

Las Posas Valley Groundwater Basin Technical Advisory Committee Special Meeting

Tuesday August 27, 2024, 1:00 PM

Via Zoom:

<https://us02web.zoom.us/j/84168071218?pwd=Kv42H0XegH4TthbvJUgzTrzACgXM8b.1>

Webinar ID: 841 6807 1218

Passcode: 150451

NOTICE OF MEETING

NOTICE IS HEREBY GIVEN that the Las Posas Basin Technical Advisory Committee (TAC) will hold a special meeting via Zoom at **1 PM on Tuesday August 27, 2024**.

AGENDA

- A. Call to Order**
- B. Roll Call**
- C. Agenda Review**
- D. Public Comments**
- E. TAC Member Comments**
- F. Regular Agenda**
 - 1. Approve the Minutes of the July 31, 2024 TAC Special Meeting** (attached)
 - 2. Review Draft TAC Recommendation Report on Basin Optimization Plan Tasks 1 and 2**
Draft Recommendation Report attached.
 - 3. Review Draft TAC Recommendation Report on Draft Scope of Work to Prepare the Las Posas Valley Basin 2025 Optimization Yield Study**
Draft Recommendation Report attached.
 - 4. Update on Committee Consultation Review Schedule**
The TAC will receive an update on the schedule for upcoming committee consultations from the Watermaster Representative.
- G. Items for Future Agenda**
Potential items for future agenda will be considered by the TAC
- H. Adjourn**

Attachment 1

Minutes of the July 31, 2024 TAC Special Meeting

Las Posas Valley Groundwater Basin Technical Advisory Committee Special Meeting

Meeting Minutes
for
July 31, 2024

The Zoom meeting start was delayed due to technical difficulties and began at 1:24.

A. Call to Order

TAC Chair Chad Taylor welcomed all attendees and called the meeting to order at 1:25 pm.

B. Roll Call

All TAC members were present (via Zoom):

Voting Members

- Chair Chad Taylor
- Vice Chair Tony Morgan
- Bob Abrams

Non-Voting Members

- Kimball “Kim” Loeb
- Bryan Bondy

C. Agenda Review

There were no requested changes to the agenda.

No public additions to the agenda.

D. Public Comments

No public comments were received.

E. TAC Member Comments

There were no TAC member comments.

F. Regular Agenda

1. Approve the Minutes of the July 15, 2024 Initial Meeting (attached)

No comments from TAC member on minutes. Tony Morgan moved to approved the minutes and Bob Abrams seconded. Meeting minutes were unanimously approved.

2. TAC Administrator’s Report on Policy and Procedural Questions Raised During July 15, 2024 Initial Meeting:

Question 1: Are TAC members required to post physical locations on agenda for regular and other meetings?

The Judgment does not indicate that Committee members are required to post physical locations. The PAC has not included physical locations for members joining remotely.

Question 2: Do Brown Act requirements also pertain to non-voting TAC members:

Chad Taylor spoke with LPV Watermaster Counsel on Brown Act application to the TAC and was told the following:

A quorum of a legislative body is the number of members of the body necessary to conduct or transact business.

The LPV Adjudication Judgment in Section 6.7 says:

“A majority of the members of a Committee constitutes a quorum of the Committee. No meeting of a Committee may occur without a quorum of its members being present. The affirmative vote of a majority of the members present at a Committee meeting is necessary for any motion to pass, except as otherwise provided.”

A quorum can also be specifically defined to be a certain number or percentage of the members and specific quorum requirement can be made to apply to specific types of actions.

This Judgment is ambiguous about quorum requirements for the TAC where we have voting and non-voting members.

Watermaster Counsel recommends our quorum requirements be that:

Two voting TAC members must be present to open a TAC meeting and to take action. This approach avoids opening meetings where no action could be taken because the quorum consists of only one voting member, which is neither a quorum of voting TAC members or all TAC members. Where only one voting TAC member is able to attend, the meeting should be canceled and rescheduled.

Chad Taylor asked if TAC members thought they should use this procedure to evaluate TAC members moving forward. Bob Abrams agreed with it.

Chad Taylor recommended a motion to adopt the language above as the quorum guidance for the TAC.

Tony Morgan made a motion that the TAC adopt quorum requirements that at least two voting TAC members must be present to open a meeting and to take action and that when only one voting member is able to attend, the meeting should be canceled or rescheduled. Bob Abrams seconded this motion, and it was unanimously approved.

Chad Taylor read further recommendations from LPV Counsel:

TAC members discussions and deliberations should be held during TAC meetings, and individual TAC members (both voting and non-voting) should refrain from discussing TAC business with other TAC members outside of TAC meetings.

Given the LPV Adjudication judgment’s intent that all PAC and TAC meetings be open and public, all TAC discussion, deliberation, review and analysis, comments, recommendations, member work product and deliverables should all be exclusively handled during TAC meetings.

Communication outside of meetings should be limited to:

- scheduling and TAC member availability
- avoid substantive issues/decisions
- one other TAC member (whether voting or non-voting).

Chad Taylor noted that doing all business in meeting, including developing and reviewing recommendation reports, may necessitate increased meeting frequency. He noted that it may be a challenge to accommodate Watermaster counsel's recommendation that all work is handled during TAC meetings. Bryan Bondy said the recommendation from counsel can and should be followed. He noted that this may not answer the entire question about Brown Act requirements for non-voting members, but said that they can follow the recommendation. Chad Taylor believed it applies to both voting and non-voting discussions.

Chad Taylor recommended that they try to present all comments during meetings and then submit them to the TAC in the draft recommendation report form in the subsequent meeting. He also indicated that it may be possible to handle report review through tracked changes where TAC members present their edits to the TAC Administrator and those edits are then included in tracked changes in subsequent meeting agenda.

Bob Abrams said he preferred this approach with tracked changes. More frequent meetings could cause problems for many. Chad Taylor agreed and said he would discuss this with Counsel.

No other comments.

Question 3. Are non-voting members required to provide public financial disclosures consistent with Form 700?

Yes, Judgment section 6.11.2 requires all TAC members, whether permanent/voting or not, to annually submit a statement of economic interests in a form approved by the Watermaster. The Watermaster should be responsible for coordinating this reporting, which it has already done with the voting TAC members.

No public comments on agenda item 2.

3. Committee Consultation: Basin Optimization Plan Tasks 1 and 2

The TAC discussed the project evaluation criteria, technical evaluation, and list of projects for inclusion in the Basin Optimization Plan. TAC members provided comments on the adequacy of the information request form for projects, the project ranking criteria and associated weighting, assessment of project feasibility, and the collection of additional information to support project evaluation and planning. Recommendations were developed for the Watermaster during this discussion:

- Provide additional documentation of the process for defining, reviewing, and evaluating project components.
- Develop methods for evaluating how projects might affect groundwater quality and local undesirable conditions like pumping depressions, the effects of multiple projects on one another, and who the direct and indirect beneficiaries of each project would be.

- Include additional criteria addressing effects (positive or negative impacts) on sustainability criteria with a point scale of 1 to 20 in five categories, similar to the project implementation timeframe criteria.

TAC Discussion also included review of the individual projects and assessment of the proposed project proponents.

In this conversation TAC member Bondy indicated that Projects 2 and 9 (Importing of surplus water and using Calleguas facilities for replenishment, respectively) appear to be effectively one project with Project 9 a subset of Project 2. Mr. Bondy also reported that Calleguas Mutual Water District (CMWD) does not believe they are the correct project proponent for these projects. CMWD can provide input and assist with cost estimation but cannot define timing and logistics for importing surplus water for replenishment; this should be a shared responsibility.

Mr. Bondy also reported that since the 2022 GSP Zone Mutual Water Company (Zone MWC) decided not to pursue grant funding for the infrastructure upgrades necessary to support the in-lieu water delivery within the Zone MWC service area identified in Project 7. They would like to request that the Watermaster replace Project 7 with an in-lieu delivery option feasibility study. Mr. Bondy noted that Zone MWD not the only local agency capable of delivering water from east Las Posas Valley to west Las Posas Valley and they would like the Watermaster to consider reviewing existing infrastructure in the service areas of all the local agencies to identify opportunities, constraints, and costs associated with in-lieu water delivery.

The TAC discussed the specific request from the Watermaster for the TAC to provide input on the appropriate project proponent for Project 6. Mr. Loeb noted that there is no record of how or who requested that this project be included in the Judgment. The TAC did not have any additional information regarding potential project proponent(s) for Project 6.

The potential for evaluation of additional projects in the Basin Optimization Plan was also discussed. The TAC will recommend that the Watermaster solicit additional projects from stakeholders for inclusion and prioritization as part of the Basin Optimization Plan. This could include supplementing areas with limited natural recharge, filling data gaps with addition monitoring, assessing and improving irrigation efficiency, water level optimization through management of pumping locations and depths, or other projects identified by stakeholders.

The recommendations identified by the TAC will be compiled in a Recommendation Report by TAC Administrator Chad Taylor for consideration by the TAC at the next regular TAC meeting on August 20, 2024.

4. Committee Consultation: Draft Scope of Work to Prepare the Las Posas Valley Basin 2025 Basin Optimization Yield Study

The TAC discussed the Dudek Draft Scope of Work to Prepare the Las Posas Valley Basin 2025 Optimization Yield Study dated December 27, 2023. Members of the TAC asked if it was appropriate to review the scope and associated budget for this work in draft when it does not include scope and budget to model and assess optimization yield in the West Las Posas Management Area (WLPMA). Mr. Loeb asked the Watermaster staff member attending the meeting (Farai Kaseke) when a scope and budget for modeling and assessing

optimized yield in the WLPMA is expected from United Water Conservation District (UWCD), but this information was not available. The Dudek scope of work indicates and assumption that UWCD will evaluate basin optimization using the same approach for the WLPMA as described in the Dudek scope for the East Las Posas Management Area (ELPMA).

The TAC identified recommendations for Watermaster consideration in requesting revisions to the Dudek scope of work and associated budget. These recommendations included:

- Clarify that baseline simulations for the ELPMA will apply only the portion of pumping identified in the Judgment associated with that Management Area and not the entire 40,000 acre-feet per year (AFY) indicated in the scope of work.
- Clarify model scenario nomenclature and add a true baseline scenario. Task 2.1 is named Baseline Model Scenario. However, the scenario as described includes simulation of projects designed to increase yield. The baseline scenario should include future conditions without projects, then a subsequent scenario including projects can be compared to that baseline to assess the effects of the projects on groundwater conditions.
- Add TAC and PAC consultation during model scenario development and evaluation in Tasks 1 and 2. The scope of work indicates that model scenarios and modeling results will not be reviewed by the TAC and PAC, but there may be important questions that need to be answered during scenario development and model analysis and consultation with the committees should be required.
- Add sufficient scenarios to Task 2.2 to evaluate not only reduce pumping but also increase in-lieu use from alternative sources of water supply. This would allow for focused delivery of supplemental water to areas of the Basin where undesirable results are identified in the modeling instead of uniformly reducing pumping for all groundwater users, which may reduce the need for rampdown and allow policy makers to identify the “sweet spot” for supplemental water delivery and pumping reductions to eliminate undesirable results while limiting pumping restrictions.

The recommendations identified by the TAC will be compiled in a Recommendation Report by TAC Administrator Chad Taylor for consideration by the TAC at the next regular TAC meeting on August 20, 2024.

5. Update on Committee Consultation Review Schedule

Mr. Loeb provided an update of the TAC consultation review schedule. He indicated that the timeframe for reviews may become compressed. The GSP 5-year evaluation draft is expected to be available for review week of August 19th. The Basin Optimization Plan will proceed following receipt of TAC comments and a draft of the Plan is expected in late fall 2024. Additional specific committee review timelines were not available.

G. Items for Future Agenda

Mr. Taylor asked if TAC members have topics they would like to be included in future meeting agenda. No future agenda items were identified.

H. Adjourn

Chair Taylor asked for a motion to adjourn the meeting. Bob Abrams made a motion to adjourn, and Tony Morgan seconded.

The motion passed unanimously, and the meeting adjourned at 3:09 pm.

Attachment 2

Draft TAC Recommendation Report on Draft Scope of Work to Prepare the Las Posas Valley Basin 2025 Optimization Yield Study

LAS POSAS VALLEY TECHNICAL ADVISORY COMMITTEE

August 16, 2024

DRAFT RECOMMENDATION REPORT

To: Las Posas Valley Watermaster
From: Chad Taylor, LPV TAC Administrator and Chair
Re: TAC Consultation Recommendation Report on Basin Optimization Plan Tasks 1 and 2

The Las Posas Basin Watermaster Board of Directors (Watermaster) approved a scope of work in January 2024 to prepare the Basin Optimization Plan for the Las Posas Valley Basin. The scope included six Basin Optimization Plan development tasks, the first two of which require committee consultation consistent with the Las Posas Valley Basin Adjudication Judgement before proceeding with the latter tasks of Basin Optimization Plan development. These first two tasks are: (1) project evaluation criteria development and (2) technical evaluation of projects for inclusion in the Basin Optimization Plan.

Watermaster staff requested consultation from the Las Posas Valley Technical Advisory Committee (TAC) on the first two tasks of Basin Optimization Plan Development in the attached memorandum dated July 10, 2024. This memorandum provided a summary of work completed to date, a list of the projects being considered, a draft project evaluation checklist, and a draft project ranking sheet for TAC review and consultation. In addition, Watermaster staff specifically requested that the TAC:

1. Confirm that each project is appropriate for inclusion in the Basin Optimization Plan.
2. Confirm that the assumed project proponents are appropriate.
3. Provide input on the appropriate project proponent for Project 6.

The TAC discussed the project evaluation criteria, technical evaluation, list of projects, and the three items above in a Special Meeting on July 31, 2024. During this meeting TAC members identified comments on the adequacy of the information request form for projects, the project ranking criteria and associated weighting, assessment of project feasibility, and the collection of additional information to support project evaluation and planning. Recommendations were also developed for the Watermaster to consider.

TAC COMMENTS AND RECOMMENDATIONS

TAC comments and recommendations on Basin Optimization Plan Tasks 1 and 2 are presented below.

Comment 1:

Projects 2 and 9 (Importing of surplus water and using Calleguas facilities for replenishment, respectively) appear to be effectively one project with Project 9 a subset of Project 2. The Calleguas Mutual Water District (CMWD) TAC representative (Mr. Bryan Bondy, PG, CHG) reported that CMWD does not believe they are the correct project proponent for these projects. The representative indicated CMWD can provide input and assist with cost estimation but cannot define timing and logistics for importing surplus water for replenishment; this should be a shared responsibility.

Comment 2:

Mr. Bondy also reported that since the 2022 GSP Zone Mutual Water Company (Zone MWC) decided not to pursue grant funding for the infrastructure upgrades necessary to support the in-lieu water delivery within the Zone MWC service area identified in Project 7. Mr. Bondy reported that Zone MWC would like to request that the Watermaster replace Project 7 with an in-lieu delivery option feasibility study. Such a study could assess the potential for in-lieu water deliveries from other local agencies capable of delivering water from east Las Posas Valley to west Las Posas Valley. The study could include a review of existing infrastructure in the service areas of all the local agencies to identify opportunities, constraints, and costs associated with in-lieu water delivery.

Comment 3:

The TAC has no additional information on potential project proponent(s) for Project 6.

Recommendation 1:

Provide additional documentation of the process for defining, reviewing, and evaluating project components.

Recommendation 2:

Develop methods for evaluating how projects might affect groundwater quality and local undesirable conditions like pumping depressions, the effects of multiple projects on one another, and who the direct and indirect beneficiaries of each project would be.

Recommendation 3:

Include additional criteria addressing effects (positive or negative impacts) on sustainability criteria with a point scale of 1 to 20 in five categories, similar to the project implementation timeframe criteria.

Recommendation 4:

Solicit additional projects from stakeholders for inclusion and prioritization as part of the Basin Optimization Plan. This could include supplementing areas with limited natural recharge, filling data gaps with additional monitoring, assessing and improving irrigation efficiency, water level optimization through management of pumping locations and depths, or other projects identified by stakeholders.

FOX CANYON GROUNDWATER MANAGEMENT AGENCY

LAS POSAS VALLEY WATERMASTER



MEMORANDUM

Date: July 10, 2024
To: Las Posas Valley Watermaster Technical Advisory Committee
From: Kudzai F. Kaseke, Assistant Groundwater Manager
Subject: Draft Las Posas Valley Basin Project Evaluation Criteria and Technical evaluation of projects that will be included in the Basin Optimization Plan.

Dear Las Posas Valley Watermaster Technical Advisory Committee (TAC):

As the Watermaster for the Las Posas Valley Basin (LPVB), Fox Canyon Groundwater Management Agency (FCGMA) is responsible for preparing the Basin Optimization Plan for the LPVB. The Judgement in *Las Posas Valley Water Rights Coalition v. Fox Canyon Groundwater Management Agency VENC100509700* (Judgement) requires LPVB committee consultation during development of the Basin Optimization Plan.

On January 12, 2024, the FCGMA Board of Directors approved a scope of work to prepare the LPVB Basin Optimization Plan. The scope of work included six (6) tasks that support development of the Basin Optimization Plan. As outlined in the Judgement and described in the approved scope of work, the first two tasks require committee consultation prior to the development of the remainder of the Basin Optimization Plan. These tasks are: (i) development of Project Evaluation Criteria and (ii) technical evaluation of projects that will be included in the Basin Optimization Plan. Watermaster referred these tasks to the Policy Advisory Committee (PAC) for committee consultation and currently awaits feedback from the PAC. Below is a summary of work completed on these tasks as of March 27, 2024.

Project Evaluation Criteria:

Dudek, in coordination with FCGMA staff, has developed a draft set of Project Evaluation Criteria for committee review. These criteria are based on the current FCGMA project evaluation process used in the Oxnard and Pleasant Valley Basins (OPV). The draft criteria developed for the LPVB consist of two forms: a project evaluation checklist, which is used to solicit information from the Project proponent, and a project evaluation ranking sheet. These forms will be used to assess the priority and feasibility of each project.

Project Evaluation Criteria

The draft set of Project Evaluation Criteria are separated into four distinct categories:

- 1) Water Supply benefits
- 2) Timing / Feasibility
- 3) Cost and Funding
- 4) Additional Project Considerations

The criteria included in categories 1 through 3 are the same as the current FCGMA project evaluation process used in the OPV.

Category 4 – Additional Project Considerations – includes Judgment-specific information, such as a description of collaborations necessary to implement the project and a description of any anticipated material and unreasonable impact, as defined in the Judgement, that cannot be fully mitigated.

Project Ranking Sheet

The project ranking sheet introduces a set of points associated with each category defined in the draft project evaluation criteria. Using the information provided by individual project proponents, each project will be scored using the proposed ranking sheet. The points awarded for water supply benefits, timing/feasibility, and cost and funding are the same as the current FCGMA project evaluation process used in the OPV.

The proposed points for the Additional Project Considerations are as follows:

- 1) Collaboration / Cooperation requirements do not impact project scoring.
- 2) If a project is anticipated to cause material and unreasonable impact, as defined in the Judgement, that cannot be fully mitigated, twenty-five (25) points will be subtracted from the overall project score.
 - The twenty-five (25) point reduction was selected to be equivalent to the maximum points awarded under the water supply category.

Technical Project Evaluation

Following the development of the Project Evaluation Criteria, Dudek, in coordination with FCGMA, will begin technical review of the projects outlined in the Judgement. The scope of work approved by the FCGMA Board on January 12, 2024, identified nine (9) projects, each of which are identified in the Judgement, for inclusion in the Basin Optimization Plan.

To ensure that each project is appropriately evaluated, Dudek and FCGMA are requesting that LPVB committees:

- 1) Confirm that each project is appropriate for inclusion in the Basin Optimization Plan.
- 2) Confirm that the assumed project proponents are appropriate.
- 3) Provide input on the appropriate project proponent for Project 6.

Please provide feedback via email at LPV.Watermaster@ventura.org or contact me at 805 654 2010 with any questions or concerns.

Projects Identified in the Judgement for Inclusion in the Basin Optimization Plan

Project No.	Project Title	Project Assumptions		
		Project Proponent	Project Type	Project Details
1	Removal, and periodic removal maintenance, of Arundo Donax from the Las Posas Valley watershed in an environmentally safe manner	FCGMA	Water Supply	Dudek assumes that the project details and benefits are the same as those developed during FCGMA's application for DWR's SGM Round 2 SGMA Implementation funding opportunity. Dudek will update the project description, as necessary, based on revised project evaluation criteria developed in Task 1.
2	Importing of surplus water	CMWD	Water Supply	Dudek assumes that CMWD will develop the project description, cost estimates, and timing for implementation of this project.
3	Arroyo Las Posas storm water capture and recharge	VCWWD-1	Water Supply	Dudek assumes that the project details and benefits are the same as those provided by VCWWD-1 during the project solicitation undertaken by FCGMA during development of the 2022 GSP Annual Report. Dudek assumes that VCWWD-1 will, as necessary and appropriate, update the project description based on the revised project evaluation criteria developed in Task 1.
4	Constructing desalter(s) to address water quality issues in the Arroyo Simi Creek	VCWWD-1	Water Quality	Dudek assumes that the project details and benefits are the same as those provided by VCWWD-1 during the project solicitation led by FCGMA during development of the 2022 GSP Annual Report. Dudek assumes that VCWWD-1 will, as necessary and appropriate, update the project description based on the revised project evaluation criteria developed in Task 1.
5	Formalizing an agreement with the City of Simi Valley ("City") to maintain up-stream wastewater treatment plant discharges, or treated effluent, into the Arroyo Simi Creek, which shall include cooperation with and support of the City, as necessary, in its interactions with the Los Angeles Regional Water Quality Control Board ("LA Waterboard") on this issue of treated effluent discharge into Arroyo Simi Creek	FCGMA	Water Supply	Dudek assumes that the project details and benefits will be developed in coordination with FCGMA.
6	Formalizing an agreement with the City for recycled water deliveries to Las Posas Valley users via pipeline, which shall include cooperation with and support of the City, as necessary, in its interactions with the LA Waterboard on this issue of recycled water	Unknown	Feasibility Study	Dudek assumes that the project proponent will be identified by the PAC, TAC, and FCGMA during development of the Basin Optimization Plan. The project proponent will be responsible for developing the project description and providing all relevant information to FCGMA.
7	Designing and constructing new or modified infrastructure in order to deliver In Lieu Water to water deficit areas for Use in lieu of Extracted Groundwater and to increase water conveyance within the Basin	Zone MWC	Water Supply	Dudek assumes that the project details and benefits are the same as those provided by Zone MWC during the project solicitation led by FCGMA during development of the 2022 GSP Annual Report. Dudek assumes that Zone MWC will, as necessary and appropriate, update the project description based on the revised project evaluation criteria developed in Task 1.
8	Developing a program for the least cost acquisition of Allocation Basis or Annual Allocations, or Carryover as an alternative to Replenishment	FCGMA	Water Supply	Dudek assumes that the project proponent will be identified by the PAC, TAC, and FCGMA during development of the Basin Optimization Plan. The project proponent will be responsible for developing the project description and providing the project details and benefits will to the FCGMA.
9	Using Calleguas facilities for Replenishment	CMWD	Water Supply	Dudek assumes that this project will be led by CMWD and that the project description, cost, and benefits will be provided by CMWD as part of the Basin Optimization Plan development.

Notes

FCGMA = Fox Canyon Groundwater Management Agency, City = City of Simi Valley, VCWWD-1 = Ventura County Water Works District No. 1, Zone MWC = Zone Mutual Water Company, CMWD = Calleguas Municipal Water District

"Project Benefits" will be characterized by each project proponent in a manner consistent with the Judgement and SGMA, including through an estimate of impact to groundwater levels, groundwater quality, groundwater in storage, interconnected surface water, and material injury

LAS POSAS VALLEY WATERMASTER

c/o Fox Canyon Groundwater Management Agency
 800 S. Victoria Avenue | Ventura, CA 93009-1610 | Tel: (805) 654-2010 | LPV.Watermaster@ventura.org

Project Evaluation Checklist

BACKGROUND INFORMATION	
Project Name:	(Please fill in)
Purpose of Project:	(Please select one)
Project Type:	(Please select one)
Sponsoring Agency:	(Please fill in)
Groundwater Basin:	(Please fill in)
Location:	(Please fill in)
Project Description:	(Please fill in)
Implementation Trigger (if applicable):	(Please fill in)
Evaluation Criteria	Response (Applicant to Complete)
Water Supply	
Annual increase in Sustainable Yield (AFY):	(Please fill in)
Annual increase in supplemental water in lieu of pumping (AFY):	(Please fill in)
Groundwater demand reduction (AFY):	(Please fill in)
Sustainability indicators addressed:	(Please fill in)
Project documentation included?	(Please select one)
Timing/Feasibility	
Project Implementation Timeframe	
Current Project status:	(Please select one)
Estimated time to Project completion (years):	(Please fill in)
Timeline / feasibility documentation included?	(Please select one)
Environmental	
CEQA/NEPA type:	(Please select one)
Status of CEQA/NEPA review and permitting:	(Please select one)
Will the Project likely be permitted?	(Please select one)
Sensitivity of location:	(Please fill in)
Permitting	
Permits required:	(Please fill in)
Status / time required:	(Please fill in)
Likelihood of Project being permitted:	(Please select one)

LAS POSAS VALLEY WATERMASTER

c/o Fox Canyon Groundwater Management Agency

800 S. Victoria Avenue | Ventura, CA 93009-1610 | Tel: (805) 654-2010 | LPV.Watermaster@ventura.org

Project Evaluation Checklist

Project Complexity	
Does the Project use new technology:	(Please select one)
Does the Project require land acquisition:	(Please select one)
Status of the land acquisition process:	(Please select one)
Is the Project dependent on other unbuilt or unfunded projects:	(Please select one)
Is the Project dependent on funded projects currently under construction:	(Please select one)
Description of Operation and Maintenance (if applicable):	(Please fill in)
Project Lifespan	
What is the projected lifespan of the Project:	(Please fill in)
Project Phasing	
<i>Please provide documentation of anticipated project phasing, including schedules and costs (capital and O&M) for each phase, as an attachment to this form.</i>	
Does Project require multiple phases of construction?	(Please select one)
No. of anticipated construction phases:	(Please fill in)
Description of phases:	(Please fill in)
Phasing timeline:	(Please fill in)
Total cost per phase:	(Please fill in)
Project phasing documentation attached?	(Please select one)
Cost and Funding	
Total capital cost:	(Please fill in)
Total annual Operations & Maintenance (O&M) Cost:	(Please fill in)
Is the project Proponent providing a funding match to construct the project?	(Please fill in)
Is there a funding source other than FCGMA for ongoing operation and maintenance costs?	(Please fill in)
Additional Project Considerations	
Is it necessary to collaborate and/or coordinate with FCGMA, Calleguas, WWDs, United Water Conservation District, or the Water Rights Holders for project implementation?	(Please select one)
If yes, please describe the anticipated collaboration/coordination.	(Please fill in)
Is the project anticipated to cause material and unreasonable impact, as defined in the Judgement, that cannot be fully mitigated?	(Please select one)
If yes, please describe the anticipated material and unreasonable impacts.	(Please fill in)

LAS POSAS VALLEY WATERMASTER

c/o Fox Canyon Groundwater Management Agency

800 S. Victoria Avenue | Ventura, CA 93009-1610 | Tel: (805) 654-2010 | LPV.Watermaster@ventura.org

Project Evaluation Checklist

Project Proponent Contact Information	Response (Applicant to Complete)
Name:	(Please fill in)
Title:	(Please fill in)
Organization:	(Please fill in)
Email:	(Please fill in)
Phone:	(Please fill in)
Date:	(Please fill in)

LAS POSAS VALLEY WATERMASTER

c/o Fox Canyon Groundwater Management Agency
 800 S. Victoria Avenue | Ventura, CA 93009-1610 | Tel: (805) 654-2010 | LPV.Watermaster@ventura.org

Project Ranking Sheet

Project Name _____ **Project Type** _____

Sponsoring Agency _____ **Basin** _____

WATER SUPPLY

1. Total Sustainable Yield / Supplemental Water / Reduced Demand

Total additional water supplied by the project for the benefit of the basin through increase to sustainable yield, supplemental water to be delivered in lieu of pumping, or reduction in groundwater demand.

_____ AFY increased sustainable yield

_____ AFY supplemental water in lieu of pumping

_____ AFY groundwater demand reduction

Points Awarded

5	10	15	20	25
<500 AFY	≤500 AFY <2,500 AFY	≤2,500 to AFY <5,000 AFY	≤5,000 AFY <7,500 AFY	≥7,500 AFY

2. Sustainable Yield / Supplemental Water / Reduced Demand Documentation

Project documentation includes verifiable quantified estimate of increased sustainable yield, supplemental water, and/or reduced groundwater demand.

Points Awarded

5	10	15	20	25
Conceptual estimate - no supporting documentation	Conceptual estimate - limited supporting documentation	Initial feasibly study supporting estimate	Preliminary design and/or modeling supporting estimate	Detailed design and/or modeling supporting estimate

TIMING / FEASIBILITY

3. Project Implementation Timeframe

What is the project implementation timeframe?

Points Awarded

1	5	10	15	20
Cannot be implemented prior to 2040	May be operational by 2040, but uncertain	Can be operational by 2040	Can be operational in 10 years or less	Can be operational in 5 years or less

4. Development Phase

How far along is the definition, feasibility, design, and development of the project?

Points Awarded

1	2	3	4	5
Conceptual – no feasibility or	Feasibility study in progress,	Initial feasibly study completed	30% engineering design	60% or greater engineering

LAS POSAS VALLEY WATERMASTER

c/o Fox Canyon Groundwater Management Agency

800 S. Victoria Avenue | Ventura, CA 93009-1610 | Tel: (805) 654-2010 | LPV.Watermaster@ventura.org

design, project not well defined	project well defined			design
----------------------------------	----------------------	--	--	--------

5. Status of Approvals, Permits, and Environmental Review

What is the status of NEPA/CEQA review and permitting?

Points Awarded

1	2	3	4	5
Permit requirements not identified or unknown	Expected to take >5 years	Underway and approvals expected <3 years	Underway and approvals expected ≤1 year	Permitting and CEQA / environmental review complete

6. Project Complexity

How complex is the project? For example, does it require multiple phases of construction; does it use proven technology; does it require land acquisition; is dependent upon other projects; and/or does it require complex permitting?

Points Awarded

1		3		5
Very complex, relies on unproven technology		Moderately complex		Low complexity, uses readily available proven technology

7. Land Acquisition

Does the project require land acquisition or easements, and if so, what is the status?

Points Awarded

1	2	3	4	5
Required, not started and/or potential eminent domain	Process started, but less than 25% complete	>25% but <50% complete	More than 50% complete	Not required or all acquisitions and/or easements complete

8. Dependency on Other Projects

Is the project dependent upon other projects?

Points Awarded

1		3		5
Project is dependent on other unbuilt and unfunded projects		Project is dependent on funded projects under construction		Not dependent on other unbuilt projects

9. Project Lifespan

What is the projected lifespan of the project?

Points Awarded

1	2	3	4	5
≤5 years		10 years		≥20 years

LAS POSAS VALLEY WATERMASTER

c/o Fox Canyon Groundwater Management Agency

800 S. Victoria Avenue | Ventura, CA 93009-1610 | Tel: (805) 654-2010 | LPV.Watermaster@ventura.org

COST & FUNDING

10. Water Cost

Projected total cost of water produced, saved, or increase in sustainable yield.

\$ _____ Total capital cost

\$ _____ Total annual O&M cost

\$ _____ Annual O&M cost per AF

\$ _____ Annual cost (all costs including capital and O&M) per AF

Points Awarded

1	5	10	15	20
≥\$3,000 / AF	≤\$2,000 / AF <\$3,000 / AF	≤\$1,000 / AF <\$2,000 / AF	>\$500 / AF <\$1,000 / AF	≤\$500 / AF

11. Funding Match for Construction

Is the project proponent providing a funding match to construct the project?

Points Awarded

1	4	8	12	15
No match	<10% match	10 to 25% match	25 to 50% match	>50% match

12. O&M Funding

Is there a funding source other than FCGMA for ongoing operation & maintenance costs?

Points Awarded

1	4	8	12	15
No funding identified	25%	50% of funding committed	75%	100% of funding committed

ADDITIONAL PROJECT CONSIDERATIONS

13. Collaboration/Cooperation/Participation

Is it necessary or desirable to collaborate and/or coordinate with FCGMA, Calleguas, WWDs, United Water Conservation District, or the Water Right Holders for project implementation?

Points Awarded

N/A
Coordination requirements will not impact final project scoring.

14. Undesirable Results/Material Injury

Is the project anticipated to cause material and unreasonable impact, as defined in the Judgement, that cannot be fully mitigated?

Points Awarded

-25	0
The project is likely to cause material and unreasonable impacts that cannot be mitigated, as defined in the Judgement.	The project is unlikely to cause material and unreasonable impacts as defined in the Judgement.

LAS POSAS VALLEY WATERMASTER

c/o Fox Canyon Groundwater Management Agency

800 S. Victoria Avenue | Ventura, CA 93009-1610 | Tel: (805) 654-2010 | LPV.Watermaster@ventura.org

Ranked by _____

Date _____

DRAFT

Attachment 3

Draft TAC Recommendation Report on Draft Scope of Work to Prepare the Las Posas Valley Basin 2025 Optimization Yield Study

LAS POSAS VALLEY TECHNICAL ADVISORY COMMITTEE

August 16, 2024

DRAFT RECOMMENDATION REPORT

To: Las Posas Valley Watermaster

From: Chad Taylor, LPV TAC Administrator and Chair

Re: TAC Consultation Recommendation Report on Draft Scope of Work to Prepare the Las Posas Valley Basin 2025 Optimization Yield Study

The Las Posas Basin Watermaster (Watermaster) requested consultation from the Las Posas Valley Technical Advisory Committee (TAC) on a draft scope of work for Dudek to prepare the Las Posas Valley Basin 2025 Optimization Yield Study. The Judgment requires the Watermaster to approve a scope of work and budget for the technical study to assess and establish the Basin Optimization Yield with committee consultation.

The Watermaster provided a memorandum requesting TAC consultation as soon as possible and transmitting the Draft Scope of Work to Prepare the Las Posas Valley Basin 2025 Basin Optimization Yield Study. The request (attached) acknowledges that the scope and budget are currently incomplete and that a revised complete draft will be referred to the TAC for consultation once United Water Conservation District provides the outstanding scope and budget information.

The TAC discussed the Dudek draft scope of work and associated budget dated December 23, 2023 in a Special Meeting on July 31, 2024 and developed the comments and recommendations below for the Watermaster to consider prior to authorizing the associated work.

TAC COMMENTS AND RECOMMENDATIONS

The TAC identified the following comments and recommendations for Watermaster consideration in requesting revisions to the Dudek scope of work and associated budget:

Comment 1:

The draft document does not include scope and budget to model and assess optimization yield in the West Las Posas Management Area (WLPMA). When is a scope and budget for modeling and assessing optimized yield in the WLPMA expected from United Water Conservation District (UWCD)? The Dudek scope of work indicates an assumption that UWCD will evaluate basin optimization using the same approach for the WLPMA as

described in the Dudek scope for the East Las Posas Management Area (ELPMA), but this should be confirmed.

Recommendation 1:

Clarify that baseline simulations for the ELPMA will apply only the portion of pumping identified in the Judgment associated with that Management Area and not the entire 40,000 acre-feet per year (AFY) indicated in the scope of work.

Recommendation 2:

Clarify model scenario nomenclature and add a true baseline scenario. Task 2.1 is named Baseline Model Scenario. However, the scenario as described includes simulation of projects designed to increase yield. The baseline scenario should include future conditions without projects, then a subsequent scenario including projects can be compared to that baseline to assess the effects of the projects on groundwater conditions.

Recommendation 3:

Add TAC and PAC consultation during model scenario development and evaluation in Tasks 1 and 2. The scope of work indicates that model scenarios and modeling results will not be reviewed by the TAC and PAC, but there may be important questions that need to be answered during scenario development and model analysis and consultation with the committees should be required.

Recommendation 4:

Add sufficient scenarios to Task 2.2 to evaluate not only reduce pumping but also increase in-lieu use from alternative sources of water supply. This would allow for focused delivery of supplemental water to areas of the Basin where undesirable results are identified in the modeling instead of uniformly reducing pumping for all groundwater users, which may reduce the need for rampdown and allow policy makers to identify the “sweet spot” for supplemental water delivery and pumping reductions to eliminate undesirable results while limiting pumping restrictions.

FOX CANYON GROUNDWATER MANAGEMENT AGENCY

LAS POSAS VALLEY WATERMASTER



MEMORANDUM

Date: July 16, 2024
To: Las Posas Valley Watermaster Technical Advisory Committee
From: Kudzai F. Kaseke, Assistant Groundwater Manager
Subject: Committee Consultation for the Draft Scope of Work to Prepare the Las Posas Valley Basin 2025 Basin Optimization Yield Study.

Dear Las Posas Valley Watermaster Technical Advisory Committee (TAC):

Attached for your review and committee consultation is the Draft Scope of Work to Prepare the Las Posas Valley Basin 2025 Basin Optimization Yield Study. The Las Posas Valley Adjudication Judgment requires that Watermaster approve a scope of work and budget for a technical study to assess and establish the Basin Optimization Yield, following Committee Consultation. (Judgment, § 4.10.1.1.). Watermaster staff acknowledge that the Draft Scope of Work as presented is incomplete and will refer the complete Draft back to your committee for consultation once United Water Conservation District supplies their time and budget estimates.

Watermaster staff working with a consultant (Dudek), have developed a draft scope of work for the 2025 Basin Optimization Yield Study. It is important to note that:

- 1) The draft scope of work assumes the Basin Optimization Yield study will be evaluated through a set of numerical model runs,
 - a. The draft budget includes budget for consultant to perform the modeling for the East Las Posas Management Area,
 - b. The draft budget includes budget for consultant to coordinate with United Water Conservation District, but the scope of work currently does not include time or budget for United Water Conservation District to perform the modeling for the West Las Posas Management Area. The budget in the attached Scope of Work thus does not represent the total cost to the Watermaster to prepare the Basin Optimization Yield Study.

Watermaster proposes that the TAC evaluate the draft scope of work and budget as presented with the understanding that once United Water Conservation District supplies their estimates, these will be brought before your committee for consultation. Please provide feedback via the email below to the Watermaster at your earliest convenience.

Please contact me at 805 654 2010 or LPV.Watermaster@ventura.org with any questions or concerns.

December 27, 2023

Kim Loeb
Fox Canyon Groundwater Management Agency
800 South Victoria Avenue
Ventura, Ca 93009

Subject: DRAFT Scope of Work to Prepare the Las Posas Valley Basin 2025 Basin Optimization Yield Study

Dear Kim Loeb:

Dudek is pleased to provide this scope of work to support the Fox Canyon Groundwater Management Agency (FCGMA) in the development of the 2025 Basin Optimization Yield (BOY) Study for the Las Posas Valley Basin (LPVB). Dudek understands that the goal of the BOY Study is to quantify the BOY¹ and Rampdown Rate², each of which will be defined in a manner consistent with the Judgement, sustainability goal for the LPVB, and the Sustainable Groundwater Management Act (SGMA). Additionally, Dudek understands that the development of this BOY Study will occur concurrently with critical basin management activities, including the development of the 5-year Groundwater Sustainability Plan (GSP) Evaluation, development of the Basin Optimization Plan, and development of Calleguas Aquifer Storage and Recovery Operations Plan. Because of this, we understand that the FCGMA will need to develop the BOY Study in a manner that efficiently and effectively incorporates new groundwater management information as it is developed by the FCGMA, with input from the Policy Advisory Committee (PAC) and Technical Advisory Committee (TAC). As the team who has actively partnered with the FCGMA in the development and implementation of the GSP for the LPVB, we are uniquely familiar with the projects identified in the Judgement and are well suited to support the FCGMA in their development of the BOY Study.

Scope of Work

As the Watermaster for the LPVB, FCGMA is responsible for calculating the BOY and Rampdown Rate. To support FCGMA in this, Dudek proposes that the numerical groundwater flow models for the LPVB be used to simulate the impact of future groundwater extractions and projects on groundwater levels in the LPVB. Dudek will use the numerical groundwater flow model for the East Las Posas Management Area (ELPMA)³ and Dudek recommends

¹ *Las Posas Valley Water Rights Coalition v. Fox Canyon Groundwater Management Agency. Case No. VENC100509700* (Judgement) defines the Basin Optimization Yield as, “the estimated yield that is projected to be available to achieve sustainable groundwater management by 2040.[...] The Basin Optimization Yield will take into account: (i) water available from native groundwater inflows; (ii) Return Flows; (iii) reasonably anticipated enhanced yield (i.e., managed replenishment excluding water stored and dedicated to the Calleguas ASR Project) projected to be available by Water Year 2040 consistent with the projected Basin Optimization Plan; and (iv) opportunities for optimization of the Sustainable Yield achieved by relocating Extraction and transmission of water to avoid Undesirable Results. The Basin Optimization Yield will also, through Adaptive Management, take into account circumstances including: (a) improved understanding of Basin conditions and hydrogeologic parameters as a result of new data over time; (b) the current status of Basin Optimization Projects; and (c) changing hydrological conditions”.

² The Judgement defines the Rampdown Rate as, “The rate of Rampdown beginning in Water Year 2025 and each Water Year thereafter, which will result from the Basin Optimization Study”, and defines that the Rampdown Rate shall be calculated, “by dividing the amount of any deficit between the then-effective Operating Yield (e.g. 40,000 AFY) and the Basin Optimization Yield by fifteen (i.e. fifteen annual increments)”.

³ Calleguas Municipal Water District, 2018, Groundwater Flow Model of the East and South Las Posas Sub-Basins – Preliminary Draft Report. Prepared by Intera Geoscience and Engineering Solutions. January 2018.

that the West Las Posas Management Area (WLPMA) analyses be performed in coordination with the United Water Conservation District (UWCD) using the Updated Coastal Plain numerical groundwater flow model currently in use for development of the 2025 GSP Update for the Oxnard Subbasin, Pleasant Valley Basin, and LPVB. The scope of work below describes Dudek’s approach to quantifying the BOY and Rampdown Rate.

Task 1 – Model Scenario Development

The Judgement requires development of a Basin Optimization Plan that defines the suite of projects that are likely to be “practical, reasonable, and cost-effective to implement prior to 2040 to maintain the Operating Yield at 40,000 AFY or as close thereto as achievable” (Section 5.3.2.2 of the Judgement). The Judgement requires that FCGMA prepare an initial draft of the Basin Optimization Plan that will include project details (e.g. schedules, costs, feasibility, etc.), a project prioritization schedule, and a schedule for the Basin Optimization Projects to be evaluated, scoped, designed, financed, and developed (Section 5.3.2.4 and 5.3.2.5 of the Judgement).

Dudek understands that the Final Basin Optimization Plan will not be adopted by the Watermaster Board until the summer of 2024. Therefore, to facilitate efficient development of the BOY Study, Dudek will use the project feasibility and implementation timelines in the draft Basin Optimization Plan to prepare a proposed suite of projects for inclusion in the BOY Study. As needed and appropriate, Dudek will coordinate with FCGMA and individual project proponents to define the project implementation details required for modeling, such as proposed in lieu and recycled water delivery recipients, conditions amenable to stormwater diversion along the Arroyo Las Posas, and timelines/conditions favorable for using Calleguas facilities for LPVB replenishment.

Assumptions

- The model scenario will *only* include projects identified in the *draft* Basin Optimization Plan that are “practical, reasonable, and cost-effective to implement prior to 2040”.
- Development of the model scenario and BOY Study project suite will not undergo PAC and TAC review.
- If individual project proponents do not respond to a request for additional information on project implementation details Dudek will use professional judgment to develop the project scenario.

Task 1 **\$6,905.00**

Task 2 – ELPMA Numerical Modeling

Task 2.1 – Baseline Model Scenario

Following development of the BOY Study project suite, Dudek will develop a baseline model scenario that simulates groundwater conditions in the ELPMA through water year 2069. To remain consistent with the GSP, the baseline model scenario will use the hydrologic period from 1930-1979, modified by DWR’s 2070 central tendency climate change factors. Groundwater withdrawals in the baseline model scenario will be set at the initial Operating Yield established in the Judgement, such that total extractions from the LPVB equal 40,000 AFY. Projects will be simulated according to the schedules defined in the draft Basin Optimization Plan.

Using the simulation results from the baseline scenario, Dudek will develop groundwater budgets, calculate the change in groundwater in storage, and compare groundwater levels at key wells to the minimum thresholds and

measurable objectives in the ELPMA to characterize the efficacy of the Basin Optimization Projects in avoiding undesirable results in the LPVB.

Assumptions

- The Baseline scenario will be modeled using the existing version of the numerical groundwater flow model of the ELPMA (CMWD 2018). This model is currently being used for development of the 2025 LPVB GSP Update.
 - Baseline modeling will *not* include model validation, re-calibration, or uncertainty quantification.
- Well by well extraction rates will be defined using the allocation schedule set forth in Exhibit C of the Judgement.
- Model results will not undergo PAC and/or TAC review until review of the *draft* BOY Study.

Task 2.1\$28,845.00

Task 2.2 – Alternative Pumping Scenarios and Rampdown Rate

If the Basin Optimization Projects do not avoid undesirable results when groundwater extractions in the LPVB equal 40,000 AFY, Dudek will perform up to three (3) additional scenarios to define a groundwater production rate that avoids undesirable results. For these scenarios, Dudek will uniformly reduce groundwater extractions across the ELPMA until undesirable results are avoided. Dudek has not included scope and budget to simulate localized restrictions on extractions within the ELPMA, as defined in section 4.10.3 of the Judgement.

If the BOY is lower than 40,000 AFY, Dudek will calculate the Rampdown Rate in accordance with Section 4.10.1.4 of the Judgement.

Assumptions

- The alternative pumping scenarios will be modeled using the existing version of the numerical groundwater flow model of the ELPMA (CMWD 2018). This model is currently being used for development of the 2025 LPVB GSP Update.
 - The alternative pumping scenarios modeling will *not* include model validation, re-calibration, or uncertainty quantification.
- Well by well extraction rates will be defined using the allocation schedule set forth in Exhibit C and the Protocols and Formulas to Determine Allocations in Exhibit D of the Judgement.
- Alternative pumping scenarios will not include localized restrictions on extractions within the ELPMA.
- Development of the alternative pumping scenarios and corresponding model results will not undergo PAC and/or TAC review until review of the *draft* BOY Study.

Task 2.2\$12,465.00

TASK 2 TOTAL\$41,310.00

Task 3 – WLPMA Modeling Coordination

Dudek understands that the numerical modeling for the WLPMA will be performed by UWCD. To support coordination between the WLPMA and ELPMA modeling efforts, Dudek has included scope and budget to attend up to four (4) coordination calls, develop up to four (4) pumping scenarios, and analyze up to four (4) sets of numerical model outputs provided by UWCD for incorporation into the BOY Study.

Assumptions

- All numerical modeling for the WLPMA will be performed by UWCD using the same version of the Ventura Regional Groundwater Flow Model that is being used to support preparation of the 2025 GSP Updates for the Oxnard Subbasin, Pleasant Valley Basin, and LPVB.
 - The WLPMA modeling will *not* include model validation, re-calibration, or uncertainty quantification.
- Well by well extraction rates will be defined using the allocation schedule set forth in Exhibit C and the Protocols and Formulas to Determine Allocations in Exhibit D of the Judgement.
- Alternative pumping scenarios will not include localized restrictions on extractions within the WLPMA.
- Development of the model scenarios and corresponding model results will not undergo PAC and TAC review until review of the *draft* BOY Study.

Task 3\$10,795.00

Task 4 – Draft and Final Basin Optimization Yield Study

Dudek will summarize results from the numerical modeling in the draft BOY Study. Dudek will prepare one (1) draft BOY Study and, pursuant to the Judgement, provide the draft to the PAC and TAC for review and comment. Dudek will, as appropriate and in consultation with FCGMA, revise the draft BOY Study based on feedback from the PAC and TAC.

The revised draft BOY Study will be provided to the Watermaster Board for review and discussion. Dudek will prepare the final BOY Study based on feedback provided by the Watermaster Board and will submit a final BOY Study for approval by Watermaster Board meeting.

Assumptions

- Dudek will provide electronic copies of the draft BOY Study to the PAC and TAC.
- The draft BOY Study will undergo one (1) round of internal review by FCGMA staff, one (1) round of external review by the LPVB PAC and TAC, and one (1) round of external review by Watermaster Board.
- The PAC will provide one (1) redline edit version of the draft BOY study with all PAC member comments collected for Dudek to review.
- The TAC will provide one (1) redline edit version of the draft BOY study with all TAC member comments collected for Dudek to review.

- Dudek will, as appropriate and in consultation with FCGMA staff, revise the draft BOY Study following each round of review and provide the Watermaster with one (1) electronic copy of the *final* BOY Study.

Task 4\$39,540.00

Task 5 – Watermaster Recommendation Response Reports

The Judgement requires that the draft BOY Study scope of work and draft BOY Study be provided to the PAC and TAC for formal review and comment. The PAC and TAC may provide the Watermaster with recommendation reports for both the BOY Study scope of work and BOY Study that shall be presented to the Watermaster Board. Prior to presenting the recommendations to the Board, Watermaster staff may prepare formal response reports that document responses to the PAC and TAC recommendations. Dudek has included time and budget to support the Watermaster staff in the development of response reports for both the draft scope of work and BOY Study. The time and budget provided is based on Dudek’s professional judgement. If PAC and TAC comments vary greatly from our estimate, we will discuss options for addressing these comments with FCGMA staff. If Dudek and staff agree that the time budgeted below is insufficient to address the comments, Dudek will prepare a revised budget for Watermaster approval detailing the additional work required to adequately respond to the comments.

Assumptions

- Dudek will prepare one (1) *draft* response report for the BOY study scope of work recommendation report and one (1) *draft* response report for the BOY Study recommendation report. Each *draft* response report will be provided to FCGMA for one (1) round of internal review.
- Dudek will, as appropriate and in consultation with FCGMA staff, revise the *draft* response reports and provide the Watermaster with one (1) electronic copy for consideration during review of the BOY Study scope of work and BOY Study report.
- The budget for this task is based on Dudek’s professional judgement.

Task 5\$31,860.00

Task 6 – Committee Meetings

The Judgement requires that the BOY Study be developed in consultation with the PAC and TAC and approved by the Watermaster Board. To support these coordination efforts, Dudek has included time to prepare for and attend both in-person and virtual meetings to discuss the development of the BOY Study with the TAC⁴ and Watermaster Board. Under this task Dudek will prepare for and attend up to six (6) meetings according to the following schedule:

Table 1. Anticipated Meetings

Meeting No.	Meeting Topic	Committee	Type
1	Scope of Work	Technical Advisory Committee	Virtual
2	Scope of Work	Watermaster Board	In Person

⁴ Dudek’s committee engagement will be focused on the technical development of the Basin Optimization Study and input from the PAC will be provided by the Watermaster and in recommendation reports.

Table 1. Anticipated Meetings

Meeting No.	Meeting Topic	Committee	Type
3	Draft Study	Watermaster Board	In Person
4	Recommendations on the Draft Study	Technical Advisory Committee	Virtual
5	Recommendations on the Draft Study	Watermaster Board	In Person
6	Adoption of the BOY Study	Watermaster Board	In Person

Task 6 \$28,240.00

Assumptions

- Up to two (2) Dudek staff members will attend up to two (2) virtual meetings with the TAC. Dudek has not included travel costs in our budget assumptions for these meetings. If the TAC meetings require in-person attendance the budget will need to be revised or the total number of meetings Dudek attends will need to be reduced. If the TAC requests additional staff members attend, the budget will need to be revised or the total number of meetings Dudek attends will need to be reduced.
- Up to two (2) Dudek staff members will attend up to four (4) in-person meetings with the Watermaster Board.

Task 7 – Project Management

Dudek anticipates that the BOY Study will be developed over a 1-year time frame (Table 2). To facilitate efficient development of the BOY Study, Dudek has included scope and budget for biweekly (every other week) coordination calls with FCGMA staff, and general project management activities.

Task 7 \$21,530.00

Schedule

Dudek anticipates that this draft scope of work will be provided to the LPVB PAC and TAC in March 2024 and that the finalization and implementation of the BOY Study scope of work will be completed in accordance with the timeline specified in Table 2.

Assumptions

- This schedule assumes that the *draft* Basin Optimization Plan for the LPVB will be developed with sufficient time to incorporate the findings into Task 1. If the *draft* Basin Optimization Plan is not prepared prior to the initiation of Task 1, Dudek will coordinate with FCGMA to prepare a revised schedule that will be disseminated to the PAC and TAC for review and feedback.
- This schedule additionally assumes that the numerical modeling performed by the UWCD can be completed in coordination with FCGMA and Dudek over a five (5) month time frame. Dudek will work with FCGMA and UWCD to facilitate this, however, Dudek understands that UWCD may have additional obligations that may impact their modeling schedules. In the event that the numerical modeling cannot be performed within this time frame, Dudek will coordinate with FCGMA to prepare a revised schedule that will be disseminated to the PAC and TAC for review and feedback.

Table 2. Schedule

Description	Tasks Covered	Anticipated Duration (weeks)
LPVB Committee review of the draft BOY Study scope of work	-	6
Recommendation Report review, BOY Study scope of work revisions, and response report development	5 ^a	6
Final BOY Study scope of work development following Watermaster Board review	5 ^a	5
Development of the draft BOY Study	1, 2, 3, 4 ^b	22
LPVB Committee review and Recommendation Report development	-	6
Recommendation Report review, draft BOY Study revisions, and Response Report development	4 ^c , 5 ^d	6
Final BOY Study development following Watermaster Board review	4 ^c	4
Total Anticipated Project Duration		55 weeks (approx. 1 year)

Notes

- ^aCovers development of the Response Reports to the draft BOY scope of work Recommendation Reports.
- ^bCovers development of the draft BOY Study.
- ^cCovers development of the revised draft BOY Study.
- ^dCovers development of the BOY Study Response Report.
- ^eCovers development of the final BOY Study.

Cost Estimate

Table 3 includes a summary of Dudek’s estimated cost to complete each task of this work plan. A detailed cost estimate, which includes a breakdown of estimated hours by staff and billing rate is included as Attachment A.

Assumptions

- This cost estimate reflects all assumptions outlined in Tasks 1 through 7. If the LPVB PAC and/or TAC recommend revisions to the BOY Study scope of work, Dudek will coordinate with FCGMA staff to prepare an updated fee estimate that incorporates the recommended revisions.

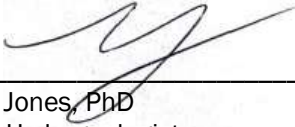
Table 3. Cost Summary

Task	Task Title	Cost Estimate
1	Model Scenario Development	\$6,905.00
2	ELPMA Numerical Modeling	\$41,310.00
2.1	Baseline Model Scenario	\$28,845.00
2.2	Alternative Pumping Scenarios and Rampdown Rate	\$12,465.00
3	WLPMA Modeling Coordination	\$10,795.00
4	Draft and Final Basin Optimization Yield Study Report	\$39,540.00
5	Watermaster Response Reports	\$31,860.00
6	Committee Meetings	\$28,240.00
7	Project Management and Coordination	\$21,530.00

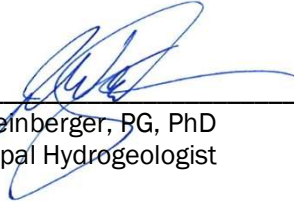
Table 3. Cost Summary

Task	Task Title	Cost Estimate
	Total Cost	\$180,180.00

Sincerely,



Trevor Jones, PhD
Senior Hydrogeologist



Jill Weinberger, PG, PhD
Principal Hydrogeologist

DRAFT

Attachment A

Detailed Cost Estimate

DRAFT LPVB Basin Optimization Yield (BOY) Study Detailed Cost Estimate

		Dudek Labor Hours and Rates								
		Principal Hydrogeologist/Engineer II	Sr. Hydrogeologist IV/Engineer IV	Sr. Hydrogeologist III/Engineer II	Project Hydrogeologist III/Engineer III	Project Hydrogeologist III/Engineer II	TOTAL DUDEK HOURS	DUDEK LABOR COSTS	OTHER DIRECT COSTS	TOTAL FEE
<i>Project Team Role:</i>										
<i>Billable Rate:</i>		\$295.00	\$250.00	\$230.00	\$185.00	\$175.00				
Task 1	Define Project Suite and Model Scenarios									
1.1	Review Basin Optimization Plan; Define Basin Optimization Suite and Implementation Timeline; Coordinate with Agencies	9	17				26	\$6,905.00		\$6,905.00
	Subtotal Task 1	9	17	0	0	0	26	\$6,905.00		\$6,905.00
Task 2	ELPMA Numerical Modeling									
2.1	Baseline Model Scenario	3	24	32	60	20	139	\$28,845.00		\$28,845.00
2.2	Alternative Pumping Scenarios and Rampdown Rate	3	12	18	24		57	\$12,465.00		\$12,465.00
	Subtotal Task 2	6	36	50	84	20	196	\$41,310.00		\$41,310.00
Task 3	WLPMA Modeling Coordination									
3.1	Coordination, Meetings, and Technical Analyses	5	10	20	12		47	\$10,795.00		\$10,795.00
	Subtotal Task 3	5	10	20	12	0	47	\$10,795.00		\$10,795.00
Task 4	Draft and Final Basin Optimization Yield Study									
4.1	Draft Basin Optimization Yield Study (Delivered to PAC and TAC)	12	40	12	12	32	108	\$24,120.00		\$24,120.00
4.3	Draft Basin Optimization Yield Study (Revised based on PAC and TAC feedback - Delivered to Watermaster Board)	6	8	8		16	38	\$8,410.00		\$8,410.00
4.4	Final Basin Optimization Yield Study	6	8	8		8	30	\$7,010.00		\$7,010.00
	Subtotal Task 4	24	56	28	12	56	176	\$39,540.00		\$39,540.00
Task 5	Watermaster Response Report(s)									
5.1	Draft response report to PAC/TAC SOW Recommendation Report	6	10				16	\$4,270.00		\$4,270.00
5.2	Final response report to PAC/TAC SOW Recommendation Report	2	4				6	\$1,590.00		\$1,590.00
5.3	Draft response report to PAC/TAC Basin Optimization Study Recommendation Report	12	32	8	8	24	84	\$19,060.00		\$19,060.00
5.4	Final response report to PAC/TAC Basin Optimization Study Recommendation Report	4	8	4	4	12	32	\$6,940.00		\$6,940.00
	Subtotal Task 5	24	54	12	12	36	138	\$31,860.00		\$31,860.00
Task 6	Committee Meetings									
6.1	TAC Meetings ^a	10	10				20	\$5,450.00		\$5,450.00
6.2	Watermaster Board Meetings ^b	40	40				80	\$21,800.00	\$990.00	\$22,790.00
	Subtotal Task 6	50	50	0	0	0	100	\$27,250.00	\$990.00	\$28,240.00
Task 7	Project Management and Coordination									
7.1	Team Calls	30	30				60	\$16,350.00		\$16,350.00
7.2	Project Management	4	16				20	\$5,180.00		\$5,180.00
	Subtotal Task 7	34	46	0	0	0	80	\$21,530.00		\$21,530.00
	Total Hours	152	269	110	120	112	763			
	Total	\$44,840.00	\$67,250.00	\$25,300.00	\$22,200.00	\$19,600.00		\$179,190.00	\$990.00	\$180,180.00

Notes

^aAssumes preparation and attendance at two TAC meetings to discuss: (1) the draft Scope of Work and Budget and (2) the draft BOY Study report. Cost assumes that Dudek will attend virtually.

^bAssumes preparation and attendance at four in-person Watermaster Board meetings to discuss: (1) the draft Scope of Work and Budget, (2) the draft BOY study report, (3) the BOY Study Recommendation Reports provided by the PAC and TAC, and (4) the final adoption of the BOY Study report.