

Notice and Agenda Regular Meeting of the Beaumont Basin Watermaster

Wednesday, December 6, 2023 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=UnNZcC9TbGZzTGFMHdhVkrMblczQT09>

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/>

BEAUMONT BASIN WATERMASTER COMMITTEE – DECEMBER 6, 2023

I. Call to Order

II. Roll Call

Committee Member Agency	Primary Representative	Alternate
City of Banning	Arturo Vela, Chair	Nathan Smith
City of Beaumont	Vacant	Robert Vestal
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

- A. Meeting Minutes
 - a. October 4, 2023 Regular Meeting [Page 6]
 - b. November 1, 2023 Special Meeting [Page 18]
- B. Status Report on Water Level Monitoring throughout the Beaumont Basin through November 13, 2023 [Page 26]
- C. A Comparison of Production Rights versus Production through August 2023 [Page 37]

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

VII. Discussion Items

- A. Proposal by Thomas Harder & Company / Alda to Provide Engineering and Reporting Services in 2024 [Memorandum No. 23-32, Page 39]

Recommendation: Approve Task Order No. 5 for Engineering and Reporting Services in 2024 for a sum not to exceed \$95,690 and send invoices to each Watermaster Committee member for 20% of the approved amount.

- B. Proposal by Thomas Harder & Company / Alda to Provide Groundwater Level Monitoring Services in 2024 [Memorandum No. 23-33, Page 45]

Recommendation: Approve Task Order No. 6 for Groundwater Level Monitoring Services for a sum not to exceed \$28,120 and send invoices to each Watermaster Committee member for 20% of the approved amount.

- C. Update on the Safe Yield Reset of the Beaumont Basin [Memorandum No. 23-34, Page 51]

Recommendation: No recommendation

- D. Review of Appropriator's Production Right Calculation [Memorandum No. 23-35, Page 52]

Recommendation: No recommendation

- E. Update on Development of Data Management System [No staff report]

Recommendation: No recommendation.

VIII. Topics for Future Meetings

	Item	Date Listed
A	Development of a Recycled Water Policy	3/27/2019
B	Development of a return flow accounting policy	3/27/2019
C	Development of a methodology and policy to account for groundwater storage losses in the basin / groundwater management	3/27/2019
D	Procurement Policy including thresholds for RFP process	8/17/2021
E	Incidental discharge	10/6/2021
F	Evaluation of Storage Issues in the Basin	Tabled from 12/2/2021 meeting
G	Monitoring of future west side well sites and methodologies, and potential collaboration with USGS	10/5/2022
H	Direction for use of different types of storage accounts	8/2/2023
I	Revision of Rules and Regulations: <ul style="list-style-type: none">i. Mechanism for BBWM to collect funds if storage account is in deficit (Development of a rate for overproduction of right)ii. General modernization of rules and regulationsiii. Clarification of overliar transfers processiv. Proposal from Dudek for this work	8/2/2023

J	Process and categorization of water production for the annual report	8/2/2023
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IX. Comments from the Watermaster Committee Members

X. Announcements

- A. A Special Meeting of the Beaumont Basin Watermaster is scheduled for Wednesday, January 10, 2024, at 11:00 a.m.
- B. 2024 Meeting Dates:

Wednesday, February 7 at 11 a.m.	Regular Meeting
Wednesday, March 6 at 11 a.m.	Special Meeting
Wednesday, April 3 at 11 a.m.	Regular Meeting
Wednesday, June 5 at 11 a.m.	Regular Meeting
Wednesday, August 7 at 11 a.m.	Regular Meeting
Wednesday, October 2 at 11 a.m.	Regular Meeting
Wednesday, December 4 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.org 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
Regular Meeting
Wednesday, October 4, 2023**

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 11:06 a.m.

II. Roll Call

<i>City of Banning</i>	<i>Art Vela</i>	<i>Present</i>
<i>City of Beaumont</i>		<i>Absent</i>
<i>Beaumont-Cherry Valley Water District</i>	<i>Dan Jagers</i>	<i>Present</i>
<i>South Mesa Water Company</i>	<i>David Armstrong</i>	<i>Present</i>
<i>Yucaipa Valley Water District</i>	<i>Joe Zoba</i>	<i>Present</i>

Hanibal Blandon and Thomas Harder were present as engineers for the Beaumont Basin Watermaster (BBWM).

Thierry Montoya was present as BBWM legal counsel.

Steve Stuart of Dudek was present as BBWM administrator.

Members of the public who registered and / or attended:

Jennifer Ares, Yucaipa Valley Water District
Erin Anton, Yucaipa Valley Water District
Allison Edmisten, Yucaipa Valley Water District
Joyce McIntire, Yucaipa Valley Water District
Madeline Blua, Yucaipa Valley Water District
Mark Swanson, Beaumont-Cherry Valley Water District
Lance Eckhart, San Geronio Pass Water Agency
Matt Howard, San Geronio Pass Water Agency
Robert Ybarra, San Geronio Pass Water Agency
Larry Smith, San Geronio Pass Water Agency
Robert Rasha, Beaumont-Cherry Valley Water District
Lynda Kerney, Beaumont-Cherry Valley Water District
Kendall Lovell, Fennemore Law
Thaxton Van Belle, City of Beaumont
Matthew Palavido, Dudek
Matt Ford
Jim Vandewater
Emily Swagart

III. Pledge of Allegiance: Chair Vela led the pledge.

IV. Public Comments: None.

V. Consent Calendar

A. Meeting Minutes

August 2, 2023 Regular Meeting

B. Status Report on Water Level Monitoring throughout the Beaumont Basin through September 20, 2023

C. A Comparison of Production Rights versus Production through August 2023

D. Financial Status Report

E. Independent Accountant's Financial Report of Agreed Upon Procedures for the Beaumont Basin Watermaster

It was moved by Member Zoba and seconded by Member Armstrong to approve Consent Calendar items A through E.

AYES:	Armstrong, Jagers, Vela, Zoba
NOES:	None
ABSTAIN:	None
ABSENT:	City of Beaumont
STATUS:	Motion Approved

VI. Reports

A. Report from Engineering Consultant

Mr. Anibal Blandon of ALDA Engineering advised that the 2022 final Annual Report is complete and has been posted on the website.

Mr. Blandon reported vandalism at a Well at the Noble Creek spreading grounds. A new communications cable needs to be ordered.

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

No report.

C. Report from Administrative Consultant – Steve Stuart, Dudek

Mr. Stuart provided an update on the well survey project. Results are expected in the next month or so. He is working with agencies to collect and compile information.

D. Report from Legal Counsel – Thierry Montoya - Frost, Brown, Todd

No report.

VII. Discussion Items

A. Letter of Support for the Brookside West Recharge Facility WaterSMART Planning and Design Grant

Recommendation: Approve the Letter in Support of SGPWA's Brookside West Recharge Facility WaterSMART Planning and Design Grant from the Bureau of Reclamation and Authorize the Committee Chairperson to execute and submit the letter

BBWM Secretary Dan Jagers advised of a request from the San Geronio Pass Water Agency (SGPWA) for a letter of support.

SGPWA General Manager Lance Eckhart described the 62-acre Brookside West priority project and noted the expansion of the SGPWA water supply portfolio. He explained the need for more recharge facilities and requested support.

It was moved by Member Jagers and seconded by Member Zoba to approve the Letter in Support of SGPWA's Brookside West Recharge Facility WaterSMART Planning and Design Grant from the Bureau of Reclamation and authorized the Committee Chairperson to execute and submit the letter by the following vote:

AYES:	Armstrong, Jagers, Vela, Zoba
NOES:	None
ABSTAIN:	None
ABSENT:	City of Beaumont
STATUS:	Motion Approved

B. Discussion on Process for Documenting the Transfer of the Overlying Water Rights of Oak Valley Partners to Yucaipa Valley Water District

Recommendation: No recommendation

Based on requests from the BBWM Committee, YVWD prepared a series of letters covering calendar years 2018 through 2022, which include data for each lot for the water actually served within the area identified on Resolution 2017-2, Member Zoba advised.

Member Jagers indicated he had reviewed the data and said the tracking and annual report out seems appropriate. He noted concern about the effects of the AB 1668 and SB 606 legislation and said this methodology seems a good approach.

Chair Vela clarified the water rights transferred, but would potentially be adjusted in the future based on the redetermination of the Basin safe yield. Mr. Zoba added that the column of overlying rights becomes a subcategory, as theoretically, all of the overlying water rights were transferred to all of the appropriators, there would then be zero safe yield. He confirmed it would change every 10 years based on the safe yield.

C. Transfer of Overlying Water Rights from Oak Valley Partners to Yucaipa Valley Water District for Calendar Years 2018, 2019, 2020, 2021, and 2022

Recommendation: Receive and file the transfer of Overlying Water Rights from Oak Valley Partners to Yucaipa Valley Water District for Calendar Years 2018-2022 and update the appropriate records in the 2023 Annual Report to reflect the transfers

Member Jagers said the data sets show the same lots each year, such as the school site, and the water use is reported out. He discussed finding equilibrium related to the legislation and said it is a good way to maintain the health of the Basin. He noted that BVCWD is providing emergency service to two parcels. The existing well was not in the District, and the transfer of water rights will be brought forward in a similar manner.

The accounting seems appropriate and reasonable, and the process can be refined moving forward, Jagers stated.

In response to Member Armstrong's question asking if Mr. Montoya was comfortable with the process of documenting water served, Legal Counsel Thierry Montoya indicated he was comfortable with the process, and said it is well thought out, well documented, and supersedes the original Form 5 that was submitted years ago. It is helpful, as there is now current parcel ID numbers, he added.

Mr. Stuart suggested that if this is to be used as the case to demonstrate how to properly document the transfer of overlier rights to appropriators, the Rules and Regulations can now be amended to reflect documentation in the same fashion moving forward.

Member Jagers noted that figures on Item V-C: A Comparison of Production Rights vs. Production through August 2023 would need to be adjusted.

It was moved by Member Jagers and seconded by Member Zoba to receive and file the transfer of Overlying Water Rights from Oak Valley Partners to Yucaipa Valley Water District for Calendar Years 2018-2022 and update the appropriate records in the 2023 Annual Report to reflect the transfers by the following vote:

AYES:	Armstrong, Jagers, Vela, Zoba
NOES:	None
ABSTAIN:	None
ABSENT:	City of Beaumont
STATUS:	Motion Approved

D. Discussion on Calculating Appropriator's Production Right and Storage Accounting

Recommendation: No recommendation

Mr. Hanibal Blandon explained that he and Mr. Stuart spoke at length about the Consolidation of Appropriator Production and Storage Accounts, and revision of Table 3-8 in the Annual Report. Given prior discussion about future shortfalls when an appropriator in any given year produces and from which bucket the overage would be taken, he presented a revised Table 3-8 reflecting a second and third bucket. He discussed options.

Member Zoba suggested a third bucket: overlying water rights. He reminded about discussion with legal counsel and an opinion that overlying water rights not put to beneficial use are lost. He recommended making it clear via the Rules and Regulations or an

agreed-upon process that the water served is being tracked, accounted for, and utilized for beneficial use.

Mr. Blandon suggested further discussion and an opinion from legal counsel.

Member Jagers recapped using an example of transfer of Oak Valley to YVWD. Member Zoba noted that the temporary surplus water may also have a time frame attached, and should be accounted for. He recommended an order of operation of water used.

Mr. Blandon said he would look at the numbers in preparation for the next meeting, with the idea that the temporary surplus water is used first, then calculate the balances. Chair Vela clarified that all water used would be calculated and whatever is left in the storage account would be the imported water.

An analysis of each appropriator might be an individual discussion in preparation for the next meeting, Jagers suggested. Blandon will prepare and send out the data.

Chair Vela said he would like to avoid an artificial burden on the Watermaster if an agency wanted to pay the Watermaster rather than tap into the storage account.

Member Jagers indicated he would rather the Watermaster not be the primary contracting agent with entities such as SGPWA until there is a point at which water cannot be brought down and there needs to be alternative. Reporting to the SGPWA allows that agency to be current on the landscape. He suggested next discussion on SGPWA as a vehicle for the Watermaster, and to have a system of acquiring money and how that system is managed responsibly.

Mr. Zoba suggested adding to a future agenda what to do when a producer goes negative.

E. Update on Safe Yield Reset of the Beaumont Basin

Recommendation: No recommendation.

Mr. Tom Harder reminded that the original Safe Yield in 2003 was 8,650 acre-feet, and was later reduced to 6,700 in 2013. This is the next reset process for the 2023 to 2034 time frame.

Harder discussed in detail the groundwater flow model being updated to be used to determine a stable Basin storage over a long period of time. This is an update to the model developed in 2013. The safe yield

will be determined based on the forecast of pumping and recharge conditions for the next 10 years. The demand estimates are based on Urban Water Management Plan data and adjustments have been made for climate change, Harder explained. Future pumping was maximized at the maximum rate recorded in the past.

Chair Vela noted that a change in safe yield will impact the projected imported water need, a moving target that will adapt to conditions on the ground, currently at 14,448 af, and increasing to 19,000 af per year in 2033. Mr. Jagers added that the required reduction in water use by 2025 as delineated in the Making Conservation a Way of Life legislation may also affect the projection.

Harder recommended achieving the best estimate of how to manage the Basin moving forward and adjusting as necessary in the future.

Mr. Jagers stated it appears that uncertainties are being projected forward and recommended a general discussion on ideas such as augmentation of the west side of the basin and recharge near Cabazon. An uncertainty analysis will be presented as part of the process, Harder advised.

Mr. Harder discussed recharge operations and advised that YVWD would be installing injection wells for 2,000 af per year. Mr. Armstrong asked about impact on water quality. Mr. Zoba assured the recycled water injected would be indirect potable reuse.

Mr. Harder indicated that preliminary results will be presented at the next workshop with final safe yield estimate presented at the regular December meeting.

In response to Chair Vela's question about the physical split of the Basin into two sections, Mr. Harder discussed the physical bifurcation of the Basin. A zone analysis will be done, he said, to determine safe yield on the west side vs. east side as an information item, which will be helpful for planning purposes. In response to Member Zoba's question as to the purpose of determining the safe yield of the west and east sides of the Basin, Harder further explained, and noted that the safe yield is based on the Basin. This amplifies the point that all the spreading basin activity is on the east side, which is already known. Harder suggested the purpose of the data could be to determine what kind of projects are needed on the west to balance. Zoba asked if YVWD would be able to drill a well on the east side. Harder indicated trade may be possible. Zoba indicated he did not want this to lead to awkward, poor policies. The exercise has value from a planning perspective, Vela noted. Harder suggested the information be kept in a hip pocket.

In response to Member Jagers, Harder explained the state of the science has changed to forward projection (forecasted safe yield), and provided some detail on factors being addressed such as climate change.

Chair Vela invited public comment.

SGPWA General Manager Lance Eckhart discussed the uncertainty and the complicated process leading to a point in time for planning purposes and "what ifs" for support of capital improvement plans.

F. Discussion Regarding Structure of the Watermaster Committee and Inclusion of Elected Representatives as Primary Members, and Process for Nomination of Members by Participating Agencies

Recommendation: No recommendation.

Mr. Stuart highlighted the discussion of Committee membership in the judgment. He outlined questions related to establishment of a process for nomination of members. Mr. Zoba requested that a precursor be included in the consent calendar as an information item on whom was presented to the Court for consideration as a member to the Committee.

Following discussion, consensus of the Committee was to leave the structure as is.

G. Consideration to Incorporate Notification and Documentation Requirements for New Wells in the Watermaster Rules and Regulations

Recommendation: That the Watermaster Committee consider engaging Dudek to revise the Rules and Regulations to include specific well construction requirements and documentation of new wells and alterations to existing wells

It was moved by Member Zoba and seconded by Member Jagers to table Item G. Approved by the following vote:

AYES:	Armstrong, Jagers, Vela, Zoba
NOES:	None
ABSTAIN:	None
ABSENT:	City of Beaumont
STATUS:	Motion Approved

H. *Update on Development of Data Management System*

Recommendation: No recommendation.

Mr. Matthew Palavido stated that the database and interface are in progress. He presented preliminary maps and asked members to think about any reference layers desired to be included in the system. He provided an overview and demonstrated system capabilities and data.

In response to Chair Vela, Mr. Palavido indicated the system is about 50 percent complete.

I. *Consideration of Professional Administrative and Technical Support Services to the Beaumont Basin Watermaster for Calendar Year 2024*

Recommendation: That the Watermaster Committee extend the contract with Dudek for Professional Administrative and Technical Support Services for the 2024 calendar year for a sum of \$79,878 and send invoices to each Watermaster Committee member for 20% of the approved amount

The Watermaster has been working with Dudek for one year, and it seems to be working well, Member Zoba stated. He recommended extension of the contract.

In response to Member Jagers, Member Zoba indicated that the current contract was 91 percent complete, per the Financial Report.

In response to Chair Vela, Member Zoba explained there will be a separate, standalone Task Order for 2024.

Jagers stated it seems appropriate from a total number perspective to keep the progress moving forward. Mr. Jagers noted that the fee for 2024 is slightly less than this year's fee.

It was moved by Chair Vela and seconded by Member Zoba to extend the contract with Dudek for Professional Administrative and Technical Support Services for the 2024 calendar year for a sum of \$79,878 and send invoices to each Watermaster Committee member for 20% of the approved amount. Approved by the following vote:

AYES: Armstrong, Jaggers, Vela, Zoba
NOES: None
ABSTAIN: None
ABSENT: City of Beaumont
STATUS: Motion Approved

J. Consideration of Thomas Harder & Co. Task Order No. 3 for Preparation and Attendance at Special Committee Meetings

Recommendation: That the Watermaster Committee approve Task Order No. 3 for a sum not to exceed \$17,100.00

Member Zoba presented the proposal and noted that Tom Harder has done a great job of informing and educating the Committee on the issues. He recommended the motion include the cost split.

Member Jaggers commented that the work is needed to support the workshops.

It was moved by Member Jaggers and seconded by Member Armstrong to approve Task Order No. 3 for a sum not to exceed \$17,100.00 and send invoices to each Watermaster Committee member for 20% of the approved amount. Approved by the following vote:

AYES: Armstrong, Jaggers, Vela, Zoba
NOES: None
ABSTAIN: None
ABSENT: City of Beaumont
STATUS: Motion Approved

K. Discussion of Agenda Items and Special Meeting Date(s) for Proposed Workshops

Mr. Stuart reviewed topics and open format for the workshops.

The Committee set the following Special Meeting schedule:

- Wednesday, November 1, at 11 a.m.
- Wednesday, January 10, 2024 at 11 a.m.
- Wednesday, March 6, 2024 at 11 a.m.

It was moved by Member Zoba and seconded by Chair Vela to approve the above schedule. Approved by the following vote:

AYES: Armstrong, Jagers, Vela, Zoba
 NOES: None
 ABSTAIN: None
 ABSENT: City of Beaumont
 STATUS: Motion Approved

- L. Notice of Planned Well Drilling in the Beaumont Basin from Beaumont-Cherry Valley Water District

Recommendation: Receive and File

Member Jagers presented the letter as formal notification to memorialize BCVWD's plans, as outlined in the Rules and Regulations.

VIII. Topics for Future Meetings

	Item	Date Listed
A	Development of a Recycled Water Policy	3/27/2019
B	Development of a return flow accounting policy	3/27/2019
C	Development of a methodology and policy to account for groundwater storage losses in the basin / groundwater management	3/27/2019
D	Procurement Policy including thresholds for RFP process	8/17/2021
E	Incidental discharge	10/6/2021
F	Evaluation of Storage Issues in the Basin	Tabled from 12/2/2021 meeting
G	Monitoring of future west side well sites and methodologies, and potential collaboration with USGS	10/5/2022
H	Direction for use of different types of storage accounts	8/2/2023
I	Revision of Rules and Regulations: <ul style="list-style-type: none"> i. Mechanism for BBWM to collect funds if storage account is in deficit (Development of a rate for overproduction of right) ii. General modernization of rules and regulations iii. Clarification of overliar transfers process iv. Proposal from Dudek for this work 	8/2/2023

J	Process and categorization of water production for the annual report	8/2/2023
K	Discussion on what to do when an Appropriator goes negative	10/4/2023

IX. Comments from the Watermaster Committee Members

Member Jagers expressed hope for another wet year.

Chair Vela announced drilling of a new well, City of Banning C8, within the Atwell project off Highland Home Road and Wilson Street.

X. Announcements

- A. The next meeting of the Beaumont Basin Watermaster is scheduled for Wednesday, November 1, 2023, at 11:00 a.m.
- B. Future Meeting Dates:
 - December 6, 2023 at 11:00 a.m.
 - January 10, 2024 at 11:00 a.m.
 - February 7, 2024 at 11:00 a.m.
 - March 6, 2024 at 11:00 a.m.
 - April 3, 2024 at 11:00 a.m.

XI. Adjournment

Chair Vela adjourned the meeting at 12:53 p.m.

Attest:

DRAFT UNTIL APPROVED

Daniel Jagers, Secretary
Beaumont Basin Watermaster

**Record of the Minutes of the
Beaumont Basin Committee Meeting of the
Beaumont Basin Watermaster
Special Meeting
Wednesday, November 1, 2023**

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 11:00 a.m.

II. Roll Call

<i>City of Banning</i>	<i>Art Vela</i>	<i>Present</i>
<i>City of Beaumont</i>	<i>Robert Vestal</i>	<i>Present</i>
<i>Beaumont-Cherry Valley Water District</i>	<i>Dan Jagers</i>	<i>Present</i>
<i>South Mesa Water Company</i>	<i>David Armstrong</i>	<i>Present</i>
<i>Yucaipa Valley Water District</i>	<i>Joe Zoba</i>	<i>Present</i>

*Hannibal Blandon and Thomas Harder were present as engineers for the
Beaumont Basin Watermaster (BBWM).
Steve Stuart of Dudek was present as BBWM administrator.*

Members of the public who registered and / or attended:
Lance Eckhart, San Geronio Pass Water Agency General Manager
Larry Smith, San Geronio Pass Water Agency
Ron Duncan, San Geronio Pass Water Agency
Emmett Campbell, San Geronio Pass Water Agency
Matt Howard, San Geronio Pass Water Agency
Kendall Lovell, Fennemore Law
Allison Edmisten, Yucaipa Valley Water District
Jennifer Ares, Yucaipa Valley Water District
Jim Vandewater
Robert Rasha, Beaumont-Cherry Valley Water District
Lynda Kerney, Beaumont-Cherry Valley Water District
Inmar Shihab, Beaumont-Cherry Valley Water District
Evan Ward, Beaumont-Cherry Valley Water District
Mark Swanson, Beaumont-Cherry Valley Water District

III. Pledge of Allegiance: Chair Vela led the pledge.

IV. Public Comments: None.

V. Workshop / Discussion Items

A. Update on the Safe Yield Redetermination

Thomas Harder reported that work is proceeding on the safe yield. He discussed the model and its calibration. Using a historical calibration, prior years' safe yields were: 1978 to 2022 = 6,700 af, 2013 to 2022 = 6,200 af, he noted.

Mr. Harder explained the program and the running of multiple models, and statistical range. Currently, the model is running 200 different scenarios, and staff will recommend the 50th percentile. There will be a difference of hundreds of acre-feet, could be more or could be less, he noted.

B. Mission and Vision Statement

Current Mission Statement:

Watermaster's mission is to manage the yield and storage within the Beaumont Basin to provide maximum benefit to the people dependent on it

Steve Stuart read the mission statement, reviewed the stipulated Judgment, and broached the potential for a water management plan including a goal or goals.

C. Watermaster Goal for the Basin

D. Compare Conditions in Beaumont Basin to SGMA Sustainability Criteria

E. Identify next steps

Member Armstrong pointed out the Beaumont Basin is not a Sustainable Groundwater Management Act (SGMA) basin, and the problems are known: east side / west side situation. He suggested supporting the San Geronio Pass Water Agency (SGPWA) in establishing recharge basins on the west side, as the solution is to get water into the ground.

Chair Vela noted value in the discussion and in goal setting while bearing in mind the judgement as the underlining document. There are good management ideas in SGMA that could be applied to the Basin. He indicated concern with establishing and being fully invested in the group and the goals that will make management of the Basin as a whole and the individual use of the Basin more restrictive.

Committee Members provided some suggestions for ongoing discussion and potential goals:

Basin level:

- Maintain current level in the Basin, or analyze and determine an acceptable threshold (level is managed up and down), or restore Basin to the 2004 level or another baseline
- Mr. Harder asked, "What is the level at which things become significant and unreasonable?" He noted that in other basins, levels have been identified at which lowering of pumps would be required. He described "material physical injury" and suggested analysis of current pumping and depth of wells, and what level would be considered and create an untenable position.

Other items of discussion:

- Wells are finite and there is lack of State Project Water (SPW)
- The SGPWA may not always be there to rely on
- How will SPW be divided in the future
- Work will be better as a group, by utilizing all resources to maximize success
- How to manage and prevent adverse effects
- What is the future and what is sustainable? Create a new forecast
- Impacts of AB 606 and SB 1668 (including Urban Water Management Plans)
- Look at realistic operational ranges of the 30-mile Basin
- Identify issues that prevent achieving beneficial use of groundwater for all users
- Achieve long-term groundwater sustainability
- System for early acknowledgement of any collapsing of the Basin without waiting for the redetermination
- Prioritization of SGPWA supply when SPW is not available and/or storage accounts are at zero

Member Armstrong indicated that SMWC Well 4 is better now than in the past, and suggested the group may be looking for a problem when there is none, but supported the production of a plan. The solution is for the SGPWA to put a recharge basin on the west side.

Member Zoba pointed to the depression of 40,000 af in the north part of the Basin, which impacts YVWD.

Emmett Campbell asked how much of that decline was due to the surplus water (160,000 af allowed to be pumped in excess of the safe yield). Mr. Harder noted it would have to be analyzed. Member Zoba said he disagreed, explaining it is an issue of pumping more water than could be recovered. The surplus water still appears in the members' storage accounts, Campbell noted. Mr. Eckhart noted that controlled overdraft is built into the Judgment, and it happens to be geographically concentrated in an area. He suggested that any analysis determine the location of any overlies that cannot be managed by the Watermaster.

Member Zoba stated the decline is near a BCVWD well and should not have gotten to that point, although it is allowed per the Judgment, but now there is a deficit depression in the Basin that has no natural recharge and nothing significant to bring it back up. Member Jagers detailed BCVWD's Well 29 extraction and efforts to manage overdraft in that area, and pointed to extraction by the golf course and other overlies. He said he would appreciate a scientific look and said BCVWD is supportive of good management of the Basin. Member Zoba suggested the consultants look into it for a future agenda item to understand why that part of the Basin is so low. The obligation is to a healthy Basin; it must be left better off for those following, he added. Member Jagers cautioned against oversimplification.

Lance Eckhart pointed to the Urban Water Management Plans and suggested the inclusion of elements of a collaborative integrated plan and begin to look at projects.

Chair Vela returned the discussion to goals. Mr. Stuart noted there is a condition in the Basin that will experience issues and suggested an operational look with application of criteria, determination of risk, and establishment of goals based on a minimum threshold. It can start with hydrogeology, he stated.

Mr. Harder posited that the SGMA approach it is a process with helpful things to achieve a sustainable Basin. He reiterated the recharge imbalance between the eastern and western portions of the Basin and posed questions, does the potential extraction of the storage account balances present a potential for undesirable results, and what are the implications for not accounting for storage losses? If the balances are drawn to zero, will an untenable position be created, and what is the untenable position?

Storage has declined since adjudication in 2003, Harder explained, but with the advent of supplemental recharge in 2007, the Basin as a whole was balanced. Since about 2010, the level has been fairly stable, and from a Basin-wide standpoint, things look fairly sustainable, he said.

Harder compared the adjudication to SGMA and discussed best management practices and the SGMA process and management criteria. Potentially impacting the Beaumont Basin are sustainability indicators: chronic lowering of groundwater levels, reduction of groundwater in storage, and degraded groundwater quality. Undesirable results would be identified, along with the conditions that cause them, he said. He pointed to overlie wells on the west side and the need to identify conditions by which they would be able to continue to pump, and if there were a risk that they would not continue to be able to do so.

The groundwater flow model is the tool which will help make determinations, Harder continued.

Member Zoba pointed out that typically, imported water is regarded as a supplemental water source but this Basin must obtain every drop of imported water possible in order to remain sustainable. If there is a hiccup and agencies are not mindful of development, more SPW will be run through a treatment plant rather than recharged to the Basin. He noted concern that the water needs to stay in the Basin. More will always be needed from the SGPWA; the idea of getting back to 2004 levels is impossible, and it must be figured out what it takes to maintain today's levels and what problems will be encountered later on, he said.

Eckhart questioned the raising of groundwater levels when there is built in controlled overdraft to create storage in the adjudication. He explained the SGPWA supply portfolio has changed with investment in the Sites Reservoir and other sources. He described the importance of more aggressive regional conservation programs and full use of recycled water. Imported water is the critical path for the region, and has been anticipated for more than 60 years, he noted.

Eckhart emphasized the need to work together to smartly use the imported water over and over again, and to highest and best use.

Member Zoba provided history on the premise of the temporary surplus and the planned contract with Metropolitan Water District (MWD) to fill the Basin, and the decision not to issue the RFP to fill the Basin. Member Armstrong noted that would be expensive water. Harder stated the Dry Year Yield Program from Chino has its pluses and minuses, but it did fund a few projects. Member Jagers recalled that the MWD contract was delayed in order to build recharge ponds, but the adjudication was followed.

The desired goal is to average orders over time to meet growth and provide redundancy, Jagers continued. He discussed the management of the storage account and reiterated that with the recent legislation, less water would be sold.

In response to Chair Vela, Mr. Harder explained the model scenarios and projections. It calculated what the safe yield is projected to be into the future. It is assumed that the recharge water is there to supply all of the overpumping (unmet replenishment), and that agencies do not have to take from their storage accounts to meet demands. Chair Vela suggested a look at a more realistic scenario that the water is not there, and agencies are pulling from storage.

There may be an economic motivator to use of water in storage when imported water costs \$399 per af, Eckhart pointed out.

Chair Vela acknowledged the serious concerns and Harder suggested running various scenarios to determine the effect on the safe yield to see if any undesirable results emerge.

Member Jagers advised about the emergency connection provided by BCVWD to Tukwet Canyon Golf Course and may be exchanged for overlie credit. In wet years, partnerships may be considered to deliver as much as possible by extraction to areas that could turn off and help recover the Basin via in-lieu recharge, Jagers noted.

Campbell suggested it may be useful to look at storage accounts to separate how much of each is the surplus water and how much is imported. Stuart recalled the discussion at the last meeting regarding priority for extraction of water.

Member Zoba questioned what would happen when SPW is not available, related to study of elasticity of the Basin. Assuming all storage accounts at zero and a 50 percent water year, which SGPWA retailer would get the water, how much, and why, he asked. Information regarding prioritization is needed for planning purposes, he said. Eckhart said it is determined through projections in each agency's Urban Water Management Plan (UWMP) and SGPWA is working on a strategic portfolio plan. The unavailability of SPW has not yet been addressed, he added, and suggested improvements could be made in demand reduction and recycled water. SGPWA is pursuing the ability to maximize imports, but business certainty will be needed for making large purchases, mainly through urban planning. SGPWA reacts to the planned needs for the community it serves, he stated.

Member Jagers acknowledged the SGPWA work toward a solution. Chair Vela indicated that this discussion and any resulting goals will drive the way the SGPWA acts, noting discussions could be tense. Jagers pointed to previous conversations and said the group is working together.

Eckhart further discussed the SGPWA activities and water portfolio, emphasizing that the agency needs to know what the retailers need. Member Zoba suggested quarterly managers meetings.

Mr. Harder suggested a baseline as a means to evaluate different scenarios, then discussion of the appropriate use of water. The Judgment shows appropriator storage accounts as part of an equation that feeds into what is defined as the appropriator production right, he said. That was the only measure that looked at if the appropriator were to exceed the production right, then there would be a cause for funds going into bringing in surplus water. Part of the equation included the temporary surplus, he noted. The storage accounts are part of an equation to check whether or not the appropriators are then obligated to contribute funds to bring additional water into the Basin; it is not a physical measure but a check on production.

Member Zoba suggested adding this to a future agenda, saying he did not think the adjudication allows for going negative. Mr. Harder indicated that if going negative, the appropriator would have to contribute funds to buy the surplus water to make up the deficit. Member Zoba noted the potential for declining the Basin and argued it must remain at zero to stay sustainable. Mr. Campbell said if overpumping, there is an obligation to pay for replenishment with imported water when available. Zoba asked if that would then become a priority for water deliveries while shorting an agency that isn't negative. Jagers suggested this would apply to a demonstrated bad actor, which this area does not seem to have to date. All are doing their part, he noted, and must be proactive in wet years as partners.

Member Armstrong said he was glad the Basin is fairly healthy and commended the SGPWA on the recharge basins.

Members agreed the workshop format is good for discussion.

Mr. Stuart indicated that he and Mr. Harder would work together to move the process forward and present it at the next meeting. Mr. Harder said he would present scenarios to review and consider, but will get the safe yield done first.

Chair Vela invited public comment. There was none.

VI. Topics for Future Meetings

	Item	Date Listed
A	Development of a Recycled Water Policy	3/27/2019
B	Development of a return flow accounting policy	3/27/2019
C	Development of a methodology and policy to account for groundwater storage losses in the Basin / groundwater management	3/27/2019
D	Procurement Policy including thresholds for RFP process	8/17/2021
E	Incidental discharge	10/6/2021
F	Evaluation of Storage Issues in the Basin	Tabled from 12/2/2021 meeting
G	Monitoring of future west side well sites and methodologies, and potential collaboration with USGS	10/5/2022
H	Direction for use of different types of storage accounts	8/2/2023

I	Revision of Rules and Regulations: i. Committee participation by electeds ii. Mechanism for BBWM to collect funds if storage account is in deficit (Development of a rate for overproduction of right) iii. General modernization of rules and regulations iv. Clarification of overlier transfers process v. Proposal from Dudek for this work	8/2/2023
J	Process and categorization of water production for the annual report	8/2/2023
K	Discussion on what to do when an Appropriator goes negative	10/4/2023 and 11/1/2023

VII. Comments from the Watermaster Committee Members

None.

VIII. Announcements

- A. The next meeting of the Beaumont Basin Watermaster is scheduled for Wednesday, December 6, 2023, at 11:00 a.m.
- B. 2024 Meeting Dates:
- | | |
|----------------------------------|----------------------------|
| Wednesday, January 10 at 11 a.m. | Special Meeting / Workshop |
| Wednesday, February 7 at 11 a.m. | Regular Meeting |
| Wednesday, March 6 at 11 a.m. | Special Meeting / Workshop |
| Wednesday, April 3 at 11 a.m. | Regular Meeting |
| Wednesday, June 5 at 11 a.m. | Regular Meeting |
| Wednesday, August 7 at 11 a.m. | Regular Meeting |
| Wednesday, October 2 at 11 a.m. | Regular Meeting |
| Wednesday, December 4 at 11 a.m. | Regular Meeting |

XI. Adjournment

Chair Vela adjourned the meeting at 12:45 p.m.

Attest:

DRAFT UNTIL APPROVED

Daniel Jaggars, Secretary
Beaumont Basin Watermaster

BEAUMONT BASIN WATERMASTER

Date: Dec 6th, 2023

From: Hannibal Blandon, ALDA Inc.

Subject: Status Report on Water Level Monitoring throughout the Beaumont Basin through Nov 13, 2023

Recommendation: Presentation - 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 Beaumont Basin. The location of active monitoring wells is depicted in the attached Figure No. 1. The location of two 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 four years a significant decline has been observed. A 20-foot decline has been recorded at YVWD 34 over this period to its current elevation of 2,122 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.
- ✓ 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 2,331 ft., a significant recovery of 53 ft has been recorded over the last six months to its current elevation of 2,384 ft. 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.; a decline of 57 feet has been recorded since 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 visit, the data has been cleaned and presented. Since August, water level in the deep aquifer has risen seven feet to its current elevation of 2,252 ft.

- ✓ 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 at this well has fluctuated over a 20-foot range. Water level information at this well 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 at this well and the site has been secured to minimize future vandalism. The newly installed optical communications cable worked for a few months, but failed to transmit and it is being replaced. Current groundwater elevation at this well is 2,508 ft in the middle of the operating range.
- ✓ Also depicted in Figure No. 4 is the water level at the Sun Lakes well site. Water level at this site has 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 2,414 ft in the last 18 months. Water level information could not be collected between May and early October 2022 due to equipment malfunction. A new communications cable and recording probe were installed in early October at this location, while the probe has been working properly, the new optical cable has not. A replacement cable has been ordered and will be installed in January 2024.
- ✓ 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, a somewhat significant and steady decline, close to 33 feet, has been recorded at Banning M-8 between the summer of 2015 and the present to its current elevation of 2,046 ft. Water level at Banning M-9 has fluctuated in a 19-foot range, between 2,128 ft and 2,147 ft. Current water level elevation is at 2,143 ft. in the upper portion of the range. While the water level probe has been collecting data hourly at this well, over the last year, two communications cables have been replaced due to the failure of the water seal at the bottom of the cable. A new replacement cable was installed during our November 2022 visit and worked as intended for four months; however, since our March visit it could not transmit information due to the presence of moisture and is in the process of being replaced.
- ✓ 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, this past summer (2023) it declined more than normal to the current low elevation of 2,193 ft. Over the last three years, summer lows have been lower each year. At BCVWD No. 2, water levels prior to 2017 were discarded due to their inconsistency as variations of 50 ft or more were recorded from one day to the next without a plausible explanation. Since 2017, water levels have ranged between 2,188 ft and 2,216 ft with a current elevation at this well of 2,192 ft. showing a significant decline since the spring of 2023. Similar to BCVWD No. 25, lower summer lows have been recorded in recent years. The water level probe at BCVWD No. 2 was replaced during our November visit since the data in the old probe could not be extracted in the field.
- ✓ 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 at this well 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 latest water level was at 2,216 ft representing the highest recorded level since monitoring began. Water levels during our September visit could not be downloaded from the probe.

Monitoring Wells Additions

No additional monitoring wells were added during this reporting period.

Equipment Installation and Replacement

Monitoring probes were replaced at:

- ✓ BCVWD No. 2
- ✓ Banning M-8
- ✓ Tukwet B

Troubleshooting Issues

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

- ✓ BCVWD No. 2
- ✓ BCVWD No. 25
- ✓ Summit Cemetery No. 1
- ✓ Mountain View
- ✓ Sun Lakes
- ✓ Banning M-8
- ✓ Banning M-9
- ✓ Tukwet B

Optical communication cables were recently replaced at four of these wells and are not working at this time. Replacement cables have been requested as they are still under warranty. New communication cables have been ordered for three additional wells. These communication cables will be installed after the December 6th, 2023 meeting or during our mid-January 2024 visit.

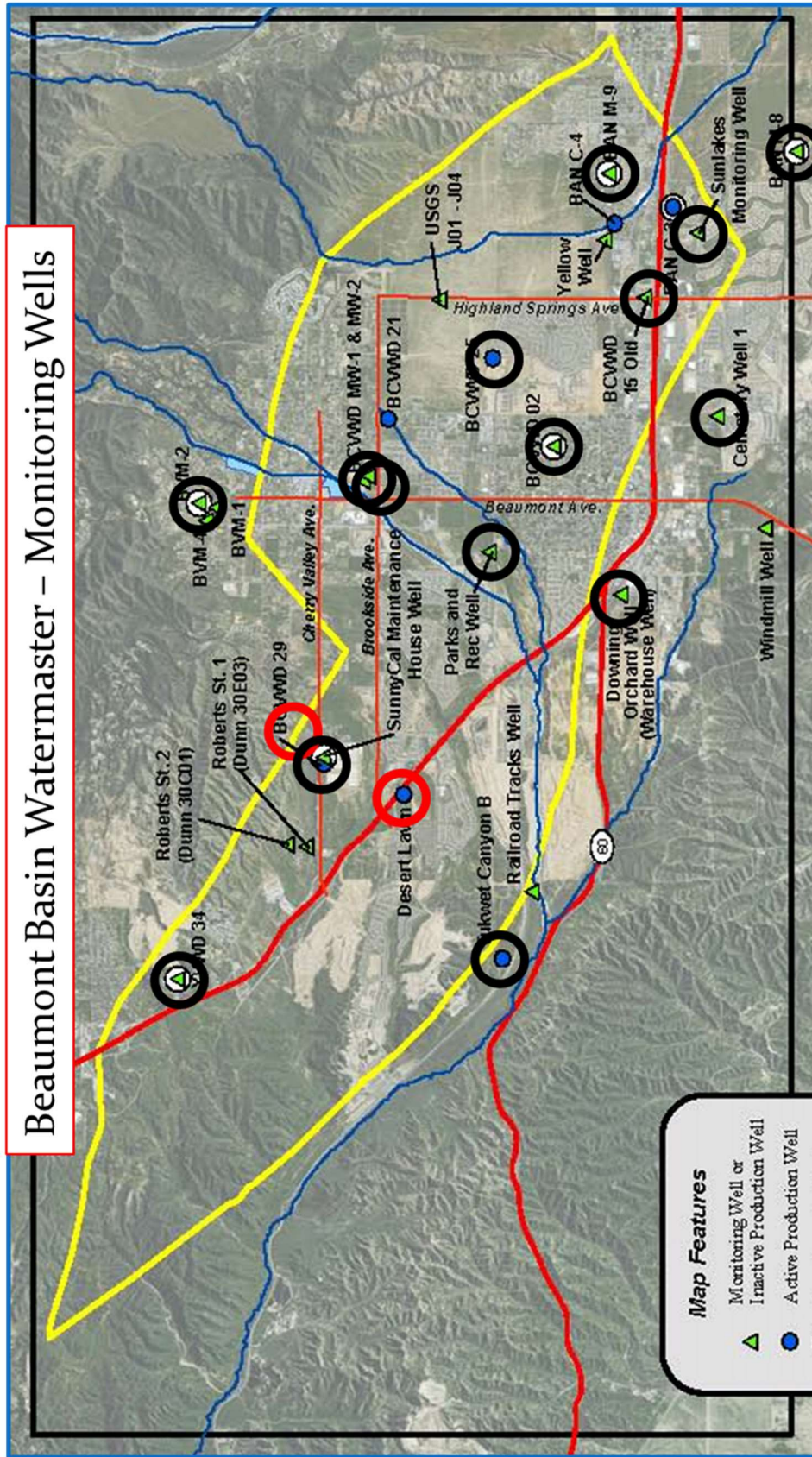
Potential Monitoring Sites

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.

Beaumont Basin Watermaster – Monitoring Wells



Wells with Working Monitoring Probes		Potential Monitoring Wells
Bonita Vista No. 3	Tukwet Well B	BCVWD No. 2
Noble Creek Ponds 4 Deep	Summit Cemetery No. 1	BCVWD No. 25
Noble Creek Ponds 4 Shallow	Sun Lakes Golf Course	BCVWD No. 29
Noble Creek Park	Banning M-8	YVWD No. 34
BCVWD Old 15 (Banning)	Banning M-9	Icon Warehouse
		Beaumont Parks and Rec.
		Plantation on the Lake

Figure No. 2
Static Groundwater Elevations at YVWD No. 34 and Oak Valley No. 5
 (July 29, 2015 through Nov 13, 2023)

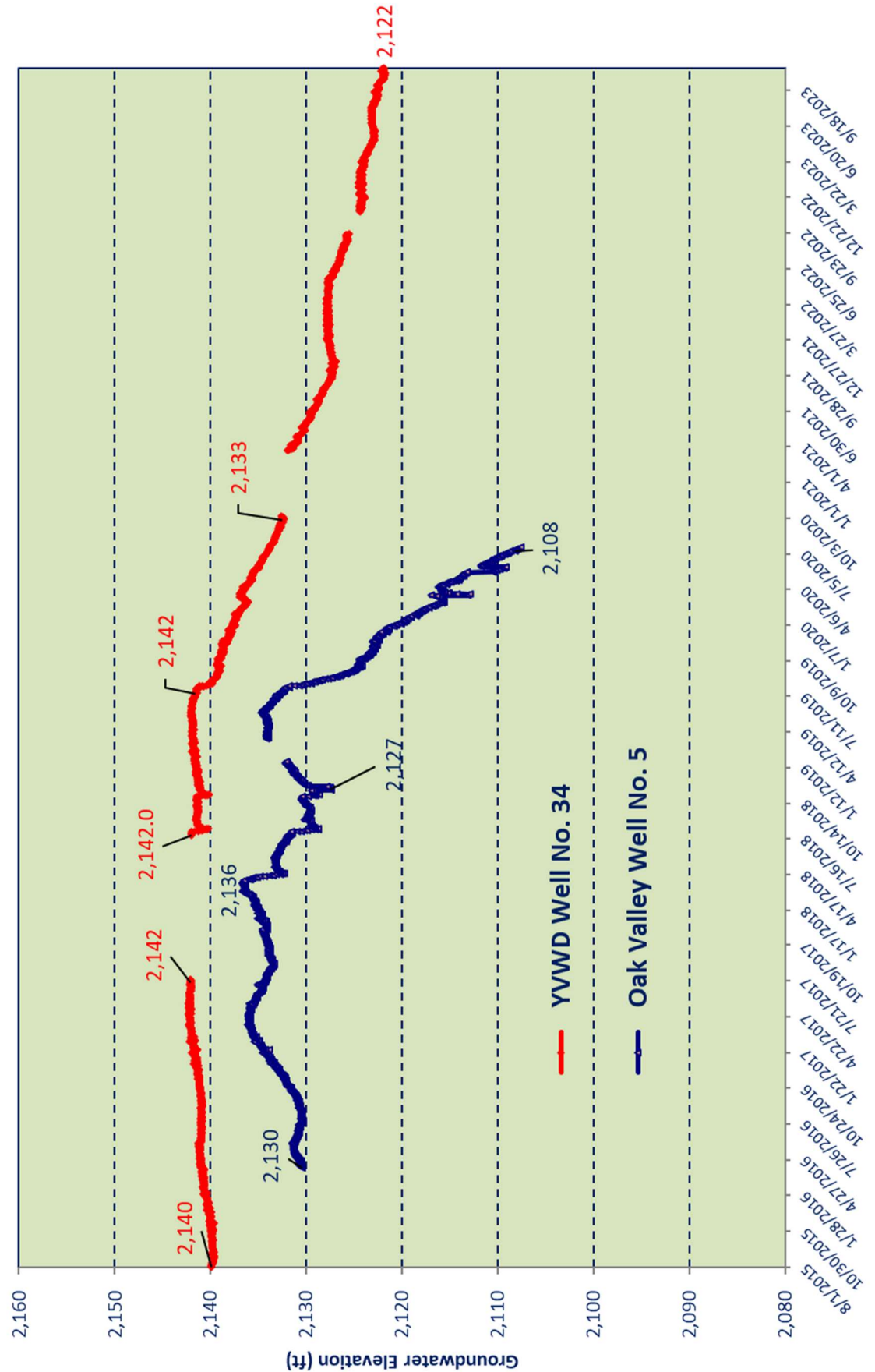


Figure No. 3
Static Groundwater Elevations at Noble Creek Obs. Well 4S and 4D
 (May 28, 2015 through Nov 13, 2023)

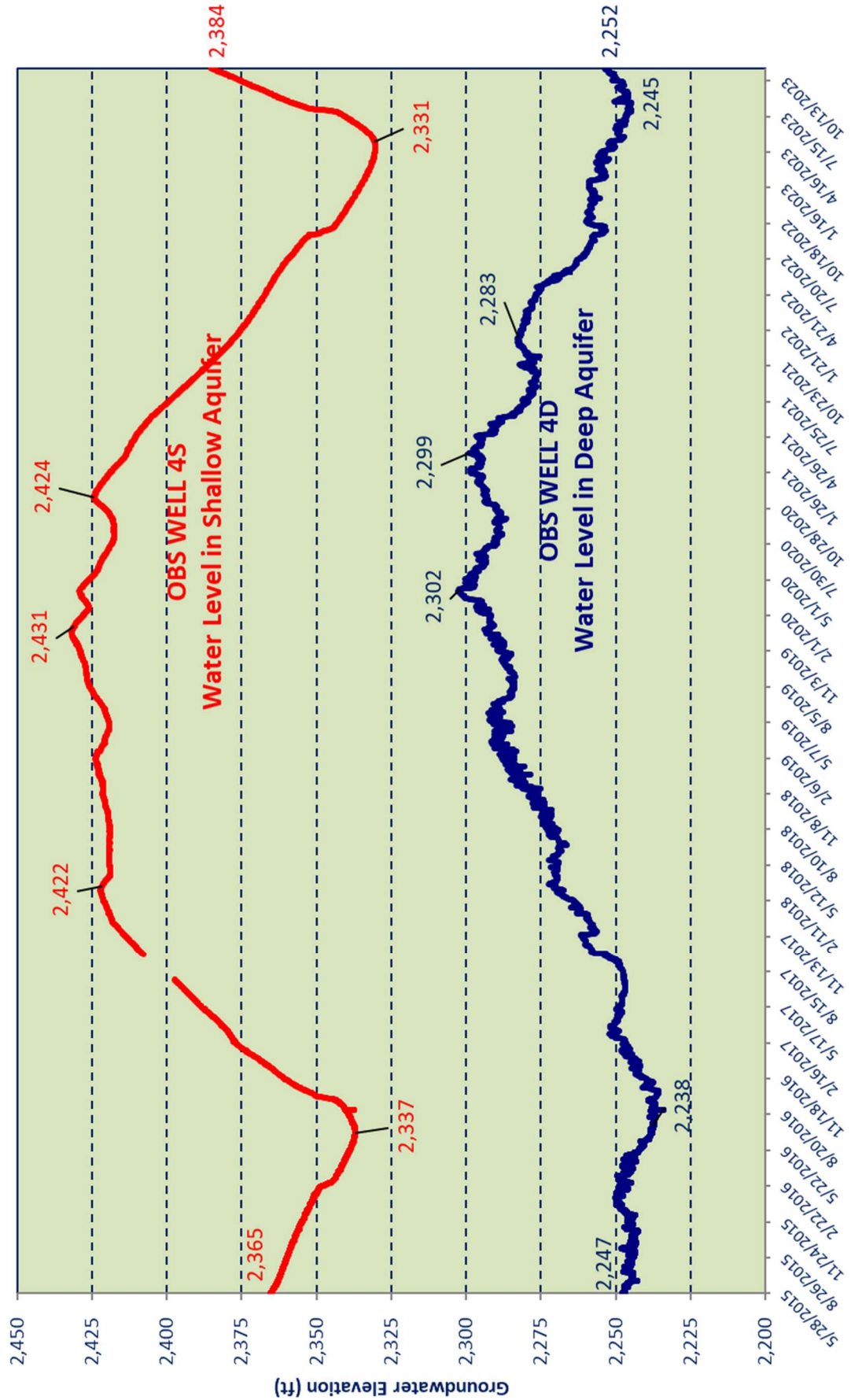


Figure No. 4
Static Groundwater Elevations at Summit Cemetary and Sun Lakes Wells
 (May 28, 2015 through Nov 13, 2023)

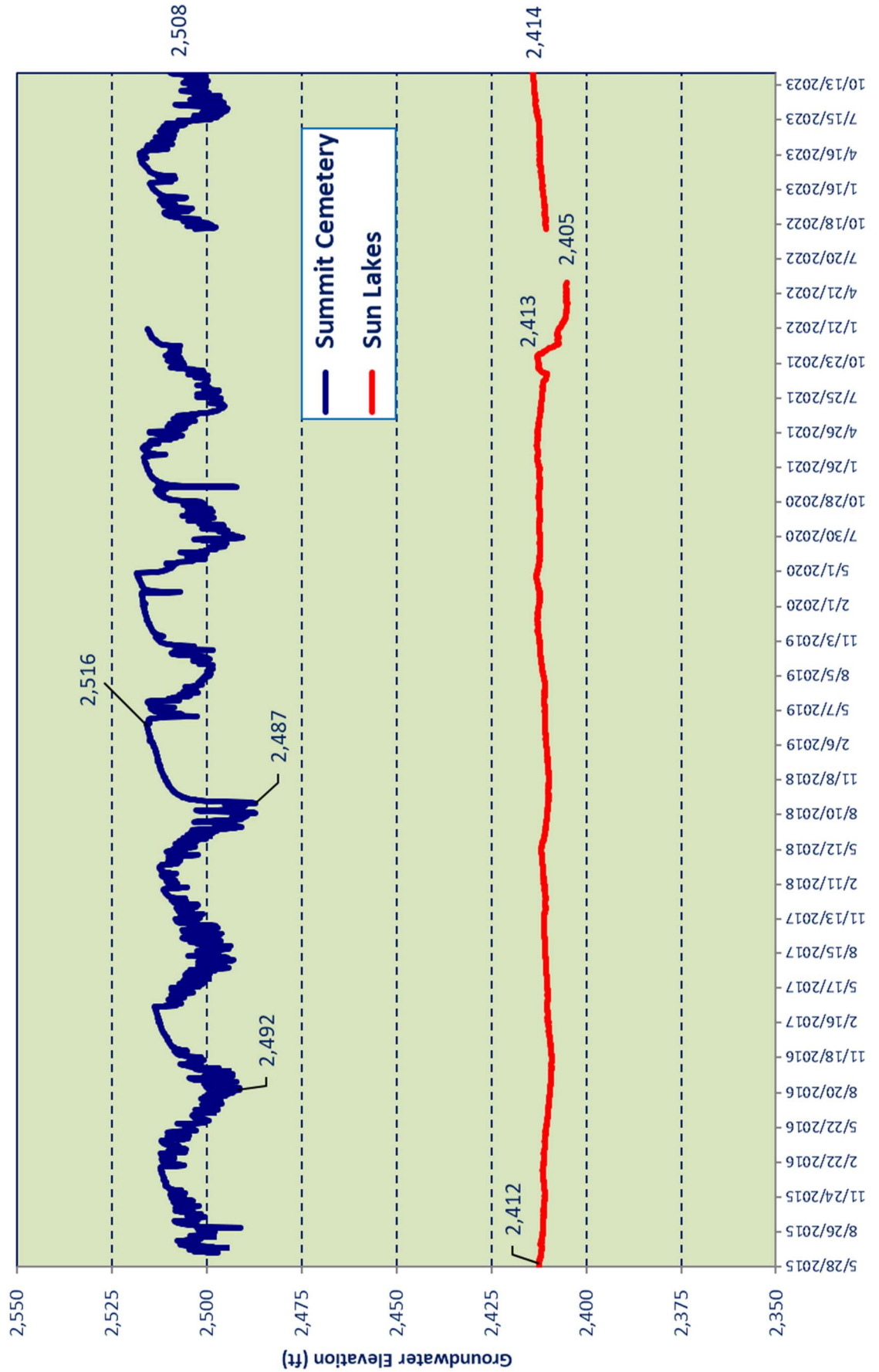


Figure No. 5
Static Groundwater Elevations in the Banning Area
 (May 28, 2015 through Nov 13, 2023)

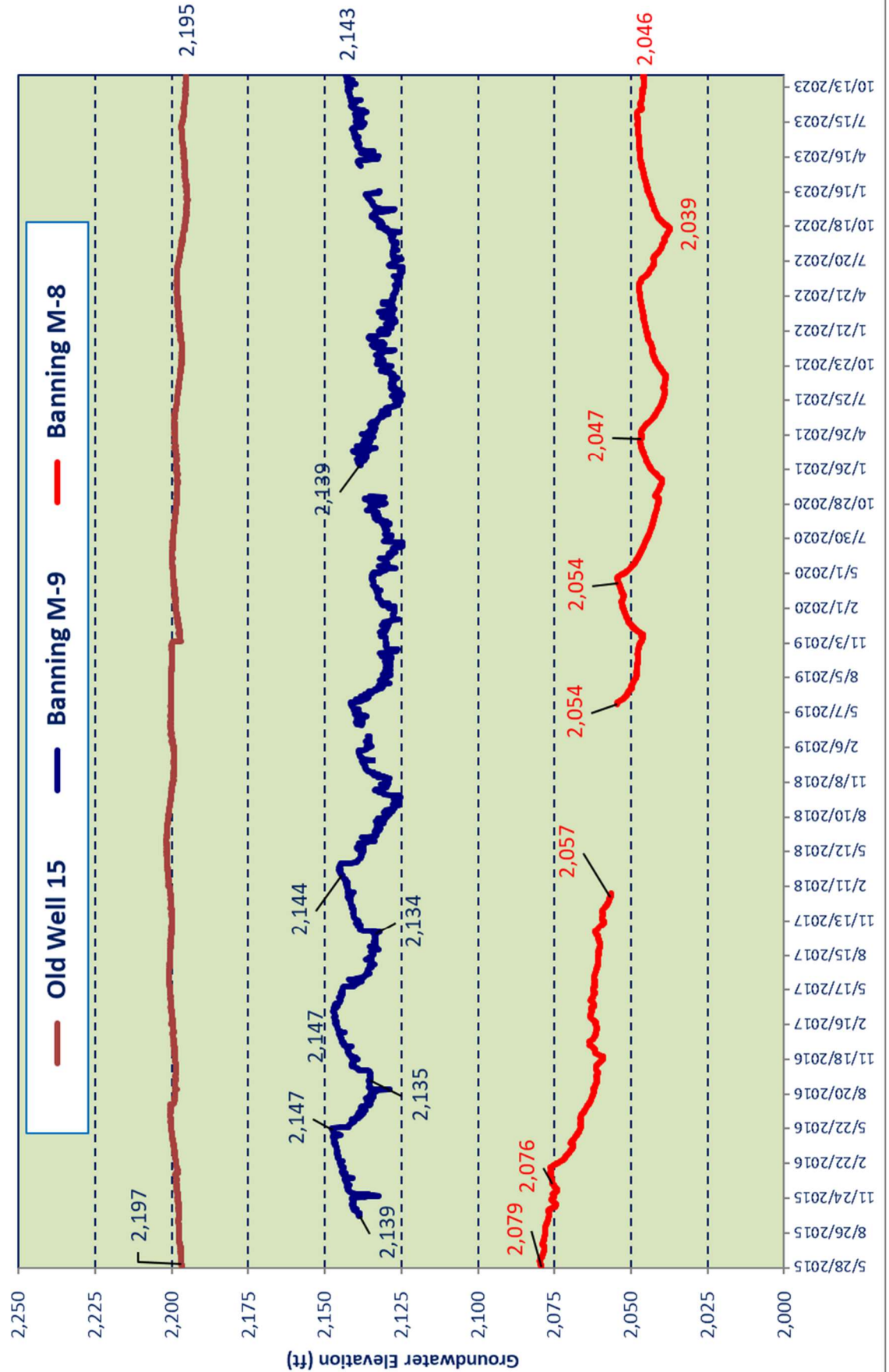


Figure No. 6
Static Groundwater Elevations at BCVWD Wells No. 2 and 25
 (Jan 26, 2017 through Nov 13, 2023)

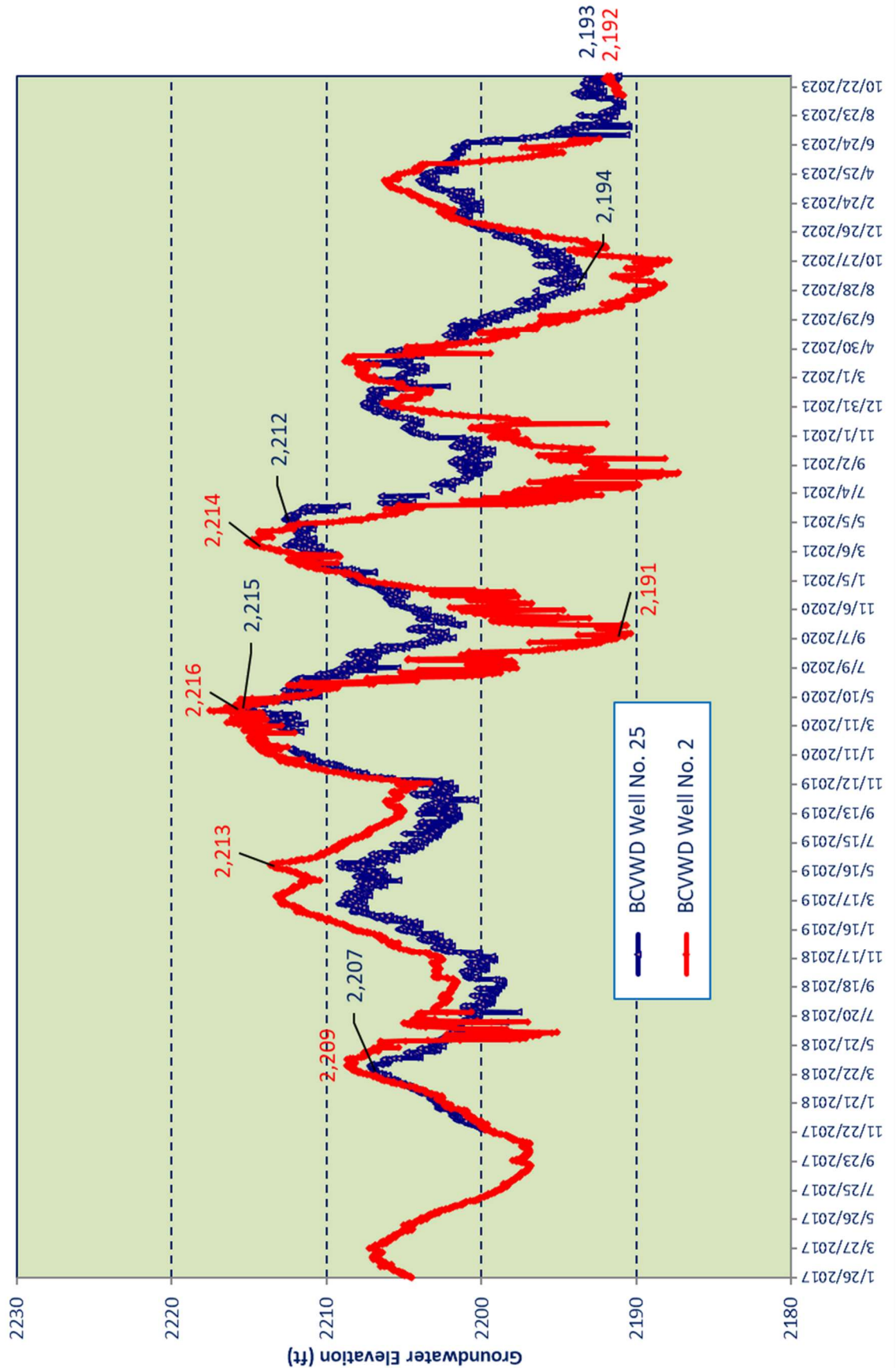
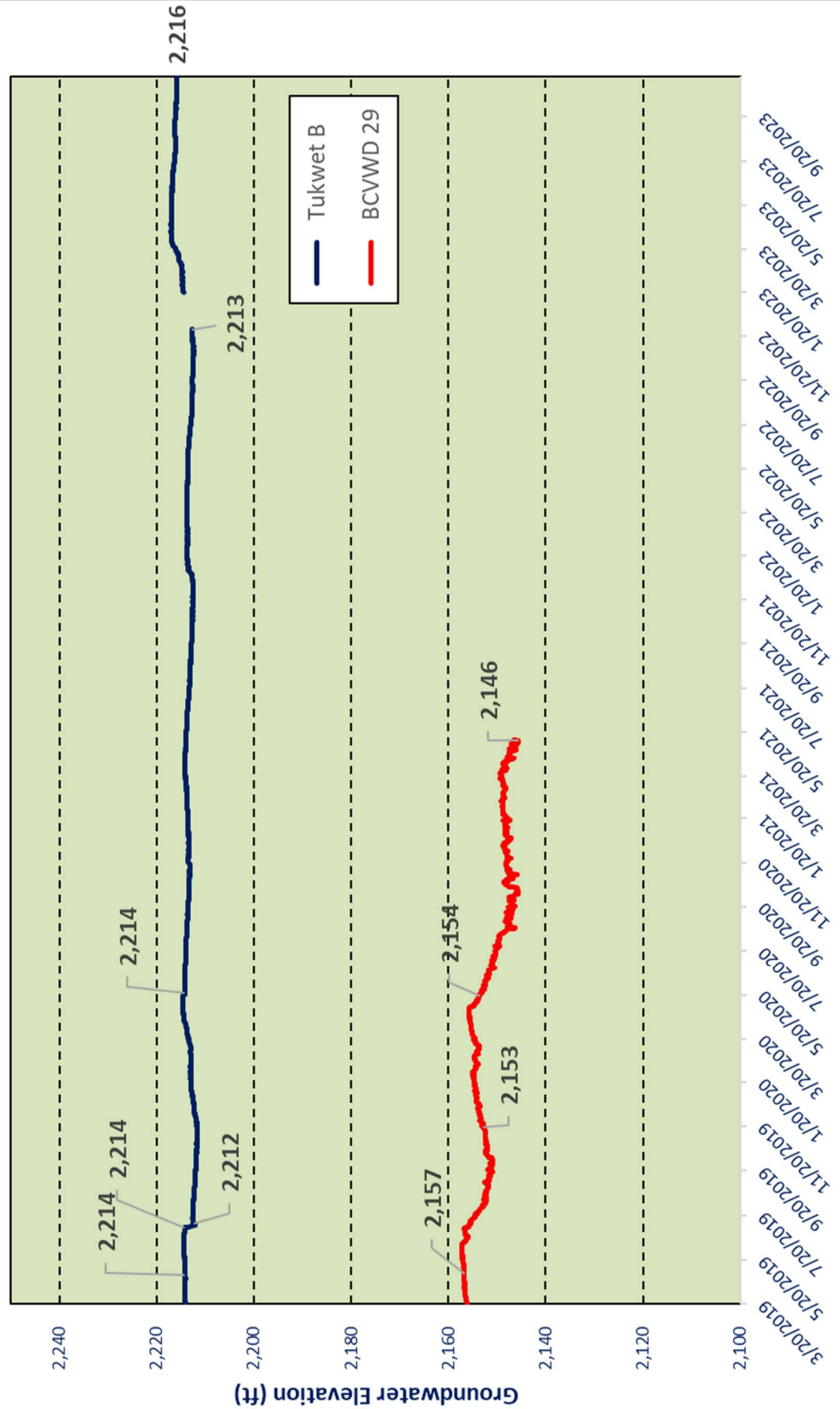


Figure No. 7
Static Water Level at BCVWD No. 29 and Tukwet Cyn Well B
 (Mar 20, 2019 through Nov 13, 2023)



BEAUMONT BASIN WATERMASTER

Date: December 6th, 2023

From: Hannibal Blandon, ALDA Inc.

Subject: A Comparison of Production Rights vs. Production through Oct 2023

Recommendation: No recommendation - For informational purposes only

This Technical Memorandum presents a comparison of Production Rights (formerly presented as Extraction Credits) from the Basin against actual production by Appropriator. At the beginning of each year, Appropriators have certain Production Rights resulting from: a) unused production by overlying users from 2018 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 for the first ten months of calendar year 2023 was 11,016 ac-ft while Production Rights for the same period were 20,608 ac-ft resulting in a positive credit balance of 9,592 ac-ft, as presented in the table below. For the first ten months of the year, all appropriators have a positive storage balance. Spreading of imported water has been significant for this period at 15,651 ac-ft; the majority of which has been on behalf of BCVWD. Based on anticipated production estimates for the rest of the year, groundwater production will not exceed production rights from the basin. Appropriators that produce less than their individual production rights can add the positive difference to their storage accounts at the end of the Calendar Year, as listed in the table.

	City of Banning	Beaumont Cherry Valley W. D.	South Mesa Mutual W. C.	Yucaipa Valley W. D. ⁽¹⁾	Total
Transfer of Overlying Rights from 2018	1,408	1,904	559	608	4,479
Transfer of Overlying Rights - OVP to YVWD	0	0	0	478	478
Imported Water	1,000	14,151	0	500	15,651
Production Rights	2,408	16,055	559	1,586	20,608
Production ⁽²⁾	1,261	8,777	242	736	11,016
Credit Balance	1,147	7,278	317	850	9,592
Water in Storage as of Dec 2022	46,570	23,193	10,224	17,029	97,017

1.- YVWD was initially credit with 790 ac-ft of transfers from OVP for 2023. This amount was revised to 478.30 ac-ft based on new information submitted by this District.

2.- Production by the City of Banning includes 688 ac-ft of groundwater produced through October 2023 by BCVWD and delivered to the city at their two connection points.

Discussion Items

ITEM VII-A

BEAUMONT BASIN WATERMASTER MEMORANDUM NO. 23-32

Date: December 6, 2023

From: Thomas Harder, Thomas Harder & Co.

Subject: Proposal by Thomas Harder & Company / Alda of Task Order No. 5 for 2024 Engineering Services and Preparation of the 2023 Annual Report

Recommendation: Approve Task Order No. 5 for a sum not to exceed \$95,690.00 and send invoices to each Watermaster Committee member for 20% of the approved amount

This task order is necessary to authorize TH&Co to provide technical support services to the Watermaster Committee during Calendar Year 2024.

The proposed scope of services for Task Order No. 5, consistent with previously years, provides for the preparation of the 2023 Consolidated Annual Report, estimate of the annualized Safe Yield and change in storage of the Beaumont Basin, and associated consulting services in support to Watermaster activities during CY 2024.

The proposed budget is \$95,690.00 and is based on 514 engineering and administrative hours.

The financial impacts associated with the proposed task order would result in a budget line item of \$95,690.00 and, if approved, would result in an invoice sent to each Watermaster Committee member in the amount of \$19,138.00.

November 22, 2023

Mr. Art Vela
Beaumont Basin Watermaster
99 E. Ramsey St.
Banning, California 92220

**Re: Beaumont Basin Watermaster – Proposed Groundwater Level Monitoring Services
for Calendar Year 2024 – Task Order 6**

Dear Mr. Vela,

This letter outlines our proposed scope of services and consulting fee to provide groundwater level monitoring services for the Beaumont Basin Watermaster (the Watermaster) in calendar year 2024. Historically, Alda, Inc. has provided these services including:

- Coordination with well owners for equipment installation,
- Purchase of transducer and barometric pressure equipment,
- Installation of monitoring equipment,
- Downloading and periodic maintenance of monitoring equipment, and
- Reporting to the Watermaster Committee.

There are currently 15 wells in the Watermaster monitoring network equipped with continuous groundwater level monitoring transducers:

- | | |
|-------------------------------|-----------------------------------|
| • YVWD No. 34 | • BCVWD No. 2 |
| • Tukwet B | • BCVWD No. 25 |
| • Noble Creek Park | • BCVWD No. 29 |
| • Noble Creek Ponds 4 Deep | • BCVWD Old 15 (Banning) |
| • Noble Creek Ponds 4 Shallow | • Sun Lakes Golf Course (Banning) |
| • ICON Warehouse | • Banning M-8 |
| • Summit Cemetery | • Banning M-9 |
| • Bonita Vista No. 3 (BCVWD) | ○ |

Thomas Harder & Co.
1260 N. Hancock St., Suite 109
Anaheim, California 92807
(714) 779-3875

Two wells, YVWD No. 34 and Banning M-9, are also equipped with barometric pressure probes to determine barometric pressure at the north and south ends of the Beaumont Basin, respectively.

Groundwater levels and barometric pressure have been monitored hourly since 2015 and results have been presented at the regular Watermaster Committee meetings.

Groundwater level monitoring services for Calendar Year 2024 would be conducted as Task Order 6 under our Agreement for Professional Services dated November 2022. Our proposed detailed scope of services is as follows:

SCOPE OF SERVICES

Task 1 – Data Processing and Reporting

A TH&Co team representative will visit each of the 15 monitoring sites every other month (up to six times) to download the data from the transducers and barometric pressure instruments, manually monitor the groundwater level, and inspect the wellhead to ensure that the probe is secure and operating properly. Manual groundwater level measurements will be collected in accordance with Section 3 of the Rules and Regulations.

Downloaded data will be exported to a spreadsheet program for processing, QA/QC, and graphing. The information collected at the selected sites will be reviewed to determine consistency with previous readings. Collected information will be tabulated and used to determine groundwater elevation considering ground elevation, length of communications cable, and barometric pressure. Water level elevation graphs for selected wells will be prepared and presented to the Watermaster Committee as part of the regular consent calendar.

Estimated Hours: 118 Hours

Estimated Cost: \$22,190.00

Task 2 – Monitoring Equipment Maintenance

Historically, some transducers installed in Watermaster wells have malfunctioned or required maintenance. This task is included to provide as-needed maintenance of groundwater level monitoring equipment should it be needed. Maintenance activities could include (but not necessarily be limited to) the following:



- Evaluation of communications cables to make sure information collected by the groundwater level probes can be accessed electronically.
- Removal of communications cable and transducers from monitoring wells to troubleshoot issues when the equipment doesn't work.
- Coordination with the equipment manufacturer to arrange repairs or order replacement cables or equipment.
- Measurement of replacement communications cables to make sure actual length of cable is the same as documented by the manufacturer.

A TH&Co team representative will conduct additional visits to monitoring sites, if necessary, to replace faulty equipment previously identified and/or to check on the performance of newly installed equipment.

Estimated Hours: 16 Hours

Estimated Cost: \$2,800.00

Task 3 – Consideration of Potential Additional Monitoring Sites

While the existing groundwater level monitoring network provides relatively good spatial coverage across the Beaumont Basin, there remain areas where additional and more reliable monitoring would be beneficial. The TH&Co team will evaluate potential monitoring sites for installation of groundwater level transducers for consideration by the Watermaster Committee. Selection of sites will be based on a number of parameters including location within the basin, distance to pumping wells, accessibility to the site, and on-site improvements that may be required.

Estimated Hours: 10 Hours

Estimated Cost: \$ 2,080.00

Task 4 – Installation of New Monitoring Equipment

This task includes budget to install groundwater level transducers at new well sites selected from Task 1 and approved by the Watermaster Committee. All new monitoring equipment will be installed and programmed in accordance with Section 3 of the Rules and Regulations currently being considered by the Watermaster Committee. Required modifications at some of the well head sites, such as installation of plates, locks, measurement ports, etc., will be coordinated by the TH&Co team to make sure all sites operate adequately, and the monitoring equipment is secured. Manual groundwater level measurements will be made during transducer installation to compare with the transducer readings and ensure the probes are operating properly. The budget



for this task assumes the TH&Co team will purchase and install up to two additional transducers. The budget does not include the cost of transducer equipment.

Estimated Hours: 6 Hours

Estimated Cost: \$ 1,050.00

COST ESTIMATE

The total estimated cost for this scope of work is \$28,120 as summarized in Table 1. Services will be billed on a time and materials basis up to the approved limit according to the billing rates shown in Table 1.

I appreciate the opportunity to provide consulting services for the Beaumont Basin Watermaster. If you have any questions, don't hesitate to contact me at (714) 394-4449.

Sincerely,



Thomas Harder, P.G., C.HG.
Principal Hydrogeologist



Cost Estimate for Beaumont Basin Watermaster Engineering Services
Task Order 6 - 2024 Groundwater Level Monitoring

Task	Description	Thomas Harder & Co.								ALDA				Total Cost
		Principal Hydro-Geologist	Associate Hydro-Geologist	Senior Hydro-Geologist	Project Geo-Scientist	Staff Geo-Scientist	Graphics	Clerical	Total Hours TH&Co	Project Manager	Professional Engineer	Staff Engineer	Total Hours ALDA	
		\$220/hr	\$190/hr	\$160/hr	\$135/hr	\$115/hr	\$100/hr	\$80/hr		\$225/hr	\$200/hr	\$175/hr		
1	Groundwater Level Data Processing and Reporting	8	0	0	8	0	0	0	16	6	48	48	102	\$22,190
2	Monitoring Equipment Maintenance	0	0	0	0	0	0	0	0	0	0	16	16	\$2,800
3	Consideration of Additional Monitoring Sites	4	0	0	0	0	0	0	4	0	6	0	6	\$2,080
4	Installation of New Monitoring Equipment	0	0	0	0	0	0	0	0	0	0	6	6	\$1,050
Total Labor Hours Tasks 1 through 4		12	0	0	8	0	0	0	20	6	54	70	130	\$28,120

Note:

The budget does not include the costs for new monitoring equipment.

ITEM VII-B

BEAUMONT BASIN WATERMASTER MEMORANDUM NO. 23-33

Date: December 6, 2023

From: Thomas Harder, Thomas Harder & Co.

Subject: Proposal by Thomas Harder & Company / Alda of Task Order 6: to Provide Groundwater Level Monitoring Services in 2024

Recommendation: Approve Task Order 6 for Groundwater Level Monitoring Services for a sum not to exceed \$28,120 and send invoices to each Watermaster Committee member for 20% of the approved amount

This task order is necessary to authorize TH&Co to provide groundwater level monitoring services during calendar year 2024.

The proposed scope of services for Task Order No. 6 provides for the continued monitoring and processing of groundwater level data in the 15 wells equipped with continuous monitoring pressure transducer equipment. The scope also includes contingencies for monitoring equipment maintenance, identification of additional monitoring sites, and installation of new monitoring equipment in any new sites identified.

The proposed budget is \$28,120.00 and is based on 150 engineering and administrative hours.

The financial impacts associated with the proposed contract would result in a budget line item of \$28,120.00, and if approved would result in an invoice sent to each Watermaster Committee member in the amount of \$5,624.00.

November 22, 2023

Mr. Art Vela
Beaumont Basin Watermaster
99 E. Ramsey St.
Banning, California 92220

Re: Beaumont Basin Watermaster – Engineering Services and Annual Reporting for Calendar Year 2024 – Task Order 5

Dear Mr. Vela,

This letter outlines our proposed scope of services and consulting fee to provide engineering services for the Beaumont Basin Watermaster (the Watermaster) in Fiscal Year (FY) 2024 (calendar year 2024). This work would be Task Order 5 under our Agreement for Professional Services dated November 2022. Our proposed scope of work for FY 2024 includes the following:

1. Data Collection
2. Preparation of the 2023 Annual Report
3. Determination of Annualized Safe Yield and Change in Storage
4. Review of Rules and Regulations
5. Meeting Attendance and Agenda Support

Our proposed detailed scope of work is as follows:

SCOPE OF SERVICES

Task 1 – Data Collection

TH&Co, with the support of ALDA and in coordination with Dudek, will collect and compile the data necessary to prepare the Watermaster Annual Report as well reporting required under the Sustainable Groundwater Management Act (SGMA). The data necessary for the Annual Report includes:

- Monthly groundwater production for all domestic groundwater production wells,
- Monthly rainfall at established precipitation stations in the area,

Thomas Harder & Co.
1260 N. Hancock St., Suite 109
Anaheim, California 92807
(714) 779-3875

- Monthly static groundwater levels at dedicated monitoring wells and selected production wells,
- Monthly deliveries of imported water and/or surface water diversions from applicable water providers, and
- Annual water quality from domestic production wells from the State of California's Groundwater Ambient Monitoring and Assessment Program (GAMA) database and from other non-domestic wells, as documented in the Beaumont Management Zone Maximum Benefit Monitoring Program.

All data will be checked by TH&Co prior to use in analysis and/or incorporation into the annual report.

Estimated Hours: 92 Hours

Estimated Cost: \$16,400.00

Task 2 – Preparation of 2023 Annual Report

ALDA will prepare the 2023 Annual Report summarizing the operations of the Beaumont Basin Watermaster. The report will include groundwater levels, water transfers, groundwater production, water quality, assessment of basin conditions, carryovers, replenishment, replenishment obligations, and recommendations for future pumping and spreading activities. The Annual Report will also provide a summary of all Watermaster Committee activities, as discussed during regular and special meetings, and will provide an annualized safe yield based on the analysis from Task 3. Once the final report is approved and adopted, all data, draft documents, spreadsheets, presentations, and other related information used to prepare the Annual Report will be submitted to the Secretary of the Watermaster within thirty days. The cost estimate for this task assumes one draft version of the Annual Report (one hard copy and one electronic version) and one final version (one hard copy with an attached CD that has the electronic version).

Estimated Hours: 160 Hours

Estimated Cost: \$33,840.00

Task 3 – Determination of Annualized Safe Yield and Change in Storage

TH&Co will review groundwater levels, groundwater production, groundwater recharge and change in storage for the Beaumont Basin area as a basis for determining an annualized estimate of the safe yield of the basin. As part of this task, TH&Co will prepare a groundwater level contour map for the fall of each year and compare it to the groundwater contour map of the



previous year to assess changes in groundwater flow patterns across the basin and change in groundwater storage. Two estimates of Beaumont Basin change in storage will be prepared:

1. An estimate based on groundwater level change between October 2022 to October 2023 (Water Year Change in Storage for the SGMA Annual Report), and
2. An estimate based on groundwater level change between December 2022 and December 2023 (FY Change in Storage for the Watermaster Annual Report).

TH&Co will generate a Technical Memorandum (TM) that summarizes the analysis. The cost estimate for this subtask assumes one draft version of the TM (two hard copies and one electronic version) and one final version (five hard copies, each with an attached CD that has the electronic version).

Estimated Hours: 132 Hours

Estimated Cost: \$ 18,220.00

Task 4 – Review Rules and Regulations

A budget is included to provide support to the Watermaster Committee and Dudek to review the existing Rules & Regulations, provide recommendations for changes and/or implement changes requested by the Committee, as appropriate. The cost estimate for this task assumes revisions are minor.

Estimated Hours: 16 Hours

Estimated Cost: \$ 3,560.00

Task 5 – Meeting Attendance and Agenda Support

The budget for this task includes attendance at six regular meetings of the Watermaster Committee in Beaumont, California. The budget also includes six meetings with Dudek to prepare for each regular meeting and prepare agenda.

Estimated Hours: 114 Hours

Estimated Cost: \$ 23,670.00



COST ESTIMATE

The total estimated cost for this scope of work is \$95,690 as summarized in Table 1. Services will be billed on a time and materials basis up to the approved limit according to the billing rates shown in Table 1.

I appreciate the opportunity to provide consulting services for the Beaumont Basin Watermaster. If you have any questions, don't hesitate to contact me at (714) 394-4449.

Sincerely,



Thomas Harder, P.G., C.HG.
Principal Hydrogeologist



Cost Estimate for Beaumont Basin Watermaster FY 2024 Engineering Services and Annual Reporting

Task	Sub-task	Description	Thomas Harder & Co.								ALDA			Total Cost
			Principal Hydro-Geologist \$220/hr	Associate Hydro-Geologist \$190/hr	Senior Hydro-Geologist \$160/hr	Project Geo-Scientist \$135/hr	Staff Geo-Scientist \$115/hr	Graphics \$100/hr	Clerical \$80/hr	Total Hours TH&Co	Project Manager \$225/hr	Professional Engineer \$200/hr	Total Hours ALDA	
1		Data Collection (1 Yr)	12	0	0	36	0	0	0	48	4	40	44	\$16,400
2		Preparation of Annual Reports	12	0	0	0	0	0	0	12	64	84	148	\$33,840
3		Determination of Annualized Safe Yield and Change in Storage	10	0	0	32	52	18	4	116	16	0	16	\$18,220
4		Review of Rules and Regulations	8	0	0	0	0	0	0	8	8	0	8	\$3,560
5		Meeting Attendance	48	0	0	0	0	0	12	60	54	0	54	\$23,670
Total Labor Hours Tasks 1 through 5			90	0	0	68	52	18	16	244	146	124	270	\$95,690

ITEM VII-C

BEAUMONT BASIN WATERMASTER MEMORANDUM NO. 23-34

Date: December 6, 2023
From: Thomas Harder, Thomas Harder & Co.
Subject: Update on the Safe Yield Reset of the Beaumont Basin
Recommendation: For Information and Discussion

As per the 2003 Beaumont Basin Judgment, "The Safe Yield of the Beaumont Basin shall be redetermined at least every 10 years beginning 10 years after the date of entry of this Judgment."¹ The first redetermination of the Beaumont Basin Safe Yield was conducted in 2013² and revised the Safe Yield to be 6,700 acre-ft per year. The Safe Yield is being redetermined again for 2023.

At the December Board meeting, we will provide an update on progress toward redetermining the Safe Yield for 2023. The Safe Yield is being redetermined using an updated version of the groundwater flow model of the Beaumont Basin that was previously developed for the 2013 Safe Yield redetermination. The update will include:

- Work completed to date to estimate the Safe Yield
- A schedule for reporting the redetermined Safe Yield

¹ Beaumont Basin Judgment. Section VI Administration, 5 (Y).

² Thomas Harder & Co., 2015. 2013 Reevaluation of the Beaumont Basin Safe Yield. Dated April 3, 2015.

ITEM VII-D

BEAUMONT BASIN WATERMASTER MEMORANDUM NO. 23-35

Date: December 6, 2023
From: Steven Stuart, Dudek
Subject: Review of Appropriator's Production Right Calculation
Recommendation: For Information and Discussion

As per the 2003 Beaumont Basin Judgment, "...Appropriator Party...is hereby enjoined and restrained from producing groundwater from the Beaumont Basin in any year hereafter in excess of such part's Appropriator's Production Right...."¹

At the December Board meeting, we will review the definition of the Appropriator's Production Right and the parameters involved in calculating it. The review will close by looking at, as examples, the annual production vs. the calculated Appropriator's Production Right for BCVWD and YVWD, and whether replenishment funds are required to replace overproduction. Our review will identify the different inputs (i.e., buckets) of water to the Basin, how they are accounted for on an annual basis, and to initiate a discussion on how the different buckets of water may be managed in the water usage accounting system.

¹ Beaumont Basin Judgment. Section II Injunctions, 1 (B).