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LIVE OAK
ASSOCIATES, INC.

February 14, 2024

Ben Fenters, PE
Central California Irrigation District
1335 WI St
Los Banos, California, 93635

Subject: 2024 Nesting Bird Survey Results, Orestimba Creek Recharge and Recovery Expansion Project, Stanislaus County, California

Dear Ben:

This letter summarizes the results of nesting bird surveys Live Oak Associates, Inc. (LOA) conducted for the remaining active work areas of the Orestimba Creek Recharge and Recovery Expansion Project ("project") located in Stanislaus County. The three active project areas are located along the Delta-Mendota Canal (DMC) (see Attachment 1).

There are two applicable environmental compliance documents prepared for the project. A 2022 Environmental Assessment / Initial Study and Mitigated Negative Declaration and a Streambed Alteration Agreement EPIMS-STA-30476-R4 (Agreement) issued by the Department of Fish and Wildlife (CDFW) for the work area west of the DMC. Because work activities at these three locations extended into the 2024 nesting season, in early February LOA conducted a survey for nesting migratory birds and raptors, tricolored blackbirds (*Agelaius tricolor*), bald eagle (*Haliaeetus leucocephalus*), and golden eagle (*Aquila chrysaetos*). The purpose of this letter is to summarize the methods, results, and conclusions of the surveys.

Survey Methodology

On February 8 and 9, 2024 LOA wildlife biologist Natalie Neff conducted a walking survey of the project sites and surrounding lands, where accessible, out to 250 feet for nesting migratory birds, 300 feet for tricolored blackbirds, 500 feet for nesting raptors, and a driving survey out to 0.5 miles for bald eagles and golden eagles. Ms. Neff systematically walked accessible portions of the survey area searching for evidence of nesting birds. Inaccessible areas and areas surveyed for eagles were surveyed using binoculars. During her surveys Ms. Neff was on the lookout for evidence of nesting birds that included adult behavior such as distress behavior, a bird flushed from a nest, repeated flight patterns, and the movement of nest material or food; as well as the presence of a nest with eggs or young, and the crying of nestlings.

The survey for active eagle nests entailed an inspection of large stick nests looking for evidence of eagle nesting activity and searching for eagles in flight.

During the survey birds observed or heard were recorded on a field datasheet.

Survey Results

The survey area consisted primarily of disturbed areas associated with the DMC, associated toe drains, public roadways, and the California Transplants commercial facility. Sections or riparian vegetation associated with Orestimba Creek were present within the nesting raptor and eagle survey area. The eagle survey area also included areas of grassland, ruderal areas, orchards, and ag field.

No active migratory bird nests including tricolored blackbird, no active raptor nests within 500 feet of the project sites, and no bald or golden eagle nests were observed during the surveys. A few active red-tailed hawk (*Buteo jamaicensis*) nests were observed nesting within 0.5 miles of the project sites during the eagle nesting survey, the closest of which was approximately 1,365 feet from the closest work area.

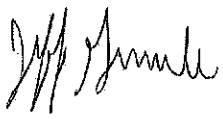
Conclusion

Because active bird nests were found absent within the corresponding survey areas for each type of bird, no disturbance free buffers are needed for the protection of nesting birds during the ongoing construction activities.

The nesting bird survey results presented in this report are valid for the rest of the year.

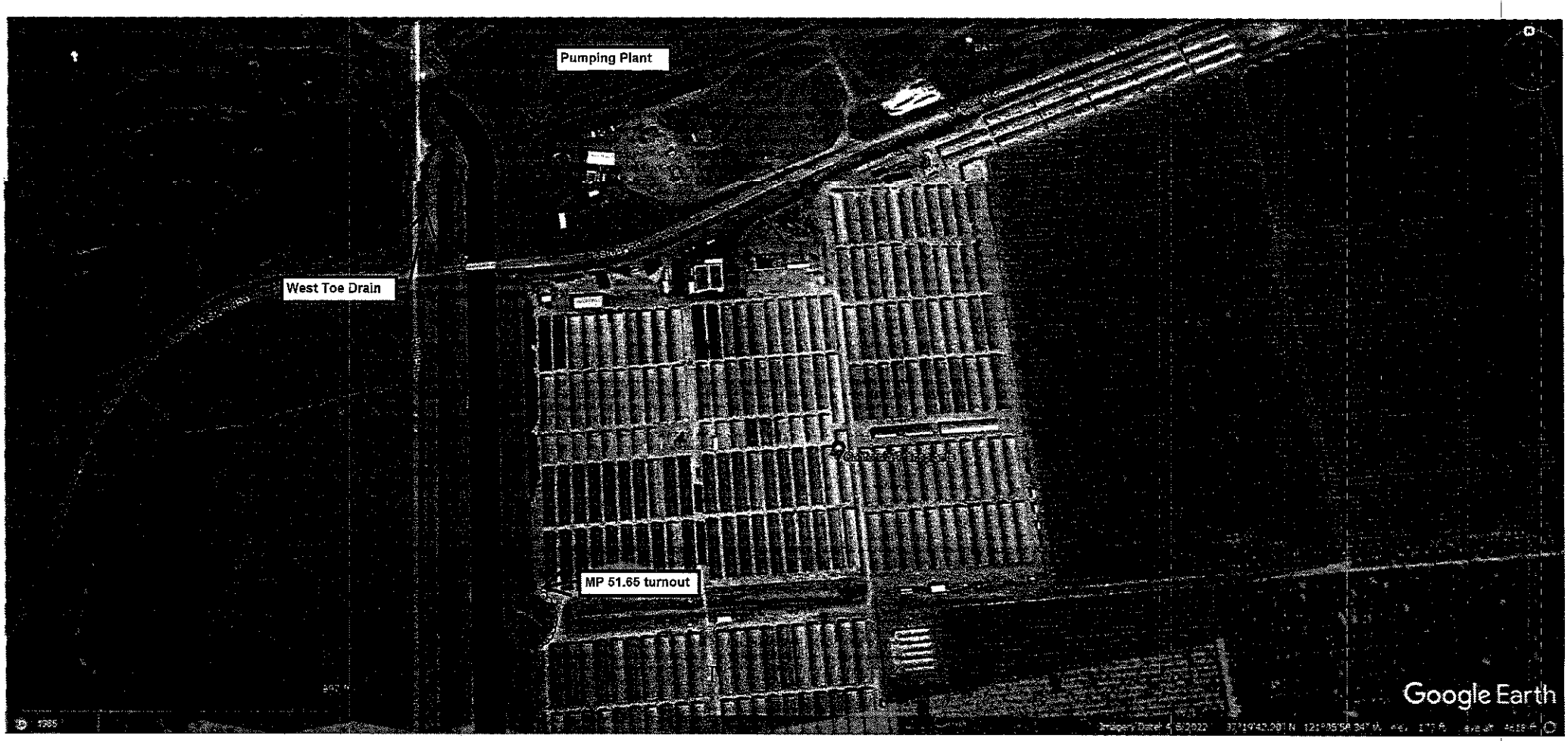
Please feel free to contact me with any questions or comments related to LOA's nesting bird surveys for 2024 work activities associated with the Orestimba Creek Recharge and Recovery Expansion Project. I can be reached at (559) 760-6842 or jgurule@loainc.com.

Sincerely,



Jeff Gurule
Senior Project Manager
Live Oak Associates, Inc.

ATTACHMENT 1:
LOCATIONS OF REMAINING PROJECT AREAS



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STEVE P. RADOS, INC.

Job 759 - Orestimba Recharge Project
ORESTIMBA CREEK WORK JOB SCHEDULE

			Current Week							WEEK TWO							WEEK THREE							WEEK FOUR						
			February							February							February/March							March						
			Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
		Lead	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	1	2	3	4	5	6	7	8	9	10
	General Work Activities																													
1	Build Reaction Pad for Blue Iron @ Toe Ditch	**Gerrad**																												
2	Blue Iron Sheetpiles Installation @ Toe Ditch	**Blue Iron**																												
3	Install Precast Structure & 48" RCP @ Toe Ditch	**Gerrad**																												
4	Grade and Place Shotcrete @ Toe Ditch	**Gerrad**																												
5	Install Precast Structures & 36" RCP @ Turnout 51.65	**Kevin**																												
6	Restore Turnout 51.65	**Kevin**																												
7	Install 36" Manifold and Tie-in 36" HDPE	**Kevin**																												
8	Install Misc. Metals	**Cody**																												

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2175 N California Blvd
Suite 315
Walnut Creek, CA 94596
www.woodardcurran.com

T 800.426.4262
T 925.627.4100

Woodard & Curran

MEMORANDUM

TO: Chris White, Executive Director, San Joaquin River Exchange Contractors Water Authority
Anthea Hansen, General Manager, Del Puerto Water District

FROM: Andy Neal

DATE: February 1, 2024

RE: Del Puerto Canyon Reservoir Progress Update for February 2024 Board Meeting

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Mr. White and Ms. Hansen:

Below is a summary of our progress on the Del Puerto Canyon Reservoir project.

Project Goals:

1) Design, permit, and construct an 82,000 AF south-of-delta reservoir to provide locally-owned and controlled water storage for agricultural and west-side communities water supply.

2) Seek to obtain up to 25% federal cost share through the Water Infrastructure Improvements in the Nation (WIIN) Act. A proportional share of the project benefits are the federal benefits.

Dam Design/Engineering

The Terra-GeoPentech team continued work to analyze the samples and process information obtained during the extensive fieldwork that concluded in November.

A meeting of the Technical Review Board (TRB) was held January 10-12 at the DPWD offices. The TRB reviewed progress to date and provided their technical input to the team.

Utility Relocation

The program team continues to coordinate with Crimson on the relocation of their petroleum line following the assignment of new staff by Crimson.

The Program team continues to work with PG&E and the dam designer TGP to coordinate and define adjustments to avoid a potential conflict between the proposed dam spillway and proposed PG&E electrical towers. PG&E continues to review a proposal made by TGP that resolves the tower location conflict.

Environmental

The Program team is continuing to work on the EIS, defining the physical features of the Ingram Canyon Alternative. Significant progress was made on required technical studies. The team continues to meet regularly with Reclamation to move the EIS forward.

Woodard & Curran

New Road Alignment

The TYLin road team continues to advance the development of road alternatives. In January, the road alternatives were analyzed based on key metrics as well as site observations from a December reconnaissance, and the nine alternatives were screened down to four that will receive more detailed study.

The Program team including TYLin met with Stanislaus County on January 18 and gained their concurrence on the results of the screening process, as well as on several technical criteria that will be used to further develop the alternatives. That concurrence is being memorialized with formal documentation.

These are key steps toward identifying the best roadway alignment, which will in turn be the subject of CEQA and NEPA documentation.

Public Outreach

No new update

Project Financing

No new update

Programmatic

1) Weekly client meetings
2) Weekly Reclamation meetings
3) Weekly internal team meetings
4) Bi-weekly internal meetings with the TGP dam design team, TYLin road design team, and clients

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Progress Report

Woodard & Curran

Del Puerto Canyon Reservoir Program Management

Subject: **December 2023 Progress Report**
Prepared for: Anthea Hansen (DPWD) and Chris White (SJRECWA)
Prepared by: Xavier Irias and Romy Sharafi (Woodard & Curran)
Date: January 29, 2024
Project No.: 0011297.00

This progress report summarizes the work performed by Woodard & Curran and subconsultants for the period between November 27, 2023 and December 31, 2023, for Del Puerto Canyon Reservoir Program Management. Please contact aneal@woodardcurran.com or (925) 627-4114 with any questions.

Work Performed

A summary of work performed during the current reporting period is summarized in the following table.

Task Description	Work Completed This Period
Task 1 Program Management	• Weekly internal team and external client coordination meetings. • Project management tool maintenance (EVA, document management portal, staff management and tracking, sub billing calendar). • Budget, schedule, and scoping tracking and updates. • Coordination with and management of subcontractors.
Task 2 Agency Coordination and Permitting Plan	• USBR weekly meetings and preparation. • Internal meetings and staff coordination related to permitting and agency coordination efforts. • ICF submitted the 2023 Annual Report TM related to the short-term Eagle Permit.

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Task Description	Work Completed This Period
Task 3 Reservoir Operations Analysis	• None.
Task 4 Funding	• Review and markup of invoices for DWR • Prepare QPR 3 for DWR
Task 5 CEQA/NEPA	• Coordination with ICF. • Continued work on the EIS including development of project description. • Provided updated schedule to Reclamation • Review of Eagle Annual Report. • Addressed Reclamation's comments on the Ingram Canyon project footprint.
Task 6 Validate Facilities	• None.
Task 7 Procure Design Consultants	• None.
Task 8 Design Consultant Management	• Prepared for meeting with TRB. • Continued to coordinate with TGP. • Held meetings with TYLin team to coordinate various items including the development and screening of roadway alternatives. Provided access agreements to team. • Walked alternative road alignments with TYLin

Task Description	Work Completed This Period
Task 9 Conveyance Facilities Preliminary Design	• None.
Task 10 USBR Feasibility Report	• None.
Task 11 Land-Owner Coordination	• Owner coordination for access and agreements
Task 12 Survey/Mapping	• None.
Task 13 Utility Company Coordination	• Continued coordination with Crimson on the relocation of their petroleum line. • Continued work with PG&E and dam designer, TGP, to coordinate and define adjustments to avoid a potential conflict between the proposed dam spillway and proposed PG&E electrical towers.
Task 14 Outreach Support	• No work this period.

Budget Status

As of this invoice, 80% of the project budget has been billed ($9,844,406.18 of $12,255,825.13). A budget breakdown by task is included in the below table.

Table 1: Budget Breakdown By Task

Task No.	Description	Budget	Previously Billed	Billed This Period	Total Billed to Date	Budget Remaining	% Billed to Date
1	Program Management	$1,240,574.94	$897,210.61	$5,121.25	$902,331.86	$218,243.08	81%
2	Agency Coordination and Permitting Plan	$1,070,643.56	$1,117,661.97	$12,496.08	$1,130,158.05	$60,485.51	95%
3	Reservoir Operations Analysis	$383,833.50	$373,206.00	$0.00	$373,206.00	$10,627.50	97%
4	Funding Strategy	$71,000.00	$40,587.25	$1,842.50	$42,429.75	$28,570.25	60%
5	CEQA/NEPA Compliance	$3,724,736.91	$2,305,441.06	$17,217.75	$2,322,658.81	$1,402,078.10	62%
6	Validate Facilities	$2,155,442.87	$2,155,442.84	$0.00	$2,155,442.84	$0.03	100%
7	Procure Design Consultants	$148,875.06	$141,333.05	$0.00	$141,333.05	$7,542.01	95%
8	Design Consultant Management	$567,016.51	$135,151.62	$12,696.34	$147,847.96	$419,168.55	26%
9	Conveyance Facilities Preliminary Design	$1,082,317.94	$1,082,317.94	$0.00	$1,082,317.94	$0.00	100%
10	USBR Feasibility Study	$571,778.64	$571,778.64	$0.00	$571,778.64	$0.00	100%
11	Land Owner Coordination	$149,420.07	$51,604.30	$345.00	$51,949.30	$97,470.77	35%
12	Survey/Mapping	$173,364.88	$173,364.88	$0.00	$173,364.88	$0.00	100%
13	Utility Company Coordination	$515,007.06	$372,915.10	$0.00	$372,915.10	$142,091.96	72%
14	Outreach Coordination	$401,813.19	$376,824.90	$0.00	$376,824.90	$24,988.29	94%
	Total	$12,255,825.13	$9,794,840.16	$49,566.02	$9,844,559.08	$2,411,266.05	80%

Notes:
[1] Task budgets are internally allocated and may be reallocated between tasks based on program need.

Schedule Status

Work through December was focused on preparing for the TRB meeting in early January, and on completing the first screening analysis of roadway alternatives.

Looking forward, the roadway alternatives analysis remains the key schedule driver in the next few months since that work will inform other program activities. The work in December to screen roadway alternatives provided a foundation for work in January, which will include short-listing roadway alternatives and gaining County concurrence on the short list. The team is working to maintain strong communications with the County so that the final roadway alternative meets appropriate standards.

Outstanding Issues

CEQA litigation

- A Court decision upheld most of the analysis in the EIR, but directed that certification be set aside because the road relocation was not sufficiently defined. The Project team is now working to identify a preferred road alignment and issue a revised CEQA document evaluating impacts of the road.

Bureau of Reclamation Coordination

- Based on extensive comments from cooperating agencies on Reclamation's draft EIS, Reclamation developed a new approach for the EIS by which W&C will draft a new EIS with substantial detail on alternatives including Ingram Canyon. We have started work on EIS and are currently focused on developing a description of the physical features associated with the Ingram Canyon alternative.
- We continue to await written confirmation that Reclamation concurs with our position that the Del Puerto Canyon Reservoir project is under construction, consistent with the requirements in section 4013(2) cited per criteria in section 4011f(2). Our project manager at USBR, Allison Jacobson, has indicated that our letter has been reviewed and there are no objections to our position.

Army Corps Coordination

- The Corps is officially a cooperating agency for the USBR NEPA process. They have designated Reclamation to act on their behalf in the Section 7 consultation. We have a Preliminary Jurisdictional Determination from the Corps, which we have agreed is sufficient for the Project. We have determined that an Approved Jurisdictional Determination is not needed.

State Water Resources Control Board Coordination

- After the initial water rights application was reviewed by the State Board, additional coordination and analyses were required for the water availability analysis portion of the application. This has required more detailed data collection and analyses to estimate downstream impacts of flow reduction in the Del Puerto Creek. The State Board does not have streamlined guidelines for the requirements of the water availability analyses, and it is unknown what level of detail will be required for completion of the application at this time. The team has developed a strategy for the water availability analysis and drafted a TM which will be presented to the State Board for further discussion before re-submitting the application.

Utility Company Coordination

- Woodard & Curran continues to work with Crimson to relocate the Crimson pipeline, and is sharing project data with the Crimson team to facilitate their work.

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TERRA / GeoPentech
a Joint Venture
235 Montgomery Street, Suite 1025
San Francisco, CA 94104
415-543-0330

Progress Report

DEL PUERTO CANYON RESERVOIR		Progress Report No.:	PR-20
DESIGN OF DAMS AND APPURTENANT STRUCTURES		Prepared by:	G. Roussel
Reporting Period:	December 30, 2023 through January 26, 2024	Date:	02/16/2024

ACTIVITIES DURING REPORTING PERIOD

Task 1 – Project Administration

- Prepared for and attended biweekly status meetings with Program Team, prepared meeting notes, and maintained action item list.
- Prepared progress report (including Earned Value Analysis) and submitted with invoice.
- Held weekly internal status meetings with TGP technical staff involved in the work to monitor progress and address issues, as necessary.
- Provided direction to TGP staff for prioritizing and re-scheduling activities and resolved logistics issues as they arose.
- Addressed special requests from Program Team.

Task 3 – Geotechnical Evaluation

- Continued drafting of boring logs and assembly of materials to be included in GDR.
- Completed draft 3-dimensional subsurface model of embankment foundations based on initial results from Phase 2 explorations.
- Analyzed results of packer tests.
- Summarized and evaluated piezometer data.
- Interpreted results of surface geophysical surveys.

Task 4 – Preliminary Design (30% Design)

- Prepared for and attended Technical Review Board meeting on January 10 through 12, 2024.

SIGNIFICANT ISSUES ENCOUNTERED / ADDRESSED

No new issues encountered.

ACTIVITIES PLANNED FOR NEXT REPORTING PERIOD (thru March 1, 2024)

Task 1 – Project Administration

- Prepare for and attend biweekly status meetings with Program Team, prepare meeting notes, and maintain action item list.
- Update schedule and planned value for Earned Value Analysis (EVA).
- Monitor weekly progress and address issues, as necessary.
- Provide logistical direction to the TGP Team as project needs and requirements evolve.
- Address special requests from Program Team.

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Task 3 – Geotechnical Evaluation

- Move samples for Phase 2 explorations to permanent storage location.
- Select specimens for laboratory testing, bring them to Cooper Labs, and assigned tests.
- Demobilize Conex boxes and Cascade's frac tank from site.
- Collect data from piezometers.
- Continue drafting of boring logs and assembly of materials to be included in GDR.
- Analyze results of falling head permeability tests.
- Summarize and evaluate new piezometer data.

PROGRESS AND COST TO DATE

Work on the project is authorized by Task Orders that assign partial budgets to the various Tasks as the project progresses. The following table provides a summary of the cost and progress by Task for work authorized under Task Orders 01 & 03 to 05, as of January 26, 2024.

ACTIVITY	Estimate for Task Orders 01 & 03 to 05	Prior Billed ($)	Current Billed ($)	Total Billed ($)	Remaining Budget ($)	Percent Spent	Percent Complete
Task 1 - Project Administration	810,555	436,125	12,003	448,128	362,427	55.3%	73%
Task 3 - Geotechnical Evaluation	8,094,581	6,361,445	157,493	6,518,938	1,575,643	80.5%	86%
Task 4 - Preliminary (30%) Design	1,330,906	750,591	46,679	797,271	533,635	59.9%	44%
TOTAL	10,236,042	7,548,162	216,175	7,764,337	2,471,705	75.9%	78%

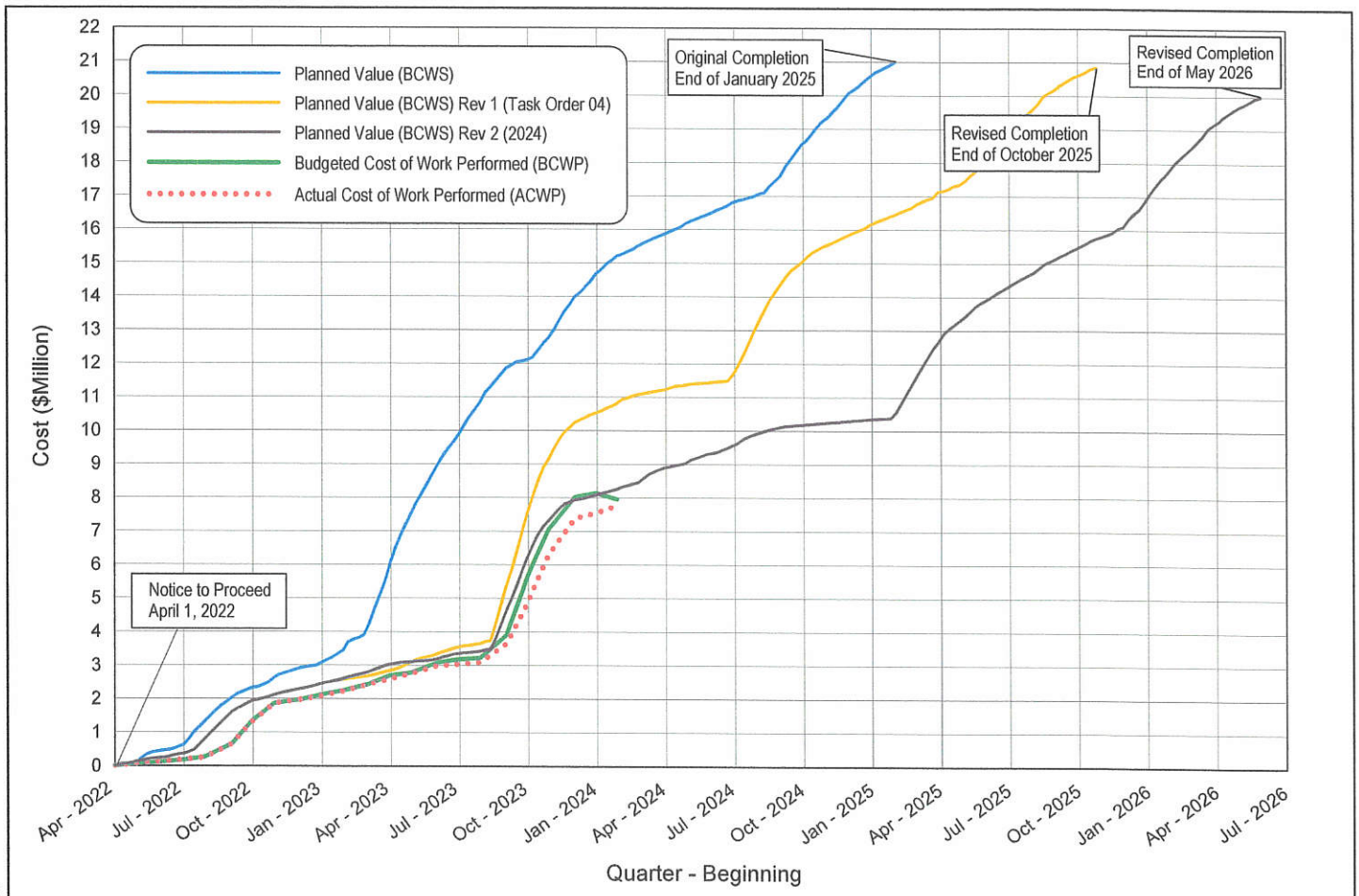
The results of the Earned Value Analysis (EVA) for the project as of January 26, 2024 are listed in the following table and are shown graphically on Figure 1. This figure shows three versions of the planned value (BCWS):

- ✓ the original planned value developed at the beginning of the project;
- ✓ a revised planned value based on the sequencing of the Phase 2 explorations and the expected schedule for completion of these explorations; and
- ✓ a second revision of the planned value based on the work we anticipate to be able to complete in 2024 without the need for additional funding.

This last planned value takes advantage of the savings that were achieved in the Phase 2 explorations as a result of a reduction in scope of the explorations caused by environmental constraints and access issues and competitive bidding of the drilling operations, and reallocate the budgets to Task 4 to complete 30% design activities not previously authorized by Task Order 03; e.g., the seepage analyses. It also assumes that we will be able to complete the hydrologic analyses necessary to inform the design of the drainage downstream of Saddle Dam 1.

Actual Cost of Work Performed (ACWP)	Budgeted Cost of Work Performed (BCWP)	Budgeted Cost of Work Scheduled (BCWS)	Cost Variance (BCWP - ACWP)	Schedule Variance (BCWP – BCWS)
$7,764,337	$7,958,567	$8,256,925	$194,230	($298,357)

The EVA is based on an Estimate-to-Complete (ETC) by subtask and indicates that the work planned to be done in 2024 is likely to be completed slightly under the budget authorized by Task Orders 01 & 03 to 05. This under budget amount will be available to address special requests from the Program Team that fall outside our specific scope of work.



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RESULTS OF EARNED VALUE ANALYSIS
AS OF JANUARY 26, 2024
DEL PUERTO CANYON RESERVOIR

Figure 1

Rev. 1 02/13/2024

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TECHNICAL REVIEW BOARD
Meeting No. 5
January 10 to 12, 2023
Patterson, CA

AGENDA

January 10, 2024

9:00 AM	Meet at the Office of Del Puerto Water District - 17840 Ward Ave, Patterson, CA 95363
9:30 AM	Technical Topics for Morning Discussion
9:35 AM	Review of Responses to Previous TRB Comments
10:00 AM	Scope of Phase 2 Explorations
10:45 AM	Brief Introduction to 3D Geologic Model
11:00 AM	Inspection of Selected Cores
12:30 PM	Lunch
1:30 PM	Welcome and Introductory Remarks by Project Partners
2:10 PM	Meeting Agenda and Objectives • Recap of Morning Session • Project Status • Questions for TRB
2:30 PM	Discussion of 3D Geologic Model and Comments from TRB
4:30 PM	Meeting Close
6:00 PM	Group Dinner – TBD

January 11, 2024

9:00 AM	Meet at the Office of Del Puerto Water District - 17840 Ward Ave, Patterson, CA 95363
9:30 AM	Update of Geotechnical Characterization based on Results of Phase 2 Explorations
12:00 PM	Lunch
1:00 AM	Remaining Investigative Work • Laboratory Testing Program • Fault Investigation
1:30 PM	Preliminary Design
3:30 PM	Six-Month Look Ahead
4:00 PM	Concluding Comments by Partners and Program Team
4:30 PM	Close for the Day

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January 12, 2024

8:30 AM	TRB Closed-Door Session – Venue TBD
2:00 PM	Presentation of TRB Findings and Comments
3:30 PM	Closing Statements and Schedule of Next TRB Meeting

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DEL PUERTO WATER DISTRICT (DPWD) AND
SAN JOAQUIN RIVER EXCHANGE CONTRACTORS WATER AUTHORITY (SJRECWA)

DEL PUERTO CANYON RESERVOIR PROJECT
TECHNICAL REVIEW BOARD MEETING NO. 5

January 22, 2024

Anthea Hansen, General Manager
Del Puerto Water District
PO Box 1596
Patterson, CA 95363

Subject: Technical Review Board Meeting No. 5, Del Puerto Canyon Reservoir Project, January 10-12, 2024

Dear Anthea,

The fifth meeting of the Technical Review Board (TRB or Board) regarding the Del Puerto Canyon Reservoir Canyon (DPCR) Project was held in-person at the Del Puerto Water District (DPWD) offices in Patterson Wednesday through Friday, January 10-12, 2024.

The meeting was attended by representatives of the project partners, Del Puerto Water District (DPWD) and San Joaquin River Exchange Contractors Water Authority (SJRECWA), the Program consultant (Woodard & Curran), the Design Team consultants (TERRA/GeoPentech, IEC, InfraTerra, Schnabel), and the TRB. A list of meeting attendees is provided in Attachment A.

The purpose of this meeting was to review results of the recently completed Phase 2 explorations, the updated geotechnical characterizations, the plans for laboratory testing and fault investigation, and the draft preliminary design report. The meeting was comprised of presentations by the Design Team, discussions by participants, and responses by the TRB to questions raised during the discussions. The meeting agenda is provided in Attachment B. The TRB was provided with the read-ahead documents listed in Attachment C prior to the meeting. In addition, the TRB was provided with copies of the meeting presentations at the meeting.

This letter report contains the TRB's responses to the four questions posed by the Design Team during the meeting. This letter report was finalized after addressing the editorial comments from you and your consultants on the draft submitted January 12, 2024.

Question 1:
Do you agree we have gathered sufficient information to adequately characterize the foundation conditions for the structures and proceed with the next level of design?

The TRB thinks that the information collected provides a good and representative characterization of foundation conditions for most project elements. The TRB commends the Design Team for excellent

work on the information presented at the meeting. The data evaluations have provided thoughtful insights that will support the next level of design. In particular, the Board appreciated the 3D model as it provides an excellent visual depiction of project geologic data and its context regarding planned project elements; this interactive model will continue to be used as a project planning and analytical tool as the project develops.

An uncompleted element of the Phase 2 investigation is to determine the location and recency of activity of the San Joaquin range front thrust fault that exists immediately east of the project. The surface trace of the fault is mapped as existing between the State Water project and Delta Mendota Canal. The Design Team geologists have obtained exploration oilfield data and will use it to map the fault's subsurface location using high resolution seismic reflection data; if there are any faults that are closer to the project they will be mapped as well. This information will be used to guide the placement of additional surface geophysical seismic lines that will be used to more precisely determine the fault's location near the ground surface. If feasible, a fault trench will be excavated to determine more detail about the fault, such as the most recent stratigraphic unit displaced by faulting (recency of activity) and the amount of offset (amount of displacement). The TRB supports this investigation as it is vital to determine the potential seismic effects this fault poses to the project. This investigation is also discussed in our response to Question 4.

The Saddle Dam 1 foundation contains a greater alluvial thickness than anticipated. This was discovered by Phase 2 boreholes and surface geophysical seismic lines. It is not feasible to accurately determine the thickness and extent of this alluvial material using exploratory trenches or relatively expensive traditional exploratory boreholes, but it is desirable to characterize the extent and depth of this alluvial channel now, as input to the dam design. An exploratory method that could be used to characterize this alluvial unit and map out the top of the fine-grained Tesla sandstone and siltstone bedrock is by using CPT soundings (Cone Penetrometer Tests). This method is relatively low cost and provides a lithologic determination. This information could be important for evaluating excavation volumes, slopes, and dewatering.

Question 2:
Will the planned laboratory testing program provide the necessary information to adequately support the design analyses?

The Design Team presented an outline of the planned laboratory testing program at the meeting. The planned program appeared to be generally sufficient to support the design analyses. The TRB offers the following suggestions for refining the planned testing program.

For the embankment foundations, the laboratory testing program for rock samples could place greater emphasis on testing of samples from locations and depths that can influence design decisions. For example, development of profiles for rock strength and weathering over the depth intervals of potential excavation can inform the design of, and development of specifications for, the foundation excavations under both the Main Dam and Saddle Dam 1.

For the spillway excavations, the characterization of the weakly cemented conglomerate for determining cut slopes is complicated by the inability to obtain core samples in certain depth intervals. The Design Team subsequently has proposed that these materials can be characterized by synthesizing information from mapping of outcrops, packer testing, performance of existing slopes, and laboratory testing of

reconstituted specimens of conglomerate materials. The Design Team further indicated that a conservative estimate of strengths for disturbed (reconstituted) conglomerate materials would be used to determine design cut slopes. The TRB found the Design Team's approach reasonable and supports the proposed laboratory testing program.

For the potential borrow areas, the proposed laboratory testing program evaluates soils from the different candidate sources, excluding those from the "ranch" landslide which had surprisingly low maximum dry densities in compaction tests. The TRB concurs with excluding borrow materials from the ranch landslide. The TRB also understands the laboratory testing of potential upstream shell materials will include both UU and ICU testing in recognition that these materials may have relatively low hydraulic conductivities and thus their undrained shear strengths should be considered in stability evaluations. The TRB concurs with the inclusion of these tests.

The TRB supports completing the planned Panoche riprap testing. Testing at a minimum should include ATSM 88-83 soundness, ATSM 131-81 LAR and ASTM 666-84 freeze thaw. The Design Team may find additional tests that support the design criteria.

The TRB suggests the Design Team consider testing the Panoche and the coarser alluvial deposits as potential sources for producing filter and drain materials. The aggregate tests should be selected to meet the proposed design criteria for filter/drain material.

In addition, the TRB believes the aggregate clasts in the conglomerates are of good quality. These clasts need to be tested and evaluated for possible use as a source of filter sand and drain gravel.

Attached is chart of gradations for filter and drain zones used on three different dams in California. The best gradations for ease of production and placement in construction were those at the Hemet dam. The sand zone was 15 feet wide, and the gravel zone was 12 feet wide. The chimney was on a 0.5 to 1 (H:V) slope.

Question 3:
Do you believe the evaluation plan for the Panoche sandstone will provide the necessary information to adequately evaluate its suitability and yield for use as riprap material?

The riprap testing needs to be completed to determine suitability of the Panoche sandstone for riprap and riprap bedding. There are two uses for riprap and riprap bedding: on the upstream slope and the downstream slope. The TRB believes there are different criteria for acceptability on the upstream versus downstream slopes. The Design Team may consider whether riprap is even required on the downstream slope or if alternative materials/gradations in combination with other erosion controls are adequate.

As noted in response to Question 2, testing of the Panoche sandstone for filter and drain materials needs to be done to rule out the possibility for its use or acceptance.

Question 4:
Do you have any further comments on the preliminary design and suggested revisions to the Technical Memorandum to be considered before the Technical Memorandum is submitted to DSOD?

General:

The Preliminary (30%) Design Technical Memorandum dated May 2023 (PDTM) generally has adequate information for the current level of design. The TRB believes valuable information has been obtained as part of the Phase 2 geotechnical investigations and understands that some of the information will be used to supplement the PDTM, while other information will be documented during the 60% design phase. The TRB agrees with this approach and has the following comments regarding the PDTM.

Main Dam - Geologic:

The PDTM does not address potential geologic hazards that could have a significant effect on the design. This could include but is not limited to landslides within the footprint of the embankment or near appurtenant structures or offsets within the foundation footprint caused by a major seismic event from reverse faulting east of the dam. The TRB understands potential geologic hazards and supporting evaluations will be outlined in the future Technical Memorandum or Report. The TRB believes it is appropriate to include this item in a future report that supports the PDTM. Although the TRB does not necessarily anticipate any geologic features that would be fatal flaws based on the information so far provided, it is important for the Design Team complete an evaluation of the geologic hazards with conclusions that would support the feasibility of the 30% design. The conclusions should include predictions of any potential foundation displacements and their magnitudes and conclusions regarding potential landslides. Although the TRB continues to support the use of an outlet beneath the dam, the feasibility of this concept could be affected by estimates of any potential foundation offsets during an earthquake event. It is expected that DSOD would need this information to approve the concept along with other design features of the outlet pipe. Approval of this concept at the 30% design level is important.

The investigation of the wedge feature on the left abutment downstream of the crest has concluded it is erosional in origin and not a landslide feature, but now the stability of the abutment during construction or later under seismic loading needs to be formally evaluated in the next phase of design.

Main Dam – Foundation and Grouting:

The foundation criteria/objective has been preliminarily defined in the current version of the PDTM. The foundation criteria/objective beneath the shell will mainly be defined by strength and shaping. The foundation criteria/objective beneath the core will be defined by the strength, permeability/groutability, and shaping. In both cases, the exploration and possibly testing program should support the foundation criteria/objective. The exploration and testing program will also provide an estimate of excavation which will be critical to estimate the cost.

Example specifications for meeting foundation criteria/objectives were previously discussed between the TRB and the Design Team. Although defining a strength equal to or greater than the embankment is sometimes used as an objective, it either needs to be obvious or for weak rock proven by laboratory or field testing. The specifications need to be customized depending on the type of foundation encountered and structure design. Examples of foundation specifications include but are not limited to weathering, final lines and grades, equipment performance (rippability, dozer blade refusal, trafficability, etc.), or field testing. It is important to have a criteria/objective the Design Team believes will support a safe

design and criteria that could be identified in the field by both the Design Team and DSOD. In addition, the Design Team can evaluate whether the excavation beneath the core needs to be deeper than beneath the shells.

The predominant and consistent water takes during Phase 2 borehole drilling occurred along a narrow plane within the hard fanglomerate unit; this was shown as a blue plane in the 3D geologic model. Until the characteristics and origin of this feature are better understood, it is referred to as the "blue plane" herein. As part of the Main Dam foundation preparation, surface and subsurface treatment of this blue plane feature should be performed and appropriate treatment procedures and details developed. Consider over-excavation and dental concreting along the surface anywhere the feature is exposed in the dam footprint and spillway entry channel. Consider stitch grouting in the subsurface in addition.

The grouting program depths, grouting patterns, and criteria can now all be updated based on the 3D subsurface model and the experiences during drilling and water pressure testing in the Phase 2 explorations. In addition, the grouting method can be informed by the experiences in Phase 2. The use of air percussion rigs with articulated masts is appropriate. The use of water flushing with percussion drilling may be too erosive for the borehole walls in some units. Based on hole stability, down stage grouting may be necessary.

The TRB notes the overall low water takes in the foundations of both the Main Dam and Saddle Dam 1. Any high takes that occurred at the Main Dam appeared to occur in discrete, localized areas. The use of oppositely inclined curtain grout lines is appropriate along the centerline. However, blanket grouting in a wider zone along the centerline may not be necessary. The TRB encourages the Design Team to reconsider the use of this amount of blanket grouting in the area outlined in the current PDTM.

Main Dam – Filters, Drains, and Riprap:

The specification approach for the filter and drain zones is often different from specifications for other embankment zones. The filter and drains are sensitive to the placement and compaction efforts. The TRB suggests the Design Team consider past practices of method specs to achieve the required compaction of these two zones.

The chimney drain will likely need to have a coarser gradation in accord with common recent practices. Attached is a table of three very different dams in California with very different gradations of filter sand and drain gravel zones.

The coarser drain material within the blanket drain will likely need to be wider than shown in the current PDTM. For example, the Design Team should consider extending this zone the full width of the valley floor.

Offsite riprap quarry sources are being evaluated. Riprap is a very expensive item on this project. Considerations of other surface treatments such as RCC, soil cement facing, or armor lock blocks should be considered.

Main Dam – Stability Evaluations:

The Design Team performed limit equilibrium slope stability analyses to support the design slopes for both embankments. The analyses used standard-of-practice procedures and criteria, and the results appear reasonable. The TRB offers the following suggestions for consideration in future updates to these analyses. For long-term stability under steady seepage conditions, it is often assumed that failure involves drained shear strengths in all materials, in accord with current USACE guidance. The long-term stability, however, should consider the potential for failure with consolidated-undrained strengths, in accord with guidance by others and recent case history lessons (e.g., Shewbridge 2019). For determining the yield acceleration under seismic loading, the undrained shear strengths should depend on the consolidation stresses prior to seismic loading rather than on the normal stresses computed with an imposed seismic coefficient. This requires a staged analysis approach, or a careful evaluation of how computed strengths are affected by the imposed seismic coefficient. This aspect of the analysis warrants clarification in the 30% Design TM.

Spillway

The spillway is founded on the poorly indurated conglomerate. Exploration of this ground by core drilling has resulted in relatively low recovery, mostly gravel sized clasts. For the most part, however, falling head tests and observations of cut slopes reveal that the ground is tight with complete matrix infill between clasts. As indicated in response to Question 2, the slope stability of the spillway cuts can be re-evaluated for the updated ground characteristics and additional laboratory tests of reconstituted samples as part of the 60% design.

Saddle Dam 1:

The Saddle Dam 1 foundation may be deeper than anticipated based on Phase 2 investigations. To better characterize the depth and extent of the alluvium, the Design Team should consider using CPT's, as noted in the response to Question 1.

Inlet/outlet structure

The inlet/outlet (I/O) structure within the reservoir is located at the base of a slope comprised of highly weathered and weak rock down to a depth of almost 60 ft. The design will need to estimate the potential for slope deformations under rapid drawdown and seismic loading as it could impact the structure or the control/vent lines running up the slope. This includes optimizing the location of the inlet/outlet structure and routing of the feeder lines, as well as excavation or shaping, to ensure the structure is on an acceptable foundation.

The I/O conduit is currently positioned near the base of the right abutment. At this location, the trench excavation will cut into the right abutment slope resulting in a deeper cut on the abutment side of the trench. For example, a 15 ft wide trench excavated where the slope is 1:1 would lead to a 15 deep cut on one side and 30 ft cut on other side, requiring additional shoring or support for the deeper cut and concrete backfilling to regain the original slope. Accordingly, there may be advantages to having the I/O conduit located further away from the abutment where the slope angles are less, and the differential in

excavation depth is less. Moving the I/O conduit further from the abutment may also allow use of a straighter alignment with fewer bends.

A single level I/O in the reservoir provides significant cost savings over the other alternatives under consideration with multiple inlet/outlets at various elevations. However, before a final decision is made, the TRB recommends a Technical Memorandum addressing water quality issues be prepared to inform and aid the project partners in their evaluation.

As a normal part of the hydraulic facilities design, the potential for corrosion of steel and concrete components is evaluated. This should be carried out for the 60% design and include a review of the project partners' experience.

Closure:

The TRB appreciates the clarity of the Design Team's presentations and the collaborative discussions during the meeting.

The next full meeting of the TRB is scheduled to be in-person from Monday to Thursday, July 22-25, 2024. The purpose of this meeting will be to review the Geotechnical Investigation Report and progress toward completing the 30% design TM.

The TRB appreciates the opportunity to be of assistance to DPWD and SJRECWA in this assignment.

Respectfully submitted,

Ross W. Boulanger, PhD, PE
Consulting Engineer
4237 Dogwood Place
Davis, California 95618
Tel: (530) 204-7527
Email: rwboulanger@ucdavis.edu

Kerry Cato, PhD, CEG
Engineering Geologist
Cato Geoscience, Inc.
P.O. Box 891930
Temecula, CA 92589
Email: kerry@catogeoscience.com

David-Gutierrez, PE, GE
Senior Geotechnical Engineer
GEI Consultants, Inc.
2868 Prospect Park Drive, Suite 400
Rancho Cordova, CA 95670
Tel: (916) 227-9800
Email: dgutierrez@geiconsultants.com

Gregg E. Korbin, PhD
Geotechnical Consultant
1167 Brown Avenue
Lafayette, California 94549
Tel: (925) 284-9017
Email: gekorbin@earthlink.net

Mike Pauletto
Aggregate Industry Specialist and Dam Constructor
11204 NW 37th Court
Vancouver, WA. 98685
Tel: (360) 921-4172
Email: Mike@mpauletto.com

Attachment A: List of Participants
Attachment B: Agenda for TRB Meeting
Attachment C: List of Read Ahead Documents
Attachment D: Filter and Drain Gradation Comparisons – Perris, Hemet, and Isabella Dams

References:

Shewbridge, S. 2019. "Undrained strengths and long-term stability of slopes." ASCE Journal of Geotechnical and Geoenvironmental Engineering. 145 (11). https://doi.org/10.1061/(ASCE)GT.1943-5606.0002140

Attachment A:
List of Participants

Name	Organization	Name	Organization
Anthea Hansen	*DPWD*	Guilaine Roussel	*TERRA/GeoPentech*
Chris White	*SJRECWA*	Robert Kirby	*TERRA/GeoPentech*
Adam Scheuber	*DPWD*	Andrew Dinsick	*TERRA/GeoPentech*
		Bob McManus	*TERRA Engineers*
Xavier Irias	*Woodard & Curran*	Chris Hitchcock	*InfraTerra*
Ross Boulanger	*TRB*	Phil Martin	*IEC*
Kerry Cato	*TRB*	Brian Toombs	*Schnabel*
David Gutierrez	*TRB*		
Gregg Korbin	*TRB*		
Mike Pauletto	*TRB*		

Attachment B:
Agenda for TRB Meeting

TECHNICAL REVIEW BOARD
Meeting No. 5
January 10 to 12, 2023
Patterson, CA

AGENDA

January 10, 2024

9:00 AM	Meet at the Office of Del Puerto Water District - 17840 Ward Ave, Patterson, CA 95363
9:30 AM	Technical Topics for Morning Discussion
9:35 AM	Review of Responses to Previous TRB Comments
10:00 AM	Scope of Phase 2 Explorations
10:45 AM	Brief Introduction to 3D Subsurface Model
11:00 AM	Inspection of Selected Cores
12:30 PM	Lunch
1:30 PM	Welcome and Introductory Remarks by Project Partners
2:10 PM	Meeting Agenda and Objectives • Recap of Morning Session • Project Status • Questions for TRB
2:30 PM	Discussion of 3D Subsurface Model and Comments from TRB
4:30 PM	Meeting Close
6:00 PM	Group Dinner – TBD

January 11, 2024

9:00 AM	Meet at the Office of Del Puerto Water District - 17840 Ward Ave, Patterson, CA 95363
9:30 AM	Update of Geotechnical Characterization based on Results of Phase 2 Explorations
12:00 PM	Lunch
1:00 AM	Remaining Investigative Work • Laboratory Testing Program • Fault Investigation
1:30 PM	Preliminary Design
3:30 PM	Six-Month Look Ahead
4:00 PM	Concluding Comments by Partners and Program Team
4:30 PM	Close for the Day

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January 12, 2024

8:30 AM	TRB Closed-Door Session – Venue TBD
2:00 PM	Presentation of TRB Findings and Comments
3:30 PM	Closing Statements and Schedule of Next TRB Meeting

Attachment C:
List of Read Ahead Documents

Updated TRB review comment tracking log:

- DPCR - TRB Review Comment Log_01-07-2024.docx

Draft Preliminary Design Report:

- DPCR - Prelim Design_05-31-2023_Draft.pdf

Draft documents describing the Phase 2 explorations:

- Exploration maps (DPCR - Explorations_Phase 1 & 2 & GF.pdf)
- Draft boring logs (17 pdf files)
- Sample rock core photos (58 pdf files)
- Packer test results (15 pdf files)
- Piezometer readings (9 pdf files)

Attachment D:
Filter and Drain Gradation Comparisons – Perris, Hemet, and Isabella Dams

Table: Percent passing gradations

	Filters				Drains		
	Perris (Zone 3)	Hemet (Z 6)	Isabella (Zone 2A)	C-33 (ASTM)	Perris (Z 4)	Hemet (Z 7)	Isabella (Z 2B)
3"					100		
1 – ½ "					65-100	100	100
1"	100					60-100	85-100
¾ "	90-100				25-75	50-85	
½ "							25-60
3/8 "	80-100	100	100	100		25-55	
#4		85-100	85-100	95-100	0-30	3-15	0-10
#8		65-90	60-90	80-100	0-10	0-2	0-5
#10			55-85				
#16	25-70	40-60	35-65	50-85	0-5		
#30		20-40	10-40	25-60			
#40			5-25				
#50	0-25	3-15	0-15	5-30			
#100		0-6		0-10			
#200	0-5		0-3	0-5			

Discussion on gradation differences

The Hemet dams source material was a quartzite quarry. This was a fine-grained material. It was difficult to produce fine sand--#16 minus. It did produce a lot of #200 minus.

The filter Z6 spec at Hemet originally was 0-2 pass the #100. We could produce it in spec at the crusher but it produced too much #100 minus during loading, hauling and placement. The spec was changed to 0-6 passing the #100. This product was washed.

The **Lake Isabella dam** spec was by the COE. They had too many gradation bands on the sand spec. There was a lot of waste due to this specification and the poor-quality granite source material.

The **Perris dam** specifications were from DSOD. The sand spec was a poor gradation. The sand product became a 3/8" minus sand. The Z 4 drain gravel was also a very poor specification. The range from 3" to #16 was too large a size difference. This resulted in segregation in the stockpile and on the fill. The actual produced gradation was about 95% passing the 1 ½" and 30% passing the ¾" and 2% passing the #4.

X B.

TYLin

PROGRESS REPORT No. 3

DATE: January 23, 2024

TO:	Del Puerto Water District
ATTENTION:	Anthea Hansen
PROJECT:	Del Puerto Reservoir – Roadway – Task Order #1 Alternatives Analysis
FOR PERIOD:	December 1, 2023 to December 31, 2023
INVOICE NO.:	102401348
TYLI PROJECT NO.:	3010.0101183.000

I. Progress during This Period

Task 1.1 Project Work Plan

- Completed Project Work Plan (PWP) (Used as a guide for onboarding new staff- Contract summary, Scope of Work, Staff Responsibilities, and many more items pertinent to logistics related to performing work on the project.
- Completed internal quality check of PWP.

Task 1.2 Contract Administration and Progress Reporting/Invoicing

- Prepared October/November monthly invoice and progress report.
- Developed subcontract agreement with various subconsultants including DKS, Fehr & Peers, Monument, Philbin Construction, and P360. Ongoing contract discussions.

Task 1.3 CPM Project Schedule/Updates

- Prepared and provided update on schedule-to-complete.

Task 1.4 Project Meetings

- Prepared for and attended Project Management Team meeting 12/11/23.
- Various touchpoint meetings with W&C regarding site recon, permitting, and discussions about response to County questions.

Task 1.5 Coordination Meetings with Other Consultant Teams

- Prepared for and attended touchpoint coordination meeting with H&A, Philbin, TYLin structures and drainage to discuss Initial Alternatives Screening Memo. Developed comments and notes/revisions to the memo based on this conversation.

Task 1.7 Project Communication Plan

- Completed technical edit of Communication Plan.

Task 1.8 Risk Management Plan

- Completed internal QAQC of the risk management plan.
- Completed technical edit review of risk management plan.

Task 2.1.1 2019 EIR

- Reviewed 2019 EIR to obtain information used in the project history section of the Initial Alternatives Screening Memo.

Task 2.1.2 Site Review & Reconnaissance

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- Various meetings to discuss site reconnaissance plan, sequencing, timing.
- Attended Alternative 3 & 4 site visit with W&C.
- Attended Alternative 9 site visit.
- Attended Alternative 6 site visit.
- Working with and processing GPS-enabled 3D video for use by other team members.

Task 2.3 Develop Data for Alternatives Evaluation

- Review of Williamson Act parcel information for use in initial screening process.
- Review of land use designation for use in initial screening process.

Task 3.1.1 Identify Initial Alternatives

- Further refinement and modifications to alternative corridor models.
- Tabulation of data to be used for initial alternatives screening criteria.

Task 3.1.2 Alternatives Screening Workshop

- Developed the Initial Alternative Screening Memo data collection, memorandum writing, and internal QAQC in advance of presentation to the County.

Task 3.2.1 Further Development of Alternatives

- Beginning the refinement and detailed design to top scoring alternatives 3-diminesional CAD Models.
- Detailed drainage design & hydrology for top scoring alternatives.

Task 3.2.10 Value Analysis/Value Engineering

- Development of detailed drainage concepts for the 4 alternatives to be carried into detailed alternatives screening in preparation for VA/VE workshop.

Task 5.1 Grant Funding Identification

- Attending and preparing meeting notes/action items for meeting with Dena Baron Smith & Chris White to discuss upcoming federal funding opportunities.

Task 5.2 Strategy Development to Facilitate Funding Positioning

- Initial development of outreach strategy to local connections with the intent of introducing various parties to the Del Puerto Roadway Relocation project.

II. <u>Ongoing/Upcoming Tasks</u>

Task 1.1 Project Work Plan

- No additional work anticipated.

Task 1.2 Contract Administration and Progress Reporting/Invoicing

- Continue to onboard subconsultants as-needed.
- Monthly invoicing

Task 1.3 CPM Project Schedule/Updates

- Ongoing schedule updates and detailed 6-week lookahead updates as-requested.

Task 1.4 Project Meetings

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- Bi-weekly progress meetings.
- Other meetings with the Project Management Team as-needed.

Task 1.5 Coordination Meetings with Other Consultant Teams

- Coordination meetings as-needed.

Task 1.6 Stakeholder Meetings

- Coordination meetings as-needed.

Task 1.7 Project Communication Plan

- No additional work anticipated.

Task 1.8 Risk Management Plan

- None

Task 1.9 QAQC Plan

- No additional work anticipated.

Task 1.10 Project History File/Record

- No work on this task in immediate future.

Task 2.1.1 2019 EIR

- Continue to utilize existing information and studies to assist in initial alternatives screening.

Task 2.1.2 Site Review & Reconnaissance

- Continue working with and processing GPS-enabled 3D video for use by other team members.

Task 2.2 Confirm Project Goals, Criteria + Alternatives

- No additional work anticipated.

Task 2.3 Develop Data for Alternatives

- Coordinate with sources for materials to be utilized for detailed alternatives screening (geologic mapping, land use mapping, LiDAR, etc.).

Task 3.1.1 Identify Initial Alternatives

- No additional work anticipated.

Task 3.1.2 Alternatives Screening Workshop

- Present Initial Alternatives Screening Memo to the County.
- Revisions to Initial Screening Memo based on conversations with County.

Task 3.2.1 Further Development of Alternatives

- Continue detailed alternative development.

Task 3.2.2 Access Constructability

- Begin Constructability assessment and coordination.

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Task 3.2.3 LOS Evaluation

- Begin LOS evaluation and coordination.

Task 3.2.4 Evacuation Analysis

- Begin Evacuation Analysis and coordination.

Task 3.2.5 Maintainability Assessment

- Begin maintainability assessment and coordination.

Task 3.2.6 Environmental & Cultural

- Coordinate with ICF/W&C on progressing Environmental/Cultural mapping & screening.

Task 3.2.7 Estimate Life Cycle Cost

- Begin Life Cycle cost and coordination.

Task 3.2.8 Other Factors

- No work on this task in immediate future.

Task 3.2.9 Evaluate Geologic Conditions

- Begin evaluation of geologic conditions and coordination.

Task 3.2.10 Value Analysis/Engineering

- Begin discussions for the preparation of the VA/VE workshop.

Task 3.2.11 Preferred Alternatives

- No work on this task in immediate future.

Task 5.1 Grant Funding Identification

- Ongoing coordination calls to determine funding strategy.

Task 5.2 Strategy Development to Facilitate Funding

- Initial development of funding strategy and targets.

Task 5.3 Grant Application Preparation

- No work on this task in immediate future.

Task 5.4 Preliminary Benefit-Cost Analysis

- No work on this task in immediate future.

III. Status of Near-Term Deliverables and Milestones

TASK	DELIVERABLE/MILESTONE	DUE DATE	STATUS
3.1.2	Initial Alternatives Screening Memo	1/18/23	Completed

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2.2	Detailed Alternative Geometric Exhibits	2/15/24	Ongoing
3.2.11	DRAFT Preferred Alternative Screening Memo	3/15/24	Not Yet Started

IV. Significant Technical Issues and Proposed Resolutions/Actions

ISSUE	PROPOSED RESOLUTION/ACTION	RESPONSIBLE	DUE DATE

V. Scope, Budget, and Schedule Issues and Proposed Resolutions/Actions

ISSUE	PROPOSED RESOLUTION/ACTION	RESPONSIBLE	DUE DATE
Golden Eagle permit required starting January 1st. No field work allowed within 1 mile of nesting locations until August 31st without permit.	Engage environmental surveyors early 2024 to obtain nesting locations required to apply for permit.	TYLin	1/15/24

VI. Attachments

- ☒ Invoice
- ☐ Current Project Schedule
- ☐ Additional Issue Documentation: _____

VII. Consultant Certification

The above information is accurate and complete to the best of my knowledge. Please contact me with any questions or comments.

Michael Pyrz, PE 1/23/2024
Project Manager

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X B.

Anthea Hansen

From: Kevin Qualiardi <kevin.qualiardi@tylin.com>
Sent: Monday, January 22, 2024 5:01 PM
To: Xavier Irias; Anthea Hansen; Andy Neal; Chris White; Robin Cort; Michael Pyrz; Gregory, Phillip
Cc: mmyers
Subject: RE: DPCR Road Relocation: biweekly

All,

As discussed, see below estimated schedule to complete Alternatives Analysis.

Task	Anticipated Due Date
Complete Site Reconnaissance	Friday, December 22, 2023
Review of Initial Alternatives Screening TM (Internal)	Friday, December 29, 2023
Review of Initial Alternatives Screening TM (Partners)	Friday, January 5, 2024
Final Decision on Final 4 Alternatives	Thursday, January 18, 2024
Detailed Analysis of Final Alternatives	Friday, March 15, 2024
Review Final Alternatives Screening TM (Partners)	Friday, March 22, 2024
Review Final Alternatives Screening TM (County + Other Stakeholders)	Friday, March 29, 2024
Finalize Final Alternatives Screening TM	Monday, April 15, 2024
Kick Off Preliminary Design	Monday, April 22, 2024

Kevin Qualiardi, PE
SENIOR TRANSPORTATION ENGINEER
TYLin

-----Original Appointment-----
From: Xavier Irias <XIrias@woodardcurran.com>
Sent: Tuesday, August 22, 2023 8:05 AM
To: Xavier Irias; ahansen@delpuertowd.org; Andy Neal; Chris White; Robin Cort; Michael Pyrz; Kevin Qualiardi; Gregory, Phillip
Cc: mmyers
Subject: DPCR Road Relocation: biweekly
When: Monday, January 22, 2024 4:30 PM-5:15 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

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Microsoft Teams meeting

Join on your computer, mobile app or room device
Click here to join the meeting

Meeting ID: 210 083 562 624
Passcode: LnoGGW
Download Teams | Join on the web

Or call in (audio only)
+1 207-558-4270,,738438332# United States, Portland
Phone Conference ID: 738 438 332#
Find a local number | Reset PIN

Learn More | Meeting options

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X.C.

LOS VAQUEROS RESERVOIR EXPANSION PROJECT

LVR JPA GENERAL MANAGERS MEETING AGENDA
January 29, 2023 – 3:00pm to 4:00pm

Location: Zoom Link
https://us06web.zoom.us/j/83054219859?pwd=FLE1Ybtc21MSZnO9MiFTWAkj8cGTDj.1
Meeting ID: 830 5421 9859 **Passcode:** 305363 **One tap mobile:** +16699006833

1. Meeting Objective: To provide relevant LVE JPA status updates and support issues resolution to meet schedule milestones.

2. JPA Schedule Status Update - JPA

3. DCA Issues and Resolution - CCWD

4. Backstop Issues and Resolution - CCWD

5. Facilitation Services - All

6. Next Steps

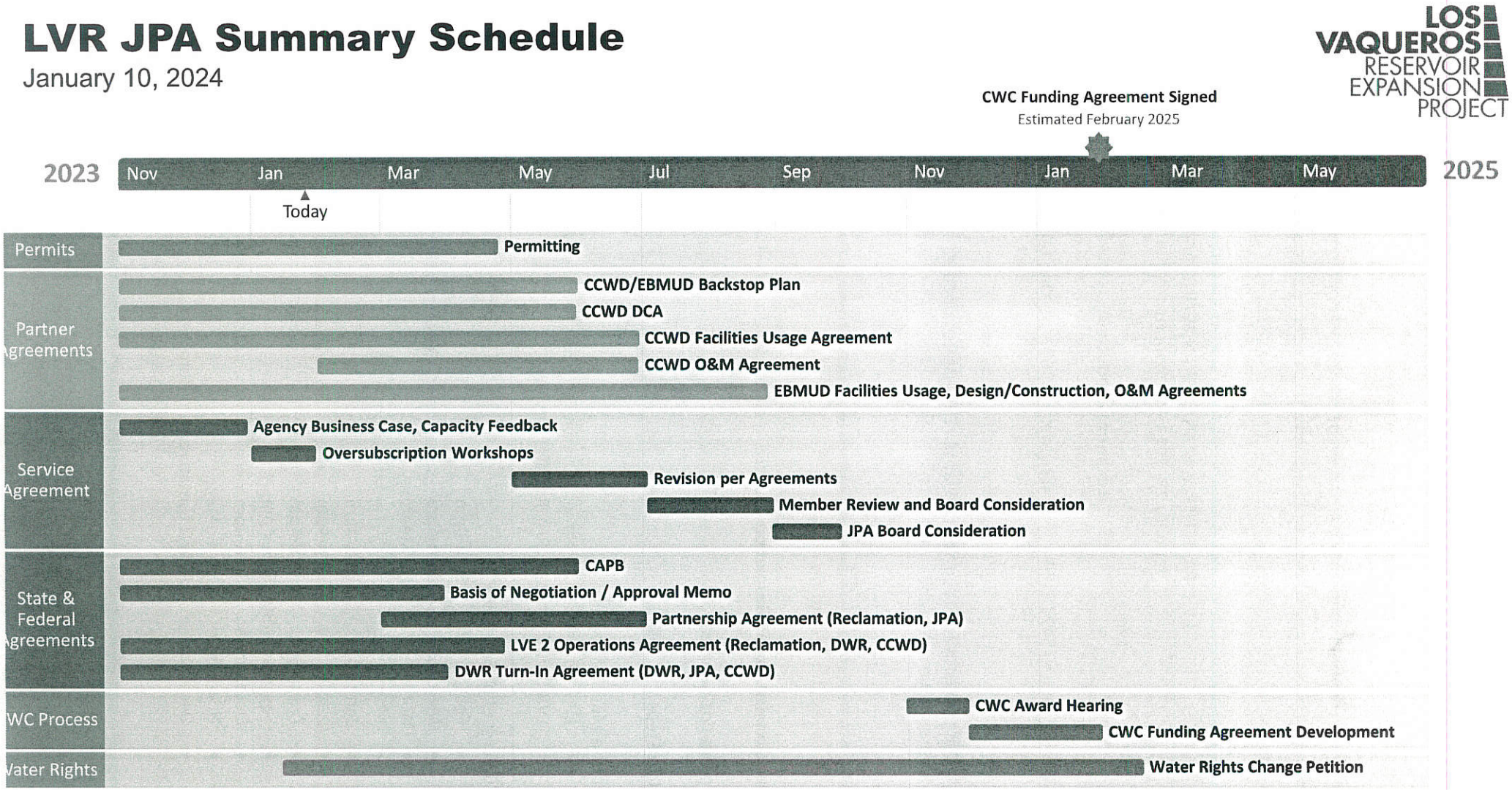
7. Future Meeting Topics
   - LV 2 Operations Agreement Overview (to be scheduled as workshop)
   - LVR Dam Expansion Risk Register Review

8. 2024 Meeting Schedule
   - February 26 3pm-4pm
   - March 25 3pm-4pm
   - April No Meeting
   - May 8 ACWA Tentative 1pm-3pm
   - June 24 3pm-4pm
   - July 29 3pm-4pm
   - August 26 3pm-4pm
   - September 30 3pm-4pm
   - October 28 3pm-4pm
   - November No Meeting
   - December 4 ACWA Tentative 1pm-3pm

LVR JPA Summary Schedule

January 10, 2024

LOS VAQUEROS RESERVOIR EXPANSION PROJECT



XC.

Anthea Hansen

From: Los Vaqueros Reservoir JPA <info-losvaquerosjpa.com@shared1.ccsend.com>
Sent: Tuesday, January 30, 2024 4:00 PM
To: Anthea Hansen
Subject: Los Vaqueros Reservoir Joint Powers Authority Update

January 30, 2024

Los Vaqueros Reservoir Joint Powers Authority Update

LOS VAQUEROS RESERVOIR EXPANSION PROJECT

UPDATE ON MULTIPARTY COST SHARE AGREEMENT

Amendment No. 5 to the Multi-Party Cost Share Agreement (MPA) has been fully executed by the JPA and all Member Agencies. All payments have been received for the first round of Member Agency funding. The second invoice was sent to each Member Agency in mid-December 2023 with a scheduled due date of February 29, 2024.

As a result of the additional time required to enter into project agreements and obtain full funding approval from the California Water Commission, the JPA has developed a comprehensive near-term schedule that reflects a delay in project implementation. The schedule has been submitted to the Member Agencies for review, and the JPA continues working to ensure sufficient interim funding for project activities.

The following chart provides an overview of the MPA expenditures through December 31, 2023, as well as in-kind services, funds received, outstanding receivables, and cash on hand.

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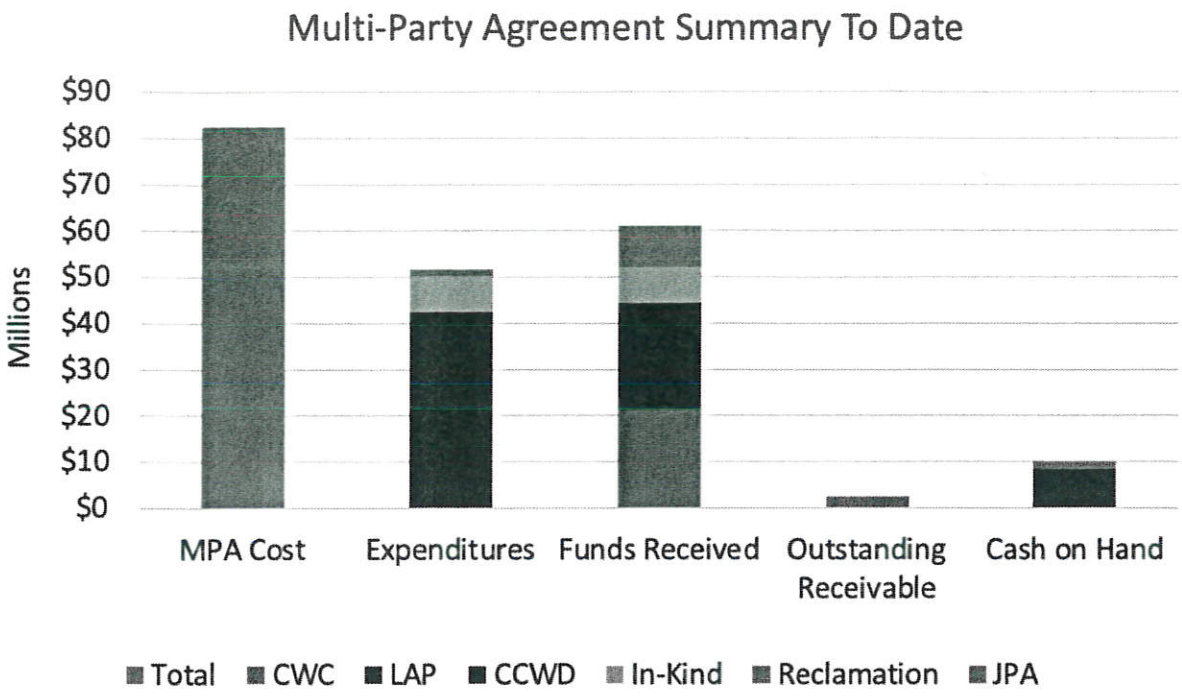

JANUARY BOARD OF DIRECTORS MEETING RECAP

On January 10, the JPA Board of Directors met in person at Zone 7 Water Agency. Action items included the election of Angela Ramirez Holmes (Zone 7 Water Agency) as the Chair and Anthea Hansen (San Luis & Delta-Mendota Water Authority) as Vice Chair for 2024. The Board also received updates on program management, budget, permitting, agreements, and design. The next JPA Board Meeting is scheduled for February 14 at Zone 7 Water Agency. In accordance with the Brown Act, the meeting agenda packet will be posted on the JPA website in advance of the meeting.

SUBMISSION AND REVIEW CONTINUE FOR PROJECT PERMITTING

U.S. Fish and Wildlife Service supervisory staff continue reviewing the draft Biological Opinion for construction activities.

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Reclamation is working to finalize the Memorandum of Agreement required under Section 106 of the National Historic Preservation Act, with execution anticipated in the coming months. Additionally, Reclamation is continuing to define the timing and path forward for the Record of Decision.

California Department of Fish and Wildlife (CDFW) continues work on the Incidental Take Permit (ITP) for construction and the Lake and Streambed Alteration Agreement for construction activities. The JPA Member Agencies transmitted a letter to CDFW supporting Contra Costa Water District's (CCWD) counterproposal to the administrative draft ITP for operations. CDFW considered the counterproposal and issued a second administrative draft to CCWD. CCWD is currently reviewing the second draft and will continue communications with CDFW.

The U.S. Army Corps of Engineers continues work on the Section 404 permit and associated Decision Document.

JPA AND CCWD CONTINUE TO COORDINATE ON DESIGN AND ENGINEERING EFFORTS

Revisions to the draft preliminary design report and drawings for the Transfer-Bethany Pipeline (TBPL) are in progress. Seismic refraction surveys are being conducted and will be completed in January, and the draft data report for the first phase of geotechnical investigations is being developed. A response letter will be sent to the California Department of Water Resources (DWR) describing how their comments on the Turn-In design will be addressed. If approved, no further Turn-In design work will be required in advance of entering into the Turn-In Agreement. The draft Turn-In Agreement is also being reviewed by DWR.

Design of Pumping Plant No. 1 Replacement (PP1) continues. A technical memorandum outlining the recommendation to encase the Rock Slough Fish Screen afterbay to prevent aquatic vegetation growth and protect the new pump station will be submitted to the JPA for review in January.

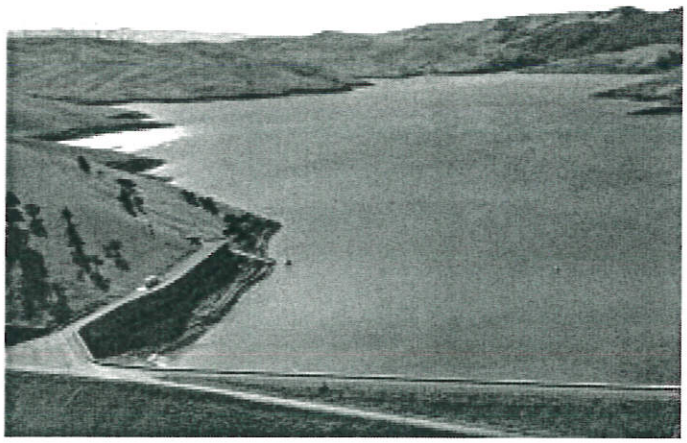
The dam inundation study was revised to address comments and submitted to the Division of Safety of Dams (DSOD) for their records in December 2023. DSOD continues to review the drawings and technical specifications that were submitted for their approval in December 2023.

Implementation of the Project Management Information System (PMIS) continues, including design and system configuration for the various projects, facilities, and budgets.

UPCOMING MEETINGS

February 14 - 9:30 a.m.
JPA Board Meeting (Zone 7 Water Agency)

February 22 - 10 a.m.
JPA Finance Committee Meeting (Virtual)



ADDITIONAL PROJECT INFORMATION

losvaquerosjpa.com
ccwater.com/lvstudies

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X D.

Anthea Hansen

From: Jessica Alwan <jalwan@hgcpm.com>
Sent: Thursday, February 1, 2024 2:03 PM
To: Rebecca R. Akroyd; 'Cindy Kao'; 'rmilligan@wwd.ca.gov'; 'Jose Gutierrez'; 'rfreeman@wwd.ca.gov'; Anthea Hansen; 'Steve Stadler'; 'Dana Jacobson'; 'Chase Hurley'; 'e.pattison@bbid.org'; 'Frances Mizuno (mizunoconsulting@gmail.com)'; 'Lea Emmons'; 'Steve Wittry'; 'Tom Boardman'; 'Andrew Gschwind'; 'Allison Febbo'; Pablo Arroyave; Chuck Gardner; Curtis Creel; Federico Barajas
Subject: BF Sisk Reclamation Negotiations, Napa

History in the making...progress toward the BF Sisk Dam Raise and Reserovoir Expansion project.

Jessica Alwan
(916) 915-7337

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