

Notice and Agenda of a Meeting of the Beaumont Basin Watermaster

Wednesday, August 4, 2021 at 10:00 a.m.

Watermaster Members:

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

Meeting Location:

Beaumont Cherry Valley Water District
560 Magnolia Avenue
Beaumont, California 92223

This meeting is also available by calling (669) 900-9128
using Meeting ID 816-3872-0446 and Passcode 636756#

Online Meeting Participation Link: <https://us02web.zoom.us/j/81638720446>
Meeting ID: 816-3872-0446 and Passcode: 636756

I. Call to Order

II. Roll Call

City of Banning: Arturo Vela (Alternate: Luis Cardenas)

City of Beaumont: Jeff Hart (Alternate: Robert Vestal)

Beaumont Cherry Valley Water District: Daniel Jaggars (Alternate: Mark Swanson)

South Mesa Water Company: George Jorritsma (Alternate: Dave Armstrong)

Yucaipa Valley Water District: Joseph Zoba (Alternate: 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.

V. Consent Calendar

A. Meeting Minutes

1. Meeting Minutes for June 2, 2021 [Page 3 of 32]

2. Meeting Minutes for June 28, 2021 [Page 10 of 32]

VI. Reports

- A. Report from Engineering Consultant - Hannibal Blandon, ALDA Engineering
- B. Report from Hydrogeological Consultant - Thomas Harder, Thomas Harder & Co.
- C. Report from Legal Counsel - Thierry Montoya/Keith McCullough, Alvarado Smith

VII. Discussion Items

- A. Status Report on Water Level Monitoring throughout the Beaumont Basin through Jul 26, 2021 [Memorandum No. 21-28, Page 12 of 32]
Recommendation: Presentation - No recommendation.
- B. Production and Allowable Extractions through June 2021 [Memorandum No. 21-29, Page 24 of 32]
Recommendation: No recommendation - For informational purposes only
- C. Return Flow Accounting Methodology presentation of final Technical Memorandum and comments [Memorandum No. 21-30, Page 25 of 32]
Recommendation: That the Watermaster Committee accepts the final Technical Memorandum, findings and recommendations
- D. Task Order No. 27 to Provide Electronic Files of the Groundwater Model of the Beaumont Basin to the City of Beaumont [Memorandum No. 21-31, Page 27 of 32]
Recommendation: That the Watermaster Committee considers the approval of this task order at a cost not to exceed \$15,000.
- E. Electronic Delivery of Annual Report [Memorandum No. 21-32, Page 32 of 32]
Recommendation: That the Watermaster Committee considers the delivery of annual reports, both draft and final, in electronic format unless an individual member or agency would prefer hard copies of individual reports.

VIII. Topics for Future Meetings

- A. Development of a methodology and policy to account for groundwater storage losses in the basin resulting from the artificial recharge of water resources.
- B. Development of a methodology and policy to account for recycled water recharge.
- C. Discussion Regarding the Addition of Various Topics to Future Meetings.

IX. Comments from the Watermaster Committee Members

X. Announcements

- A. The next regular meeting of the Beaumont Basin Watermaster is scheduled for Wednesday, October 6, 2021 at 10:00 a.m.
- B. Future Meeting Dates:
 - i. Wednesday, December 1, 2021 at 10:00 a.m.

XI. Adjournment

DRAFT
Record of the Minutes of the
Beaumont Basin Committee Meeting of the
Beaumont Basin Watermaster
Regular Meeting
Wednesday, June 2, 2021

Meeting Location:

There was no public physical meeting location due to the coronavirus pandemic. Meeting held via video teleconference pursuant to: California Government Code Section 54950 et. seq. and California Governor's Executive Orders N-29-20 and N-33-20

I. Call to Order

Chairman Arturo Vela called the meeting to order at 10:00 a.m.

II. Roll Call

<i>City of Banning</i>	<i>Arturo Vela</i>	<i>Present</i>
<i>City of Beaumont</i>	<i>Jeff Hart</i>	<i>Present</i>
<i>Beaumont-Cherry Valley Water District</i>	<i>Daniel Jagers</i>	<i>Present</i>
<i>South Mesa Water Company</i>	<i>George Jorritsma</i>	<i>Present</i>
<i>Yucaipa Valley Water District</i>	<i>Joseph Zoba</i>	<i>Present</i>

Hannibal Blandon and Thomas Harder were present as engineers for the BBWM.

Members of the public who registered and / or attended:

*Lance Eckhart, San Geronio Pass Water Agency
Mark Swanson, Beaumont-Cherry Valley Water District
Erica Gonzales, Beaumont-Cherry Valley Water District
John Covington, Beaumont-Cherry Valley Water District / Morongo Band of Mission Indians*

III. Pledge of Allegiance

Chair Vela led the pledge.

IV. Public Comments:

None.

V. Consent Calendar

1. Meeting Minutes for April 7, 2021

It was moved by Member Jagers and seconded by Member Hart to approve the Meeting Minutes.

AYES: Hart, Jagers, Jorritsma, Vela, Zoba
NOES: None.
ABSTAIN: None.
ABSENT: None.
STATUS: Motion Approved

VI. Reports

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

Mr. Blandon reported that the 2019 Consolidated Annual Report and Engineering Report was submitted on April 21, 2021 but has not been posted.

Blandon advised that Member Hart had requested copies of all annual reports and all files related to the groundwater model of the Beaumont Basin. Due to the expense of compiling the files, the item would have been agendaized for approval by the Committee. After discussion, consensus was to provide the requested information as the time should be minimal. Mr. Blandon will complete the work under the open Task Order for On Call Engineering Services.

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

No report.

- C. Report from Legal Counsel – Thierry Montoya, Alvarado Smith

No report.

VII. Discussion Items

- A. Financial Status Report

Recommendation: No recommendation. Presentation only

Member Zoba provided an overview. After payment of invoices, the bank balance is \$93,000, he noted, and pointed to the Operating expenses. At the next meeting, the fiscal year will be closed out and a year end report will be provided.

- B. Status Report on Water Level Monitoring throughout the Beaumont Basin through May 13, 2021

Recommendation: No recommendation.

Mr. Blandon reviewed the report. He reminded the Committee of anomalies reported at the last meeting and said that the jump in level had been determined to be correct.

He noted that Banning Well M-9 has declined by more than 30 feet over the last two years, and BCVWD Wells No. 2 and 25 show significant fluctuations.

New monitoring wells were being considered in the northern portion of the Basin, and three wells were evaluated, Blandon explained. Since levels measured were flat it was decided there is no need to have observation wells monitored on an hourly basis, he said.

- C. A Comparison of Production and Allowable Extractions through April 2021

Recommendation: No recommendation; informational only

Mr. Blandon shared the table of Production vs. Allowable Extractions through April 2021. He noted that 6,617 acre-feet of imported water has been spread in the Basin. Production through April has been 4,126 af and the total allowable production considering the transfers of overlying rights since 2016 is 6,171, he stated. The numbers change daily as the agencies continue to pump, he added.

Member Jagers suggested adding the Morongo Band of Mission Indians and the San Geronio Pass Water Agency to the report to memorialize the data. Mr. Blandon suggested a footnote indicating that they, along with the City of Beaumont, have water storage accounts but no water in storage.

- D. Discussion Regarding Task Order No. 25 with ALDA Inc. for On-Call Engineering Services

Recommendation: That the Watermaster Committee approve Task Order No. 25 for a sum not to exceed \$25,000

Mr. Blandon reminded the Committee about Task Order No. 8 approved in October 2015 for \$20,000. Six tasks have been completed and \$18,062 spent, with a remainder of about \$1,900. A portion of that will be used to pull the data requested by Member Hart, he noted.

New Task Order No. 25 is requesting an additional \$25,000, Blandon explained. In response to Chair Vela, Blandon indicated that Task Order 8 would be exhausted or closed. Member Zoba recommended adding Task 25 which would take over once the amount in Task 8 is expended.

It was moved by Member Vela and seconded by Member Jagers to approve Task Order No. 25 for a sum not to exceed \$25,000 and to send out invoices to the Watermaster Committee members and was approved by the following vote:

AYES:	Hart, Jagers, Jorritsma, Vela, Zoba
NOES:	None.
ABSTAIN:	None.
ABSENT:	None.
STATUS:	Motion Approved

E. Development of a Policy to Account for Storage Losses in the Beaumont Basin – Initial Approach

Recommendation: That the Watermaster Committee authorize the expenditure of \$10,000 under Task 25 On-Call Services, to cover the expense associated with this task

Tom Harder of Thomas Harder and Associates reminded the Committee of the discussion regarding comparison of the storage accounts and the written accounts which appears to show the groundwater level response is not commensurate with the storage accounts that are accruing. It is a complicated matter and is worthwhile to evaluate to assure the physical water budget in the Basin is commensurate with what is on paper, he noted.

Harder said analyses show that groundwater flows to the southeast, and most of the losses are occurring in that area. Some limited losses are occurring at the western part of the Basin, he added. Issues are outlined in the Technical Memo along with a summary of what other basins are doing to address storage losses.

Basin losses are sensitive to imported recharge, and the location and pumping rate of pumping wells, Harder advised. The conclusion was that loss can be limited on the east side of the Basin via strategic pumping. Pumping outside the Basin is also influencing the loss, he noted.

Harder said that accounting for Basin losses is necessary to maintain a representative water balance, and it behooves the Committee to

evaluate those losses and develop a methodology and policy to account for them, otherwise, safe yield assessments may have a discrepancy.

Harder recommended development of a framework to account for storage losses based on the hydrogeology of the Basin via an initial budget of \$10,000 Under Task Order 25.

Member Jagers clarified that in addition to potential losses there are potential gains due to operational activity. BCVWD has increased pumping on the east side to capture those losses and has shut down Well 29 in the winter to stimulate in-lieu recharge on the western side of the Basin, he explained. The framework would want to make an understanding of those operations, he noted. He pointed out that Tukwet Canyon pumps (mostly irrigation water) in the area, also.

Member Zoba suggested the work be rolled into the redetermination of safe yield. Harder agreed and said it would be helpful to have the Committee's input ahead of the process to vet the ideas and issues.

Mr. Lance Eckhart of the San Geronio Pass Water Agency (SGPWA) pointed out this is a big deal for a managed basin, and \$10,000 might get it started, but moving into basin optimization and how to minimize losses will be an ongoing effort. He also pointed out the current drought conditions and noted that the Committee will want to aggressively store more water and do more active conjunctive use moving forward. He stated there should not be a disincentive to bring imported water into the Basin and touted a thoughtful, collaborative process. This is core to the mission of the SGPWA, and the Agency would be happy to participate in answering these important questions.

In response to Mr. John Covington of the Morongo Band of Mission Indians, Member Jagers explained the location of Well 29 near the old Sunny Cal Egg Ranch.

Committee members concurred regarding communication with SGPWA regarding participation.

It was moved by Member Zoba and seconded by Member Jagers to create Task Order No. 26 for a sum not to exceed \$10,000 and to send out invoices to the Watermaster Committee members and was approved by the following vote:

<i>AYES:</i>	<i>Hart, Jagers, Jorritsma, Vela, Zoba</i>
<i>NOES:</i>	<i>None.</i>
<i>ABSTAIN:</i>	<i>None.</i>
<i>ABSENT:</i>	<i>None.</i>

STATUS: Motion Approved

F. Update on Development of a Return Flow Accounting Methodology

Recommendation: That the Watermaster Committee receive the Draft Report and provide comments that will be addresses at the August 2021 regular meeting

Mr. Harder reminded the Committee that a draft of the Return Flow Methodology was prepared in 2019, comments were received, and results were presented in February. A draft Technical Memo is included in the Board packet along with a water quality analysis on TDS concentrations in the Basin into the future, he added. He requested Committee member comments by July 21.

G. 2020 Consolidated Annual Report and Engineering Report – Presentation of Comments Received on Draft Report

Recommendation: That the Watermaster Committee consider Approving the 2020 Annual Report after comments received on the Draft Report are Presented and Discussed.

Mr. Blandon highlighted comments that were received and changes made to the Report in response.

It was moved by Member Jorritsma and seconded by Member Jaggers to approve the 2020 Consolidated Annual Report and Engineering Report. The motion was approved 4-1 by the following vote:

AYES:	Hart, Jaggers, Jorritsma, Vela
NOES:	Zoba
ABSTAIN:	None.
ABSENT:	None.
STATUS:	Motion Approved

VIII. Topics for Future Meetings

- a. Development of a methodology and policy to account for groundwater storage losses in the basin resulting from the artificial recharge of water resources.
- b. Development of a methodology and policy to account for recycled water recharge.
- c. Discussion regarding the addition of various topics to future meetings.

IX. Comments from the Watermaster Committee Members

Member Zoba commented on recycled water recharge, which is not an indirect discharge of treated wastewater, and said he agreed with Member Jaggars regarding re-titling of the Annual Report sections, but recommended keeping the agenda related to recycled water recharge.

Member Jaggars added that the City of Beaumont is approaching recycled water and noted two components: treated tertiary wastewater and recycled water.

Zoba indicated that the judgment discusses recharge of recycled water and appears to require the filing of an application through the Watermaster. Jaggars concurred and added there are minimum standards outlined in the judgment.

X. Announcements

- a. The next regular meeting of the Beaumont Basin Watermaster is scheduled for Wednesday, August 4, 2021 at 10:00 a.m.
- b. Future Meeting Dates:
 - i. Wednesday, October 6, 2021 at 10:00 a.m.
 - ii. Wednesday, December 1, 2021 at 10:00 a.m.

XI. Adjournment

Chairman Vela adjourned the meeting at 10:48 a.m.

Attest:

DRAFT UNTIL APPROVED

Daniel Jaggars, Secretary
Beaumont Basin Watermaster

DRAFT
Record of the Minutes of the
Beaumont Basin Committee Special Meeting of the
Beaumont Basin Watermaster
Regular Meeting
Monday, June 28, 2021

Meeting Location:

There was no public physical meeting location due to the coronavirus pandemic. Meeting held via video teleconference pursuant to: California Government Code Section 54950 et. seq. and California Governor's Executive Orders N-29-20, N-33-20, and N-08-21

I. Call to Order

Chairman Arturo Vela called the meeting to order at 10:02 a.m.

II. Roll Call

<i>City of Banning</i>	<i>Arturo Vela</i>	<i>Present</i>
<i>City of Beaumont</i>	<i>Jeff Hart</i>	<i>Present</i>
<i>Beaumont-Cherry Valley Water District</i>	<i>Daniel Jagers</i>	<i>Present</i>
<i>South Mesa Water Company</i>	<i>George Jorritsma</i>	<i>Present</i>
<i>Yucaipa Valley Water District</i>	<i>Joseph Zoba</i>	<i>Present</i>

Hannibal Blandon was present as engineer for the BBWM. Thierry Montoya was present as legal counsel for the BBWM.

Members of the public who registered and / or attended:

Mark Swanson and Erica Gonzales, Beaumont-Cherry Valley Water District

III. Public Comments:

None.

IV. Closed Session

Chair Vela recessed the meeting to Closed Session at 10:07 a.m.

CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION

Pursuant to *Government Code* section 54956.9(a)

Yucaipa Valley Water District

- i) Motion for an Order Directing the Beaumont Basin Watermaster to Amend the Beaumont Basin Watermaster 2019 Annual Report to Adjust Oak Valley Partners LP's Overlying Water Rights and Yucaipa Valley Water District's Appropriative Water Rights;

- ii) Motion for an Order Directing the Beaumont Basin Watermaster to Rescind Beaumont Basin Watermaster Rule 7.3

both currently pending before the Hon. Judge Irma Poole Asberry, Riverside Superior Court, Department 05.

Reconvene in Open Session: 10:48 a.m.

Report on Action Taken During Closed Session:

Counsel Thierry Montoya reported that there is ongoing litigation in the form of the two motions. Discussed were:

- The briefing schedule
- The new Court hearing date is August 19, 2021
- The substance of the BBWM responses in the form of oppositions to the two motions.

V. Comments from the Watermaster Committee Members

The Committee chose to resume hybrid in-person/ videoconference meetings in August.

VI. Announcements

- a. The next regular meeting of the Beaumont Basin Watermaster is scheduled for Wednesday, August 4, 2021 at 10:00 a.m.
- b. Future Meeting Dates:
 - i. Wednesday, October 6, 2021 at 10:00 a.m.
 - ii. Wednesday, December 1, 2021 at 10:00 a.m.

XI. Adjournment

Chairman Vela adjourned the meeting at 10:51 a.m.

Attest:

DRAFT UNTIL APPROVED

Daniel Jagers, Secretary
Beaumont Basin Watermaster

BEAUMONT BASIN WATERMASTER

MEMORANDUM NO. 21-28

Date: August 4, 2021

From: Hannibal Blandon, ALDA Inc.

Subject: Status Report on Water Level Monitoring throughout the Beaumont Basin through Jul 26, 2021

Recommendation: Presentation - No recommendation.

At the present time, there are 15 monitoring wells collecting water level information on an hourly basis at various locations throughout the basin. In addition, there are two monitoring probes collecting barometric pressures at opposite ends of the Beaumont Basin. The location of active monitoring wells is depicted in the attached Figure No. 1.

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. Through the summer of 2019 water levels at these two wells have been fairly steady; however, over the two years a significant decline has been observed. A 12-foot decline has been recorded at YVWD 34 over this period. The decline at Oak Valley 5 has been steeper with a drop 24 feet in 2020 despite of the fact that this well has not been pumped since the fall of 2019. This monitoring well is in the process of being destroyed as part of a residential development 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 90 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 has declined 31 feet to the current elevation of 2,400 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 22 feet has been recorded since to the current elevation of 2,280 ft.
- ✓ Figure No. 4 – Southern Portion of the Basin. Water level at the Summit Cemetery well is highly influenced by a nearby pumping well that is used to irrigate the cemetery grounds. The water level at this well continues to fluctuate over a 20-foot band. Conversely, the water level at the Sun Lakes well has fluctuated minimally over the same period and it is currently one foot lower than the level recorded in the summer of 2015.

- ✓ 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 four years, a somewhat significant and steady decline, close to 39 feet, has been recorded at Banning M-8 between the summer of 2015 and the current summer to its current elevation of 2,041 ft. Water level at Banning M-9 has fluctuated in a 17-foot range, between 2,130 ft and 2,147 ft. since monitoring began in the summer of 2015. Over the last six months, the water level at this well has declined 12 feet to the current elevation of 2,127 ft. A replacement communications cable, provided by Solinst Canada, was installed at Banning M-9 since the existing communications cable was not working due to the presence of moisture.
- ✓ Figure No. 6 illustrate recorded water level at BCVWD No. 2 and BCVWD No. 25. Water levels at these two wells follow seasonal pumping patterns peaking in the spring to begin a gradual decline into the fall to later recover again. Figure 6A illustrate water levels at BCVWD No. 25 over the last two years; it compares the summer decline between 2020 and 2021. In 2021, the water level did not recover as much as it did in the spring of 2020 and the summer decline has been steeper than last year. Considering we are only half-way through the summer, it is anticipated that the water level at this well may drop an additional 10 feet by the early fall. Figure 6B illustrates hourly readings at BCVWD No. 2 and the influence of pumping at Well No. 3, which is located approximately 300 ft to the south.
- ✓ 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 that is now more actively used to meet peak summer demands. A decline in water level of nine feet has been recorded at this well since monitoring began in the spring of 2019. During our visit, the communications cable could not be pulled and information from the water level probe could not be downloaded. Earlier this summer, the pump from this well was pulled to remove two pumping bowls. Apparently during this process, the water level probe was not removed and became entangled with the pump column as the pump was being lowered. It is our understanding that this pump will be pulled again later this fall to install the two pumping bowls that were removed. While there it is not certainty that the probe may be recovered, we recommend to wait until the pump is removed to reinstall the existing probe or to procure a new probe for installation. Mr. Jagers has indicated that the BCVWD will assume responsibility for the replacement of the probe and/or the communications cable.
- ✓ Tukwet B is a dedicated monitoring well in the southern portion of the basin with minimal fluctuations in levels since the probe was installed in the spring of 2019 as shown in Figure No. 7.

New Monitoring Wells

No additional monitoring wells were added during this reporting period.

New Equipment Installation

- None

Troubleshooting Issues

The following malfunctioning issues were encountered during our July 27, 2021 field visit:

- ✓ BCVWD No. 29. Communications cable could not be pulled and communications with the probe could not be established. As discussed earlier, it is likely that the communications cable became entangled when the pump was being lowered into the well earlier this summer. This pump will be pulled again in the fall. We recommend to wait until then to determine a corrective action.

New Monitoring Sites

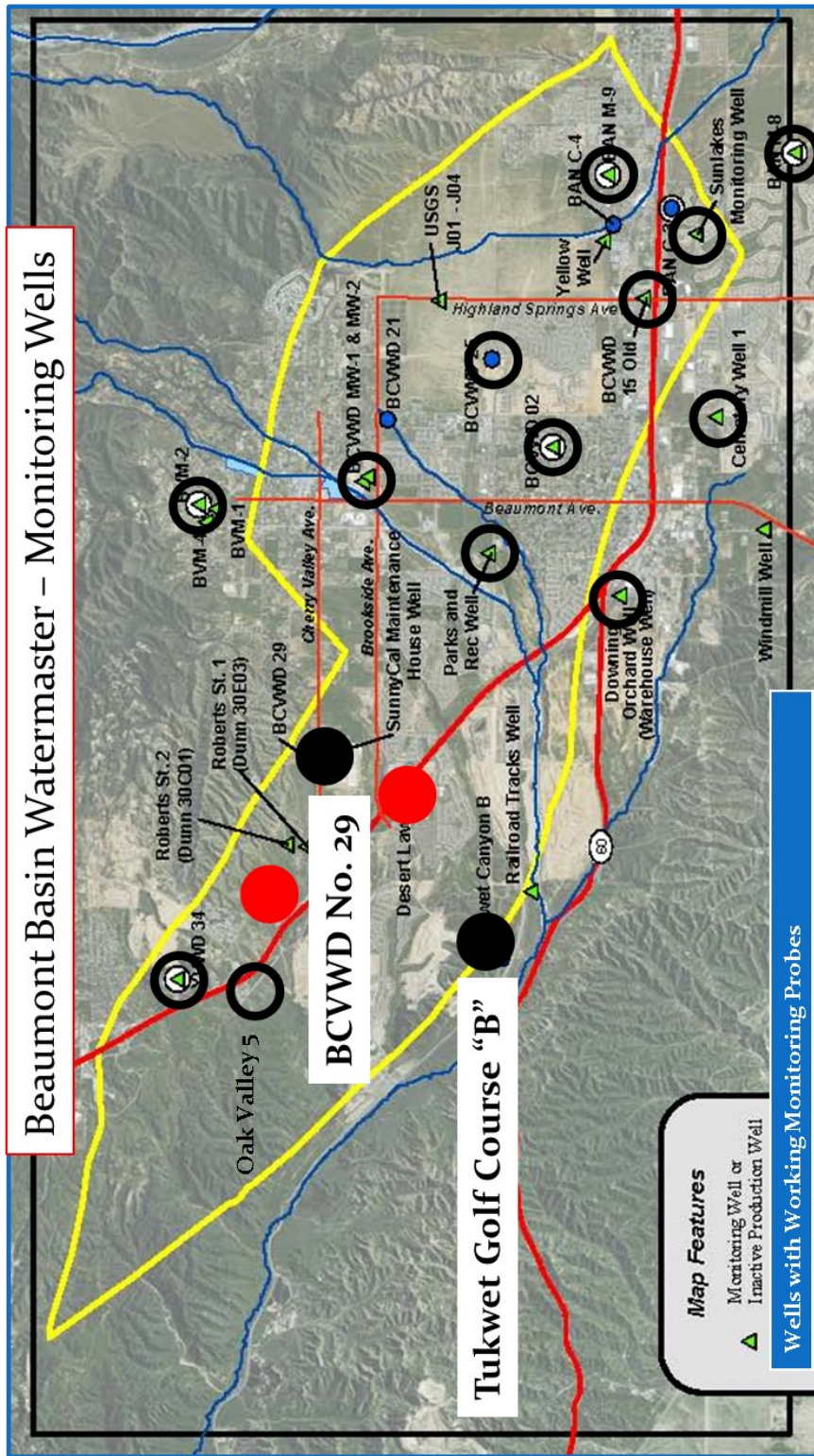
During the month of March, we had the opportunity to evaluate three wells owned and operated by the South Mesa Water Company as potential sites to select one additional well to monitor water levels in the Calimesa Basin, just north of the Beaumont Basin.

After visiting the sites and evaluating historical water levels, it was decided that there was no need to monitor water levels in the southern portion of the Calimesa Basin since the changes in static water levels are very small. Figure 8 illustrates historical water levels at Wells No. 1, No. 3, and No. 5 since 2011. The following observations are made;

- ✓ The water level over the last 10 years at Wells No. 1 and No. 3 has changed minimally. These wells are observation wells with no pump equipment installed.
- ✓ The water level at Well No. 5, a pumping well, fluctuates between 300 and 350 ft below ground as a result of seasonal pumping. Over the 10-year period, there is no trend as levels are relatively flat.

Due to the current pandemic, all communications with owners of potential well sites have stalled. We will restart communications in the future as the country gradually goes back to normal. The following sites are being considered:

- ✓ Catholic Dioceses of San Bernardino-Riverside counties, near Rancho Calimesa Mobile Home Park has three abandoned wells. Two of these wells cannot be used at this time because the probe could not be lowered; however, the third site has great potential. This well is approximately 400 ft deep and the water level is at approximately 160 feet below ground.
- ✓ Sharondale Well No. 1 – This well is operated by Clearwater Operations. We initiated contact with this company to install a water level probe at this well, but progress has not been made.
- ✓ At Plantation by the Lake, another potential monitoring well site, communications with owner have not be reestablished.



Wells with Working Monitoring Probes

Bonita Vista No. 2	BCVWD Old 15 (Banning)
Noble Creek Ponds 4 Deep	Summit Cemetery No. 1
Noble Creek Ponds 4 Shallow	Sun Lakes Golf Course
Noble Creek Park	Banning M-8
BCVWD No. 2	Banning M-9
BCVWD No. 25	YVWD No. 34
BCVWD No. 29	Tukwet Golf Course "B"
Oak Valley Partners No. 5	ICON Warehouse

Potential Monitoring Wells

Desert Lawn	Sharondale Mesa Owners A.
Rancho Calimesa Mobile HP	

Beaumont Basin Watermaster - Monitoring Wells

BCVWD No. 29

Tukwet Golf Course "B"

Map Features

- Monitoring Well or Inactive Production Well

Figure No. 2
Static Groundwater Elevations at YVWD No. 34 and Oak Valley No. 5
 (July 29, 2015 through Jul 26, 2021)

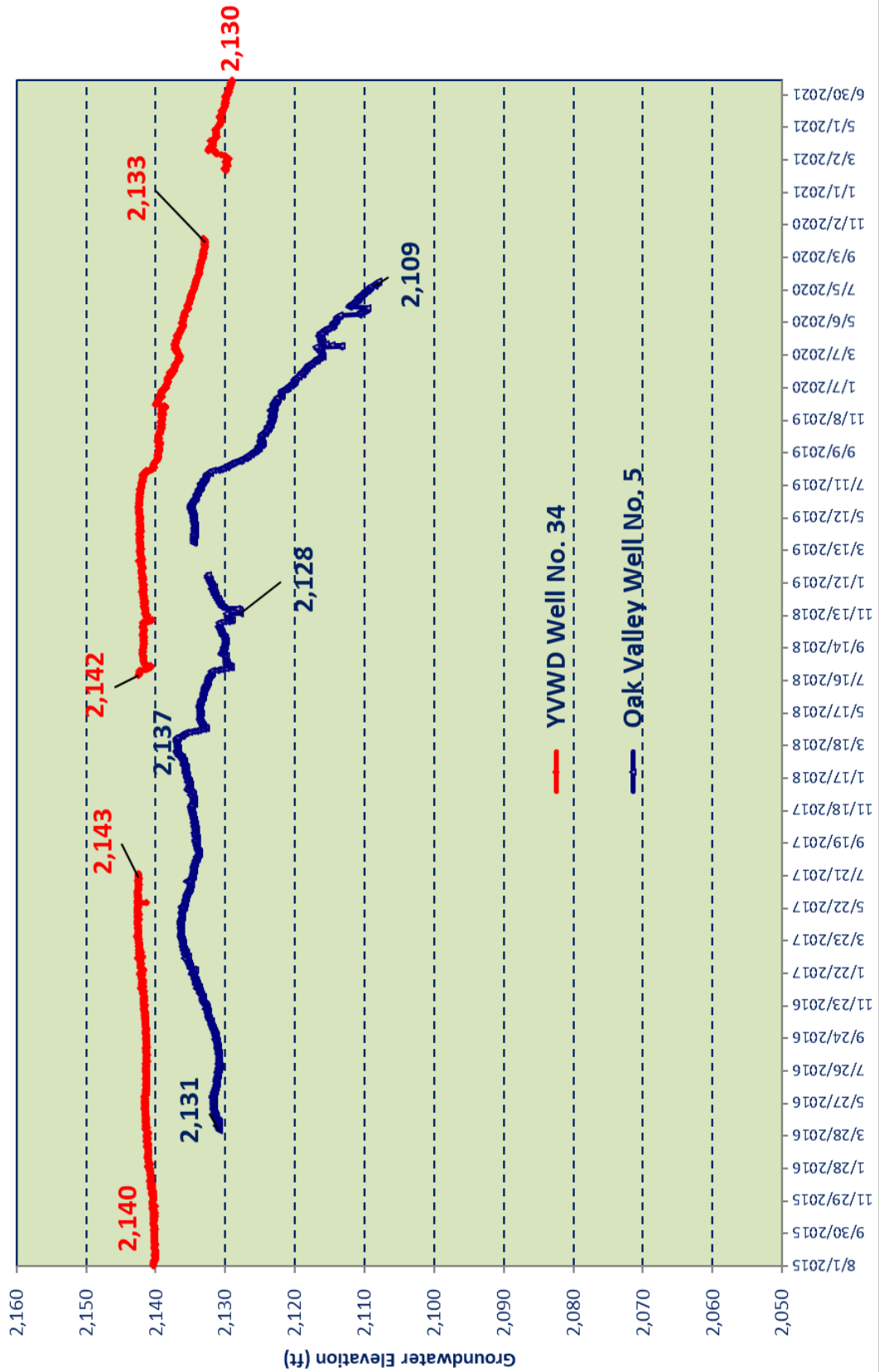


Figure No. 3
Static Groundwater Elevations at Noble Creek Obs. Well 4S and 4D
 (May 28, 2015 through Jul 26, 2021)

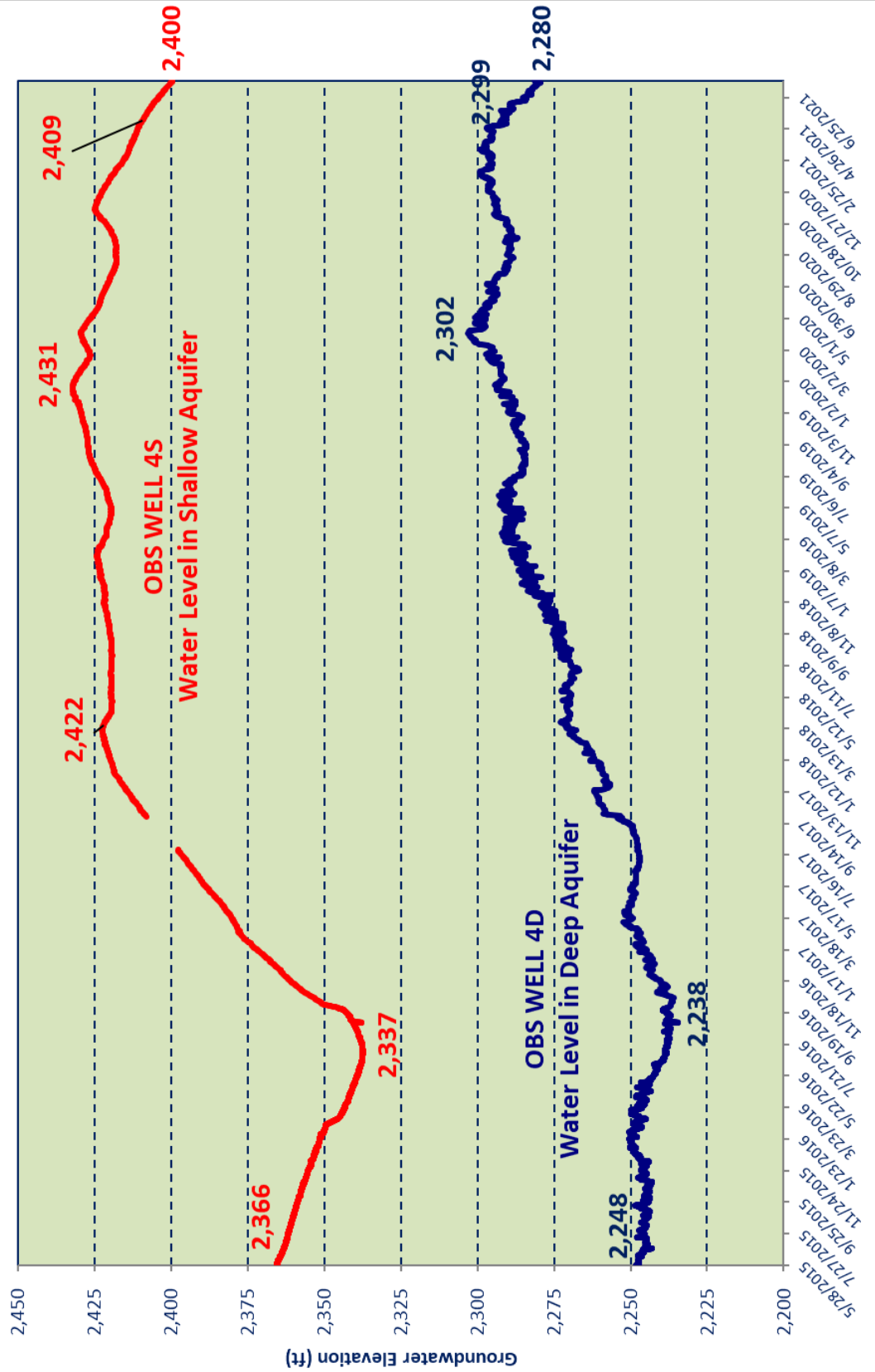


Figure No. 4
Static Groundwater Elevations at Summit Cemetery and Sun Lakes Wells
 (May 28, 2015 through Jul 26, 2021)

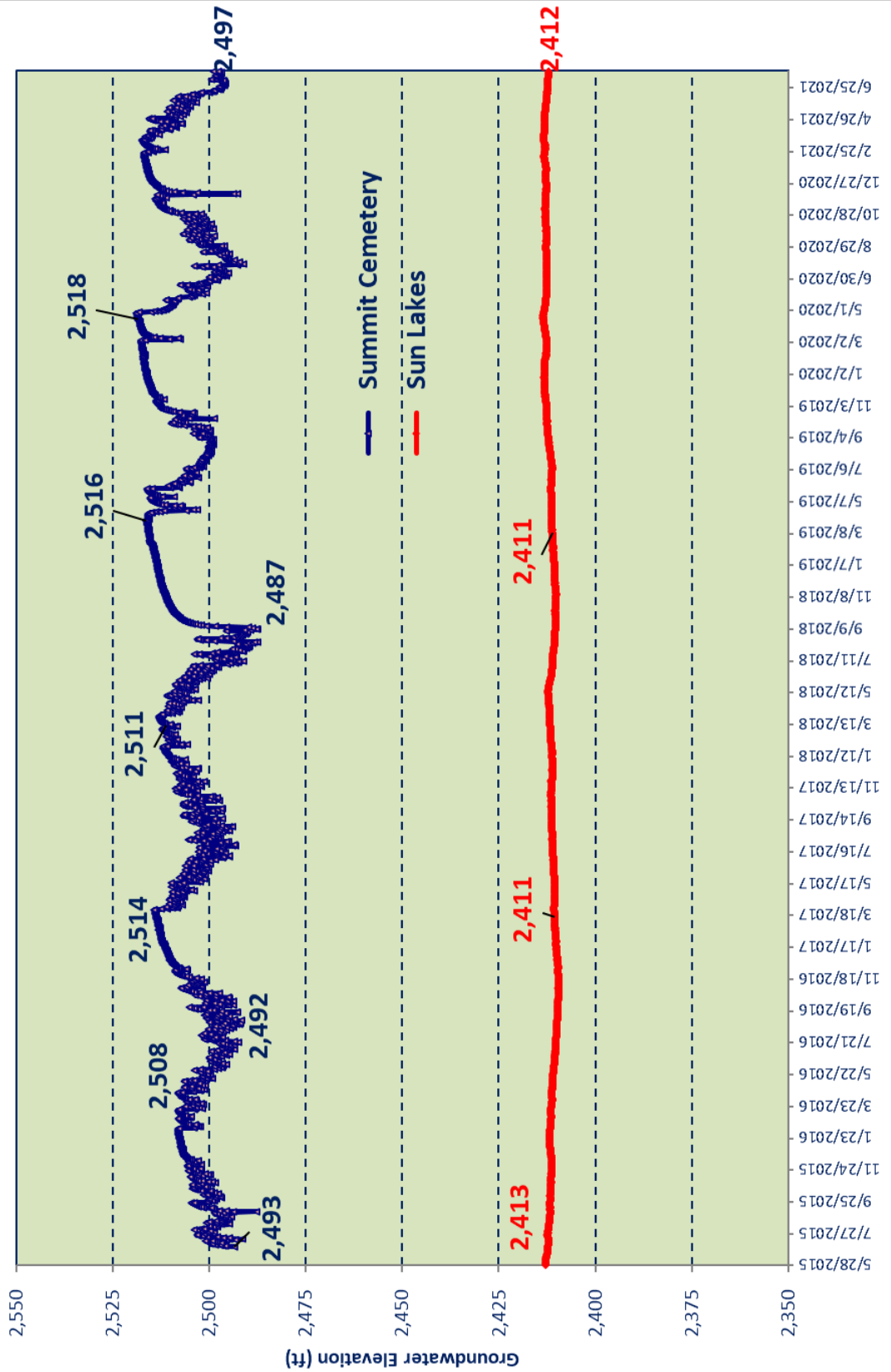


Figure No. 5
Static Groundwater Elevations in the Banning Area
 (May 28, 2015 through Jul 26, 2021)

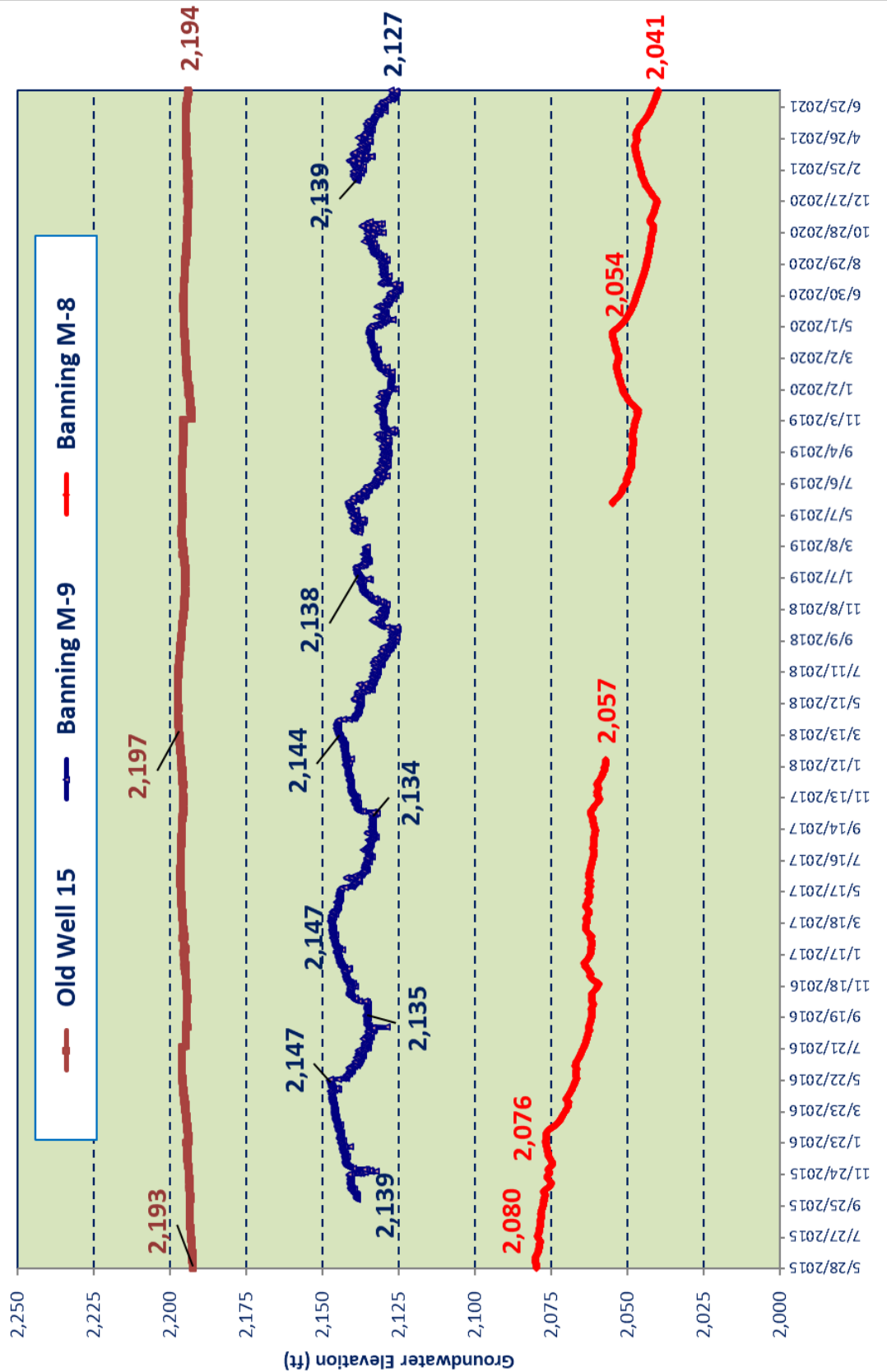


Figure No. 6
Static Groundwater Elevations at BCVWD Wells No. 2 and 25
 (May 28, 2015 through Jul 26, 2021)

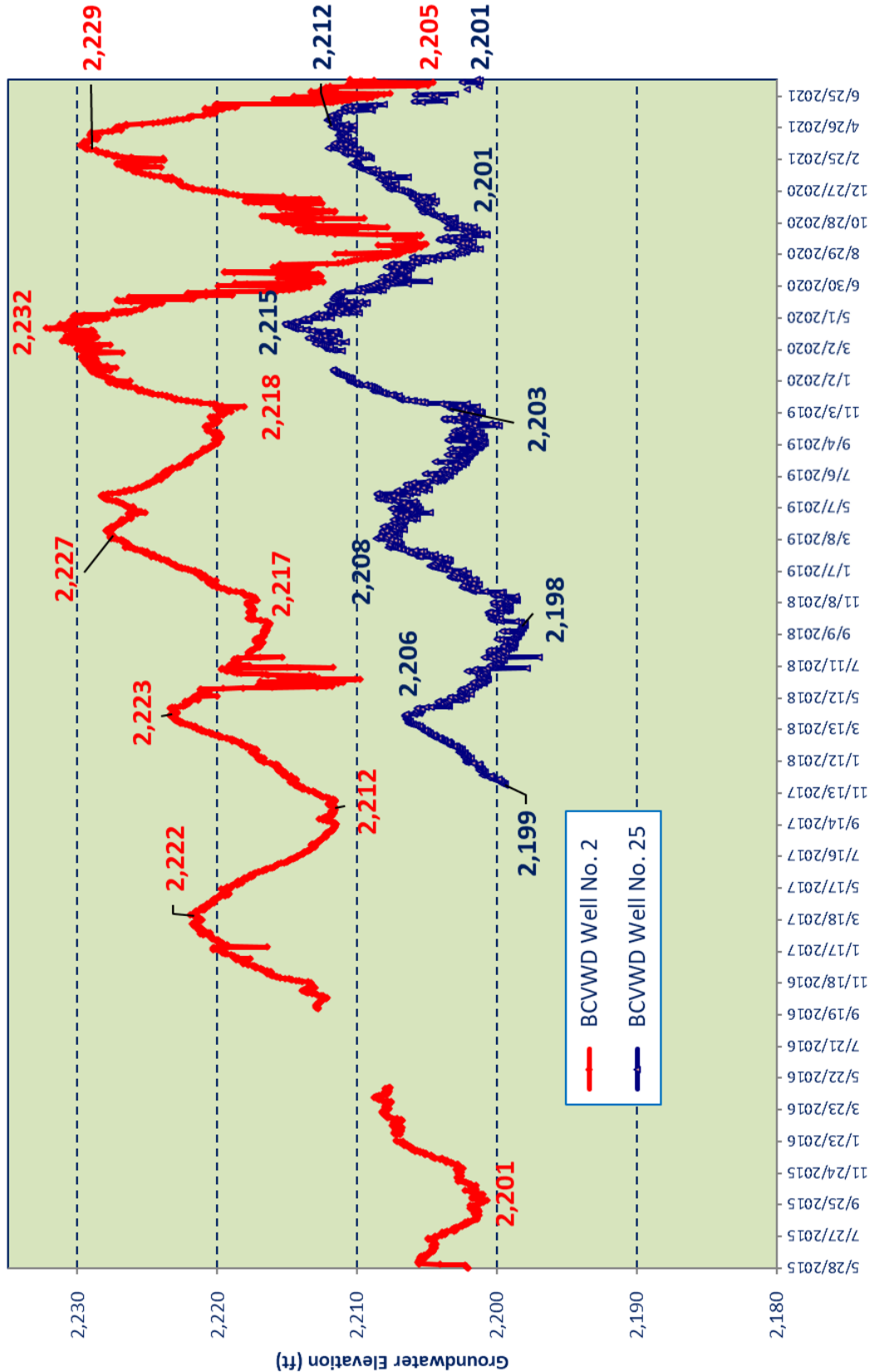
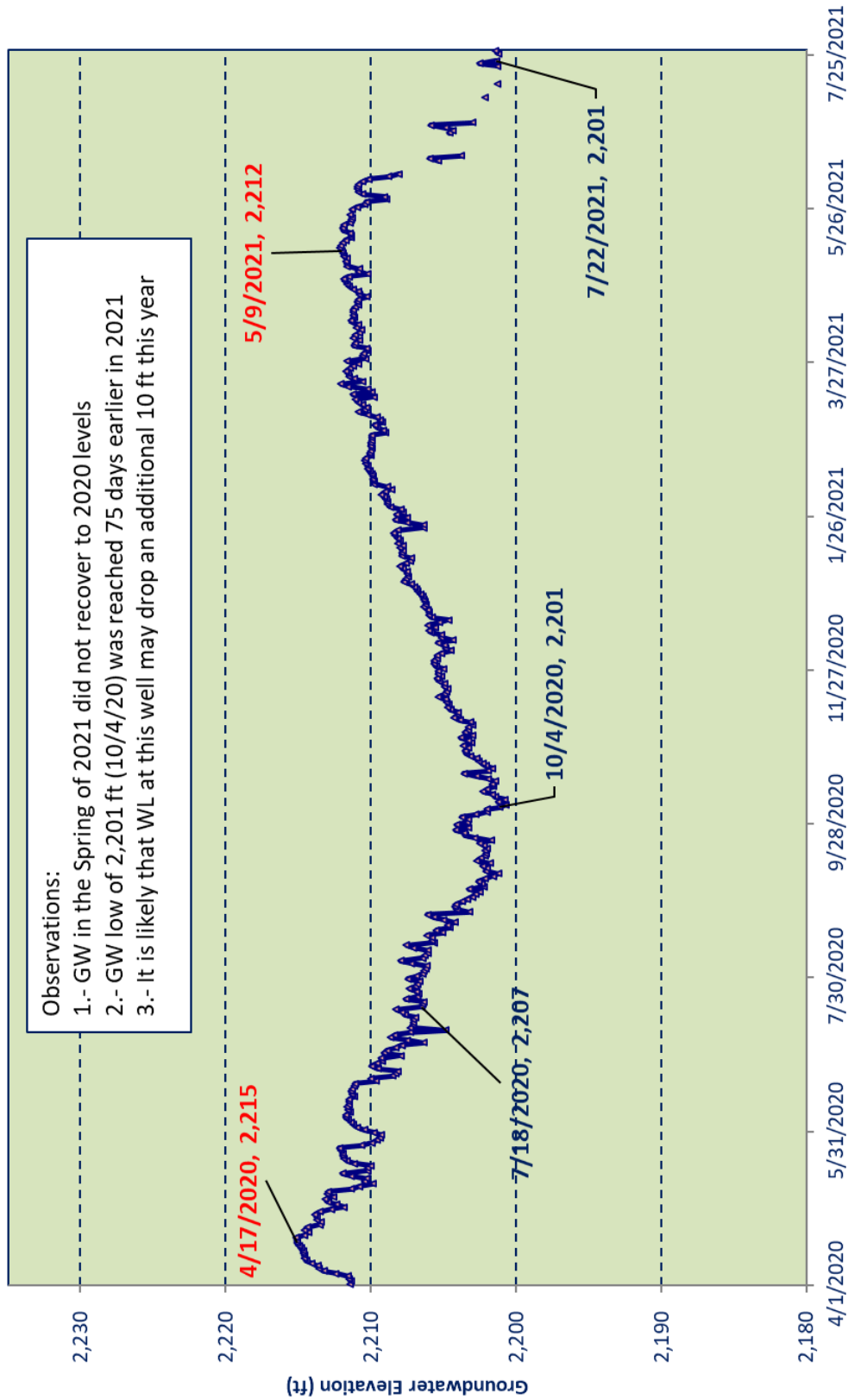


Figure No. 6A
Static Groundwater Elevations at BCVWD Well No. 25
(Apr 1, 2020 through Jul 26, 2021)



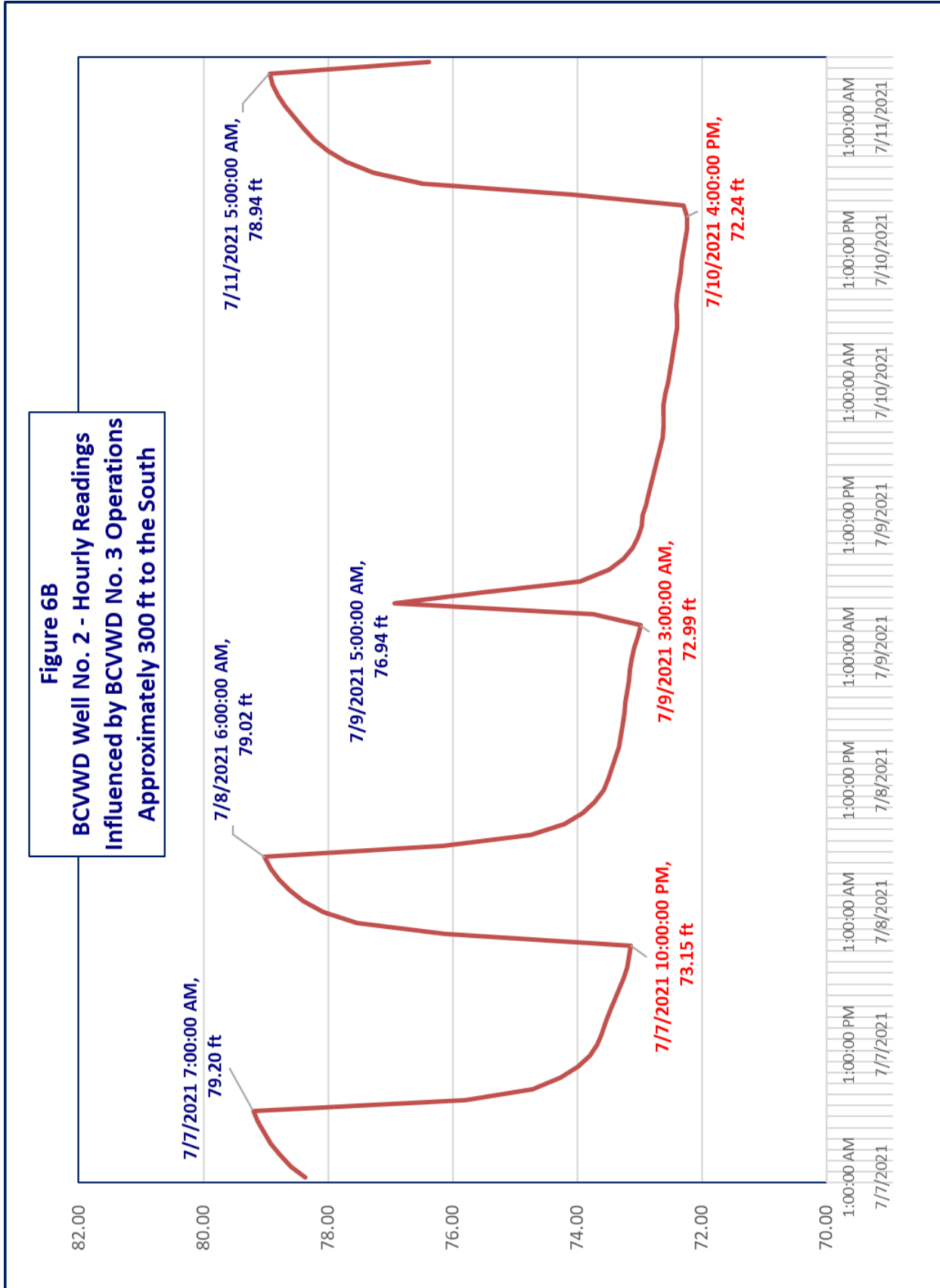
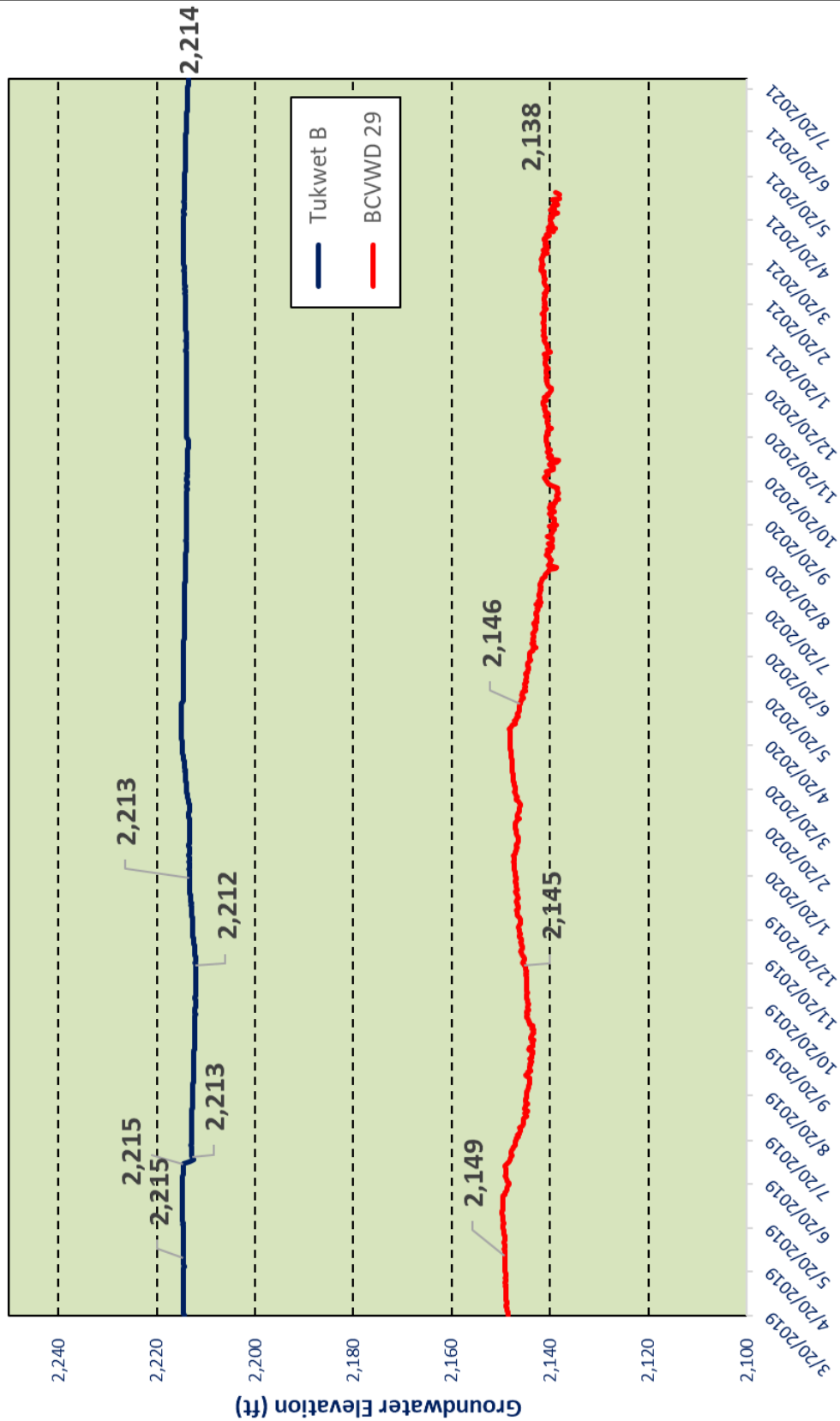


Figure No. 7
Static Water Level at BCVWD No. 29 and Tukwet Cyn Well B
(Mar 20, 2019 through Jul 26, 2021)



BEAUMONT BASIN WATERMASTER

MEMORANDUM NO. 21-29

Date: August 4, 2021

From: Hannibal Blandon, ALDA Inc.

Subject: Production and Allowable Extractions through June 2021

Recommendation: No recommendation - For informational purposes only

This Technical Memorandum presents a comparison of production rights from the Basin against actual production by Appropriators. Production rights consist of the sum of: a) unused production by overlying users from 2016 as transferred to Appropriators for 2021; b) transfers of overlying water rights from OVP to YVWD to serve certain parcels within the Basin; and c) imported water spreading. Final numbers will be documented in the 2021 Annual Report.

Total production by Appropriators for the first six months in 2021 was 7,675 ac-ft. Imported water spreading was reported at 1,671 ac-ft exclusively by BCVWD with no imported water delivered in May and June. Allowable production for the reporting period was estimated at 6,617 ac-ft. Transfers of Overlying Production from OVP to YVWD were 183.05 ac-ft. Overall, Appropriators have produced 116 percent of their allowable production during the first six months of the year. These numbers are anticipated to change as agencies continue to spread imported water. The table also lists the amount of water in storage for each agency as of the end of 2020, which is also available for production, if needed. All numbers are reported in ac-ft.

	City of Banning	Beaumont Cherry Valley W. D.	South Mesa Mutual W. C.	Yucaipa Valley W. D.	Total
Transfer of Overlying Rights from 2016	1,497	2,025	594	647	4,763
Transfer of Overlying Rights - OVP to YVWD	0	0	0	183	183
Imported Water	0	1,671	0	0	1,671
Total	1,497	3,696	594	830	6,617
Production	1,479	5,445	169	582	7,675
% of Total	98.8%	147.3%	28.5%	70.1%	116.0%
Storage Impact	18	(1,749)	425	248	(1,058)
Water in Storage as of Dec 2020	50,889	39,750	10,134	16,288	117,533

BEAUMONT BASIN WATERMASTER

MEMORANDUM NO. 21-30

Date: August 4, 2021

From: Thomas Harder, Thomas Harder & Company

Subject: Return Flow Accounting Methodology presentation of final Technical Memorandum and comments

Recommendation: That the Watermaster Committee accepts the final Technical Memorandum, findings and recommendations

In consideration of the fact that irrigation return flow contributes to the Safe Yield of the Beaumont Basin, the Beaumont Basin Watermaster Board (Watermaster) directed ALDA/Thomas Harder & Co. (ALDA/TH&Co) to develop a methodology to account for the return flow that occurs overlying each Appropriator service area. Under Task No. 17, the work was started in 2018 and resulted in submittal of a draft return flow methodology in July 2019. Per the Watermaster's direction, this return flow methodology was updated to account for:

1. Modifications to indoor/outdoor water use for the City of Banning and YVWD
2. Further evaluation of landscape irrigation efficiency
3. Incorporation of commercial water deliveries as an additional water delivery account type
4. Pipeline losses and infiltration and inflow
5. Potential changes in total dissolved solids (TDS) concentration in groundwater associated with return flow

The refined methodology was applied to the most recent complete set of available water delivery data (2019). Preliminary results of this analysis were presented at the February 2021 regular meeting.

A draft Technical Memorandum (TM) summarizing the revised and updated return flow methodology was provided at the June 2021 meeting; review of the report and comments were requested. Comments provided by Mr. Vela, City of Banning, are attached.

At the August 4, 2021 Board meeting, TH&Co will present the final TM, respond to the comments submitted, and address any additional comments that members of the Watermaster Committee may have.

Return Flow Analysis Comments

From: Arturo Vela (avela@banningca.gov)

To: blandona@aldaengineering.com; tharder@thomashardercompany.com

Date: Tuesday, July 20, 2021, 10:14 PM PDT

Hannibal/Tom,

Here are my comments on the Return Flow Analysis:

- Page 7: 1st sentence at top of page, Correct spelling "Over"
- Page 8, Section 2.5.1, Irrigation Efficiency
 - I'm curious if the irrigation efficiency factor varies throughout the year (winter vs. summer). Is the recommended value an average?
- Page 10, Section 2.5.4
 - It's noted that the return flow from the Morongo Golf Course is not included. This may be more a policy comment, but I assume that Morongo will want to credit return flow back to their storage account.
- Page 10, Section 2.5.5
 - It's noted that the return flow from construction in 2019 was 11 acre-ft. Is this sole reason that we are considering it negligible? If so, when do consider not negligible. In Banning, there has been a major increase in water for construction (i.e. grading) purposes.

I do not have any comments on the Impacts to Groundwater Quality analysis.

Good job gents!

Arturo Vela, P.E.

Director of Public Works/

City Engineer

Public Works Department

City of Banning
Direct Line: 951-922-3134

Direct Fax: 951-922-3141

avela@banningca.gov

99 E. Ramsey Street

Banning, CA 92220



BEAUMONT BASIN WATERMASTER MEMORANDUM NO. 21-31

Date: August 4, 2021

From: Hannibal Blandon, ALDA Inc.

Subject: Task Order No. 27 to Provide Electronic Files of the Groundwater Model of the Beaumont Basin to the City of Beaumont

Recommendation: That the Watermaster Committee considers the approval of this task order at a cost not to exceed \$15,000.

In May of this year, the City of Beaumont requested the computer files required to run the Beaumont Basin groundwater flow model. We made these files available to the City via a Drop Box account on June 9, 2021, following notification of the Beaumont Basin Watermaster Board on June 2, 2021. In addition, the City requested copies of all Beaumont Basin Watermaster annual reports dating back to 2011. These reports were made available to Mr. Hart via e-mail in early June 2021.

Recently, we received an e-mail from the City requesting additional files, data and information supplemental to the original modeling files requested. The attached scope of services details the City's request for additional information.

We have prepared the attached scope of services for Task Order No. 27 to include the initial delivery as well as the second data request. In addition, we allowed a few additional support hours, under Task No. 3 of the scope of services, should they be needed.

In our experience in other groundwater basins, requests from individual agencies for the sole benefit of said agency are normally handled either by said agency contracting directly with the consulting firm or by creating a stand-alone task order.

For the sake of transparency, we would like to handle this through a separate task order, as noted herein.

ALDA Inc.

5928 Vineyard Avenue
Alta Loma, CA 91701
Tel: (909) 587-9916
Fax: (909) 498-0423

August 4th, 2021

Joseph B. Zoba, Treasurer
Beaumont Basin Watermaster
Yucaipa Valley Water District
12770 Second Street
Yucaipa, California 92399

Subject: **Beaumont Basin Watermaster – Task Order No. 27
Provide Groundwater Modeling Support to the City of Beaumont**

Dear Mr. Zoba:

Please find attached our proposed scope of services and consulting fee for Task Order No. 27 under the Engineering Services contract with the Beaumont Basin Watermaster dated May 10, 2012 and amended in February 2017. The proposed scope of services includes three tasks as follows:

Task 1 – Initial delivery of groundwater modeling files and annual reports

Task 2 – Delivery of additional electronic files as requested by the City of Beaumont

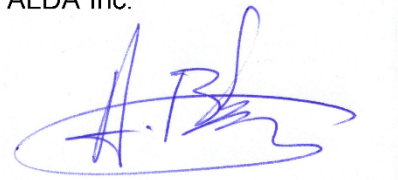
Task 3 – Additional miscellaneous support

While we have already completed Task 1, we would like to bring all three tasks under a single Task Order No. 27. PI

We welcome your review of our proposed scope services. Should you have any questions on our proposed services or need further information, please contact us at 909-587-9916 during normal business hours.

Very truly yours

ALDA Inc.



F. Anibal Blandon, P.E.
Principal

Beaumont Basin Watermaster – Task Order No. 27
Provide Groundwater Modeling Support to the City of Beaumont

Aug 4th, 2021

TASK OBJECTIVES

The objective of Task No. 27 is to provide technical support to the City of Beaumont by delivering electronic files of the existing groundwater model and associated databases and tables.

SCOPE OF SERVICES

Task 1 – Initial Delivery of Supporting Information

The ALDA/TH&Co team collected, compiled, and tabulated the following information:

- ✓ Electronic files to run the Beaumont Basin Groundwater flow model
- ✓ Electronic copies of all annual reports dating back to 2011

This task has already been completed. Actual expenditures were as follows:

Hours: 16.5 Hours

Consulting Cost: \$2,765.00

Task 2 – Preparation of Additional Electronic files and Associated Databases

The ALDA/TH&Co team will collect, compile, and tabulate the following information:

- ✓ Provide coordinate system x offset and y offset for the groundwater model
- ✓ Define the first stress period for the groundwater model
- ✓ Provide all electronic files, data, databases, excel files and GIS files covering the area of the Beaumont Basin and surrounding areas
- ✓ Provide all electronic files to run the Beaumont Basin Groundwater flow model
- ✓ Provide all data, including, but not limited to
 - Well data including related tables/databases
 - Well logs (if scanned)
 - Beophysical logs (if scanned)
 - Xurface and measuring point elevations
 - owner, x-y locations, use, status, lithology (if compiled in a database or tables)
 - Construction, and aquifer testing
 - Groundwater production tables/database
 - Groundwater levels tables/database/GIS files
 - Groundwater and surface water quality tables/database/GIS files
 - Imported water quality and delivered volumes tables/database
 - Testing and operational details for BCVWD and SGPWA spreading basins including recharge volumes, capacities and recharge rates
 - Stream flow measurements and estimates tables/databases

Beaumont Basin Watermaster – Task Order No. 27
Provide Groundwater Modeling Support to the City of Beaumont

Aug 4th, 2021

- Provide surface water diversion locations (GIS files) and volumes and diverter tables/databases
- Provide stormwater recharge facilities shape files and recharge volume tables/databases
- Provide BCWWD non-potable conveyance facilities shape files
- Provide creeks and surface water features shape files

Estimated Hours: 84 Hours

Estimated Cost: \$10,790.00

Task 3 – Additional Miscellaneous Support

The ALDA/TH&Co team will provide additional support related to the delivery of the Groundwater model as needed.

Estimated Hours: 12 Hours

Estimated Cost: \$1,445.00

SCHEDULE

The requested data will be delivered within 45 calendar days after approval.

COST ESTIMATE

Our estimated cost to perform the scope of work as outlined herein is \$15,000.00 (Fifteen Thousand and 00/100); this estimate is based on 113 technical and administrative hours.

Beaumont Basin Watermaster – Task Order No. 27
 Provide Groundwater Modeling Support to the City of Beaumont

Aug 4th, 2021

**Beaumont Basin Watermaster
 Billing Rates for Task Order No. 27**

Billing Rates for ALDA Inc.

Billing rates for Task Order No. 27:

<u>Position</u>	<u>Hourly Rate</u>
Project Manager	\$180.00
Project Engineer	\$150.00

Billing Rates for Thomas Harder and Company

Billing rates for Task Order No. 27:

<u>Position</u>	<u>Hourly Rate</u>
Principal Hydrogeologist	\$180.00
Senior Hydrogeologist	\$140.00
Project Hydrogeologist	\$120.00
Staff Hydrogeologist	\$ 95.00
Field Technician	\$ 70.00
Graphics	\$ 85.00
Clerical	\$ 65.00
Expert Witness	\$360.00

BEAUMONT BASIN WATERMASTER MEMORANDUM NO. 21-32

Date: August 4, 2021

From: Hannibal Blandon, ALDA Inc.

Subject: Electronic Delivery of Annual Report

Recommendation: That the Watermaster Committee considers the delivery of annual reports, both draft and final, in electronic format unless an individual member or agency would prefer hard copies of individual reports.

Prior to the current COVID-19 pandemic, hard copies of the draft and final of the Consolidated Annual Report and Engineering Report were hand delivered to all members of the Watermaster Committee. The 2017 annual report was the last report that was delivered in this format.

Final copies of the Consolidated Annual Report and Engineering Report for 2018 (June 2020), 2019 (April 2021), and 2020 (June 2021) were all delivered in PDF format. Individual agencies provided comments to the draft of the reports by noting their input on the original PDF files or by separate electronic correspondence.

While we are moving towards a paperless society, we understand that there may be some agencies and individuals that would still like to receive hard copies of said reports. You should be aware that the cost of printing 12 reports is estimated at approximately \$1,000.00 including printing cost and coordination hours. Actual cost varies depending on the number of pages of individual reports. This cost represents an estimated annual cost of \$2,000.00 to provide the draft and final reports.

While we have available budget to print these reports, we would like the Watermaster Committee to consider using electronic versions of the report only unless an agency or member would like to receive hard copies. This request is for all annual reports starting with Calendar Year 2018.

Further, delivery of annual reports in electronic format makes for good environmental use of our natural resources.