FOX CANYON GROUNDWATER MANAGEMENT AGENCY

A STATE OF CALIFORNIA WATER AGENCY

September 25, 2024

Board of Directors
Fox Canyon Groundwater Management Agency
800 South Victoria Avenue
Ventura, CA 93009-1600

SUBJECT: **Presentation on Las Posas Valley Adjudication Technical Advisory Committee Recommendation Report and Watermaster's Response Report on Draft Scope of Work to Prepare the Las Posas Valley 2025 Basin Optimization Yield Study [LPV Watermaster]** – *(New Item)*

RECOMMENDATIONS: (1) Receive and file a presentation from Agency staff on the Las Posas Valley Adjudication Technical Advisory Committee (TAC) Recommendation Report and Watermaster's Response Report; and **(2)** Provide direction to Watermaster staff.

BACKGROUND:
The Las Posas Adjudication Judgment (Judgment) requires that 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.).

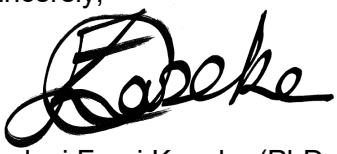
DISCUSSION:
Watermaster referred a draft scope of work dated December 27, 2023, to prepare the Las Posas Valley Basin 2025 Basin Optimization Yield Study prepared by staff working with Dudek for Committee Consultation to the Las Posas Valley Technical Advisory Committee (TAC) as required by the Judgment (attached as Exhibit 25A).

In response, Watermaster received a TAC Recommendation Report with one comment and four recommendations (attached, as Exhibit 25B). Staff worked with Dudek to review and prepare the attached Response Report to the TAC Recommendation Report addressing the comments and each of the recommendations. The Watermaster Response Report is attached as Exhibit 25B.

CONCLUSION:
Staff recommends that your Board (1) receive and file this Board letter, the attached Watermaster Response Report, and today's presentation; and (2) provide any desired direction to staff.

This letter has been reviewed by Agency Counsel. If you have any questions, please call me at (805) 654 2954.

Sincerely,



Kudzai Farai Kaseke (PhD, PMP, CSM)
Assistant Groundwater Manager

Attachments: Exhibit 25A – Draft Scope of Work Presented to TAC
Exhibit 25B – TAC Recommendation Report - Basin Optimization Yield Study
Exhibit 25C – Watermaster Response Report - Basin Optimization Yield Study

Item 25 - Exhibit 25A – Draft Scope of Work Presented to TAC

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

Item 25A – Draft Scope of Work Presented to TAC

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 BOY[1] and Rampdown Rate[2], 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. VENCI00509700* (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 TAC[4] 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
[a]Covers development of the Response Reports to the draft BOY scope of work Recommendation Reports.
[b]Covers development of the draft BOY Study.
[c]Covers development of the revised draft BOY Study.
[d]Covers development of the BOY Study Response Report.
[e]Covers 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

Attachment A

Detailed Cost Estimate

Item 25A – Draft Scope of Work Presented to TAC

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

		Dudek Labor Hours and Rates								
	Project Team Role:	Principal Hydrogeologist/ Engineer II	Sr. Hydrogeologist IV/Engineer IV	Sr. Hydrogeologist II/Engineer II	Project Hydrogeologist III/Engineer III	Project Hydrogeologist II/Engineer II	TOTAL DUDEK HOURS	DUDEK LABOR COSTS	OTHER DIRECT COSTS	TOTAL FEE
	Billable Rate:	$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

[a]Assumes 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.

[b]Assumes 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.

LAS POSAS VALLEY
TECHNICAL ADVISORY COMMITTEE

August 27, 2024

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 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), 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.

Item 25 – Exhibit 25C

WATERMASTER RESPONSE REPORT

Date: September 19, 2024

To: Las Posas Valley Watermaster Board of Directors

From: Kudzai Farai Kaseke, Assistant Groundwater Manager (FCGMA)

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

The Las Posas Valley Watermaster (Watermaster) requested consultation from the Las Posas Valley Technical Advisory Committee (TAC) on a draft scope of work by Dudek dated December 27, 2023, to prepare the Las Posas Valley Basin 2025 Basin Optimization Yield Study. Watermaster's request was in a July 16, 2024, memorandum to the TAC. The TAC discussed and developed its recommendation report at the July 31, 2024, and August 27, 2024, meetings.

TAC's August 27, 2024, recommendation report included one comment and four recommendations. Each of these are listed below, followed by Watermaster staff's recommendations.

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 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), but this should be confirmed.

Response to Comment 1:
The draft scope of work and budget for UWCD to conduct numerical groundwater modeling for the WLPMA is currently being negotiated by agency staff and UWCD.

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.

Response to Recommendation 1:
Pumping for baseline simulations for the ELPMA will be based on allocations in the Groundwater Allocation Schedule prepared in accordance with the Judgment Annual Allocations Calculation for Water Rights Holders in the ELPMA. Pumping for baseline simulations in the WLPMA will similarly be based on allocations in the Groundwater Allocation Schedule for Water Rights Holders in the WLPMA.

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.

Response to Recommendation 2:
Dudek's scope of work has been revised to include, and UWCD's scope includes, an additional baseline scenario to simulate future groundwater conditions based on pumping as described in Response to Recommendation 1 without inclusion of projects.

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.

Response to Recommendation 3:
The December 27, 2023, Dudek draft scope of work included consultations with TAC and the Policy Advisory Committee (PAC) on the draft Basin Optimization Yield Study. The scope of work has been revised to consult with TAC at two points during preparation of the Study. The first consultation would be prior to conducting baseline scenario simulations. The second consultation would be following completion of the two baseline scenarios, but before initiating alternative pumping scenarios. As this is a technical study, no additional PAC consultations are proposed.

Recommendation 4:
Add sufficient scenarios to Task 2.2 to evaluate not only reduce [sic] 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.

Response to Recommendation 4:
TAC's recommendation represents a new project. Evaluation of focused supplemental water deliveries to specific areas to identify the "sweet spot" in lieu of pumping would require multiple simulations and evaluation of infrastructure requirements to focus these supplemental deliveries. As described in the Judgment, projects are to be evaluated as part of the Basin Optimization Plan. As discussed in the response report to TAC's August 27, 2024, recommendation report on Basin Optimization Plan Tasks 1 and 2, there is insufficient time to evaluate new projects for this Basin Optimization Plan and the proposed new project should be evaluated in a future Plan.