Notice and Agenda

Special Meeting of the Beaumont Basin Watermaster

Wednesday, August 6, 2025 at 11:00 a.m.

Meeting Location:
Beaumont-Cherry Valley Water District
560 Magnolia Avenue • Beaumont, California 92223

This meeting is hereby noticed pursuant to California Government Code Section 54950 et. seq.

Members of the Watermaster Committee:

City of Banning — Beaumont-Cherry Valley Water District
City of Beaumont — South Mesa Water Company
Yucaipa Valley Water District

Remote attendance options are provided primarily as a matter of convenience to the public. Unless a Watermaster Committee member is attending remotely pursuant to provisions of GC 54953 et. seq., the public, in-person meeting will not stop or be otherwise suspended should a technological interruption occur with respect to the Zoom teleconference or call-in line listed on the agenda. Members of the public are encouraged to attend BBWM meetings in person at the above address, or remotely using the options listed.

Online Meeting Participation Link:
https://us02web.zoom.us/j/81638720446?pwd=UnNZcC9TbGZzTGFuMHdhVkRMblczQT09

Telephone: (669) 900-9128 / Meeting ID: 816-3872-0446 / Passcode: 636756
One-Tap Mobile: +16699009128,,81638720446#,,,,*636756#

*For Public Comment, use the **"Raise Hand"** feature if on the video call when prompted, if dialing in, please **dial *9 to "Raise Hand"** when prompted*

Meeting materials are available on the Watermaster website:
https://beaumontbasinwatermaster.org/

I. Call to Order

II. Roll Call

Committee Member Agency	Primary Representative		Alternate	
City of Banning	Arturo Vela, Chair		Nathan Smith	
City of Beaumont	Robert Vestal		Dustin Christensen	
Beaumont-Cherry Valley Water District	Daniel Jaggers		Mark Swanson	
South Mesa Water Company	Dave Armstrong		Brittany Lim	
Yucaipa Valley Water District	Joseph Zoba		Jennifer Ares	

III. Pledge of Allegiance

IV. Public Comments At this time, members of the public may address the Beaumont Basin Watermaster on matters within its jurisdiction; however, no action or discussion may take place on any item not on the agenda. To provide comments on specific agenda items, please complete a Request to Speak form and provide that form to the Secretary prior to the commencement of the meeting, or, RAISE HAND electronically or Press *9 when prompted for public comment.

ACTION ITEMS

Action may be taken on any item on the agenda.

V. Consent Calendar

All matters listed under the Consent Calendar are considered by the Committee to be routine and may be approved in one motion.

A. Meeting Minutes

The June 4, 2025 Regular Meeting was cancelled.

i. June 11, 2025 Special Meeting [Page 6]

B. Status Report on Water Level Monitoring throughout the Beaumont Basin through July 27, 2025 [Page 15]

C. Comparison of Production Rights versus Production through June 2025 [Page 27]

D. City of Banning: Notification of New Well C8 within the Beaumont Basin [Page 28]

VI. Reports

A. Report from Engineering Consultant - Hannibal Blandon, ALDA Engineering

B. Report from Hydrogeological Consultant - Thomas Harder, Thomas Harder & Co.

C. Report from Administrative Consultant – Dudek

D. Report from Legal Counsel - Thierry Montoya/Keith McCullough, Frost, Brown, Todd

VII. Discussion Items

A. Update on Analysis of Losses in the Beaumont Basin - Thomas Harder & Co. [Memorandum No. 25-22, Page 36]

Recommendation: None. Information / discussion only

B. Update on Proposed Revisions to the BBWM Rules and Regulations [Memorandum No. 25-23, Page 53]

Recommendation: None. Discussion only

C. Consideration to Retain Dudek to Evaluate and Develop Management Strategies for when Groundwater Storage Accounts are Negative [Memorandum No. 25-24, Page 59]

Recommendation: That the Watermaster Committee enter into agreement with Dudek to evaluate and develop management strategies for negative groundwater storage accounts for a sum of $29,780 and send invoices to each Watermaster Committee member for 20% of the approved amount

D. Consideration to Retain Dudek to Evaluate and Develop a Policy to Account for Return Flows in the Beaumont Basin [Memorandum No. 25-25, Page 65]

Recommendation: That the Watermaster Committee enter into agreement with Dudek to evaluate and develop a policy to account for return flows in the Beaumont Basin for a sum of $27,400 and send invoices to each Watermaster Committee member for 20% of the approved amount

E. Consideration of Special Meetings / Workshops in 2025 [Memorandum No. 25-26, Page 71]

Recommendation: Consider setting a schedule for special meetings / workshops in 2025

VIII. Topics for Future Meetings

	Item	Date Listed
A	Development of a Recycled Water Policy including Incidental Discharge	3/27/2019
B	Development of a return flow accounting policy	3/27/2019
C	Monitoring of future west side well sites and methodologies, and potential collaboration with USGS	10/5/2022
D	Discussion on what to do when an Appropriator goes negative	10/4/2023 and 11/1/2023
E	Discussion on Policy to Document and Account for Emergency Potable Water Transfers from Appropriator to Overlying Party (Tabled from 4/17/24 meeting)	4/17/2024
F	Procurement Policy including thresholds for RFP process	8/17/2021
G	YVWD Aquifer Storage and Recovery (ASR) project	6/11/2025

IX. Comments from the Watermaster Committee Members

X. Announcements

Per BBWM Rules and Regulations, the Committee meets on the first Wednesday of even-numbered months

2025 Meeting Dates:	
Wednesday, October 1 at 11 a.m.	Regular Meeting
Wednesday, December 3 at 11 a.m.	Regular Meeting
2026 Meeting Dates:	
Wednesday, February 4 at 11 a.m.	Regular Meeting
Wednesday, April 1 at 11 a.m.	Regular Meeting
Wednesday, June 3 at 11 a.m.	Regular Meeting
Wednesday, August 5 at 11 a.m.	Regular Meeting
Wednesday, October 7 at 11 a.m.	Regular Meeting
Wednesday, December 2 at 11 a.m.	Regular Meeting

XI. Adjournment

NOTICES

AVAILABILITY OF AGENDA MATERIALS - Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the Beaumont Basin Watermaster Committee in connection with a matter subject to discussion or consideration at an open meeting of the Committee are available for public inspection in the Office of the Watermaster Secretary, at 560 Magnolia Avenue, Beaumont, California ("Office") during business hours, Monday through Thursday from 7:30 a.m. to 5 p.m. If such writings are distributed to members of the Committee less than 72 hours prior to the meeting, they will be available from the Office at the same time or within 24 hours' time as they are distributed to Board Members, except that if such writings are distributed one hour prior to, or during the meeting, they can be made available in the Board Room at the District Office. Materials may also be available on the Watermaster website: https://beaumontbasinwatermaster.org/.

REVISIONS TO THE AGENDA - In accordance with §54954.2(a) of the Government Code (Brown Act), revisions to this Agenda may be made up to 72 hours before the Board Meeting, if necessary, after mailings are completed. Interested persons wishing to receive a copy of the set Agenda may pick one up at the Office, located at 560 Magnolia Avenue, Beaumont, California, or download from the website up to 72 hours prior to the Meeting.

REQUIREMENTS RE: DISABLED ACCESS - In accordance with §54954.2(a), requests for a disability related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting, should be made to the Office, at least 48 hours in advance of the meeting to ensure availability of the requested service or accommodation. The Office may be contacted by telephone at (951) 845-9581, email at info@bcvwd.gov or in writing to the Beaumont Basin Watermaster Committee, c/o Beaumont-Cherry Valley Water District, 560 Magnolia Avenue, Beaumont, California 92223.

CERTIFICATION OF POSTING: A copy of the foregoing notice was posted near the regular meeting place of the Beaumont Basin Watermaster Committee and to its website at least 72 hours in advance of the meeting (Government Code §54954.2(a)).

Consent Calendar

Record of the Minutes of the
Beaumont Basin Committee Meeting of the
Beaumont Basin Watermaster
Special Meeting
Wednesday, June 11, 2025

Meeting Location:
Beaumont-Cherry Valley Water District
560 Magnolia Ave., Beaumont, CA 92223

I. Call to Order

Chair Art Vela called the meeting to order at 11:03 a.m.

II. Roll Call

City of Banning	*Art Vela*	*Present*
City of Beaumont	*Dustin Christensen*	*Present*
Beaumont-Cherry Valley Water District	*Dan Jaggers*	*Present*
South Mesa Water Company	*David Armstrong*	*Present*
Yucaipa Valley Water District	*Joseph Zoba (until 12:20 p.m.)*	*Present*
Yucaipa Valley Water District	*Jennifer Ares (after 12:20 p.m.)*	*Present*

Hannibal Blandon was present as engineer for the Beaumont Basin Watermaster (BBWM).
Thomas Harder was present as hydrogeologist for BBWM.
Thierry Montoya was present as BBWM legal counsel.
Steve Stuart was present as Administrator of the BBWM.

Members of the public who registered and / or attended:
Thaxton Van Belle, City of Beaumont
Erin Anton, Yucaipa Valley Water District
Jennifer Ares, Yucaipa Valley Water District
Joyce McIntire, Yucaipa Valley Water District
Mike Kostelecky, Yucaipa Valley Water District
Lance Eckhart, San Gorgonio Pass Water Agency
Sarah Wargo, San Gorgonio Pass Water Agency
Kevin Walton, San Gorgonio Pass Water Agency
Larry Smith, San Gorgonio Pass Water Agency
Blair Ball, San Gorgonio Pass Water Agency
Matthew Howard, San Gorgonio Pass Water Agency
Mickey Valdivia, San Gorgonio Pass Water Agency
Matt Ford, Thomas Harder & Co.
Lauren Healey, Thomas Harder & Co.
Daniel Slawson Beaumont-Cherry Valley Water District
Mark Swanson, Beaumont-Cherry Valley Water District
Robert Rasha, Beaumont-Cherry Valley Water District

Lynda Kerney, Beaumont-Cherry Valley Water District
Wes Miliband, Miliband Water Law
D. Lee
Anthony Mendoza

III. Pledge of Allegiance

IV. Public Comments: None.

V. Consent Calendar

A. Meeting Minutes
   i. April 2, 2025 Regular Meeting

B. Status Report on Water Level Monitoring throughout the Beaumont Basin through May 28, 2025

C. A Comparison of Production Rights versus Production through April 2025

It was moved by Member Zoba and seconded by Member Jaggers to approve the Consent Calendar items:

AYES:	Armstrong, Christensen, Jaggers, Vela, Zoba
NOES:	None
ABSTAIN:	None
ABSENT:	None
STATUS:	Motion Approved 5-0

VI. Reports

A. Report from Engineering Consultant – Hannibal Blandon, ALDA Engineering
Mr. Blandon reported some inconsistency issues at Yucaipa Well 34. He will investigate after the meeting.

B. Report from Hydrogeological Consultant – Thomas Harder, Thomas Harder & Co. (THC) – No report

C. Report from Administrative Consultant – Steve Stuart, Dudek
Mr. Stuart reminded everyone to use the microphones in order to be heard on the meeting recording.

D. Report from Legal Counsel – Thierry Montoya – Frost, Brown, Todd – No report.

11:06 a.m. City of Beaumont Alternate Member Christensen joined the meeting.

VII. Discussion Items

A. Consideration of a request from the Morongo Band of Mission Indians (MBMI) to further amend the Beaumont Basin Judgment to authorize the transfer of overlying groundwater rights to other parties, including appropriators. The proposal would remove existing limitations that tie overlying rights to appurtenant land

Recommendation: Discussion only; no action

Legal Counsel Thierry Montoya summarized a request submitted by the Morongo Band of Mission Indians (MBMI) seeking to amend the Beaumont Basin Judgment to permit the transfer of overlying groundwater rights to third parties.

Mr. Montoya explained that the requested amendment would authorize unrestricted transfers of overlying rights, thereby establishing a private groundwater market and decoupling the rights from the land. He stated that such a change would be inconsistent with California water law, under which overlying rights are inherently appurtenant to the land. He explained that the amended judgment already allows for limited transfers under specific conditions, citing sections 3.3(b), 3.3(e), Rule 6.5, and Form 5.

Mr. Montoya also noted that the proposed amendment would undermine the current mechanism that returns unused overlying rights to the appropriative pool, thereby weakening appropriators' access to reserves and complicating long term management. He concluded that the Tribe had not demonstrated a sufficient legal ground to modify the judgment, and recommended that the Watermaster decline to advance the proposed amendment.

Watermaster administrator Steve Stuart supported counsel's position and elaborated on the only two existing mechanisms in the Judgment that allow for transfer of overlying rights:

1. *When an appropriator provides potable water service to an overlier, the volume transferred compensates for the service.*
2. *When an appropriator provides recycled water service to an overlier, the transfer is temporary and contingent on continued recycled water delivery.*

Mr. Wes Miliband, representing the Morongo Band of Mission Indians (MBMI), suggested Watermaster legal counsel's memorandum was based on inaccurate assumptions about the Tribe's request. He emphasized that the Tribe's April 1 letter was intended to initiate dialogue on a possible amendment to the Beaumont Basin Judgment—not to present a fully formed legal proposal. He stated that his expectation was for a process to begin, potentially through the formation of an ad hoc committee, a meaningful dialog between the Watermaster and the Tribe.

Miliband clarified that the Tribe's goal is to enable transferability of overlying rights. He stressed that the proposal is consistent with California water law, and noted that other groundwater basins and adjudicated judgments in California permit this type of flexibility.

He explained that the current Judgment is a forbearance judgment (an uncommon structure) which limits water use options by overlying right holders. This limitation, he argued, not only affects the Tribe but also impacts appropriators and Watermaster operations. Miliband cited a 2021 court ruling by Judge Asbury that acknowledged this restriction and reinforced the view that the Judgment, as written, constrains beneficial use.

Miliband expressed desire to engage the Waternaster legal counsel in meaningful academic discussion. He said he intended to provide more robust documentation.

Public Comment: Mr. Mickey Valdivia, General Manager of the Beaumont-Cherry Valley Recreation and Park District, advised that the BCVRPD is also an overlying party (approximately 233 acre-feet). He said he would like to be included in the discussion with Mr. Miliband.

Member Armstrong reminded the Committee this topic had been previously covered in depth, but said he is willing to listen.

Chair Vela called for comment from the Committee, and Member Jaggers expressed openness to discussion but emphasized the need for a more clearly defined written proposal before considering next steps. He noted BCVWD's historical and ongoing management of the Basin through development and return flows, pointing out that BCVWD delivers water to some developments that did not supply water rights, as they were moved around to parcels within the specific plans. Jaggers stated that, absent scientific or technical justification, an ad hoc committee was premature and recommended that initial discussion take place in a public engineering workshop format.

Chair Vela stressed the potential complications to the Watermaster, and pushed back on the idea that the water is not being put to beneficial use. He said he was open to suggestion as to how to continue the dialogue and recommended further information could be brought forward by the Tribe before additional discussion.

Mr. Miliband noted the comment provided by Member Armstrong was related to Rule 7.3 and did not address the judgment topic itself. He also clarified that there is not a maximization of the beneficial use of water, and that is what the Tribe is seeking to move forward. He noted there appeared to be a lack of interest on the part of the Committee and legal counsel to engage, and noted

if there was no change, it would be taken under consideration for the next step.

The Committee took no action.

B. Update on Thomas Harder & Co. Study on Basin Loses

Recommendation: None. Presentation only

Thomas Harder presented the preliminary results of Task 1 of the Basin Losses Study initiated under the scope of work submitted in November 2024. The analysis aimed to evaluate the impacts of managed recharge on subsurface inflow and outflow patterns in the Beaumont Basin, comparing conditions before (1978–2006) and after (2006–2022) the implementation of managed recharge. Using the basin's numerical groundwater model, Harder assessed changes in flow dynamics and conducted particle tracking simulations to evaluate travel paths and residence times of recharged water.

Key findings included:

- *Managed recharge has not altered the general flow directions into and out of the basin.*
- *The West Beaumont area showed increased net inflow, primarily attributed to BCVWD's Well 29 pumping, which induces a local groundwater depression.*
- *In the East Beaumont area, managed recharge increased outflow at the Banning fault and reduced inflow from Cherry Valley due to changes in hydraulic gradients.*
- *Particle tracking simulations indicated that managed recharge water remains in the basin as of December 2022 and has not exited the adjudicated area.*

Mr. Harder clarified that these results represent one element of the broader water budget and are distinct from safe yield determinations. He concluded by outlining next steps, including analysis of three future recharge scenarios in coordination with San Gorgonio Pass Water Agency (SGPWA).

Member Jaggers discussed the mechanical operation of the Basin, and emphasized the value of strategically placed wells around recharge facilities to hydraulically control groundwater mounding. He noted that northward extraction could help restore inflow balance, and stressed the importance of mechanically operating the Basin in conjunction with hydrogeological considerations. Jaggers also pointed out potential influences from return flows not fully represented in the model.

Lance Eckhart commended the study and advocated for regional coordination to manage mounding and distribute imported water more effectively. He noted

that such hydraulic controls could bring water quality and cost benefits. Eckhart also highlighted SGPWA budget allocations for a basin master planning effort, which would build on the findings presented.

C. Update on Draft 2024 Consolidated Annual Report and Engineering Report

Recommendation: Approve the 2024 Annual Report

Engineer Hannibal Blandon presented the most recent comments and technical updates to the draft Annual Report and noted that information on the operating safe yield and changes in groundwater levels had become available and was now included.

Three major content areas had been incomplete in the draft presented in April but were now fully developed and discussed:

- *Treated Wastewater Discharge: The report's terminology was clarified to refer to "treated wastewater discharge" rather than "recharge," to reflect the fact that not all effluent is recharged to the Basin. Updated data from the City of Beaumont Wastewater Treatment Plant indicated an average discharge of 3.51 MGD in 2024, equating to approximately 3,958 acre-feet annually. Table 3-5 in the report was revised accordingly.*
- *Chromium-6 (Cr-6) Update: A discussion of the new California Maximum Contaminant Level (MCL) for Hexavalent Chromium (10 µg/L effective October 1, 2024, with compliance due by October 1, 2026 for agencies serving more than 10,000 people) was included. Multiple wells in the basin exceeded or approached this limit, notably BCVWD Wells 25 and 26. Member Jaggers noted that BCVWD Well 3, which is currently offline, also exceeds the MCL. He offered to provide data for inclusion in the final report.*
- *Operating Safe Yield (OSY) for 2024: The OSY was calculated using updated production, recharge, and groundwater storage data. A storage increase of 839 acre-feet was noted from winter 2023 to winter 2024; however, due to substantial recharge volumes, the OSY was negative (−1,910 acre-feet). This figure reflects a short-term condition rather than a shift in long-term basin sustainability. Mr. Blandon explained that discrepancies in OSY values (−1,910 vs. −1,959 acre-feet) stemmed from updated production data submitted by the City of Banning after the draft report was circulated.*

Member Armstrong requested that Aquifer Storage and Recovery (ASR) activities on the western side of the Basin be brought forward for discussion in a future Watermaster meeting. Mr. Blandon clarified that ASR has not been agendized to date, and suggested it be formally proposed for future inclusion. Mr. Armstrong expressed interest due to the proximity of his own well to the ASR project and concerns about potential impacts on local groundwater conditions. Member Zoba noted that the required forms would be filed with the BBWM by YVWD, and that would be the time to provide an overview.

It was moved by Member Jaggers and seconded by Member Armstrong to approve the 2024 Consolidated Annual Report and Engineering Report as presented with revisions as discussed.

AYES:	Armstrong, Christensen, Jaggers, Vela, Zoba
NOES:	None
ABSTAIN:	None
ABSENT:	None
STATUS:	Motion Approved 5-0

D. Update on Proposed Revisions to Watermaster Rules and Regulations

Recommendation: None. Presentation only; no action required

Administrator Steve Stuart provided an update on the proposed revisions to the BBWM Rules and Regulations, last discussed at the March 5, 2025 Special Meeting. He pointed to a summary of committee comments and highlighted key areas of focus based on prior feedback from the City of Banning and Yucaipa Valley Water District.

Two primary topics were emphasized:

1. *Return Flows: Mr. Stuart described the need to develop a methodology for quantifying return flows and determining how they should be credited in storage accounting. He referenced earlier work by Thomas Harder in April 2022 and stated his intention to bring forward a proposal at a future meeting to address both calculation and ownership attribution for return flows.*
2. *Depletion of Appropriator Storage Accounts: The issue of appropriator accounts going negative was raised as a priority concern. Mr. Stuart noted that options under consideration include levying replenishment fees, implementing transfer mechanisms between parties, and creating procedures for addressing deficits through temporary water transfers or other accounting methods. He committed to presenting draft methodologies for discussion at the next meeting.*

Mr. Stuart also requested written comments from the agencies that had not already done so to complete the current phase of revisions and move toward formal consideration and adoption.

Member Jaggers advocated for exploring strategic use of SGPWA storage accounts as a regional buffer against future overdraft. He suggested the SGPWA maintain a reserve within the Beaumont Basin that could be accessed in times of drought or when appropriators approach negative storage. Mr.

Jaggers proposed leveraging existing reserves (approximately 1,500 acre-feet locally and an additional 3,200 acre-feet stored externally) and encouraged integration of SGPWA into contingency planning. He emphasized that such an approach could provide regional flexibility and promote fairness, particularly for agencies with high usage levels.

Member Zoba acknowledged the value of the discussion but expressed concern over the possibility of broadly subsidizing deficits across agencies. He advocated for investment in regional water supply development—such as recycled water and local recharge projects—over reliance on imported water contracts that divert funds outside the region. Mr. Zoba urged a proactive strategy to strengthen basin resilience and reduce dependence on external sources.

Mr. Stuart indicated the discussion provided sufficient input and that no further guidance was required at this time. He will bring forward proposals at a future meeting addressing both return flow accounting and negative storage account management.

E. Proposed Schedule for Future Special Meetings of the Watermaster

Recommendation: Consider meeting dates and direct staff as desired

Mr. Stuart presented two proposed special meeting dates. Member Zoba expressed concern about the added $12,000 cost to hold the extra meetings. Vela and Jaggers acknowledged potential loss of Committee momentum, but consensus was to stay with the existing schedule.

Chair Vela tabled this item. No added dates were set.

F. Thomas Harder & Co. Proposal to Participate in Future Special Meetings

Recommendation: Approve the proposal for future meeting support

Chair Vela tabled this item.

G. Certification of Groundwater Production, Imported Water Spreading, and Change in Storage in the Beaumont Groundwater Basin in Water Year 2024

Recommendation: Certify groundwater production, imported water spreading, and change in storage in the Beaumont Basin in Water Year 2024

Mr. Blandon advised that some of the groundwater production numbers require reconciliation. Chair Vela tabled this item.

VIII. Topics for Future Meetings

Item G was added at the request of Member Armstrong:

	Item	Date Listed
A	Development of a Recycled Water Policy including Incidental Discharge	3/27/2019
B	Development of a return flow accounting policy	3/27/2019
C	Monitoring of future west side well sites and methodologies, and potential collaboration with USGS	10/5/2022
D	Discussion on what to do when an Appropriator goes negative	10/4/2023 and 11/1/2023
E	Discussion on Policy to Document and Account for Emergency Potable Water Transfers from Appropriator to Overlying Party (Tabled from 4/17/24 meeting)	4/17/2024
F	Procurement Policy including thresholds for RFP process	8/17/2021
G	YVWD Aquifer Storage and Recovery (ASR) project	6/11/2025

IX. Comments from the Watermaster Committee Members: None.

X. Announcements

Wednesday, August 6 at 11 a.m.	Regular Meeting
Wednesday, October 1 at 11 a.m.	Regular Meeting
Wednesday, December 3 at 11 a.m.	Regular Meeting

XI. Adjournment

Chair Vela adjourned the meeting at 12:27 p.m.

Attest:

DRAFT UNTIL APPROVED

_____

Daniel Jaggers, Secretary
Beaumont Basin Watermaster

BEAUMONT BASIN WATERMASTER

Date: August 6, 2025

From: Hannibal Blandon, ALDA Inc.

Subject: Status Report on Water Level Monitoring throughout the Beaumont Basin through Jul 27, 2025

Recommendation: No recommendation.

At the present time, there are 15 monitoring wells equipped with pressure transducers collecting water level information on an hourly basis at various locations throughout the basin. In addition, two of these monitoring wells are equipped with additional probes to collect barometric pressures at opposite ends of the Basin. The location of active monitoring wells is depicted in Figure No. 1 attached. The location of three potential monitoring wells currently being considered are identified in red in this figure. Ground elevations at all sites were obtained from Google Earth, which has varied over time at selected sites and could continue to vary in the future. The Watermaster Committee is in the process of surveying all production and monitoring wells using a common datum.

Water levels at selected locations are depicted in Figures 2 through 7 and are described as follows:

- ✓ Figure No. 2 – Water levels at YVWD Well No. 34 and Oak Valley Well No. 5 are considered representative of basin conditions in the Northwest portion of the basin. From the summer of 2015 through the spring of 2019, water levels at these two wells were fairly steady; however, over the last six years a significant decline has been observed. A 22-foot decline has been recorded at YVWD 34 over this period to its current elevation of 2,120 ft. The decline at Oak Valley 5 has been steeper with a drop 24 feet in the first half of 2020 despite the fact that this well was pumped last in the fall of 2019. Oak Valley 5 is no longer being monitored, as of the Summer of 2020, as it has been destroyed. It is being included here for reference purposes at this time since there is no other well in the immediate area that could be used to monitor levels in the area.

- ✓ Figure No. 3 – Two of the Noble Creek observation wells are presented in this figure representing the shallow and deep aquifers. From the summer of 2016 through the spring of 2018, the water level in the shallow aquifer monitoring well increased over 80 feet to an elevation of 2,422 ft. Water level continued to increase, although at a lower rate, over the ensuing 18 months reaching a peak elevation of 2,431 ft in the fall of 2019. Since, it declined 100 feet to an elevation of 2,331 ft. in the spring of 2023. Over the last 24 months, a significant recovery has taken place to its current elevation of 2,446 ft., the highest level recorded since monitoring began. In the deeper aquifer, the increase in water level was steady from the summer of 2016 through the spring of 2020 reaching a peak elevation of

2,302 ft.; over the next three years, water level declined 57 feet to a low elevation of 2,245 ft, recorded on August 15, 2023. On that date, this well was vandalized resulting in the disruption of the communications cable and the temporary collection of accurate water level information. With the November 2023 visit, the data was cleaned and it is now included in the figure. A new communications cable was installed on December 6th 2023. Since August 2023, water level at this well has increased by 52 ft. to elevation 2,297 ft., just five feet below the highest recorded level of 2,302 ft. in the spring of 2020.

- ✓ Figure No. 4 – Southern Portion of the Basin. The water level at the Summit Cemetery well is highly influenced by a nearby pumping well that is used to irrigate the cemetery grounds. Since monitoring began, the water level has fluctuated over a 20-foot range. Water level information between January and October 2022 was not collected due to equipment malfunction and vandalism. New water level monitoring equipment was installed at the beginning of October 2022 and the site was secured to minimize further vandalism. The newly installed optical communications cable worked for a few months, but failed to transmit and was replaced on January 10, 2024 with a similar cable and has been working fine since. Beginning in the spring of 2025, water level at this well declined 14 ft. into the summer to its current level of 2,500 ft near the bottom of its operating range. Water level at this well is anticipated to increase as summer comes to an end into the fall and winter months.

- ✓ Also depicted in Figure No. 4 is the water level at the Sun Lakes well site. It fluctuated minimally between 2015 and the end of 2021, when it began to decline. Between November 2021 and May 2022, the water level dropped by eight feet to 2,405 ft. However, it has recovered to 2,420 ft in the last three years. After a number of optical communications cables were used and replaced due to factory defect, the latest cable, installed in Jan 2024, has been working properly since.

- ✓ Figure No. 5 illustrates water levels at three wells owned by the City of Banning in the Southeast portion of the basin. While water level at the Old Well No. 15 (Chevron Well) has been fairly flat over the last six years between elevations 2,197 ft and 2,199 ft., a somewhat significant and steady decline, close to 40 feet, has been recorded at Banning M-8 between the summer of 2015 and the fall of 2024 to an elevation of 2,039 ft., last recorded on October 16, 2024. Since that time, communications with the probe have not been established and the communications cable is stuck inside the well. Several attempts were made between October 2024 and February 2025 without success. As a result, water levels are now measured manually. Figure 5 shows the last seven manual readings at this well. Current water level is at elevation 2,044 ft.

- ✓ Also depicted in Figure 5 is the water level at Banning M-9. It has fluctuated in a 19-foot range, between 2,128 ft and 2,147 ft. Current water level elevation is at 2,136 ft. While the water level probe has been collecting data hourly at this well, over the last two years, three communications cables have been replaced due to the failure of the water seal at the bottom of the cable. The latest replacement

cable was installed during our January 2024 visit and continued to work through our latest visit, a good sign.

- ✓ Figure No. 6 illustrates recorded water level at BCVWD No. 2 and BCVWD No. 25. Water level at these two wells follow the same seasonal pattern rising in the fall through the spring months and falling during the summer as production increases. The water level at BCVWD No. 25 has been fluctuating over a 25 ft range between 2,191 ft and 2,215 ft in elevation; however, in the summer of 2023 it declined more than normal to a low elevation of 2,192 ft; since, water level is recovering to the March 2024 elevation of 2,203 ft. Over the last three years, summer lows have been lower each year, 2,199 ft in the summer of 2021, 2,194 ft in 2022, and 2,193 in 2023. Water level in the spring of 2024 was at an elevation of 2,203 ft. Since that time, over the last year water level information has not been reported due to a combination of inconsistent recorded data and the communications cable being stuck in the well. During our March 2025 visit, the communications cable was finally removed from the well and a new probe installed; unfortunately, communications could not be established during our last two visits. While the probe continues to record levels, this information will be extracted from the probe during our next visit as we want to minimize the potential for the probe to be stuck again inside the well.

- ✓ At BCVWD No. 2, also depicted in Figure No. 6, water levels since 2017 have ranged between 2,188 ft and 2,216 ft with a current elevation of 2,210 ft. closer to the upper portion of the operating range. Similar to BCVWD No. 25, lower summer lows have been recorded in recent years. A new communications cable was installed at this well on December 6, 2023; however, no data was recorded through March 2024 due to malfunctioning of the recording probe. A different probe was installed at that time and has been working fine since.

- ✓ Figure No. 7 depicts the recorded water level at the two newest observation wells, BCVWD No. 29 and Tukwet Canyon Well “B”. BCVWD No. 29 is a pumping well on the western portion of the basin. This well was extensively used prior to 2022; however, minimum pumping has been recorded since the winter of 2021. A decline in water level of nine feet has been recorded between the spring of 2019 and the spring of 2021. During the May 2021 visit, the communications cable could not be pulled and information from the water level probe could not be downloaded. During our January 2022 visit, the water level meter got lodged between the pump column and the well casing and could not be removed; it has been there since. There is a chance that the water level meter probe may not be recovered until the column is pulled from the well and the equipment recovered.

- ✓ Tukwet B is a dedicated monitoring well in the southern portion of the basin with minimal fluctuations in elevation since the probe was installed in the spring of 2019. The March 2024 water level was recorded at 2,218 ft representing the highest recorded level since monitoring began. No water level information was available between March and September 2024 due to malfunctioning of the recording probe.

The latest recorded level was at elevation 2,217 ft. Water level data for the last four months is not available as the probe needs to be replaced.

Monitoring Wells Additions

None during this period

Equipment Installation and Replacement

No replacements took place during the reporting period.

Troubleshooting Issues

The probe at BCVWD No. 25 was replaced during our March visit using the existing communications cable. While good communication was established during that visit, communications could not be established during our two most recent visits. The probe will be pulled during our September visit to download the information collected. Downloading of this data will take place twice a year to minimize the potential for the probe to be stuck inside the well. During our next visit we will also consider the possibility of replacing the communications cable at this well.

At Noble Creek Park, the communications cable is not working. The cable was pulled and upon inspection, several portions of the cable's protective coating had been ripped resulting in interruptions in communications. This 500 ft cable needs to be replaced.

At Noble Creek the communications cable in the shallow aquifer well needs to be replaced as it has not been working properly over the last year. This is a 500 ft cable.

At Tukwet B, the communications cable is not working. This cable was pulled and inspected without any physical defects observed. This 100 ft cable needs to be replaced.

Water level information was manually retrieved at the following wells due to malfunctioning of the communication cables:

- ✓ Mountain View
- ✓ Noble Creek Park
- ✓ Noble Creek Spreading Grounds – Shallow aquifer well

Potential Monitoring Sites

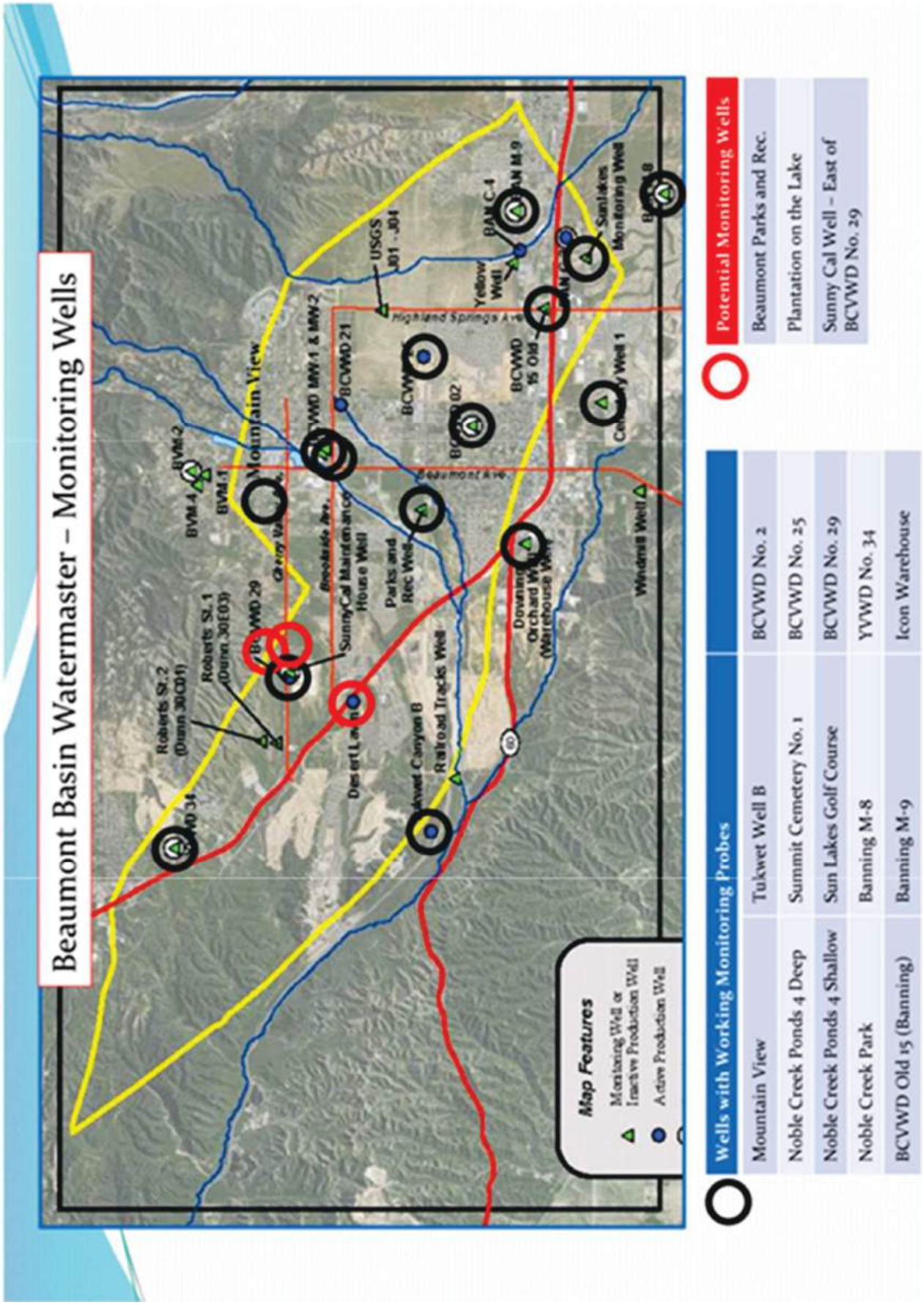
Two production wells have been identified as potential monitoring wells recently. The owners have been contacted and the sites visited. The first well is owned by the Beaumont-Cherry Valley

Recreation and Park District. The well is located on the north side of Cherry Valley Blvd and has been recently used to supply water during grading for construction of two warehouses nearby.

Upon construction of these facilities, this well will be available to irrigate nearby lands; a monitoring probe could be installed with minor modifications at the well head.

The second well is owned by Plantation on the Lake. The site has been visited and owner is considering drilling a hole on the well head to accommodate the monitoring probe. No progress has been made by owner.

In addition to the two production wells, a new monitoring groundwater well, located approximately 400 ft east of BCVWD No. 29 is currently being considered. Water level at this well is 400 ft below surface and the well has a measured depth of 465 ft


Beaumont Basin Watermaster – Monitoring Wells
Map Features
Monitoring Well or Inactive Production Well
Active Production Well
Wells with Working Monitoring Probes
Mountain View
Noble Creek Ponds 4 Deep
Noble Creek Ponds 4 Shallow
Noble Creek Park
BCVWD Old 15 (Banning)
Tukwet Well B
Summit Cemetery No. 1
Sun Lakes Golf Course
Banning M-8
Banning M-9
BCVWD No. 2
BCVWD No. 25
BCVWD No. 29
YVWD No. 34
Icon Warehouse
Potential Monitoring Wells
Beaumont Parks and Rec.
Plantation on the Lake
Sunny Cal Well – East of BCVWD No. 29

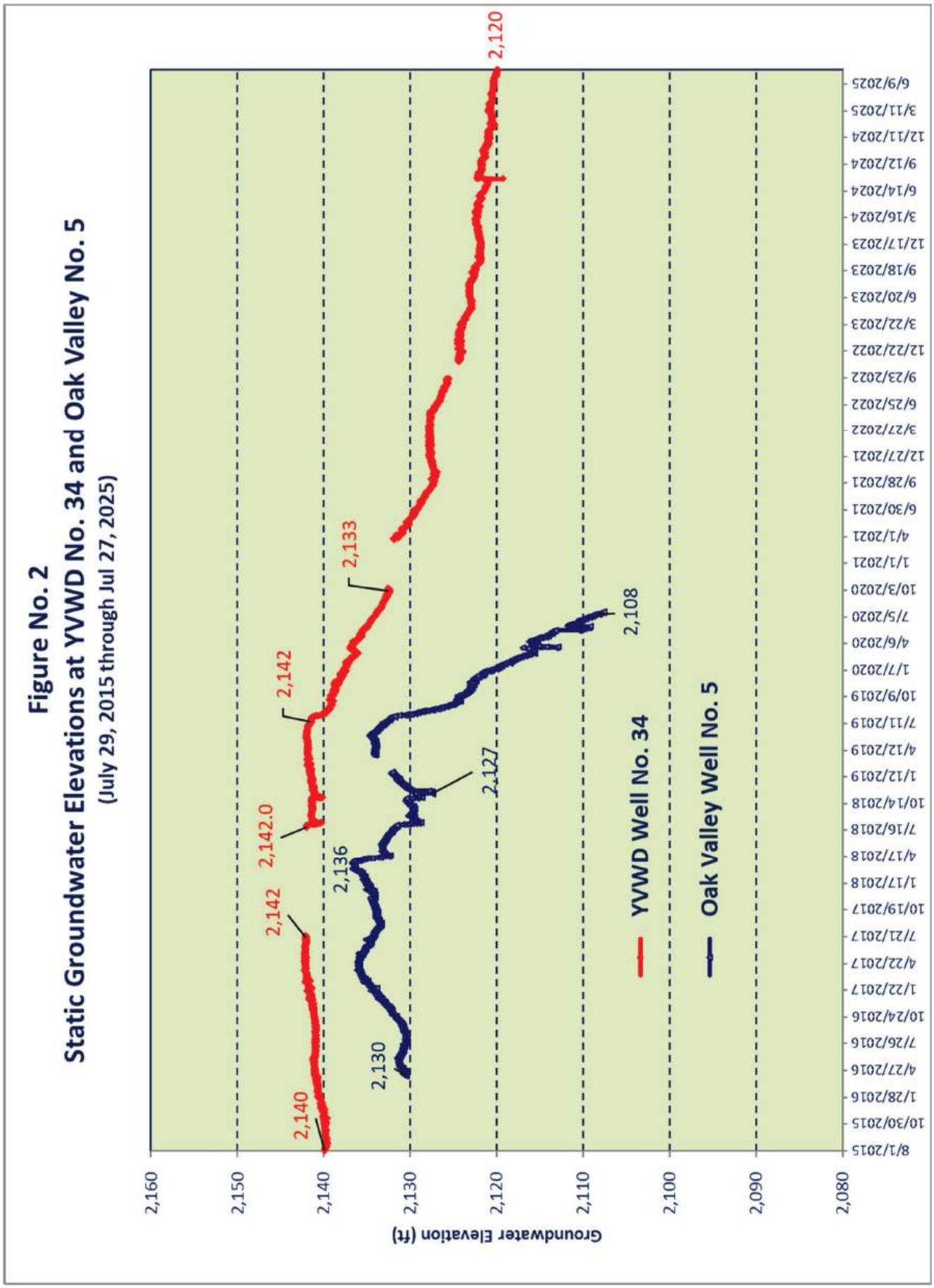


Figure No. 2
Static Groundwater Elevations at YVWD No. 34 and Oak Valley No. 5
(July 29, 2015 through Jul 27, 2025)
Groundwater Elevation (ft)
2,160
2,150
2,140
2,130
2,120
2,110
2,100
2,090
2,080
YVWD Well No. 34
Oak Valley Well No. 5
2,120
2,133
2,142
2,142.0
2,142
2,140
2,136
2,130
2,127
2,108
8/1/2015
10/30/2015
1/28/2016
4/27/2016
7/26/2016
10/24/2016
1/22/2017
4/22/2017
7/21/2017
10/19/2017
1/17/2018
4/17/2018
7/16/2018
10/14/2018
1/12/2019
4/12/2019
7/11/2019
10/9/2019
1/7/2020
4/6/2020
7/5/2020
10/3/2020
1/1/2021
4/1/2021
6/30/2021
9/28/2021
12/27/2021
3/27/2022
6/25/2022
9/23/2022
12/22/2022
3/22/2023
6/20/2023
9/18/2023
12/17/2023
3/16/2024
6/14/2024
9/12/2024
12/11/2024
3/11/2025
6/9/2025

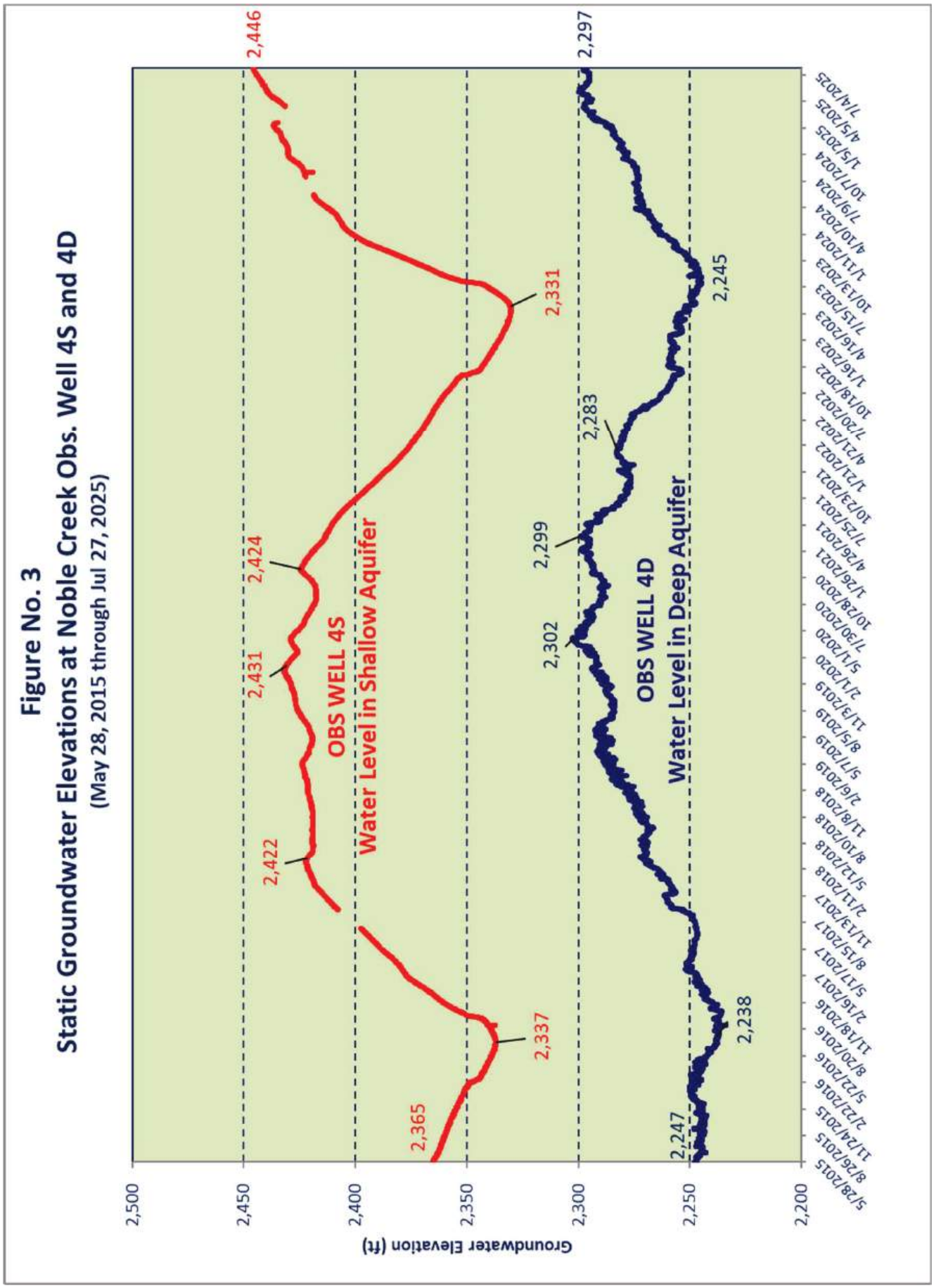


Figure No. 3
Static Groundwater Elevations at Noble Creek Obs. Well 4S and 4D
(May 28, 2015 through Jul 27, 2025)
OBS WELL 4S
Water Level in Shallow Aquifer
OBS WELL 4D
Water Level in Deep Aquifer
2,446
2,424
2,431
2,422
2,365
2,337
2,331
2,299
2,302
2,297
2,283
2,245
2,247
2,238
Groundwater Elevation (ft)
2,500
2,450
2,400
2,350
2,300
2,250
2,200
5/28/2015
8/26/2015
11/24/2015
2/22/2016
5/22/2016
8/20/2016
11/18/2016
2/16/2017
5/17/2017
8/15/2017
11/13/2017
2/11/2018
5/12/2018
8/10/2018
11/8/2018
2/6/2019
5/7/2019
8/5/2019
11/3/2019
2/1/2020
5/1/2020
7/30/2020
10/28/2020
1/26/2021
4/26/2021
7/25/2021
10/23/2021
1/21/2022
4/21/2022
7/20/2022
10/18/2022
1/16/2023
4/16/2023
7/15/2023
10/13/2023
1/11/2024
4/10/2024
7/9/2024
10/7/2024
1/5/2025
4/5/2025
7/4/2025

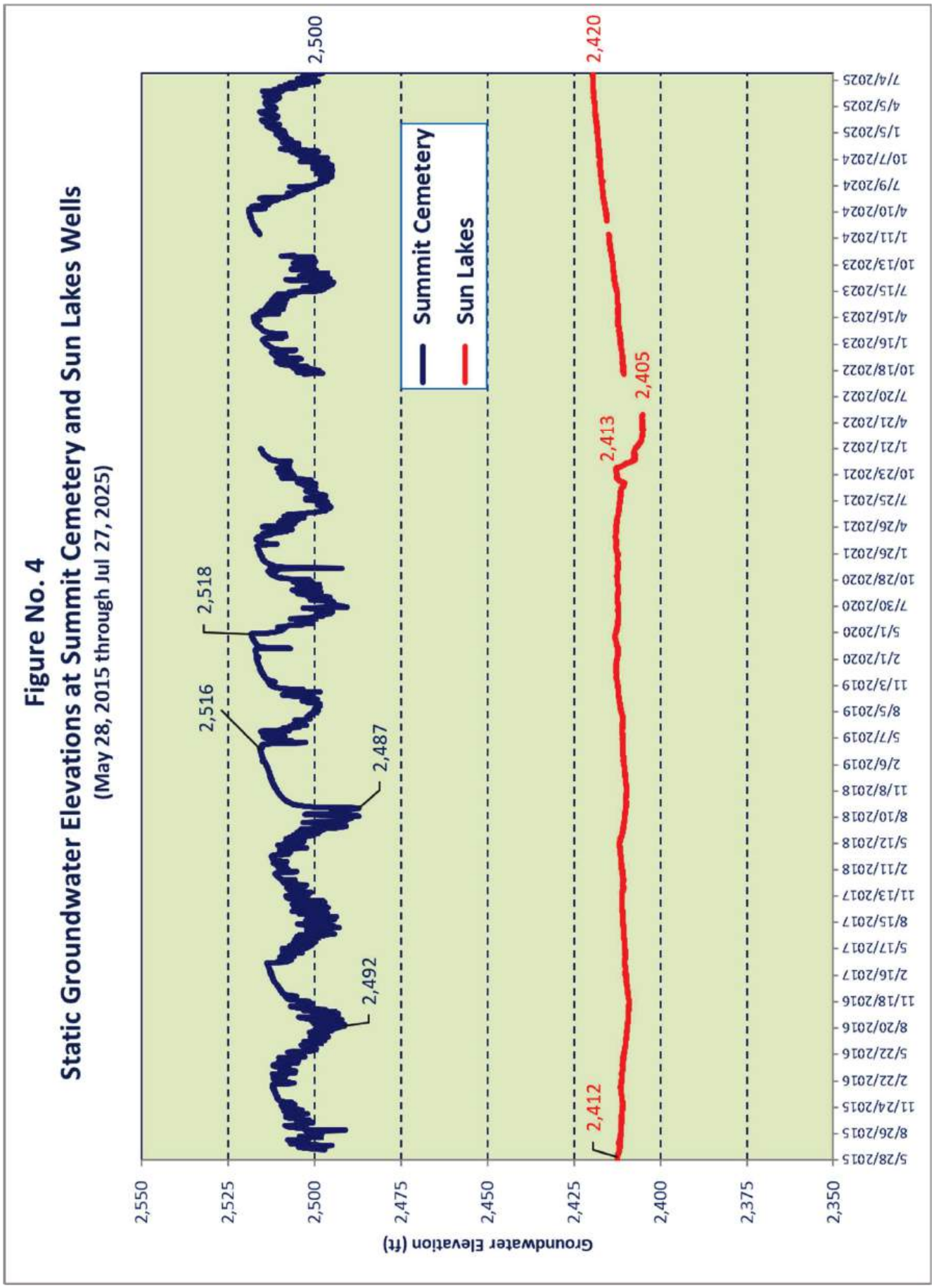


Figure No. 4
Static Groundwater Elevations at Summit Cemetery and Sun Lakes Wells
(May 28, 2015 through Jul 27, 2025)
Summit Cemetery
Sun Lakes
2,500
2,420
2,518
2,516
2,487
2,492
2,413
2,405
2,412
Groundwater Elevation (ft)
2,550
2,525
2,500
2,475
2,450
2,425
2,400
2,375
2,350
5/28/2015
8/26/2015
11/24/2015
2/22/2016
5/22/2016
8/20/2016
11/18/2016
2/16/2017
5/17/2017
8/15/2017
11/13/2017
2/11/2018
5/12/2018
8/10/2018
11/8/2018
2/6/2019
5/7/2019
8/5/2019
11/3/2019
2/1/2020
5/1/2020
7/30/2020
10/28/2020
1/26/2021
4/26/2021
7/25/2021
10/23/2021
1/21/2022
4/21/2022
7/20/2022
10/18/2022
1/16/2023
4/16/2023
7/15/2023
10/13/2023
1/11/2024
4/10/2024
7/9/2024
10/7/2024
1/5/2025
4/5/2025
7/4/2025

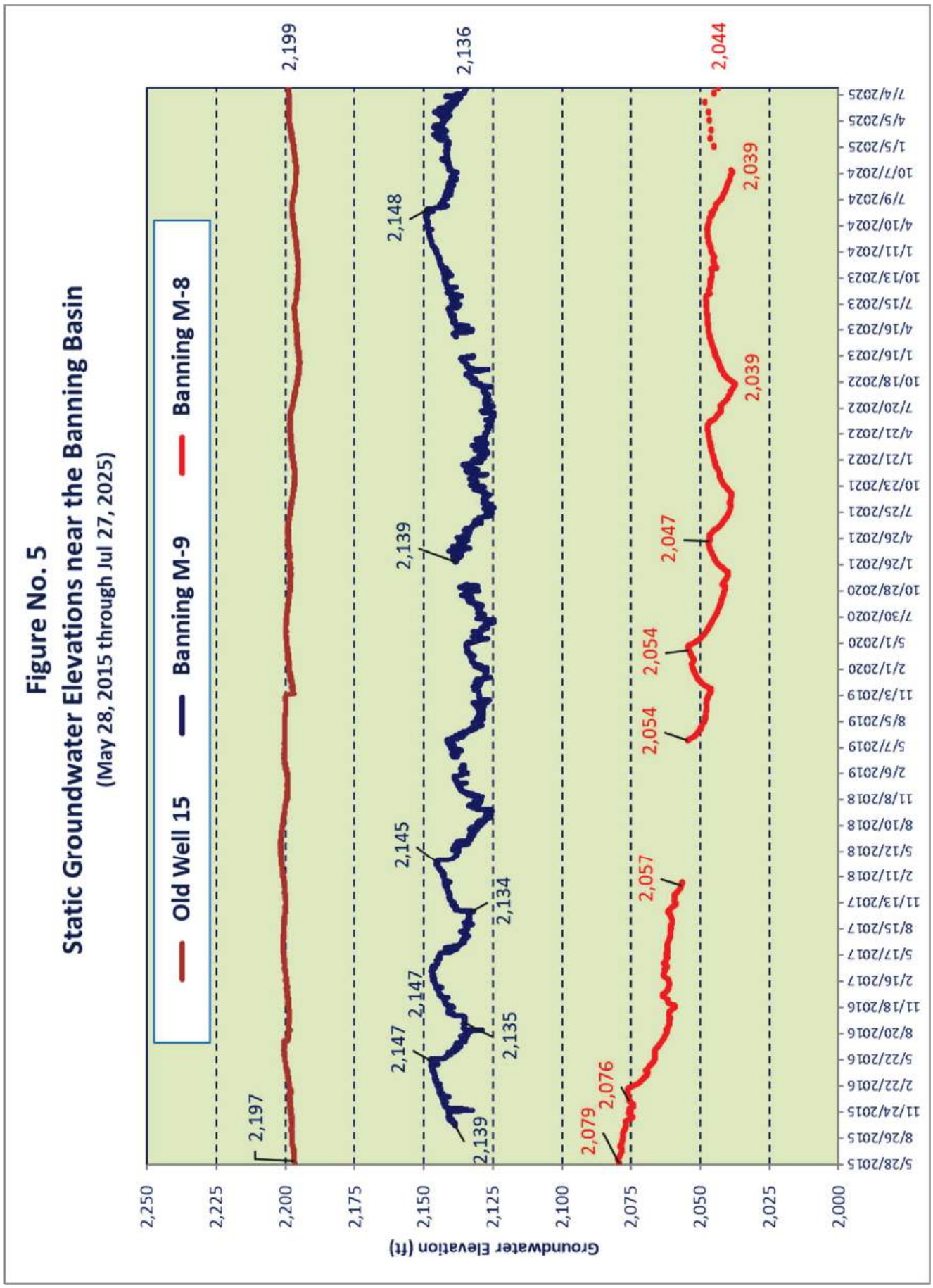


Figure No. 5
Static Groundwater Elevations near the Banning Basin
(May 28, 2015 through Jul 27, 2025)
Old Well 15
Banning M-9
Banning M-8
Groundwater Elevation (ft)
2,250
2,225
2,200
2,175
2,150
2,125
2,100
2,075
2,050
2,025
2,000
2,199
2,136
2,044
2,039
2,039
2,148
2,139
2,047
2,145
2,134
2,054
2,147
2,147
2,135
2,054
2,057
2,139
2,079
2,076
2,197
5/28/2015
8/26/2015
11/24/2015
2/22/2016
5/22/2016
8/20/2016
11/18/2016
2/16/2017
5/17/2017
8/15/2017
11/13/2017
2/11/2018
5/12/2018
8/10/2018
11/8/2018
2/6/2019
5/7/2019
8/5/2019
11/3/2019
2/1/2020
5/1/2020
7/30/2020
10/28/2020
1/26/2021
4/26/2021
7/25/2021
10/23/2021
1/21/2022
4/21/2022
7/20/2022
10/18/2022
1/16/2023
4/16/2023
7/15/2023
10/13/2023
1/11/2024
4/10/2024
7/9/2024
10/7/2024
1/5/2025
4/5/2025
7/4/2025

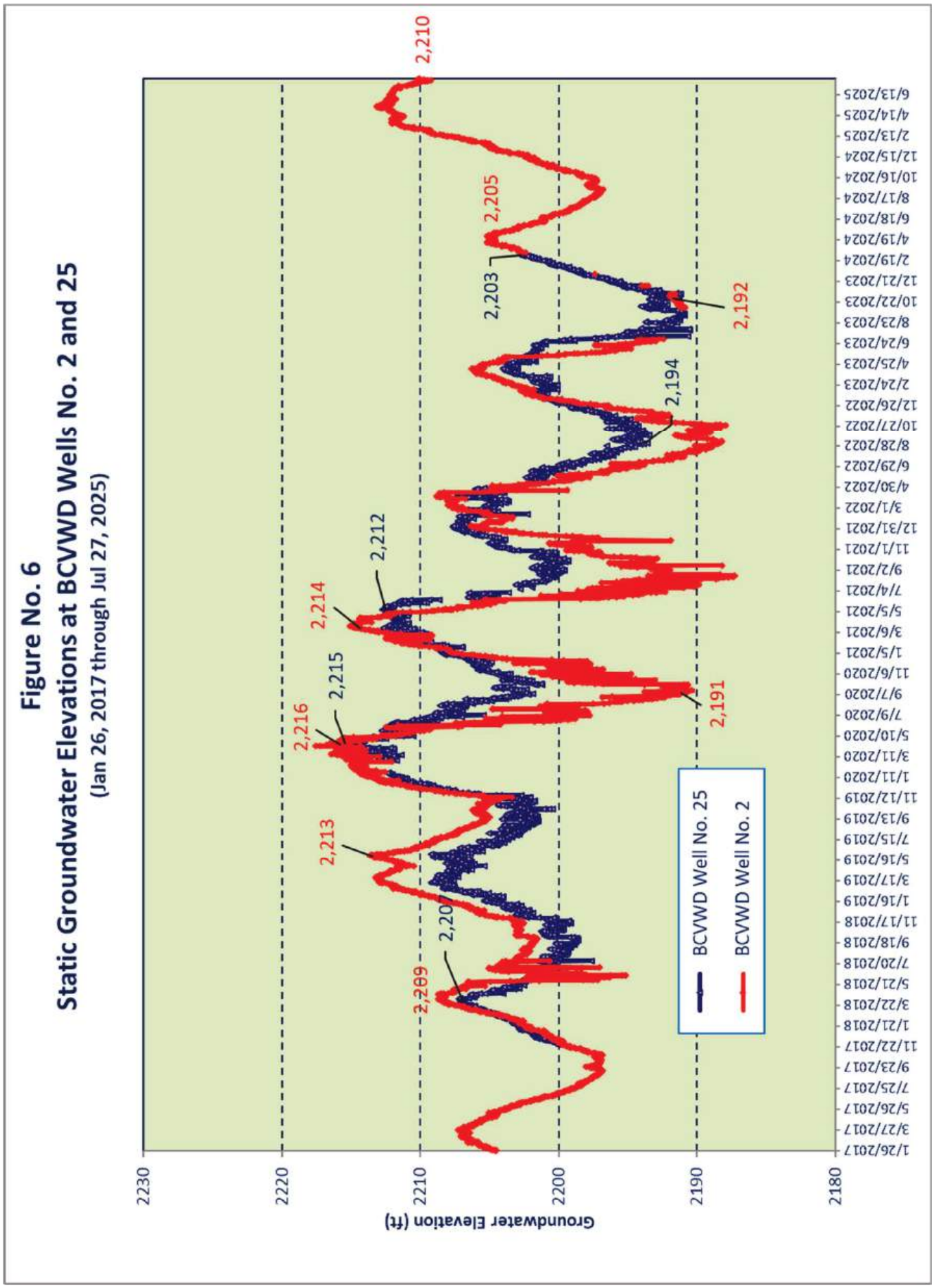


Figure No. 6
Static Groundwater Elevations at BCVWD Wells No. 2 and 25
(Jan 26, 2017 through Jul 27, 2025)
Groundwater Elevation (ft)
2230
2220
2210
2200
2190
2180
BCVWD Well No. 25
BCVWD Well No. 2
2,210
2,205
2,203
2,192
2,194
2,212
2,214
2,215
2,216
2,213
2,191
2,209
1/26/2017
3/27/2017
5/26/2017
7/25/2017
9/23/2017
11/22/2017
1/21/2018
3/22/2018
5/21/2018
7/20/2018
9/18/2018
11/17/2018
1/16/2019
3/17/2019
5/16/2019
7/15/2019
9/13/2019
11/12/2019
1/11/2020
3/11/2020
5/10/2020
7/9/2020
9/7/2020
11/6/2020
1/5/2021
3/6/2021
5/5/2021
7/4/2021
9/2/2021
11/1/2021
12/31/2021
3/1/2022
4/30/2022
6/29/2022
8/28/2022
10/27/2022
12/26/2022
2/24/2023
4/25/2023
6/24/2023
8/23/2023
10/22/2023
12/21/2023
2/19/2024
4/19/2024
6/18/2024
8/17/2024
10/16/2024
12/15/2024
2/13/2025
4/14/2025
6/13/2025

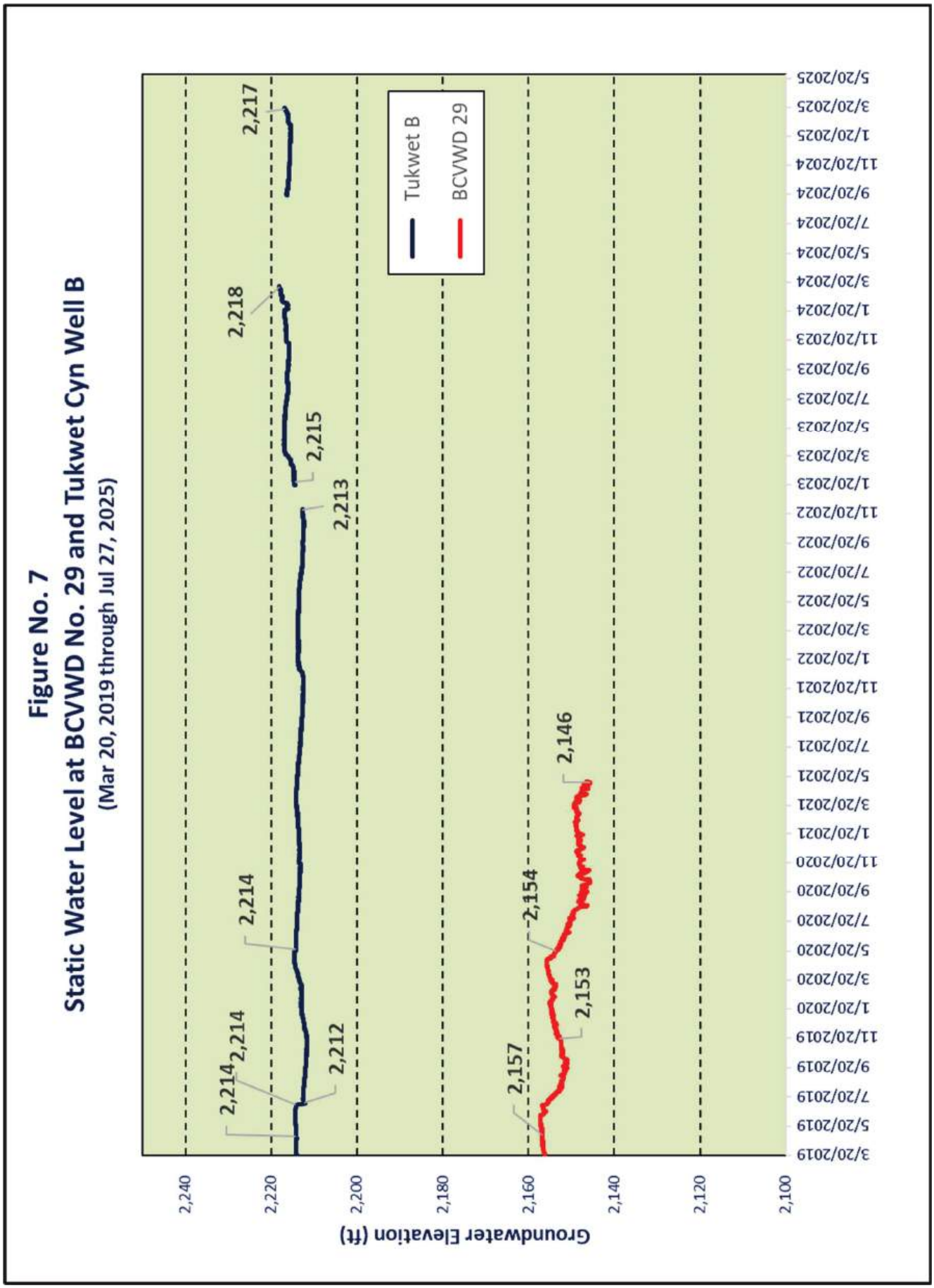


Figure No. 7
Static Water Level at BCVWD No. 29 and Tukwet Cyn Well B
(Mar 20, 2019 through Jul 27, 2025)
Tukwet B
BCVWD 29
Groundwater Elevation (ft)
2,240
2,220
2,200
2,180
2,160
2,140
2,120
2,100
2,214
2,214
2,214
2,212
2,213
2,215
2,218
2,217
2,157
2,153
2,154
2,146
3/20/2019
5/20/2019
7/20/2019
9/20/2019
11/20/2019
1/20/2020
3/20/2020
5/20/2020
7/20/2020
9/20/2020
11/20/2020
1/20/2021
3/20/2021
5/20/2021
7/20/2021
9/20/2021
11/20/2021
1/20/2022
3/20/2022
5/20/2022
7/20/2022
9/20/2022
11/20/2022
1/20/2023
3/20/2023
5/20/2023
7/20/2023
9/20/2023
11/20/2023
1/20/2024
3/20/2024
5/20/2024
7/20/2024
9/20/2024
11/20/2024
1/20/2025
3/20/2025
5/20/2025

BEAUMONT BASIN WATERMASTER

Date: August 6, 2025

From: Hannibal Blandon, ALDA Inc.

Subject: A Comparison of Production Rights vs Production through Jun 2025

Recommendation: No recommendation - For informational purposes only.

This Technical Memorandum presents a comparison of Appropriator's Production Rights from the Beaumont Basin against actual production. At the beginning of each year, Appropriators have certain Production Rights resulting from: a) unused production by overlying users from 2020 and/or b) permanent transfers of overlying water rights. Production Rights for individual Appropriators can be increased through the course of the year by spreading imported (supplemental) water.

Total production by Appropriators in 2025 through June was 6,334 ac-ft while Appropriator's Production Rights for the same period were 14,370 ac-ft resulting in a positive storage balance of 8,036 ac-ft, as presented in the table below. Spreading of supplemental water for this period was 9,298 ac-ft, mostly by BCVWD. The Production Rights for all Appropriators was higher than their respective production amounts resulting in a net temporary addition to their individual storage accounts. Change in storage accounts will be adjusted throughout the calendar year. SGPWA decreased its pre-stored water balance to 1,230 ac-ft for the reporting period.

	City of Banning	Beaumont Cherry Valley W.D.	South Mesa Mutual W.C.	Yucaipa Valley W.D. (1)	Total
Appropriative Water Rights	1,444	1,953	573	624	4,594
Transfer of Overlying Water Right to Appropriator	0	0	0	478	478
Supplemental Water	750	8,548	0	0	9,298
Appropriator's Production Right	2,194	10,501	573	1,102	14,370
Production (2)	1,211	4,554	110	459	6,334
Change in Storage Account	983	5,947	463	643	8,036
Storage Account Balance as of December 2024	49,176	38,068	10,888	19,009	117,141

1.- YVWD was credited at the beginning of the year with 478.30 ac-ft of Overlying transfers from OVP. Actual credit may be higher at the end of the year.
2.- Production by the City of Banning may be supplemented by transfers from BCVWD – 120.95 ac-ft reported between Jan and Jun 2025.

City of Banning

July 23, 2025

Dan Jaggers, Secretary
Beaumont Basin Watermaster
560 Magnolia Avenue
Beaumont, CA 92223

New Well C8 within the Beaumont Basin

Dear Mr. Jaggers,

This letter serves as a courtesy notice to inform the Beaumont Basin Watermaster (BBW) of the City of Banning's installation of a new well, designated as Well C8, within the Beaumont Basin. The well is currently in the Equipping Phase of the project and is expected to be online during the 2nd quarter of 2026.

The City acknowledges and adheres to the BBW's Rules and Regulations regarding the construction of new wells, and confirms that Well C8 has been developed in full compliance with these requirements.

As detailed in the attached documentation, Well C8 is located at Latitude 33.936363, Longitude -116.931876, with a well casing elevation of 2,582.2 feet (NAD83 datum).

Should you require any additional information, please feel free to contact me at (951) 922-3134 or via email at avela@banningca.gov.

Sincerely,

Art Vela, P.E.
Acting City Manager

Attachments:
- Well Completion Report
- Civil Sheet

APPENDIX O

State of California Well Completion Report

State of California

Well Completion Report

Form DWR 188 Submitted 12/12/2023

WCR2023-013506

Owner's Well Number C-8 | Date Work Began 05/09/2023 | Date Work Ended 12/04/2023

Local Permit Agency County of Riverside Department of Environmental Health

Secondary Permit Agency | Permit Number WP0031120 | Permit Date 04/19/2023

Well Owner (must remain confidential pursuant to Water Code 13752)

Name CITY OF BANNING,

Mailing Address 99 E. Ramsey Street

City Banning | State CA | Zip 92220

Planned Use and Activity

Activity New Well

Planned Use Water Supply Public

Well Location

Address

City | Zip | County Riverside

Latitude 33 Deg. 56 Min. 10.9067 Sec. N | Longitude -116 Deg. 55 Min. 54.7535 Sec. W

Dec. Lat. 33.936363 | Dec. Long. -116.931876

Vertical Datum | Horizontal Datum WGS84

Location Accuracy | Location Determination Method

APN 408570021

Township 03 S

Range 01 W

Section 01

Baseline Meridian San Bernardino

Ground Surface Elevation 2590

Elevation Accuracy 30 Ft

Elevation Determination Method Digital Aerial Photo

Borehole Information

Orientation Vertical | Specify

Drilling Method Reverse Circulation | Drilling Fluid Bentonite

Total Depth of Boring 1026 Feet

Total Depth of Completed Well 860 Feet

Water Level and Yield of Completed Well

Depth to first water (Feet below surface)

Depth to Static Water Level 407.17 (Feet) | Date Measured 11/08/2023

Estimated Yield* 1000 (GPM) | Test Type Pump

Test Length 24 (Hours) | Total Drawdown (feet)

*May not be representative of a well's long term yield.

Geologic Log - USCS/ASTM D2488

Depth from Surface Feet to Feet		Soil Class	Soil Color	Soil Description
0	40	(SP-SM) Poorly graded sand with silt		SAND WITH SILT: medium sand with silt
40	50	(SM) Silty sand		SILTY SAND: fine sand with silt
50	60	(SP) Poorly graded sand with gravel		SAND: fine to medium sand with trace gravel
60	110	(SP) Poorly graded sand with gravel		SAND: find to medium sand, silt, and fine gravel
110	130	(SP-SM) Poorly graded sand with silt		SAND WITH SILT: fine to medium sand with silt
130	210	(SP) Poorly graded sand		SAND: find to medium sand and silt
210	220	(SP-SM) Poorly graded sand with silt		SAND WITH SILT: medium sand with silt
220	260	(SW) Well-graded sand with gravel		SAND: fine to coarse sand with silt and trace gravel
260	270	(SP) Poorly graded sand		SAND: find to medium sand and trace silt
270	280	(SW) Well-graded sand		SAND: fine to coarse sand with silt and fine gravel

280	290	(SP) Poorly graded sand		SAND: find to medium sand and trace silt
290	300	(SM) Silty sand		SILTY SAND: fine sand with silt
300	310	(SP) Poorly graded sand		SAND: find to medium sand and silt
310	320	(SP-SM) Poorly graded sand with silt and gravel		SAND WITH SILT: medium sand with silt and fine gravel
320	330	(SC) Clayey sand		CLAYEY SAND: fine to coarse sand with clay and trace gravel
330	350	(ML) Silt with sand		SILT: silt with fine to medium sand and clay
350	400	(SM) Silty sand		SILTY SAND: fine sand with silt
400	430	(SP) Poorly graded sand		SAND: find to medium sand and silt
430	450	(SW-SC) Well-graded sand with clay		SAND WITH CLAY: fine sand with clay and silt
450	460	(SP-SM) Poorly graded sand with silt		SAND WITH SILT: medium sand with silt and clay
460	480	(SP) Poorly graded sand		SAND: find to medium sand and clay with trace silt
480	490	(SP-SM) Poorly graded sand with silt		SAND WITH SILT: medium sand with silt and clay
490	500	(SW-SC) Well-graded sand with clay		SAND WITH CLAY: fine sand with clay and silt
500	560	(SP) Poorly graded sand		SAND: fine to medium sand with trace clay
560	590	(SC) Clayey sand		CLAYEY SAND: fine to coarse sand with clay and trace silt
590	630	(SW-SC) Well-graded sand with clay		SAND WITH CLAY: fine sand with clay and silt
630	670	(SP) Poorly graded sand		SAND: fine to medium sand with trace clay
670	680	(SW-SC) Well-graded sand with clay		SAND WITH CLAY: fine sand with clay and silt
680	690	(SP) Poorly graded sand		SAND: fine to medium sand with trace clay
690	710	(SW-SC) Well-graded sand with clay		SAND WITH CLAY: fine sand with clay and silt
710	720	(SC) Clayey sand		CLAYEY SAND: fine to medium sand with clay and trace silt
720	780	(SP) Poorly graded sand		SAND: fine to medium sand with silt and trace clay
780	800	(SC) Clayey sand		CLAYEY SAND: fine to medium sand with clay and trace silt
800	810	(SW-SC) Well-graded sand with clay		SAND WITH CLAY: fine sand with clay and silt
810	820	(SP) Poorly graded sand		SAND: fine to medium sand with silt and trace clay
820	830	(SW-SC) Well-graded sand with clay		SAND WITH CLAY: fine sand with clay and silt
830	850	(SP) Poorly graded sand		SAND: fine to coarse sand with trace silt and trace clay
850	870	(SP-SC) Poorly graded sand with clay		SAND WITH CLAY: fine sand with clay
870	880	(SW-SC) Well-graded sand with clay		SAND WITH CLAY: fine sand with clay and silt
880	890	(SM) Silty sand		SILTY SAND: fine sand with silt
890	900	(SP-SM) Poorly graded sand with silt		SAND WITH SILT: medium sand with silt and clay
900	920	(SM) Silty sand		SILTY SAND: fine sand with silt
920	930	(SC) Clayey sand		CLAYEY SAND: fine to medium sand with clay and silt

930	940	(CL) Sandy lean clay		CLAY: fine to coarse sand with clay and silt
940	950	(SC) Clayey sand		CLAYEY SAND: fine to medium sand with clay and silt
950	970	(CL) Sandy lean clay		CLAY: fine to coarse sand with clay and silt
970	980	(SC) Clayey sand		CLAYEY SAND: fine to medium sand with clay and silt
980	1010	(SP-SC) Poorly graded sand with clay		SAND WITH CLAY: fine sand with clay
1010	1026	(SC) Clayey sand		CLAYEY SAND: fine to medium sand with clay and silt

Casings

Casing #	Depth from Surface Feet to Feet		Casing Type	Material	Casings Specificatons	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size if any (inches)	Description
1	0	50	Conductor or Fill Pipe	Low Carbon Steel	Grade: ASTM A53	0.375	42			
2	0	490	Blank	Spiral Weld Stainless Steel	N/A	0.375	20.75			Blank
2	490	590	Screen	Spiral Weld Stainless Steel	Nominal Size: 20 in. | Thickness: 5/16 in. | OD: 20-5/8 in.	0.3125	20.625	Louver	0.08	
2	590	615	Blank	Spiral Weld Stainless Steel	Nominal Size: 20 in. | Thickness: 5/16 in. | OD: 20-5/8 in.	0.3125	20.625			
2	615	690	Screen	Spiral Weld Stainless Steel	Nominal Size: 20 in. | Thickness: 5/16 in. | OD: 20-5/8 in.	0.3125	20.625	Louver	0.08	
2	690	710	Blank	Spiral Weld Stainless Steel	Nominal Size: 20 in. | Thickness: 5/16 in. | OD: 20-5/8 in.	0.3125	20.625			
2	710	850	Screen	Spiral Weld Stainless Steel	Nominal Size: 20 in. | Thickness: 5/16 in. | OD: 20-5/8 in.	0.3125	20.625	Louver	0.08	
2	850	860	Blank	Spiral Weld Stainless Steel	Nominal Size: 20 in. | Thickness: 5/16 in. | OD: 20-5/8 in.	0.3125	20.625			
3	0	430	Conductor or Fill Pipe	Stainless Steel	Grade: 304 Stainless Steel	0.22	3.5			Gravel Feed Line
4	0	430	Conductor or Fill Pipe	Stainless Steel	Grade: 304 Stainless Steel	0.22	3.5			Gravel Feed Line
5	0	488	Other: Sounding Pipe	Stainless Steel	Grade: 304 Stainless Steel	0.15	2.375			

Annular Material

Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size	Description
0	420	Cement	10.3 Sack Mix		
420	423	Other Fill	See description.		Transition Sand
423	885	Filter Pack	Other Gravel Pack	4 x 16	
885	1026	Other Fill	See description.		Native Fill

Other Observations:

Borehole Specifications

Depth from Surface Feet to Feet		Borehole Diameter (inches)
0	50	54
50	490	36
490	885	30
885	1026	17.5

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name: BEST DRILLING AND PUMP INC, Connor Harmon
Person, Firm or Corporation

1640 W PELLISIER ROAD	COLTON	CA	92324
Address	City	State	Zip

Signed: *electronic signature received* | 12/12/2023 | 826672
C-57 Licensed Water Well Contractor | Date Signed | C-57 License Number

DWR Use Only

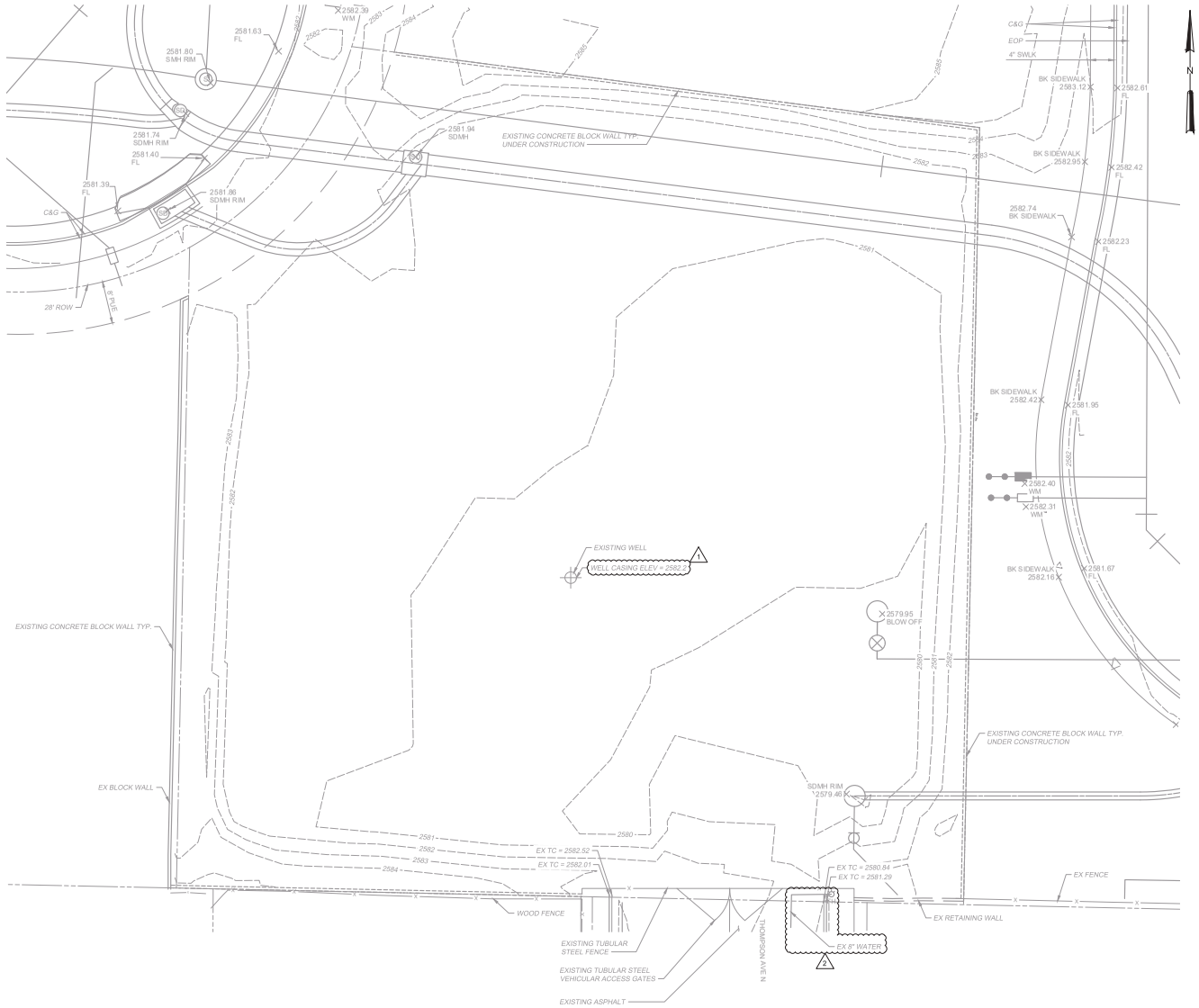
CSG #	State Well Number	Site Code	Local Well Number

N — Latitude Deg/Min/Sec

W — Longitude Deg/Min/Sec

TRS:

APN:



BENCHMARK
ELEVATIONS SHOWN HEREON ARE BASED ON BENCHMARK MWD 400 1992 - A 3 1/4" STANDARD ALUMINUM DISK SET FLUSH IN CONCRETE BRIDGE ABUTMENT, IN BANNING, AT THE NORTHWEST BRIDGE ABUTMENT FOR SOUTHERN PACIFIC RAILROAD OVER HIGHLAND SPRINGS AVE., 60 FT WEST OF THE CENTERLINE OF HIGHLAND SPRINGS AVE., 20 FEET NORTH OF THE NORTH RAIL OF RAILROAD. ELEVATION = 784.366 METERS = 2573.37 FT (NAVD88)

THE COORDINATES AND BEARINGS ON THIS SURVEY ARE BASED ON NAD83 (1986) 33° 5'5" 34" (N) 116° 56' 34" (W)

EXISTING CONDITIONS BASED ON SURVEY CONDUCTED IN FEBRUARY 2024

SCALE: 1" = 10'

10 5 0 10

CIP # 2018-02W

UNDERGROUND SERVICE ALERT
CALL TOLL FREE
1-800-422-4133
TWO WORKING DAYS BEFORE YOU DIG

CONSTRUCTION RECORD	DATE	BY	REVISIONS	ACC'D	DATE
Contractor					
Inspector					
Date Completed	02/2025		CITY BUILDING REVIEW UPDATE		
	01/2025		ADDENDUM #1		
	10/2024		BID SET		

BENCHMARK

SCALE
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE
0 1/2" 1"

SEAL: REGISTERED PROFESSIONAL ENGINEER OSCAR ALEX CUMMINGS No.045158 CIVIL STATE OF CALIFORNIA
2/21/2025

Designed By	Drawn By	Checked By
N. MAHER	N. BARRINGER	G. CUMMINGS

Hazen
HAZEN AND SAWYER
2151 RIVER PLAZA DRIVE, SUITE 270, SACRAMENTO, CA 95833

ACCEPTED BY: _____ DATE: 7.23.25
ARTURO VELA, P.E.
DIRECTOR OF PUBLIC WORKS
R.C.E. No. 75696 EXP. 09/2026

CITY OF BANNING DEPARTMENT OF PUBLIC WORKS

CIVIL
EXISTING CONDITIONS

Drawing No. C-01

File: C:\USERS\NBARRINGER\DACUMENTS\HAZEN AND SAWYER\30060.001-WELL C-8 GEOHYDROLOGIC AND ENGINEERING DS\PROJECT FILES\01_DESIGN\CIVIL\C-01 Saved by NBARRINGER Save date: 2/24/2025 1:46 PM
PLOT DATE: 2/24/2025 4:23 PM By: NBARRINGER

Discussion Items

ITEM VII-A

BEAUMONT BASIN WATERMASTER

MEMORANDUM NO. 25-22

Date:	August 6, 2025
From:	Thomas Harder, Thomas Harder & Co.
Subject:	Update on the Analysis of Losses in the Beaumont Basin
Recommendation:	For Information and Discussion

At the December 2024 Committee meeting, the Beaumont Basin Watermaster approved TH&Co's scope of work to analyze potential losses in the Beaumont Basin. The scope of work included the following tasks:

1. Quantify Subsurface Outflow Under Various Historical Periods
2. Coordinate with SGPWA to Develop Imported Water Forecasts for Analysis of Storage Losses
3. Model Pre-Processing
4. Analysis of Losses
5. Reporting

At the August Committee Meeting, we will provide an update on our analysis of basin losses with the groundwater flow model. The update will include:

- A summary of three forecast imported water delivery scenarios (baseline, dry and wet) that were analyzed with the groundwater flow model
- Changes in groundwater underflow at the Beaumont Basin boundaries for the wet and dry scenarios, compared to the baseline
- Particle tracking analysis for each scenario
- Next steps for reporting the model analysis results

Beaumont Basin Watermaster

Subsurface Outflow Analysis (2023-2072)

August 6, 2025

Thomas Harder & Co.
Groundwater Consulting

Subsurface Outflow Forecast Scenarios (Task 4)

Purpose: Evaluate how changes in imported water recharge volumes in the 3 forecast scenarios (baseline, wet, dry) impact subsurface outflow in the basin.

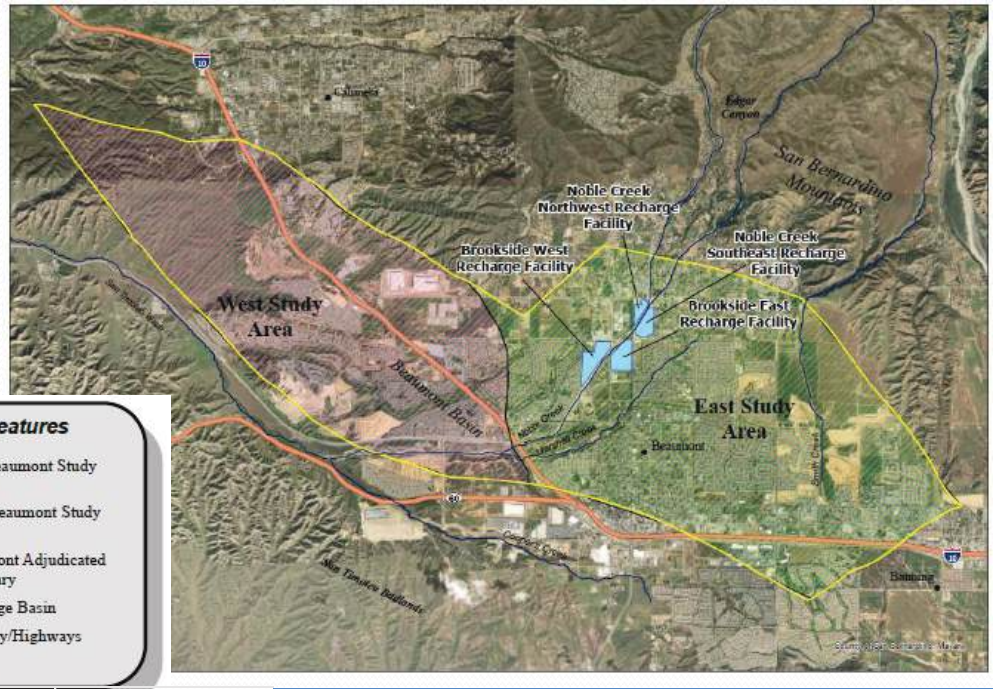
Method: Basin outflow from both the wet and dry scenarios will be analyzed and compared to basin outflow from the baseline scenario.

Goal: Assess subsurface losses under varying climatic conditions (baseline, dry, and wet) to understand how imported water recharge affects groundwater outflow in the basin.

Based on TH&Co Proposed Scope of Work dated November 22, 2024

Thomas Harder & Co.
Groundwater Consulting

Study Area and Forecast Imported Water Deliveries



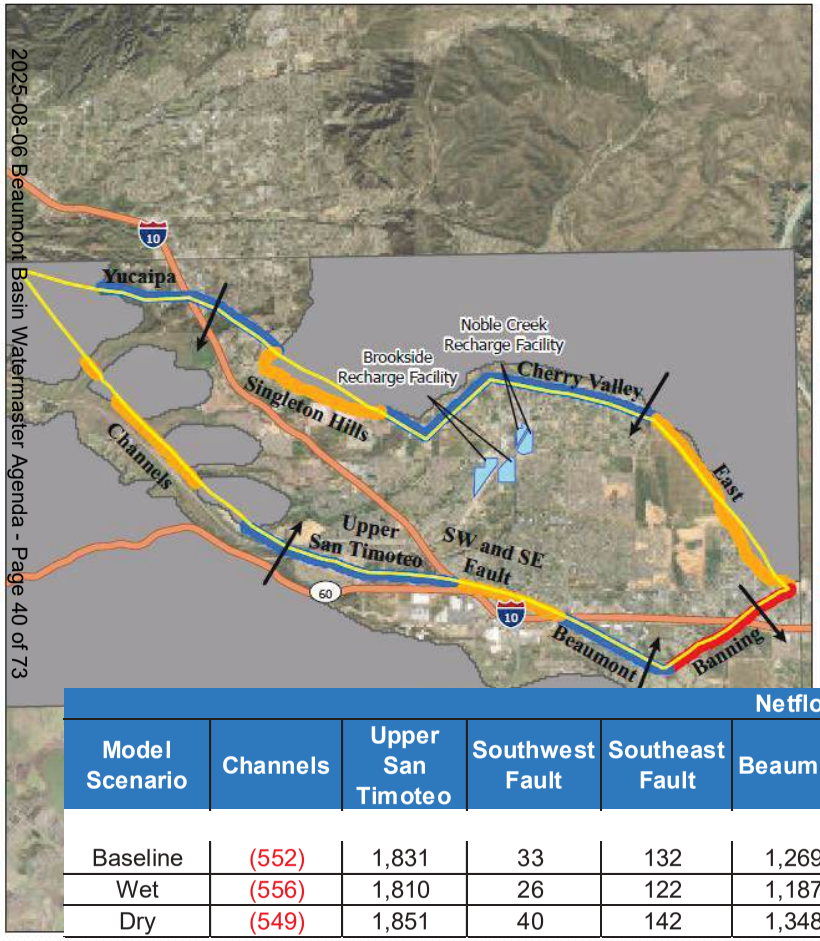
Imported Water Deliveries (acre-ft)			
	Dry Scenario	Baseline Scenario	Wet Scenario
Average (2023-2072)	11,033	13,792	16,292

Beaumont Basin Loss Analysis Model Scenario's

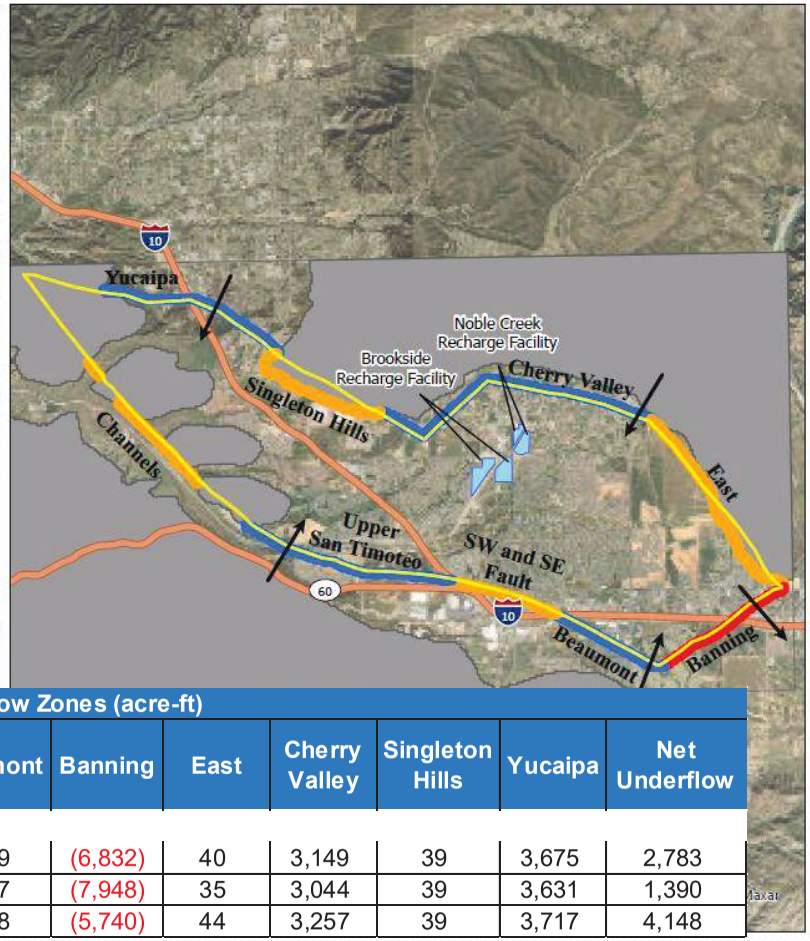
Model Forecast Year	10-Year Period Climate	Imported Water Deliveries (acre-ft) Dry Scenario	Baseline Scenario	Wet Scenario
2023	Average (50%)	7,615	9,518	11,422
2024		10,916	13,645	16,374
2025		9,541	11,926	14,311
2026		2,857	3,572	4,286
2027		4,797	5,997	7,196
2028		5,598	6,997	8,397
2029		9,543	11,928	14,314
2030		14,191	17,739	21,287
2031		5,751	7,189	8,627
2032		1,966	2,458	2,949
2033	Wet (60%)	2,834	3,542	4,250
2034		9,020	11,275	13,530
2035		18,568	23,210	27,000
2036		8,687	10,859	13,030
2037		14,178	17,722	21,267
2038		12,983	16,229	19,474
2039		14,721	18,401	22,081
2040		14,234	17,793	21,352
2041		10,843	13,554	16,265
2042		19,738	24,672	27,000
2043	Average (50%)	6,847	8,558	10,270
2044		9,707	12,133	14,560
2045		21,600	27,000	27,000
2046		13,043	16,304	19,565
2047		17,601	22,001	26,401
2048		7,677	9,596	11,515
2049		8,532	10,664	12,797
2050		11,881	14,851	17,822
2051		17,141	21,427	25,712
2052		11,845	14,807	17,768
2053	Dry (40%)	13,043	16,304	19,565
2054		17,601	22,001	26,401
2055		7,677	9,596	11,515
2056		8,532	10,664	12,797
2057		10,974	13,717	16,461
2058		16,234	20,292	24,351
2059		10,938	13,672	16,407
2060		11,393	14,241	17,090
2061		7,836	9,796	11,755
2062		6,180	7,725	9,270
2063	Average (50%)	5,939	7,424	8,909
2064		8,799	10,999	13,199
2065		20,693	25,866	27,000
2066		12,136	15,170	18,204
2067		16,693	20,867	25,040
2068		6,770	8,462	10,154
2069		7,624	9,530	11,436
2070		10,974	13,717	16,461
2071		16,234	20,292	24,351
2072		10,938	13,672	16,407
Average (2023-2072)		11,033	13,792	16,292

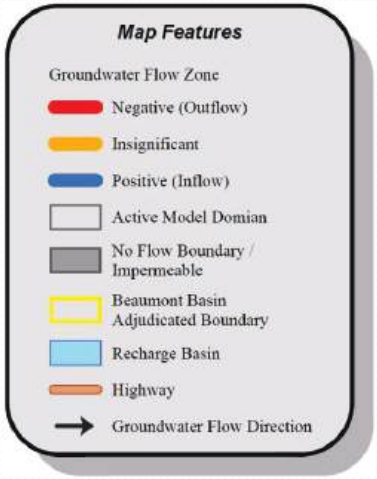
Groundwater Underflow Patterns - Baseline vs. Wet Scenario

Adjudicated Boundary
Baseline (2023-2072)



Adjudicated Boundary
Wet Scenario (2023-2072)

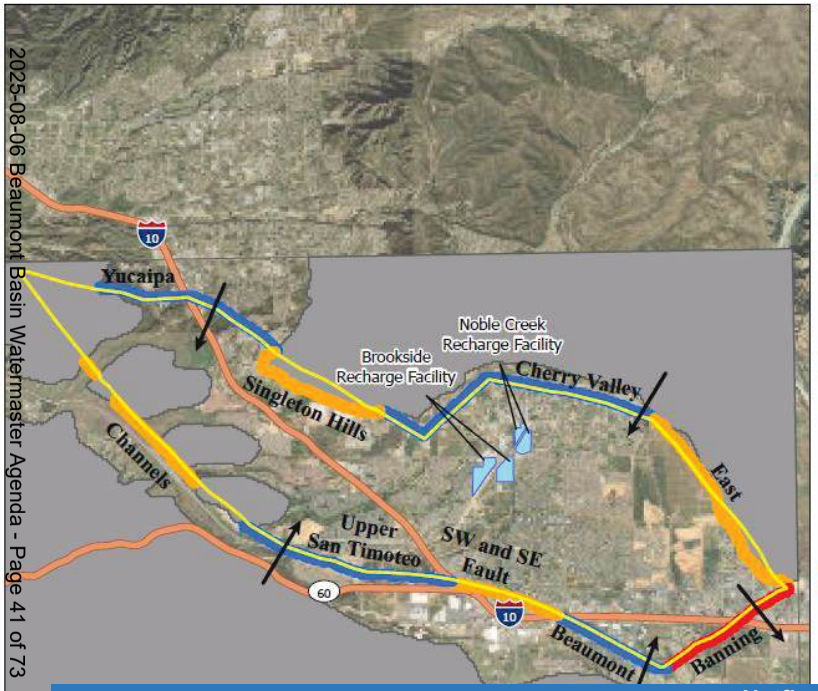




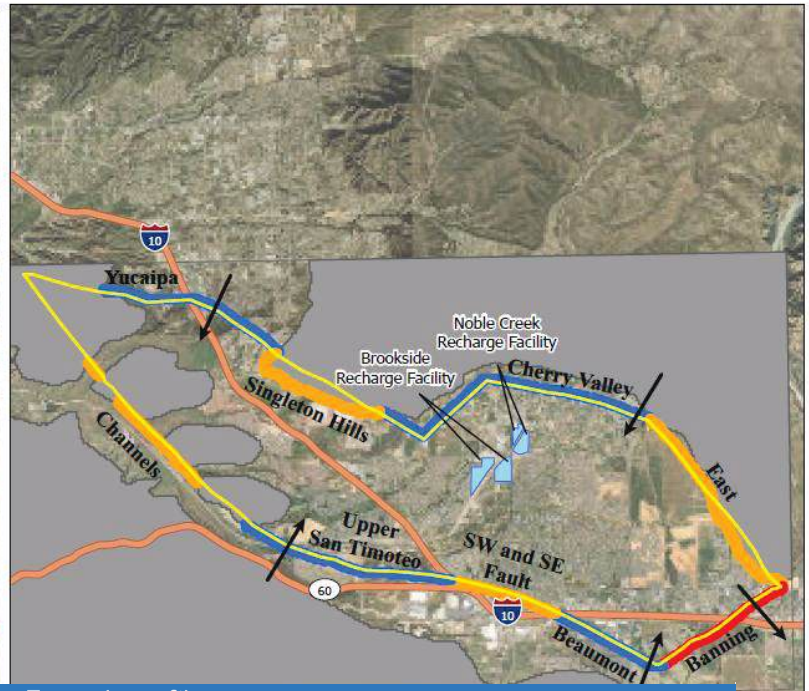
Netflow Zones (acre-ft)											
Model Scenario	Channels	Upper San Timoteo	Southwest Fault	Southeast Fault	Beaumont	Banning	East	Cherry Valley	Singleton Hills	Yucaipa	Net Underflow
Baseline	(552)	1,831	33	132	1,269	(6,832)	40	3,149	39	3,675	2,783
Wet	(556)	1,810	26	122	1,187	(7,948)	35	3,044	39	3,631	1,390
Dry	(549)	1,851	40	142	1,348	(5,740)	44	3,257	39	3,717	4,148

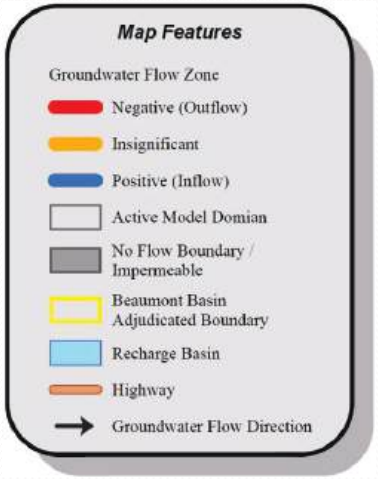
Groundwater Underflow Patterns – Baseline vs. Dry Scenario

Adjudicated Boundary
Baseline (2023-2072)



Adjudicated Boundary
Dry Scenario (2023-2072)





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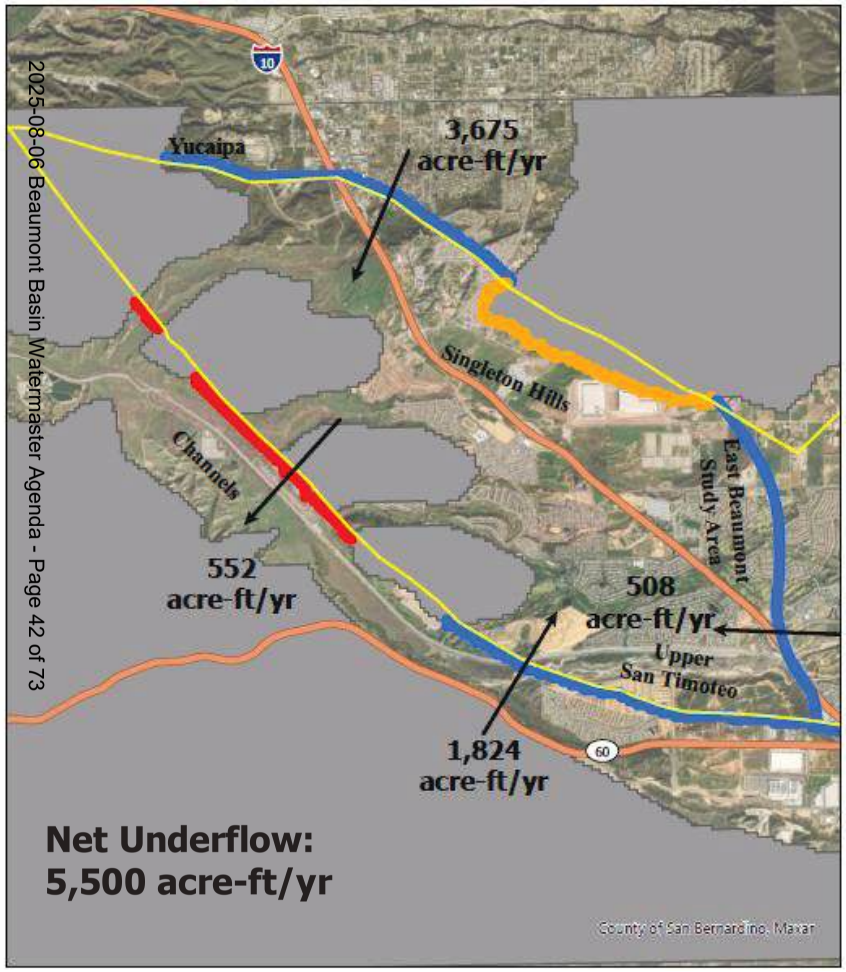
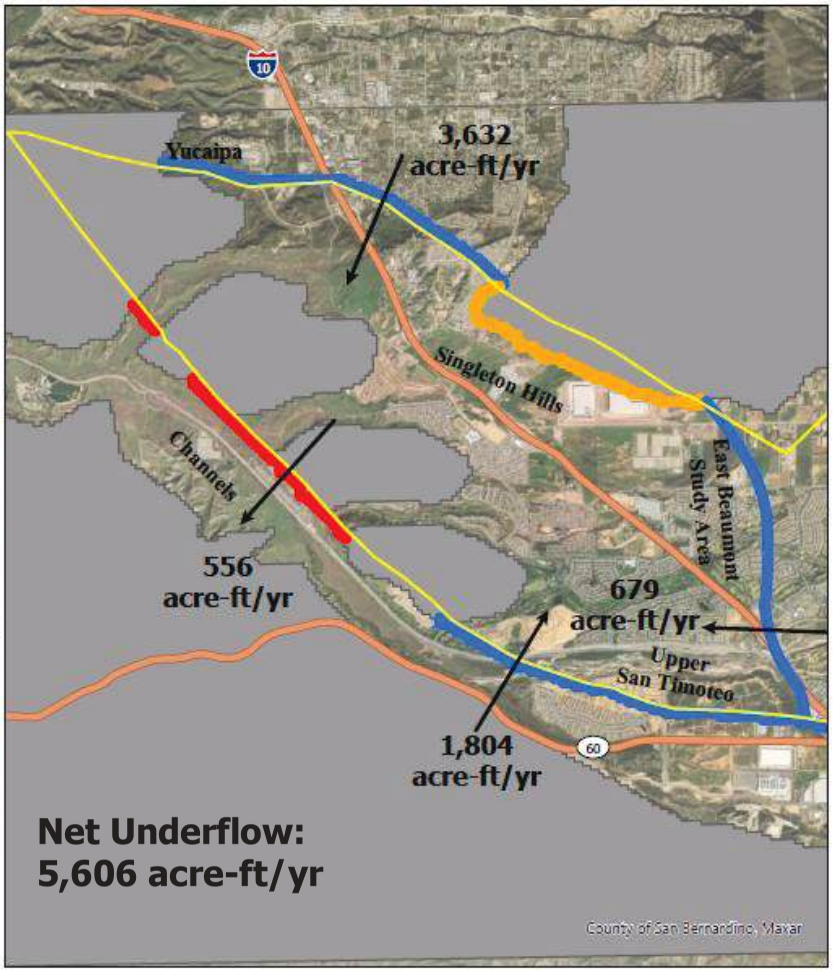
Wet	(556)	1,810	26	122	1,187	(7,948)	35	3,044	39	3,631	1,390
Dry	(549)	1,851	40	142	1,348	(5,740)	44	3,257	39	3,717	4,148

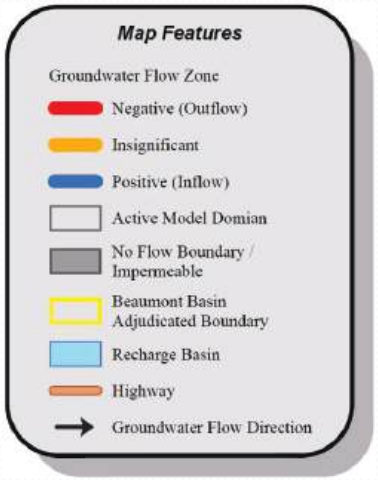
Impacts on Groundwater Underflow - Baseline vs. Wet Scenario

West Study Area
Baseline (2023-2072)



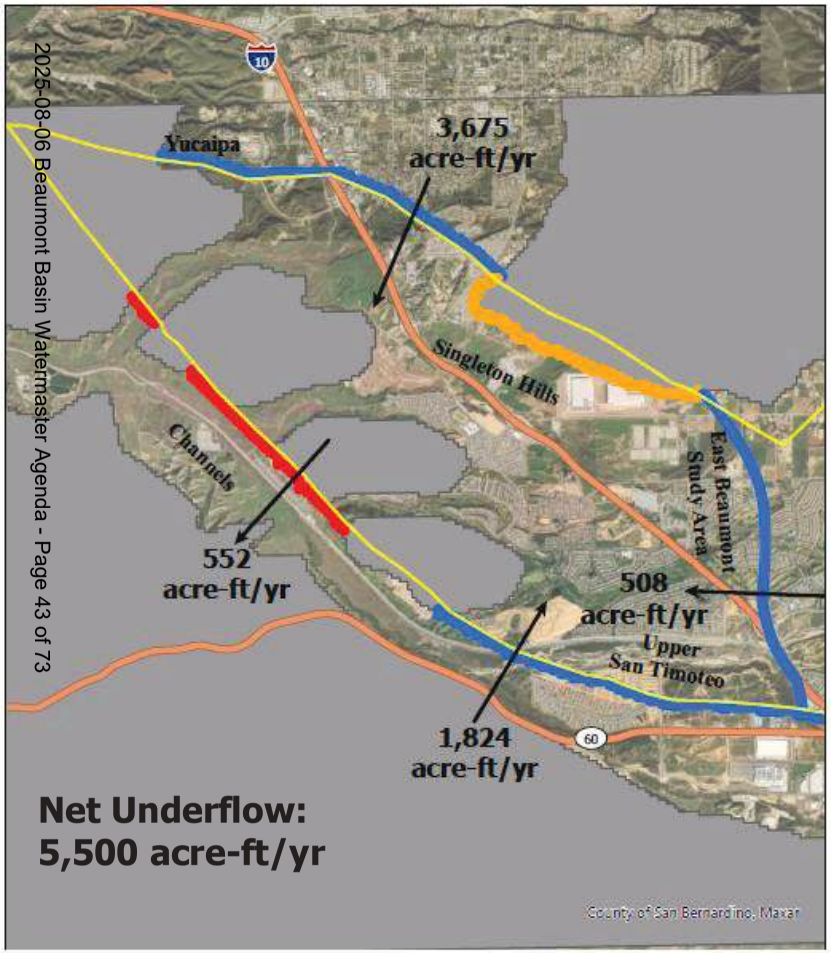
West Study Area
Wet Scenario (2023-2072)



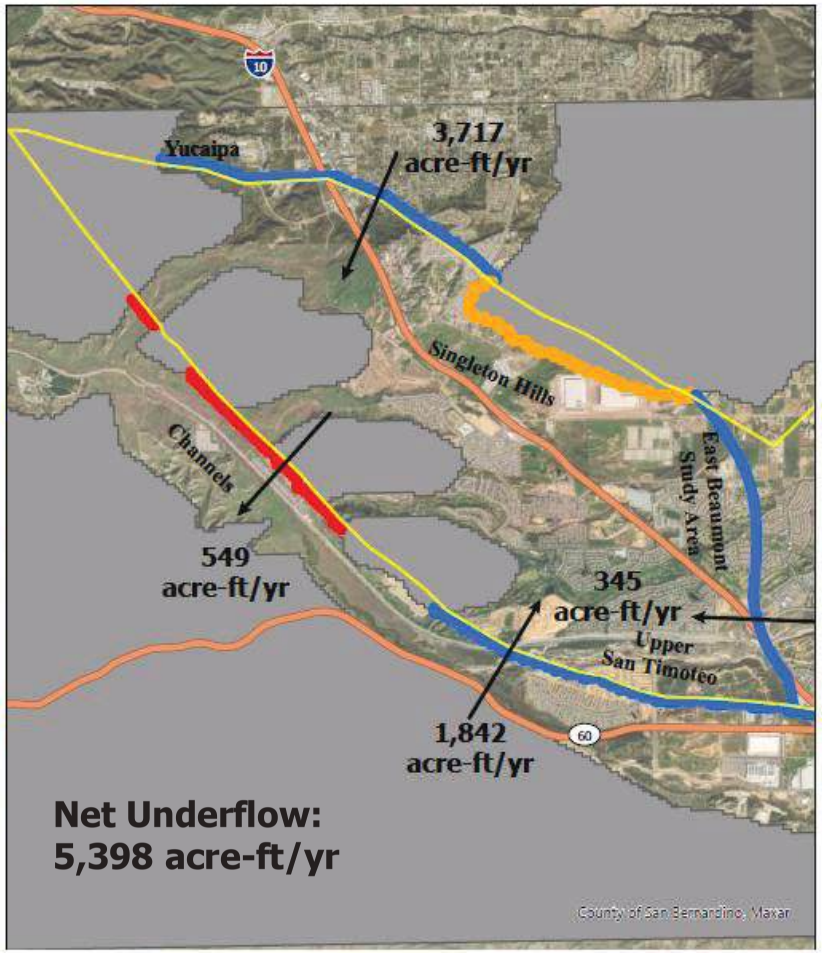


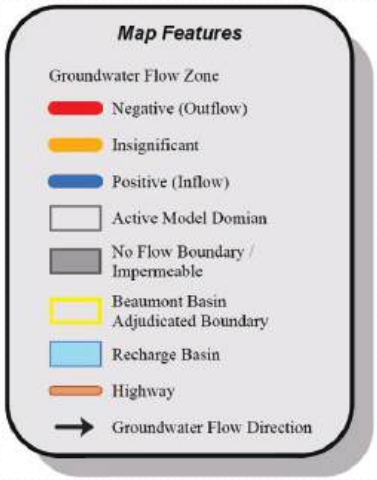
West Study Area – Baseline vs. Dry Scenario

West Study Area
Baseline (2023-2072)



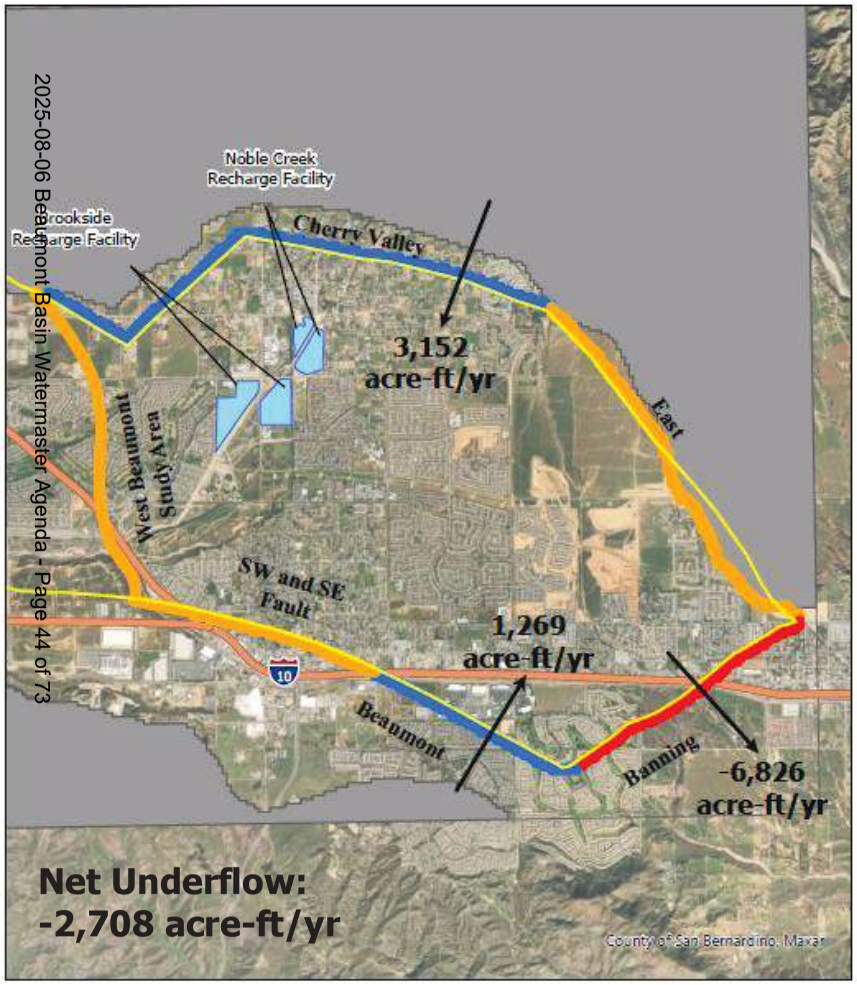
West Study Area
Dry Scenario (2023-2072)



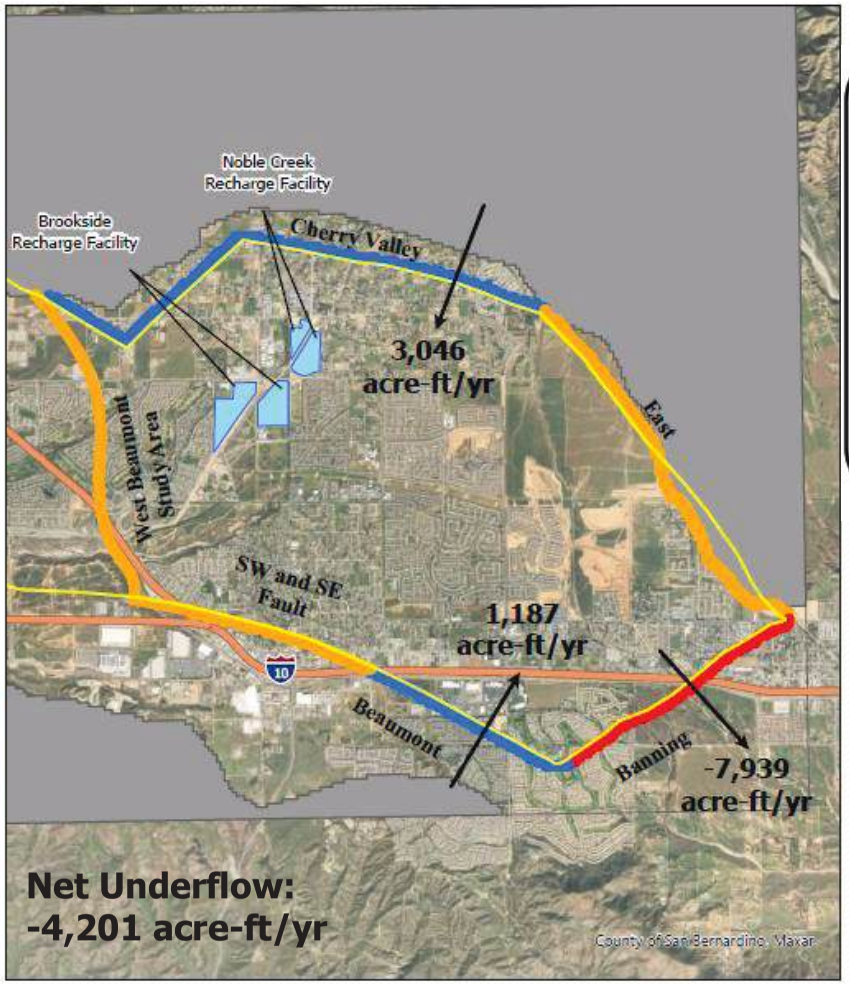


East Study Area – Baseline vs. Wet Scenario

East Study Area
Baseline (2023-2072)

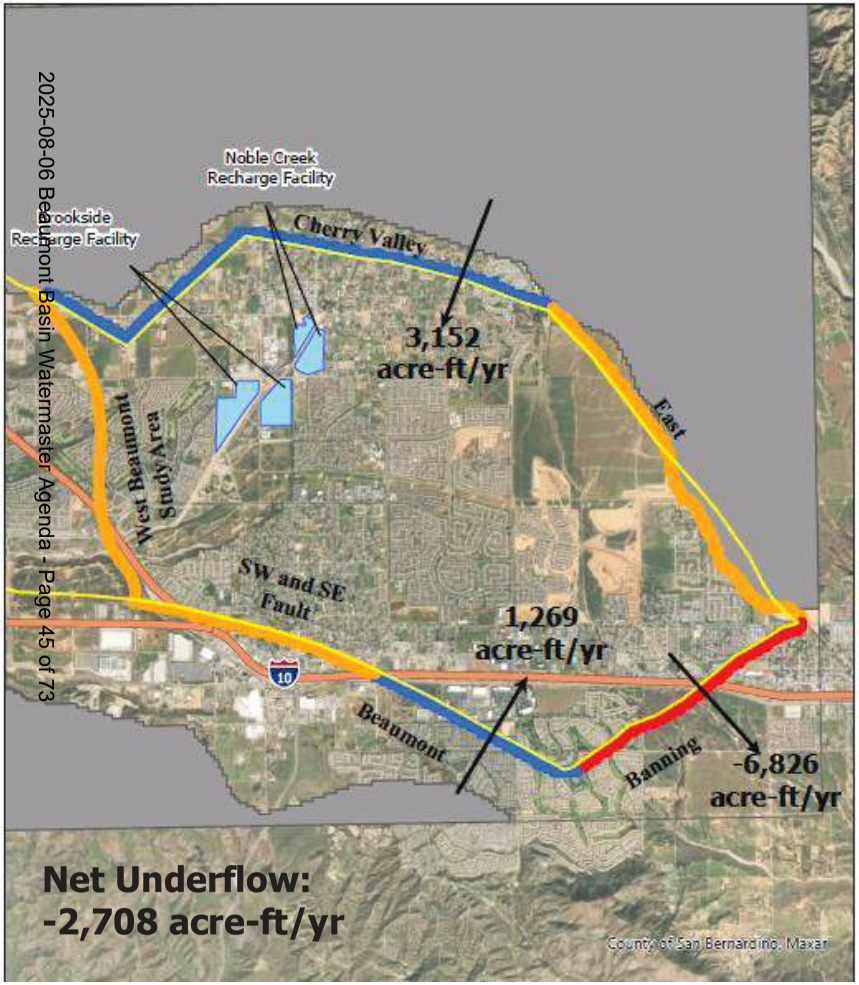


East Study Area
Wet Scenario (2023-2072)

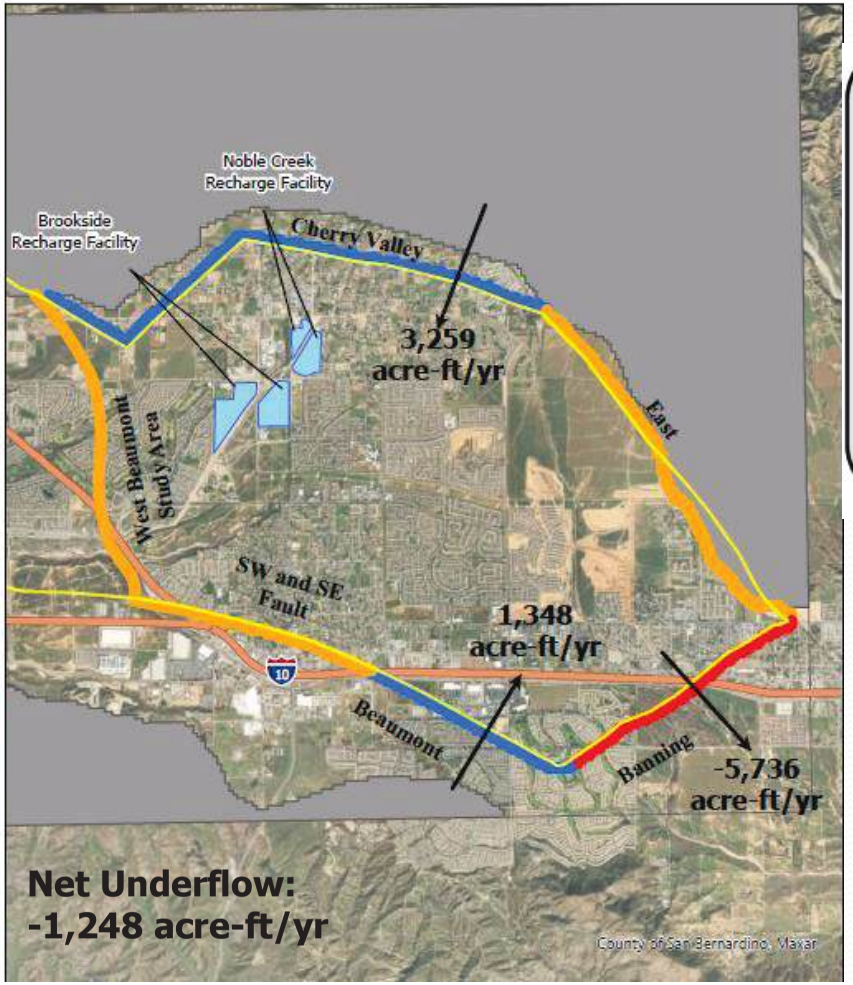


East Study Area – Baseline vs. Dry Scenario

East Study Area
Baseline (2023-2072)



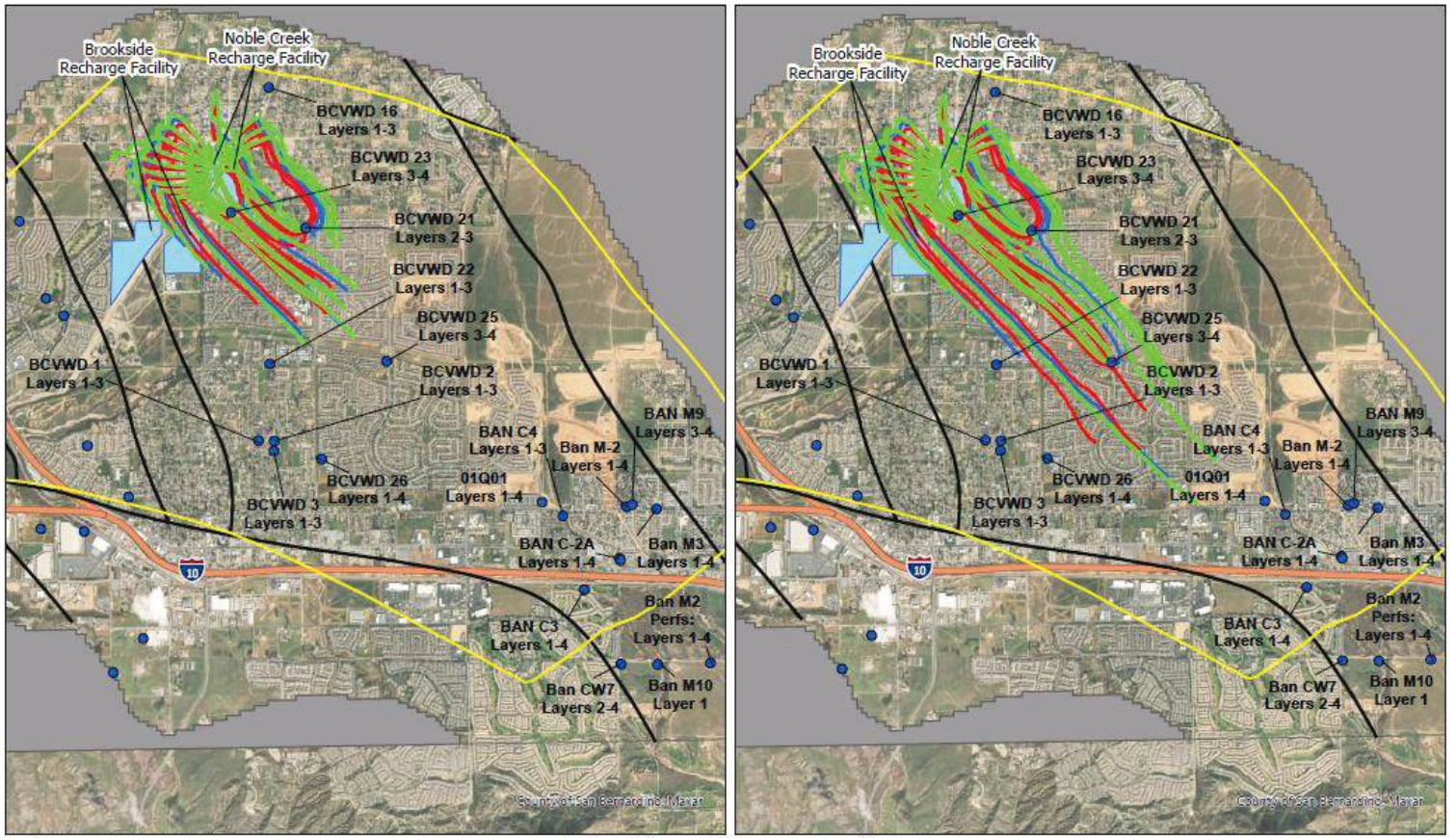
East Study Area
Dry Scenario (2023-2072)

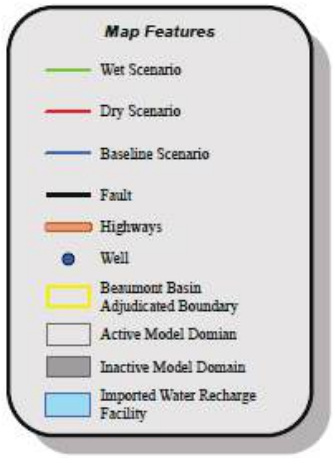


Noble Creek Northwest – Particle Tracking

25-year Period (2023-2048)
Porosity = 0.2

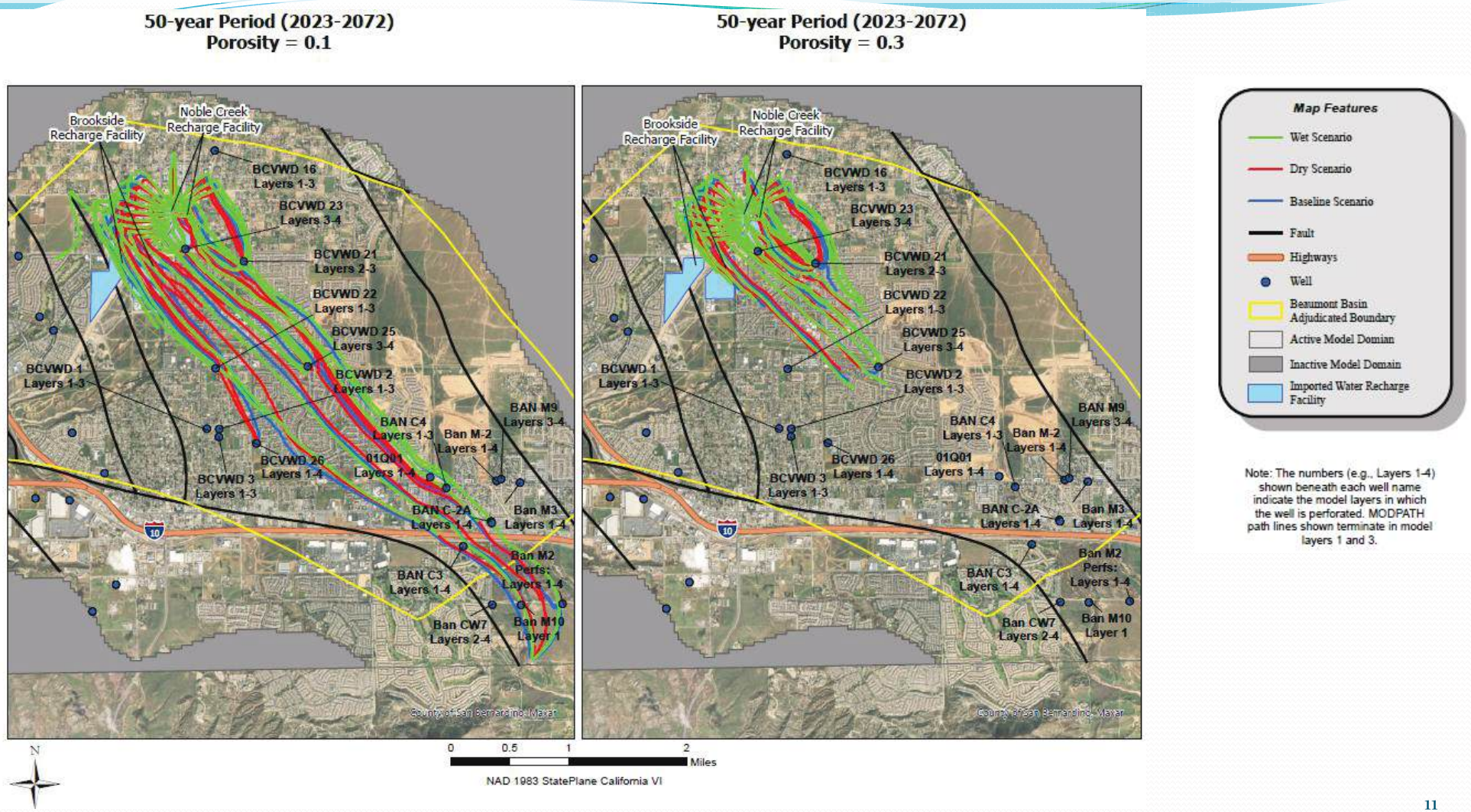
50-year Period (2023-2072)
Porosity = 0.2





Note: The numbers (e.g., Layers 1-4) shown beneath each well name indicate the model layers in which the well is perforated. MODPATH path lines shown terminate in model layers 1 and 3.

Noble Creek Northwest – Particle Tracking

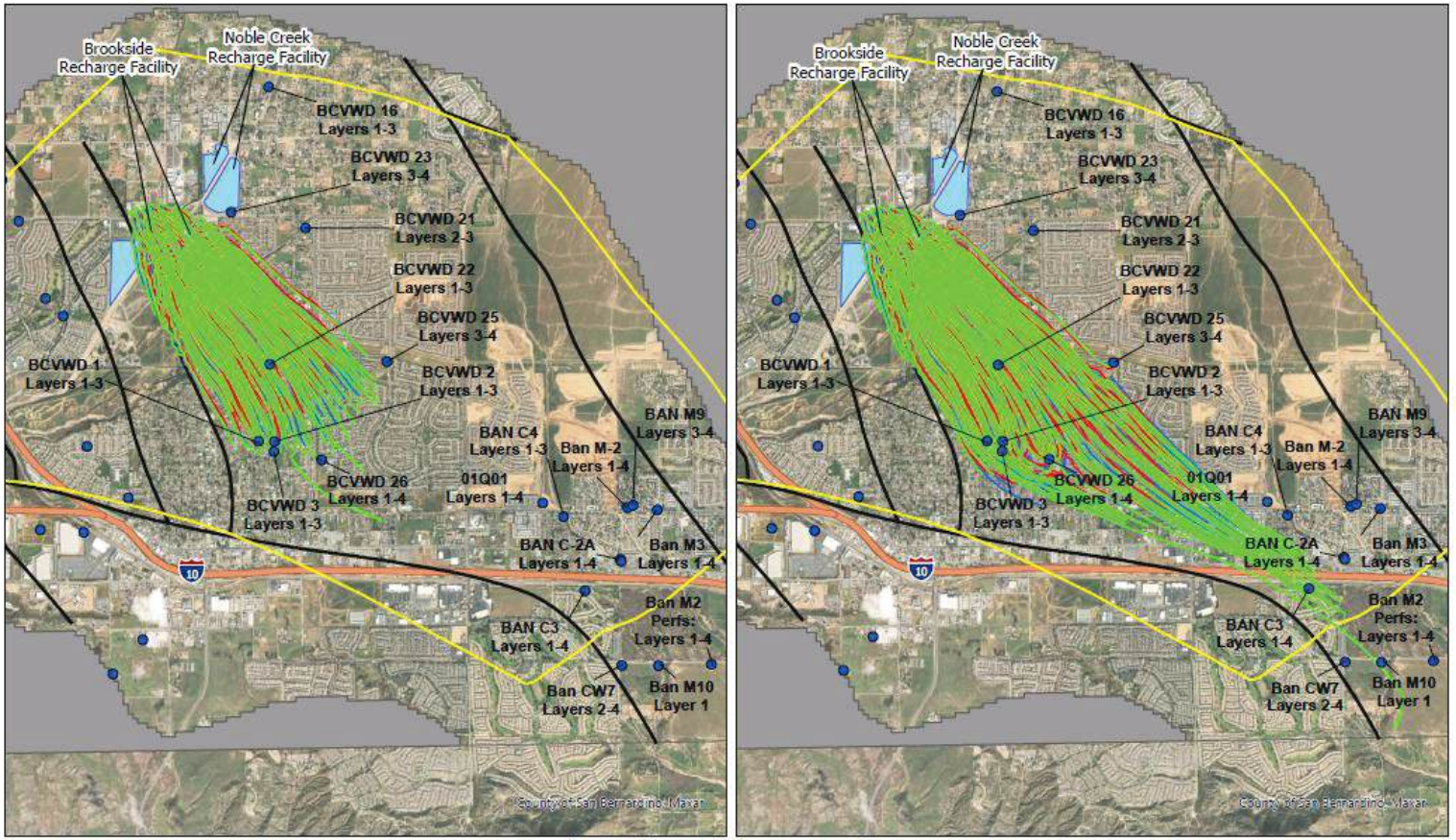


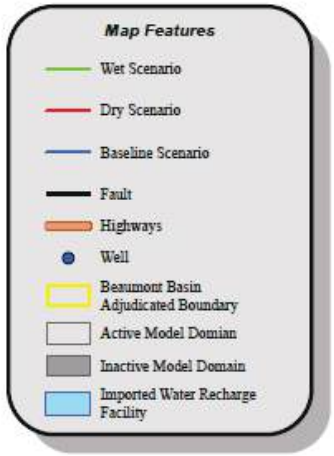
Note: The numbers (e.g., Layers 1-4) shown beneath each well name indicate the model layers in which the well is perforated. MODPATH path lines shown terminate in model layers 1 and 3.

Brookside East – Particle Tracking

25-year Period (2023-2048)
Porosity = 0.2

50-year Period (2023-2072)
Porosity = 0.2

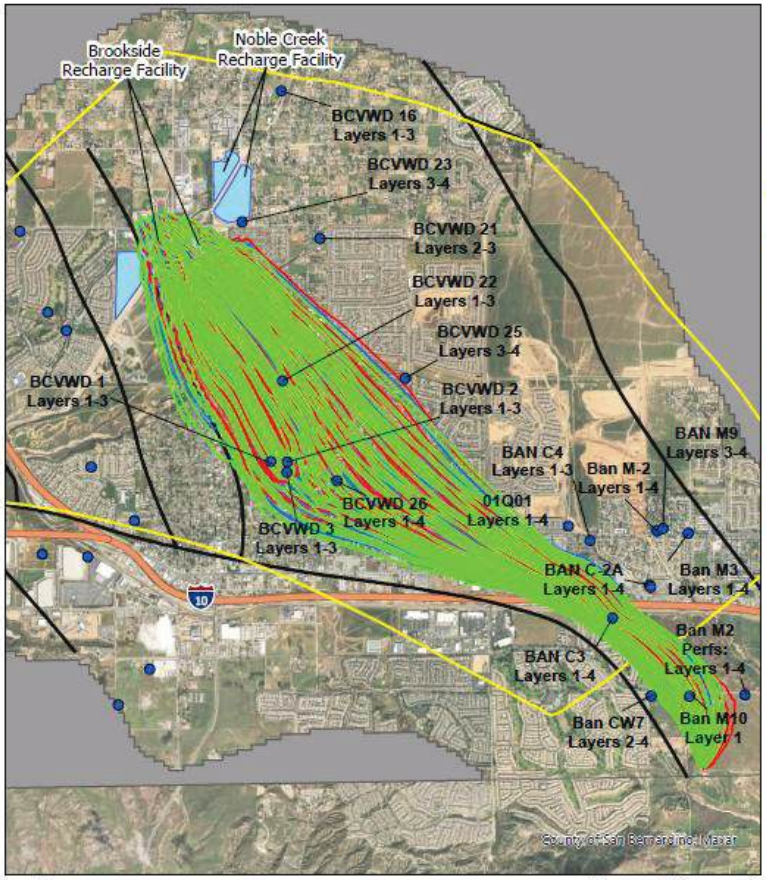




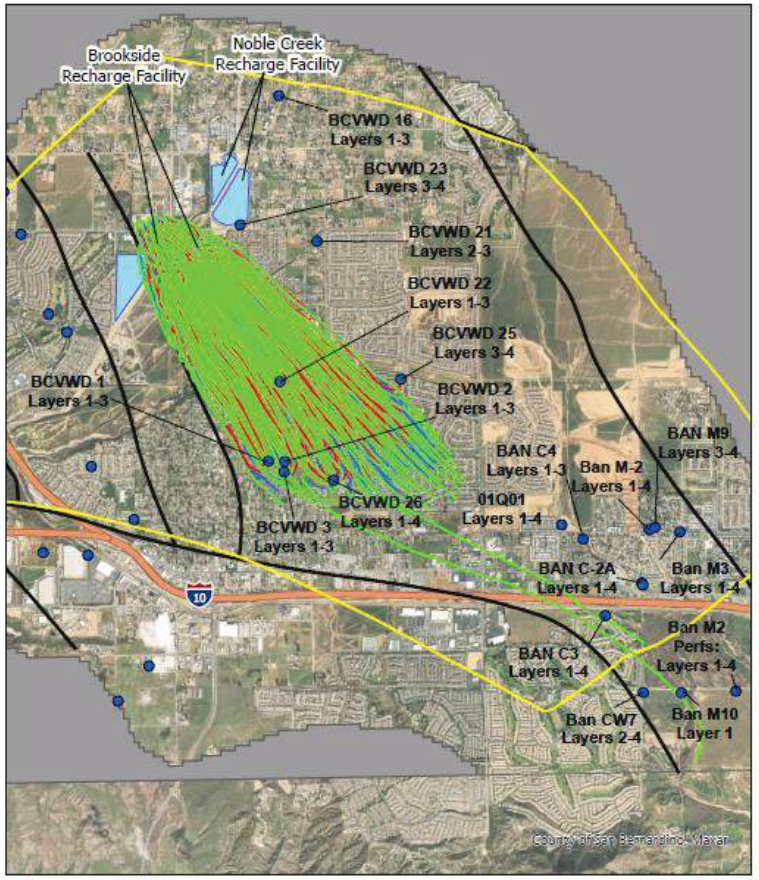
Note: The numbers (e.g., Layers 1-4) shown beneath each well name indicate the model layers in which the well is perforated. MODPATH path lines shown terminate in model layers 1 and 3.

Brookside East – Particle Tracking

50-year Period (2023-2072)
Porosity = 0.1



50-year Period (2023-2072)
Porosity = 0.3



N

0 0.5 1 2 Miles

NAD 1983 StatePlane California VI

Map Features

- Wet Scenario
- Dry Scenario
- Baseline Scenario
- Fault
- Highways
- Well
- Beaumont Basin Adjudicated Boundary
- Active Model Domain
- Inactive Model Domain
- Imported Water Recharge Facility

Note: The numbers (e.g., Layers 1-4) shown beneath each well name indicate the model layers in which the well is perforated. MODPATH path lines shown terminate in model layers 1 and 3.

Preliminary Results

- **Basinwide, managed recharge per the dry hydrologic scenario results in greater net underflow to the basin relative to a baseline**
    - Baseline: 2,783 ac-ft, Wet: 1,390 ac-ft, Dry: 4,148
- **In the West Study Area, changes in hydrologic conditions have minimal impact on net underflow to this part of the Basin**
    - Baseline: 5,500 ac-ft, Wet: 5,606 ac-ft, Dry: 5,398
- **In the East Study Area, managed recharge during the wet hydrologic scenario is forecast to result in an ~55% increase in outflow from the basin relative to a baseline**
    - Baseline: -2,708 ac-ft, Wet: -4,201 ac-ft, Dry: -1,248 ac-ft

Preliminary Results

- **Particle tracking analysis suggests that, under the most likely conditions, most of the imported water recharged in the existing facilities does not leave the basin in the 50-year forecast period**
- **Changes in subsurface outflow at the southeast basin boundary are due to changes in hydraulic head at the recharge facilities that induce pressure changes at the boundary**

Next Steps

- **TH&Co is Preparing a Technical Memorandum that Summarizes the Analysis**
- **The technical memorandum will include a preliminary draft basin loss policy for discussion among the Beaumont Basin Watermaster Committee**

ITEM VII-B

BEAUMONT BASIN WATERMASTER

MEMORANDUM NO. 25-23

Date:	August 6, 2025
From:	Steven Stuart, Dudek
Subject:	Update on Proposed Revisions to BBWM Rules and Regulations
Recommendation:	For Discussion Purposes Only

At the March 5 and June 11, 2025 special meetings, Mr. Stuart presented a table summarizing comments received by the City of Banning and the Yucaipa Valley Water District on some of the proposed revisions to the Watermaster Rules and Regulations. The table is attached with this memorandum. Mr. Stuart highlighted some of the comments for discussion at the 6/11/25 meeting. In response to those discussions, Dudek is presenting two proposals to address the issues of negative storage accounts and the accounting of return flows in the Beaumont Basin. Dudek is looking to finalize the review and comment period for the proposed revisions to the Rules and Regulations. Proposed schedule:

- October 1, 2025: Final submittal of comments on proposed revisions to Rules and Regulations
- December 3, 2025: Final revisions to Rules and Regulations for consideration for adoption by Watermaster Committee

At this meeting, Mr. Stuart is seeking feedback on the proposed revisions to the Rules and Regulations by the other member agencies and will open the floor for further discussion on any proposed revisions presented to date. Mr. Stuart will discuss a timeline for receiving comments and presenting a version of the Rules and Regulations with proposed revisions for consideration of adoption by the Watermaster Committee.

Comments on Proposed Revisions to the Beaumont Basin Watermaster Rules and Regulations

Date Comments Received	Commentator	Page	Section Number	Section Title	Comment
2/12/2025	Art Vela	18	4.0	Safe Yield and Storage Accounts	Comment: "I didn't see a definition for Annualized Safe Yield below. Is this supposed to replace Operating Safe Yield in 4.2.1.a? General Comment: Please confirm all capitalized references have a definition."
2/12/2025	Art Vela	22	5.3	New Yield	Comment: "I want to make sure that we are clear that not all storm water capture facilities increase the amount of recharge above the natural recharge in a stream system. In some instances, yes it may. I want to make sure that everyone is comfortable that this language identifies this fact."
2/12/2025	Art Vela	30	7.3 (b)	Notice of Adjustments of Rights from an Overlying Party to an Appropriator	Comment: "This information would likely be available after the submittal of Form 5. Is this an estimated amount or is supplemental information as listed in (c)."
2/12/2025	Art Vela	Form 1		Application for Groundwater Storage Agreement	Comment on Applicant's Signature: "Should this be a board member signature of proof that signer has been given the authority by board?"
2/12/2025	Art Vela	Form 2		Groundwater Storage Agreement #___	Comment on Storage Party: "Should we require proof of signature authority or include attorney signature as well?"
2/12/2025	Art Vela	Form 5		Notice to Adjust Rights of an Overlying Party Due to Proposed Provision of Water Service by an Appropriator	Comment: "Should we list out the additional information required as listed in the Rules /Regs Section 7.3?"
2/12/2025	Art Vela	Form 7		Transfer of Appropriator Production Right or Operating Yield Between Appropriators	Comment: "Should we require proof of signature authority (e.g. minutes of board action)?"

Comments on Proposed Revisions to the Beaumont Basin Watermaster Rules and Regulations

Date Comments Received	Commentator	Page	Section Number	Section Title	Comment
2/12/2025	Art Vela	Form 8		Transfer of Right to Recapture Water in Storage Between Appropriators	Comment: "Should a proof of board action from each agency involved be included?"
2/24/2025	Joe Zoba	1	1.1 (b)	Definitions	Add ", or as amended in the future." to the last sentence.
2/24/2025	Joe Zoba	1	1.1 (f)	Definitions	Recommend deleting, "Salt Credits may be used by Appropriators to facilitate implementation of the Integrated Regional Water Management Program for the San Timoteo Watershed (Wildermuth, 2005) and as an offset against potential impacts associated with discrete projects. This does not preclude development of Salt credits by Appropriators implementing projects through agreements with their users."
2/24/2025	Joe Zoba	2	1.1 (j)	Definitions	Added "Supplemental Water" throughout document where "Supplemental" is shown and referring to Supplemental Water.
2/24/2025	Joe Zoba	2	1.1 (k)	Definitions	Add "*and alternate as provided in Section 2.14* " to the sentence, "'Watermaster' and 'Watermaster Committee' means the 5-member committee of the Beaumont Basin Watermaster composed of persons nominated by the City of Banning, the City of Beaumont, the Beaumont-Cherry Valley Water District, the South Mesa Mutual Water Company and the Yucaipa Valley Water District, each of whom shall have the right to nominate one representative *and alternate as provided in Section 2.14* who shall be an employee of or consultant to the nominating agency."
2/24/2025	Joe Zoba	7	2.14	Watermaster Alternates	Comment, "See VI.4 of the Judgement to include consultants."
2/24/2025	Joe Zoba	13	3.3.5.3 (a)	Manual Groundwater Level Measurements	Add, "or equivalent" following "Alconox solution" in the text.
2/24/2025	Joe Zoba	18	4.2.1	Storage Accounts: Definitions	Comment: "Add the definition of Overlying-Appropriative Water Right represents the volume of Overlying Water Rights transferred to an Appropriator and adjusted based on the redetermination of safe yield."

Comments on Proposed Revisions to the Beaumont Basin Watermaster Rules and Regulations

Date Comments Received	Commentator	Page	Section Number	Section Title	Comment
2/24/2025	Joe Zoba	19	4.2.4	NEW SECTION: Depletion of a Storage Account	Propose new section: "4.2.4 Depletion of a Storage Account - In the event a Storage Account is depleted and it is determined that less than zero acre feet of water is available at the end of the calendar year, the Watermaster shall levy an assessment equal to 1.5 times the then current supplemental water purchase charge for the San Gorgonio Pass Water Agency multiplied by each acre foot of water depleted from a Storage Account. The Annual Replenishment Assessment funds received by the Watermaster shall be divided equally and credited to each Appropriator, up to the amount of water in their Storage Account, as the annual rental for the temporary use of water to provide sufficient supplies to replace the overproduction by a Party to the Judgement (Judgement Section VI.5.N(1)). The Annual Replenishment Assessments by the Watermaster for any Overproduction by a Party to the Judgement will continue until the Storage Account is determined to be greater than zero acre feet at the end of the calendar year."
2/24/2025	Joe Zoba	20	4.3	Losses or Spills from the Basin	Comment reads, "Basin Water - Maybe we should add a definition to specifically state what Basin Water is as a term of art. I think Overlying Water Rights and Overlying-Appropriative Water Rights should be included in the definition of Basin Water."
2/24/2025	Joe Zoba	21	5.0	Recharge of Supplemental Water and New Yield Water	Add "Water" following "Supplemental" in "Add Supplemental and New Yield Water..."
2/24/2025	Joe Zoba	21	5.0 (a)	Recharge of Supplemental Water and New Yield Water	Comment reads, "Will a safe yield loss really be calculated annually, or does this only occur with the redetermination of safe yield?"
2/24/2025	Joe Zoba	21	5.0 (b)	Recharge of Supplemental Water and New Yield Water	Delete "publicly owned" from first sentence.
2/24/2025	Joe Zoba	21	5.1	Sources of Supplemental Water	Add "Title 22 Recycled Water approved by the Regional Water Quality Control Board"
2/24/2025	Joe Zoba	21	5.1 (d)	Sources of Supplemental Water	Replace "Metropolitan Water District" with "San Gorgonio Pass Water Agency"

Comments on Proposed Revisions to the Beaumont Basin Watermaster Rules and Regulations

Date Comments Received	Commentator	Page	Section Number	Section Title	Comment
2/24/2025	Joe Zoba	22	5.2	Method of Replenishment of Supplemental Water	Comment reads, "Can this section by rewritten as a single paragraph instead of as an outline?"
2/24/2025	Joe Zoba	27	6.8	Groundwater Storage Agreements	Insert "*, injection* " in the following sentence: "...and confirmation of the Watermaster's right to inspect the recharge*, injection* and/or recapture facilities maintained and operated by the Storage Party."
2/24/2025	Joe Zoba	28	7.1	Overlying Water Rights and Redetermination of the Safe Yield	Revise the 2nd paragraph to read, "If an Overlying Party has previously transferred a portion of or all of its Overlying Water Right to an Appropriator, then the Overlying Water Right will be adjusted accordingly by subtracting the transferred amount *(Overlying-Appropriative Right)* from the modified Overlying Water Right. If the modified Overlying Water Right is less than the amount previously transferred to an Appropriator, then the amount of the Overlying Water Right, *if any, and Overlying-Appropriative Right will be reduced proportionally* ."
2/24/2025	Joe Zoba	28	7.1	Overlying Water Rights and Redetermination of the Safe Yield	Revise the first sentence of the 4th paragraph to read, "After the Overlying Parties *and Overlying-Appropriative Parties* comments are *reviewed* , the Watermaster shall consider approving the redetermined Safe Yield at a Watermaster Regular Meeting."
2/24/2025	Joe Zoba	28	7.1	Overlying Water Rights and Redetermination of the Safe Yield	Revise the first sentence of the 3rd paragraph to read, "A draft of the *redetermination of safe yield* technical report shall be *presented to the Overlying Parties and Overlying-Appropriative Parties* to review and provide comments."
2/24/2025	Joe Zoba	29	7.2	Adjustment of Overlying Water Rights	Comment in 2nd paragraph: "What is paragraph 7(a)?"
2/24/2025	Joe Zoba	29	7.2	Adjustment of Overlying Water Rights	Revise the 2nd sentence of the 2nd paragraph to read, "The Appropriator Party providing such service shall have the right to produce the volume of water foregone *by the Overlying Party as an Overlying-Appropriative Right* , in addition to other rights otherwise allocated to the Appropriator Party."
2/24/2025	Joe Zoba	29	7.2	Adjustment of Overlying Water Rights	Delete "portable" from the first sentence in the 3rd paragraph.
2/24/2025	Joe Zoba	30	7.4	Accounting of Transfers	Delete "as appropriate" from last sentence in paragraph.

Comments on Proposed Revisions to the Beaumont Basin Watermaster Rules and Regulations

Date Comments Received	Commentator	Page	Section Number	Section Title	Comment
2/24/2025	Joe Zoba	30	7.5	Transfer of Water Between Appropriators	Add "prior to the transfer taking place." to the end of the 2nd sentence in the paragraph.
2/24/2025	Joe Zoba	32	8.1	Potential Conflict	Delete Section 8.1
2/24/2025	Jennifer Ares	1	1.1 (c)	Definitions	Add "new" to the following sentence: "'New Yield Water' means water derived from an increase in yield in quantities greater than historical amounts from sources of supply including, but not limited to, capture of *new* available stream flow and rising groundwater..."
2/24/2025	Jennifer Ares	1	1.1 (c)	Definitions	"ASR recharge?"
2/24/2025	Jennifer Ares	2	1.1	Definitions	Add definition for Recapture
2/24/2025	Jennifer Ares	3	2.3	Quorum	Revise sentence to read, "A majority of the 5-member *board, which is 3 members* , acting as the Watermaster shall constitute a quorum for the transaction of business."
2/24/2025	Jennifer Ares	3	2.4	Voting Procedures	Add, "per Brown Act procedures." to the end of the sentence.
2/24/2025	Jennifer Ares	4	2.9	Contracts	Revise to read, "The Watermaster may enter into contracts and agreements for the performance of any of its powers pursuant to the Judgement and Rules & Regulations."
2/24/2025	Jennifer Ares	5	2.11 (c)	Special Project Assessments	Revise first sentence to read, "Special Project Assessments will be levied to cover special project expenses including: special engineering, economic or other studies, litigation expenses *against the Watermaster* , meter testing,..."
2/24/2025	Jennifer Ares	6	2.13	Notice and Waiver of Notice	Question: "Approved by a judge?"
2/24/2025	Jennifer Ares	6	2.14	Watermaster Alternates	Add language to note that alternates need to be approved by a judge.
2/24/2025	Jennifer Ares	11	3.3.2.2 (4)	New Wells	Revise to read, "Reference points shall be surveyed by a California licensed surveyor per the details included in Section 3.3.2.1 (3)."
2/24/2025	Jennifer Ares	22	5.3	New Yield	Do return flows constitute supplemental water and/or new yield?

ITEM VII-C

BEAUMONT BASIN WATERMASTER

MEMORANDUM NO. 25-24

Date:	August 6, 2025
From:	Steven Stuart, Dudek
Subject:	Consideration to Retain Dudek to Evaluate and Develop Management Strategies for when Groundwater Storage Accounts are Negative
Recommendation:	That the Watermaster Committee enter into agreement with Dudek to evaluate and develop management strategies for negative groundwater storage accounts for a sum of $29,780 and send invoices to each Watermaster Committee member for 20% of the approved amount

The Stipulated Judgement for the adjudicated Beaumont Basin and the Rules and Regulations established by the Beaumont Basin Watermaster Committee ("Committee") provide for the establishment and management of groundwater storage accounts for Appropriators and Storage Parties storing supplemental water in the Beaumont Basin.

Recent discussions at Committee meetings have inquired about the situation when groundwater storage accounts become negative and what actions may be implemented to make the Storage Party whole. Dudek proposes to research other agencies that operate water banking programs or have implemented groundwater storage accounts to learn of their management strategies, and to assess potential courses of action that the Beaumont Basin Watermaster may implement to prevent or recover from negative groundwater storage accounts.

At this meeting, the Watermaster Committee will be able to discuss the content of the proposal and consider awarding a contract to Dudek to evaluate potential management strategies and actions to address negative groundwater storage accounts in the Beaumont Basin.

August 6, 2025

Dan Jaggers, General Manager
c/o Beaumont-Cherry Valley Water District
560 Magnolia Ave.
Beaumont, California 92223

Subject: Proposal to Evaluate and Develop Management Strategies for when Groundwater Storage Accounts are Negative

Dear Dan Jaggers:

The amended Stipulated Judgement for the Beaumont Basin and Rules and Regulations established by the Beaumont Basin Watermaster (Watermaster) provide for the establishment and management of groundwater storage accounts for Appropriators and Storage Parties storing supplemental water in the Beaumont Basin. Under Section VI.5 of the amended Stipulated Judgement, Powers and Duties of the Watermaster, the Watermaster shall perform the following: 1) adopt uniform rules and a standard form of agreement for the storage of supplemental water, 2) calculate the additions, extractions and losses of supplemental water and new yield water, and 3) maintain an accounting of acquisitions by Appropriators of water othewise subject to Overlying Water Rights as a result of the provision of water service thereto by an Appropriator. The Watermaster is also required to prepare an annual report of the proceding year's operations, including an accounting of groundwater extractions and importation of State Water Project water. The Beaumont Basin Watermaster Rules and Regulations Section 7.3 provides detail on how Appropriative Water, the amount of Safe Yield remaining after satisfaction of Overlying Water Rights, is allocated to the Appropriators.

These sections of the Stipulated Judgment and the Watermaster's Rules and Regulations lay the framework for the accounting of water stored in the Beaumont Basin. Some discussions at recent Watermaster meetings have inquired about how the Watermaster should respond to when the balance of a groundwater storage account becomes negative (i.e., a deficit of water stored in the Beaumont Basin). Is such a situation permissible? How does an Appropriator or Storage Party recover from a negative storage account balance? What are the possible mechanisms to do so?

Scope of Work The proposed scope of work is to answer these questions and conduct an analysis for when a storage account of an Appropriator or Storage Party becomes negative and identify potential management strategies and/or actions to prevent or recover from storage account deficits.

Task 1. Historical Data and Literature Review

Dudek will research the use of groundwater storage accounts utilized by other adjudicated basins or basins regulated by Groundwater Sustainability Plans to learn how they were created, what components are included in the accounting of groundwater in storage, and how other agencies manage storage accounts to maintain their groundwater resources. Dudek has compiled water usage and storage information collected by the Beaumont Watermaster, as reported in the Beaumont Basin annual reports since 2004, to review the components of water that contribute to a groundwater storage account. For instance, the first 10 years of the Judgement allocated a

volume of temporary surplus to the Appropriators to extract from the Basin to increase storage capacity for future conjunctive use. Temporary surplus water that was not extracted contributed to an Appropriator's storage account, in addition to Appropriative Water (the amount of Safe Yield remaining after satisfaction of Overlying Water Rights), imported SWP water that recharged that Basin, and transfers of water between Appropropirators or Overlyers. In summary, this task will provide the historical and regional background and review of the development and use of groundwater storage accounts in the Basin and others in California. This information may provide insight to how other agencies or watermasters manage groundwater storage accounts and if they experienced situations where a storage account approached or reached a negative balance.

Fee for Task 1.....$7,700

Task 2. Evaluate Potential Scenarios of Negative Groundwater Storage Accounts. Dudek will evaluate various potential scenarios to address the situation when a groundwater storage account either approaches a negative balance or becomes negative. This will include developing management strategies and/or actions that may be implemented to avoid negative balances or to recover from them. The following possible management strategies/actions will be evaluated:

- Reduce groundwater extractions by supplementing water supply with other sources (i.e., recycled water, SWP water)
- Purchase Stored Water belonging to SGPWA
- Transfer Stored Water between Appropriators (from one Appropriator with a surplus to one Appropriator with a zero or negative balance)
- Transfer of Overlying Water Rights to an Appropriator
- Lease water from other Appropriators until Storage Account balance is positive

The management strategies/actions listed above may be included in a tiered approach to addressing negative balances. The Judgement does provide for the transfers of water between Appropriators and Parties with a Groundwater Storage Agreement (e.g., SGPWA) and the transfer of Overlying Water Rights to an Appropriator (permanent transfer due to water service provided by Appropriator). The potential process for addressing negative balances may begin with the transfer mechanisms detailed in the Judgement and Rules and Regulations, followed by new approaches (e.g., leasing water) should the initial mechanisms not be available or agreed upon.

Fee for Task 2.....$12,840

Task 3. Technical Memorandum. Dudek will prepare a draft technical memorandum detailing information discovered from Task 1 and an evaluation of potential scnearios to address negative groundwater storage account balances explored in Task 2. The technical memorandum will provide a starting point for further discussion by the Watermaster Committee on how to develop and implement a policy to adress negative storage accounts.

Fee for Task 3.....$9,240

Fee Summary

The fee presented in this proposal will be charged on a time and materials basis in accordance with Dudek's 2025 Standard Schedule of Charges. The time and materials fee provided in this proposal represents an estimate of the anticipated level of effort required to complete the tasks described in the proposal. Should the actual effort required to complete the tasks be less than anticipated, the amount billed will be less than the total fee.

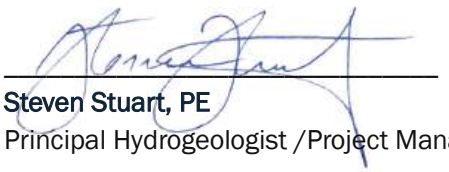
Conversely, should the actual effort to complete the proposed tasks be greater than anticipated, additional fee authorizations will be requested. No work in excess of the proposed fee or outside of the proposed scope of work will be performed without written authorization from the Watermaster.

TOTAL FEE $29,780.00

Per agreement between the Watermaster Committee members, the total fee will be distributed equally between Committee members for 20%, or $5,956.00 each, of the total fee. Dudek appreciates the opportunity to present this proposal to evaluate potential scenarios for when Appropriators and Storage Parties approach or experience negative groundwater storage account balances. We look forward to continuing our working relationship with the Watermaster.

If you have any questions regarding this proposal, please call me at 760-415-9079 or email me at sstuart@dudek.com.

Sincerely,



Steven Stuart, PE
Principal Hydrogeologist /Project Manager

Att.: *Table 1. Fee to Evaluate and Develop Management Strategies for When Groundwater Storage Accounts are Negative*
Dudek 2025 Standard Schedule of Charges

Table 1. Evaluate and Develop Management Strategies for when Groundwater Storage Accounts are Negative

Beaumont Basin Watermaster

DUDEK FEE SCHEDULE

	Project Team Role:	Principal Hydrogeologist II/ Project Manager	Hydrogeologist V				
	Team Member:	Steven Stuart, PE	Daniel Culling				
	Billable Rate :	$320	$225	TOTAL HOURS	DUDEK LABOR COST	OTHER DIRECT COSTS[1]	TOTAL FEE
Task #	TASK						
1.0	Historical Data and Literature Review	10	20	30	$ 7,700.00	$ -	$ 7,700
2.0	Evaluate Potential Negative Storage Account Scenarios	12	40	52	$ 12,840.00	$ -	$ 12,840
3.0	Technical Memorandum	12	24	36	$ 9,240.00	$ -	$ 9,240
	Total Hours and Fee	**34**	**84**	**118**	**$29,780.00**	**$ -**	**$ 29,780.00**

DUDEK 2025 Standard Schedule of Charges

Engineering Services

Project Director	$355.00/hr
Principal Engineer III	$330.00/hr
Principal Engineer II	$315.00/hr
Principal Engineer I	$300.00/hr
Program Manager	$290.00/hr
Senior Project Manager	$290.00/hr
Project Manager	$275.00/hr
Senior Engineer III	$270.00/hr
Senior Engineer II	$260.00/hr
Senior Engineer I	$255.00/hr
Project Engineer IV/Technician IV	$245.00/hr
Project Engineer III/Technician III	$235.00/hr
Project Engineer II/Technician II	$220.00/hr
Project Engineer I/Technician I	$200.00/hr
3D Production Manager	$235.00/hr
Senior Designer II	$220.00/hr
Senior Designer I	$215.00/hr
Designer	$210.00/hr
Assistant Designer	$205.00/hr
CADD Operator III	$200.00/hr
CADD Operator II	$190.00/hr
CADD Operator I	$175.00/hr
CADD Drafter	$160.00/hr
CADD Technician	$145.00/hr
Project Coordinator	$170.00/hr
Engineering Assistant	$145.00/hr

Environmental Services

Senior Project Director	$350.00/hr
Project Director	$300.00/hr
Senior Specialist V	$275.00/hr
Senior Specialist IV	$265.00/hr
Senior Specialist III	$250.00/hr
Senior Specialist II	$235.00/hr
Senior Specialist I	$220.00/hr
Specialist V	$210.00/hr
Specialist IV	$195.00/hr
Specialist III	$185.00/hr
Specialist II	$175.00/hr
Specialist I	$165.00/hr
Analyst V	$155.00/hr
Analyst IV	$145.00/hr
Analyst III	$135.00/hr
Analyst II	$125.00/hr
Analyst I	$105.00/hr
Technician IV	$100.00/hr
Technician III	$90.00/hr
Technician II	$80.00/hr
Technician I	$70.00/hr
Project Coordinator II	$170.00/hr
Project Coordinator I	$135.00/hr

Mapping and Surveying Services

UAS Pilot	$165.00/hr
Survey Lead	$260.00/hr
Survey Manager	$220.00/hr
Survey Crew Chief	$185.00/hr
Survey Rod Person	$145.00/hr
Survey Mapping Technician	$135.00/hr

Construction Management Services

Principal Manager	$215.00/hr
Senior Construction Manager	$195.00/hr
Senior Project Manager	$190.00/hr
Construction Manager	$185.00/hr
Project Manager/Construction Management	$175.00/hr
Resident Engineer	$175.00/hr
Construction Engineer	$175.00/hr
On-site Owner's Representative	$160.00/hr
Prevailing Wage Inspector	$160.00/hr
Construction Inspector	$150.00/hr
Administrator/Labor Compliance	$125.00/hr

Hydrogeology/HazWaste Services

Project Director	$345.00/hr
Principal Hydrogeologist/Engineer III	$320.00/hr
Principal Hydrogeologist/Engineer II	$310.00/hr
Principal Hydrogeologist/Engineer I	$300.00/hr
Senior Hydrogeologist V/Engineer V	$275.00/hr
Senior Hydrogeologist IV/Engineer IV	$265.00/hr
Senior Hydrogeologist III/Engineer III	$255.00/hr
Senior Hydrogeologist II/Engineer II	$245.00/hr
Senior Hydrogeologist I/Engineer I	$235.00/hr
Project Hydrogeologist V/Engineer V	$225.00/hr
Project Hydrogeologist IV/Engineer IV	$215.00/hr
Project Hydrogeologist III/Engineer III	$205.00/hr
Project Hydrogeologist II/Engineer II	$195.00/hr
Project Hydrogeologist I/Engineer I	$185.00/hr
Hydrogeologist/Engineering Assistant	$150.00/hr
HazMat Field Technician	$135.00/hr

District Management & Operations

District General Manager	$225.00/hr
District Engineer	$215.00/hr
Operations Manager	$165.00/hr
District Secretary/Accountant	$150.00/hr
Collections System Manager	$150.00/hr
Grade V Operator	$140.00/hr
Grade IV Operator	$125.00/hr
Grade III Operator	$115.00/hr
Grade II Operator	$95.00/hr
Grade I Operator	$90.00/hr
Operator in Training	$80.00/hr
Collection Maintenance Worker	$85.00/hr

Project Delivery Services

Technology Specialist II	$245.00/hr
Technology Specialist I	$190.00/hr
GIS Analyst V	$220.00/hr
GIS Analyst IV	$200.00/hr
GIS Analyst III	$165.00/hr
GIS Analyst II	$145.00/hr
GIS Analyst I	$130.00/hr
Creative Services IV	$185.00/hr
Creative Services III	$160.00/hr
Creative Services II	$145.00/hr
Creative Services I	$130.00/hr
Technical Editor IV	$185.00/hr
Technical Editor III	$160.00/hr
Technical Editor II	$145.00/hr
Technical Editor I	$130.00/hr
Publications Specialist IV	$135.00/hr
Publications Specialist III	$125.00/hr
Publications Specialist II	$115.00/hr
Publications Specialist I	$105.00/hr
Clerical Administration	$100.00/hr

Expert Witness – Court appearances, depositions, and interrogatories as expert witness will be billed at 2.00 times normal rates.

Emergency and Holidays – Minimum charge of two hours will be billed at 1.75 times the normal rate.

Material and Outside Services – Subcontractors, rental of special equipment, special reproductions and blueprinting, outside data processing and computer services, etc., are charged at 1.15 times the direct cost.

Travel Expenses – Mileage at current IRS allowable rates. Per diem where overnight stay is involved is charged at cost

Invoices, Late Charges – All fees will be billed to Client monthly and shall be due and payable upon receipt. Invoices are delinquent if not paid within 30 days from the date of the invoice. Client agrees to pay interest at a 10% annual rate for amounts unpaid greater than 30 days after the date of the invoice.

Annual Increases – Unless identified otherwise, these standard rates will increase in line with the CPI-U for the nearest urban area per the Department of Labor Statistics to where the work is being completed) or by 3% annually, whichever is higher.

Prevailing Wage – The rates listed above assume prevailing wage rates do not apply. If this assumption is incorrect Dudek reserves the right to adjust its rates accordingly.

ITEM VII-D

BEAUMONT BASIN WATERMASTER

MEMORANDUM NO. 25-25

Date:	August 6, 2025
From:	Steven Stuart, Dudek
Subject:	Consideration to Retain Dudek to Evaluate and Develop a Policy to Account for Return Flows in the Beaumont Basin
Recommendation:	That the Watermaster Committee enter into agreement with Dudek to evaluate and develop a policy to account for return flows in the Beaumont Basin for a sum of $27,400 and send invoices to each Watermaster Committee member for 20% of the approved amount.

In 2022, Thomas Harder & Co. prepared a technical memorandum detailing the development of a methodology to calculate the volume of return flows that would be available for capture by the Appropriators. This proposal by Dudek is to review and update the analysis conducted by Thomas Harder & Co., to confirm the legality of an Appropriator staking a right to capture return flows, and propose a methodology to incorporate return flows into groundwater storage accounts.

At this meeting, the Watermaster Committee will be able to discuss the content of the proposal and consider awarding a contract to Dudek to evaluate and develop a polity to account for return flows in the Beaumont Basin.

August 6, 2025

Dan Jaggers, General Manager
c/o Beaumont-Cherry Valley Water District
560 Magnolia Ave.
Beaumont, California 92223

Subject: Proposal to Develop a Policy to Account for Return Flows in the Beaumont Basin

Dear Dan Jaggers:

In 2018, the Beaumont Basin Watermaster Board (the Watermaster) directed the Alda/Thomas Harder & Co. team to develop a revised return flow methodology to consider parcel by parcel water delivery records, a more detailed accounting of indoor/outdoor water use, and account for differences in return flow lag time between the time of application and the arrival of the return flow at the groundwater. Thomas Harder & Co. prepared a technical memorandum in 2019 detailing the data used to inform a methodology to quantify return flows and how to account for ownership of the return flows. Subsequently, in 2022, Thomas Harder & Co. revised the 2019 technical memorandum to address the following issues raised by the Watermaster Committee:

1. Modify the indoor/outdoor water use for the City of Banning and Yucaipa Valley Water District,
2. Further evaluate landscape irrigation efficiency,
3. Incorporate commercial water deliveries as an additional water delivery account type,
4. Include pipeline losses and infiltration and inflow in quantifying return flows, and
5. Evaluate potential changes in concentrations of total dissolved solids in groundwater in response to return flows.

The 2022 technical memorandum prepared by Thomas Harder & Co. estimated the travel time for water used for irrigation purposes and other outdoor uses to reach the water table to range between 3 to 44 years depending on the depth-to-water in the Basin and an estimated infiltration rate of 15 feet/year. The incorporation of travel time for water to reach the water table factors into quantifying the volume of return flow that is avaialble for capture by the applicable Appropriator that can claim ownership of the return flow.

Scope of Work The proposed scope of work is to review the 2022 technical memorandum prepared by Thomas Harder & Co. and update the return flow analysis with data collected since 2019. This review will also investigate the definition and estimate of irrigation efficiency as an indicator of the amount of applied water that recharges groundwater. Dudek will also research whether there is legal precedent for claiming ownership of return flows by water purveyors that sell water and will evaluate the location of return flows relative to the capture of return flows by municipal water supply wells.

Task 1. Review and Update Return Flow Accounting Methodology Memorandum

Dudek will review the *Updated Return Flow Accounting Methodology for the Beaumont Basin Adjudicated Area* technical memorandum prepared by Thomas Harder & Co. in April 2022 and continue the analysis of return flows by updating the volume of water delivered to the customer bases for BCVWD, City of Banning, YVWD, and South Mesa Water Company and the volume of water treated by the City of Beaumont, City of Banning, and YVWD since 2019. Dudek will review the use of irrigation efficiecy to estimate the volume of water used and/or applied that will recharge groundwater, and the estimate of the infiltration rate that dictates the arrival time of return flows to groundwater. Dudek will also explore other methodologies for estimating the infiltration rate of water applied at or near surface to groundwater (e.g., chemical markers) to evaluate the estimate of 15 feet/year in the Beaumont Basin.

Fee for Task 1.....$8,520

Task 2. Incorporate Return Flow into Groundwater Storage Account. Dudek will review and confirm that there is legal precendent in the state of California that water purveyors supplying water to customers may rightfully stake a claim to return flows. Subsequently, Dudek will utilize the confirmed or revised estimate of return flows following the completion of Task 1 to quantify the volume of return flow available for capture by the applicable Appropriator. The distribution of the estimated quantity of return flow available for capture will be based on the area of origin and the estimated depth-to-water, which will dictate the time between when the water is applied and available for capture. Thomas Harder & Co. estimated a range of arrival times from 3 to 44 years. Estimates of the arrival times for return flows will be recalculated every year in the winter/spring when the highest groundwater elevations are observed. An estimate of the lateral spreading of infiltrating return flows will be based on the hydraulic mounding observed near the existing spreading basins, which will factor into the estimation of capture by wells owned by the Appropriators staking claim to the return flows. Dudek will also investigate how to account for return flows not captured by Appropriator wells. The capture and reuse of return flows will constitute a new groundwater storage account category that will be tracked separately from the other sources of water.

Fee for Task 2.....$11,640

Task 3. Technical Memorandum. Dudek will prepare a draft technical memorandum providing a review of the Thomas Harder & Co. technical memorandum on return flow accounting methodology, including the incorporation of additional data since 2019 to help inform the estimates of the quantity of return flows to the Beaumont Basin. The technical memorandum will include a review and confirmation of the legal precedent for Appropriators to stake a claim to return flows, and a proposed methodology for calculating the annual volume of return flow avaialbe for capture by the Appropriators on a per year basis.

Fee for Task 3.....$7,240

Fee Summary

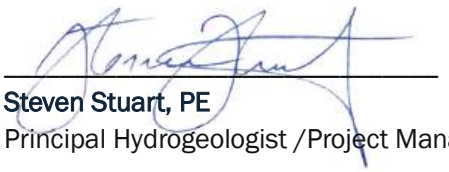
The fee presented in this proposal will be charged on a time and materials basis in accordance with Dudek's 2025 Standard Schedule of Charges. The time and materials fee provided in this proposal represents an estimate of the anticipated level of effort required to complete the tasks described in the proposal. Should the actual effort required to complete the tasks be less than anticipated, the amount billed will be less than the total fee. Conversely, should the actual effort to complete the proposed tasks be greater than anticipated, additional fee authorizations will be requested. No work in excess of the proposed fee or outside of the proposed scope of work will be performed without written authorization from the Watermaster.

TOTAL FEE $27,400.00

Per agreement between the Watermaster Committee members, the total fee will be distributed equally between Committee members for 20%, or $5,480.00 each, of the total fee. Dudek appreciates the opportunity to present this proposal to review, update, and expand on the methodology for calculating the volume of return flow available for capture by the applicable Appropriator. We look forward to continuing our working relationship with the Watermaster.

If you have any questions regarding this proposal, please call me at 760-415-9079 or email me at sstuart@dudek.com.

Sincerely,



Steven Stuart, PE
Principal Hydrogeologist /Project Manager

Att.: *Table 1. Fee to Evaluate and Develop Policy to Account for Return Flows in the Beaumont Basin*
Dudek 2025 Standard Schedule of Charges

Table 1. Evaluate and Develop Policy to Account for Return Flows in the Beaumont Basin

Beaumont Basin Watermaster

DUDEK FEE SCHEDULE

	Project Team Role:	Principal Hydrogeologist II/ Project Manager	HydrogeologistII				
	Team Member:	Steven Stuart, PE	Samira Ismaili				
	Billable Rate :	$320	$195	TOTAL HOURS	DUDEK LABOR COST	OTHER DIRECT COSTS[1]	TOTAL FEE
Task #	TASK						
1.0	Review and Update Return Flow Accounting Methodology Memorandum	12	24	36	$ 8,520.00	$ -	$ 8,520
2.0	Incorporate Return Flow into Groundwater Storage Account	12	40	52	$ 11,640.00	$ -	$ 11,640
3.0	Technical Memorandum	8	24	32	$ 7,240.00	$ -	$ 7,240
	Total Hours and Fee	**32**	**88**	**120**	**$27,400.00**	**$ -**	**$ 27,400.00**

DUDEK 2025 Standard Schedule of Charges

Engineering Services

Project Director	$355.00/hr
Principal Engineer III	$330.00/hr
Principal Engineer II	$315.00/hr
Principal Engineer I	$300.00/hr
Program Manager	$290.00/hr
Senior Project Manager	$290.00/hr
Project Manager	$275.00/hr
Senior Engineer III	$270.00/hr
Senior Engineer II	$260.00/hr
Senior Engineer I	$255.00/hr
Project Engineer IV/Technician IV	$245.00/hr
Project Engineer III/Technician III	$235.00/hr
Project Engineer II/Technician II	$220.00/hr
Project Engineer I/Technician I	$200.00/hr
3D Production Manager	$235.00/hr
Senior Designer II	$220.00/hr
Senior Designer I	$215.00/hr
Designer	$210.00/hr
Assistant Designer	$205.00/hr
CADD Operator III	$200.00/hr
CADD Operator II	$190.00/hr
CADD Operator I	$175.00/hr
CADD Drafter	$160.00/hr
CADD Technician	$145.00/hr
Project Coordinator	$170.00/hr
Engineering Assistant	$145.00/hr

Environmental Services

Senior Project Director	$350.00/hr
Project Director	$300.00/hr
Senior Specialist V	$275.00/hr
Senior Specialist IV	$265.00/hr
Senior Specialist III	$250.00/hr
Senior Specialist II	$235.00/hr
Senior Specialist I	$220.00/hr
Specialist V	$210.00/hr
Specialist IV	$195.00/hr
Specialist III	$185.00/hr
Specialist II	$175.00/hr
Specialist I	$165.00/hr
Analyst V	$155.00/hr
Analyst IV	$145.00/hr
Analyst III	$135.00/hr
Analyst II	$125.00/hr
Analyst I	$105.00/hr
Technician IV	$100.00/hr
Technician III	$90.00/hr
Technician II	$80.00/hr
Technician I	$70.00/hr
Project Coordinator II	$170.00/hr
Project Coordinator I	$135.00/hr

Mapping and Surveying Services

UAS Pilot	$165.00/hr
Survey Lead	$260.00/hr
Survey Manager	$220.00/hr
Survey Crew Chief	$185.00/hr
Survey Rod Person	$145.00/hr
Survey Mapping Technician	$135.00/hr

Construction Management Services

Principal Manager	$215.00/hr
Senior Construction Manager	$195.00/hr
Senior Project Manager	$190.00/hr
Construction Manager	$185.00/hr
Project Manager/Construction Management	$175.00/hr
Resident Engineer	$175.00/hr
Construction Engineer	$175.00/hr
On-site Owner's Representative	$160.00/hr
Prevailing Wage Inspector	$160.00/hr
Construction Inspector	$150.00/hr
Administrator/Labor Compliance	$125.00/hr

Hydrogeology/HazWaste Services

Project Director	$345.00/hr
Principal Hydrogeologist/Engineer III	$320.00/hr
Principal Hydrogeologist/Engineer II	$310.00/hr
Principal Hydrogeologist/Engineer I	$300.00/hr
Senior Hydrogeologist V/Engineer V	$275.00/hr
Senior Hydrogeologist IV/Engineer IV	$265.00/hr
Senior Hydrogeologist III/Engineer III	$255.00/hr
Senior Hydrogeologist II/Engineer II	$245.00/hr
Senior Hydrogeologist I/Engineer I	$235.00/hr
Project Hydrogeologist V/Engineer V	$225.00/hr
Project Hydrogeologist IV/Engineer IV	$215.00/hr
Project Hydrogeologist III/Engineer III	$205.00/hr
Project Hydrogeologist II/Engineer II	$195.00/hr
Project Hydrogeologist I/Engineer I	$185.00/hr
Hydrogeologist/Engineering Assistant	$150.00/hr
HazMat Field Technician	$135.00/hr

District Management & Operations

District General Manager	$225.00/hr
District Engineer	$215.00/hr
Operations Manager	$165.00/hr
District Secretary/Accountant	$150.00/hr
Collections System Manager	$150.00/hr
Grade V Operator	$140.00/hr
Grade IV Operator	$125.00/hr
Grade III Operator	$115.00/hr
Grade II Operator	$95.00/hr
Grade I Operator	$90.00/hr
Operator in Training	$80.00/hr
Collection Maintenance Worker	$85.00/hr

Project Delivery Services

Technology Specialist II	$245.00/hr
Technology Specialist I	$190.00/hr
GIS Analyst V	$220.00/hr
GIS Analyst IV	$200.00/hr
GIS Analyst III	$165.00/hr
GIS Analyst II	$145.00/hr
GIS Analyst I	$130.00/hr
Creative Services IV	$185.00/hr
Creative Services III	$160.00/hr
Creative Services II	$145.00/hr
Creative Services I	$130.00/hr
Technical Editor IV	$185.00/hr
Technical Editor III	$160.00/hr
Technical Editor II	$145.00/hr
Technical Editor I	$130.00/hr
Publications Specialist IV	$135.00/hr
Publications Specialist III	$125.00/hr
Publications Specialist II	$115.00/hr
Publications Specialist I	$105.00/hr
Clerical Administration	$100.00/hr

Expert Witness – Court appearances, depositions, and interrogatories as expert witness will be billed at 2.00 times normal rates.

Emergency and Holidays – Minimum charge of two hours will be billed at 1.75 times the normal rate.

Material and Outside Services – Subcontractors, rental of special equipment, special reproductions and blueprinting, outside data processing and computer services, etc., are charged at 1.15 times the direct cost.

Travel Expenses – Mileage at current IRS allowable rates. Per diem where overnight stay is involved is charged at cost

Invoices, Late Charges – All fees will be billed to Client monthly and shall be due and payable upon receipt. Invoices are delinquent if not paid within 30 days from the date of the invoice. Client agrees to pay interest at a 10% annual rate for amounts unpaid greater than 30 days after the date of the invoice.

Annual Increases – Unless identified otherwise, these standard rates will increase in line with the CPI-U for the nearest urban area per the Department of Labor Statistics to where the work is being completed) or by 3% annually, whichever is higher.

Prevailing Wage – The rates listed above assume prevailing wage rates do not apply. If this assumption is incorrect Dudek reserves the right to adjust its rates accordingly.

ITEM VII-E

BEAUMONT BASIN WATERMASTER

MEMORANDUM NO. 25-26

Date:	August 6, 2025
From:	Steven Stuart, Dudek
Subject:	Consideration of Special Meetings / Workshops
Recommendation:	Consider setting a schedule for special meetings/workshops in 2025

Since 2023, the Watermaster Committee has held several successful and constructive special meetings to facilitate more in-depth discussions on various topics. To further the dialog, particularly on the analysis of basin losses and review of proposed revisions to the Rules and Regulations, the following dates for additional Watermaster Committee Special Meetings are proposed:

- Wednesday, September 10
- Wednesday, November 5

Schedule of Regular Meetings in 2025:

- October 1
- December 3

September 2025

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 -Labor Day 	2	3	4	5	6
7 -Grandparent's Day	8	9	10 PROPOSED BBWM	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

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November 2025

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2-Daylight Saving Time Ends	3	4-Election Day	5 PROPOSED BBWM	6	7	8
9	10	11-Veteran's Day	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27-Thanksgiving	28	29
30						

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