

**AGENDA**

**ENGINEERING and OPERATIONS COMMITTEE MEETING**

**Thursday, October 6, 2022, at 9:00 a.m.**

**UWCD Headquarters, First Floor, Board Room  
1701 N. Lombard Street, Oxnard, CA 93030**

**CALL TO ORDER – OPEN SESSION 9:00 a.m.**

**Committee Members Roll Call**

**1. Public Comment**

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 September 1, 2022, Engineering and Operations Committee meeting.

**3. October 12, 2022, Board Meeting Motion Agenda Items**

The Committee will review and discuss the following agenda items to be considered for approval at the October 12, 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 Contract with Northwest Hydraulic Consultants for the Freeman Diversion Hardened Ramp Additional Modeling and Design Updates**

(Engineering Department, Craig Morgan) (Proposed Time: 5 minutes)

The Committee will consider recommending approval of the motion authorizing the General Manager to execute a professional consulting services agreement with Northwest Hydraulic Consultants (NHC) in the amount of \$645,515 to provide additional modeling and design updates of the Hardened Ramp as a Freeman Diversion Fish Passage Facility alternative to the full Board.

**3.2 Pre-implementation Studies in Support of Federal Energy Regulatory Commission Fish Passage Assessment – Amendment to Professional Consulting Services Agreement with Cramer Fish Sciences - \$425,633**

(Environmental Services Department, Linda Purpus) (Proposed Time: 20 minutes)

The Committee will consider recommending approval of the motion to authorize the General Manager to execute an amendment to the professional consulting services agreement with Cramer Fish Sciences in the amount of \$425,633 to continue and complete the monitoring phase of study activities outlined in the “Santa Felicia Dam Fish Passage Program Pre-Implementation Study Plan” to the full Board.

Continues...



**3.3 Verizon Request for Easement for Cell Tower Fiber Optic Conduit**

(Operations and Maintenance Department, Brian Collins) (Proposed Time: 5 minutes)

The Committee will consider recommending approval of the motion authorizing the General Manager or his designee to execute both a Memorandum of Easement and Grant of Easement, and to record the Grant of Easement, to allow Verizon to install a fiber optic conduit in proximity to the Saticoy facility main gate.

**4. Project Highlights** (Proposed Time: 15 minutes per update)

**4.1 Engineering Department Update** (Dr. Maryam Bral)

**4.2 Environmental Services Department Update** (Linda Purpus)

**4.3 Operations and Maintenance Department Update** (Brian Collins)

**5. Future Agenda Items**

The Committee will suggest topics or issues for discussion on future agendas.

**ADJOURNMENT**

**Directors:**

Chair Lynn E. Maulhardt  
Gordon Kimball  
Daniel C. Naumann

**Staff:**

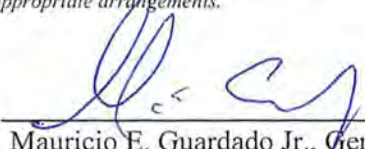
Mauricio E. Guardado Jr.  
Anthony Emmert  
Linda Purpus  
Evan Lashly  
Randall McInvale  
Hannah Garcia-Wickstrum

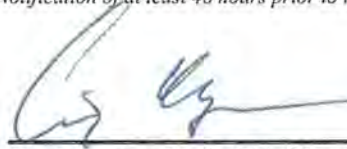
Dr. Maryam Bral  
Brian Collins  
John Carman  
Jackie Lozano  
Vanessa Vasquez

Craig Morgan  
Michel Kadah  
Adrian Quiroz  
Robert Richardson

*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, or if you require agenda material in an alternative format, please contact the District's offices 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

Craig Morgan  
on behalf of  
Dr. Bral

  
Brian Collins, Chief Operations Officer

Posted: (date) September 30, 2022

(time) 4:30 p.m.

(attest) Jackie Lozano

At: [www.unitedwater.org](http://www.unitedwater.org)

Posted: (date) September 30, 2022

(time) 4:30p.m.

(attest) Jackie Lozano

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



Board of Directors  
Bruce E. Dandy, President  
Sheldon G. Berger, Vice President  
Lynn E. Maulhardt, Secretary/Treasurer  
Mohammed A. Hasan  
Gordon Kimball  
Michael W. Mobley  
Daniel C. Naumann

General Manager  
Mauricio E. Guardado, Jr.

Legal Counsel  
David D. Boyer

**MINUTES**  
**ENGINEERING AND OPERATIONS**  
**COMMITTEE MEETING**  
**Thursday, September 1, 2022 – 9:00 A.M.**  
**Board Room, UWCD Headquarters**  
**1701 N. Lombard Street, Oxnard, CA 93030**

**COMMITTEE MEMBERS IN ATTENDANCE**

Lynn E. Maulhardt, chair  
Daniel C. Naumann, director

**COMMITTEE MEMBER ABSENT**

Gordon Kimball, director

**STAFF IN ATTENDANCE**

Dr. Maryam Bral, chief engineer  
Brian Collins, chief operations officer  
John Carman, operations and maintenance program supervisor  
Tessa Lenz, associate environmental scientist  
Jackie Lozano, administrative assistant  
Craig Morgan, engineering manager  
Josh Perez, chief human resources officer  
Zachary Plummer, technology systems manager  
Linda Purpus, environmental services manager  
Ed Reese, technology systems specialist  
Robert Richardson, senior engineer  
Vanessa Vasquez, administrative assistant  
Brian Zahn, chief financial officer

**PUBLIC IN ATTENDANCE**

Three members of the public were in attendance but chose not to sign the attendance sheet.

**Call to Order – Open Session**

Chair Maulhardt called the Committee meeting to order at 9:19 a.m. Chair Maulhardt and Director Naumann were present. Director Kimball was absent.

**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 July 7, 2022, Engineering and Operations Committee meeting, Director Naumann; Second, Chair Maulhardt. Voice vote: two ayes (Maulhardt, Naumann), none opposed, and one absent (Kimball). Motion carried 2/0/1.

**3. September 14, 2022, Board Meeting Agenda Motion Items**

The Committee reviewed and discussed the following motion items for the September 14 UWCD Board of Directors meeting to formulate Committee recommendations:

**3.1 Phase 1A License Agreement with U.S. Navy for the Extraction Barrier and Brackish Water Treatment Project – Phase 1A**

Chief Engineer Dr. Maryam Bral presented the motion item to the Committee (presentation attached). Director Maulhardt inquired as to how long Phase 1 would last. Dr. Bral responded Phase 1 was projected to run through 2025 with an overlap of Phase 1A to Phase 1B. Director Naumann felt it would be beneficial for Dr. Bral to share the progress of this project with Mr. Gene Fisher of the Regional Defense Partnership-21<sup>st</sup> Century as well as other District allies and supporters (Calleguas Municipal Water District) of this process.

No public comments or questions were offered.

The Committee members were pleased the project was moving along correctly and were in favor of recommending approval of the motion item to the full Board.

**3.2 Authorize a Contract with GEI Consultants, Inc. to Develop the 90 percent Design Phase of the Santa Felicia Dam Outlet Works Improvement Project**

Dr. Bral presented this motion item to the Committee (presentation attached). She mentioned the Board of Consultants (BOC) met and understood the process and timelines, which she clarified for Chair Maulhardt.

No public comments or questions were offered.

The Committee members were supportive of this contract, and felt it was a very clear and logical process. They were pleased the project was on schedule and were in favor of recommending approval of the motion item to the full Board.

**3.3 Authorize a Contract with GEI Consultants, Inc. to Develop the 60 percent Design Phase of the Santa Felicia Dam Spillway Improvement Project**

Dr. Bral continued with a summary of this motion item to the Committee (presentation attached). When questioned if both of the Santa Felicia Dam projects were running simultaneously, Dr. Bral replied that both the Outlet Works Project and Dam Spillway Improvement Project are being designed in parallel implemented and simultaneously and are on track to be completed as noted on the timeline and the project implementation (construction) is staggered over two periods as noted on the timeline.

Chair Maulhardt asked if Engineering looked at the *what if* in the modeling or construction and, also, what the fallback position would be in order to get the water out of the lake, should the area experience two wet years in a row? Dr. Bral responded that we are in the process of developing contingency measures and that these concerns are being addressed in a responsible manner.

Currently, Engineering is working on a Reservoir Management Plan. Chair Maulhardt emphasized the importance of looking at all of the probabilities to ensure the District does not forego any opportunities of receiving water (i.e., Article 21).

Regarding the construction window, Dr. Bral mentioned the project is scheduled to begin the summer of 2024 and, as they near final design, the timeline would be refined. Construction of each of the two components would last for two years with the anticipated completion date by summer 2028. Director Naumann felt that was a good target and requested Dr. Bral include the start and end date of the projects in the slide presentations so the Committee could see the progress on the timeline.

No public comments or questions were offered. The Committee members agreed to recommend approval of the motion item to the full Board.

**3.4 Five-year Purchase of State Water from Casitas Municipal Water District**

Chief Operations Officer Brian Collins presented this motion item to the Committee (presentation attached). Director Naumann expressed his enthusiasm that this item is moving forward and thanked staff for making this happen. Chair Maulhardt also expressed his pleasure that the negotiation is going forward.

No public comments or questions were offered. The Committee members agreed to recommend approval of the motion item to the full Board.

**4. Project Highlights**

**4.1 Engineering Department Update** (see attached slides)

Dr. Bral presented an overview of the Engineering department's activities, including updates of the Santa Felicia Dam Safety Improvement Projects and the draft Biological Assessment report. She also provided an update on the Iron and Manganese Treatment Facility and shared her department's participation in two public outreach events. Director Naumann requested that she share the timelines moving forward to show the progress of the Iron and Manganese Treatment Facility. Also, there was discussion between the Committee and staff regarding the Biological Assessment Report. The Committee thanked Dr. Bral for her updates.

Information Item. There were no further comments or questions from the Committee. No public comments or questions were offered.

**4.2 Environmental Services Department Update** (see attached slides)

Environmental Services Department Manager Linda Purpus provided updates to the Committee on activities relating to coordination for increased importation of SWP water, permit filing and implementation, ongoing efforts supporting the Multiple Species Habitat Conservation Plan (MCHCP), and recruitment. There was discussion between the Committee and staff regarding CDFW's denial of request

for incidental take coverage under Fish and Game Code 2084 for the Santa Felicia Project.

Information Item. There were no comments or further questions from the Committee. No public comments or questions were offered.

**4.3 Operations and Maintenance Department Update** (see attached slides)

Mr. Collins provided updates on the Operations and Maintenance Department activities for the past two months. Included in the updates were images depicting work activities at the Santa Felicia Dam, Freeman Diversion, and the PTP and OH pipelines. He highlighted activities of the physical modeling and mentioned he would share pictures at the next Committee meeting of their activities at Freeman relating to sediment removal.

There was discussion among the Committee and staff regarding data collected from the new instrumentation panels.

After the discussion, Chair Maulhardt moved the Committee into a short break at 10:32 a.m. At 10:34, Chair Maulhardt resumed the Open Session.

Mr. Collins continued his updates to the Committee regarding the desander used in the modeling. Director Naumann said he was pleased with the design and excited to hear about the process. Mr. Collins expressed his heartfelt appreciation to the Committee members for giving their support to the modeling project. At the conclusion of the discussion, Chair Maulhardt and Director Naumann proposed to staff that nothing be removed from the presentations to the Board since its a record of where the money is being spent, what the technical issues are, and the drivers of why this is occurring. They then directed staff to review with the General Manager Mauricio Guardado regarding what needs to be included.

For the sake of clarification, Mr. Collins clarified the Committee requested no edits be made to the presentation when it goes to the Board, but to confirm that the timing is appropriate with Mr. Guardado. Mr. Collins also mentioned that in the future staff plans to capture video of a two- to five-minute summary of the modeling activities at Denver and Iowa to share with the Committee and Board members.

Director Naumann commented that the presentation gives a perspective of why the District made the choices it did in constructing the model. Chair Maulhardt agreed and supported the video documentation concept and suggested the possibility of capturing video on the Extraction Barrier Brackish Water project. Director Naumann agreed, stating video showing the work on District projects gives a great perspective of what efforts are being made.

Information item. There were no additional comments or questions from the Committee. No public comments were offered.

**5. Future Agenda Topics**

None were offered

Engineering and Operations Committee Meeting MINUTES

September 1, 2022

Page 5

**ADJOURNMENT 10:51 a.m.**

Chair Maulhardt adjourned the meeting at 10:51 a.m.

I certify that the above is a true and correct copy of the minutes of the Engineering and Operations Committee Meeting of September 1, 2022.

ATTEST: \_\_\_\_\_  
Chair Lynn E. Maulhardt





1

## Project Phases

➔Phase 1A

Exploration and Development Phase

- Field Exploration Activities (Planning, Design and Permitting Efforts)
- District's Right-of-Access through License Agreement 1A (2022-2025)

Phase 1B


Implementation Phase

- Construction of Seven (7) Groundwater Extraction Wells, Installation of Monitoring Wells, and Discharge of Extracted Water

Phase 2

Build-out Phase

- Construction of Additional Extraction Wells, Water Treatment Plant, Drinking Water Delivery to U.S. Navy, Distribution Pipes, and Brine Disposal



2

2




### Extraction Barrier and Brackish Water Treatment Project

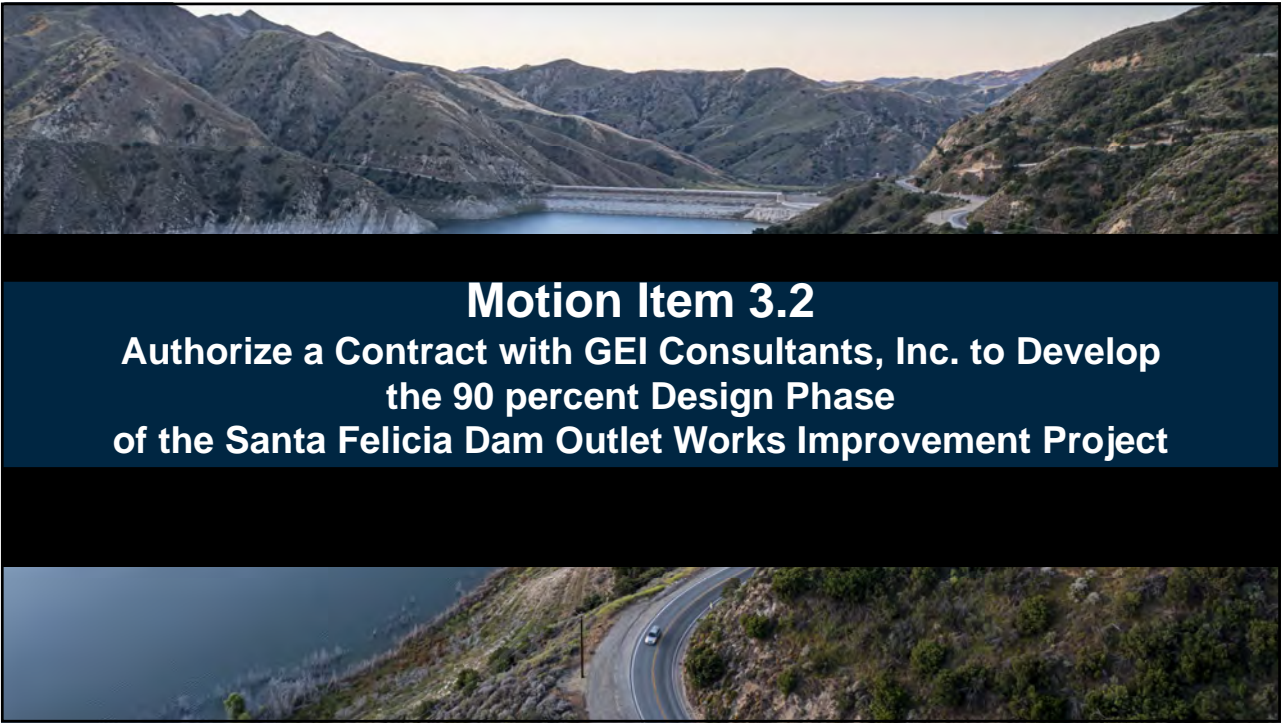
**August 2-** Coordination Meeting with Calleguas MWD – Discussed Discharge Options to SMP

**August 10-** Fourth Navy Leadership Meeting between NBVC and United – Discussed License Agreement 1A, M.O.U, Public Outreach, and Funding Sources

**August 24-** Finalized Draft License Agreement 1A



3



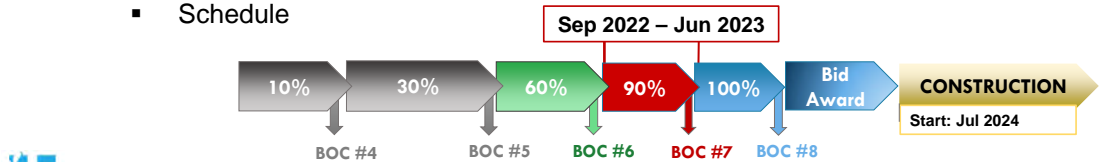
Motion Item 3.2

Authorize a Contract with GEI Consultants, Inc. to Develop the 90 percent Design Phase of the Santa Felicia Dam Outlet Works Improvement Project

1

Outlet Works Improvement Project - 90% Design

- ☐ Scope of Work:
- Additional Analyses and Design Development
  - Basis of Design and Design Reports, Plans Drawings and Specifications
  - Geotechnical Baseline Report
  - Constructability Report and Updated Engineering Cost Estimate
  - **3D Design Rendering Model of the Improvements**
  - **Operations and Maintenance Manual**
  - **Reservoir Operations Plan during Construction**
  - BOC Meeting #7 (May 2023)
  - UWCD Board Presentation (optional)
- ☐ Fee and Schedule:
- \$1,502,018
  - Schedule



2



3

## Spillway Improvement Project - 60% Design

❑ Scope of Work:

▪ Additional Analyses and Design Development

▪ Basis of Design and Design Reports, Plans Drawings and Specifications

▪ Constructability Report and Updated Engineering Cost Estimate

▪ BOC Meeting #8 (Oct 2023)

▪ UWCD Board Presentation (optional)

❑ Fee and Schedule:

▪ \$917,004

▪ Schedule

Sep 2022 –Dec 2023

10%  
↓  
BOC #4

Supp. 10%  
↓  
BOC #5

30%  
↓  
BOC #6

60%  
↓  
BOC #8

90%  
↓  
BOC #9

100%  
↓  
BOC #10

Bid Award

CONSTRUCTION

4

4



# OPERATIONS AND MAINTENANCE

## Motion Item 3.4- Five Year Purchase of State Water from Casitas Municipal Water

September 1, 2022



1

	Percent allocated (availability)	Water Received (AF)	Cost per AF	Conveyance Cost/AF	Total to CMWD	Total Cost of water
	5%	250	\$700	\$300	\$175,000	\$250,000
	10%	500	\$700	\$300	\$350,000	\$500,000
	15%	750	\$700	\$300	\$525,000	\$750,000
	20%	1000	\$600	\$300	\$600,000	\$900,000
	25%	1250	\$575	\$300	\$718,750	\$1,093,750
	30%	1500	\$550	\$300	\$825,000	\$1,275,000
	35%	1750	\$525	\$300	\$918,750	\$1,443,750
	40%	2000	\$500	\$300	\$1,000,000	\$1,600,000
	45%	2250	\$475	\$300	\$1,068,750	\$1,743,750
	50%	2500	\$450	\$300	\$1,125,000	\$1,875,000
	55%	2750	\$425	\$300	\$1,168,750	\$1,993,750
	60%	3000	\$400	\$300	\$1,200,000	\$2,100,000
	65%	3250	\$375	\$300	\$1,218,750	\$2,193,750
	70%	3500	\$350	\$300	\$1,225,000	\$2,275,000
	75%	3750	\$325	\$300	\$1,218,750	\$2,343,750
	80%	4000	\$300	\$300	\$1,200,000	\$2,400,000
	85%	4250	\$275	\$300	\$1,168,750	\$2,443,750
	90%	4500	\$275	\$300	\$1,237,500	\$2,587,500
	95%	4750	\$275	\$300	\$1,306,250	\$2,731,250
	100%	5000	\$275	\$300	\$1,375,000	\$2,875,000

2

Questions?








1

# Santa Felicia Dam Safety Improvement Project

- ❑ 60% OW and 30% SpW Design
  - Design of the New Outlet Works and Spillway Improvements on Schedule – BOC Meeting on September 28 and 29
  - Approval of Motion Items 3.2 and 3.3 Allows for Design Advancement
- ❑ Biological Assessment Report
  - Draft Biological Assessment Report Submitted to FERC on August 9
  - Draft Biological Assessment Report to NMFS by FERC on August 15



## Santa Felicia Dam Safety Improvement Project

### Draft Biological Assessment

Prepared for US Fish and Wildlife Service and National Marine Fisheries Service  
July 29, 2022

2

2



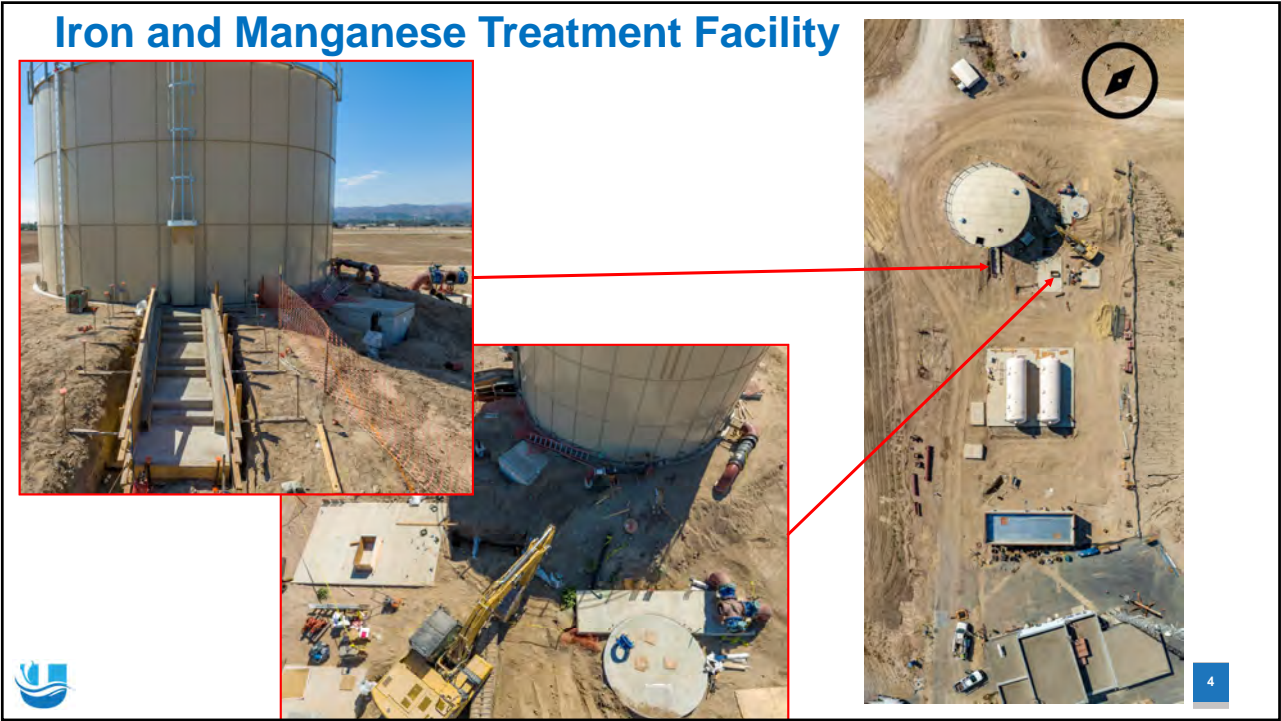
### Dam Safety and Regulatory Compliance

- July 19 - Annual Law Enforcement Consultation
- August 18 – ODSP Audit Kick Off Meeting
- August 23 – Annual FERC Inspection
- August 23, 24, 30 – 2022 Part 12D Inspection and PFMA Review Session
- Preparation for EAP Tabletop Exercise on October 20

3

3

### Iron and Manganese Treatment Facility



4

4



### Iron and Manganese Treatment Facility



### Iron and Manganese Treatment Facility




A photograph showing a woman in a dark blue shirt standing and speaking into a microphone at an outdoor public outreach event. She is positioned under a green metal pavilion with a wooden roof. Several people are seated at a table in the background, and a large black speaker is on the ground. The scene is outdoors with trees and a building visible in the distance.


## Public Outreach

- July 14 –  
Society of American Military Engineers –  
San Francisco Post – Dam and Levee  
Resilience Webinar Series – Local  
Government
- August 17 –  
Piru Neighborhood Council Meeting  
SFD Safety Improvement Project  
Updates

7

A solid blue vertical bar graphic.

## QUESTIONS

The UWCD logo, featuring a stylized blue wave or 'U' shape.

8

8



# ENVIRONMENTAL SERVICES DEPARTMENT UPDATE



September 1, 2022




1

## Department Summary Updates

- Coordination with DWR
  - CEQA for increased importation of SWP water
  - USFS' Rivers Values Assessment
- Permitting
  - Application submittals and implementation
    - o SFD and Lake Piru Recreation Area
    - o Freeman Sediment Management Project
    - o Condor Point
- MSHCP Effort
- CESA
  - CDFW denial of request for incidental take coverage for Santa Felicia Project under F&G Code 2084
- Recruitment/Staff Updates





2

QUESTIONS



3








# OPERATIONS AND MAINTENANCE DEPARTMENT UPDATE


September 1, 2022



## Santa Felicia Dam

FERC Part 12 Inspection – Asphalt Reseal





2

Freeman Diversion

Freeman Maintenance - Desilt Basin





3

3

OH Delivery

OH Well 18 – Chlorine Injection System Service

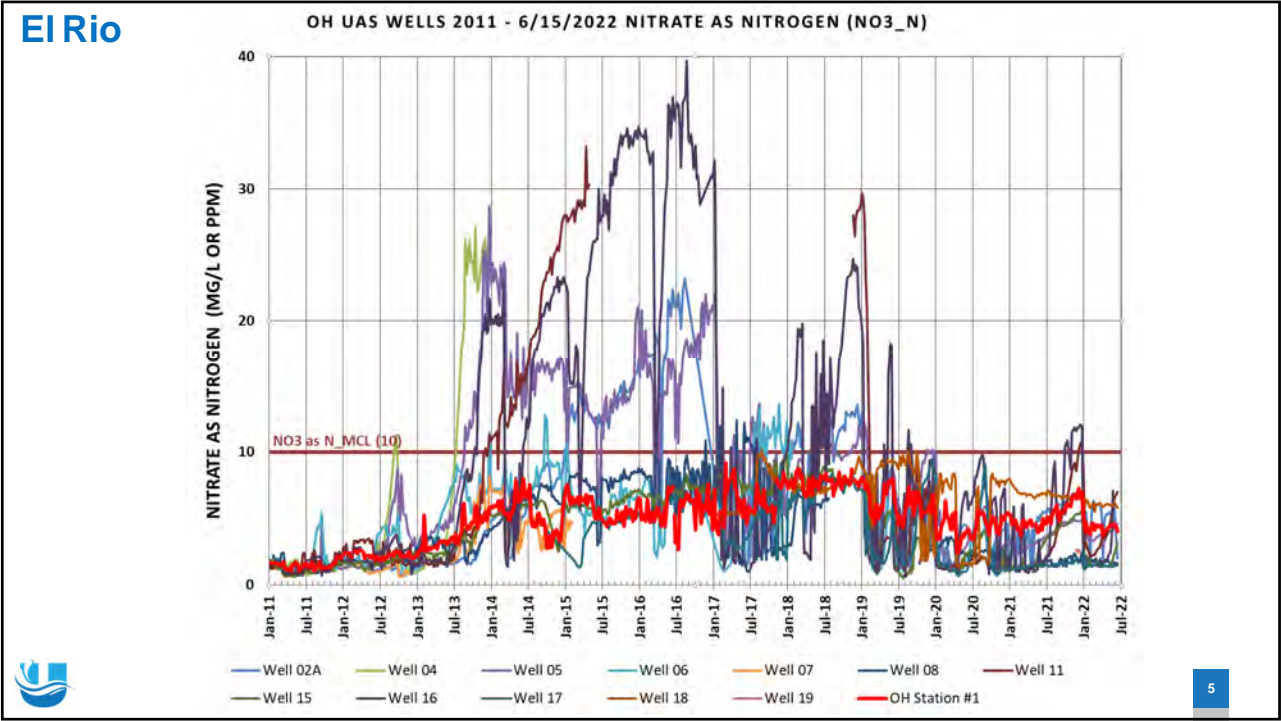




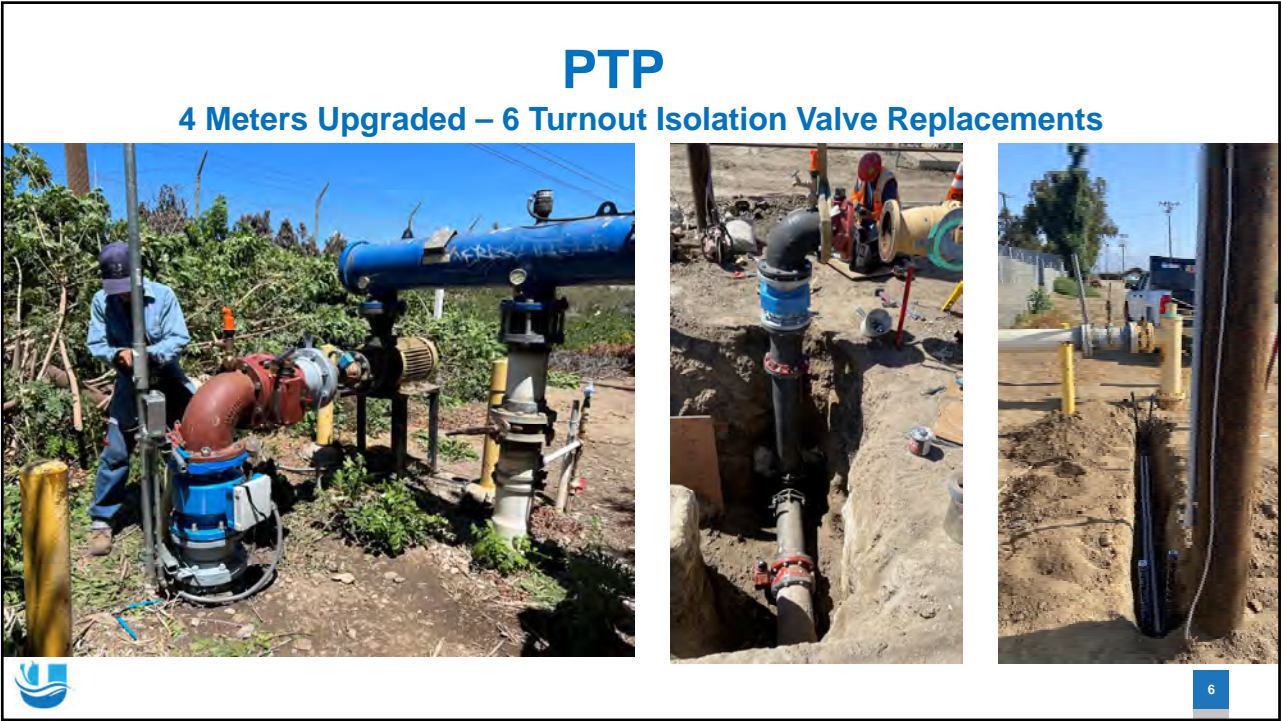
4

4





5








6



## Electrical and Instrumentation



Lombard Emergency Generator - PHWA AMI







7

## Physical Modeling





8

Desander



nhc

water resource specialists



9

Sluicing Channel and Outlet



nhc

water resource specialists



10



Low Flow Channel Rock Placement





nhc

water resource specialists

11

Questions?



12

**Staff Report**

**To:** Engineering and Operations Committee Members

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

**From:** Dr. Maryam A. Bral, Chief Engineer  
Craig Morgan, Engineering Manager

**Date:** September 20, 2022 (October 6, 2022 meeting)

**Agenda Item:** **3.1 Contract with Northwest Hydraulic Consultants for the Freeman Diversion Hardened Ramp Additional Modeling and Design Updates**  
**Board Motion**

---

**Staff Recommendation:**

The Committee will consider recommending approval of the motion authorizing the General Manager to execute a professional consulting services agreement with Northwest Hydraulic Consultants (NHC) in the amount of \$645,515 to provide additional modeling and design updates of the Hardened Ramp as a Freeman Diversion Fish Passage Facility alternative to the full Board.

**Discussion:**

Based on the findings of the physical model, NHC will perform additional hydraulic analysis, modeling, and design refinements. NHC has re-engaged GEI Consultants, Inc. at this phase of the design to update their analysis from the 30% design level to incorporate the new design features. The information developed during this scope of work will be presented in an updated Development Design Report (DDR) and Hydraulic Plan Set. Support has also been included for the selection of alternatives including development of quantities, construction phasing and updated cost estimate.

Staff recommends the Board authorize the General Manager to execute a contract with NHC to provide analysis and support for the physical modeling of the Hardened Ramp as an alternative Fish Passage Facility at the Freeman Diversion.

**Fiscal Impact:**

The physical modeling support, hydraulic design, and analysis of the Freeman Diversion Fish Passage Facility is included in the Fiscal Year 2022-23 Budget (421-400-81020 Project 8001), and sufficient funds are available to provide for the \$645,515.

**Attachments:**

Attachment A – NHC’s Additional Modeling and Design Updates Proposal  
Attachment B – Professional Consulting Services Agreement

---

NHC Ref. No. 5007701

19 September 2022

**United Water Conservation District**

1701 Lombard Street  
Oxnard, CA 93030

**Attention:**    **Craig Morgan, P.E.**  
Engineering Manager

**Via email:**    [craigm@unitedwater.org](mailto:craigm@unitedwater.org)

**Subject:**        **Freeman Hardened Ramp Additional Modeling and Design Updates**

Northwest Hydraulic Consultants (NHC) has developed preliminary design drawings and reporting for the Hardened Ramp Fish Passage Alternative (Hardened Ramp) at Vern Freeman Diversion Dam (VFD) for United Water Conservation District (United Water). NHC previously provided 30% designs for the Hardened Ramp MOD-6 configurations in the Design Development Report (2020) and for the MOD-9 configuration within the Basis of Design Report (2021). Most recently NHC has provided physical modeling support to the Bureau of Reclamation Hydraulics Laboratory (USBR) for testing of the baseline design conditions and supporting the design development. This phase of work will be completed on October 31st, 2022.

United Water has requested that NHC advance the Hardened Ramp Design based on the findings of the physical model, prior to the beginning of the final design contract anticipated for May 2023. The work will be completed from October 2022 until May 2023, in line with the agreed upon project schedule. Work to be completed by NHC during this phase will include additional hydraulic analysis, modeling and design refinements. NHC has re-engaged GEI at this phase of the design to update their analysis from the 30% design level to incorporate the new design features and to perform analysis that will support the upcoming 60% design (foundation design, gate design, ramp structural elements, etc.). The information developed during this scope of work will be presented in an updated Development Design Report (DDR) and Hydraulic Plan Set. Support has also been included for the selection of alternatives including development of quantities, construction phasing and updated cost estimate.

The services to be provided can be described to some degree at present but will be adapted depending on needs identified by United moving forward. The work will be directed by

United and coordinated in regular weekly meetings. A description of work tasks and budgets to support the expected level of effort are provided below.

## TASKS

NHC has identified four primary and one optional task for completion of the work described below.

### **Task 1: Design Development and Criteria**

Under this task the team will continue design development of project features to support the 30% design level package.

The NHC team expects to provide additional analysis in areas such as the following:

- Fish Screen and Fish Bypass System Design Development
- Desander Design
- Low Flow Passage Design
- River Training and Debris Boom Design
- Operational Modeling
- Ramp Structural Element Design
- Foundation Design
- Site Specific Seismic Design Criteria
- Gate Design.

The detail of work and schedule for items will be discussed with United throughout the process. The following items may be replaced or supplemented by other topics as directed by United.

### **Task 2: Design Documentation**

The design drawings will be updated to reflect changes adopted in physical modeling and design development. The draft 100% hydraulic design and report will be developed and provided by February 22<sup>nd</sup>, 2023. The drawings will be updated to serve as a basis for the cost estimate and starting point for subsequent phases. The previous hydraulic basis of design document will be updated to include the design development through physical modeling, computational modeling and desktop exercises.

GEI will perform the civil design, structural analysis and design for all the elements of the components of the Hardened Ramp Alternative and will lay out and prepare all the updated drawings for the 30% preliminary design of the project. It is assumed that GEI will update 18 sheets. GEI will use the geotechnical parameters developed during the 2021 Geotechnical Investigation Program including the assessment of site seismicity and seismic site classification parameters in geotechnical design of the different component elements listed

above. Conceptual design of any needed temporary cofferdam and underpinning (or ground improvement), for the adjacent existing structure will also be provided. Overall stability of the dam and the new ramp will be assessed.

GEI will assemble and review the available geotechnical study reports, previous site and nearby soil boring and groundwater data. GEI will provide independent geotechnical engineering evaluation based on the available information, which included an initial assessment of site seismicity and seismic site classification using available project and USGS information. GEI will also develop preliminary design geotechnical parameters for 30 percent design. Conceptual design of the temporary cofferdam and underpinning (or ground improvement), if necessary, for the adjacent existing structure will also be provided. Overall stability of the diversion structure and the new ramp will be assessed.

Structural design will consider the stability of the structure under various flow regimes and under seismic loading conditions. The potential for uplift of the ramp slab will be considered to determine if tiedown anchorage of the slab will be required. GEI structural and geotechnical engineers will work together to develop the soil loads on the walls and allowable bearing of the ramp. Anchor loads will be provided to the geotechnical engineering staff to provide sufficient anchor design to develop costs.

30% reinforced concrete design, stability analysis and gate anchorage will be conducted in accordance with the U.S. Army Corps of Engineers (USACE), Bureau of Reclamation (USBR) engineering manuals plus other industry accepted standards for example American Concrete Institute (ACI). Seismic design of the structures will be evaluated using the USGS online hazard tool and in accordance with the American Society of Civil Engineers (ASCE) 7 – Minimum Design Loads for Buildings and Other Structures.

GEI will also include structural evaluation of the existing facilities relative to the new facilities to assure compatibility of the new and existing. Specifically, we will focus on the ramp interaction with the existing inlet works and the diversion structure.

### **Task 3: Alternative Selection Support**

Under this task the team will provide information to support the selection of a preferred alternative such as development of quantities and description of construction phasing to support the cost estimate. Opinions of probable construction costs (Level 3) will be developed based on the updated 30% level designs. Cost development will include contractor overhead and profit and will be prepared assuming prevailing wage rates. Environmental, right of way, utility, construction management, and public outreach related estimated costs not included.

This task may also include support work for other items related to the Habitat Conservation Plan as directed by United.



**Task 4: Meetings and Coordination**

This task include time for project management, meetings, invoicing and coordination with the United Team.

This task includes regular online meetings and coordination through the end of February 2023. NHC attends weekly standing meetings on the Hardened Ramp with the United Team where we discuss the advancement of design concepts, we expect these to continue through the duration of the contract. NHC also provides support for bi-weekly meetings with the agencies to update the advancement of the hardened ramp design. Time is included for regular attendance of these meetings for three individuals and anticipated as-needed attendance for other members of the NHC project team. Between the end of February and May meetings will be held as required while plans and report are under review by the agencies.

**Task 5 (Optional): Physical Modeling Support**

This task includes in person support for potential additional physical modeling activities being completed by others. The location and details are unknown at this time. It is assumed that NHC would make up to 4 trips to physical model laboratories, sending two people per trip. The trips would average 2 to 3 days in the lab.

**SCHEDULE**

The work described above will cover work through the end of May 2022. The schedule for individual tasks and activities within tasks will be coordinated with United as the work proceeds.

**BUDGET**

The costs for the tasks outlined above were estimated based on the expected level of effort for design and analysis of potential solutions that are presently anticipated. Depending on initial development and review of potential solutions with the United team and the fisheries agencies, cost allocations may need to be shifted between tasks. The hourly rates will be based on our 2022 Table. A cost breakdown by task is given below.

#	Task	Budget
1	Design Development and Criteria	\$194,790
2	Design Documentation	\$241,520
3	Alternative Selection Support	\$64,030
4	Meetings and Coordination	\$70,375
5	(Optional) Physical Modeling Support	\$74,800
	<b>Amount Requested</b>	<b>\$645,515</b>

A detailed cost breakdown can be provided upon request.

## CLOSURE

We hope the approach outlined above and the estimated schedule meets United's needs for contracting purposes. Please call or email with any questions or comments.

Sincerely,

**Northwest Hydraulic Consultants Inc.**



Barry Chilbeck, P.Eng.  
Principal



Brady McDaniel, P.E.  
Principal

# AGREEMENT FOR PROFESSIONAL CONSULTING SERVICES

THIS AGREEMENT (“Agreement”) is made and entered into on \_\_\_\_\_, 2022, by and between the **United Water Conservation District**, Ventura County, California, (hereinafter “**UNITED**”), and Northwest Hydraulic Consultants, (hereinafter “**CONSULTANT**”).

## RECITALS:

WHEREAS, UNITED desires to obtain professional services in connection with additional modeling and design updates for the Hardened Ramp Fish Passage Alternative (“Project”); and

WHEREAS, UNITED has selected CONSULTANT to provide such services; and

WHEREAS, CONSULTANT represents that it has the skills, experience, license, and expertise to perform these professional services for UNITED; and

WHEREAS, UNITED is desirous of engaging the services of CONSULTANT to perform these services;

NOW, THEREFORE, based on the terms and covenants set forth herein, UNITED and CONSULTANT mutually agree as follows:

### **1. EMPLOYMENT**

A. UNITED hereby employs CONSULTANT to perform and complete the professional engineering services as set forth in Exhibit “A” (“Scope of Work/Schedule of Charges”). CONSULTANT shall perform such professional services as set forth in Exhibit “A” and shall furnish or procure the use of incidental services, equipment, and facilities reasonably necessary for the completion of services.

B. Any extra work over and above that included in the Scope of Work included in Exhibit “A” shall be in compliance with Section 3D.

C. CONSULTANT represents that its services shall be performed, within the limits prescribed by UNITED, in a manner consistent with the level of care and skill ordinarily exercised by other engineering professionals under similar circumstances at the time and in the vicinity its services are performed.

D. **Brady McDaniel** shall: (a) personally perform or supervise the performance of services on a day-to-day basis on behalf of CONSULTANT; and (b) maintain direct communication with UNITED’s **Craig Morgan** or designee in the performance of CONSULTANT’s services.

E. CONSULTANT in the performance of services hereunder shall fully comply with any and all local, state and federal laws, regulations, ordinances, and policies applicable to its work, including any licensing laws applicable to CONSULTANT's profession and anti-discrimination laws pertaining to employment practices.

F. In the event of any conflict between the terms and conditions set forth in Exhibit A (Scope of Work/Schedule of Charges) versus those terms and conditions set forth in this Agreement, the terms and conditions set forth in this Agreement shall govern and the conflicting terms and conditions in Exhibit A shall not apply.

## **2. TERM OF AGREEMENT**

Unless otherwise earlier terminated as specified in Section 8, this Agreement shall commence on the date set forth above and shall expire on **May 31, 2023**.

## **3. COMPENSATION**

Payment by UNITED for the consulting services shall be considered as full compensation for all personnel, materials, supplies, and equipment used in carrying out the work.

A. Compensation and payments to the CONSULTANT shall be as described below:

1. UNITED shall compensate CONSULTANT on a time and expenses basis not to exceed **six hundred forty-five thousand five hundred fifteen dollars (\$645,515)** for performing all services authorized and required by this Agreement and specified in Exhibit "A." UNITED shall compensate CONSULTANT only for actual costs incurred on a time and expenses basis, but in no event shall the total compensation be greater than the not to exceed amount above. However, the total amount paid on a time and expenses basis may be lower than the not to exceed amount above based on actual costs incurred. Payment shall be made in accordance with CONSULTANT's Schedule of Charges submitted to UNITED, included in Exhibit "A" attached and incorporated by reference herein.

2. CONSULTANT shall provide UNITED with monthly itemized invoices. Invoices shall include the categories and identities of CONSULTANT's employees performing services, a description of the services, the number of hours spent performing services, the hourly rate for each employee, CONSULTANT's actual costs and expenses, and the total amount of compensation requested by CONSULTANT for that month. Upon UNITED's request, CONSULTANT shall include with its monthly invoices a detailed verification, including accounting records, of the work actually performed and costs and expenses incurred, along with any other documents or information reasonably requested by UNITED.

B. UNITED shall pay CONSULTANT within thirty (30) days after receipt of CONSULTANT's invoices, with the exception of any disputed amounts which shall be withheld until resolution of the dispute. If UNITED has reasonable grounds to believe that CONSULTANT will be unable to materially perform the services under this Agreement, or there exists or may exist a claim against CONSULTANT arising out of CONSULTANT's negligence or intentional acts, errors, omissions, or material breach of any provision of this Agreement, then UNITED may withhold payment of any reasonable amount due to CONSULTANT which is directly related to such negligence, intentional act, error, omission or material breach. No payment made under this Agreement shall be conclusive evidence of CONSULTANT's performance of the Agreement, either wholly or in part, and no payment shall be construed to be an acceptance by UNITED of CONSULTANT's work.

C. CONSULTANT shall notify UNITED in writing of the need for additional services required due to the circumstances beyond the CONSULTANT's control ("Additional Services"). The CONSULTANT shall obtain written authorization from UNITED before rendering any Additional Services. Compensation for all approved Additional Services shall be negotiated and approved in writing by UNITED before such Additional Services are performed by CONSULTANT. No compensation shall be paid to the CONSULTANT for any Additional Services that are not previously approved by UNITED in writing.

D. Reimbursable expenses, if applicable, are in addition to compensation for services outlined in the Scope of Work and Additional Services, and shall be paid to the CONSULTANT in accordance with the guidelines specified on Exhibit "B". Reimbursable expenses are paid at the actual costs, without mark-ups, incurred by the CONSULTANT and the CONSULTANT's employees in conduct of Agreement activities.

#### **4. SCHEDULE OF WORK**

CONSULTANT shall complete and deliver services and deliverables to UNITED in a diligent and professional manner, in accordance with the Project schedule set forth in Exhibit "A" attached and incorporated by reference herein. Time is of the essence in CONSULTANT's performance of services hereunder.

CONSULTANT's Project Manager shall keep UNITED's **Craig Morgan**, or designee informed as to the progress of work by informal reports. Neither party shall hold the other responsible for damages or delay in performance caused by acts of God, strikes, lockouts, accidents, or other events beyond the reasonable control of the other or the other's employees and agents.

#### **5. ASSIGNMENT OF CONTRACT**

This Agreement is a professional services contract. CONSULTANT shall not assign this Agreement or any portion of the work without the prior written approval of

UNITED. Any such assignment without UNITED's prior written approval shall be void. UNITED may withhold such approval for any reason in its sole discretion.

## **6. INDEMNIFICATION**

To the fullest extent permitted by law, CONSULTANT agrees to indemnify and hold UNITED entirely harmless from all liability arising out of:

1. Workers' Compensation and Employer's Liability. Any and all claims under Workers' Compensation acts and other employee benefit acts with respect to CONSULTANT's employees or CONSULTANT's subconsultant's employees arising out of CONSULTANT's work under this Agreement; and

2. General Liability. To the extent arising out of, pertaining to, or relating to the negligence, recklessness, or willful misconduct of the CONSULTANT, the CONSULTANT shall indemnify, defend and hold UNITED harmless from any liability for damages for (1) death or bodily injury to person; (2) injury to, loss or theft of property; (3) any failure or alleged failure to comply with any provision of law; or (4) any other loss, damage or expense arising under either (1), (2), or (3) above, sustained by the CONSULTANT or UNITED, or any person, firm or corporation employed by the CONSULTANT or UNITED upon or in connection with the Project, except for liability resulting from the sole or active negligence, or willful misconduct of UNITED, its officers, employees, agents, or independent consultants who are directly employed by UNITED. The CONSULTANT, at its own expense, cost, and risk, shall defend any and all claims, actions, suits, or other proceedings (other than professional negligence covered by Section A3 below) that may be brought or instituted against UNITED, its officers, agents, or employees, to the extent such claims, actions, suits, or other proceedings arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the CONSULTANT, and shall pay or satisfy any judgment that may be rendered against UNITED, its officers, agents, or employees, in any action, suit or other proceedings as a result thereof. Any costs to defend under this Section A2 shall not exceed the CONSULTANT's proportionate percentage of fault; and

3. Professional Liability. To the extent arising out of, pertaining to, or relating to the negligence, recklessness, or willful misconduct of the CONSULTANT, the CONSULTANT shall indemnify and hold UNITED harmless from any loss, injury to, death of persons, or damage to property caused by any act, neglect, default, or omission of the CONSULTANT, or any person, firm, or corporation employed by the CONSULTANT, either directly or by independent contract, including all damages due to loss or theft, sustained by any person, firm, or corporation, including UNITED, arising out of, or in any way connected with, the Project, including injury or damage either on or off UNITED property; but not for any loss, injury, death, or damages caused by sole or active negligence, or willful misconduct of UNITED. With regard to the CONSULTANT's obligation to indemnify

for acts of professional negligence, such obligation does not include the obligation to provide defense counsel or to pay for the defense of actions or proceedings brought against UNITED, but rather to reimburse UNITED for attorneys' fees and costs incurred by UNITED in defending such actions or proceedings brought against UNITED, and such fees and costs shall not exceed the CONSULTANT's proportionate percentage of fault.

## **7. INSURANCE**

A. CONSULTANT shall procure and maintain for the duration of this Agreement, and for injuries which occur and claims which are made after the services herein are provided, insurance policies in accordance with the requirements set forth in Exhibit "C" attached and incorporated by reference herein. CONSULTANT shall also provide UNITED with a certificate of insurance attesting to its professional liability (errors and omissions) coverage and all required additional insured endorsements.

B. Submission of insurance certificates or endorsements or other proof of insurance shall not relieve CONSULTANT from liability under the indemnification provisions of Section 6. CONSULTANT's obligations in accordance with Section 6 shall apply whether or not such insurance policies shall have been determined to apply to any of such claims, damage, lawsuits, losses or liabilities covered by Section 6.

C. By its signature hereto, CONSULTANT certifies that it is aware of the provisions of California Labor Code Section 3700 which requires every employer to be insured against liability for workers compensation' or to undertake self-insurance as specified. CONSULTANT shall comply with these provisions before commencing work under this Agreement.

## **8. TERMINATION OF AGREEMENT**

### **A. Termination for Cause**

1. UNITED may terminate CONSULTANT's services for cause, whereupon this Agreement shall terminate immediately. Termination may occur regardless of whether CONSULTANT's services are completed. Any termination or special instructions from UNITED shall be made in writing.

2. Termination for cause may occur upon any of the following events: (a) CONSULTANT's material breach of this Agreement; (b) abandonment or lack of diligence in performance of the work by CONSULTANT; (c) cessation, suspension, revocation or expiration of any license needed by CONSULTANT to provide services hereunder; (d) failure of CONSULTANT to substantially comply with any local, state or federal laws, regulations, ordinances or policies applicable to its work hereunder; (e) filing by or against CONSULTANT of bankruptcy or any petition under any law



for relief of debtors; or (f) conviction of CONSULTANT or its principal representative or personnel for any crime other than minor traffic offenses.

3. Subject to the provisions of Section 3.B herein, CONSULTANT shall be paid for all approved services performed and approved expenses incurred to the date of termination for cause supported by documentary evidence, including payroll records and expense reports, up to the date of the termination. In the event of termination for cause, all damages and costs associated with the termination, including increased consultant and replacement consultant costs, shall be deducted from any payments due to CONSULTANT.

4. In the event a termination for cause is determined to have been made wrongfully or without cause, then the termination shall be treated as a termination for convenience in accordance with Section 8.B below, and CONSULTANT shall have no greater rights than it would have had if a termination for convenience had been effected in the first instance. No other loss, cost, damage, expense or liability may be claimed, requested or recovered by CONSULTANT.

B. Termination Without Cause/For Convenience. This Agreement may be terminated without cause by UNITED or for UNITED's convenience upon fourteen (14) days' written notice to the CONSULTANT. In the event of a termination without cause, UNITED shall pay the CONSULTANT for all approved services performed and all approved expenses incurred under this Agreement supported by documentary evidence, including payroll records and expense reports, up until the date of the notice of termination. In addition, CONSULTANT will be reimbursed for reasonable termination costs through the payment of 3% beyond the sum due the CONSULTANT under this section through 50% completion of the CONSULTANT's portion of the Project and, if 50% completion is reached, payment of 3% of the unpaid balance of the contract to CONSULTANT as termination cost. This 3% is agreed to compensate the CONSULTANT for the unpaid profit CONSULTANT would have made under the Project on the date of termination and is consideration for entry into this termination for convenience clause.

C. In the event of termination with or without cause, CONSULTANT shall promptly provide to UNITED all Project Documents as defined in Section 9 below within five (5) calendar days from the effective date of termination. Failure to provide all Project Documents as required shall be deemed a material breach of this Agreement.

D. In the event of a dispute as to the performance of the work or an interpretation of this Agreement, or payment or nonpayment for work performed or not performed, the parties shall attempt to resolve the dispute. Pending resolution of the dispute CONSULTANT agrees to continue the work diligently to completion. If the dispute is not resolved, CONSULTANT agrees it will neither rescind the Agreement nor stop the progress of work, but CONSULTANT's sole remedy will be

to submit such controversy to determination by a court having competent jurisdiction of the dispute as required by this Agreement after the Project has been completed and not before.

## **9. PROFESSIONAL SERVICES**

A. The CONSULTANT is employed to render a professional service(s) only and any payments made to it are compensation solely for such services as it may render and recommendations it may make in the performance of services.

B. All plans, specifications, construction documents, data, records, files, communications, information, reports and/or other documents that are prepared, generated, reproduced, maintained and/or managed by the CONSULTANT or CONSULTANT's subconsultants arising from or in any way related to the services provided under this Agreement (regardless of medium, format, etc.) shall be and remain the property of UNITED ("Project Documents"). UNITED may provide the CONSULTANT with a written request for the return of the Project Documents at any time. Upon CONSULTANT's receipt of UNITED's written request, CONSULTANT shall return the requested Project Documents to UNITED within five (5) calendar days. CONSULTANT may make copies of the work generated. Failure to comply with any such written request above shall be deemed a material breach of this Agreement. Nothing in this paragraph shall be deemed a waiver of any copyright in the Project Documents prepared by the CONSULTANT. Any unauthorized reuse or modification of such Project Documents other than for purposes intended by CONSULTANT or for the Project shall be at UNITED's risk and liability.

C. CONSULTANT agrees that all dealings of the parties under this Agreement shall be confidential and no Project Documents or information developed, prepared or assembled by CONSULTANT under this Agreement, or any information made available to CONSULTANT by UNITED, shall be revealed, disseminated or made available by CONSULTANT to any person or entity other than UNITED without the prior written consent of UNITED, unless otherwise required by subpoena or applicable law or regulatory authority.

## **10. INDEPENDENT CONTRACTOR RELATIONSHIP**

It is expressly understood between the parties that no employee/employer relationship is intended, the relationship of CONSULTANT to UNITED being that of an independent contractor. UNITED shall not be required to make any payroll deductions or provide Worker's Compensation Insurance coverage or health benefits to CONSULTANT. CONSULTANT is solely responsible for selecting the means, methods and procedures for performing its services hereunder as assigned by the UNITED and for coordinating all portions of the work so the results will be satisfactory to UNITED. CONSULTANT will supply all tools and instruments required to perform its services under this Agreement.

## **11. ASSISTANCE BY UNITED**

It is understood and agreed that the UNITED shall, to the extent reasonable and practicable, assist and cooperate with CONSULTANT in the performance of CONSULTANT's services hereunder. Such assistance does not include, in any manner, the exercise of professional judgment for which CONSULTANT is being retained herein. Such assistance and cooperation to be provided by UNITED as applicable includes, but shall not be limited to, providing right of access to work sites; providing material available from the UNITED's files such as maps, as-built drawings, records and operation and maintenance information; and rendering assistance in determining the location of existing facilities and improvements which may be affected by the Project. CONSULTANT shall otherwise be responsible for giving all notices and complying with all applicable laws, ordinances, rules, regulations and lawful orders of any public authority relating to the work.

## **12. ADDITIONAL PROVISIONS**

### **A. Examination of Records**

CONSULTANT agrees that UNITED shall have access to and the right to examine at any reasonable time and on reasonable notice CONSULTANT's documents, papers and records, including accounting records, relating to its performance under this Agreement.

### **B. Notice**

All notices or other official correspondence relating to contractual matters between the parties shall be made by depositing the same as first-class, postage paid mail addressed as follows:

To CONSULTANT:	Brady McDaniel Principal Northwest Hydraulic Consultants 2600 Capitol Ave Ste 140 Sacramento, CA 95816
----------------	--

To UNITED:	Craig Morgan Engineering Manager United Water Conservation District 1701 North Lombard Street, Suite 200 Oxnard, CA 93030
------------	---

or such other address as either party may designate hereinafter in writing delivered to the other party. All notices shall be agreed to have been received three (3) days after mailing.

C. No Waiver

No failure or delay by UNITED in asserting any of UNITED's rights and remedies as to any default of CONSULTANT shall operate as a waiver of the default, of any subsequent or other default by CONSULTANT, or of any of UNITED's rights or remedies. No such delay shall deprive UNITED of its right to institute and maintain any actions or proceedings which may be necessary to protect, assert or enforce any rights or remedies arising out of this Agreement or the performance of this Agreement.

D. Integration

This Agreement constitutes the entire agreement between the parties pertaining to the subject matter hereto, and supersedes all prior agreements, oral or written, and all prior or contemporaneous discussions or negotiations between the parties.

E. Modification

No alteration or variation of the terms of this Agreement shall be valid unless made in writing and signed by the parties.

F. Rules of Interpretation

The terms of this Agreement have been negotiated by the parties and the language used in this Agreement shall be deemed to be the language chosen by the parties to express their mutual intent. This Agreement shall be construed without regard to any presumption or rule requiring construction against the party causing such instrument to be drafted, or in favor of the party receiving a particular benefit under this Agreement. No rule of strict construction shall be applied against any party to this Agreement.

G. Partial Invalidity

If any term, covenant, condition, or provision of this Agreement is found by a court of competent jurisdiction to be invalid, void, or unenforceable, the remainder of the provisions hereof shall remain in full force and effect, and shall in no way be affected, impaired, or invalidated thereby.

H. Incorporation of Recitals and Exhibits

The foregoing recitals and exhibits are incorporated herein as though fully set forth.

I. California Law; Dispute Resolution; Venue

This Agreement shall be interpreted and construed pursuant to the laws of the State of California, regardless of whether this Agreement is executed by any party in another state or otherwise. If a dispute arises between the parties related to this Agreement or the breach thereof, the parties shall first attempt in good faith to settle the matter through discussion, and if unsuccessful may in their discretion mutually agree to mediate the dispute prior to filing a judicial action. The costs of a third party mediator, if utilized, shall be borne equally by the parties. If either party elects to file an action in court, such action shall be filed and heard in a court of competent jurisdiction in the County of Ventura.

J. Counterparts


This Agreement may be executed in multiple counterparts, a complete set of which shall be deemed to be an original and all of which together shall comprise but a single document. Signatures may be given via facsimile transmission and shall be deemed given as of the date of facsimile transmittal of the executed Agreement by one party to the other.

IN WITNESS WHEREOF, this Agreement has been executed by the parties hereto.

UNITED WATER CONSERVATION DISTRICT

By \_\_\_\_\_  
Mauricio E. Guardado Jr., General Manager

Northwest Hydraulic Consultants Inc.

By  \_\_\_\_\_  
Brady McDaniel, Principal Engineer

**EXHIBIT “A” TO AGREEMENT FOR  
PROFESSIONAL CONSULTING SERVICES**

CONSULTANT shall provide professional engineering consultation services under this Agreement in accordance with work described in the attached **Scope of Work** and **Schedule of Charges**.

NHC Ref. No. 5007701

19 September 2022

**United Water Conservation District**

1701 Lombard Street  
Oxnard, CA 93030

**Attention:**     **Craig Morgan, P.E.**  
Engineering Manager

**Via email:**     [craigm@unitedwater.org](mailto:craigm@unitedwater.org)

**Subject:**       **Freeman Hardened Ramp Additional Modeling and Design Updates**

Northwest Hydraulic Consultants (NHC) has developed preliminary design drawings and reporting for the Hardened Ramp Fish Passage Alternative (Hardened Ramp) at Vern Freeman Diversion Dam (VFD) for United Water Conservation District (United Water). NHC previously provided 30% designs for the Hardened Ramp MOD-6 configurations in the Design Development Report (2020) and for the MOD-9 configuration within the Basis of Design Report (2021). Most recently NHC has provided physical modeling support to the Bureau of Reclamation Hydraulics Laboratory (USBR) for testing of the baseline design conditions and supporting the design development. This phase of work will be completed on October 31st, 2022.

United Water has requested that NHC advance the Hardened Ramp Design based on the findings of the physical model, prior to the beginning of the final design contract anticipated for May 2023. The work will be completed from October 2022 until May 2023, in line with the agreed upon project schedule. Work to be completed by NHC during this phase will include additional hydraulic analysis, modeling and design refinements. NHC has re-engaged GEI at this phase of the design to update their analysis from the 30% design level to incorporate the new design features and to perform analysis that will support the upcoming 60% design (foundation design, gate design, ramp structural elements, etc.). The information developed during this scope of work will be presented in an updated Development Design Report (DDR) and Hydraulic Plan Set. Support has also been included for the selection of alternatives including development of quantities, construction phasing and updated cost estimate.

The services to be provided can be described to some degree at present but will be adapted depending on needs identified by United moving forward. The work will be directed by



United and coordinated in regular weekly meetings. A description of work tasks and budgets to support the expected level of effort are provided below.

## TASKS

NHC has identified four primary and one optional task for completion of the work described below.

### **Task 1: Design Development and Criteria**

Under this task the team will continue design development of project features to support the 30% design level package.

The NHC team expects to provide additional analysis in areas such as the following:

- Fish Screen and Fish Bypass System Design Development
- Desander Design
- Low Flow Passage Design
- River Training and Debris Boom Design
- Operational Modeling
- Ramp Structural Element Design
- Foundation Design
- Site Specific Seismic Design Criteria
- Gate Design.

The detail of work and schedule for items will be discussed with United throughout the process. The following items may be replaced or supplemented by other topics as directed by United.

### **Task 2: Design Documentation**

The design drawings will be updated to reflect changes adopted in physical modeling and design development. The draft 100% hydraulic design and report will be developed and provided by February 22<sup>nd</sup>, 2023. The drawings will be updated to serve as a basis for the cost estimate and starting point for subsequent phases. The previous hydraulic basis of design document will be updated to include the design development through physical modeling, computational modeling and desktop exercises.

GEI will perform the civil design, structural analysis and design for all the elements of the components of the Hardened Ramp Alternative and will lay out and prepare all the updated drawings for the 30% preliminary design of the project. It is assumed that GEI will update 18 sheets. GEI will use the geotechnical parameters developed during the 2021 Geotechnical Investigation Program including the assessment of site seismicity and seismic site classification parameters in geotechnical design of the different component elements listed

above. Conceptual design of any needed temporary cofferdam and underpinning (or ground improvement), for the adjacent existing structure will also be provided. Overall stability of the dam and the new ramp will be assessed.

GEI will assemble and review the available geotechnical study reports, previous site and nearby soil boring and groundwater data. GEI will provide independent geotechnical engineering evaluation based on the available information, which included an initial assessment of site seismicity and seismic site classification using available project and USGS information. GEI will also develop preliminary design geotechnical parameters for 30 percent design. Conceptual design of the temporary cofferdam and underpinning (or ground improvement), if necessary, for the adjacent existing structure will also be provided. Overall stability of the diversion structure and the new ramp will be assessed.

Structural design will consider the stability of the structure under various flow regimes and under seismic loading conditions. The potential for uplift of the ramp slab will be considered to determine if tiedown anchorage of the slab will be required. GEI structural and geotechnical engineers will work together to develop the soil loads on the walls and allowable bearing of the ramp. Anchor loads will be provided to the geotechnical engineering staff to provide sufficient anchor design to develop costs.

30% reinforced concrete design, stability analysis and gate anchorage will be conducted in accordance with the U.S. Army Corps of Engineers (USACE), Bureau of Reclamation (USBR) engineering manuals plus other industry accepted standards for example American Concrete Institute (ACI). Seismic design of the structures will be evaluated using the USGS online hazard tool and in accordance with the American Society of Civil Engineers (ASCE) 7 – Minimum Design Loads for Buildings and Other Structures.

GEI will also include structural evaluation of the existing facilities relative to the new facilities to assure compatibility of the new and existing. Specifically, we will focus on the ramp interaction with the existing inlet works and the diversion structure.

### **Task 3: Alternative Selection Support**

Under this task the team will provide information to support the selection of a preferred alternative such as development of quantities and description of construction phasing to support the cost estimate. Opinions of probable construction costs (Level 3) will be developed based on the updated 30% level designs. Cost development will include contractor overhead and profit and will be prepared assuming prevailing wage rates. Environmental, right of way, utility, construction management, and public outreach related estimated costs not included.

This task may also include support work for other items related to the Habitat Conservation Plan as directed by United.

**Task 4: Meetings and Coordination**

This task include time for project management, meetings, invoicing and coordination with the United Team.

This task includes regular online meetings and coordination through the end of February 2023. NHC attends weekly standing meetings on the Hardened Ramp with the United Team where we discuss the advancement of design concepts, we expect these to continue through the duration of the contract. NHC also provides support for bi-weekly meetings with the agencies to update the advancement of the hardened ramp design. Time is included for regular attendance of these meetings for three individuals and anticipated as-needed attendance for other members of the NHC project team. Between the end of February and May meetings will be held as required while plans and report are under review by the agencies.

**Task 5 (Optional): Physical Modeling Support**

This task includes in person support for potential additional physical modeling activities being completed by others. The location and details are unknown at this time. It is assumed that NHC would make up to 4 trips to physical model laboratories, sending two people per trip. The trips would average 2 to 3 days in the lab.

**SCHEDULE**

The work described above will cover work through the end of May 2022. The schedule for individual tasks and activities within tasks will be coordinated with United as the work proceeds.

**BUDGET**

The costs for the tasks outlined above were estimated based on the expected level of effort for design and analysis of potential solutions that are presently anticipated. Depending on initial development and review of potential solutions with the United team and the fisheries agencies, cost allocations may need to be shifted between tasks. The hourly rates will be based on our 2022 Table. A cost breakdown by task is given below.

#	Task	Budget
1	Design Development and Criteria	\$194,790
2	Design Documentation	\$241,520
3	Alternative Selection Support	\$64,030
4	Meetings and Coordination	\$70,375
5	(Optional) Physical Modeling Support	\$74,800
	<b>Amount Requested</b>	<b>\$645,515</b>

A detailed cost breakdown can be provided upon request.

## CLOSURE

We hope the approach outlined above and the estimated schedule meets United's needs for contracting purposes. Please call or email with any questions or comments.

Sincerely,

**Northwest Hydraulic Consultants Inc.**



Barry Chilbeck, P.Eng.  
Principal



Brady McDaniel, P.E.  
Principal

## SCHEDULE OF STANDARD CHARGES (Effective January 2022)

Labor Category	Fee Rate (\$US/hour)
Principal .....	275
Principal T3 / Sr. Project Engineer 1 .....	255
Sr. Project Engineer/Scientist 2 .....	225
Sr. Engineer/Scientist 1 .....	195
Sr. Engineer/Scientist 2 .....	185
Engineer/Scientist 1 .....	160
Engineer/Scientist 2 .....	140
Jr. Engineer/Scientist .....	130
GIS Analyst 1 .....	145
GIS Analyst 2 .....	115
Sr. CAD Designer .....	155
CAD Designer .....	125
Sr. Engineering Technician .....	155
Engineering Technician 1 .....	125
Engineering Technician 2 .....	105
Jr. Engineering Technician .....	95
Sr. Engineering Lab Technician .....	145
Engineering Lab Technician .....	125
Sr. Contract Administrator .....	180
Sr. Technical Editor .....	150
Technical Editor .....	120
Office Administrator .....	95

*Labor costs subject to annual escalation adjustment in October to reflect cost of living and merit salary increases. Refer to separate schedules for field and laboratory equipment charges.*

### Handling Charges / Fees

Markup on Subconsultants.....	10%
Markup on Reimbursables .....	10%
Markup on Travel/Subsistence .....	10%

### Plotting      \$/sheet

Plots, bond, 11 x 17 .....	\$2.00
Plots, bond, D size .....	\$4.00
Plots, oversize (running foot) .....	\$2.00

### Photocopies    \$/sheet

B&W 8½ x 11 .....	\$0.10
B&W 11 x 17 .....	\$0.15
Color 8½ x 11 .....	\$1.00
Color 11 x 17 .....	\$2.00

**FEE SCHEDULE**

<u>Personnel Category</u>	<u>Hourly Billing Rate</u> \$ per hour
Staff Professional – Grade 1	\$ 136
Staff Professional – Grade 2	\$ 150
Project Professional – Grade 3	\$ 164
Project Professional – Grade 4	\$ 184
Senior Professional – Grade 5	\$ 217
Senior Professional – Grade 6	\$ 247
Senior Professional – Grade 7	\$ 294
Senior Consultant – Grade 8	\$ 329
Senior Consultant – Grade 9	\$ 401
Senior Principal – Grade 10	\$ 401
-----	
Senior Drafter and Designer	\$ 164
Drafter / Designer and Senior Technician	\$ 150
Field Professional	\$ 123
Technician, Word Processor, Administrative Staff	\$ 122
Office Aide	\$ 95

These rates are billed for both regular and overtime hours in all categories.

Rates will increase up to 5% annually, at GEI's option, for all contracts that extend beyond twelve (12) months after the date of the contract. Rates for Deposition and Testimony are increased 1.5 times.

**OTHER PROJECT COSTS**

**Subconsultants, Subcontractors and Other Project Expenses** - All costs for subconsultants, subcontractors and other project expenses will be billed at cost plus a 15% service charge. Examples of such expenses ordinarily charged to projects are subcontractors; subconsultants: chemical laboratory charges; rented or leased field and laboratory equipment; outside printing and reproduction; communications and mailing charges; reproduction expenses; shipping costs for samples and equipment; disposal of samples; rental vehicles; fares for travel on public carriers; special fees for insurance certificates, permits, licenses, etc.; fees for restoration of paving or land due to field exploration, etc.; state and local sales and use taxes and state taxes on GEI fees. The 15% service charge will not apply to GEI-owned equipment and vehicles or in-house reproduction expenses.

**Field and Laboratory Equipment Billing Rates** – GEI-owned field and laboratory equipment such as pumps, sampling equipment, monitoring instrumentation, field density equipment, portable gas chromatographs, etc. will be billed at a daily, weekly, or monthly rate, as needed for the project. Expendable supplies are billed at a unit rate.

**Transportation and Subsistence** - Automobile expenses for GEI or employee owned cars will be charged at the rate per mile set by the Internal Revenue Service for tax purposes plus tolls and parking charges or at a day rate negotiated for each project. When required for a project, four-wheel drive vehicles owned by GEI or the employees will be billed at a daily rate appropriate for those vehicles. Per diem living costs for personnel on assignment away from their home office will be negotiated for each project.

**PAYMENT TERMS**

Invoices will be submitted monthly or upon completion of a specified scope of service, as described in the accompanying contract (proposal, project, or agreement document that is signed and dated by GEI and CLIENT).

Payment is due upon receipt of the invoice. Interest will accrue at the rate of 1% of the invoice amount per month, for amounts that remain unpaid more than 30 days after the invoice date. All payments will be made by either check or electronic transfer to the address specified by GEI and will include reference to GEI's invoice number.

## **EXHIBIT “B” TO AGREEMENT FOR PROFESSIONAL CONSULTING SERVICES**

CONSULTANT shall adhere to the following **Guidelines for Expense Reimbursement**:

Incidental expenditures incurred by CONSULTANT in the course of performing work under this Agreement and submitted for reimbursement by UNITED shall comply with the following guidelines.

Receipts are required for all reimbursable expenses (with an exception for meals and lodging) and shall be furnished with the invoice. Reimbursable expenditures shall not be subject to mark-up. Only actual costs of expenditures within the limits presented below are eligible for reimbursement.

### **1. Reimbursable Expenditures**

#### **A. Travel Expenses**

Expenses for airfare or other travel accommodations shall not exceed costs that would reasonably be expected for comparable economy or coach class accommodations.

Personal vehicles may be used when appropriate and mileage will be reimbursed at the standard Internal Revenue Service (IRS) business mileage rate (i.e., 56 cents per mile for calendar year 2021, but for a total cost no greater than the cost that would reasonably be expected for round trip economy or coach class airfare. With the exception of extenuating circumstances (e.g. transport of specialized equipment), mileage for any trip over 500 miles shall be reimbursed at a total cost no greater than would reasonably be expected for round trip economy or coach class airfare. Extenuating circumstances shall be pre-approved by UNITED.

Rental vehicle costs are reimbursable when justified by the nature of the trip. With the exception of extenuating circumstances (e.g. transport of more than 4 people or excessive cargo) the total expense for the rental vehicle shall not exceed a cost that would reasonably be expected for a standard class vehicle. Insurance for rental vehicles is not reimbursable and must be in accordance with all insurance requirements set forth in this Agreement.

#### **B. Lodging**

The cost of lodging incurred on approved CONSULTANT business trips is reimbursable. UNITED will reimburse lodging at the standard U.S. General Services



Administration (GSA) rate for Ventura County. GSA rates are annually updated in October.

C. Meals

The cost of meals incurred on approved CONSULTANT Projects is reimbursable.

If UNITED is reimbursing the CONSULTANT for lodging, UNITED will reimburse for meals at the appropriate standard GSA rate for Ventura County (i.e., \$49.50 (or 75% of a daily rate) per day for first and last calendar day of PROJECT work, and \$66.00 per day for additional PROJECT work days for calendar year 2021.

If UNITED is not reimbursing the CONSULTANT for lodging, UNITED will not reimburse the CONSULTANT for meals.

D. Equipment

All reimbursable equipment must be purchased or rented at a reasonable cost, in accordance with industry standards.

E. Expendable Items

Items that are expendable (depleted) will not be returned to UNITED, as the items will be “used up” in the course of CONSULTANT’s work.

F. Non-Expendable Items

Items that are non-expendable (not depleted) will be returned to UNITED upon completion of CONSULTANT’s work.

## EXHIBIT “C” TO AGREEMENT FOR PROFESSIONAL CONSULTING SERVICES

CONSULTANT shall procure and maintain for the duration of the Agreement, and for injuries that occur and claims which are made after the services herein are performed, insurance against claims or injuries to persons or damages to property, which may arise from or in connection with the performance of the work hereunder by CONSULTANT, its agents, representatives, or employees.

### *Minimum Scope of Insurance*

Coverage shall be at least as broad as:

1. Insurance Services Office Commercial General Liability coverage (occurrence Form CG 00 01 or its equivalent).
2. Insurance Services Office Form Number CA 00 01 covering Automobile Liability, Code 1 or its equivalent (any auto).
3. Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.
4. Errors & Omissions Liability insurance appropriate to the CONSULTANT's profession. Architects' and engineers' coverage is to be endorsed to include contractual liability.
5. Valuable Document Insurance on all plans, specifications and other documents as may be required to protect UNITED in the amount of its full equity in such plans, specifications and other documents.

### *Minimum Limits of Insurance*

CONSULTANT shall maintain limits no less than:

- |  |   |
|--|---|
| 1. General Liability:<br>Including operations, products and completed operations, as applicable. | <b>\$1,000,000</b> per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. |
| 2. Automobile Liability:   | <b>\$1,000,000</b> per accident for bodily injury and property damage.  |

3. Employer's Liability: **\$1,000,000** per accident for bodily injury or disease.
4. Errors & Omissions Liability: **\$1,000,000** per claim.
5. Valuable Document Insurance **Full Equity of all Documents**

*Deductibles and Self-Insured Retentions*

Any deductibles or self-insured retentions must be declared to and approved by UNITED. At the option of UNITED, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects UNITED, its directors, officers, officials, employees and agents; or CONSULTANT shall provide a financial guarantee satisfactory to UNITED guaranteeing payment of losses and related investigations, claim administration and defense expenses.

*Other Insurance Provisions*

The commercial general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

6. For all policies required by this Agreement, UNITED and its directors, officers, officials, employees and volunteers are to be covered as additional named insureds as respects: liability arising out of work or operations performed by or on behalf of the CONSULTANT; or automobiles owned, leased, hired or borrowed by the CONSULTANT.
7. For any claims related to this Project, the CONSULTANT's insurance coverage shall be primary insurance as respects UNITED and its directors, officers, officials, employees and agents. Any insurance or self-insurance maintained by UNITED, its directors, officers, officials, employees or agents shall be excess of the CONSULTANT's insurance and shall not contribute with it.
8. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party, except after thirty (30) days prior written notice has been provided to UNITED (with the exception of ten (10) days for nonpayment of premium).

If General Liability, Contractors Pollution Liability and/or Asbestos Pollution Liability and/or Errors & Omissions coverages are written on a claims-made form:

9. The retroactive date must be shown, and must be before the date of the contract or the beginning of contract work.
10. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the contract of work.

11. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the contract effective date, the CONSULTANT must purchase an extended period coverage for a minimum of five (5) years after completion of contract work.
12. A copy of the claims reporting requirements must be submitted to UNITED for review.
13. If the services involve lead-based paint or asbestos identification/ remediation, the Contractors Pollution Liability shall not contain lead-based paint or asbestos exclusions. If the services involve mold identification/ remediation, the Contractors Pollution Liability shall not contain a mold exclusion and the definition of "Pollution" shall include microbial matter including mold.

#### *Acceptability of Insurers*

Insurance is to be placed with insurers qualified to do business in the State of California with a current A.M. Best's rating of no less than A: VII, unless otherwise acceptable to UNITED. Exception may be made for the State Compensation Insurance Fund when not specifically rated.

#### *Verification of Coverage*

CONSULTANT shall furnish UNITED with original certificates and amendatory/ additional insured endorsements effecting coverage required by this clause. The endorsements should be on forms provided by UNITED or on other than UNITED's forms provided those endorsements conform to UNITED requirements. All certificates and endorsements are to be received and approved by UNITED before work commences. However, failure to do so shall not operate as a waiver of these insurance requirements. UNITED reserves the right to require complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by these specifications at any time.

#### *Waiver of Subrogation*

CONSULTANT hereby agrees to waive subrogation, which any insurer of contractor may acquire from vendor by virtue of the payment of any loss. CONSULTANT agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation.

The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the entity for all work performed by the CONSULTANT, its employees, agents and subcontractors.

**Staff Report**

**To:** Engineering and Operations Committee Members

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

**From:** Linda Purpus, Environmental Services Manager  
Evan Lashly, Environmental Scientist

**Date:** September 20, 2022 (October 6, 2022 meeting)

**Agenda Item:** **3.2 Pre-implementation Studies in Support of Federal Energy Regulatory Commission Fish Passage Assessment – Amendment to Professional Consulting Services Agreement with Cramer Fish Sciences - \$425,633**  
**Board Motion**

---

**Staff Recommendation:**

The Committee will consider recommending approval of the motion to authorize the General Manager to execute an amendment to the professional consulting services (PCS) agreement with Cramer Fish Sciences in the amount of \$425,633 to continue and complete the monitoring phase of study activities outlined in the “Santa Felicia Dam Fish Passage Program Pre-Implementation Study Plan” to the full Board.

**Background:**

In April 2017, the District submitted a Fish Passage Feasibility Assessment Report for the Santa Felicia Project to the Federal Energy Regulatory Commission (FERC), National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife (CDFW). The District’s FERC license and the associated biological opinion issued by NMFS require United to evaluate fish passage feasibility and submit a report containing the results. The submitted report conveys United’s intent regarding a preferred long-term solution on fish passage at the Santa Felicia Project. As noted in the report, implementation of trap and haul facilities (the preferred passage alternative identified by the panel of fish passage experts that conducted the study) is contingent on resolution of certain outstanding issues, including uncertainties regarding the engineering and biological feasibility, and development of biological criteria that would trigger implementation of the preferred passage alternative.

On December 17, 2017, the District executed a contract with Cramer Fish Sciences to develop pre-implementation studies to address remaining uncertainties. On March 20, 2018, Cramer Fish Sciences provided United with the “Santa Felicia Dam Fish Passage Program Pre-Implementation Study Plan” (study plan). The study plan outlines measures to fill in the following knowledge gaps associated with *Oncorhynchus mykiss* in middle Piru Creek: 1) population dynamics (number, size, and timing of fish movement); 2) the number and size class of *Oncorhynchus mykiss* that can be removed without jeopardizing the viability of the existing population; and 3) identify the most

---



**Agenda Item: 3.2 Pre-implementation Studies in Support of Federal Energy Regulatory Commission Fish Passage Assessment – Amendment to Professional Services Agreement with Cramer Fish Sciences - \$425,633**  
**Board Motion**

---

effective sampling methods, locations, and seasons. The study plan is structured as a three-year (i.e., phase) project. Ultimately, this work is expected to result in high-caliber scientifically defensible research, that will lead to peer reviewed publication, and form the foundation from which United can evaluate the efficacy of interim passage operations, as well as provide information for establishing biological criteria for triggering development of permanent fish passage facilities.

United and Cramer Fish Sciences began implementing this work in April 2018. The first phase project activities were completed during FY 2018-19. The second phase project activities were initiated in fall 2019, subsequently interrupted in March 2020 due to COVID-19, and ultimately completed in Spring 2022. The PCS agreement has been amended for each phase of the project, and funding for the studies has been allocated on an annual basis.

**Discussion:**

The initial phase of the study plan was aimed at gathering basic population dynamics information to inform the second phase of the study. The second phase of study was designed to be more extensive and include installation and monitoring of traps and electrofishing. The third phase of the study was designed to continue elements implemented during phase two and provide for two full years of information regarding trap operations (i.e., engineering feasibility) and fish movement (i.e., biological feasibility). Staff proposes to continue this third phase of study elements thereby completing the field study components of the study plan, with the understanding that there may be a need for additional development of final reports and deliverables during 2023-24. The proposed amendment would increase the contract by \$425,633 and result in a total revised not-to-exceed amount of \$1,701,123.

A copy of the Amendment to the PCS agreement detailing Cramer Fish Science's complete proposal, including the scope of work and deliverables, proposed fee, and the project schedule, is included in Attachment A.

**Fiscal Impact:**

Funding for the services to be conducted under the proposed amendment is available in the FY 2022-23 Budget (050-600-52220; 4340-300). If additional work is needed to complete the final project reports and deliverables for the pre-implementation studies, funding for these items would be included in FY 2023-24 Budget.

**Attachment:**

Attachment A – Seventh Amendment to the Professional Consulting Service Agreement with Cramer Fish Sciences

**SEVENTH AMENDMENT TO  
AGREEMENT FOR PROFESSIONAL CONSULTING SERVICES**

This Amendment to the Agreement for Professional Consulting Services is entered into as of \_\_\_\_\_, 2022, by and between **United Water Conservation District (UNITED)**, a public entity, and **Cramer Fish Sciences (CONSULTANT)** with reference to the following terms and conditions:

WITNESSETH

WHEREAS, on December 17, 2017, UNITED and CONSULTANT entered into a Professional Consulting Services AGREEMENT for the purpose of developing a study plan and providing specific support in United's effort to pursue fish passage at the Santa Felicia Project, and subsequently entered into amendments to the AGREEMENT to implement the study plan including a FIRST AMENDMENT on May 11, 2018, a SECOND AMENDMENT on May 21, 2019, a THIRD AMENDMENT on June 19, 2019, a FOURTH AMENDMENT on July 11, 2019; a FIFTH AMENDMENT on July 13, 2021; a SIXTH AMENDMENT on December 16, 2021; and;

WHEREAS, UNITED and CONSULTANT have discussed and agreed to amend certain terms and conditions of the AGREEMENT, the FIRST, SECOND, THIRD, FOURTH, FIFTH, and SIXTH AMENDMENTS involving scope of work, and compensation as specified in this SEVENTH AMENDMENT.

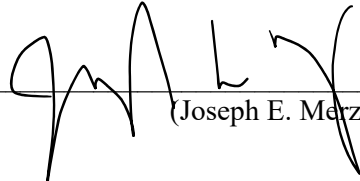
NOW, THEREFORE, based on the covenants and considerations set forth, UNITED and CONSULTANT mutually agree as follows:

1. The not-to-exceed total charge described in the AGREEMENT, the FIRST, SECOND, THIRD, FOURTH, FIFTH, and SIXTH AMENDMENTS is hereby increased by \$425,633. This amendment results in a total revised not-to-exceed amount of: \$1,701,123 as total payment inclusive of all services.
2. The Scope of Work included as Exhibit A of the AGREEMENT, Attachment A of the FIRST AMENDMENT, Attachment A of the SECOND AMENDMENT, ITEM 2 of the THIRD AMENDMENT, Attachment A of the FOURTH AMENDMENT, and Attachment A of this SIXTH AMENDMENT is hereby amended to include the Scope of Work included in Attachment A of this SEVENTH AMENDMENT.
3. The term of the AGREEMENT, the FIRST, SECOND, THIRD, FOURTH, FIFTH, and SIXTH AMENDMENTS is hereby extended to expire on December 31, 2023.
4. Each and all other provisions of said AGREEMENT and the FIRST, SECOND, THIRD, FOURTH, FIFTH, and SIXTH AMENDMENTS remain in full force and effect and apply to all services and payments made under this SEVENTH AMENDMENT.

UNITED WATER CONSERVATION DISTRICT

By \_\_\_\_\_  
Mauricio E. Guardado, Jr., General Manager

CRAMER FISH SCIENCES

By  \_\_\_\_\_  
(Joseph E. Metz, President)



## SANTA FELICIA DAM *O. MYKISS* PASSAGE PROGRAM

---

### Pre-Implementation Study – Phase 3 Scope of Work, Part 1 1 Oct 2022 – 30 June 2023

In support of United Water Conservation District (United), Cramer Fish Sciences (CFS) developed the Santa Felicia Dam Fish Passage Program Pre-Implementation Study Plan (Study Plan) to provide United a detailed road map for executing a suite of priority studies over the next several years (2018-2023). The Study Plan builds on the Santa Felicia Dam Fish Passage Alternatives Feasibility Report (Panel Report) and defines pre-implementation studies that are intended to facilitate the Implementation and Adaptive Management Process (IAMP) and inform future fish passage decisions. The overarching study plan goal is to fill crucial knowledge gaps limiting the understanding of southern California steelhead (*Oncorhynchus mykiss*) in Piru Creek and inform implementation of the preferred passage alternative, including assessment and long-term maintenance of the *O. mykiss* population above Lake Piru. Ultimately these pre-implementation studies will provide information to resolve some of the specific uncertainties identified in the Panel Report and develop biological trigger criteria for a phased implementation of the preferred alternative. The Study Plan outlines three years of activities. However, due to project delays caused by COVID-related shutdowns, hereafter we will refer to the originally outlined “years” as “phases” to maintain clarity as the total project duration may extend beyond three years, but the overall scope of activities has not changed.

Phase 3 (2022-2023) will follow the tasks lined out in Year 3 of the study plan, building on knowledge from previous phases. Due to fieldwork scheduled into the spring of 2023, some Phase 3 work and deliverables cannot be completed before the end of United’s fiscal year (30 June 2023). Therefore, the Phase 3 Scope of Work and budget has been divided into two parts: Phase 3, Part 1 (1 October 2022 – 30 June 2023), consisting primarily of field work, and Phase 3, Part 2 (1 July 2023 – 30 November 2023), consisting primarily of meetings with United and agencies, data management, analysis, and reporting.



## Task 1: Population Survey

**\$187,176**

This task supports Phase 3 of the population survey (previously called mark-and-recapture study), with surveys in the fall (November) and spring (March-May). Fall 2022 sampling plans will be flexible to account for fire danger and dry sections of the creek due to drought; sampling later in the fall season is expected to provide a greater opportunity for success. The March sampling is a modification from the original Plan timeframe (April-May) to allow crews to access sites when both air and water temperatures are cooler and there is less amphibian activity.

The Phase 3 goal is to PIT tag 1,000 *O. mykiss* within the size range that is likely to migrate and sample sites selected using the Generalized Random Tessellation Stratified (GRTS) sample design. We are permitted to tag 700 *O. mykiss* in the fall and 300 in the spring. Tagging events will span approximately two weeks in mainstem middle Piru Creek and its tributaries (Agua Blanca and Fish creeks). Even though these tributaries are remote and more difficult to access, they contain critical over-summer habitat, and documented emigrants, based on data from previous years PIT tag detections. During the fall 2022 survey, CFS will sample new GRTS sites via multiple-pass depletion electrofishing, and supplemental tagging outside of GRTS sites via single pass depletion. The spring 2023 surveys will differ due to overlapping with the breeding season for sensitive species, such as arroyo toads (*Anaxyrus californicus*) and California red-legged frogs (*Rana draytonii*). To limit impacts on sensitive species, only a limited number of new GRTS sites will be sampled via multiple-pass depletion electrofishing, with no supplemental electrofishing. Spring 2023 sampling will be informed by the results of fall sampling, stream conditions, and permitting limitations. Spring 2023 electrofishing is dependent on renewal of temporary permits issued in 2022. Hook-and-line surveys will supplement spring 2023 electrofishing surveys to deploy tags and will only be implemented if necessary and possible (e.g., assumes temporary SCP will be reissued and that 2022-23 is not an extreme wet or dry water year). Before spring sampling, CFS and United will arrange for staff to be trained in sensitive species identification (e.g., arroyo toad, willow flycatcher) and mitigation measures by a qualified biologist.

Only captured *O. mykiss* >65 mm fork length will be tagged; however, we will prioritize PIT-tagging *O. mykiss* that are within a size range that are most likely to emigrate in spring based on previous data (100-200 mm fork length). PIT-tagging fish will enable tracking of individual movements associated with environmental events and developmental stages and provide the basis for population size estimates. Our ability to evaluate the number of possible emigrants, emigrant timing, and trap efficiency is dependent on tagging and recapturing adequate numbers of *O. mykiss* as they move past the PIT tag antennas. Caudal fin tissue for genetic analysis, and scale samples for age and growth analysis, will be collected from all captured *O. mykiss* >65 mm fork length. Scale samples collected from Phase 2, Continued and Phase 3 will be analyzed for age. Genetic samples may be analyzed at a later date on a separate scope of work.

### Deliverables

- Tabular summaries of fish captured, fish tagged, and individual *O. mykiss* information (e.g., length, weight, condition), general capture location (lat, long) and field notes.
- The fall data will be compiled in a memo under the Phase 3 Scope of Work, Part 1.

**Commented [JW1]:** Increase of \$2,581 from Phase 2c. Additional Sr tech hours for fieldwork and more scale preparation for multiple phases. Reduction in travel costs based on previous invoice



- Fall and spring data will be compiled into the yearly summary report under the Phase 3 Scope of Work, Part 2.

## Task 2: Emigrant Trap Install, Training, and Removal

**\$49,330**

Alternative D7 (Piru Creek Collector) is a proposed fish trapping facility located in middle Piru Creek upstream of Lake Piru. The D7 installation and associated facilities are intended to function and effectively trap downstream-migrating *O. mykiss* at flows <400 cfs and continue operating with reduced efficiency at higher flows (e.g., as high as 1,000 cfs). CFS will evaluate two low-tech downstream emigrant traps to inform implementation of D7.

Rotary screw trap (RST) and fyke trap installation will occur in November. At the end of Phase 2, the RST was left on site and is already installed. If no damage or vandalism has occurred to the RST, setup effort should be minimal for Phase 3. Fyke liveboxes will be modified so they can attach with a bridge to increase holding capacity for one trap. The modification will allow CFS to test triggers to increase trap capacity and prevent the trap from being overwhelmed with emigrants and mitigate potential negative effects of over-crowding. Trap operation and maintenance training will be provided, as needed, during installation and throughout the year. During high flow events, additional CFS staff may be deployed from Central Valley offices to provide expertise to local staff to ensure traps are operated safely and effectively. In addition to trap operation, CFS and United will arrange for staff to be trained in sensitive species identification measures (e.g., arroyo toad, willow flycatcher) and mitigation by a qualified biologist. Trap removal will occur after the *O. mykiss* migratory season (June) or as water levels and quality allows. Trap operation in the spring and removal in the summer will likely overlap with the arroyo toad breeding season (March-July). Therefore, trap removal and operation activities during the breeding season will be coordinated with federal agencies to prevent disturbance or injury to arroyo toads.

### Deliverables:

- Personnel training, trap installation and removal.

## Task 3: Emigrant Trap Monitoring and Efficiency Studies

**\$158,935**

Within this task we will continue to evaluate two relatively low-tech downstream migrant traps, a fyke trap and an RST, which will be deployed concurrently on middle Piru Creek. In Phase 3, traps will be operated during the full migratory season (approximately December-June), which will provide a wider variety of environmental conditions (if flows allow) and more days to test trap performance. Previous phases lacked sustained flows above 125 cfs or debris loads were too high to allow consistent RST operation.

Although traps may be installed and tested in November, their operation will occur from December 2022 through June 2023 (flow and water quality dependent). Traps will be deployed and operated according to characteristics related to flow and debris capacity. Fykes will be operated at flows from 10 to ~250 cfs and RST at flows from ~125 to 1000 cfs. It is possible both methods can work at flows outside these ranges, and we will determine this through experience, while ensuring safe

**Commented [JW2]:** 1000 decrease from Phase 2. Decrease for RST already installed. Increase for fyke box mods and more Sr tech hours. Increase for anchor install for fyke similar to PIT antennas.

**Commented [JW3]:** Increase of 10,650 from Phase 2c. Additional Sr tech hours, and small increase for trapping consumables to make repairs.





operation. We will conduct trials to determine whether installation of louver panels to increase velocity of water entering the cone and creating more room for the cone to spin will allow the RST to operate under lower flow conditions. Flow thresholds for RST operation will be defined by the Phase 3 operational trials.

Based on previous PIT array detections and *O. mykiss* migration patterns in the Santa Clara River, monitoring effort will be increased during high flow events and later in the migratory season (March-May). Additional trap checks and supplemental staff will support trapping operations during these critical times when storms may disable/damage traps or when *O. mykiss* may have a higher tendency to emigrate. Within this task, we assume that captured *O. mykiss* will be released within middle Piru Creek and not transported to lower Piru Creek.

Results from this task will enable identification of optimal trap location, design, and operation, and will support the Group in assessing feasibility of implementing D7. This study will provide a foundation from which expectations of trap performance can be grounded and a better understanding of the tradeoffs between competing alternatives relative to their efficiency in safely capturing out-migrating *O. mykiss*. We expect these studies will generate information on the middle Piru Creek *O. mykiss* population, life history strategies, migratory behavior, and potential magnitude of migration into the reservoir.

### *Trap efficiency studies*

The preferred method to estimate trap efficiency is mark-recapture trials using *O. mykiss*, which requires capture of an adequate number of emigrating individuals to obtain a statistically sound efficiency estimate (CAMP 2008). Trap efficiency tests should be conducted frequently during a sampling period, particularly when changes in fish size or environmental conditions (e.g., stream or river discharge, turbidity, etc.) have the potential to significantly affect trap efficiency and movement patterns.

*O. mykiss* in healthy condition captured in the fyke trap will be used to estimate trap efficiency to increase chances that marked fish are recaptured while volitionally migrating downstream. Upon first capture, *O. mykiss* will be marked with a PIT tag and then released upstream of the traps and lower PIT antenna. PIT arrays will also be used to evaluate capture efficiency of the emigrant traps by estimating the proportion of tagged *O. mykiss* passing the trap location. Previous trapping data suggest insufficient numbers of *O. mykiss* will be available in middle Piru Creek to rely on this method alone. Therefore, we may use a combination of 1) estimates of water volume sampled by the trap(s) (CAMP 2008), 2) recapture of nearly-neutrally buoyant particles (Hedrick et al. 2008), and 3) mark-recapture of surrogate species (Roper and Scarnecchia 1996) to estimate trap efficacy.

### *Deliverables*

- These data will be compiled into the yearly report summary under the Phase 3 Scope of Work, Part 2.

### *References*

U.S. Fish and Wildlife Service. 2008. Draft rotary screw trap protocol for estimating production of juvenile Chinook salmon. Document prepared by the U.S. Fish and Wildlife Service, Comprehensive Assessment and Monitoring Program. Sacramento, California.



Hedrick, T. N., Bestgen, K. R., and Christopherson, K. D. 2008. Entrainment of semi-buoyant beads as a surrogate for larval razorback sucker, *Xyrauchen texanus*, into flood-plain wetlands of the middle Green River, Utah. Proceedings of the Colorado River Basin Science and Resource Management Symposium 185-194.

Roper, B., and Scarnecchia, D. L. 1996. A comparison of trap efficiencies for wild and hatchery age-0 Chinook salmon. North American Journal of Fisheries Management 16(1):214-217.

## Task 4: Middle Piru PIT Tag Array Operation and Maintenance

**\$24,047**

Two PIT tag arrays will be operated in middle Piru Creek to provide empirical measures of *O. mykiss* emigration timing. These data support analysis of the linkages between environmental conditions (e.g., flow and length of day) and emigration. The arrays also allow for the evaluation of capture efficiency for competing trapping methodologies and support adequate design, planning, and operation of trapping equipment. Deployment and operation of arrays in Year 1 and 2 provided an improved understanding of the unique challenges of designing, installing, and operating fisheries monitoring equipment in a stream with a highly variable hydrograph and active channel bed. We learned that the antenna arrays were not able to remain stationary during the bed-mobilizing flows (7-10-year recurrence flow) that occurred in Year 1 and that re-installation of detached antennas may be needed when this occurs. Currently, a portion of the upper antenna array is buried by sediment and will need to be uncovered and re-attached to the substrate.

Detection rates of PIT tagged individuals in previous years provided information on emigration timing and environmental variables linked to emigration. Additional tagged *O. mykiss* in Phase 3 and operation of the PIT tag arrays will provide larger sample sizes to inform downstream trapping efficiency and implementation.

This task includes three sub-tasks:

- 1) Data download – PIT antennas are in operation throughout the year. Outside the critical time for sensitive species in the area (November-February), sites will be visited at least twice per month, with additional visits before and after high flow events, as feasible. During the critical time for sensitive species (March-July), arrays will be visited once per month. Additionally, within this subtask is PIT antenna array training for technicians.
- 2) Antenna range testing and antenna tuning will occur at least once per month during the data downloads.
- 3) PIT antenna efficiency tests will occur twice during the season.
- 4) Antenna re-installation and repair may be necessary if bed-mobilizing flows occur.

### Deliverables

- These data will be compiled into the yearly report summary under the Phase 3 Scope of Work, Part 2.

**Commented [JW4]:** Increase of 3,440 from phase 2c. Additional Sr tech hours and additional hours to finish digging up US antenna



## Task 5: Data Management, Analysis, and Reporting

**\$30,607**

Data collected from Tasks 1, 3, and 4 will be entered into databases that combine data collected across all years. After entry, data will go through two complete QA/QC checks for errors. Data collected for Task 1 (fall population survey) will be summarized in a memo. A draft memo of biological trigger criteria for a phased implementation of low tech collection and the preferred alternative will be developed. Biological trigger criteria will be based on information gained from the pre-implementation study and the ability of different trapping facilities to safely and effectively pass *O. mykiss*.

### Deliverables

- Memo summarizing the fall population survey study from Task 1.
- Draft of biological triggers memo.

## Task 6: Project Management

**\$21,665**

Coordinating project activities requires frequent communication among multiple study participants including United, CFS, and resource agencies, among others to ensure that all parties are aware of project plans and progress. Towards this aim, CFS team members will: 1) coordinate project activities, 2) provide regular updates to United staff, 3) participate in meetings with resource agencies, as requested and, 4) prepare monthly invoices and cover letters that detail activity and time spent on this project.

## Deliverables

Below, we list the deliverables associated with this Scope of Work, Part 1, and the completion date.

Task	Deliverable	Completion Date
Task 3: Emigrant trap install, training and removal	Trap installation	By 1 December 2022
Task 1: Population Survey	Fall population survey technical memo	31 January 2023
Task 5: Data Management, analysis, and reporting	Draft of biological triggers criteria memo	24 February 2023
Task 3: Emigrant trap install, training and removal	Trap removal	By 30 June 2022

**Commented [JW5]:** Increase of 17,084 from Phase 2c. Additional hours for Bio trigger draft, report edits, starting analysis for final report

**Commented [JW6]:** Increase of 6,793 from phase 2c. Additional hours from project management based on invoices. Additional hours for meetings with United and agencies. Additional hours for permit reporting in final year



## Budget

CFS will work with United to meet all project objectives on schedule and on budget. We estimate the total cost of Phase 3, Part 1 to be **\$471,760**. A remaining unused scope containing \$46,127 will be applied to the cost of Phase 3 part 1 bringing the total budget to complete Phase 3 part 1 to **\$425,633**. Phase 3 SOW part 2 will be executed in July 2023.

Cost Summary Table	
Phase 3 Part 1	\$471,760
Rolled over scope to be applied	(\$46,127)
<b>Additional budget to complete Phase 3 Part 1</b>	<b>\$425,633</b>

## Budget Assumptions

The following assumptions were used to develop the budget:

- 1) Work and associated deliverables completed after 30 June 2023 has been moved to a separate Phase 3 Part 2 budget and SOW.
- 2) United-CFS meetings will be conducted remotely via video conference or telephone once every two months between October 2022 and June 2023 and will not exceed 1 hour.
- 3) CFS will present study results at one SFD Fish Passage Science and Technology Panel meeting.
- 4) CFS will provide personnel for field sampling and equipment installations.
- 5) CFS assumes a water year type that is neither extremely wet nor extremely dry. An extreme water year type may affect our ability to operate traps effectively and impact data collection efforts.
- 6) CDC guidelines on social distancing and other measures to prevent the spread of COVID-19 may change, which could require additional travel and mileage expenses.
- 7) CFS will draft all permitting reports and applications for United's review and approval. CFS will also support United in communicating/coordinating with resource agencies regarding the studies and required permits. United will be responsible for submitting permit applications/permit required reports and communicating with resource agencies.
- 8) Deliverables completion dates are for drafts to United for review. CFS anticipates two rounds of drafts with United and one round of drafts with resource agencies. CFS will complete draft edits and responses within four weeks of receiving them.
- 9) CFS will provide additional experienced staff to supplement local staff in response to up to three major flow events or during periods of high emigration rates.
- 10) CFS will travel to the project site for field sampling.



## *SFD Fish Passage Program*

---

- 11) Standard 2022 U.S. General Service Administration (GSA) rates for mileage, lodging, and meals were applied to travel costs associated with field sampling.
- 12) A personal gear rental fee of \$150 per week per person has been added for crew using their own camping equipment during the population surveys.
- 13) CFS assumes that captured *O. mykiss* will be released within middle Piru Creek and not transported to lower Piru Creek for experimental release. If *O. mykiss* are to be experimentally released into lower Piru Creek, additional funding may be required to expand current experimental release protocol drafts and for the releases themselves.
- 14) PIT antennas will require repairs in response to up to one major flow event in the study year. Additional flow events that disrupt or dislodge equipment (e.g., outside of typical maintenance) may result in further incurred costs.

If the assumptions listed above are not met, this may result in changes to the project schedule, scope, and deliverables detailed in this proposal. Additional collaboration, site-visits, meetings, or tasks beyond the scope of this proposal will be budgeted on a per-task basis, as needed.





SFD Fish Passage Program: Phase 3 (1 October 2022 - 30 June 2023) Study Scope for Juvenile Downstream Passage Pre-Implementation Studies										
Objectives and Tasks	Projected Hours						Labor Subtotal			Totals
	\$235.00 Principal Scientist	\$183.00 Sr. Scientist	\$138.00 Sr. Biologist	\$103.00 Biologist I	\$80.00 Senior Bio Technician	\$64.00 Bio Technician		Travel	Misc.	
<b>Task 1: Population Survey</b>										
Task 1.1 Fall electrofishing (Nov. 2022)	2		140		600	440	\$95,950	\$12,000	\$2,400	\$110,350
Task 1.2 Spring electrofishing (March 2023)	2		130		220	320	\$56,490	\$8,000	\$1,800	\$66,290
Task 1.3 Scale sample preparation			2	20	20	100	\$10,336		\$200	\$10,536
<b>Task 1 Subtotal</b>	<b>4</b>		<b>272</b>	<b>20</b>	<b>840</b>	<b>860</b>	<b>\$162,776</b>	<b>\$20,000</b>	<b>\$4,400</b>	<b>\$187,176</b>
<b>Task 2: Emigrant Trap Installation, Training, and Removal</b>										
Task 2.1 Pre-install site visit and prep (Nov. 2022)	2		10		20	20	\$4,730			\$4,730
Task 2.2 Livebox modifications to expand capacity (Nov. 2022)					25		\$2,000		\$300	\$2,300
Task 2.3 Trap (RST and fyke) installation (Dec. 2022)			20		40	40	\$8,520	\$4,000	\$1,200	\$13,720
Task 2.4 Field crew training (Dec. 2022)	24		30		12	12	\$11,508	\$2,000		\$13,508
Task 2.5 Trap removal and storage (June 2023)			4		80	80	\$12,072	\$3,000		\$15,072
<b>Task 2 Subtotal</b>	<b>26</b>		<b>64</b>	<b>0</b>	<b>177</b>	<b>152</b>	<b>\$38,830</b>	<b>\$9,000</b>	<b>\$1,500</b>	<b>\$49,330</b>
<b>Task 3: Emigrants Trap Monitoring and Efficiency Studies</b>										
Task 3.1 Daily fyke/rotary screw trap checks (Dec. 2022 - June 2023)					750	900	\$117,600	\$3,200	\$500	\$121,300
Task 3.2 High flow/debris trap adjustments	8		60	25	80	120	\$26,815	\$3,000		\$29,815
Task 3.3 Conduct efficiency and flow tests	4		20		25	30	\$7,620		\$200	\$7,820
<b>Task 3 Subtotal</b>	<b>12</b>		<b>80</b>	<b>25</b>	<b>855</b>	<b>1,050</b>	<b>\$152,035</b>	<b>\$6,200</b>	<b>\$700</b>	<b>\$158,935</b>
<b>Task 4: PIT Tag Array Operation and Maintenance</b>										
Task 4.1 Data Download and training			20		20	20	\$5,640	\$800		\$6,440
Task 4.2 Antenna tag capture efficiency and antenna tuning			12		20	20	\$4,536	\$800		\$5,336
Task 4.3 Antenna re-installation and repair			12	25	35	35	\$9,271	\$3,000		\$12,271
<b>Task 4 Subtotal</b>			<b>44</b>			<b>75</b>	<b>\$19,447</b>	<b>\$4,600</b>		<b>\$24,047</b>
<b>Task 5: Data Management, Analysis, and Reporting</b>										
Task 5.1 Data management and QC			15	10	40	40	\$8,860			\$8,860
Task 5.2 Data summary and analysis			20	20			\$4,820			\$4,820
Task 5.3 Fall tech memo and biological triggers draft	15	10	40	20			\$12,935			\$12,935
Task 5.4 Respond to report edits from United and agencies	4	2	12	10			\$3,992			\$3,992
<b>Task 5 Subtotal</b>	<b>19</b>	<b>12</b>	<b>87</b>	<b>60</b>	<b>40</b>	<b>40</b>	<b>\$30,607</b>			<b>\$30,607</b>
<b>Task 6: Project Management</b>										
Task 6.1 Coordinate field activities	2		60	10			\$9,780			\$9,780
Task 6.2 Communications with United and agencies	15	8	20				\$7,749			\$7,749
Task 6.3 Monthly invoice review			12				\$1,656			\$1,656
Task 6.4 Permit reporting and support			12	8			\$2,480			\$2,480
<b>Task 6 Subtotal</b>	<b>17</b>	<b>8</b>	<b>104</b>	<b>18</b>			<b>\$21,665</b>			<b>\$21,665</b>
<b>Total Project Hours</b>	<b>78</b>	<b>20</b>	<b>651</b>	<b>123</b>	<b>1,912</b>	<b>2,177</b>				
<b>Total Project Costs</b>	<b>\$18,330</b>	<b>\$3,660</b>	<b>\$89,838</b>	<b>\$12,669</b>	<b>\$152,960</b>	<b>\$139,328</b>	<b>\$425,360</b>	<b>\$39,800</b>	<b>\$6,600</b>	<b>\$471,760</b>
<b>Rolled Over Scope to be Applied</b>										<b>\$46,127</b>
<b>Additional Budget to Complete Phase 3 Part 1</b>										<b>\$425,633</b>



### **Staff Report**

**To:** Engineering and Operations Committee

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

**From:** Brian Collins, Chief Operations Officer

**Date:** September 22, 2022 (October 6, 2022, meeting)

**Agenda Item:** **3.3 Verizon Request for Easement for Cell Tower Fiber Optic Conduit**  
**Board Motion**

---

#### **Staff Recommendation:**

The Committee members will consider recommending the authorization of the General Manager or his designee to execute both a Memorandum of Easement and Grant of Easement, and to record the Grant of Easement, to allow Verizon to install a fiber optic conduit in proximity to the Saticoy facility main gate, to the full Board.

#### **Background:**

Verizon initiated discussions with District staff toward securing an easement to allow the installation of a conduit and fiber optic line, to provide service to the Saticoy cellular tower, located on the neighboring Jim Lloyd Butler ranch.

#### **Discussion:**

Staff met with Verizon's easement procurement specialist to discuss the possibility of granting an easement to Verizon. Staff has reviewed the proposed easement and language associated with the easement agreement and have determined that installation of the proposed conduit and fiber optics do not detrimentally impact the District's current or planned future operations.

#### **Fiscal Impact:**

Upon approval and subsequent execution of the easement agreement, the District will be compensated for the granting of easement in a onetime payment of \$20,000, from Verizon.

**Agenda Item: 3.3 Verizon Request for Easement for Cell Tower Fiber Optic Conduit Motion**



**Attachments:**

Attachment A: Verizon UWCD Grant of Easement Agreement

Attachment B: Verizon UWCD Memorandum of Grant Easement for Recording

## GRANT OF EASEMENT

THIS GRANT OF EASEMENT ("**Easement**") is entered into as of \_\_\_\_\_, by and between United Water Conservation District, a public district (hereinafter "**Grantor**") and Los Angeles SMSA Limited Partnership, a California limited partnership dba Verizon Wireless (hereinafter "**Grantee**").

WHEREAS, Grantor is the owner of that certain real property located off of Los Angeles Avenue in Oxnard, California and legally described in **Exhibit "A"** attached hereto (the "**Property**").

WHEREAS, Grantee is the owner of a leasehold estate in certain real property located at 3135 West Los Angeles Avenue, Oxnard, California, APN 109-0-010-120 (the "Leased Premises"), pursuant to that certain Option and Land Lease Agreement dated October 31, 2012 (the "Lease"); Grantee's premises is within or adjacent to the Property. Pursuant to the Lease, Grantee operates a communications facility on a portion of the Leased Premises.

WHEREAS, Grantor has agreed to convey to Grantee an easement over, under and across the Property (the "**Easement Area**") for the installation of utility connections as provided herein as described in **Exhibit "B,"** attached hereto and made a part hereof.

NOW, THEREFORE, for and in consideration of the covenants contained herein, the parties agree as follows:

**1. Grant of Easement.** Grantor hereby grants to Grantee, its successors and assigns, a non-exclusive easement over, under and across the Easement Area for the purposes of ingress and egress and for constructing, maintaining, operating, repairing and replacing utility lines, cables and conduits at the Property.

a. Each party shall utilize its estate in a manner that will minimize interference with the other party's use of its estate.

b. Upon completion of the installation of utility connections, Grantee shall restore the Easement Area to substantially its pre-existing condition.

c. Grantee shall conduct its activities on the Easement Area in a safe, good and workmanlike manner to avoid causing any damage to, or unreasonable interference with, any activities conducted by, or at the permission or direction of, the Grantor on or near the Easement Area or any adjacent property owned by Grantor.

d. Grantee shall not cause any liens of any kind to be placed against the Easement Area.

**2. No Permanent Structures.** Grantor hereby covenants for and on behalf of itself, its heirs, successors or assigns that neither it, nor any of them, shall construct or permit to be constructed, any building or any other permanent structure within the Easement Area, or make any permanent excavation, or permit any permanent excavation to be made within the

Easement Area.

3. **Consideration.** In consideration for the rights granted hereunder, Grantee shall pay Grantor a one-time, lump sum payment of Twenty Thousand Dollars (\$20,000), which shall be due within sixty (60) days after this Easement is fully executed.

4. **Term.** The Easement, rights, and privileges herein granted shall be for a term coinciding with the term of the Lease, including any renewals and replacements thereof, and shall, without any further action on the part of Grantor or Grantee, terminate immediately upon the termination of said Lease or Grantee's leasehold interest in the Leased Premises. Upon termination of this Easement for any reason, at Grantor's request Grantee shall execute with acknowledgement and deliver a notice of termination in form suitable for recording in the official records of the County.

5. **Termination for Default.** Upon Grantee's default hereunder, Grantor may deliver to Grantee a written notice of default, stating with specificity the nature of Grantee's default. If Grantee has not cured the default within a reasonable time (but not less than 60 days for a non-monetary default) after receipt of the notice of default, Grantor may terminate this Easement effective immediately upon receipt by Grantee of Grantor's written notice of termination.

6. **Indemnification.** Grantee agrees to indemnify, defend and hold Grantor harmless from and against any and all actual or potential claims, liens, actions, demands, proceedings, lawsuits, liabilities, damages, losses, fines, penalties, judgments, costs or expenses (including reasonable attorneys' fees and court costs) of every kind and character, including without limitation, any damage to or loss of property or injury to or death of any person, to the extent caused by or arises from or results from Grantee's use of the Easement Area and/or the exercise or enjoyment of any rights herein granted to it under this Easement, except to the extent attributable to the negligent or intentional act or omission of Grantor or its agents.

7. **Limitations on Easement.** It is understood and agreed that this Easement does not constitute a conveyance of a fee interest in the Easement Area, or of the minerals therein and thereunder, but grants only the limited easement as provided in Section 1 above. The Easement granted herein is on an "AS-IS" basis and Grantor makes no representation or warranty of any kind, express or implied, regarding the condition of the Property or Easement Area. Other than what is specified herein, Grantee shall make no changes, alterations, or improvements to the Easement Area without prior written approval from the Grantor.

8. **Insurance.** Grantee will carry, at its own cost and expense, the following insurance: (i) commercial general liability insurance with limits of \$2,000,000 for bodily injury (including death) and property damage each occurrence. Grantee will include Grantor as an additional insured under its commercial general liability policy as its interest appears under this Easement. Notwithstanding anything in this Easement, with respect to all loss, damage, or destruction to a party's property (including rental value and business interruption) occurring during the term of this Easement, Grantor and Grantee hereby release and waive

all claims (except for willful misconduct) against the other party and its employees, agents, officers, and directors. With respect to property damage, each party hereby waives all rights of subrogation against the other party, but only to the extent that collectible commercial insurance is available for said damage. Neither party shall be liable to the other, or any of their respective agents, representatives, or employees for any lost revenue, lost profits, diminution in value of business, loss of technology, rights or services, loss of data, or interruption or loss of use of service, incidental, punitive, indirect, special, trebled, enhanced or consequential damages, even if advised of the possibility of such damages, whether such damages are claimed for breach of contract, tort (including negligence), strict liability or otherwise, unless applicable law forbids a waiver of such damages.

9. **Assignment.** Grantee shall not assign, transfer, or convey any rights and/or obligations under this Easement except through prior written consent of Grantor; provided however, that Grantor's consent shall not be required if any assignment of this Easement occurs in connection with an assignment of the Lease.

10. **Attorneys' Fees.** In the event any action or suit is brought by a party against the other party by reason of the breach of any of the covenants or agreements set forth in this Easement or any other dispute between the parties concerning this Easement, each party shall be responsible for its own attorney's fees and costs.

11. **Dominant and Servient Tenements.** This Easement is granted for the benefit of the Leased Premises and is appurtenant to the Leased Premises. The Leased Premises are the dominant tenement and the Property is the servient tenement.

12. **Entire Agreement.** This Easement constitutes the entire agreement between Grantor and Grantee relating to the above easement. Any prior agreements, promises, negotiations or representations not expressly set forth in this Easement are of no force and effect.

13. **Binding Effect.** This Easement shall be binding on and shall inure to the benefit of the heirs, executors, administrators, successors and assigns of Grantor and Grantee.

14. **Amendments.** Any modification or other termination of this Easement shall become effective only upon the execution by Grantor and Grantee of a written instrument.

15. **Interpretation; Governing Law.** This Easement shall be construed as if prepared by both parties hereto. This Easement shall be governed by and construed under the laws of the State of California, with venue in Ventura County.

16. **Authority.** Each individual executing this Grant of Easement on behalf of each respective party acknowledges and warrants that it: (i) has full authority to execute this Grant of Easement on behalf of such party, (ii) this Grant of Easement has been duly authorized and approved by such party, and (iii) this Grant of Easement constitutes a valid and binding obligation of such party.

17. **Captions; Incorporation By Reference.** The captions used herein are for convenience only and are not a part of this Easement and do not in any way limit or amplify



the terms and provisions hereof. Each of the Exhibits attached to this Easement is hereby incorporated into this document as if set forth in full herein.

**18. Severability.** If any paragraph, section, sentence, clause or phrase contained in the Easement shall become illegal, null or void, against public policy, or to otherwise unenforceable, for any reason, or shall be held by any court of competent jurisdiction to be illegal, null or void, against public policy, or otherwise unenforceable, the remaining paragraphs, sections, sentences, clauses or phrases contained in the Easement shall not be affected thereby and shall remain in force and effect to the full extent permissible by law.

**19. Waiver.** The waiver of any breach of any provision hereunder by either party shall not be deemed to be a waiver of any preceding or subsequent breach hereunder. No failure or delay of either party in the exercise of any right given hereunder shall constitute a waiver thereof nor shall any partial exercise of any right preclude further exercise thereof.

**20. Counterparts.** This Easement may be executed in two or more counterparts, each of which shall be deemed to be an original, but when taken together shall constitute one and the same instrument.

**21. Recording.** Grantor agrees to execute a Memorandum of this Easement, and any amended Memorandum of Easement reflecting any material modifications to this Easement, which Grantee may record in the office of the County Clerk of Ventura County, California.

**22. Notices.** All notices hereunder must be in writing and shall be deemed validly given if sent by certified mail, return receipt requested or by commercial courier, provided the courier's regular business is delivery service and provided further that it guarantees delivery to the addressee by the end of the next business day following the courier's receipt from the sender, addressed as follows (or any other address that the Party to be notified may have designated to the sender by like notice):

GRANTOR: United Water Conservation District  
1701 North Lombard Street, Suite 200  
Oxnard California 93030

GRANTEE: Los Angeles SMSA Limited Partnership,  
d/b/a Verizon Wireless  
180 Washington Valley Road  
Bedminster, New Jersey 07921  
Attention: Network Real Estate  
Re: Lirio

Notice shall be effective upon actual receipt or refusal as shown on the receipt obtained pursuant to the foregoing.

IN WITNESS WHEREOF, this Grant of Easement has been executed and delivered as of the day and year first above written.

**GRANTOR:**

United Water Conservation District, a public district

By: \_\_\_\_\_

Name: \_\_\_\_\_


Title: \_\_\_\_\_

Date: \_\_\_\_\_

**GRANTEE:**

Los Angeles SMSA Limited Partnership, a  
California limited partnership dba Verizon Wireless

By: AirTouch Cellular Inc., its General Partner

By:  \_\_\_\_\_

Name: Jill Flynn

Title: Sr Manager Real Estate

Date: 8/03/2022

**EXHIBIT "A"**

The Property

See attached

**EXHIBIT A**  
**LEGAL DESCRIPTION**

ALL THAT CERTAIN REAL PROPERTY SITUATED IN THE COUNTY OF VENTURA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

PARCEL 1:

THOSE PORTIONS OF LOTS 10, 11, 12 AND 13, RANCHO SANTA CLARA DEL NORTE, IN THE COUNTY OF VENTURA, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY IN BOOK 3, PAGE 26 OF MAPS, LYING WITH ASSESSORS PARCEL NO. 109-0-010-035, BEING A PORTION OF THE PROPERTY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE CENTER LINE OF LOS ANGELES AVENUE (FORMERLY DEL NORTE AVENUE) WITH THE CENTER LINE OF VINEYARD AVENUE, AS SAID AVENUES ARE SHOWN ON SAID MAP;

THENCE ALONG THE CENTER LINE OF SAID LOS ANGELES AVENUE, SOUTH 50° 20' 00" EAST 860 FEET TO A NAIL SET AT THE INTERSECTION WITH THE SOUTHWESTERLY PROLONGATION OF THE SOUTHEASTERLY LINE OF THE LAND CONVEYED TO UNITED CONCRETE PIPE CORPORATION BY DEED RECORDED JULY 16, 1945, AS DOCUMENT NO. 8614, IN BOOK 721, PAGE 451 OF OFFICIAL RECORDS;

THENCE ALONG SAID PROLONGATION AND SAID SOUTHEASTERLY LINE, NORTH 39° 39' 08" EAST 280.07 FEET, AT 30.07 FEET A 4 INCH X 4 INCH POST SET IN CONCRETE IN THE NORTHEASTERLY LINE OF SAID LOS ANGELES AVENUE, AT 280.07 FEET A 1-1/4 INCH IRON PIPE, MARKED "R.E. 606", SET AT THE INTERSECTION WITH A LINE WHICH IS PARALLEL WITH AND LINE, FROM THE NORTHEASTERLY LINE OF SAID LOS ANGELES AVENUE AND BEING THE TRUE POINT OF BEGINNING;

1ST: THENCE ALONG SAID PARALLEL LINE, SOUTH 50° 20' 00" EAST 2743.39 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

2ND: THENCE, NORTH 34° 55' 04" EAST 2140.63 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

3RD: THENCE, NORTH 50° 19' 53" WEST 708.22 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

4TH: THENCE, NORTH 38° 40' 21" EAST 162.51 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

5TH: THENCE, NORTH 44° 52' 33" WEST 896.14 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

6TH: THENCE, NORTH 30° 50' 52" EAST 200.07 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

7TH: THENCE, NORTH 44° 47' 09" WEST 735.81 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

8TH: THENCE, NORTH 47° 40' 18" EAST 581.32 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

9TH: THENCE, NORTH 62° 32' 35" EAST 186.73 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

10TH: THENCE, NORTH 36° 00' 40" EAST 613.77 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

11TH: THENCE, NORTH 53° 28' 03" EAST 201.02 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

**EXHIBIT A  
(Continued)**

12TH: THENCE, NORTH 44° 09' 28" EAST 331.92 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

13TH: THENCE, NORTH 7° 48' 28" WEST 125.43 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606, SET ON THE GRANT LINE BETWEEN LOT 10 OF THE RANCHO SANTA CLARA DEL NORTE AND LOT 83 OF THE RANCHO SANTA PAULA Y SATICOY, WHICH BEARS SOUTH 70° 37' 52" WEST 84.15 FEET FROM PUNTA DE LA LOMA, SO CALLED, THE COMMON CORNER TO THE RANCHO SANTA PAULA Y SATICOY, RANCHO SANTA CLARA DEL NORTE, AND TOWNSHIP 2 NORTH, RANGE 21 WEST, SAN BERNARDINO MERIDIAN, AND MARKED BY A 1/2-INCH IRON ROD;

14TH: THENCE, SOUTH 70° 37' 52" WEST 2104.18 FEET ALONG THE SAID GRANT LINE; AT 123.18 FEET A 1-1/4 INCH IRON PIPE MARKED R.E. 606; AT 1834.59 FEET A 1-1/2 INCH IRON PIPE AT THE INTERSECTION OF THE LOT LINE BETWEEN LOTS 83 AND 84 OF THE RANCHO SANTA PAULA Y SATICOY WITH THE SAID GRANT LINE; AT 2104.18 FEET A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

15TH: THENCE, SOUTH 11° 01' 23" WEST 397.80 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

16TH: THENCE, NORTH 74° 20' 13" EAST 176.29 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

17TH: THENCE, NORTH 62° 05' 13" EAST 894.46 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

18TH: THENCE, SOUTH 55° 51' 07" EAST 244.97 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

19TH: THENCE, SOUTH 34° 08' 53" WEST 30 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

20TH: THENCE, NORTH 55° 51' 07" WEST 226.92 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

21ST: THENCE, SOUTH 62° 05' 13" WEST 879.63 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

22ND: THENCE, SOUTH 74° 20' 13" WEST 170.95 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

23RD: THENCE, SOUTH 31° 35' 49" EAST 545.71 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

24TH: THENCE, SOUTH 38° 14' 33" WEST 489.10 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

25TH: THENCE, SOUTH 31° 39' 42" EAST 154.20 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

26TH: THENCE, SOUTH 28° 08' 51" WEST 202.27 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

27TH: THENCE, SOUTH 43° 22' 57" WEST 346.46 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

28TH: THENCE, SOUTH 59° 13' 09" WEST 378.64 FEET TO A 1-1/4 INCH IRON PIPE MARKED "R.E. 606"; SET AT THE INTERSECTION WITH THE NORTHEASTERLY PROLONGATION OF THE SOUTHEASTERLY LINE OF SAID LAND OF UNITED CONCRETE PIPE CORPORATION;

29TH: THENCE ALONG SAID PROLONGATION AND SAID SOUTHEASTERLY LINE, SOUTH 39° 39' 08" WEST 843.20 FEET; AT 60.08 FEET A 3/4 INCH IRON PIPE; AT 843.20 FEET THE TRUE POINT OF BEGINNING.

EXCEPT THEREFROM ALL OIL, GAS AND OTHER HYDROCARBON SUBSTANCES LYING IN AND UNDER SAID LAND, INCLUDING THE RIGHT TO DRILL FOR, DEVELOP, AND PRODUCE SAID SUBSTANCES BY MEANS OF SLANT HOLES FROM LANDS RETAINED BY GRANTOR, BUT WITHOUT THE RIGHT EVER TO

81G28 CLTA Guarantee Form No. 28 (06-05-14) Page 6

© California Land Title Association. All rights reserved.

The use of this Form is restricted to CLTA subscribers in good standing as of the date of use. All other uses are prohibited. Reprinted under license or express permission from the California Land Title Association.

**EXHIBIT A**  
**(Continued)**

USE THE SURFACE OF SAID REAL PROPERTY OR THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET FOR THE PURPOSE OF DRILLING, EXPLORING FOR OR PRODUCING OIL, GAS OR OTHER HYDROCARBON SUBSTANCES FOR ANY OTHER PURPOSE, AS RESERVED BY JOHN LLOYD-BUTLER, A MARRIED MAN, IN DEED RECORDED SEPTEMBER 7, 1955, AS DOCUMENT NO. 35134 IN BOOK 1326, PAGE 57 OF OFFICIAL RECORDS.

**NOTE: THIS COMPANY HAS PROVIDED SAID DESCRIPTION AS AN ACCOMMODATION FOR THE PURPOSE OF FACILITATING THIS REPORT. SAID DESCRIPTION MAY NOT AN INSURABLE PARCEL PURSUANT TO THE SUBDIVISION MAP ACT OF THE STATE OF CALIFORNIA AND SHOULD NOT BE RELIED UPON TO CONVEY OR ENCUMBER SAID LAND, UNTIL APPROVED BY THE APPROPRIATE GOVERNING AGENCY.**

**PARCEL 2:**

A NON-EXCLUSIVE EASEMENT FOR ROAD PURPOSES OVER, IN AND ALONG THAT PORTION OF LOT 10, RANCHO SANTA CLARA DEL NORTE, IN THE COUNTY OF VENTURA, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY IN BOOK 3, PAGE 26 OF MAPS, DESCRIBED AS FOLLOWS:

A STRIP OF LAND 30 FEET IN WIDTH LYING BETWEEN THE FOLLOWING COURSES AS RECITED IN THE HEREINBEFORE DESCRIBED PARCEL 1:

THE 18TH AND 20TH COURSES, RECITED AS "SOUTH 55° 51' 07" EAST 244.97 FEET AND NORTH 55° 51' 07" EAST 226.92 FEET", RESPECTIVELY, BETWEEN THE 17TH AND 21ST COURSES RECITED AS "NORTH 62° 05' 13" EAST 894.46 FEET AND SOUTH 62° 05' 13" WEST 879.63 FEET", RESPECTIVELY, AND BETWEEN THE 16TH AND 22ND COURSES RECITED AS "NORTH 74° 20' 13" EAST 176.29 FEET AND SOUTH 74° 20' 13" WEST 170.95 FEET" RESPECTIVELY, AND EXTENDING FROM THE 19TH COURSE TO A LINE BETWEEN THE SOUTHWESTERLY TERMINUS OF THE 22ND AND THE 16TH COURSES OF SAID PARCEL 1.

**PARCEL 3:**

A NON-EXCLUSIVE EASEMENT FOR ROAD PURPOSES OVER, IN AND ALONG THAT PORTION OF LOT 10, RANCHO SANTA CLARA DEL NORTE, IN THE COUNTY OF VENTURA, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY IN BOOK 3, PAGE 26 OF MAPS, DESCRIBED AS FOLLOWS:

A STRIP OF LAND 30 FEET IN WIDTH AND EXTENDING IN A GENERAL SOUTHWESTERLY DIRECTION FROM THE SOUTHWESTERLY TERMINUS OF THE HEREINBEFORE DESCRIBED PARCEL 2 TO THE 6TH COURSE OF THE LAND DESCRIBED AS PARCEL 2 IN THE DEED TO UNITED WATER CONSERVATION DISTRICT, RECORDED SEPTEMBER 7, 1955 IN BOOK 1326, PAGE 57 OFFICIAL RECORDS.

**PARCEL 4:**

A NON-EXCLUSIVE EASEMENT FOR ROAD PURPOSES OVER, IN AND ALONG THAT PORTION OF LOT 11, RANCHO SANTA CLARA DEL NORTE, IN THE COUNTY OF VENTURA, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY IN BOOK 3, PAGE 26 OF MAPS, DESCRIBED AS FOLLOWS:

A STRIP OF LAND 50 FEET IN WIDTH LYING PARALLEL WITH AND ADJOINING THE SOUTHWESTERLY PROLONGATION OF THE 29TH COURSE, RECITED AS "SOUTH 39° 39' 08" WEST 843.20 FEET" IN THE 81G28 CLTA Guarantee Form No. 28 (06-05-14)

Page 7

Condition of Title Guarantee

© California Land Title Association. All rights reserved.

The use of this Form is restricted to CLTA subscribers in good standing as of the date of use. All other uses are prohibited. Reprinted under license or express permission from the California Land Title Association.



**EXHIBIT A**  
**(Continued)**

HEREINBEFORE DESCRIBED PARCEL 1 AND EXTENDING FROM THE NORTHEASTERLY LINE OF LOS ANGELES AVENUE (FORMERLY DEL NORTE AVENUE) TO THE 1ST COURSE OF SAID PARCEL 1.

**PARCEL 5:**

A NON-EXCLUSIVE EASEMENT FOR AN UNDERGROUND CONDUIT AND ROAD (FOR PURPOSE OF SERVICING SAID CONDUIT) OVER, IN AND ALONG THOSE PORTIONS OF LOTS 12 AND 13, RANCHO SANTA CLARA DEL NORTE, IN THE COUNTY OF VENTURA, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY IN BOOK 3, PAGE 26 OF MAPS, DESCRIBED AS FOLLOWS:

A STRIP OF LAND 50 FEET IN WIDTH LYING PARALLEL WITH AND ADJOINING THE SOUTHWESTERLY PROLONGATION OF THE 2ND COURSE, RECITED AS "NORTH 34° 55' 04" EAST 2140.63 FEET" IN THE HEREINBEFORE DESCRIBED PARCEL 1 AND EXTENDING FROM THE NORTHEASTERLY LINE OF LOS ANGELES AVENUE (FORMERLY DEL NORTE AVENUE) TO THE 1ST COURSE OF SAID PARCEL 1.

ALSO AN ADJOINING TRIANGULAR-SHAPED STRIP OF LAND AT THE INTERSECTION OF THE SOUTHWESTERLY PROLONGATION OF SAID 2ND COURSE OF SAID PARCEL 1 WITH SAID NORTHEASTERLY LINE OF SAID LOS ANGELES AVENUE, HAVING SIDES OF TRIANGLE FORMED BY THE FOLLOWING:

1ST: NORTHEASTERLY FROM SAID INTERSECTION 40 FEET ALONG SAID PROLONGATION,

2ND: SOUTHEASTERLY FROM SAID INTERSECTION 20 FEET ALONG SAID NORTHEASTERLY LINE OF SAID LOS ANGELES AVENUE AND,

3RD: A LINE BETWEEN THE NORTHEASTERLY TERMINUS OF THE 40 FEET SIDE AND THE SOUTHEASTERLY TERMINUS OF THE 20 FEET SIDE.

**PARCEL 6:**

A NON-EXCLUSIVE EASEMENT FOR AN UNDERGROUND PIPELINE AND ROAD OVER, IN AND ALONG THAT PORTION OF LOT 11, RANCHO SANTA CLARA DEL NORTE, IN THE COUNTY OF VENTURA, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY IN BOOK 3, PAGE 26 OF MAPS, DESCRIBED AS FOLLOWS:

A STRIP OF LAND 30 FEET IN WIDTH LYING PARALLEL WITH AND ADJOINING THE SOUTHEASTERLY PROLONGATION OF THE 2ND COURSE RECITED AS "SOUTH 50° 19' 36" EAST 357.01 FEET" IN THE LAND DESCRIBED AS PARCEL 2 IN THE DEED TO UNITED WATER CONSERVATION DISTRICT, RECORDED SEPTEMBER 7, 1955 IN BOOK 1326, PAGE 57 OFFICIAL RECORDS AND EXTENDING FROM THE 3RD COURSE OF SAID PARCEL 2 TO THE 29TH COURSE OF THE HEREINBEFORE DESCRIBED PARCEL 1.

**PARCEL 7:**

THOSE PORTIONS OF LOTS 11, 12 AND 13, RANCHO SANTA CLARA DEL NORTE, IN THE COUNTY OF VENTURA, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY IN BOOK 3, PAGE 26 OF MAPS, DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE CENTER LINE OF LOS ANGELES AVENUE (FORMERLY DEL NORTE AVENUE) WITH THE CENTER LINE OF VINEYARD AVENUE, AS SAID AVENUES ARE SHOWN ON SAID MAP;

81G28 CLTA Guarantee Form No. 28 (06-05-14)  
Condition of Title Guarantee

Page 8

© California Land Title Association. All rights reserved.

The use of this Form is restricted to CLTA subscribers in good standing as of the date of use. All other uses are prohibited. Reprinted under license or express permission from the California Land Title Association.

**EXHIBIT A  
(Continued)**

THENCE ALONG THE CENTER LINE OF SAID LOS ANGELES AVENUE.

THE SOUTH 50° 20' 00" EAST 560.00 FEET TO A NAIL SET IN THE INTERSECTION WITH THE SOUTHWESTERLY PROLONGATION OF THE SOUTHEASTERLY LINE OF THE LAND DESCRIBED IN THE DEED TO UNITED CONCRETE PIPE CORPORATION, BY DEED RECORDED JULY 16, 1946 AS DOCUMENT NO. 8614 IN BOOK 721, PAGE 451 OF OFFICIAL RECORDS;

THENCE ALONG SAID PROLONGATION AND SAID SOUTHEASTERLY LINE, NORTH 39° 39' 08" EAST 30.07 FEET TO A 4 INCH X 4 INCH POST SET IN CONCRETE IN THE NORTHEASTERLY LINE OF SAID LOS ANGELES AVENUE AND BEING THE TRUE POINT OF BEGINNING;

1ST: THENCE CONTINUING ALONG SAID SOUTHEASTERLY LINE, NORTH 39° 39' 08" EAST 250.00 FEET TO A 1-1/4 INCH IRON PIPE, MARKED "R.E. 606";

2ND: THENCE PARALLEL WITH THE NORTHEASTERLY LINE OF SAID LOS ANGELES AVENUE, SOUTH 50° 20' 00" EAST 2743.39 FEET TO A 1-1/4 INCH IRON PIPE, MARKED "R.E. 606";

3RD: THENCE, SOUTH 34° 55' 04" WEST 250.86 FEET TO A 4 INCH X 4 INCH POST SET IN SAID NORTHEASTERLY LINE OF SAID LOS ANGELES AVENUE;

4TH: THENCE ALONG SAID NORTHEASTERLY LINE, NORTH 50° 20' 00" WEST 2764.10 FEET TO THE TRUE POINT OF BEGINNING.

EXCEPT THEREFROM ALL MINERALS, OIL, GAS AND OTHER HYDROCARBON SUBSTANCES, TOGETHER WITH THE RIGHT TO DIRECTIONALLY DRILL AND PASS THROUGH SAID PROPERTY AND TO EXPLORE FOR AND PRODUCE THE SAME FROM OTHER LANDS IN THE VICINITY, WITHOUT, HOWEVER, THE RIGHT TO ENTER UPON OR DRILL THROUGH THE SURFACE OR UPPER FIVE HUNDRED FEET (500') OF THE SUBSURFACE OF SAID PROPERTY, AS PROVIDED IN DEED RECORDED MAY 22, 1987 AS INSTRUMENT NO. 87-79086, OFFICIAL RECORDS.

**APN: 109-0-010-035 and 109-0-010-070**

**EXHIBIT "B"**

**Easement Area**

See attached

MODIFICATION TO EXISTING WIRELESS COMMUNICATIONS UNMANNED  
AERIAL SYSTEM TO CORRECT THE FOLLOWING:

1. INSTALLATION OF ONE (1) NEW 220 TAPPING RATED WIRE HOLE WITHIN THE  
ROW-W STUD OUT TO METER-POINT BY FIBER PROVIDER
2. PROPERTY & S.W. LINE BY NEW 220 TAPPING RATED WIRE HOLE WITHIN FRONT  
PROPERTY
3. INSTALLATION OF NEW TWO (2) x 6 CONDUIT TO BE BRANCHED FROM FIBER  
METER-POINT, THROUGH METERS, NEW N.E. 1/4, TO EXISTING VERSION WIRELESS  
LOOP (SEE APPROX. LIGHTING - 2477)
4. NEW 220 TAPPING CONDUIT TO WIRELESS WIRELESS  
LOOP, SPLITTER BOX NEW 220 TAPPING RATED N.E. 1/4 AT PROPERTY LINE
5. C.C. TO ROUTE APPROX. 20' OF 1" MINIDUCT FROM JUNCTION BOX TO ENTRY  
POINT, THRU TO VERSION WIRELESS TOOL MACH.

CONSTRUCTION DATA:

INTERSECTION:	COUNTY OF YEMALA
TYPE OF CONSTRUCTION:	NEW
OCCUPANCY:	U

LEGAL DESCRIPTION	
ASSESSOR'S IDENTIFICATION	
APN 029-000-120	
COUNTY OF VENTURA, STATE OF CALIFORNIA, AS PER MAP THEREOF RECORDED IN VOLUME 26 OF MAPS IN THE OFFICE OF THE COUNTY CLERK, SAN JOSE, CALIFORNIA.	
BEGINNING AT A POINT BEING THE CORNER OF THE INTERSECTION OF THE CENTERLINE OF DEL MONTE AVENUE 60 FEET WIDE WITH THE INTERSECTION OF THE PRODUCEWAY NORTH-EASTERNLY OF THE CENTERLINE OF ANEYARD DRIVE 100 FEET WIDE; THENCE NORTH 89°58'00" WEST 100 FEET TO A POINT INDICATED ON THE SAID MAP; THENCE WITH THE CENTERLINE OF DEL MONTE AVENUE 1571 SOUTH 10°20' EAST 689 FEET AT 1.66 FEET A POINT FROM THE CORNER OF THE INTERSECTION OF THE CENTERLINE OF ANEYARD DRIVE SOUTH 35°40' WEST 30 FEET AT 860 FEET A POINT; THENCE 2002 NORTH 89°58'00" WEST 160 FEET TO A POINT; THENCE 3802 NORTH 60°22' WEST 692.81 FEET TO A POINT; THENCE WITH SOUTH 55°11'30" WEST 1031.07 FEET TO THE POINT OF BEGINNING.	
SOUTHWESTERLY FROM ALL THAT PORTION OF SAID LAND LYING EXCEPT THEREFROM THE NORTH-EASTERNLY BOUNDARY OF PARCEL 7323-1, RECORDED JANUARY 18, 1989 AS INSTRUMENT NO. 93-00044 OF OFFICIAL RECORDS.	
THE ENTIRE TRACT BEING THE WHOLE INTEREST IN AND TO ALL THE OIL AND GAS MINERAL RIGHTS AND MINERAL IN, ON AND UNDER THE SURFACE OF THE SAID LAND AND OF THE SUBSURFACE THEREOF TO A DEPTH OF 660 FEET, OF RECORD FOR DEVELOPMENT ON DRILLING AND 3005 ACRES.	
SEE SHEET LS-1 FOR FULL LEGAL DESCRIPTION	
SHEET INDEX	
SHEET NUMBER	DESCRIPTION
LS-1	TITLE SHEET
LS-2	TOPOGRAPHIC SURVEY
LS-3	TOPOGRAPHIC SURVEY
LS-4	TOPOGRAPHIC SURVEY
LS-5	SITE PLAN
LS-6	SITE PLAN DETAILS
LS-7	GROUNDWATER FLOW
NOTES	

SPECIAL INSPECTIONS

SPECIAL INSPECTIONS REQUIRED FOR THE WORK DONE

[illegible]

COMMONWEALTH LAND THE INSURANCE COMPANY, CONVENTION  
OF THE CUPPETER, ORDER NO. 92016310-920-CM-CMS,  
DATED AS OF JANUARY 12, 2022.

[illegible]

COMMONWEALTH LAND TITLE INSURANCE COMPANY, CONDITION  
OF TITLE GUARANTEE ORDER NO. 92016011-920-CWM-CWG,  
DATED AS OF JANUARY 12, 2022.

[illegible]

ALL THAT CERTAIN REAL PROPERTY SITUATED IN THE COUNTY OF VENTURA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

PARCEL 1:

[illegible]

**BASED ON RECORDS:**  
 ESTABLISHED BY C.P.S. RESOLUTIONS AND PROCEEDED TO  
 CALIFORNIA JUNE 5, STATE PLANS AND CARPORT SYSTEM  
 OF 1983.

**ASSESSOR'S IDENTIFICATION:**  
 VENTURA COUNTY A.P.N. 169-0-010-210, 035 & 070

**AREA:**  
 19.80 ACRES PER VENTURA COUNTY ASSESSOR

**BENCH MARK REFERENCE:**

Approach

**verizon**<sup>✓</sup>

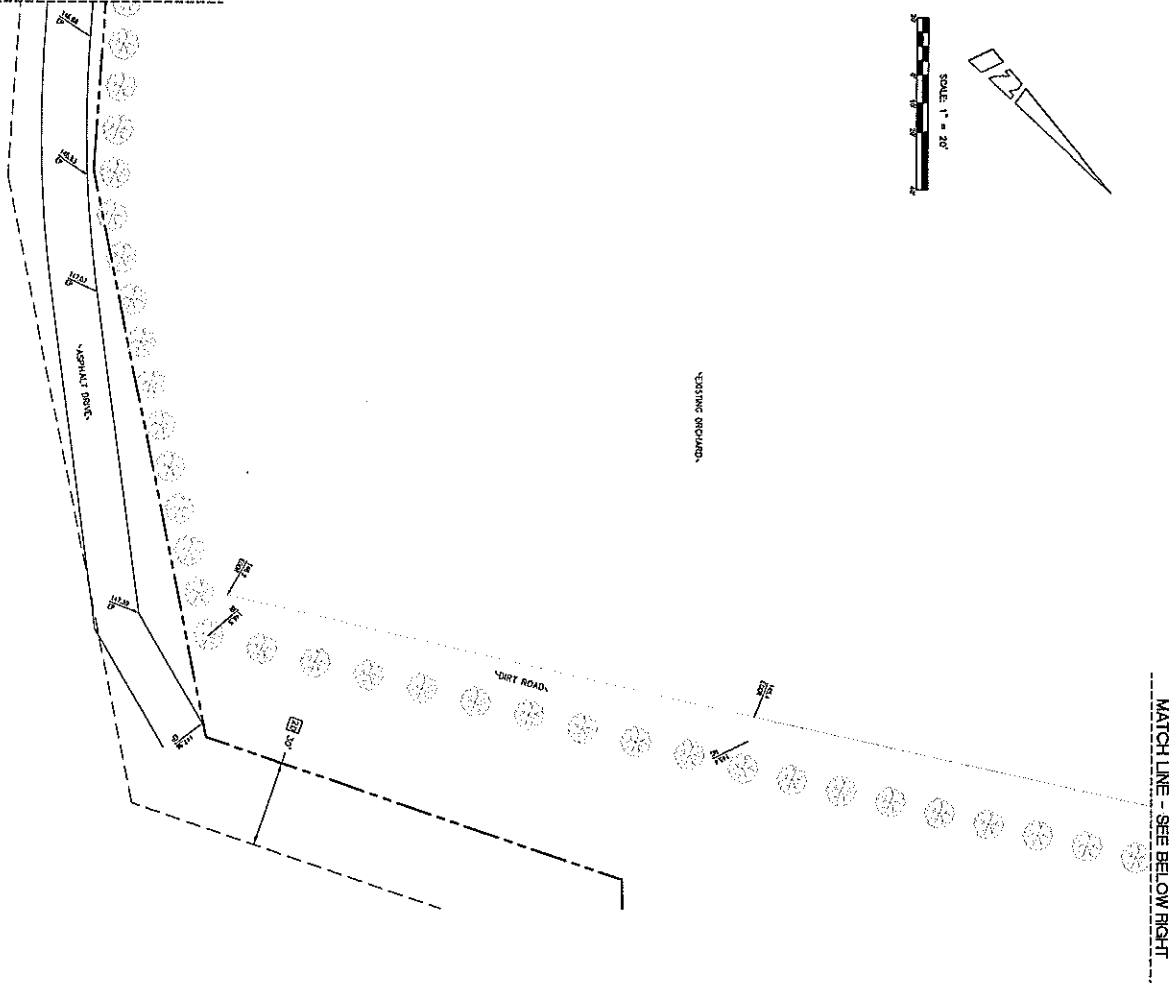
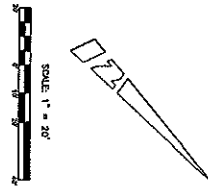
15505 Sand Canyon Ave.  
Building "D", First Floor







MATCH LINE - SEE SHEET LS-3



MATCH LINE - SEE ABOVE LEFT



- LEGEND**
- BL - BOUNDARY LINE
  - CL - CENTER LINE
  - CP - CORNER POINT
  - CS - CENTER OF GRAVITY
  - CU - CURVE
  - CV - CURVE VERGENCE
  - DE - DEPRESSION
  - EL - ELEVATION
  - EP - ELEVATION POINT
  - FO - FENCE
  - FR - FENCE RAIL
  - FT - FENCE TOP
  - GR - GRADE
  - HA - HATCH
  - HE - HATCH ELEVATION
  - HO - HATCH ORIGIN
  - HY - HATCH YIELD
  - IR - IRON RAIL
  - LI - LINE
  - LU - LINE UNDER
  - LV - LINE VERT
  - MA - MASONRY
  - MC - MASONRY CORNER
  - ME - MASONRY EDGE
  - MI - MASONRY INTERIOR
  - ML - MASONRY LINE
  - MO - MASONRY OUTLINE
  - MP - MASONRY POINT
  - MS - MASONRY SURFACE
  - MT - MASONRY TOP
  - NU - NUT
  - OW - OPEN WORK
  - PE - PILE
  - PI - PILE INTERIOR
  - PL - PILE LINE
  - PO - PILE ORIGIN
  - PR - PILE RAIL
  - PT - PILE TOP
  - RA - RAILROAD
  - RE - RAILROAD ELEVATION
  - RI - RAILROAD INTERIOR
  - RO - RAILROAD ORIGIN
  - RU - RAILROAD UNDER
  - RV - RAILROAD VERGENCE
  - SA - SAND
  - SE - SAND ELEVATION
  - SI - SAND INTERIOR
  - SO - SAND ORIGIN
  - SV - SAND VERGENCE
  - TA - TANK
  - TE - TANK ELEVATION
  - TI - TANK INTERIOR
  - TO - TANK ORIGIN
  - TV - TANK VERGENCE
  - WA - WALL
  - WE - WALL ELEVATION
  - WI - WALL INTERIOR
  - WO - WALL ORIGIN
  - WV - WALL VERGENCE
  - XY - XYLINE
  - YX - XYLINE
  - ZY - ZYLINE
  - YZ - ZYLINE
  - ZZ - ZZLINE
  - ZZ - ZZLINE

SEE SHEET LS-1 FOR TITLE INFO  
SEE SHEET LS-2 FOR BOUNDARY INFO  
SEE SHEET LS-3 FOR ADDITIONAL SITE DETAILS

LS-4

**BERT HARRIS**  
AND ASSOCIATES, INC.  
LAND SURVEYING & MAPPING  
3168 AIRWAY AVENUE, SUITE K1  
COSTA MESA, CALIFORNIA 92626  
714 557-1547 OFFICE  
714 557-1568 FAX  
JN. 803 513



LIRIO  
3135 LOS ANGELES AVE.  
OXNARD, CA 93036

TOPOGRAPHIC SURVEY

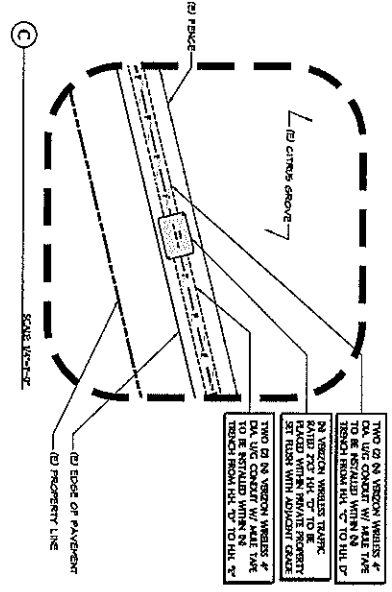
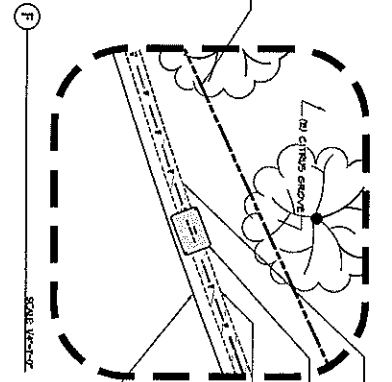
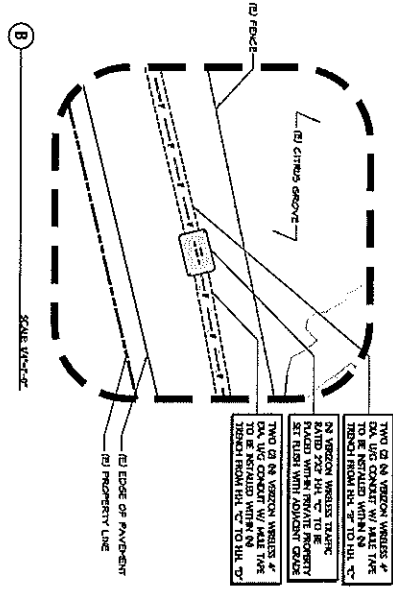
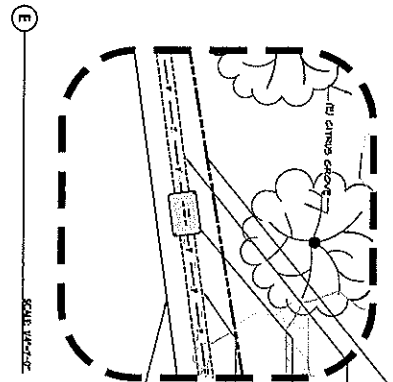
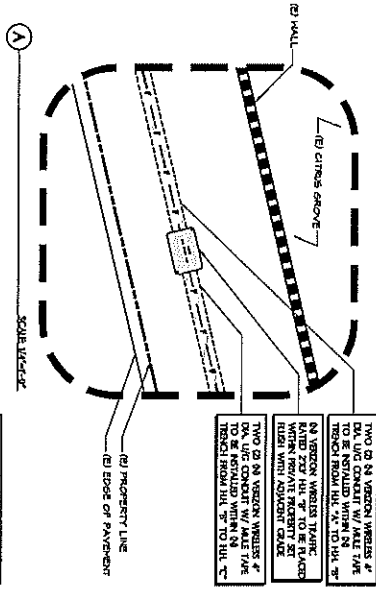
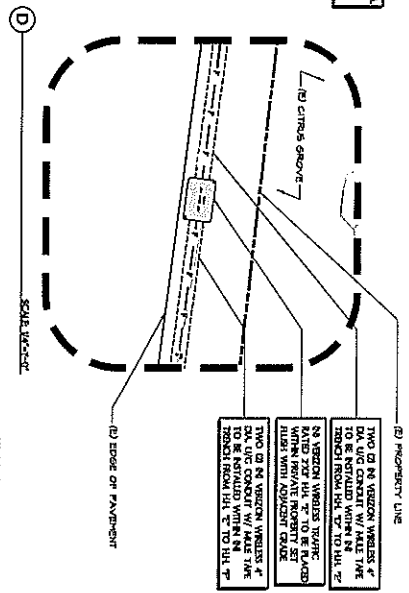
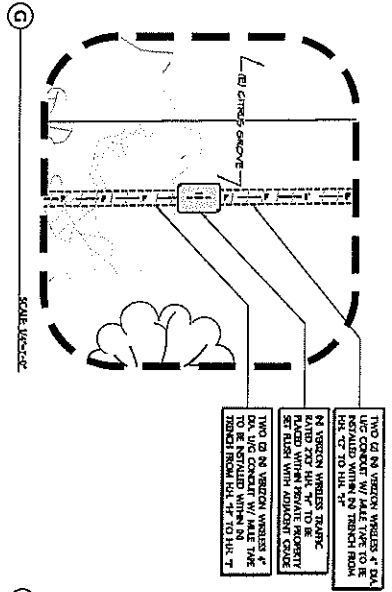
**verizon**

15505 Sand Canyon Ave.  
Building "D", First Floor  
Irvine, CA 92618

(949) 266-7000

Dept. Approved Data		
A&C		
RE		
INT		
EE		
OPS		
EE/OUT		

Dept. Approved Date	
A&C	
RE	
RF	
INT	
EE	
OPS	
EE/OUT	



TRENCH RUNS	
A.P.N.	LENGTH
109-0-010-035	912'
109-0-010-035	0'
109-0-010-035	561'
109-0-010-035	1019'

**SITE PLAN DETAILS**  
NORTH  
SCALE: 1"=100'  
GRAPHIC SCALE

Z.A. CASE NO.:

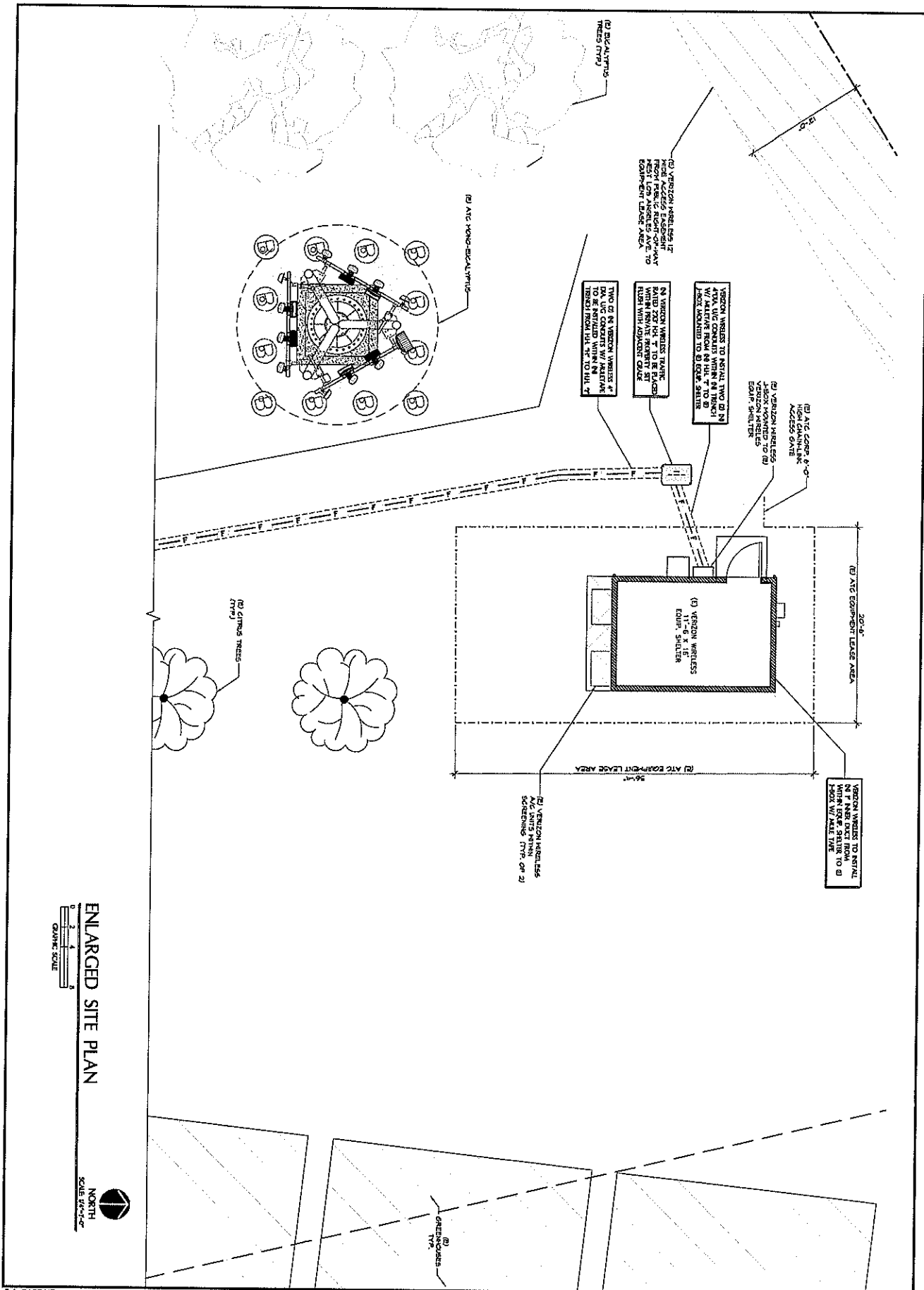
Revisions	By	Date
1	05/19/22	05
2		
3		
4		
5		
6		
7		
8		
9		
10		



**SITE NAME: "LIRIO" (FIBER)**  
3135 LOS ANGELES AVE.  
OXNARD, CA 93036  
SITE PLAN DETAILS  
LEASE EXHIBIT



Dept. Approved	Date
AAC	
RE	
INT	
EE	
OPS	
EE/OUT	



ENLARGED SITE PLAN

GRAPHIC SCALE



2.A. CASE NO.:

Revisions	DATE	BY	REVIEW
0	01/15/12	W. L. REVER	
1			
2			
3			
4			
5			
6			
7			
8			
9			

LE-2

1st Rev. 2/20/11



SITE NAME: "LIRIO"  
(FIBER)  
3135 LOS ANGELES AVE.  
OXNARD, CA 93036  
ENLARGED SITE PLAN  
LEASE EXHIBIT

**verizon**  
15505 Sand Canyon Ave.  
Building 101, First Floor  
Irvine, CA 92618  
(949) 266-7000

Dispt. Approved On	DATE
A&C	
RE	
RF	
INT	
EE	
OPS	
EE/OUT	

**Upon Recording, Return to:**

McGuireWoods LLP  
1800 Century Park East, 8<sup>th</sup> Floor  
Los Angeles, CA 90067  
Attn: Reena R. Yuba

[Space above this line for Recorder's Use]

**MEMORANDUM OF GRANT OF EASEMENT**

THIS MEMORANDUM OF GRANT OF EASEMENT evidences that a Grant of Easement ("Easement") was entered into as of \_\_\_\_\_, by and between United Water Conservation District, a public district ("Grantor"), and Los Angeles SMSA Limited Partnership, a California limited partnership dba Verizon Wireless ("Grantee") concerning that certain real property of Grantor located off of Los Angeles Avenue in Oxnard, California, and which is described in Exhibit "A" attached hereto ("Grantor's Property"), for ingress and egress and utilities. The utilities and access routes are more particularly described in Exhibit B attached to the Easement.

IN WITNESS WHEREOF, hereunto, Grantor and Grantee have caused this Memorandum of Grant of Easement to be duly executed on the date first written hereinabove.

**GRANTOR:**

United Water Conservation District, a public district

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**GRANTEE:**

Los Angeles SMSA Limited Partnership, a California limited liability company dba Verizon Wireless

By: AirTouch Cellular Inc., its General Partner

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF \_\_\_\_\_ )

COUNTY OF \_\_\_\_\_ )

On \_\_\_\_\_, 2022, before me, \_\_\_\_\_, Notary Public, personally appeared \_\_\_\_\_, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

\_\_\_\_\_  
Notary Public

(Seal)



A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF California )  
COUNTY OF Orange )

On August 9, 2022, before me, Janice K Sorensen, Notary Public, personally appeared Jill Flynn, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

  
\_\_\_\_\_  
Notary Public

(Seal)



**EXHIBIT "A"**

**Legal Description of Grantor's Property**

See attached

**EXHIBIT A****LEGAL DESCRIPTION**

ALL THAT CERTAIN REAL PROPERTY SITUATED IN THE COUNTY OF VENTURA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

PARCEL 1:

THOSE PORTIONS OF LOTS 10, 11, 12 AND 13, RANCHO SANTA CLARA DEL NORTE, IN THE COUNTY OF VENTURA, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY IN BOOK 3, PAGE 26 OF MAPS, LYING WITH ASSESSORS PARCEL NO. 109-0-010-035, BEING A PORTION OF THE PROPERTY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE CENTER LINE OF LOS ANGELES AVENUE (FORMERLY DEL NORTE AVENUE) WITH THE CENTER LINE OF VINEYARD AVENUE, AS SAID AVENUES ARE SHOWN ON SAID MAP;

THENCE ALONG THE CENTER LINE OF SAID LOS ANGELES AVENUE, SOUTH 50° 20' 00" EAST 860 FEET TO A NAIL SET AT THE INTERSECTION WITH THE SOUTHWESTERLY PROLONGATION OF THE SOUTHEASTERLY LINE OF THE LAND CONVEYED TO UNITED CONCRETE PIPE CORPORATION BY DEED RECORDED JULY 16, 1945, AS DOCUMENT NO. 8614, IN BOOK 721, PAGE 451 OF OFFICIAL RECORDS;

THENCE ALONG SAID PROLONGATION AND SAID SOUTHEASTERLY LINE, NORTH 39° 39' 08" EAST 280.07 FEET, AT 30.07 FEET A 4 INCH X 4 INCH POST SET IN CONCRETE IN THE NORTHEASTERLY LINE OF SAID LOS ANGELES AVENUE, AT 280.07 FEET A 1-1/4 INCH IRON PIPE, MARKED "R.E. 606", SET AT THE INTERSECTION WITH A LINE WHICH IS PARALLEL WITH AND LINE, FROM THE NORTHEASTERLY LINE OF SAID LOS ANGELES AVENUE AND BEING THE TRUE POINT OF BEGINNING;

1ST: THENCE ALONG SAID PARALLEL LINE, SOUTH 50° 20' 00" EAST 2743.39 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

2ND: THENCE, NORTH 34° 55' 04" EAST 2140.63 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

3RD: THENCE, NORTH 50° 19' 53" WEST 708.22 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

4TH: THENCE, NORTH 38° 40' 21" EAST 162.51 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

5TH: THENCE, NORTH 44° 52' 33" WEST 896.14 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

6TH: THENCE, NORTH 30° 50' 52" EAST 200.07 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

7TH: THENCE, NORTH 44° 47' 09" WEST 735.81 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

8TH: THENCE, NORTH 47° 40' 18" EAST 581.32 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

9TH: THENCE, NORTH 62° 32' 35" EAST 186.73 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

10TH: THENCE, NORTH 36° 00' 40" EAST 613.77 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

11TH: THENCE, NORTH 53° 28' 03" EAST 201.02 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

**EXHIBIT A  
(Continued)**

12TH: THENCE, NORTH 44° 09' 28" EAST 331.92 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

13TH: THENCE, NORTH 7° 48' 28" WEST 125.43 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606, SET ON THE GRANT LINE BETWEEN LOT 10 OF THE RANCHO SANTA CLARA DEL NORTE AND LOT 83 OF THE RANCHO SANTA PAULA Y SATICOY, WHICH BEARS SOUTH 70° 37' 52" WEST 84.15 FEET FROM PUNTA DE LA LOMA, SO CALLED, THE COMMON CORNER TO THE RANCHO SANTA PAULA Y SATICOY, RANCHO SANTA CLARA DEL NORTE, AND TOWNSHIP 2 NORTH, RANGE 21 WEST, SAN BERNARDINO MERIDIAN, AND MARKED BY A 1/2-INCH IRON ROD;

14TH: THENCE, SOUTH 70° 37' 52" WEST 2104.18 FEET ALONG THE SAID GRANT LINE; AT 123.18 FEET A 1-1/4 INCH IRON PIPE MARKED R.E. 606; AT 1834.59 FEET A 1-1/2 INCH IRON PIPE AT THE INTERSECTION OF THE LOT LINE BETWEEN LOTS 83 AND 84 OF THE RANCHO SANTA PAULA Y SATICOY WITH THE SAID GRANT LINE; AT 2104.18 FEET A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

15TH: THENCE, SOUTH 11° 01' 23" WEST 397.80 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

16TH: THENCE, NORTH 74° 20' 13" EAST 176.29 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

17TH: THENCE, NORTH 62° 05' 13" EAST 894.46 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

18TH: THENCE, SOUTH 55° 51' 07" EAST 244.97 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

19TH: THENCE, SOUTH 34° 08' 53" WEST 30 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

20TH: THENCE, NORTH 55° 51' 07" WEST 226.92 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

21ST: THENCE, SOUTH 62° 05' 13" WEST 879.63 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

22ND: THENCE, SOUTH 74° 20' 13" WEST 170.95 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

23RD: THENCE, SOUTH 31° 35' 49" EAST 545.71 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

24TH: THENCE, SOUTH 38° 14' 33" WEST 489.10 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

25TH: THENCE, SOUTH 31° 39' 42" EAST 154.20 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

26TH: THENCE, SOUTH 28° 08' 51" WEST 202.27 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

27TH: THENCE, SOUTH 43° 22' 57" WEST 346.46 FEET TO A 1-1/4 INCH IRON PIPE MARKED R.E. 606;

28TH: THENCE, SOUTH 59° 13' 09" WEST 378.64 FEET TO A 1-1/4 INCH IRON PIPE MARKED "R.E. 606"; SET AT THE INTERSECTION WITH THE NORTHEASTERLY PROLONGATION OF THE SOUTHEASTERLY LINE OF SAID LAND OF UNITED CONCRETE PIPE CORPORATION;

29TH: THENCE ALONG SAID PROLONGATION AND SAID SOUTHEASTERLY LINE, SOUTH 39° 39' 08" WEST 843.20 FEET; AT 60.08 FEET A 3/4 INCH IRON PIPE; AT 843.20 FEET THE TRUE POINT OF BEGINNING.

EXCEPT THEREFROM ALL OIL, GAS AND OTHER HYDROCARBON SUBSTANCES LYING IN AND UNDER SAID LAND, INCLUDING THE RIGHT TO DRILL FOR, DEVELOP, AND PRODUCE SAID SUBSTANCES BY MEANS OF SLANT HOLES FROM LANDS RETAINED BY GRANTOR, BUT WITHOUT THE RIGHT EVER TO

81G28 CLTA Guarantee Form No. 28 (06-05-14) Page 6

Condition of Title Guarantee

© California Land Title Association. All rights reserved.

The use of this Form is restricted to CLTA subscribers in good standing as of the date of use. All other uses are prohibited. Reprinted under license or express permission from the California Land Title Association.

**EXHIBIT A  
(Continued)**

USE THE SURFACE OF SAID REAL PROPERTY OR THE SUBSURFACE THEREOF TO A DEPTH OF 500 FEET FOR THE PURPOSE OF DRILLING, EXPLORING FOR OR PRODUCING OIL, GAS OR OTHER HYDROCARBON SUBSTANCES FOR ANY OTHER PURPOSE, AS RESERVED BY JOHN LLOYD-BUTLER, A MARRIED MAN, IN DEED RECORDED SEPTEMBER 7, 1955, AS DOCUMENT NO. 35134 IN BOOK 1326, PAGE 57 OF OFFICIAL RECORDS.

**NOTE: THIS COMPANY HAS PROVIDED SAID DESCRIPTION AS AN ACCOMMODATION FOR THE PURPOSE OF FACILITATING THIS REPORT. SAID DESCRIPTION MAY NOT AN INSURABLE PARCEL PURSUANT TO THE SUBDIVISION MAP ACT OF THE STATE OF CALIFORNIA AND SHOULD NOT BE RELIED UPON TO CONVEY OR ENCUMBER SAID LAND, UNTIL APPROVED BY THE APPROPRIATE GOVERNING AGENCY.**

**PARCEL 2:**

A NON-EXCLUSIVE EASEMENT FOR ROAD PURPOSES OVER, IN AND ALONG THAT PORTION OF LOT 10, RANCHO SANTA CLARA DEL NORTE, IN THE COUNTY OF VENTURA, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY IN BOOK 3, PAGE 26 OF MAPS, DESCRIBED AS FOLLOWS:

A STRIP OF LAND 30 FEET IN WIDTH LYING BETWEEN THE FOLLOWING COURSES AS RECITED IN THE HEREINBEFORE DESCRIBED PARCEL 1:

THE 18TH AND 20TH COURSES, RECITED AS "SOUTH 55° 51' 07" EAST 244.97 FEET AND NORTH 55° 51' 07" EAST 226.92 FEET", RESPECTIVELY, BETWEEN THE 17TH AND 21ST COURSES RECITED AS "NORTH 62° 05' 13" EAST 894.46 FEET AND SOUTH 62° 05' 13" WEST 879.63 FEET", RESPECTIVELY, AND BETWEEN THE 16TH AND 22ND COURSES RECITED AS "NORTH 74° 20' 13" EAST 176.29 FEET AND SOUTH 74° 20' 13" WEST 170.95 FEET" RESPECTIVELY, AND EXTENDING FROM THE 19TH COURSE TO A LINE BETWEEN THE SOUTHWESTERLY TERMINUS OF THE 22ND AND THE 16TH COURSES OF SAID PARCEL 1.

**PARCEL 3:**

A NON-EXCLUSIVE EASEMENT FOR ROAD PURPOSES OVER, IN AND ALONG THAT PORTION OF LOT 10, RANCHO SANTA CLARA DEL NORTE, IN THE COUNTY OF VENTURA, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY IN BOOK 3, PAGE 26 OF MAPS, DESCRIBED AS FOLLOWS:

A STRIP OF LAND 30 FEET IN WIDTH AND EXTENDING IN A GENERAL SOUTHWESTERLY DIRECTION FROM THE SOUTHWESTERLY TERMINUS OF THE HEREINBEFORE DESCRIBED PARCEL 2 TO THE 6TH COURSE OF THE LAND DESCRIBED AS PARCEL 2 IN THE DEED TO UNITED WATER CONSERVATION DISTRICT, RECORDED SEPTEMBER 7, 1955 IN BOOK 1326, PAGE 57 OF OFFICIAL RECORDS.

**PARCEL 4:**

A NON-EXCLUSIVE EASEMENT FOR ROAD PURPOSES OVER, IN AND ALONG THAT PORTION OF LOT 11, RANCHO SANTA CLARA DEL NORTE, IN THE COUNTY OF VENTURA, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY IN BOOK 3, PAGE 26 OF MAPS, DESCRIBED AS FOLLOWS:

A STRIP OF LAND 50 FEET IN WIDTH LYING PARALLEL WITH AND ADJOINING THE SOUTHWESTERLY PROLONGATION OF THE 29TH COURSE, RECITED AS "SOUTH 39° 39' 08" WEST 843.20 FEET" IN THE 81G28 CLTA Guarantee Form No. 28 (06-05-14)

Page 7

Condition of Title Guarantee

© California Land Title Association. All rights reserved.

The use of this Form is restricted to CLTA subscribers in good standing as of the date of use. All other uses are prohibited. Reprinted under license or express permission from the California Land Title Association.

**EXHIBIT A  
(Continued)**

HEREINBEFORE DESCRIBED PARCEL 1 AND EXTENDING FROM THE NORTHEASTERLY LINE OF LOS ANGELES AVENUE (FORMERLY DEL NORTE AVENUE) TO THE 1ST COURSE OF SAID PARCEL 1.

**PARCEL 5:**

A NON-EXCLUSIVE EASEMENT FOR AN UNDERGROUND CONDUIT AND ROAD (FOR PURPOSE OF SERVICING SAID CONDUIT) OVER, IN AND ALONG THOSE PORTIONS OF LOTS 12 AND 13, RANCHO SANTA CLARA DEL NORTE, IN THE COUNTY OF VENTURA, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY IN BOOK 3, PAGE 26 OF MAPS, DESCRIBED AS FOLLOWS:

A STRIP OF LAND 50 FEET IN WIDTH LYING PARALLEL WITH AND ADJOINING THE SOUTHWESTERLY PROLONGATION OF THE 2ND COURSE, RECITED AS "NORTH 34° 55' 04" EAST 2140.63 FEET" IN THE HEREINBEFORE DESCRIBED PARCEL 1 AND EXTENDING FROM THE NORTHEASTERLY LINE OF LOS ANGELES AVENUE (FORMERLY DEL NORTE AVENUE) TO THE 1ST COURSE OF SAID PARCEL 1.

ALSO AN ADJOINING TRIANGULAR-SHAPED STRIP OF LAND AT THE INTERSECTION OF THE SOUTHWESTERLY PROLONGATION OF SAID 2ND COURSE OF SAID PARCEL 1 WITH SAID NORTHEASTERLY LINE OF SAID LOS ANGELES AVENUE, HAVING SIDES OF TRIANGLE FORMED BY THE FOLLOWING:

1ST: NORTHEASTERLY FROM SAID INTERSECTION 40 FEET ALONG SAID PROLONGATION,

2ND: SOUTHEASTERLY FROM SAID INTERSECTION 20 FEET ALONG SAID NORTHEASTERLY LINE OF SAID LOS ANGELES AVENUE AND,

3RD: A LINE BETWEEN THE NORTHEASTERLY TERMINUS OF THE 40 FEET SIDE AND THE SOUTHEASTERLY TERMINUS OF THE 20 FEET SIDE.

**PARCEL 6:**

A NON-EXCLUSIVE EASEMENT FOR AN UNDERGROUND PIPELINE AND ROAD OVER, IN AND ALONG THAT PORTION OF LOT 11, RANCHO SANTA CLARA DEL NORTE, IN THE COUNTY OF VENTURA, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY IN BOOK 3, PAGE 26 OF MAPS, DESCRIBED AS FOLLOWS:

A STRIP OF LAND 30 FEET IN WIDTH LYING PARALLEL WITH AND ADJOINING THE SOUTHEASTERLY PROLONGATION OF THE 2ND COURSE RECITED AS "SOUTH 50° 19' 36" EAST 357.01 FEET" IN THE LAND DESCRIBED AS PARCEL 2 IN THE DEED TO UNITED WATER CONSERVATION DISTRICT, RECORDED SEPTEMBER 7, 1955 IN BOOK 1326, PAGE 57 OFFICIAL RECORDS AND EXTENDING FROM THE 3RD COURSE OF SAID PARCEL 2 TO THE 29TH COURSE OF THE HEREINBEFORE DESCRIBED PARCEL 1.

**PARCEL 7:**

THOSE PORTIONS OF LOTS 11, 12 AND 13, RANCHO SANTA CLARA DEL NORTE, IN THE COUNTY OF VENTURA, STATE OF CALIFORNIA, ACCORDING TO THE MAP THEREOF RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY IN BOOK 3, PAGE 26 OF MAPS, DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE CENTER LINE OF LOS ANGELES AVENUE (FORMERLY DEL NORTE AVENUE) WITH THE CENTER LINE OF VINEYARD AVENUE, AS SAID AVENUES ARE SHOWN ON SAID MAP;

81G28 CLTA Guarantee Form No. 28 (06-05-14)  
Condition of Title Guarantee

Page 8

© California Land Title Association. All rights reserved.

The use of this Form is restricted to CLTA subscribers in good standing as of the date of use. All other uses are prohibited. Reprinted under license or express permission from the California Land Title Association.

**EXHIBIT A  
(Continued)**

THENCE ALONG THE CENTER LINE OF SAID LOS ANGELES AVENUE.

THE SOUTH 50° 20' 00" EAST 560.00 FEET TO A NAIL SET IN THE INTERSECTION WITH THE SOUTHWESTERLY PROLONGATION OF THE SOUTHEASTERLY LINE OF THE LAND DESCRIBED IN THE DEED TO UNITED CONCRETE PIPE CORPORATION, BY DEED RECORDED JULY 16, 1946 AS DOCUMENT NO. 8614 IN BOOK 721, PAGE 451 OF OFFICIAL RECORDS;

THENCE ALONG SAID PROLONGATION AND SAID SOUTHEASTERLY LINE, NORTH 39° 39' 08" EAST 30.07 FEET TO A 4 INCH X 4 INCH POST SET IN CONCRETE IN THE NORTHEASTERLY LINE OF SAID LOS ANGELES AVENUE AND BEING THE TRUE POINT OF BEGINNING;

1ST: THENCE CONTINUING ALONG SAID SOUTHEASTERLY LINE, NORTH 39° 39' 08" EAST 250.00 FEET TO A 1-1/4 INCH IRON PIPE, MARKED "R.E. 606";

2ND: THENCE PARALLEL WITH THE NORTHEASTERLY LINE OF SAID LOS ANGELES AVENUE, SOUTH 50° 20' 00" EAST 2743.39 FEET TO A 1-1/4 INCH IRON PIPE, MARKED "R.E. 606";

3RD: THENCE, SOUTH 34° 55' 04" WEST 250.86 FEET TO A 4 INCH X 4 INCH POST SET IN SAID NORTHEASTERLY LINE OF SAID LOS ANGELES AVENUE;

4TH: THENCE ALONG SAID NORTHEASTERLY LINE, NORTH 50° 20' 00" WEST 2764.10 FEET TO THE TRUE POINT OF BEGINNING.

EXCEPT THEREFROM ALL MINERALS, OIL, GAS AND OTHER HYDROCARBON SUBSTANCES, TOGETHER WITH THE RIGHT TO DIRECTIONALLY DRILL AND PASS THROUGH SAID PROPERTY AND TO EXPLORE FOR AND PRODUCE THE SAME FROM OTHER LANDS IN THE VICINITY, WITHOUT, HOWEVER, THE RIGHT TO ENTER UPON OR DRILL THROUGH THE SURFACE OR UPPER FIVE HUNDRED FEET (500') OF THE SUBSURFACE OF SAID PROPERTY, AS PROVIDED IN DEED RECORDED MAY 22, 1987 AS INSTRUMENT NO. 87-79086, OFFICIAL RECORDS.

**APN: 109-0-010-035 and 109-0-010-070**





### **Staff Report**

**To:** Engineering and Operations Committee Members

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

**From:** Maryam A. Bral, Chief Engineer  
Craig A. Morgan, Engineering Manager  
Robert J. Richardson, Senior Engineer  
Michel Kadah, Engineer  
Adrian Quiroz, Associate Engineer  
Erik Zvirbulis, GIS Analyst

**Date:** September 26, 2022 (October 6, 2022, meeting)

**Agenda Item:** 4.1 Monthly Engineering Department Report  
**Information item**

---

#### **Staff Recommendation:**

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

#### **Discussion:**

1. Santa Felicia Dam Safety Improvement Projects

- Spillway Improvement Project
    - The 30% design analyses was completed during the month of September. Staff reviewed and provided final comments on all Technical Memoranda (TMs) included in this design phase, the Board of Consultants (BOC) comments tracking form, and the BOC list of questions.
    - On September 14, Staff finalized and submitted the BOC pre-meeting packet to the FERC, DSOD, and BOC members.
    - Staff in coordination with GEI Consultants (GEI) finalized the BOC meeting agenda and the PowerPoint presentation.
    - Staff finalized the executed contracts and contract amendments between the District and the BOC members' companies and submitted the documents to the BOC members prior to the BOC meeting No. 6.
    - Staff coordinated the logistics of the BOC meeting No. 6 with the Admin staff and IT Department.
    - The BOC meeting No. 6 is to be held at the District's headquarters on September 28-29.
-

#### 4.1 Monthly Engineering Department Report Information Item

---

- Staff finalized and submitted the fully executed contract for developing the 60% design of the spillway improvements to GEI. The Notice to Proceed (NTP) was issued on September 21.
- Outlet Works Improvement Project
  - The above updates reported for the Spillway Improvement Project are also applicable to the Outlet Works Improvement Project.
- FERC License Amendment Application, NEPA Documentation and Section 7 Consultation
  - Staff are awaiting NMFS comments on the draft BA. NMFS has indicated that their comments will be provided to the District in October.
  - Staff in coordination with the Environmental Service Department staff is planning to submit the draft BA to the California Department Fish and Wildlife (CDFW) in October.
  - The Exhibit E (Environmental Assessment (EA)) was originally submitted to FERC in May 2020. The EA will be revised to incorporate recent project design decisions and resubmitted to FERC to support NEPA document development.
- Loan and Grant Applications
  - 2021 FEMA HMGP
    - No update to report. Staff is awaiting the CalOES announcement of the selected sub-applications. Once the list is announced, CalOES will submit the selected sub-applications to FEMA for review.

##### PrepareCA Match – FEMA HMGP

- The above-mentioned process is also applicable to the PrepareCA Match grant program.

##### WIFIA Loan

- On September 7, Engineering and Finance staff met with the EPA (WIFIA loan administrator) to discuss the WIFIA loan application. The EPA indicated that the project may not yet be qualified for WIFIA loan since the NEPA determination of the project is still in progress. However, the WIFIA loan administrator may consider granting a smaller loan to the District for the project design phase if the project planning and design fees exceed \$20 million. In collaboration with the Finance Department, staff prepared a spreadsheet, including the SFD Safety Improvement Project costs incurred to date in addition to the future spending related to the planning, design, and permitting efforts and submitted to EPA on September 15. The total estimated cost was estimated to \$20.9M.

#### 4.1 Monthly Engineering Department Report Information Item

---

##### 2022 High Hazard Potential Dams (HHPD) Grant

- No update to report. Staff is waiting for the DWR to announce the selected projects.

- Santa Felicia Dam Safety

- The FERC Engineering guidelines require that an Independent Consultant (IC) conduct a Part 12D Safety Inspection of SFD on a 5-year basis. The District retained Gannett Fleming (GF) to serve as the IC for the 2022 SFD Part 12D Safety Inspection. On August 23, 2022, the IC conducted a site safety inspection of SFD. The IC will summarize their findings, observations, and recommendations in an IC Safety Inspection Report. The District is required to submit this report to FERC by November 1, 2022. However, due to the numerous dam safety activities currently being undertaken, on September 2, 2022, the District submitted a request for extension of time to FERC that if approved would extend the deadline for this report to December 31, 2022.
- On September 20, 2022, Engineering Staff conducted a meeting with DWR Staff to discuss the possibility of a joint EAP workshop. The purpose of the workshop is to discuss interagency EAP procedures and to initiate discussions related to reservoir management during the construction of the SFD SIP and Pyramid Dam releases during the construction phase. This workshop has been tentatively scheduled for November 15, 2022.
- The District is required to conduct an EAP Tabletop and an EAP Functional Exercise on a 5-year basis. The last tabletop exercise was conducted in 2018 while the last functional exercise was conducted in 2019. These exercises were due in 2023 and 2024 respectively, however, as an Interim Risk Reduction Measure (IRRM), the District has committed to conducting these exercises one year earlier to enhance emergency preparedness. The District has retained GF to support the planning and facilitating of these exercises per an agreement with GF that was executed on August 9, 2022. A kick-off meeting was held on August 9, 2022, between staff and GF. A series of planning meetings will be held leading up to the exercises. The tabletop exercise has been scheduled for October 20, 2022, while the functional exercise is tentatively planned for February 2023.

#### 2. Santa Felicia Dam Sediment Management Project

- On September 22, 2022, GEI submitted a draft technical memorandum titled *Santa Felicia Dam Sediment Removal Study* to the District. The technical memorandum includes analyses to estimate potential sediment removal amount, characterization of the existing sediment in the reservoir, development of an approach for excavation of sediment and hauling it to disposal locations, and development of an opinion of probable construction costs. The District will review this technical memorandum and provide comments to GEI.

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

---

##### 3. Pothole Trailhead Parking Area

- No update to report.

##### 4. Condor Point Improvement Project-

- On September 1, 2022, at the conclusion of bird nesting season, MDJ resumed construction. Concrete pads for the six new Ramada Shaded Picnic Sites were poured on September 16, 2022. See Figure 1.

##### 5. Freeman Diversion Expansion

- Staff, USBR, the University of Iowa, Stantec and NHC participate in rotating weekly calls with NMFS and CDFW to provide updates on physical modeling, CFD modeling and design alternations.
- September 19-21, Staff along with representatives from Stantec and NMFS, visited the University of Iowa to witness the 1:12 and 1:24 scale physical models of the Vertical Slot.

##### 6. Iron and Manganese Treatment Facility

- Meetings:
    - Weekly coordination meetings between staff and the District's construction manager (HDR, Inc.)
    - Weekly construction progress meetings hosted by HDR and attended by GSE Construction, Taft Electric, Kennedy Jenks Consultants (KJ) and staff.
  - GSE Construction has submitted approximately 285 out of a total of 325 submittal packages anticipated for the project. HDR and design engineer (KJ) have provided responses on approximately 272 submittal packages including a requirement to comply with the Buy American Act (BAA).
  - GSE Construction has submitted approximately 107 Requests for Information (RFIs) to date. HDR, KJ and the District have been providing responses.
  - Twenty (20) Change Orders (COs) have been fully executed to date amounting to a net total of \$1,118,384.12. This represents 11.9% of the original contract amount (\$9,342,900.00). Four (4) of these COs amounting to \$662,910.19 or 7.1% of the original contract amount are directly related to compliance with the BAA which is a federal grant requirement (the project was not originally bid with this requirement in place). Therefore, only \$455,473.93 or 4.9% of COs have resulted in additions or modifications to the original scope of work.
  - Staff reviewed and provided comments on the draft Operations, Maintenance and Monitoring Plan (OMMP) which is required by the State Water Resources Control Board (SWRCB) Division of Drinking Water (DDW) prior to start-up and operation of the facility. The tentative OMMP submittal date to DDW is October 13, 2022.
  - Planned for the Upper Aquifer System (UAS) well manifold pipeline shutdown on October 19<sup>th</sup> to make the Filtered Water (FW) and RAW bypass connections.
-

#### 4.1 Monthly Engineering Department Report Information Item

---

- GSE Construction continued construction of the following (See Figures 2, 3 and 4):
    - 20" Backwash Supply Pipeline (BWS)
    - 4" Solids Line (SL)
    - 24" Raw Water Pipeline (RAW)
    - 20" Surface Wash Water Pipeline (SWW)
    - 8" Filter Drain Piping (FD)
    - Filter face piping
    - Plumbing, fire suppression system, electrical and heating ventilation and air conditioning in the Laboratory/Electrical/Aeration building.
    - Building roofing and interior framing
  - The tentative date for construction completion and implementation is January 26, 2023. A total of five (5) inclement weather days have been counted.
7. OH System Backup Generator at the El Rio Booster Plant
- No update to report. The project was completed, and Staff are currently waiting on FEMA programmatic grant closeout.
8. PTP Metering Improvement Project
- Total number of Meters installed: 39 of 61 or 63.9% complete.
  - An additional five (5) Meter installations are planned by the end of 2022.
  - Easement acquisition completion: 23 of 41 obtained or 56.1% complete
  - On August 25, UWCD received a signed easement for site #134
  - On September 15, staff met with Hamner, Jewell and Associates (HJA) to discuss the progress of the easement acquisition which HJA is performing for the District.
9. PTP Recycled Water Connection – Laguna Road Pipeline Project
- Staff completed their review of the initial draft Preliminary Design Report (PDR) and draft Geotechnical Report. Comments were submitted to Kennedy Jenks for review and to be incorporated in the final PDR.
  - Staff received a draft section of UWCD preliminary connection write up from MKN (PVCWD's consultant). The draft section did not include details on how PVCWD is planning to control the operation of PVCWD Wells adjacent to the Laguna Road pipeline connection. Staff will prepare and send comments to MKN/PVCWD and discuss the next step that will be needed to continue coordination efforts with PVCWD.
  - On September 22, Staff attended Prop 1 SGMA Grant kick-off meeting.
10. Rice Avenue Grade Separation Project and Impact on PTP
- No update is available on a request for revising the Right of Way (ROW) contract to include the County of Ventura as the legally binding third party to the ROW contract. CalTrans' final response to staff request is pending.
-

#### 4.1 Monthly Engineering Department Report Information Item

---

- The Legal Counsel, in collaboration with Staff, prepared and submitted a revised copy of the Utility Agreement (UA) to the City of Oxnard for consideration on September 8, 2022. On September 20, the Assistant City Attorney confirmed the receipt of the revised UA and informed the Counsel that a copy of the executed UA was submitted to CalTrans Legal for review on September 20. The City expects to hear back from CalTrans by the week of September 26. However, the City informed the Counsel that Caltrans would likely reject the disputed liability UA. If that occurs, the City must proceed with filing a declaratory relief action in Ventura Superior Court against the District.

#### 11. State Water Project (SWP) Interconnection Pipeline Project

- No updates to report.

#### 12. Extraction Barrier and Brackish Water Treatment Project-

- Meetings:
  - September 27 – Bi-weekly progress meeting held with the U.S. Navy
- Grants:
  - Phase 1 Extraction Barrier Project - Prop 1 Round 3 Ground Water Grant Program (GWGP) – State Water Resources Control Board (SWRCB) – preliminary award announcements anticipated in Fall 2022.
  - Monitoring Wells - Sustainable Groundwater Management (SGM) Grant Program
    - September 9 – the Fox Canyon Groundwater Management Agency authorized Executive Officer to enter into an agreement with the Department of Water Resources
    - September 22 – Kick-off meeting held with Kennedy/Jenks Consultants who is performing grant administration on behalf of the FCGMA
- CEQA/NEPA:
  - September 15 – Five (5) proposals were received in response to the Request for Qualifications/Proposals (RFQ/P) for CEQA and Regulatory Permitting services for Phase 1B (implementation phase) which are under review by Staff. The proposing firms included:
    - Catalyst Environmental Solutions - Santa Monica, CA
    - Environmental Science Associates – Los Angeles, CA
    - GEI Consultants – Rancho Cordova, CA
    - Rincon Consultants – Ventura, CA
    - Stantec – Santa Barbara, CA
- Design:
  - September 22 – One (1) complete proposal was received in response to the RFQ/P for Design Services for Phase 1B (implementation phase) which is under review by Staff. The proposing firm is Kennedy/Jenks Consultants.
  - Staff prepared site layout maps for proposed monitoring wells at NBVC Point Mugu.

#### 4.1 Monthly Engineering Department Report Information Item

---

##### 13. Asset Management/ CMMS System

- Staff continues to work on tables and graphs for the end of year reporting from Santa Felicia Dam monthly reporting Survey123 app data exports.

##### 14. Main Supply Line Sodium Hypochlorite Injection Facility

- No updates to report.

##### 15. Other Topics, Meetings and Training

- September 20 – Robert Richardson toured Port Hueneme Water Agency's (PHWA) Brackish Water Reclamation Demonstration Facility (BWRDF) alongside Navy staff. See Figures 5 and 6.
- September 22 - Michel Kadah attended FEMA webinar for BRIC FY 2022 Notice of Funding Opportunity Technical and Qualitative Criteria.



Figure 1 – Ramada Shaded Site Concrete Pour at Condor Point



#### 4.1 Monthly Engineering Department Report Information Item

---



Figure 2 – RAW pipeline under construction as part of the Iron and Manganese Treatment Project (connects the new treatment plant to Well Nos. 12, 13 and 14)



Figure 3 – Filter face piping under construction as part of the Iron and Manganese Treatment Project



#### 4.1 Monthly Engineering Department Report Information Item

---



Figure 4 – Nearly completed construction of the building roof as part of the Iron and Manganese Treatment Project



Figure 5 – Tour with Navy staff of the PHWA BWRDF. Two treatment skids shown including Nanofiltration (left) and Reverse Osmosis (right).



Figure 6 – Theo Provencio (Lead Operator) demonstrates Silt Density Index (SDI) sampling during a tour of the PHWA BWRDF.



### **Staff Report**

**To:** Engineering and Operations Committee Members

**Through:** Mauricio E. Guardado Jr., General Manager  
Anthony A. Emmert, Assistant General Manager

**cc:** Dr. Maryam Bral, Chief Engineer

**From:** Linda Purpus, Environmental Services Manager

**Date:** September 26, 2022 (October 6, 2022, meeting)

**Agenda Item:** 4.2 Monthly Environmental Services Department Report  
**Information Item**

---

#### **Staff Recommendation:**

The Engineering and Operations Committee members will receive this staff report from the Environmental Services Department regarding its activities for the month of September 2022.

#### **Discussion:**

1. Santa Felicia Project Operations and Federal Energy Regulatory Commission (FERC) License Support

- Water Release Plan and Water Release and Ramping Rate Implementation Plan

Under the Water Release Plan and FERC license for the Santa Felicia Project, United Water Conservation District (United) is required to make certain water releases from the Santa Felicia Dam for steelhead habitat and migration, when specific triggers are met. Triggers for habitat water releases are based on cumulative rainfall within the water year. United evaluates whether the trigger is met on the first day of each month, between January and June. Each month that the trigger is not met, the minimum required habitat water release is seven (7) cubic feet per second (cfs). The trigger for enhanced habitat water releases was not met on June 1, therefore, the minimum required habitat water release will remain at 7 cfs for the rest of the calendar year.

- Historic Properties Management Plan

On September 13, 2022, FERC issued an order approving United's Historical Properties Management Plan (HPMP) for the Santa Felicia Project. The HPMP was filed with FERC on March 1, 2022, for approval. The HPMP outlines measures intended to protect cultural and historical resources when performing ongoing operations and maintenance activities at the Lake Piru Recreation Area and Santa Felicia Dam facility and support federal consultations under Section 106 of the National Historic Preservation Act for future projects under the FERC license. The document was developed pursuant to Article 414 of United's license and U.S. Forest Service's 4(e) Condition 19. United conducted consultation for the HPMP with U.S. Forest Service (Los Padres National Forest and Angeles National Forest), California State Historic

---



## 4.2 Monthly Environmental Services Department Report

### Information Item

---

Preservation Office, Fernandeano Tataviam Band of Mission Indians, Santa Ynez Band of Chumash Indians, and the local Chumash Indian community. Per HPMP reporting requirements, United submitted the first annual report to FERC on September 30, 2022. Moving forward, Environmental Services staff will work with staff at Lake Piru Recreation Area and the Santa Felicia Dam facility to initiate HPMP implementation.

- Noxious Weed and Vegetation Management Plan

From September 19 through 23, 2022, United's contractor, Channel Islands Restoration (CIR), implemented noxious weed management activities in the vicinity of the Santa Felicia facility and Lake Piru Recreation Area in accordance with the Noxious Weed and Vegetation Management Plan. Specifically, CIR conducted focused herbicide treatment and manual removal of tamarisk, a target weed species identified within the Noxious Weed and Vegetation Management Plan, as well as an evaluation of the success of the previous years' control activities. Control activities were focused on areas identified as "priority treatment areas" including below Santa Felicia Dam (within the spillway channel as well as along the release reach of lower Piru Creek) and in Reasoner Canyon (with focus on areas above the high-water mark of Lake Piru). A summary of this year's control activities and the efficacy of previous years' activities will be prepared and provided to FERC, California Department of Fish and Wildlife (CDFW), and Los Padres National Forest in the March 2023 annual report.

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

On September 29, 2010, the U.S. Court of Appeals granted United a motion to hold the court case "United Water Conservation District v. FERC" in abeyance and directed United to file status reports every 60-days. United filed the court case to challenge the biological opinion issued by National Marine Fisheries Service (NMFS) on FERC's issuance of a license for the Santa Felicia Project. On September 13, 2022, the seventy-second status update was filed with the U.S. Court of Appeals for District of Columbia Circuit.

## 2. Clean Water Act Permits for General Maintenance Activities at the Lake Piru Recreation Area and Santa Felicia Project

On September 6, 2022, Environmental Services staff met with two California Regional Water Quality Control Board (RWQCB) staff at the Lake Piru Recreation Area for a site visit. RWQCB requested a site visit after receiving United's submittal of our 401 Water Quality Certification application on July 27, 2022. Environmental Services staff showed RWQCB the proposed Condor Point swim beach location, Lake Piru Marina, Reasoner Canyon boat launch ramp, and the Juan Fernandez Day Use area. In follow-up to an earlier request for information, and direction provided by RWQCB staff during the site visit, staff submitted final 401 Water Quality Certification application documentation to RWQCB on September 22, 2022.

3. Freeman Diversion Sediment Management

On September 8, 2022, United issued pre-project notifications to CDFW, U.S. Army Corps of Engineers (USACE), and RWQCB of United's intent to perform sediment management activities at the Freeman Diversion under their respective permits and authorizations. Environmental Services staff hosted a pre-construction meeting and inspection with an inspector from the Ventura County Watershed Protection District (VCWPD) on September 9, 2022. Staff also conducted a pre-construction survey in accordance with the project's permits on September 9, 2022. On September 15, 2022, the USACE issued a notice to proceed and the VCWPD issued a permit modification to their previously issued Watercourse Encroachment permit to specify that some material would be hauled off the project site. Project work commenced on September 19, 2022. Environmental Services staff supported the project work by providing a pre-construction meeting, providing a biological monitor on site during all project activities, and coordinating with agency representatives regarding implementation of permit terms and conditions, as appropriate. As of September 26, 2022, project activities are proceeding as planned and anticipated to be completed prior to October 1, 2022.

4. California Endangered Species Act (CESA) Candidacy of Southern California Steelhead

Following the California Fish and Game Commission's (Commission) determination that listing of southern California steelhead under CESA "may be warranted," the Commission issued public notice that the species is now a candidate under CESA and is afforded the same protection as a threatened or endangered species under the statute. CDFW has subsequently initiated a 12- to 18-month status review of the species to inform the future full listing decision. On July 15, 2022, CDFW issued a press release inviting public comment and information relevant to the status review. United prepared comments and pertinent information contributing to the best available science and consistent with and expanding upon the comments submitted leading up to the Commission's "may be warranted" decision. United's comments and information were submitted to CDFW on September 20, 2022, in both electronic and hardcopy form.

5. Extraction Barrier and Brackish Water Treatment Project

On September 15, 2022, the Request for Qualifications and Proposals (RFQ/P) for California Environmental Quality Act (CEQA) and environmental permitting consultant services to support the Extraction Barrier and Brackish (EBB) Water Treatment Project, Demonstration Phase (Phase 1B) closed. United received five (5) proposals. Proposals will be evaluated and a recommendation for consultant selection will be provided to the General Manager and Board of Directors in advance of the November 9, 2022, Board of Directors meeting.

6. Quagga Mussel Management

On September 15, 2022, Environmental Services staff met with CDFW to discuss proposed revisions to United's Quagga Mussel Monitoring and Control Plan (QMMCP). Staff will integrate CDFW's feedback and formally submit the proposed revisions in the next several weeks. Additionally, United discussed the challenges of permitting molluscicide application in Lake Piru and requested CDFW's support in consulting with NMFS. CDFW suggested that United re-initiate the technical advisory committee to provide a mechanism for agencies engagement.

## 4.2 Monthly Environmental Services Department Report

### Information Item

---

Staff continues to conduct routine monitoring under the QMMCP including monthly water quality sampling, monthly veliger (microscopic planktonic larvae) sampling, monthly artificial substrate sampling in Lake Piru (plate sampling), and natural substrate sampling in lower Piru Creek (surface surveys).

#### 7. Miscellaneous

- On September 12, 2022, recruitment for the Environmental Services Manager position closed.
- On September 13, 2022, Environmental Services staff attended the fire extinguisher safety training.



**Staff Report**

**To:** Engineering and Operations Committee Members

**Through:** Mauricio E. Guardado Jr., General Manager  
Brian Collins, Chief Operations Officer

**From:** John Carman, Programs Supervisor

**Date:** September 29, 2022 (October 6, 2022, Meeting)

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

---

**Staff Recommendation:**

The Engineering and Operations Committee members will receive this staff report from the Operations and Maintenance department regarding its activities for the month of September.

1. Water Releases, Diversions

- Lake Piru dropped 1.2 feet in September to 15,220 acre-feet (AF) of storage.
- 0 AF of water was diverted by the Freeman Diversion facility in September.
- 0 AF of water was diverted to the Saticoy recharge basins in September (metered).
- 0 AF of surface water was delivered to the El Rio recharge basins in September.
- 0 AF of surface water was delivered to the PTP system in September.
- 0 AF of surface water was delivered to C customers in September.
- 0 AF of surface water was delivered to Pleasant Valley County Water District in September.

2. Major Facilities Update

- **Santa Felicia Dam**
    - On October 1, 2022 the lake level was 77.7 feet below the spillway lip.
    - Habitat water releases from Santa Felicia Dam (SFD) were maintained at 7 cubic feet per second (cfs), for the month of September, as per the Water Release and Ramping Rate Implementation Plan for Lower Piru Creek.
    - On September 26, 2022 Owner Dam Safety Program (ODSP) audit site visit at Santa Felicia Dam was performed.
    - Contractor Rayco completed installation of SFD security system.
  - **Freeman Diversion, Saticoy, and El Rio Recharge Facilities**
    - Flows at the Freeman Diversion averaged 0 cfs for the month of September, with 0 cfs of surface water being diverted on October 1, 2022.
-

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

---

- Static water levels (distance of water from the well pad to the water table):

	<b>2022</b>	<b>2021</b>	<b>2020</b>
Saticoy	137'	141'	115'
El Rio	141.4'	138.7'	112.5'
PTP	132' - 179'	125' - 173'	105' - 143'

- **Oxnard-Hueneme (OH) Delivery System**

- Staff assisted contractor Don Peterson Construction with the removal of the originally installed circa 1955 OH Booster Plant natural gas engine, which is being shipped to Waukesha Pierce Industries in New Mexico for a motor rebuild.
- Travis Ag replaced inlet piping for the Emergency Booster Plant pump #2 gas engine.
- Contractor Quinn Powers systems assisted with troubleshooting overheating issues with natural gas backup engines; technician replaced thermostats in gas engines #2 & #3.
- Staff coordinated with the Iron and Manganese project contractor, GSE, making repairs to damaged pre-chlorination sample return lines.

- **Pleasant Valley County Water District (PVCWD)**

- PVCWD received surface water from the Conejo Creek Project and also received some highly treated recycled water from the City of Oxnard's Advanced Water Purification Facility (AWPF).

- **Pumping Trough Pipeline (PTP)**

- During the month of September, the PTP system demand was met with PTP wells.
- Staff upgraded PTP Well 2 manifold meter to an Endress Hauser magnetic flow meter.
- Excessive heatwave caused electrical grid deficiencies, the new PTP Reservoir backup generator ran four hours sustaining the PTP system demand.
- On September 28, 2022 staff dewatered the PTP distribution system, and installed electronic Endress Hauser meter assembly at Turnout 146.

- **Instrumentation**

- Staff installed backup nitrate analyzer in El Rio Plant 5500 room.
- Staff pulled new fiber optic cables from the server room to the audio room at the Lombard headquarters facility.
- Upgraded cameras installed by staff at ranger station, entry kiosk, SFD water treatment plant, and dam crest.
- Staff installed a security camera in Lombard Office parking lot trash bin area.
- Instrumentation staff is currently 55% complete with the PLC upgrade CIP.
- Staff installed 1inch conduit from first floor electrical room to the 2nd floor server room.

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

---

- **Lake Piru Water System**
    - All chlorine residuals and turbidity readings for the drinking water system were within proper ranges for the month of September.
    - Manifold meter power supply replaced on September 26, 2022.
    - Monthly pH, turbidity and coliform samples were obtained for Lake Piru, as part of the Long Term 2 Enhanced Surface Water Treatment Rule compliance monitoring.
  - 3. Operations and Maintenance Projects Update
    - The Iron and Manganese grant funded project is progressing well at El Rio Booster Plant.
  - 4. Other Operations and Maintenance Activities
    - The Santa Felicia Dam Emergency Action Plan sirens located in Piru were exercised on September 2, 2022.
    - On September 22/23, 2022 Contractor R & B Automation performed annual service of Pleasant Valley, PTP Reservoir, Head Control, and El Rio Recharge Basin valve actuators.
    - On September 19, 2022 Konecranes performed annual inspection of the chlorine 2 ton and vehicle #22 cranes.
    - In coordination with the California Department of Fish and Wildlife (CDFW), staff performed the Freeman Diversion Sediment Management Project.
    - The monthly inspection of Santa Felicia Dam was performed.
    - Monthly bacteria samples were obtained for the PTP system.
    - Monthly meter readings were obtained for the OH, PTP, and PV Pipelines.
    - Completed and electronically transmitted the monthly OH Pipeline report to the State Water Resources Control Board Division of Drinking Water.
    - Static water levels were obtained for all El Rio, Saticoy, and PTP wells.
    - Weed abatement continued throughout the District.
    - Action priority update biweekly meetings for operations staff were continued.
  - 5. Safety and Training
    - During the months of September, approximately 3100 hours of O & M department work were performed with no reportable accidents.
    - One Safety Meeting was conducted on at the District's Saticoy facility, covering Fire Prevention & Hazardous Response. O&M Recharge Worker Kevin Champlin stepped up to deliver this training. Preparation efforts for this presentation opportunity was conducted between this staff and the Risk and Safety Manager. Occasionally, these presentation opportunities provide a platform for staff to gain experience in developing or refining presentation and public speaking skills. Two safety videos were shown to staff—*Chlorine Gas Explosion at Jordan's Aqaba Port Kills at Least 12, Injures Over 250* by Reuters/SCMP and *Fire Extinguisher Gone Wrong During Fuel Pump Fire* by Yogender Kadyan's Academy. The videos emphasized the importance of emergency response training and ensuring firefighting equipment is properly maintained. Following the safety presentation, staff participated in the annual fire extinguisher training.
-

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

---

- El Rio Water Treatment operators staff along with cross trained staff from other sites completed the annual HAZWOPER refresher training. Tailgate safety meetings were conducted at all individual O&M field locations and the topics included refresher training on equipment used at the various O & M locations. The online Target Safety assignment for September was “Water Industry Fire and Flammable Liquids Safety.”

**Attachment:**  
Operations Log for September

---