam Outlet Works Improvement Project (CIP 8002), Approval of a Supplemental Appropriation to cover Fees associated with the Amendment, and Approval of Fund Transfer from the EPA WIFIA Loan

Contract Amendment Fee: \$1,158,211



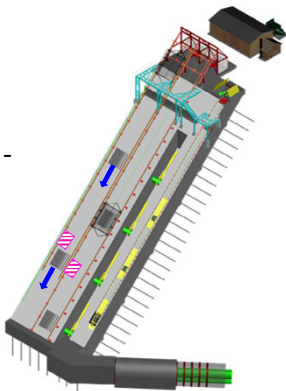
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Regulatory and Environmental Compliance

Motion Item 3.1

1. Authorize Contract Amendment to address Design Modifications and Additional Analysis:

- ❖ Increase Proposed High-Flow Intakes from 4 to 6 and Modify Elevation of Proposed Intakes – Enabling Operational Flexibility
- ❖ BOC’s Recommended Design Modifications and Additional Analysis - (BOC Meeting No. 7, June 21, 2023)
- ❖ Develop Design Details and Alternative Means and Methods requested by BV – More Cost-Effective Construction Contract
- ❖ Completion of Design PFMA – FERC’s Requirements
- ❖ Additional Analysis to Support Environmental Documents





2

Regulatory and Environmental Compliance

Motion Item 3.1

2. Approval of Supplemental Appropriation due to insufficient funds in FY23/24 Budget

3. Approval of Fund Transfer from EPA WIFIA Design Loan to Support Supplemental Appropriation

Updated Contract Fee:

Original Contract Amount:

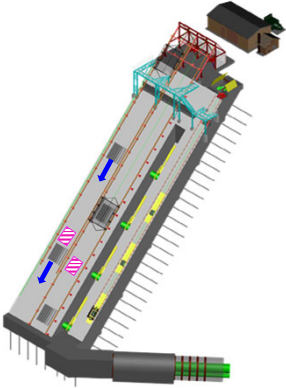
Contract Amendment Fee:


Total Contract Fee to Date:

\$867,980

\$1,158,211

\$2,026,191





Water Supply Reliability

Motion Item 3.2

Resolution for Adoption of CEQA Notice of Exemption (NOE) for the Three Barrel Culvert Replacement (CIP 8018)

❑ Exempt under Section 15301 and Section 15302

❑ In support of the Freeman Conveyance System Upgrade - Freeman to Ferro.

❑ Replacement of the Three Barrel Culvert will remove a restriction in the system and replace an aging facility.

Desilter

Saticoy Yard

Main Canal

Existing Structure to be Replaced

Approx. Work Limits

Access Road (1000 ft from Saticoy Yard)

50 ft

N

1

1

Water Supply Reliability


Motion Item 3.3


Resolution for Adoption of CEQA Notice of Exemption (NOE) for the Inverted Siphon Replacement (CIP 8018)

Exempt under Section 15301 and Section 15302

In support of the Freeman Conveyance System Upgrade - Freeman to Ferro.

Replacement of the Inverted Siphon will provide positive drainage, remove a restriction in the system, and replace an aging facility.





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Water Supply Reliability

Motion Item 3.4

Authorize Approval of a Contract with HDR Engineers, Inc. to Develop the Final Design of the Freeman Conveyance System Upgrade Project – Freeman to Ferro (CIP 8018)

Final Design, Permit Support, and Bid Support for 3 5-ft diameter pipes from Noble to Ferro Basin

HDR is the designer for the State Water Project Interconnection Project and is completing preliminary design of the Noble to Ferro connection.

Contract Fee not to Exceed \$350,000

Grant Funding: \$1M matching (IRWM)

Sufficient funds available in the FY 2023/24 budget

1



1

Regulatory and Environmental Compliance

Motion 3.5

Authorize Approval of Amendment No. 8 to the Contract Cramer Fish Sciences for Services Related to Santa Felicia Dam Fish Passage Pre-implementation Studies

- Committee will consider recommending approval of the motion to the full Board to authorize the General Manager to execute an amendment to the professional consulting services agreement with Cramer Fish Sciences
- Contract is directly related to the FERC license compliance associated with the 2008 Biological Opinion from National Marine Fisheries Service
- Amendment amount: \$196,054



1

Engineering and Operations Committee Meeting Agenda Item 3.5

Request to consider recommending that the Board authorize the General Manager to execute a contract amendment with Cramer Fish Sciences to complete field work associated with their study plan regarding Santa Felicia fish passage pre-implementation studies in the amount of \$196,054



Project Background

2008 – NMFS Biological Opinion

2017 – Fish Passage Feasibility Report

2019 – Pre-implementation Study Plan

- Stipulated a process for evaluating the feasibility of fish passage
- Identified “trap and haul” as potentially feasible, contingent upon resolving specific uncertainties
- Study plan designed to address uncertainties related to passage of downstream migrants



2

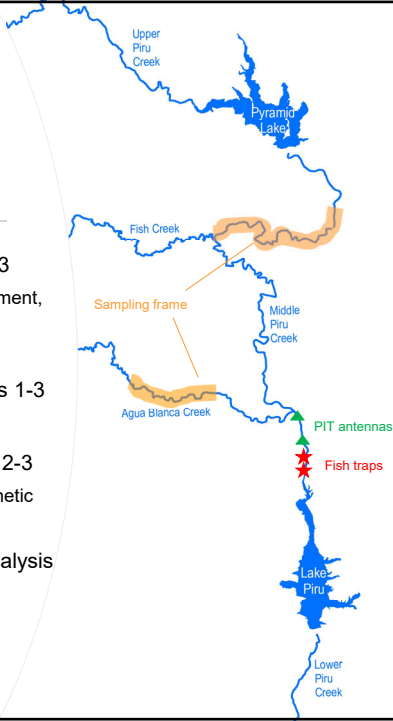
Study Plan Overview


Spring-fall field sampling – yrs 1-3
Population, demographics, movement, genetic sampling

Operate Passive Integrated Transponder (PIT) antennas – yrs 1-3
Movement

Operate low-tech fish traps – yrs 2-3
Test trap designs, movement, genetic sampling

Develop technical reports and analysis





Middle Piru Creek – February 2022

3

Jan 9, 2023 Storm Damage

- Storm Damage Assessment Upstream of Lake Piru
 - ~\$185K loss of equipment middle Piru Creek
- FEMA Reimbursable
 - Complete loss of upper PIT array
 - Partial loss of lower PIT array
 - Complete loss of fyke trap equipment
 - Displacement of RST



Middle Piru Creek – February 2023



Middle Piru Creek – March 2023



Lake Piru & SFD – March 2023

4

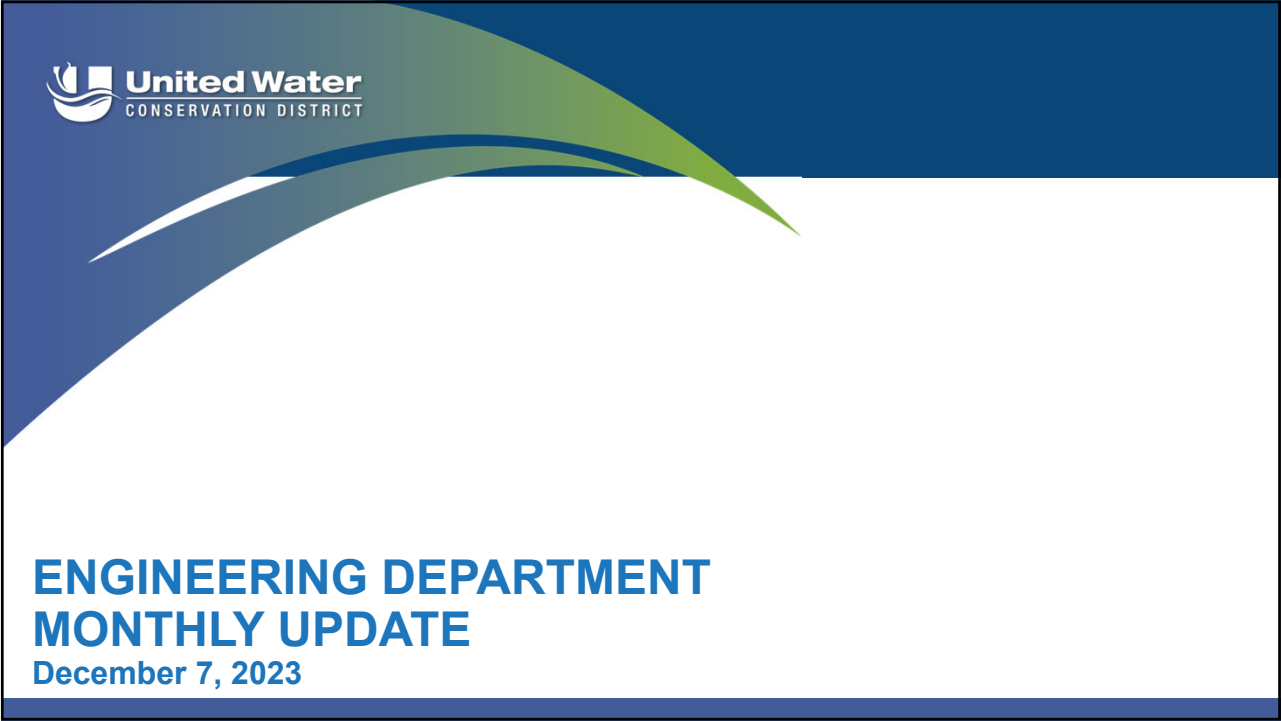
Regulatory and Environmental Compliance

Motion 3.5

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- Committee will consider recommending approval of the motion to the full Board to authorize the General Manager to execute an amendment to the professional consulting services agreement with Cramer Fish Sciences
- Contract is directly related to the FERC license compliance associated with the 2008 Biological Opinion from National Marine Fisheries Service; *to complete the final phase of field studies*
- Amendment amount: \$196,054





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23 Water Sustainability Summit



Engineering and Water Resources Presentations

- ❑ The Best Science Available – *Dr. Sun*
- ❑ Extraction Barrier and Brackish Water Treatment – *Dr. Bral*
- ❑ Optimizing Use of Growing Water Portfolio – *Dr. Sercu*
- ❑ Freeman Diversion Expansion – *Craig Morgan*
- ❑ Laguna Road Recycled Water Pipeline – *Robert Richardson*
- ❑ SFD Public Safety Improvement Project – *Dr. Bral*
- ❑ The Threat of New Bypass Flow Recommendations for the Region – *Murray McEachron*
- ❑ Ramping Down the Region's Water Supply – *John Lindquist*

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Santa Felicia Dam Safety Improvement Project

BOC Meeting No. 8

Meeting Agenda:




- Overall Project Schedule Update - based on **Proposed Regulatory Compliance and Permitting Timeline**
- Interim Risk Reduction Measures
- 60% Design of Spillway Improvements

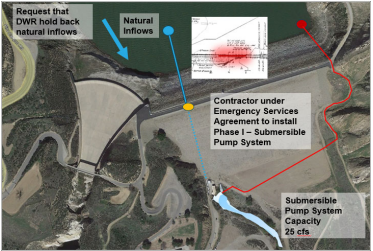
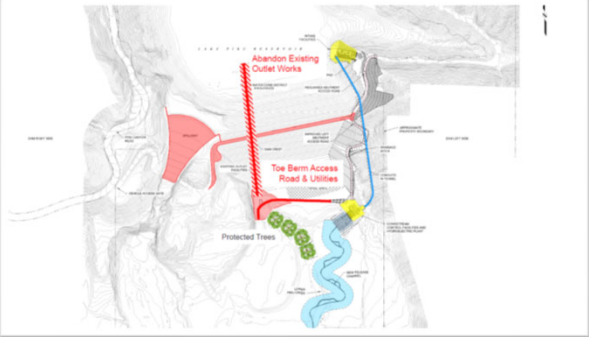
Santa Felicia Dam Safety Improvement Project

Spillway Improvements - 60% Design Phase

Board of Consultants
Meeting No. 8

UWCD Headquarters
Oxnard, CA
November 15-16, 2023









3

Santa Felicia Dam Safety Improvement Project


Updated Project Schedule



	2019				2020				2021				2022				2023				2024				2025				2026				2027				2028				2029				2030				2031			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4								
	Regulatory Compliance and Permitting																				??																															
New Outlet Works	Design																Award				PreCon				Construct				Startup/Test																							
Spillway Improvements	Design																Award				PreCon				Construct																											
Environ. Mitigation	Design																				Award				Construct																											



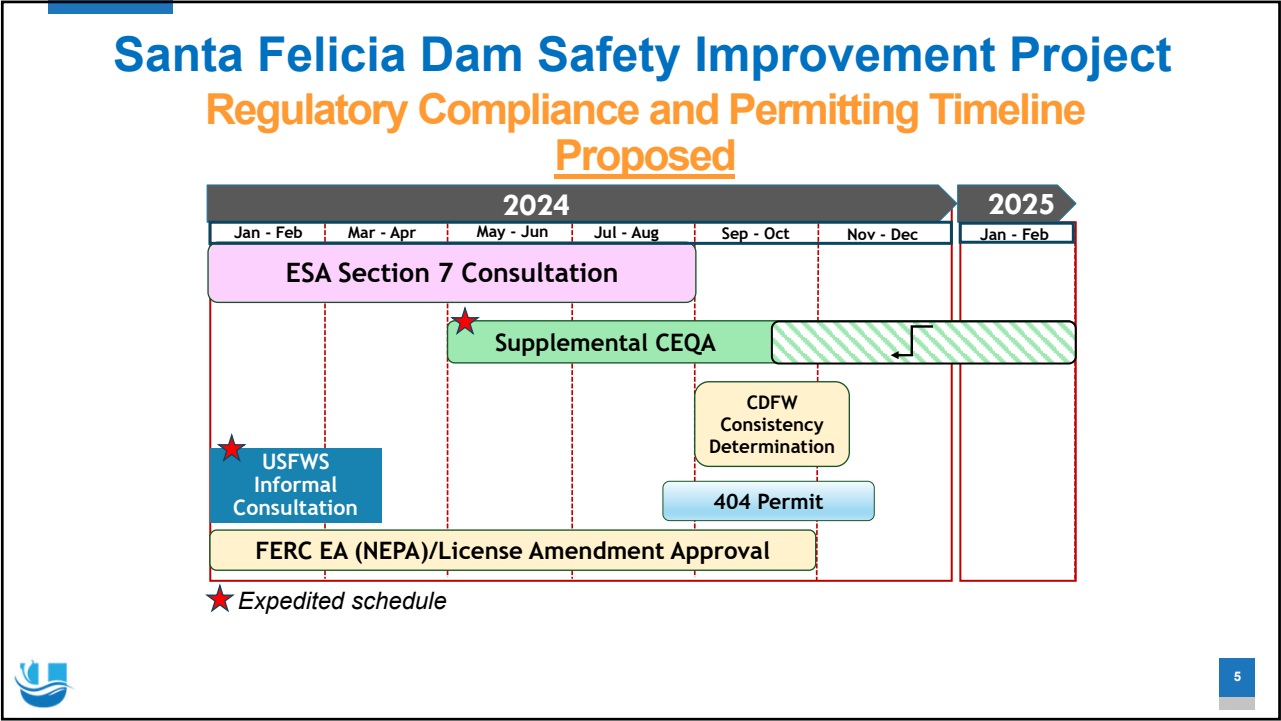
BOC Meeting #8



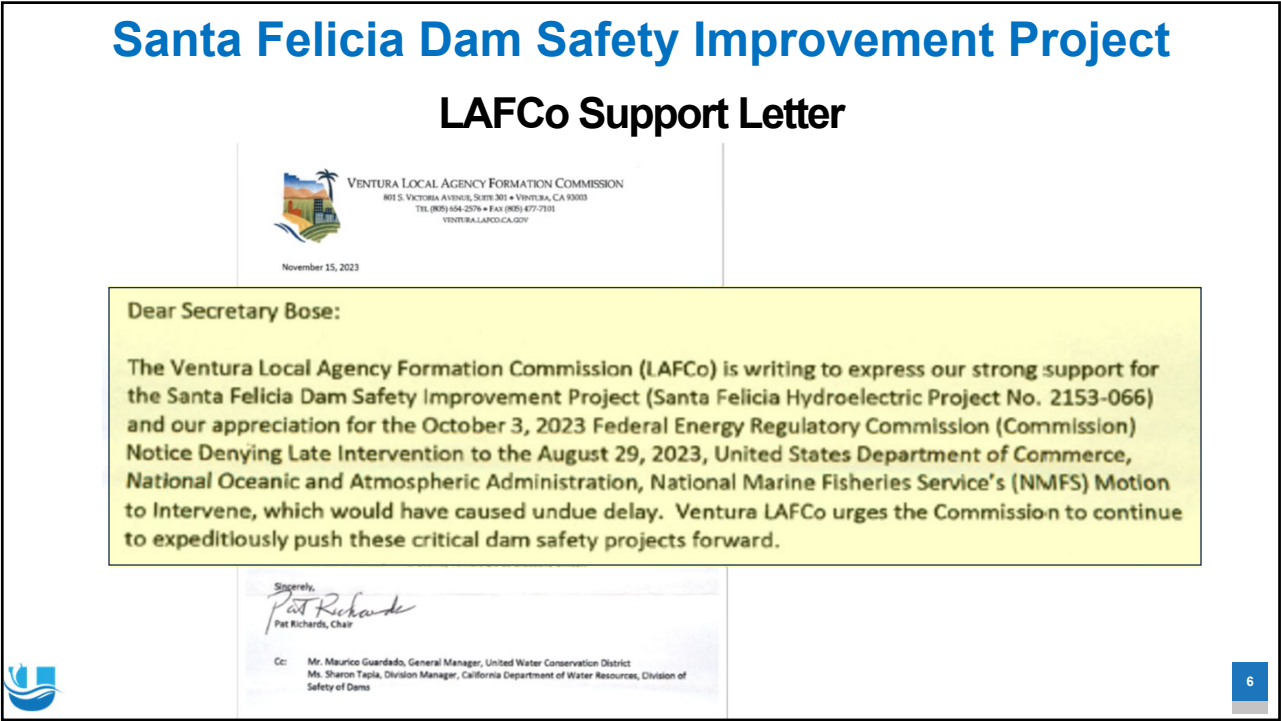
Submitted to FERC and DSOD on October 31, 2023

4

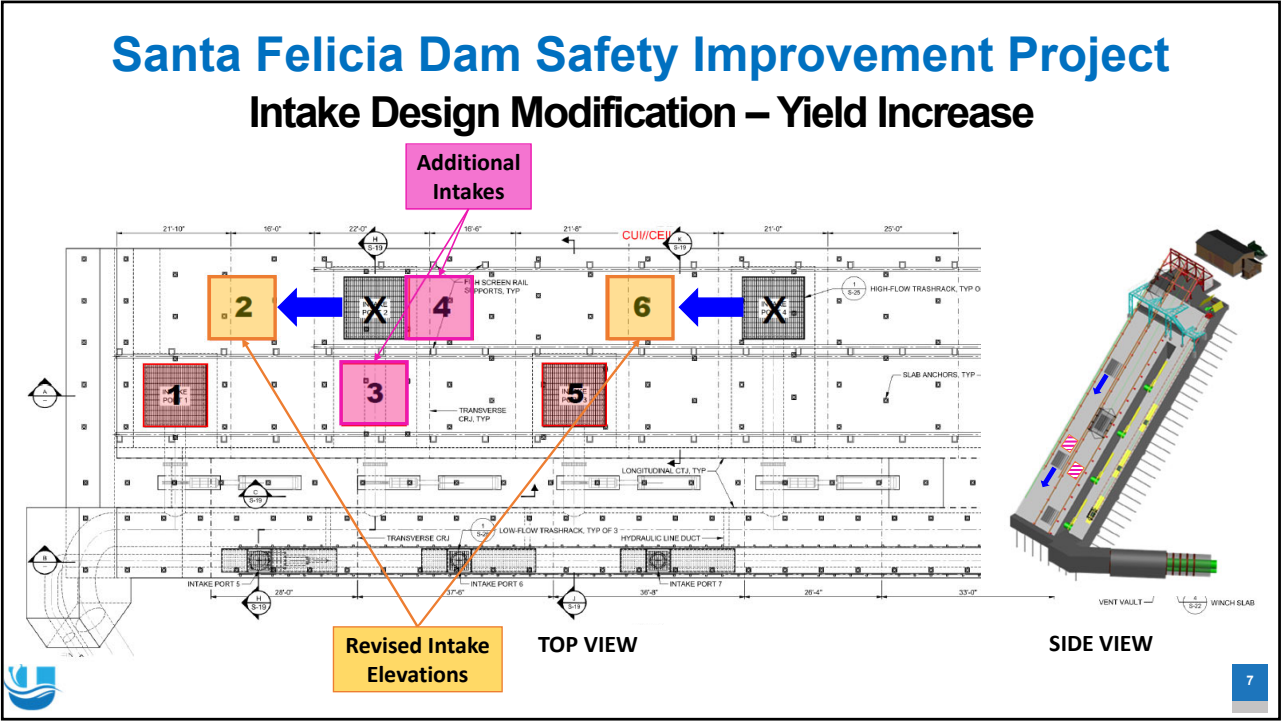
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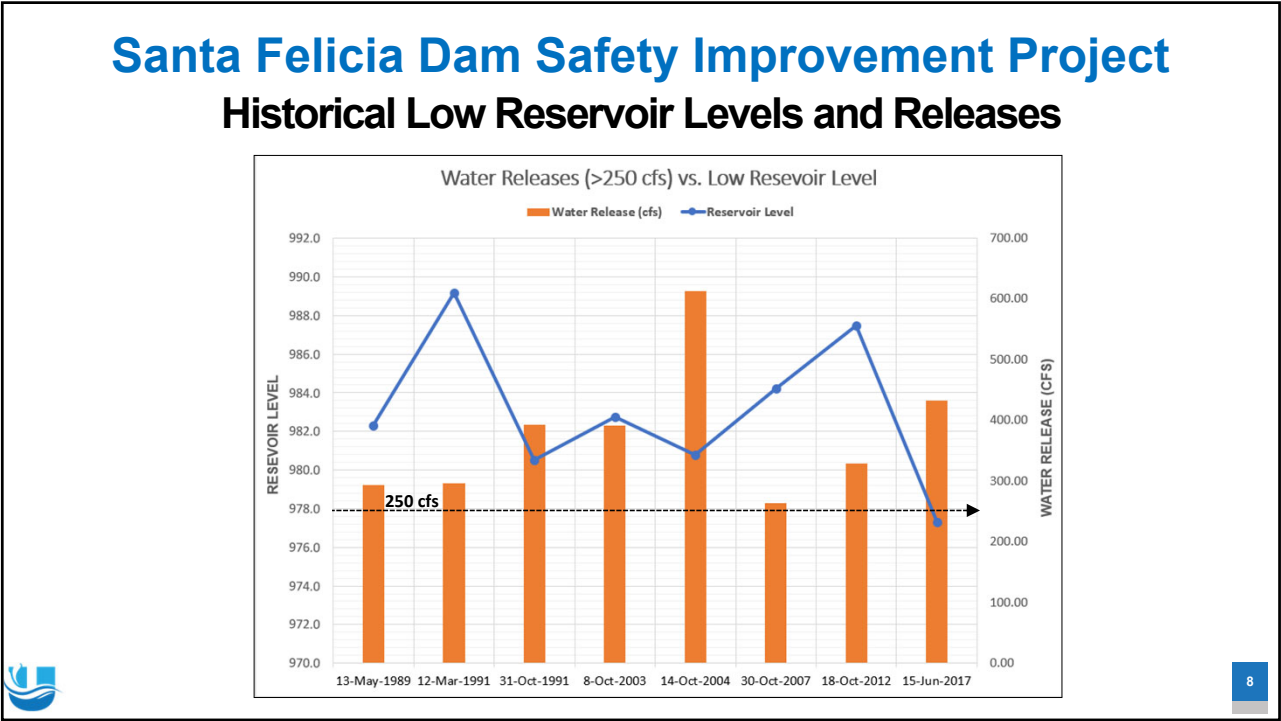
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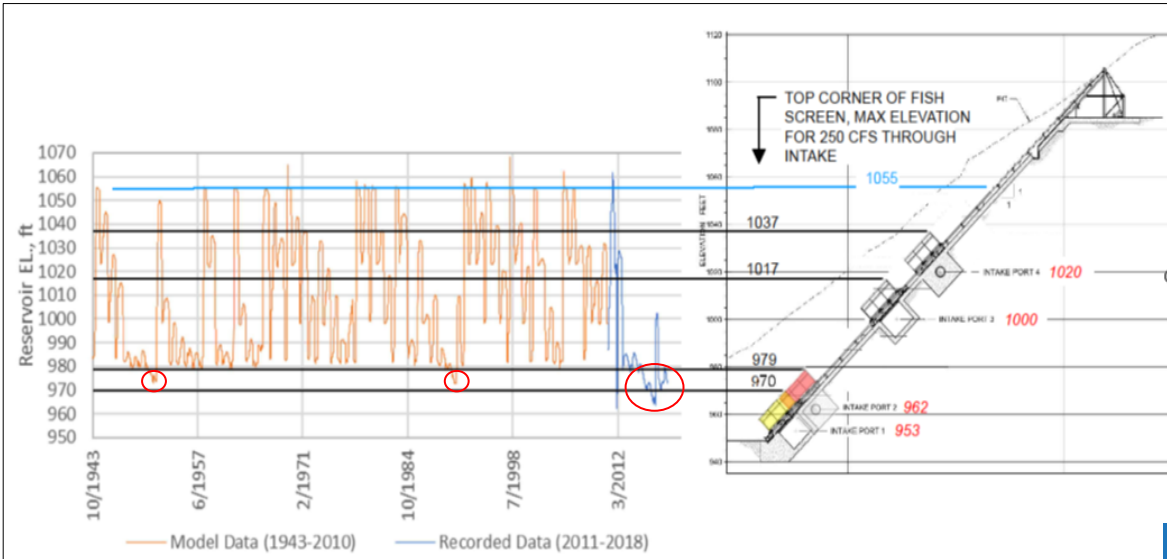
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Santa Felicia Dam Safety Improvement Project

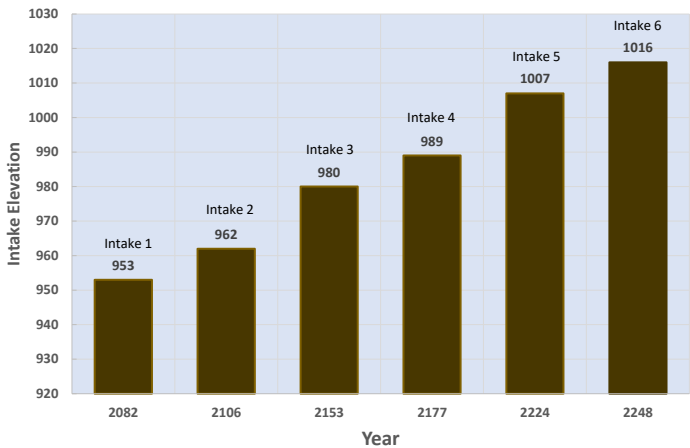
Low Reservoir Levels and Modified Intake Elevations



9

Santa Felicia Dam Safety Improvement Project

Projected Reservoir Siltation for High-Flow Intakes

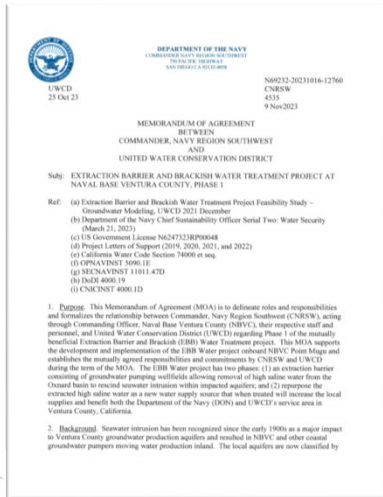


Starting Year: 2020, latest bathymetric survey
Sediment Elevation: 929.5 Approx. near dam
Ave Rate/Year: 0.38 feet of sediment rise (1985-2020)
New Intake Operation: 2030

10


Extraction Barrier and Brackish Water Treatment Project - Phase 1


Memorandum of Agreement (MOA)



- Formalizes relationship between CNRSW, NBVC and UWCD for Phase 1
- Delineates roles and responsibilities
- Allows for MOA amendment as necessary
- Implementation may be affected by court rulings (i.e., OPV Coalition)

SUBJ: EXTRACTION BARRIER AND BRACKISH WATER TREATMENT PROJECT AT
NAVAL BASE VENTURA COUNTY
IN WITNESS WHEREOF, the Parties have entered into this Agreement as of on the later of the
two date(s) indicated below:


MAURICIO GUARDADO
UWCD General Manager


B. N. ROSEN
Rear Admiral, U.S. Navy
Commander, Navy Region Southwest

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EBB Water – Phase 1 MOA

- CNRSW/NBVC will:
 - Execute appropriate real estate agreements
 - Act as Federal lead agency for NEPA and federal consultations
 - Work directly with UWCD and FCGMA to assess requirements and allocations required for the project
 - Lead all CA Coastal Commission Communications
 - Support UWCD in funding requests
 - Has final decision authority over all decisions that affect NBVC
 - Provide access to UWCD staff

SUBJ: EXTRACTION BARRIER AND BRACKISH WATER TREATMENT PROJECT AT NAVAL BASE VENTURA COUNTY
v. *Fox Canyon Groundwater Management Agency*, Superior Court of Santa Barbara, Case No. VENC10055357, filed June 15, 2021; and *City of Oxnard v. Fox Canyon Groundwater Management Agency*, Los Angeles County Superior Court, Case No. 20STCP0929, filed December 2, 2019.

4. Agreement/Understanding Responsibilities

a. CNRSW/NBYC will:

- (1) Request approval to execute appropriate Real Estate agreements in support of the project performance (g). Real estate and funding requirements will be outlined in a letter to UWCD upon completion of the project performance process. (CRNSW/NMVC)
- (2) Act as the on Federal lead agency under NEPA for the I/E EBB Water project, which necessarily includes foreseeable aspects of Phase 2. Assign subject matter experts (SMEs) to support UWCD staff with preparation of NEPA documentation. NEPA requirements will be provided to UWCD upon completion of a real estate request (b)(6) and (b)(7)(C) and assume CRNSW and UWCD agree that development of the NEPA requirements by UWCD staff complements the project performance process. NEPA and CEQA documents is a cost savings and a benefit of the project execution process.
- (3) Act as the lead agency for all federal communications, have reviewing authority, control of aspects of environmental review, and compliance that affect CRNSW/NMVC or its operations.
- (4) Work closely with UWCD and the Free Commerce Committee (FCC) to develop a GCOMMA and CEQA analysis and NEPA documentation.
- (5) Provide (as needed) data security laws and requirements for project studies, data, surveys, and other technical documentation that supports development of the EBB Water project.
- (6) Lead all California Coastal Commission (CCC) communications, consultations, and coordination with CCC. CCC will be required to review all project information, data, and special studies will be provided to staff to facilitate the regulatory interactions.
- (7) Sign and process the final NEPA document(s) per reference (f) upon concurrence of federal, relevant state and local regulators, CRNSW and Navy leadership, and receipt of all required documents and approvals.
- (8) Support (letters of support, meetings with government officials, and other non-monetary support) UWCD during project funding requests to federal, state, and local agencies.
- (9) Discover potential legacy contamination.

12

EBB Water – Phase 1 MOA

SUB: EXTRACTION BARRIER AND BRACKISH WATER TREATMENT PROJECT AT NAVAL BASE VENTURA COUNTY

(11) Process and receive authority to operate for any Facility-Related Control Systems that connect to Navy infrastructure, utility monitoring or control network, or otherwise.

(12) Provide access onto NBVC Point Mugu, as necessary, for UWCD staff and their consultants to perform work per this MOA.

h. UWCD will:

(1) Conduct, fund, document, and report all required studies, analyses, and assessments required to support the EBB Water project and share with CNRSW/NBVC.

(2) Plan, design, permit, construct, operate, and maintain infrastructure as part of Phase 1 of the EBB Water project, as approved by CNRSW/NBVC.

(3) Continue to support FCGMA's groundwater sustainability goals and water supply projects, which include the EBB Water project.

(4) Fund and contract an environmental consultant acceptable to CNRSW/NBVC to prepare and finalize both NEPA and CEQA documentation in support of the EBB Water Phase 1 project.

(5) Develop and fund studies and documents in support of NEPA and CEQA documentation, as determined in coordination with CNRSW/NBVC.

(6) Obtain and pay for all applicable Federal, State, and local required permits to own and operate all the facilities required for the EBB Water Phase 1 project. Applicability of permits and other requirements to be coordinated with CNRSW/NBVC.

(7) Comply with all federal, state, and local requirements applicable to their facilities and operations, including but not limited to requirements relating to air, water, solid, and hazardous waste and substances. Be responsible for Federal, State, and local permits, as applicable, implementation and ensuring compliance with all permit conditions, as well as compliance with any permits or regulatory consultations/approvals obtained by NBVC/NBVC.


(8) Own, operate, and maintain the Phase 1 facilities, including but not limited to a groundwater extraction wellfield, a pipeline mainline, and discharge facilities.

(9) Upon approval granted by the Navy, fund all administrative costs to support execution of appropriate real estate agreement(s).

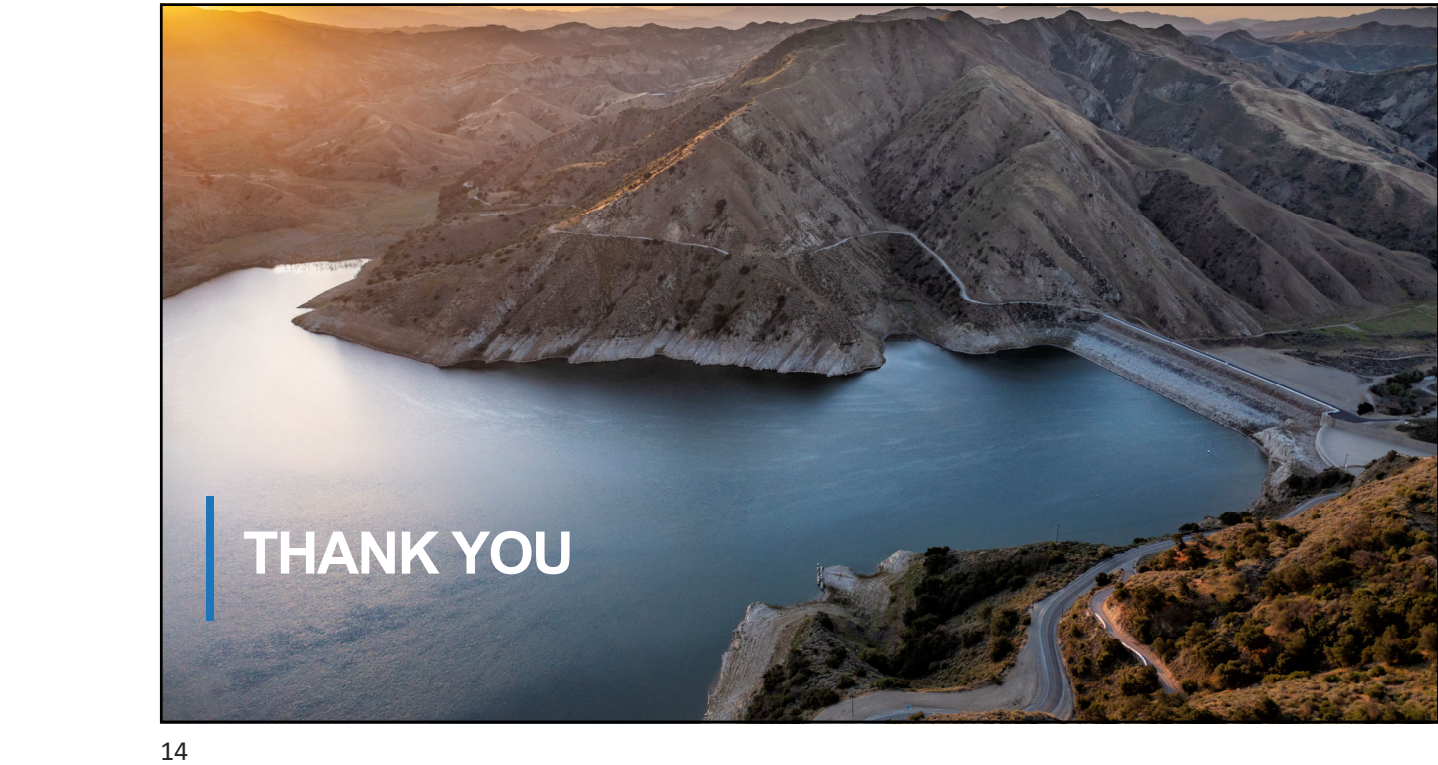
(10) Apply and assign appropriate UWCD applicant for all required permits and regulatory requirements with exception of required CCC consent permit(s) including other federal requirements to be specified by CNRSW/NBVC.

➤ UWCD will:

- Conduct, fund, document, and report all required studies and analyses
- Plan, design, permit, construct, operate, and maintain Phase 1 infrastructure
- **Continue to support FCGMA's groundwater sustainability goals and water supply projects**
- Fund and contract with environmental consultant acceptable to CNRSW/NBVC for NEPA/CEQA documentation
- **Comply with all federal, state and local requirements**
- Fund Navy's administrative costs to support execution of real estate agreement



13





Agua Blanca Creek – Oct 9, 2023

ENVIRONMENTAL SERVICES DEPARTMENT UPDATE

December 7, 2023





SFD, Lake Piru, & middle Piru Creek


FERC compliance study activities

Annual tamarisk surveys and treatment

Status of State water imports



Agua Blanca Creek – Oct 9, 2023



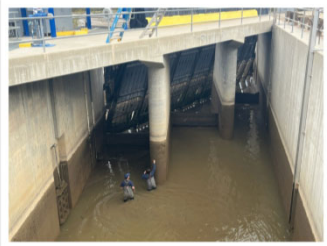
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Freeman Diversion Operations

Cowbird trapping annual report

Support for O&M maintenance activities

MSHCP to be submitted Feb 9, 2024



Freeman Diversion – Nov 6, 2023

Training and Tour



October Environmental Services staff quagga mussel and veliger training workshop



November tour of the Casitas Robles Diversion facility and fish ladder





OPERATIONS AND MAINTENANCE DEPARTMENT
MONTHLY UPDATE

December 7, 2023



1



Santa Felicia Dam

Fugro Bathymetric Survey – Lake Pyramid Inflow – Marina Anchor Adjustments – Wind Damage – SFD
Water Releases



2



Freeman Diversion Maintenance

Fish Ladder Gate Maintenance– Fish Screen Maintenance – Freeman Sediment Removal



3



Freeman Diversion Maintenance Continued

Freeman Rain Cover Installation – Trash Rack Maintenance – Sediment Removal at Floc Building



4



Saticoy Well Field

Total Well Production During Shutdown: 224.4 Acre Feet
Well #1: 50.6 AF Well #3: 36.6 AF
Well #2: 59.6 AF Well #4: 77.6 AF



5



PTP System

PTP Turnout 162 Meter Swap – New No Drinking Signs at PTP Turnouts – Pleasant Valley Reservoir Weed Abatement



6

