



CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

BOARD OF DIRECTORS MEETING

Board of Directors

Cory Bantilan Chair, Santa Barbara County Water Agency
Matt Vickery Vice Chair, Cuyama Basin Water District
Arne Anselm Secretary, County of Ventura
Byron Albano Treasurer, Cuyama Basin Water District
Rick Burnes Cuyama Basin Water District
Jimmy Paulding County of San Luis Obispo

Zack Scrivner County of Kern
Das Williams Santa Barbara County Water Agency
Deborah Williams Cuyama Community Services District
Jane Wooster Cuyama Basin Water District
Derek Yurosek Cuyama Basin Water District

AGENDA

July 12, 2023

Agenda for a meeting of the Cuyama Basin Groundwater Sustainability Agency Board of Directors to be held on Wednesday, July 12, 2023, at 2:00 PM at the **Cuyama Valley Family Resource Center 4689 CA-166, New Cuyama, CA 93254**. Participate via computer at: <https://rb.gy/04ube> or by going to Microsoft Teams, downloading the free application, then entering Meeting ID: 264 661 085 508 Passcode: FsqpJf or enter or telephonically at (469) 480-3918 Phone Conference ID: 775 076 319#

Teleconference Locations:

4689 CA-166, New Cuyama, CA 93254	105 E. Anapamu St. Santa Barbara, CA 93101	800 S. Victoria Ave. Ventura, CA 93009
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The order in which agenda items are discussed may be changed to accommodate scheduling or other needs of the Board or Committee, the public, or meeting participants. Members of the public are encouraged to arrive at the commencement of the meeting to ensure that they are present for discussion of all items in which they are interested.

In compliance with the Americans with Disabilities Act, if you need disability-related modifications or accommodations, including auxiliary aids or services, to participate in this meeting, please contact Taylor Blakslee at (661) 477-3385 by 4:00 p.m. on the Friday prior to this meeting. The Cuyama Basin Groundwater Sustainability Agency reserves the right to limit each speaker to three (3) minutes per subject or topic.

1. Call to Order
2. Roll Call
3. Pledge of Allegiance
4. Standing Advisory Committee Meeting Report

CONSENT AGENDA

Items listed on the Consent Agenda are considered routine and non-controversial by staff and will be approved by one motion if no member of the Board or public wishes to comment or ask questions. If comment or discussion is desired by anyone, the item will be removed from the Consent Agenda and will be considered in the listed sequence with an opportunity for any member of the public to address the Board concerning the item before action is taken.

5. Approve Minutes – May 3, 2023
6. Approve Payment of Bills for April and May 2023
7. Approve Financial Report for April and May 2023

ACTION ITEMS

All action items require a simple majority vote by default (50% of the vote). Items that require a super majority vote (75% of the weighted total) will be noted as such at the end of the item.

8. Discuss and Take Appropriate Action on DWR GSP Approval Staff Report
9. Discuss and Take Appropriate Action on Plan Amendment to Change Undesirable Results Criteria
10. Discuss and Take Appropriate Action on GSP Periodic Evaluation
11. Discuss and Take Appropriate Action on Precipitation Enhancement Study by Desert Research Institute
12. Discuss and Take Appropriate Action on Proposed Modifications to Water Use Reporting Procedures
13. Discuss and Take Appropriate Action on Well Registration Program
14. Discuss and Take Appropriate Action on a Monitoring Network Consultant Contract for FY 23-24

REPORT ITEMS

15. Administrative Updates
 - a) Report of the Executive Director
 - b) Report of the General Counsel
16. Technical Updates
 - a) Update on Groundwater Sustainability Plan Activities
 - b) Update on Grant-Funded Projects
 - c) Update on Active Well Dataset
 - d) Update on Potential Non-Reporting Pumpers
 - e) Update on April 2023 Groundwater Conditions Report
17. Report of Ad Hoc Committees
18. Directors' Forum
19. Public comment for Items Not on the Agenda
20. Correspondence

CLOSED SESSION

21. Conference with Legal Counsel – Anticipation Litigation
Significant Exposure to Litigation Pursuant to Government Code section 54956.9(d)(2)
 - (a) Number of Potential Cases: One
22. Adjourn

2023

Board Ad hocs

CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

1	Adaptive Management	Anselm Bantilan Vickery Yurosek
2	Basin-Wide Water Management Policy	Anselm Bantilan Williams, Deborah Yurosek
3	Fiscal Year 2023-2024 Budget	Bantilan Vickery Williams, Das Williams, Deborah Wooster
4	Central Management Area Policy	Anselm Bantilan Vickery Williams, Deborah Wooster
5	Grant-Funded Items	Albano Vickery Williams, Das Williams, Deborah
6	Unknown Extractors	Anselm Vickery

Standing Advisory Committee Report

Meeting Date: July 5th, 2023

Submitted to the CBGSA Board on July 12th, 2023

By Brenton Kelly, SAC Chair

The Standing Advisory Committee met at the Cuyama Valley Family Resource Center in a hybrid format, with four committee members present in-person and two on the conference line. GSA Staff Taylor Blakeslee was present, joined by Jim Beck and Brian Van Lienden and Alex Dominguez on the call, and several public members were on the videoconference. Committee member Draucker was not able to attend.

The SAC reviewed the DWR Approval Report and Recommendations and was asked to help staff and this Board to prioritize and set the timeline for the many topics and policy discussions needed as we move towards the Periodic Update in 2025.

In the SAC Committee Forum toward the end of the meeting, several community updates were given by committee members:

- It was suggested that the Twitchell Reservoir Sediment Removal Project was potentially interested in the reduction of sediment from the upper Cuyama Valley tributaries which could coincide with projects and actions that might also increase infiltration of groundwater before it gets into the river.
- The recent article in the *Santa Barbara Independent* titled '[A water war is underway in Santa Barbara Counties carrot country](#)' was noted for its honest take on how landowners—including the school district— are being impacted by the adjudication process.
- The permit for the North Fork Vineyard groundwater filled reservoirs was denied by the Santa Barbara County Planning Commission on the basis of environmental concerns. Harvard has appealed this decision to the SB County Board of Supervisors.

8. Discuss and Take Appropriate Action on DWR GSP Approval Staff Report

The SAC addressed each of DWR's five recommendations separately:

#1. Simulating the impacts to beneficial uses and users in the Northwestern Region

Committee Member Jaffe asked for more information regarding the well dataset and what areas it will cover. Mr. Van Lienden responded that the well data set will cover the entire basin.

Committee Member Jaffe commented there are three large reservoirs seeking approval to be built that will be filled with groundwater and asked if this can be incorporated in the analysis. Mr. Van Lienden replied this can be looked at if the reservoirs are approved.

#2. Depletions of Interconnected Surface Water caused by groundwater pumping

Chair Kelly asked if it is possible if the river channel survey by drone flight is photographic and if it can be used for vegetation classification. This could assist the GSA to both identify Groundwater Dependent

Ecosystems as well as the presence of invasive species like Tamarisk. Mr. Van Lienden replied this is an optional part of the survey, and may not be more useful information than the remote data provided by DWR.

Lynn Carlisle commented that information for vegetation classification can be used to inform efforts to control the spread of invasive species and the substantial consumption of water for a non-beneficial use. Mr. Van Lienden replied he would need to check whether that level of detail can be provided and what the cost would be.

#3. Improved Reliability of Water Supplies for Local Communities project

Chair Kelly asked if the Reliability of Water Supplies was being considered for the two other communities in the Cuyama Valley (Cuyama and Ventucopa) that are currently experiencing reliability issues with domestic water supply. Mr. Van Lienden said no such considerations are currently being made.

#4, Establishing Sustainable Management Criteria for Nitrate

This discussion continued as it has over the years regarding the Regional Water Quality Control Board (RWQCB) and their jurisdiction over the regulation of Nitrates. If the RWQCB has the data, the CBSGA should coordinate and not duplicate those efforts.

The SAC expressed full support for coordinating with RWQCB and the Integrated Lands Project for data collection and reporting.

Vice Chair DeBranch asked if the corrective actions are requirements or just suggestions. Mr. Beck responded DWR did not identify these as a deficiency otherwise they would not have approved the plan. Mr. Beck continued to explain DWR made these comments as suggestions that we should strongly consider.

#5. Clarifying the frequency of collecting samples to analyze for arsenic and nitrate

Chair Kelly asked Staff how frequently groundwater quality samples should be taken. Mr. Beck replied the shortest interval would be annually and the longest it should be is every 3 years.

9. Discuss and Take Appropriate Action on Plan Amendment to Change Undesirable Results Criteria

The SAC agreed with Staff and voted unanimously to not take any action on this item at this time, and to put the effort towards the 2025 periodic update.

10. Discuss and Take Appropriate Action on GSP Periodic Evaluation

The ambitious schedule was discussed for reviewing the proposed updates for the GSP chapters and related policy items. Public engagement was discussed, and the effectiveness of the workshop timing was considered.

Lynn Carlisle suggested that a workshop on the relationship between the GSA and the adjudication process would be helpful for the community to help stakeholders understand the issues, including

requests for boundary modifications. Legal counsel Alex Dominguez responded this will be discussed with the Board and see what the Board would like to do.

11. Discuss and Take Appropriate Action on Precipitation Enhancement Study by Desert Research Institute

The SAC was somewhat split on the effectiveness of this project, but did generally agree that this contract would help to resolve these questions without too much expense. SAC voted in favor of cooperating with SB County on this cloud seeding report, with one abstention.

12. Discuss and Take Appropriate Action on Proposed Modifications to Water Use Reporting Procedures

The SAC felt that it may be too soon to change the photo requirements for the Well Meter Report. It was suggested to clarify the language to require a photo of the meter for every month the well was used.

It was also suggested that crop data (including crop type and acreage) was important to include on the meter report. The SAC encouraged Staff to effectively collect the data needed to understand “How much water each well was producing to irrigate what crops on which parcels”. The SAC felt that this may require different forms for the diversity of operations in the Valley.

SAC agreed with Staff that the chart of crop factors on the Small Pumper Form needs to be updated for accuracy in the high desert of Cuyama.

13. Discuss and Take Appropriate Action on Well Registration Program

The SAC agreed with the Well Registration Program as proposed. Staff reminded Stakeholders that there is also a form online to report any well issues. This form can be found on the Resource page of the CBGSA website: Cuyamabasin.org

Thank you for your consideration of our discussions,
Brenton Kelly
SAC Chairperson

Cuyama Basin Groundwater Sustainability Agency
Board of Directors Meeting

May 3, 2023

Draft Meeting Minutes

PRESENT:

Directors

Bantilan, Cory – Chair
Vickery, Matt – Vice Chair
Albano, Byron – Treasurer
Anselm, Arne – Secretary
Burnes, Rick
Reely, Blaine – Alternate for Jimmy Paulding
Williams, Das
Williams, Debby
Wooster, Jane
Yurosek, Derek
Zenger, Katelyn – Alternate for Scrivner, Zack

Staff

Beck, Jim – Executive Director
Hughes, Joe – Legal Counsel

ABSENT:

None

1. Call to Order

Cuyama Basin Groundwater Sustainability Agency (CBGSA) Chair Cory Bantilan called the meeting to order at 2:04 p.m.

2. Roll Call

Mr. Blakslee called roll (shown above) and informed Chair Bantilan that there was a quorum of the Board.

3. Pledge of Allegiance

The pledge of allegiance was led by Chair Bantilan.

4. Standing Advisory Committee Meeting Report

SAC Chair Brenton Kelly provided a report on the April 27, 2023, SAC meeting and is included below:

Standing Advisory Committee Report

Meeting Date: April 27th, 2023

Submitted to the CBGSA Board on May 3rd,
2023 By Brad DeBranch, SAC Vice-Chair

The Standing Advisory Committee met on April 27th both in person and by teleconference. Quorum was established by six committee members (four present in-person and two present via teleconference). GSA staff including Taylor Blakslee, Joshua Montoya, and Alex Dominguez were present with additional staff online including Brian Van Lienden. Public participation was comprised of approximately 10 members throughout the ~3 hour meeting. The SAC's feedback and recommendations are summarized below per each item of discussion.

Item 6. Discuss and Take Appropriate Action on Resolution No. 2023-051 Adopting Final Groundwater Allocations in the Central Management Area for 2023 and 2024

Staff provided an overview of the extensive landowner variance process that began many months ago. SAC comments included concerns related to the Santa Maria Union High School parcel and whether or not the property should be exempt from this groundwater allocation exercise. Staff and the SAC confirmed that this area is within the CCSD boundary and that they are receiving water from the CCSD, therefore should be exempt. One SAC member had concerns that a certain ranch within the CMA had a very high allocation that didn't seem "physically possible" based on property characteristics. As follow up to this discussion several committee members felt it was very important to ground-truth the data involved in establishing these groundwater allocations. The SAC received one public comment from a Duncan Family Farms legal representative who reiterated points made in a letter submitted to staff on April 27th. The SAC's understanding was that the letter requested further information from staff on the specifics of the allocation methodology and the data that was used in the model. The SAC also discussed the need to look closer at government owned lands that have been given an allocation, and to check whether or not those determinations are appropriate given land use data and locations of the subject parcels.

There was a **motion** to accept the proposed groundwater allocation with an adjustment to exclude all school parcels. The motion passed unanimously.

An additional **motion** was made recommending the Board to direct staff to ground-truth the model's groundwater numbers prior to allocations in 2025. The motion passed with one "no" vote.

Item 7. Review and Take Appropriate Action on Supplemental Section to GSP Sustainability Thresholds Chapter and Authorize 90-Day Notice to Cities and Counties for an Amendment to the GSP

Staff provided an overview of the analysis that was performed which, by Board direction, adjusted the minimum thresholds (MTs) by estimating projected 2025 groundwater elevations using recent trend lines. These MTs were adjusted to levels which did not impose additional impacts to production wells, domestic wells, or groundwater dependent ecosystems beyond what is currently projected with the current minimum thresholds.

Concerns by the SAC included technical issues such as not being able to fully understanding the total depth of wells relative to the adjusted change in minimum thresholds, and whether or not this revision to the MTs would have additional impacts to GDEs that yet to be known. Several committee members had interest to continue to review and vet the wells within the monitoring network in order to better grasp the history of each well and its construction information. There was also concern that this analysis is not based on science and only a way to avoid triggering

undesirable results. A majority of the SAC spoke in opposition to adjusting the minimum thresholds and were concerned about the downward trend in water levels, and felt that lowering the thresholds was a way to avoid the consequences. One committee member stated it would be better to extend the exceedance limit one more year rather than lowering the minimum thresholds.

Another committee member felt that adjusting the MTs would be a temporary solution to get us to the 2025 update which would likely result in new MTs/MOs based on observed data; and that it seemed unreasonable to not try and find a creative solution to the issue prior to implementing the interim allocation program.

A public comment was received from a landowner who expressed concerns that the current minimum thresholds were set more by political motivation rather than science and is in favor of extending the exceedance limit to three years.

There was a **motion** recommending that the Board not lower minimum thresholds, and not soften the undesirable results. The motion passed with 2 “no” votes.

Technical Updates & Other Discussion

Staff provided an update on their efforts working with landowners to install piezometers for continued monitoring within the basin. There was a plea to landowners to help participate in helping locate these monitoring devices. One SAC member recommended that staff should reach out to the US Forest Service who could potentially help in securing a monitoring device location.

There was discussion on the updated OPTI well system and whether or not water quality data was being integrated into the representative monitoring system. Staff reconfirmed that the RWQCB data is being utilized throughout the basin to assist in the overall monitoring efforts.

One SAC member requested further information on the groundwater adjudication and whether or not the GSA will get involved in the process. GSA counsel responded back informing the SAC that an update report was given at the previous meeting and that they would not be informing the public on potential legal strategy. Several SAC members replied saying that transparency in this process will help ease concern within the community.

Respectfully
Submitted, Brad
DeBranch
SAC Vice-Chair

CONSENT AGENDA

5-7. Consent Agenda

Chair Bantilan asked if any Directors wanted to move any of the consent items out to discuss in more detail. No request was made, and Chair Bantilan asked if there was a motion to approve consent agenda item nos. 5-7.

MOTION

Director Debby Williams made a motion to approve the consent agenda item nos. 5-7.

The motion was seconded by Director Burnes, a roll call vote was made and passed with 100%.

AYES: Albano, Bantilan, Burnes, Reely, Vickery, Debby Williams, Das Williams, Wooster, Yurosek, Zenger
 NOES: None
 ABSTAIN: None
 ABSENT: Anselm

ACTION ITEMS

8. Discuss and Take Appropriate Action on the Fiscal Year 2023-2024 Budget and Cash Flow

Mr. Blakslee provided an overview of the Fiscal Year 2023-2024 budget and cash flow which is provided in the Board packet.

 Director Anselm joined the meeting at 2:14 p.m.

Director Albano asked if the Board was aware the fault investigation was not grant funded. Mr. Beck replied staff did inform the Board the fault investigation was not funded by the grant.

Director Das Williams commented that the fault investigation should not be paid by the groundwater extraction fee when the analysis will not benefit everyone in the basin, but would support this item if it was supported by grant funding.

Director Debby Williams commented the fault investigation is critical to fill the data gaps and make decisions about water levels and allocations.

Director Yurosek asked staff if the fault investigation is valuable information to fill in the data gaps. Jim Strandberg replied the data would help staff understand how the water flows between the faults and improve the model.

Robbie Jaffe said the study on the faults is important for the CBGSA to better understand the Basin.

Attorney Sean Hood commented that work to understand the faults is occurring in the context of the adjudication and will be made available to the public and recommended the \$330,000 be put to better use.

Director Albano commented it is not the CBGSA's responsibility to begin studies to support the adjudication.

Director Vickery asked for further clarification on how the study on the faults will only benefit the large pumpers. Director Das Williams commented that there is a perception that it will only benefit the large pumpers and it is not a good use of the extraction fee. Director Vickery replied the study would help fill data gaps and it was the Boards understanding the Basin would be

studied more to make more informed decisions prior to the 2025 GSP update. Director Vickery further explained the perception that the fault investigation only supports the large pumpers is incorrect.

Director Wooster commented it is important to know more about the basin and the fault investigation will help the CBGSA fill data gaps.

Director Reely asked on a scale 1-10 how important is this study where 10 is critical. Mr. Beck replied it is a difficult question to answer, but it is important to get a better understanding of these faults and the rest of the basin.

Mr. Burnes asked how likely it is to have the fault investigation be paid by a grant. Mr. Beck replied more than likely a grant will probably not be able to pay for this investigation prior to the 2025 GSP update.

MOTION

Director Yurosek made a motion to approve the Fiscal Year 2023-2024 Budget as presented. The motion was seconded by Director Zenger, a roll call vote was made and passed with 82%.

AYES: Anselm, Bantilan, Burnes, Reely, Vickery, Debby Williams, Wooster, Yurosek, Zenger
 NOES: Albano, Das Williams
 ABSTAIN: None
 ABSENT: None

9. Discuss and Take Appropriate Action on Consultant Task Orders for Fiscal Year 2023-2024

Mr. Blakslee reviewed the Hallmark Group and Woodard & Curran task orders for consideration of Board approval and were included in the Board packet. He noted the task orders match the budgeted amounts approved by the Board under agenda item No. 8.

MOTION

Director Yurosek made a motion to approve the consultant task orders for Fiscal Year 2023-2024. The motion was seconded by Director Debby Williams, a roll call vote was made and passed with 100%.

AYES: Albano, Anselm, Bantilan, Burnes, Reely, Vickery, Debby Williams, Das Williams, Wooster, Yurosek, Zenger
 NOES: None
 ABSTAIN: None
 ABSENT: None

10. Discuss and Take Appropriate Action on Resolution No. 2023-051 Adopting Final Groundwater Allocations in the Central Management Area for 2023 and 2024

Mr. Beck provided background on the initial variance process and legal counsel Joe Hughes reviewed the second variance process and the Board's decisions from each variance process.

Director Vickery commented there were a few entities that did not have the asterisk indicating they were part of a farm unit. He also asked staff if there is a master list of questions/issues that have been asked during this allocation process that can be used when updating the allocation in 2025. Mr. Beck replied the Hallmark team has a list of items that will be used to in developing allocations for 2025.

Director Albano commented that the letter from Perkins Ranch correctly identifies a mistake the CBGSA Board made and the Board should reconsider the motion.

Director Vickery commented that Grimmway's variance request was not a request to change the methodology for the calculation of the allocations.

SAC Vice Chair DeBranch provided the SAC report on Adopting Final Groundwater Allocations in the Central Management Area for 2023 and 2024 which is provided in the SAC report.

Duncan Family Farms attorney Sean Hood commented that staff concludes there is an error in relation to the allocation for Duncan Family Farms, LLC and continued to say Duncan does not have the methodology for the allocations and repeatedly asked staff for this information.

Jim Markman commented that Sunrise Olive provided data to support an increase in Sunrise's allocation, but staff did not make any change.

MOTION

Director Albano made motion to approve Resolution No. 2023-051 Adopting Final Groundwater Allocations in the Central Management Area for 2023 and 2024 with the modification of removing the clause "...and do not represent a specific allocation to that particular owner/parcel within the farming unit" in the Grimmway variance request. The motion was seconded by Director Das Williams, a roll call vote was made and passed with 68%.

AYES:	Albano, Anselm, Bantilan, Reely, Debby Williams, Das Williams, Wooster
NOES:	Burnes, Vickery, Yurosek, Zenger
ABSTAIN:	None
ABSENT:	None

11. Review and Take Appropriate Action on Supplemental Section to GSP Sustainability Thresholds Chapter and Authorize 90-Day Notice to Cities and Counties for an Amendment to the GSP

Mr. Beck reviewed the background on the Board direction on adjusting the minimum thresholds (MT) which is provided in the Board packet. Mr. Van Lienden walked through the proposed adjustment to the MT's which is provided in the Board packet.

SAC Vice Chair DeBranch provided the SAC report on the Supplemental Section to GSP Sustainability Thresholds Chapter and whether to authorize the 90-Day notice to cities and counties for an amendment to the GSP which is provided in the SAC report.

Director Wooster agreed with the SAC's comments and noted the CBGSA cannot adequately set

MT's when the well depths are unknown.

Director Das Williams agreed with the SAC to not change the MTs.

Director Vickery asked what would happen if the CBGSA did nothing. Mr. Beck replied there are two components to consider. The first is whether groundwater levels will improve significantly from the recent storms affecting the MTs and he stated this is unlikely. The second consideration is undesirable results are expected to occur in July 2023 which will trigger being out of compliance with the GSP. DWR will then need to consider its course of action, which may include implementing a probationary status.

Director Vickery commented that the choice is either the CBGSA does nothing and is unclear on how DWR will react to the CBGSA being uncompliant or approve changes to the MTs.

Director Albano said the CBGSA needs to ground truth the monitoring wells this year and remove wells that are not providing useful data. Director Vickery responded if the MT is not changed there is a possibility DWR will step in and take over the CBGSA. Director Albano replied staff can speak with DWR and explain all the steps the CBGSA is taking to address the well's that have exceeded their MT levels for more than 2 years.

Director Das Williams commented he does not believe the CBGSA should change the MTs. He continued to say the Santa Barbara County Water Agency advocated to reduce pumping a year ago and the current situation is a result of not implementing management actions soon enough.

Director Yurosek commented staff's recommendation is to adjust the MT levels and it is important to listen to the people the CBGSA are paying to assess the data and provide recommendations.

Brenton Kelly commented the well measurements are at a historic low for that time of the year and doing nothing about it is the issue. Robbie Jaffe commented it is a big mistake to change the MTs and it misrepresents what the CBGSA is trying to do with the GSP.

Director Burnes commented that the CBGSA initially set MTs without using sufficient data and even now there are still data gaps. He continued to explain a more transparent compromise is to speak with DWR and explain the CBGSA needs another year to gather more information to accurately set MT levels.

Chair Bantilan asked if there have been any other GSA's that were allowed to have three years of levels below MTs. Mr. Van Lienden replied there have been a handful of other GSAs that adopted a 3-year period for their undesirable results criteria, but they are not classified as critically overdraft basins like the CBGSA.

Director Vickery commented he is not against supporting Director Burnes suggestion but it was staffs stance that it will be easier to bring changed MTs to DWR rather than ask for an additional year to the undesirable results criteria.

Chair Bantilan commented it is difficult to support changing the MT levels at this time.

MOTION

Director Yurosek made a motion to change the undesirable results criteria for groundwater levels from 2 to 3 years, update the supplemental section, and issue a 90-day notice to cities and counties to set a public hearing to amend the GSP. The motion was seconded by Director Debby Williams, a roll call vote was made and passed with 100%.

AYES: Albano, Anselm, Bantilan, Burnes, Reely, Vickery, Debby Williams, Das Williams, Wooster, Yurosek, Zenger
 NOES: None
 ABSTAIN: None
 ABSENT: None

12. Award a Contract for the Installation of Dedicated Monitoring Wells and Piezometers

Jim Strandberg reviewed the drilling quotes for the installation of dedicated monitoring wells and piezometers which is provided in the Board packet and recommend the Board select BC2.

MOTION

Director Albano made a motion to approve the staff recommendation selection of BC2 for the installation of dedicated monitoring wells and piezometers. The motion was seconded by Director Burnes, a roll call vote was made and passed with 100%.

AYES: Albano, Anselm, Bantilan, Burnes, Reely, Vickery, Debby Williams, Das Williams, Wooster, Yurosek, Zenger
 NOES: None
 ABSTAIN: None
 ABSENT: None

REPORT ITEMS

13. Administrative Updates

a. Report of the Executive Director

Mr. Blakslee provided an update on Hallmark Group progress and next steps and an overview of the CBGSA's expenses and budget-to-actuals, which are included in the Board packet.

b. Report of the General Counsel

Nothing to report.

14. Technical Updates

a. Update on Groundwater Sustainability Plan Activities

Mr. Van Lienden provided an update on the accomplishments for March and April 2023 which

are provided in the Board packet.

b. Update on Monitoring Network Implementation

Mr. Van Lienden provided an update on the monitoring network and landowner outreach which is included in the Board packet. He informed the Board there are two landowners who have agreed to allow a piezometers on their land and there was one person who declined the request.

c. Update on Opti Data Management System (DMS) Enhancements

Mr. Van Lienden provided an update on the Opti data management system enhancements which is provided in the Board packet.

15. Report of the Ad Hoc Committee

Nothing to report.

16. Directors' Forum

Nothing to report.

17. Public comment for Items Not on the Agenda

No comments.

18. Correspondence

No comments.

Public Hearing

19. Public Hearing – Groundwater Extraction Fee

Chair Bantilan opened the groundwater extraction fee public hearing at 4:30 p.m.

No public comments were provided.

20. Consider for Approval Resolution No. 2023-052 Setting a Groundwater Extraction Fee for Fiscal Year 2023-24 and Authorize Invoicing of Landowners

Mr. Beck reported on the budget ad hoc recommendation to set a reduced fee of \$12 per acre-foot for the upcoming fiscal year. He also noted that due to the recently awarded grant funds, the cash flow projections for the next three fiscal years will likely be significantly lower.

MOTION

Director Yurosek made a motion to adopt Resolution No. 2023-052 reducing the existing groundwater extraction fee of \$38 per acre-foot to \$12 per acre-foot and authorize invoicing of landowners. The motion was seconded by Director Burnes, a roll call vote was made and passed with 100%.

AYES: Albano, Anselm, Bantilan, Burnes, Reely, Vickery, Debby Williams, Das Williams, Wooster, Yurosek, Zenger

NOES: None

ABSTAIN: None

ABSENT: None

21. Closed Session

The Board adjourned to closed session at 5:21 p.m.

The Board returned from closed session at 5:39 p.m. and no reportable action was taken.

22. Adjourn

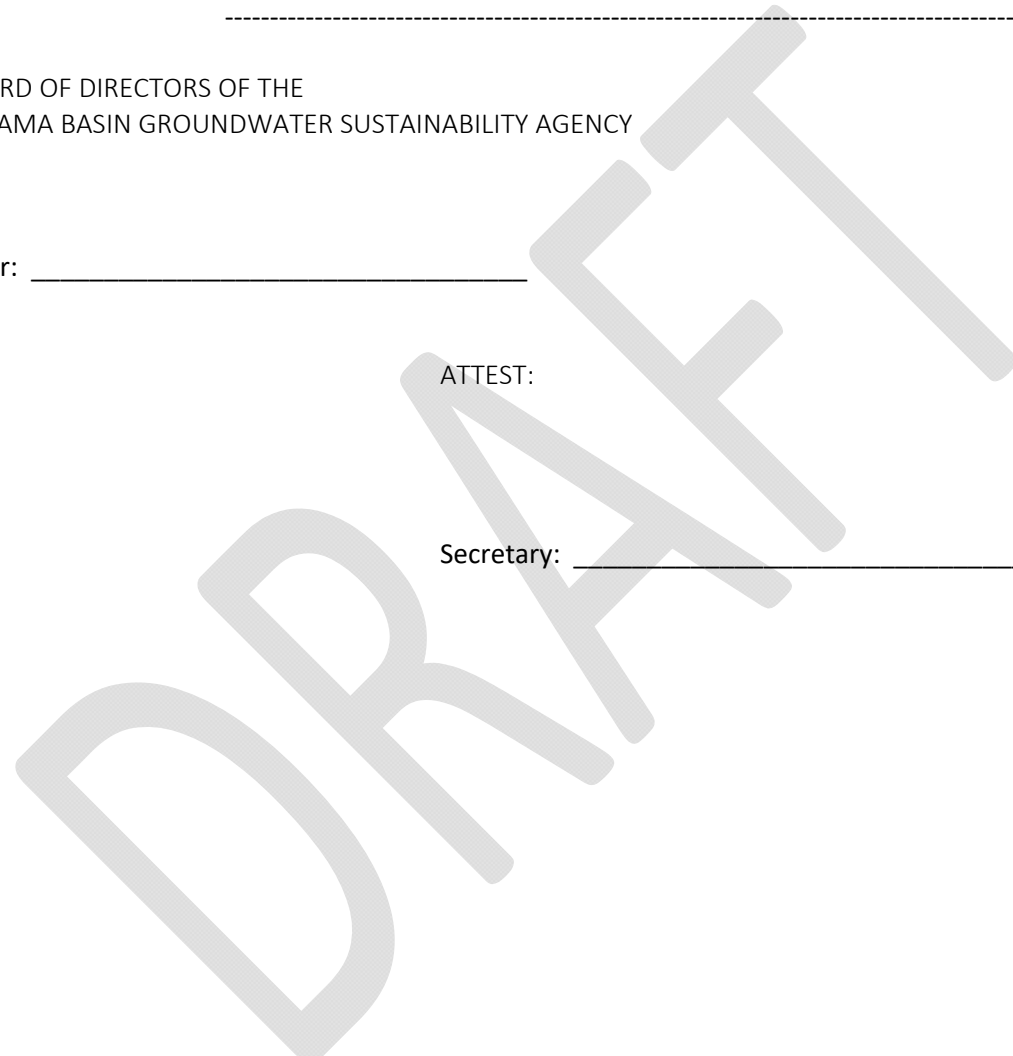
Chair Bantilan adjourned the meeting at 5:40 p.m.

BOARD OF DIRECTORS OF THE
CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

Chair: _____

ATTEST:

Secretary: _____





TO: Board of Directors
Agenda Item No. 6

FROM: Taylor Blakslee, Hallmark Group

DATE: July 12, 2023

SUBJECT: Approval of Payment of Bills for April and May 2023

Recommended Motion

Approve payment of the bills for April and May 2023 in the amount of \$219,351.59.

Discussion

Consultant invoices for the months of April and May 2023 are provided as Attachment 1 and summarized below.

Expense	April 2023	May 2023	Totals
W&C – Technical support services	\$ 95,109.47	\$66,055.48	\$161,164.95
Hallmark – Executive Director services	\$15,100.38	\$15,076.54	\$30,176.92
Klein – Legal services	\$10,226.00	\$8,008.50	\$18,234.50
P&P – Quarterly Groundwater level measurements	\$6,239.42	\$2,005.00	\$8,244.42
Mailed Notices – Well information surveys and non-reporting pumpers	-	\$1,530.80	\$1,530.80
TOTAL	\$126,675.27	\$92,676.32	\$219,351.59



INVOICE

Billed To:**Cuyama Basin GSA**

Attn: Jim Beck
4900 California Avenue, Ste B
Bakersfield, CA 93309

Please Remit Payment To:**The Hallmark Group**

500 Capitol Mall, Ste 2350
Sacramento, CA 95814
P: (916) 923-1500

Invoice No.: 2023-CBGSA-04**Date:** April 30, 2023**Agreement No.:** 201709-CB-001**Project:****Task Order:** CB-HG-008

For professional services rendered for the month of April 2023:

Task No.	Task Description	Personnel	Billing Classification	Hours	Rate	Amount
1	Board of Directors Meetings	J. Beck	Executive Director	2.75	\$ 350.00	\$ 962.50
		T. Blasklee	Project Manager	27.50	\$ 175.00	\$ 4,812.50
		J. Montoya	Project Coordinator	15.75	\$ 125.00	\$ 1,968.75
Total Task 1 Labor						\$ 7,743.75
2	Consultant Mgmt and GSP Impl	J. Beck	Executive Director	2.75	\$ 350.00	\$ 962.50
		T. Blasklee	Project Manager	4.50	\$ 175.00	\$ 787.50
		J. Montoya	Project Coordinator	0.50	\$ 125.00	\$ 62.50
Total Task 2 Labor						\$ 1,812.50
3	Financial Information Coordination	J. Harris	Project Controls	9.75	\$ 200.00	\$ 1,950.00
		T. Blasklee	Project Manager	7.00	\$ 175.00	\$ 1,225.00
		H. Fuentes	Project Controls Coordinator	0.50	\$ 150.00	\$ 75.00
		J. Montoya	Project Coordinator	2.00	\$ 125.00	\$ 250.00
Total Task 3 Labor						\$ 3,500.00
4	CBGSA Outreach	T. Blasklee	Project Manager	2.50	\$ 175.00	\$ 437.50
Total Task 4 Labor						\$ 437.50
5	Groundwater Extraction Fee Funding	J. Harris	Project Controls	0.00	\$ 200.00	\$ -
		T. Blasklee	Project Manager	2.25	\$ 175.00	\$ 393.75
		J. Montoya	Project Coordinator	1.00	\$ 125.00	\$ 125.00
Total Task 5 Labor						\$ 518.75
7	Central Management Area Policy	T. Blasklee	Project Manager	3.75	\$ 175.00	\$ 656.25
		J. Montoya	Project Coordinator	1.50	\$ 125.00	\$ 187.50
Total Task 7 Labor						\$ 843.75
Total Labor						\$ 14,856.25
	Other Direct Costs (ODC)	Mileage - Travel to Meetings (T. Blasklee 390.60 miles)				\$ 244.13
Total ODC						\$ 244.13
5% ODC Mark-Up						\$ -
TOTAL AMOUNT DUE THIS INVOICE						\$ 15,100.38

Maximum Contract Value and Progress Billing

Sub Task	Contract Value	Amendments/ Change Orders	Total Committed	Previously Billed	Current Billing	Remaining Balance
CB-HG-008	\$ 284,306.00	\$ 20,500.00	\$ 304,806.00	\$ 231,593.75	\$ 14,856.25	\$ 58,356.00
Other Direct Costs	\$ 5,694.00	\$ -	\$ 5,694.00	\$ 13,108.97	\$ 244.13	\$ (7,659.10)
Total	\$ 290,000.00	\$ 20,500.00	\$ 310,500.00	\$ 244,702.72	\$ 15,100.38	\$ 50,696.90

CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

PROGRESS REPORT FOR TASK ORDER CB-HG-008

Client Name:	Cuyama Basin Groundwater Sustainability Agency	Agreement Number:	201709-CB-001
Company Name:	HGCPM, Inc. DBA The Hallmark Group	Address:	500 Capitol Mall, Suite 2350 Sacramento, CA 95814
Task Order Number:	CB-HG-008	Report Period:	April 1-30, 2023
Progress Report Number:	50	Project Manager:	Jim Beck
Invoice Number:	2023-CBGSA-04	Invoice Date:	April 30, 2023

SUMMARY OF WORK PERFORMED

Task 1: Board of Directors and Advisory Committee Meetings

- Ordered Name Tags for Directors
- Drafted SAC minutes for meeting on March 23, 2023.
- Drafted Board minutes for meeting on March 29, 2023.
- Prepared and sent print shop post card for notice of public rate hearing.
- Completed Meeting Packet for SAC meeting on April 27, 2023, and Board meeting on May 3, 2023.
- Prepared for and facilitated SAC meeting on April 27, 2023.

Task 2: Consultant Management and GSP Implementation

- Correspondence with James Bishop on water quality.

Task 3: Financial Information Coordination

- Billing and administration.
- Drafted March progress report.
- Correspondence with Woodward and Curran (W&C) project manager Brian Van Lienden regarding the budget.
- Finalized budget and sent to the Budget ad hoc for review.
- Prepared for and facilitated Budget ad hoc on April 10, 2023.

Task 4: Cuyama Basin GSA Outreach

- Correspondence with Vaughn Easter regarding land purchase.
- Attended California Department of Water Resources (DWR) spring workshop on April 19, 2023.

Task 5: Groundwater Extraction Fee Funding

- Processed submitted water use forms.
- Drafted and finalized fiscal year 2023-2024 fee report.

Task 7: Management Area Policy

- Coordinated with print shop to send central management area allocations to stakeholders.
- Correspondence with Craig Parton regarding Sunridge model data for nurseries.
- Summarized variance information with Mr. Van Lienden.

DELIVERABLES AND COMPLETED TASKS

- Facilitated FY 23-24 budget ad hoc on April 10, 2023.
- Facilitated SAC meeting on April 27, 2023
- Attended DWR spring workshop on April 19, 2023.

PLANNED OBJECTIVES FOR NEXT REPORTING PERIOD

- Finalize work on Central Management Area policies and allocations.
- Draft final FY 23-24 budget and cash flow.
- Draft FY 23-24 Groundwater Extraction Fee report.

SIGNIFICANT ISSUES OR CHALLENGES (IF ANY) AND POTENTIAL RESOLUTIONS

- N/A

455 W. Fir Avenue
 Clovis, CA 93611
 (559) 449-2700
 Fax (559) 449-2715

EST. 1968
**PROVOST &
 PRITCHARD**
 CONSULTING GROUP
An Employee Owned Company

Cuyama GSA
 4900 California Ave., Tower B, 2nd Floor
 Bakersfield, CA 93309

May 10, 2023
 Project: No: 03930-22-001
 Invoice No: 100418

Project Name: Cuyama GSA-CBGSA Groundwater Level Monitoring for 2023

Client Project #:

Phase LVL 2022:

Appointment / Correspondence with well owners.

Quarterly levels monitoring event with travel.

Data development

Project management

Professional Services from April 1, 2023 to April 30, 2023

Phase: LVL Groundwater Level Monitoring

Labor

	Hours	Rate	Amount	
Assistant Engineer	40.50	126.00	5,103.00	
Project Administrator	.40	94.00	37.60	
Associate Envir. Spec	5.00	140.00	700.00	
Totals	45.90		5,840.60	
Total Labor				5,840.60

Reimbursable Expenses

Travel & Mileage			366.08	
Other Direct Reimb Expenses			32.74	
Total Reimbursables			398.82	398.82

Total this Phase: \$6,239.42

Total this Invoice \$6,239.42

Project 03930-22-001 CBGSA Groundwater Level Monitoring for 2 Invoice 100418

Billing Backup

Wednesday, May 10, 2023

Provost & Pritchard Consulting Group

Invoice 100418 Dated 5/10/2023

4:29:08 PM

Phase: LVL Groundwater Level Monitoring

Labor

		Hours	Rate	Amount
Assistant Engineer				
1026 - Poire, Luis	4/4/2023	.50	126.00	63.00
1026 - Poire, Luis	4/11/2023	.50	126.00	63.00
1026 - Poire, Luis	4/13/2023	3.00	126.00	378.00
1026 - Poire, Luis	4/14/2023	1.00	126.00	126.00
1026 - Poire, Luis	4/17/2023	1.00	126.00	126.00
1026 - Poire, Luis	4/18/2023	1.50	126.00	189.00
1026 - Poire, Luis	4/20/2023	1.00	126.00	126.00
1026 - Poire, Luis	4/21/2023	2.50	126.00	315.00
1026 - Poire, Luis	4/24/2023	12.50	126.00	1,575.00
1026 - Poire, Luis	4/25/2023	11.50	126.00	1,449.00
1026 - Poire, Luis	4/26/2023	2.00	126.00	252.00
1026 - Poire, Luis	4/27/2023	2.50	126.00	315.00
1026 - Poire, Luis	4/28/2023	1.00	126.00	126.00
Project Administrator				
1117 - Bravo, Vivian	4/13/2023	.30	94.00	28.20
1117 - Bravo, Vivian	4/21/2023	.10	94.00	9.40
Associate Envir. Spec				
1154 - Vander Schuur, Jon	4/3/2023	1.00	140.00	140.00
1154 - Vander Schuur, Jon	4/5/2023	1.00	140.00	140.00
1154 - Vander Schuur, Jon	4/6/2023	1.00	140.00	140.00
1154 - Vander Schuur, Jon	4/10/2023	2.00	140.00	280.00
	Totals	45.90		5,840.60
	Total Labor			5,840.60

Reimbursable Expenses

Travel & Mileage				
MI 0000000MLG13 4/30/2023	2018 Nissan Frontier - Bakersfield Pool / 4/21/23 486 miles @ \$0.655 per mile			366.08
Other Direct Reimb Expenses				
EX 000000000888 4/25/2023	☐ Poire, Luis / Meal at the Buckhorn / Ate at the hotel, because there is no other food around			32.74
	Total Reimbursables		398.82	398.82

Total this Phase: \$6,239.42

Total this Project: \$6,239.42

Total this Report: \$6,239.42

CUYAMA BUCKHORN

New Cuyama, CA 4923
 Primero St. 93254
 (661)766-2825
 Y'ALL COME BACK NOW

Check: 209369

Table:

Server: Summer J

04/25/23

05:53pm

<hr/>	
[Seat 1]	
1 Tri Tip Sandwich	\$21.00
<hr/>	
	\$21.00
Tax 1:	\$1.63
Non Cash Adj:	\$0.84
Sub w/Tax:	\$23.47
Cash Total:	\$22.63
CC Total:	\$23.47

Customer Copy

Check: 209369

Card Type Visa

Card Number *****8619

Auth Code 015060

Expiration Date **/**

Amount \$23.47

Tip: 5.00

Total: 28.47

Customer Copy

Check: 209369

Card Type Visa

Card Number *****8619

Auth Code 01506D

Expiration Date **/**

Amount \$23.47

Tip: 5.00Total: 28.47

Progress Report



Cuyama Basin Groundwater Sustainability Plan Development

Subject: April 2023 Progress Report

Jim Beck, Executive Director,

Prepared for: Cuyama Basin Groundwater Sustainability Agency (CBGSA)

Prepared by: Micah Eggleton, Woodard & Curran

Reviewed by: Brian Van Lienden, Woodard & Curran

Date: May 18, 2023

Project No.: 0011078.01

This progress report summarizes the work performed and project status for the period of April 1, 2023 through April 28, 2023 on the Cuyama Basin Groundwater Sustainability Plan Development project. The work associated with this invoice was performed in accordance with our Consulting Services Agreement dated December 6, 2017, and with Task Order 10, issued by the CBGSA on May 4, 2022. Work previously authorized on Task Orders 1 through 9 are complete.

The progress report contains the following sections:

1. Work Performed
2. Budget Status
3. Schedule Status
4. Outstanding Issues to be Coordinated

1 Work Performed

A summary of work performed on the project during the current reporting period is provided in Tables 1. Table 1 shows work under Task Order 10.

Table 1: Summary of Task/Deliverables Status for Task Order 10

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 45: FY23 Stakeholder/Board and Outreach Engagement Support	<ul style="list-style-type: none"> • Prepare for and participate in ad-hoc calls • Prepare materials for Board meeting and packet • Participation in April 28 SAC meetings • Updates to GSA website 	80%	<ul style="list-style-type: none"> • Participation in future ad-hoc calls • Preparation for and participation in future CBGSA Board and SAC meetings
Task 46: FY23 Grant Administration	<ul style="list-style-type: none"> • Coordination, budget and schedule management related to grant tasks • Prepared draft progress report, invoice and backup documentation for third grant invoice 	85%	<ul style="list-style-type: none"> • Finalize third grant invoice and submit to DWR • Further grant administration and invoicing
Task 47: FY23 Ongoing Monitoring and Data Management Support	<ul style="list-style-type: none"> • Program management, coordination and data management related to monitoring activities • Uploading data to DMS • Development of sustainability features into DMS 	99%	<ul style="list-style-type: none"> • Regular reporting of April 2023 groundwater levels data • Finalize DMS development for current fiscal year
Task 48: FY23 Monitoring Network Enhancements	<ul style="list-style-type: none"> • Additional outreach with landowners for potential well and piezometer installation • GIS and data analysis to determine alternate site locations • Reviewed bids received for well and piezometer installation and made recommendation to Board for contractor selection • Coordination with GSA staff and ad-hoc committee 	35%	<ul style="list-style-type: none"> • Continue outreach to landowners for potential well and piezometer installation and finalize agreements • Site visits to planned drilling sites • Develop subcontract and coordinate with drilling subconsultant

Cuyama Basin Groundwater Sustainability Development
April 2023 Progress Report

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 49: FY23 Projects & Management Action Implementation	<ul style="list-style-type: none"> Developed draft supplemental GSP section for revised sustainability criteria for Board consideration Development of meeting material for ad-hoc meetings Develop revised allocation tables per Board direction Performed technical analysis related to pumping wells and GDEs to support adaptive management and project analysis Document review and coordination related to cloud seeding analyses 	90%	<ul style="list-style-type: none"> Develop draft Supplemental GSP section on revised sustainability criteria Develop revised allocation tables per Board direction Continued data analysis, drafting, and support of implementation of projects and management actions
Task 50: FY23 GSP Implementation, Outreach, & Compliance Activities	<ul style="list-style-type: none"> Coordination among GSA Board, staff and stakeholders Ongoing budget tracking, schedule management, and quality assurance/quality control of project implementation activities Coordination related to potential responses to DWR on GSP documents 	70%	<ul style="list-style-type: none"> PMA implementation support including analysis and material preparation
Task 51: FY23 Improve Understanding of Basin Water Use	<ul style="list-style-type: none"> GIS analysis and coordination calls with landowners to support CIMIS station installation Coordination with GSA staff and consultants for aerial survey of river channel 	40%	<ul style="list-style-type: none"> Continued support for weather station, river channel survey and land use project implementation
Task 52: Support for DWR Technical Support Services	<ul style="list-style-type: none"> None during billing period 	0%	<ul style="list-style-type: none"> Support DWR TSS activities as needed
Task 53: Preparation of Grant Proposal	<ul style="list-style-type: none"> None during billing period 	100%	<ul style="list-style-type: none"> No additional work is anticipated

2 Budget Status

Table 2 shows the percent spent for each task under Task Order 10 as of April 28, 2023. 61% of the available Task Order 10 budget has been expended (\$863,124.14 out of \$1,423,667).

Table 2: Budget Status for Task Order 10

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
45	\$145,650.00	\$101,887.17	\$15,410.72	\$117,297.89	\$28,352.11	81%
46	\$100,060.00	\$75,973.75	\$7,797.50	\$83,771.25	\$16,288.75	84%
47	\$44,810.00	\$43,712.50	\$975.00	\$44,687.50	\$122.50	100%
48	\$460,160.00	\$129,305.00	\$30,360.00	\$159,665.00	\$300,495.00	35%
49	\$305,950.00	\$238,030.00	\$29,221.25	\$267,251.25	\$38,698.75	87%
50	\$150,050.00	\$92,931.25	\$8,612.50	\$101,543.75	\$48,506.25	68%
51	\$154,992.00	\$61,231.25	\$2,732.50	\$63,963.75	\$91,028.25	41%
52	\$20,030.00	\$0.00	\$0.00	\$0.00	\$20,030.00	0%
53	\$41,965.00	\$24,943.75	\$0.00	\$24,943.75	\$17,021.25	59%
Total	\$1,423,667.00	\$768,014.67	\$95,109.47	\$863,124.14	\$560,542.86	61%

3 Schedule Status

The project is on schedule. Work authorized under Task Orders 1 through 9 is complete.

4 Outstanding Issues to be Coordinated

None



Remit to:
 PO Box 55008
 Boston, MA 02205-5008

T 800.426.4262
 T 207.774.2112
 F 207.774.6635

INVOICE

TD BANK

Electronic Transfer:

⑆ 211274450 ⑆ 2427662596 ⑆*

Jim Beck
 Executive Director
 Cuyama Basin Groundwater Sustainability
 Agency
 c/o Hallmark Group
 1901 Royal Oaks Drive, Suite 200
 Sacramento, CA 95815

May 19, 2023
 Project No: 0011078.01
 Invoice No: 219300

Project 0011078.01 CUYAMA GSP

Professional Services for the period ending April 28, 2023

Phase 045 FY 22/23 STAKEHOLDER/BOARD AND OUTREACH ENGAGEMENT SUPPORT

Professional Personnel

	Hours	Rate	Amount	
Designer				
Fox, Adam	.25	200.00	50.00	
Project Planner 1				
Eggleton, Charles	14.00	265.00	3,710.00	
Senior Project Manager				
Long, Jeanna	14.00	335.00	4,690.00	
Van Lienden, Brian	19.00	335.00	6,365.00	
Totals	47.25		14,815.00	
Labor Total				14,815.00

Reimbursable

Vehicle Expenses				
3/29/2023	Van Lienden, Brian	Cuyama Basin GSA Board meeting. 347 Mi @ .585	203.05	
3/30/2023	Van Lienden, Brian	Cuyama Basin GSA Board meeting. 347 Mi @ .585	203.05	
Travel & Lodging				
3/29/2023	Van Lienden, Brian	Cuyama Basin GSA Board meeting	7.67	

Project	0011078.01	CUYAMA GSP	Invoice	219300
	3/29/2023	Van Lienden, Brian	Cuyama Basin GSA Board meeting	127.79
Reimbursable Total			1.1 times	541.56
			Total this Phase	\$15,410.72

Phase 046 FY 22/23 GRANT ADMINISTRATION

Professional Personnel

	Hours	Rate	Amount
Planner 3			
Valenzuela, George	9.75	250.00	2,437.50
Senior Project Manager			
Van Lienden, Brian	16.00	335.00	5,360.00
Totals	25.75		7,797.50
Labor Total			7,797.50
			Total this Phase
			\$7,797.50

Phase 047 FY 22/23 ONGOING MONITORING AND DATA MANAGEMENT SUPPORT

Professional Personnel

	Hours	Rate	Amount
Drafter			
Li Guan, Javier	6.50	150.00	975.00
Totals	6.50		975.00
Labor Total			975.00
			Total this Phase
			\$975.00

Phase 048 FY 22/23 MONITORING NETWORK ENHANCEMENTS

Professional Personnel

	Hours	Rate	Amount
Drafter			
Almestad, Kevin	28.50	150.00	4,275.00
Engineer 1			
Camille, Adrien	40.75	200.00	8,150.00
Project Assistant			
Hodgens, Jennifer	3.75	130.00	487.50

Project	0011078.01	CUYAMA GSP		Invoice	219300
Project Planner 1					
	Eggleton, Charles		6.00	265.00	1,590.00
Senior Project Manager					
	Strandberg, James		35.75	335.00	11,976.25
Technical Specialist 2					
	Lucy, Caleb		17.25	225.00	3,881.25
	Totals		132.00		30,360.00
	Labor Total				30,360.00
Total this Phase					\$30,360.00

Phase 049 FY 22/23 PROJECT & MANAGEMENT ACTION IMPLEMENTATION

Professional Personnel

	Hours	Rate	Amount	
Drafter				
	Li Guan, Javier	125.00	150.00	18,750.00
Project Assistant				
	Sentz-Casas, Christine	.50	130.00	65.00
Project Engineer 2				
	Ceyhan, Mahmut	.50	280.00	140.00
Project Planner 1				
	Eggleton, Charles	17.25	265.00	4,571.25
Senior Project Manager				
	Van Lienden, Brian	17.00	335.00	5,695.00
	Totals	160.25		29,221.25
	Labor Total			29,221.25
Total this Phase				\$29,221.25

Phase 050 FY 22/23 GSP IMPLEMENTATION, OUTREACH, AND COMPLIANCE ACTIVITIES

Professional Personnel

	Hours	Rate	Amount	
Project Planner 1				
	De Anda, Vanessa	17.75	265.00	4,703.75
	Eggleton, Charles	14.75	265.00	3,908.75
	Totals	32.50		8,612.50
	Labor Total			8,612.50

Project	0011078.01	CUYAMA GSP	Invoice	219300
			Total this Phase	\$8,612.50

Phase	051	FY 22/23 IMPROVE UNDERSTANDING OF BASIN WATER USE
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Professional Personnel

	Hours	Rate	Amount
Project Planner 1			
De Anda, Vanessa	2.50	265.00	662.50
Senior Technical Leader			
Taghavi, Ali	6.00	345.00	2,070.00
Totals	8.50		2,732.50
Labor Total			2,732.50
			Total this Phase
			\$2,732.50
			Total this Invoice
			\$95,109.47

	Current Fee	Previous Fee	Total
Project Summary	95,109.47	4,437,685.14	4,532,794.61

Approved by: _____

Brian Van Lienden
Senior Project Manager
Woodard & Curran

Best Western Heritage Inn

(661) 764-6268

05560.bestwestern@gmail.com

253 TRASK STREET
 BAKERSFIELD, CA 93314
 United States

03/30/2023 08:58 AM

Loyalty Club: 600663-75975-23596 PLATINUM

Room # 112-A

Registered To:

Conf # 780080494-01

VANLIENDEN, BRIAN
DIRECT TRAVEL

Arrival 03/29/23

1329 COX DRIVE
WOODLAND, CA 95776

Departure 03/30/23

Room Type KNS - 1 KING NON-SMOKING

(207) 874-7400

Guests 1 1 0

Payment Visa/Master

Acct XXXX-XXXX-XXXX-4762

Posting Date	Oper	AcctCode	Description	From	Reference	Amount
03/29/23	wendy	RC	ROOM,CHRG REVENUE			127.79
03/29/23	wendy	9	TRANSIENT TAX			7.67
03/30/23	izzy	VS	PAYMENT VISA/MC		4762 - 60894D	135.46-
					Balance Due	\$0 00

THE UNDERSIGNED GUEST AGREES TO PAY THE AMOUNT INDICATED ON THE BALANCE DUE PORTION OF THIS INVOICE. IF THE CHARGES ARE TO BE BILLED TO A THIRD PARTY, THE UNDERSIGNED AGREES TO BE PERSONALLY LIABLE FOR PAYMENT OF THE CHARGES IN THE EVENT THAT THE INDICATED THIRD PARTY, PERSON, COMPANY OR ASSOCIATION FAILS TO PAY FOR ANY PART OR THE FULL AMOUNT OF SUCH CHARGES.

 GUEST SIGNATURE

Each Best Western6 branded hotel is independently owned and operated.

 Signature

Billed To:
Cuyama Basin GSA
 Attn: Jim Beck
 4900 California Avenue, Ste B
 Bakersfield, CA 93309

Please Remit Payment To:
The Hallmark Group
 500 Capitol Mall, Ste 2350
 Sacramento, CA 95814
 P: (916) 923-1500

Invoice No.: 2023-CBGSA-05
Date: May 31, 2023
Agreement No.: 201709-CB-001
Project:
Task Order: CB-HG-008

For professional services rendered for the month of May 2023:

Task No.	Task Description	Personnel	Billing Classification	Hours	Rate	Amount
1	Board of Directors Meetings	J. Beck	Executive Director	10.75	\$ 350.00	\$ 3,762.50
		T. Blasklee	Project Manager	13.00	\$ 175.00	\$ 2,275.00
		J. Montoya	Project Coordinator	11.75	\$ 125.00	\$ 1,468.75
Total Task 1 Labor						\$ 7,506.25
2	Consultant Mgmt and GSP Impl	J. Beck	Executive Director	3.00	\$ 350.00	\$ 1,050.00
		T. Blasklee	Project Manager	7.50	\$ 175.00	\$ 1,312.50
Total Task 2 Labor						\$ 2,362.50
3	Financial Information Coordination	J. Harris	Project Controls	4.00	\$ 200.00	\$ 800.00
		T. Blasklee	Project Manager	3.00	\$ 175.00	\$ 525.00
		H. Fuentes	Project Controls Coordinator	0.50	\$ 150.00	\$ 75.00
		J. Montoya	Project Coordinator	1.50	\$ 125.00	\$ 187.50
Total Task 3 Labor						\$ 1,587.50
4	CBGSA Outreach	T. Blasklee	Project Manager	2.75	\$ 175.00	\$ 481.25
		J. Montoya	Project Coordinator	0.25	\$ 125.00	\$ 31.25
Total Task 4 Labor						\$ 512.50
5	Groundwater Extraction Fee Funding	J. Harris	Project Controls	4.75	\$ 200.00	\$ 950.00
		T. Blasklee	Project Manager	2.75	\$ 175.00	\$ 481.25
		J. Montoya	Project Coordinator	6.50	\$ 125.00	\$ 812.50
Total Task 5 Labor						\$ 2,243.75
6	Support for DWR and Public Comments	T. Blasklee	Project Manager	0.50	\$ 175.00	\$ 87.50
		Total Task 6 Labor				
7	Central Management Area Policy	T. Blasklee	Project Manager	1.00	\$ 175.00	\$ 175.00
		Total Task 7 Labor				
8	Adjudication Support	T. Blasklee	Project Manager	1.50	\$ 175.00	\$ 262.50
		Total Task 8 Labor				
9	Well Permits	T. Blasklee	Project Manager	1.50	\$ 175.00	\$ 262.50
		Total Task 9 Labor				
Total Labor						\$ 15,000.00
Other Direct Costs (ODC)		Hall Letter Shop - Mailing Public Notice				\$ 575.80
		Hall Letter Shop - Mailing CMA Allocation Packet				\$ 955.00
Total ODC						\$ 1,530.80
5% ODC Mark-Up						\$ 76.54
TOTAL AMOUNT DUE THIS INVOICE						\$ 16,607.34

Maximum Contract Value and Progress Billing

Sub Task	Contract Value	Amendments/ Change Orders	Total Committed	Previously Billed	Current Billing	Remaining Balance
CB-HG-008	\$ 284,306.00	\$ 20,500.00	\$ 304,806.00	\$ 246,450.00	\$ 15,000.00	\$ 43,356.00
Other Direct Costs	\$ 5,694.00	\$ -	\$ 5,694.00	\$ 13,353.10	\$ 1,607.34	\$ (9,266.44)
Total	\$ 290,000.00	\$ 20,500.00	\$ 310,500.00	\$ 259,803.10	\$ 16,607.34	\$ 34,089.56



HALL Letter Shop, Inc.

PRINTING & MAILING CENTER

5200 Rosedale Highway, Bakersfield, CA 93308
 (661) 327-3228 • Fax (661) 327-5140

5/1/2023

INVOICE NO.

26125

AMOUNT DUE

\$575.80

SOLD TO

Hallmark Group CPM
 4900 California Ave Tower B
 Suite 210
 Bakersfield, CA 93309

SHIP TO

Hallmark Group CPM
 4900 California Ave Tower B
 Suite 210
 Bakersfield, CA 93309

Order Placed... Joshua Montoya

TERMS	COD	CUSTOMER #	PO #	JOB #	14105
QTY	PRODUCT	DESCRIPTION	TOTAL		
700	Printing	Board Meeting/Hearing PC	157.851		
1	Mail Preparation	688 Pieces Mailed 4/25/2023 (Processed 803 Records)	125.97		
1	110	Postage	278.96		

All charge accounts are due and payable on the 1st day of the month following the date of invoice. 1.5% per month late charge will be due on all past due balances. A Statement will not be sent unless requested.

Thank you for this order!

SALES TAX	\$13.02
SALE TOTAL	\$575.80
PAYMENTS / CREDITS	\$0.00

PLEASE PAY THIS AMOUNT →

\$575.80

INVOICE



HALL Letter Shop, Inc.

PRINTING & MAILING CENTER

5200 Rosedale Highway, Bakersfield, CA 93308
 (661) 327-3228 • Fax (661) 327-5140

INVOICE DATE

5/1/2023

INVOICE NO.

26127

AMOUNT DUE

\$955.00

SOLD TO

Hallmark Group CPM
 4900 California Ave Tower B
 Suite 210
 Bakersfield, CA 93309

SHIP TO

Hallmark Group CPM
 4900 California Ave Tower B
 Suite 210
 Bakersfield, CA 93309

Order Placed... Joshua Montoya

TERMS	COD	CUSTOMER #	PO #	JOB #	I4113
QTY	PRODUCT	DESCRIPTION	TOTAL		
210	Printing	Cuyama Landowner Packets	431.50T		
225	Envelopes	6x9 Booklet Envelopes	130.00T		
1	Mail Preparation	Processed and Mailed 204 Pieces 4/21/2023	158.68		
1	Metered	Postage	188.50		

All charge accounts are due and payable on the 1st day of the month following the date of invoice. 1.5% per month late charge will be due on all past due balances. A Statement **will not** be sent unless requested.

Thank you for this order!

SALES TAX

\$46.32

SALE TOTAL

\$955.00

PAYMENTS / CREDITS

\$0.00

PLEASE PAY THIS AMOUNT →

\$955.00

CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

PROGRESS REPORT FOR TASK ORDER CB-HG-008

Client Name:	Cuyama Basin Groundwater Sustainability Agency	Agreement Number:	201709-CB-001
Company Name:	HGCPM, Inc. DBA The Hallmark Group	Address:	500 Capitol Mall, Suite 2350 Sacramento, CA 95814
Task Order Number:	CB-HG-008	Report Period:	May 1-31, 2023
Progress Report Number:	51	Project Manager:	Jim Beck
Invoice Number:	2023-CBGSA-05	Invoice Date:	May 31, 2023

SUMMARY OF WORK PERFORMED

Task 1: Board of Directors and Advisory Committee Meetings

- Prepared for and facilitated Board meeting on May 3, 2023.
- Developed and sent Director's summary of Board action items.
- Attended meeting with Anita Regmi with California Department of Water Resources (DWR) on May 10, 2023, regarding the amended Ground Water Sustainability Plan.

Task 2: Consultant Management and GSP Implementation

- Correspondence with Dan Wilke regarding well permit.
- Reviewed well driller agreement with BC2 Environmental.

Task 3: Financial Information Coordination

- Billing and administration.
- Reviewed groundwater extraction fee invoice.
- Review and file invoices for April and May financial close.
- Coordinated with Jon Vander Schuur with Provost & Pritchard regarding mileage reimbursement from DWR.
- Paid invoices for print shop.

Task 4: Cuyama Basin GSA Outreach

- Attended meeting with Lee Harrington on May 25, 2023.

Task 5: Groundwater Extraction Fee Funding

- Created invoicing template for fiscal year 2023-2024 groundwater extraction fee.
- Prepared and mailed invoices for fiscal year 2023-2024 groundwater extraction fee to landowners.
- Emailed invoices for fiscal year 2023-2024 groundwater extraction fee to landowners.
- Reviewed groundwater extractors list for quality and assurance.
- Prepared and posted resolution adopting groundwater extractor fee on website.

- Correspondence with landowners regarding reported water use.

Task 7: Management Area Policy

- Drafted central management cover letter for final allocations.

Task 9: Well Permits

- Reviewed and approved replacement well permit.

DELIVERABLES AND COMPLETED TASKS

- Facilitated Board meeting on May 3, 2023.
- Attended meeting with Anita Regmi with DWR on May 10, 2023.
- Finalized and sent invoices for fiscal year 2023-2024 groundwater extraction fee to landowners.

PLANNED OBJECTIVES FOR NEXT REPORTING PERIOD

- Finalize work on Central Management Area policies and allocations.

SIGNIFICANT ISSUES OR CHALLENGES (IF ANY) AND POTENTIAL RESOLUTIONS

- N/A

455 W. Fir Avenue
 Clovis, CA 93611
 (559) 449-2700
 Fax (559) 449-2715

EST. 1968
**PROVOST &
 PRITCHARD**
 CONSULTING GROUP
 An Employee Owned Company

Cuyama GSA
 4900 California Ave., Tower B, 2nd Floor
 Bakersfield, CA 93309

June 20, 2023
 Project No: 03930-22-001
 Invoice No: 101463

Project Name: Cuyama GSA-CBGSA Groundwater Level Monitoring for 2023

Client Project #:

Phase LVL 2022:

Appointment / Correspondence with well owners.

Quarterly levels monitoring event with travel.

Data development

Project management

Professional Services from May 1, 2023 to May 31, 2023

Phase: LVL Groundwater Level Monitoring

Labor

	Hours	Rate	Amount	
Assistant Engineer	3.70	126.00	466.20	
Senior GIS Specialist	.30	147.00	44.10	
Associate Envir. Spec	5.80	140.00	812.00	
Associate GIS Specialist	2.00	105.00	210.00	
Associate GIS Specailist	1.10	132.00	145.20	
Totals	12.90		1,677.50	
Total Labor				1,677.50

Reimbursable Expenses

Travel & Mileage			327.50	
Total Reimbursables			327.50	327.50

Total this Phase: \$2,005.00

Total this Invoice \$2,005.00

Project 03930-22-001 CBGSA Groundwater Level Monitoring for 2 Invoice 101463

Billing Backup

Tuesday, June 20, 2023

Provost & Pritchard Consulting Group

Invoice 101463 Dated 6/20/2023

1:39:13 PM

Phase: LVL Groundwater Level Monitoring

Labor

			Hours	Rate	Amount	
Assistant Engineer						
1026 - Poire, Luis	5/2/2023		1.00	126.00	126.00	
1026 - Poire, Luis	5/3/2023		2.00	126.00	252.00	
1026 - Poire, Luis	5/15/2023		.50	126.00	63.00	
1026 - Poire, Luis	5/30/2023		.20	126.00	25.20	
Senior GIS Specialist						
1142 - Slater, Philip	4/20/2023		.30	147.00	44.10	
Associate Envir. Spec						
1154 - Vander Schuur, Jon	5/2/2023		1.00	140.00	140.00	
1154 - Vander Schuur, Jon	5/4/2023		1.00	140.00	140.00	
1154 - Vander Schuur, Jon	5/26/2023		1.30	140.00	182.00	
1154 - Vander Schuur, Jon	5/30/2023		2.50	140.00	350.00	
Associate GIS Specialist						
1226 - Toews, Benjamin	4/20/2023		2.00	105.00	210.00	
Associate GIS Specailist						
1296 - Thompson, Mark	4/20/2023		1.10	132.00	145.20	
Totals			12.90		1,677.50	
Total Labor						1,677.50

Reimbursable Expenses

Travel & Mileage						
AP 59563	5/16/2023	Business Card (4082) / 4/14/23 Hotel: Luie Poire / Invoice: 4082 May 2023, 5/4/2023			295.37	
AP 59563	5/16/2023	Business Card (4082) / 4/25/23 Hotel: Luie Poire / Invoice: 4082 May 2023, 5/4/2023			32.13	
Total Reimbursables					327.50	327.50

Total this Phase: \$2,005.00

Total this Project: \$2,005.00

Total this Report: \$2,005.00



CHECK / CHARGE REQUEST

REQUESTED BY: _____ DATE: _____

MAKE CHECK PAYABLE /CHARGE TO: _____

ADDRESS: _____

CITY, STATE, ZIP CODE: _____

CHECK/CHARGE AMOUNT: ~~_____~~ \$284.78 _____

WHAT IS EXPENSE FOR: JOB #: _____ PHASE #: _____

CHECK	CHARGE	DESCRIPTION:
_____	_____	_____
_____	_____	_____

DATE NEEDED: _____ IMMEDIATELY: Yes No

IF CHECK IS BEING DELIVERED IN PERSON, RETURN TO: _____

WILL SOMEONE PICK IT UP? Yes No

MAIL: Yes No

IF MAILING ADDRESS IS DIFFERENT, PLEASE COMPLETE BELOW:

APPROVED BY: _____ DATE: _____

ACCOUNTING DEPARTMENT

VENDOR #: _____

ACCOUNT #: _____

#: _____

#: _____

PAY DATE: _____

AMOUNT \$: _____

AMOUNT \$: _____

AMOUNT \$: _____

Check-out receipt

Name: Luis Poire
 Check-in: Monday Apr 24 2023
 Check-out: Tuesday Apr 25 2023
 Confirmation #: 1492505964
 Invoice number: 7320
 Invoice date: 04/25/2023

Unit assignment: 21

Luis Poire
 3203 tresselwyck lane
 Bakersfield CA 93311
 United States
 lpoire@ppeng.com
 T: 1 661 4874344

Date	Description of services	Cost(USD)
04/24/2023	Unit 21: Classic Queen Room - Siteminder - BAR	220.50
04/24/2023	Resort Fee : Resort Fee	25.00
Sub-total		245.50
Processing Fee		10.88
Govt Tax		26.46
STax		1.94
Total		284.78
Apr 13, 2023, MC XXXX 4082		256.84
Apr 24, 2023, MC XXXX 4082		27.94
Amount due (USD)		0.00

Your signature authorizes Cuyama Buckhorn to communicate with you via email and to charge your credit card for the full amount due.

Customer signature: _____

There will be a credit card authorization of \$100 per day taken for incidental charges upon the day of check-in.

All rooms are non-smoking (tobacco and marijuana). \$250 cleaning fee will be applied if anyone smokes within a hotel room or on their patio.

We are pleased to offer an array of food & beverage options for meals while you are on property. No outside food or beverages are permitted in public areas. No guestroom or patio cooking is permitted. A \$250 fee will be applied to the credit card on file if unauthorized cooking takes place on our property.

A pet fee of \$30.00 will be applied for the entire stay. \$175 authorization upon check in will be taken for a pet cleaning fee. This fee will be returned if extra cleaning is not needed.

Any damages to property, public spaces, and or rooms due to guest, will be sole responsibility of guest.

Please know that glass and pets are not allowed in pool area.

My signature above acknowledges that I have read and understand the above policies, authorizations and fees that may be applied to my credit card.

Progress Report



Cuyama Basin Groundwater Sustainability Plan Development

Subject: May 2023 Progress Report

Jim Beck, Executive Director,

Prepared for: Cuyama Basin Groundwater Sustainability Agency (CBGSA)

Prepared by: Micah Eggleton, Woodard & Curran

Reviewed by: Brian Van Lienden, Woodard & Curran

Date: June 13, 2023

Project No.: 0011078.01

This progress report summarizes the work performed and project status for the period of April 29, 2023 through May 26, 2023 on the Cuyama Basin Groundwater Sustainability Plan Development project. The work associated with this invoice was performed in accordance with our Consulting Services Agreement dated December 6, 2017, and with Task Order 10, issued by the CBGSA on May 4, 2022 and with Task Order 11, issued by the CBGSA on May 3, 2023. Work previously authorized on Task Orders 1 through 9 are complete.

The progress report contains the following sections:

1. Work Performed
2. Budget Status
3. Schedule Status
4. Outstanding Issues to be Coordinated

1 Work Performed

A summary of work performed on the project during the current reporting period is provided in Table 1 for Task Order 10 and in Table 2 for Task Order 11.

Table 1: Summary of Task/Deliverables Status for Task Order 10

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 45: FY23 Stakeholder/Board and Outreach Engagement Support	<ul style="list-style-type: none"> • Prepare for and participate in ad-hoc calls • Prepare materials for Board meeting and packet • Participation in May 3 Board meeting • Updates to GSA website 	80%	<ul style="list-style-type: none"> • Participation in future ad-hoc calls • Preparation for and participation in future CBGSA Board and SAC meetings
Task 46: FY23 Grant Administration	<ul style="list-style-type: none"> • Coordination, budget and schedule management related to grant tasks • Prepared draft progress report, invoice and backup documentation for third grant invoice 	93%	<ul style="list-style-type: none"> • Finalize third grant invoice and submit to DWR • Further grant administration and invoicing
Task 47: FY23 Ongoing Monitoring and Data Management Support	<ul style="list-style-type: none"> • Program management, coordination and data management related to monitoring activities • Uploading data to DMS • Finalization of DMS update 	99%	<ul style="list-style-type: none"> • Regular reporting of April 2023 groundwater levels data •
Task 48: FY23 Monitoring Network Enhancements	<ul style="list-style-type: none"> • Additional outreach with landowners for potential well and piezometer installation • Prepare permit applications for well site locations • Coordination with GSA staff and ad-hoc committee • Developed subcontract and coordinated with drilling subconsultant 	35%	<ul style="list-style-type: none"> • Continue outreach to landowners for potential well and piezometer installation and finalize agreements • Site visits to planned drilling sites • Finalize subcontract and coordinate with drilling subconsultant

Cuyama Basin Groundwater Sustainability Development
May 2023 Progress Report

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 49: FY23 Projects & Management Action Implementation	<ul style="list-style-type: none"> Developed revised supplemental GSP section for revised undesirable results for Board consideration Performed technical analysis related to pumping wells and GDEs to support adaptive management and project analysis Document review and coordination related to cloud seeding analyses 	90%	<ul style="list-style-type: none"> Develop draft Supplemental GSP section on revised sustainability criteria Develop revised allocation tables per Board direction Continued data analysis, drafting, and support of implementation of projects and management actions
Task 50: FY23 GSP Implementation, Outreach, & Compliance Activities	<ul style="list-style-type: none"> Coordination among GSA Board, staff and stakeholders Ongoing budget tracking, schedule management, and quality assurance/quality control of project implementation activities Coordination related to potential responses to DWR on GSP documents 	80%	<ul style="list-style-type: none"> PMA implementation support including analysis and material preparation
Task 51: FY23 Improve Understanding of Basin Water Use	<ul style="list-style-type: none"> GIS analysis and coordination calls with landowners to support CIMIS station installation Coordination with GSA staff and consultants for aerial survey of river channel 	45%	<ul style="list-style-type: none"> Continued support for weather station, river channel survey and land use project implementation
Task 52: Support for DWR Technical Support Services	<ul style="list-style-type: none"> None during billing period 	0%	<ul style="list-style-type: none"> Support DWR TSS activities as needed
Task 53: Preparation of Grant Proposal	<ul style="list-style-type: none"> None during billing period 	100%	<ul style="list-style-type: none"> No additional work is anticipated

Table 2: Summary of Task/Deliverables Status for Task Order 11

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 54: FY24 Stakeholder/Board and Outreach Engagement Support	<ul style="list-style-type: none"> None 	0%	<ul style="list-style-type: none"> None
Task 55: FY24 Grant Administration	<ul style="list-style-type: none"> None 	0%	<ul style="list-style-type: none"> None
Task 56: FY24 Ongoing Monitoring and Data Management Support	<ul style="list-style-type: none"> None 	0%	<ul style="list-style-type: none"> None
Task 57: FY24 Project and Management Action Implementation	<ul style="list-style-type: none"> None 	0%	<ul style="list-style-type: none"> None
Task 58: FY24 GSP Implementation, Outreach, & Compliance Activities	<ul style="list-style-type: none"> None 	0%	<ul style="list-style-type: none"> None
Task 59: Prepare Five Year Update	<ul style="list-style-type: none"> None 	0%	None
Task 60: FY24 Improve Understanding of Basin Water Use	<ul style="list-style-type: none"> None 	0%	<ul style="list-style-type: none"> None
Task 61: FY24 Preparation of Grant Proposal	<ul style="list-style-type: none"> None 	0%	<ul style="list-style-type: none"> None
Task 62: Perform Fault Investigation	<ul style="list-style-type: none"> None 	0%	<ul style="list-style-type: none"> None

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 63.1: Support for DWR Technical Support Services	<ul style="list-style-type: none"> None 	0%	<ul style="list-style-type: none"> None
Task 63.2: Well Permit Review	<ul style="list-style-type: none"> Replacement well application review: <ul style="list-style-type: none"> Bolthouse Farms – Strandberg 0.5 hours; Van Lienden 0.5 hours 	3%	<ul style="list-style-type: none"> Additional well permit reviews as requested
Task 63.3: Website Redesign	<ul style="list-style-type: none"> None 	0%	<ul style="list-style-type: none"> None

2 Budget Status

Table 3 shows the percent spent for each task under Task Order 10 as of May 26, 2023. 65% of the available Task Order 10 budget has been expended (\$928,844.62 out of \$1,423,667).

Table 3: Budget Status for Task Order 10

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
45	\$145,650.00	\$117,297.89	\$16,646.73	\$133,944.62	\$11,705.38	92%
46	\$100,060.00	\$83,771.25	\$9,652.50	\$93,423.75	\$6,636.25	93%
47	\$44,810.00	\$44,687.50	\$0.00	\$44,687.50	\$122.50	100%
48	\$460,160.00	\$159,665.00	\$11,826.25	\$171,491.25	\$288,668.75	37%
49	\$305,950.00	\$267,251.25	\$21,635.00	\$288,886.25	\$17,063.75	94%
50	\$150,050.00	\$101,543.75	\$5,290.00	\$106,833.75	\$43,216.25	71%
51	\$154,992.00	\$63,963.75	\$670.00	\$64,633.75	\$90,358.25	42%
52	\$20,030.00	\$0.00	\$0.00	\$0.00	\$20,030.00	0%
53	\$41,965.00	\$24,943.75	\$0.00	\$24,943.75	\$17,021.25	59%
Total	\$1,423,667.00	\$863,124.14	\$65,720.48	\$928,844.62	\$494,822.38	65%

Table 4 shows the percent spent for each task under Task Order 11 as of May 26, 2023. 0% of the available Task Order 11 budget has been expended (\$335.00 out of \$2,436,117).

Table 4: Budget Status for Task Order 11

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
54	\$153,530.00	\$0.00	\$0.00	\$0.00	\$153,530.00	0%
55	\$99,940.00	\$0.00	\$0.00	\$0.00	\$99,940.00	0%
56	\$323,350.00	\$0.00	\$0.00	\$0.00	\$323,350.00	0%
57	\$541,220.00	\$0.00	\$0.00	\$0.00	\$541,220.00	0%
58	\$114,980.00	\$0.00	\$0.00	\$0.00	\$114,980.00	0%
59	\$688,500.00	\$0.00	\$0.00	\$0.00	\$688,500.00	0%
60	\$101,892.00	\$0.00	\$0.00	\$0.00	\$101,892.00	0%
61	\$41,980.00	\$0.00	\$0.00	\$0.00	\$41,980.00	0%
62	\$329,730.00	\$0.00	\$0.00	\$0.00	\$329,730.00	0%
63.1	\$20,050.00	\$0.00	\$0.00	\$0.00	\$20,050.00	0%
63.2	\$12,030.00	\$335.00	\$0.00	\$335.00	\$11,695.00	3%
63.3	\$8,915.00	\$0.00	\$0.00	\$0.00	\$8,915.00	0%
Total	\$2,436,117.00	\$335.00	\$0.00	\$335.00	\$2,435,782.00	0%

3 Schedule Status

The project is on schedule. Work authorized under Task Orders 1 through 9 is complete.

4 Outstanding Issues to be Coordinated

None



Remit to:
 PO Box 55008
 Boston, MA 02205-5008

T 800.426.4262
 T 207.774.2112
 F 207.774.6635

INVOICE

TD BANK

Electronic Transfer:

Ⓜ 211274450 Ⓜ 2427662596 Ⓜ *

Jim Beck
 Executive Director
 Cuyama Basin Groundwater Sustainability
 Agency
 c/o Hallmark Group
 1901 Royal Oaks Drive, Suite 200
 Sacramento, CA 95815

June 14, 2023

Project No: 0011078.01

Invoice No: 220429

Project 0011078.01 CUYAMA GSP

Professional Services for the period ending May 26, 2023

Phase 045 FY 22/23 STAKEHOLDER/BOARD AND OUTREACH ENGAGEMENT SUPPORT

Professional Personnel

	Hours	Rate	Amount
Designer			
Fox, Adam	.50	200.00	100.00
Engineer 3			
Baer, John	15.00	250.00	3,750.00
Project Planner 1			
De Anda, Vanessa	2.25	265.00	596.25
Eggleton, Charles	34.00	265.00	9,010.00
Senior Project Manager			
Long, Jeanna	1.00	335.00	335.00
Van Lienden, Brian	7.00	335.00	2,345.00
Senior Technical Leader			
Blanke, James	1.00	345.00	345.00
Totals	60.75		16,481.25
Labor Total			16,481.25

Project	0011078.01	CUYAMA GSP	Invoice	220429
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Reimbursable

Travel & Lodging

5/2/2023	Van Lienden, Brian	CBGSA and Palmdale WD Board Meetings	67.05	
5/2/2023	Van Lienden, Brian	CBGSA and Palmdale WD Board Meetings	8.17	
5/3/2023	Van Lienden, Brian	CBGSA and Palmdale WD Board Meetings	67.05	
5/3/2023	Van Lienden, Brian	CBGSA and Palmdale WD Board Meetings	8.17	
Reimbursable Total			1.1 times	150.44
			Total this Phase	\$16,646.73

Phase	046	FY 22/23 GRANT ADMINISTRATION
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Professional Personnel

	Hours	Rate	Amount	
Engineer 3				
Baer, John	15.00	250.00	3,750.00	
Planner 3				
Valenzuela, George	1.50	250.00	375.00	
Senior Project Manager				
Van Lienden, Brian	16.50	335.00	5,527.50	
Totals	33.00		9,652.50	
Labor Total			9,652.50	
			Total this Phase	\$9,652.50

Phase	048	FY 22/23 MONITORING NETWORK ENHANCEMENTS
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Professional Personnel

	Hours	Rate	Amount	
Drafter				
Almestad, Kevin	14.00	150.00	2,100.00	
Engineer 1				
Camille, Adrien	16.25	200.00	3,250.00	
Project Assistant				
Hodgens, Jennifer	1.00	130.00	130.00	

Project	0011078.01	CUYAMA GSP		Invoice	220429
Project Planner 1					
Eggleton, Charles			1.00	265.00	265.00
Senior Project Manager					
Strandberg, James			11.75	335.00	3,936.25
Technical Specialist 2					
Lucy, Caleb			8.00	225.00	1,800.00
Senior Technical Leader					
Medlin, William			1.00	345.00	345.00
Totals			53.00		11,826.25
		Labor Total			11,826.25
				Total this Phase	\$11,826.25

Phase 049 FY 22/23 PROJECT & MANAGEMENT ACTION IMPLEMENTATION

Professional Personnel

	Hours	Rate	Amount
Drafter			
Li Guan, Javier	10.50	150.00	1,575.00
Project Assistant			
Hughart, Desiree	.75	130.00	97.50
Sentz-Casas, Christine	1.25	130.00	162.50
Project Planner 1			
Eggleton, Charles	19.50	265.00	5,167.50
Senior Project Manager			
Strandberg, James	26.50	335.00	8,877.50
Van Lienden, Brian	11.00	335.00	3,685.00
Senior Technical Leader			
Taghavi, Ali	6.00	345.00	2,070.00
Totals	75.50		21,635.00
		Labor Total	21,635.00
			Total this Phase
			\$21,635.00

Phase 050 FY 22/23 GSP IMPLEMENTATION, OUTREACH, AND COMPLIANCE ACTIVITIES

Project 0011078.01 CUYAMA GSP Invoice 220429

Professional Personnel

	Hours	Rate	Amount	
Drafter				
Morison, Michael	13.00	150.00	1,950.00	
Engineer 3				
Baer, John	10.00	250.00	2,500.00	
Project Engineer 2				
Ceyhan, Mahmut	3.00	280.00	840.00	
Totals	26.00		5,290.00	
Labor Total				5,290.00
			Total this Phase	\$5,290.00

Phase 051 FY 22/23 IMPROVE UNDERSTANDING OF BASIN WATER USE

Professional Personnel

	Hours	Rate	Amount	
Senior Project Manager				
Van Lienden, Brian	2.00	335.00	670.00	
Totals	2.00		670.00	
Labor Total				670.00
			Total this Phase	\$670.00

Phase 063 FY 23/24 AS-NEEDED TECHNICAL TASKS

Task 0002 WELL PERMIT REVIEW

Professional Personnel


	Hours	Rate	Amount	
Senior Project Manager				
Strandberg, James	.50	335.00	167.50	
Van Lienden, Brian	.50	335.00	167.50	
Totals	1.00		335.00	
Labor Total				335.00
			Total this Task	\$335.00
			Total this Phase	\$335.00

Project	0011078.01	CUYAMA GSP	Invoice	220429
			Total this Invoice	\$66,055.48

Outstanding Invoices

Number	Date	Balance
219300	5/19/2023	95,109.47
Total		95,109.47

	Current Fee	Previous Fee	Total
Project Summary	66,055.48	4,532,794.61	4,598,850.09

Approved by: 

Brian Van Lienden
Senior Project Manager
Woodard & Curran



LA QUINTA.

INNS a SUITES

La Quinta Inn & Suites by Wyndham Santa Cl
Valencia

25201 The Old Road
Stevenson Ranch
California, 91381 United States
Phone: 1-d61-286-1111

Folio 1

Email: lq0772gm@laquinta.com

Name: VANLIENDEN, BRIAN J

Confirmation Number:
88674EE020375

Phone #:

Email:

Loyalty Level: N/A

Guest

Company

Guests: 1/0

Address:

Address:

Nights: 2

Room: 328

Room Type: ENK1

GTD: CA

Rate Plan: SPD4

Daily Rate: USD 134.10

Arrival: May 02, 2023 (Tue)

Departure: May 04, 2023 (Thu)

Room Rate:

May 02, 2023 (Tue) USD 134.10 per night

Total Estimated Stay Amount: USD 300.90

Date	Code	Description	Amount	Balance
May 02, 2023 (Tue)	1000	Tourism Assessment Tax 0.195%	USD 0.26	USD 0.26
May 02, 2023 (Tue)	1001	State Tax 12%	USD 16.09	USD 16.35
May 02, 2023 (Tue)	RM	ROOM CHARGE	USD 134.10	USD 150.45
May 02, 2023 (Tue)	VI	VI 47d2	USD (300.90)	USD (150.45)
May 03, 2023 (Wed)	1000	Tourism Assessment Tax 0.195%	USD ;2+	USD (150.19)
May 03, 2023 (Wed)	1001	State Tax 12%	USD 16.09	USD (134.10)
May 03, 2023 (Wed)	RM	ROOM CHARGE	USD 134.10	USD 0.00

Summary

Room	Taxes and Fees	F&B	Other	Payments	Balance Due
USD 268.20	USD 32.70	USD 0.00	USD 0.00	USD (300.90)	USD 0.00

Printed on: May 04, 2023 (Thu)
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Printed by: Menju52829



TO: Board of Directors
Agenda Item No. 7

FROM: Taylor Blakslee, Hallmark Group

DATE: July 12, 2023

SUBJECT: Approval of Financial Reports for April and May 2023

Recommended Motion

Approve financial reports for April and May 2023.

Discussion

The Cuyama Basin Groundwater Sustainability Agency's financial report for April 2023 are provided as Attachment 1 is provided as Attachment 2 is financial report for May 2023.

The reports include:

- Statement of Financial Position
- Receipts and Disbursements
- A/R Aging Summary
- A/P Aging Summary
- Statement of Operations with Budget Variance
- 2022/2023 Operating Budget



Cuyama Basin GSA

Financial Statements
April 2023

CUYAMA BASIN GSA
Statement of Financial Position
As of April 30, 2023

	Apr 30, 23	Apr 30, 22	\$ Change	% Change
ASSETS				
Current Assets				
Checking/Savings				
Chase - General Checking	893,994	1,155,194	-261,200	-23%
Total Checking/Savings	893,994	1,155,194	-261,200	-23%
Accounts Receivable				
Accounts Receivable	1,400,524	311,314	1,089,210	350%
Total Accounts Receivable	1,400,524	311,314	1,089,210	350%
Total Current Assets	2,294,519	1,466,509	828,010	57%
TOTAL ASSETS	2,294,519	1,466,509	828,010	57%
LIABILITIES & EQUITY				
Liabilities				
Current Liabilities				
Accounts Payable				
Accounts Payable	343,680	356,146	-12,467	-4%
Total Accounts Payable	343,680	356,146	-12,467	-4%
Total Current Liabilities	343,680	356,146	-12,467	-4%
Total Liabilities	343,680	356,146	-12,467	-4%
Equity				
Unrestricted Net Assets	1,115,300	763,431	351,869	46%
Net Income	835,539	346,931	488,608	141%
Total Equity	1,950,839	1,110,362	840,477	76%
TOTAL LIABILITIES & EQUITY	2,294,519	1,466,509	828,010	57%

CUYAMA BASIN GSA
Receipts and Disbursements
As of April 30, 2023

Type	Date	Num	Name	Memo	Debit	Credit
Chase - General Checking						
Bill Pmt -Check	07/06/2022	1108	HGCPM, Inc.			56,982.88
Bill Pmt -Check	07/06/2022	1109	Klein DeNatale Goldner			14,654.61
Bill Pmt -Check	07/06/2022	1110	Woodard & Curran Inc			186,637.84
Payment	07/07/2022	2093	Groundwater Extraction Fees:Tri-County Pistachios		34,654.10	
Payment	07/07/2022	4157	Groundwater Extraction Fees:Sunrise Olive Ranch, LLC		73,140.12	
Payment	07/07/2022	20526	Groundwater Extraction Fees:Cuyama Orchards, Inc		36,720.05	
Payment	07/07/2022	3031	Groundwater Extraction Fees:Harrington Farms		4,218.00	
Payment	08/02/2022	655	Groundwater Extraction Fees:Lewis, David		1,624.12	
Payment	08/12/2022	1002107539	Groundwater Extraction Fees:Cuyama Orchards, Inc		175.56	
Payment	08/12/2022	501659	Groundwater Extraction Fees:E & B Natural Resources Mgmt Co...		874.47	
Payment	08/30/2022	167	Groundwater Extraction Fees:Lee, Jennifer		3,444.38	
Deposit	08/30/2022			Deposit - Ventura County Int	9.06	
Bill Pmt -Check	09/07/2022	1111	HGCPM, Inc.			48,709.28
Bill Pmt -Check	09/07/2022	1112	Klein DeNatale Goldner			18,759.40
Bill Pmt -Check	09/07/2022	1113	Woodard & Curran Inc			151,031.80
Payment	10/04/2022	459731	Grimmway		218.97	
Payment	10/04/2022	331457	Groundwater Extraction Fees:Lear Real Estate Ent LLC		21,951.07	
Deposit	11/01/2022			Deposit - SB County Int	0.80	
Bill Pmt -Check	11/03/2022	1114	Daniells Phillips Vaughan & Bock	VOID: BOD Mtg Canceled	0.00	
Bill Pmt -Check	11/03/2022	1115	HGCPM, Inc.	VOID: BOD Mtg Canceled	0.00	
Bill Pmt -Check	11/03/2022	1116	Klein DeNatale Goldner	VOID: BOD Mtg Canceled	0.00	
Bill Pmt -Check	11/03/2022	1117	Provost & Pritchard Consulting Group	VOID: BOD Mtg Canceled	0.00	
Bill Pmt -Check	11/03/2022	1118	U.S. Geological Survey	VOID: BOD Mtg Canceled	0.00	
Bill Pmt -Check	11/03/2022	1119	Woodard & Curran Inc	VOID: BOD Mtg Canceled	0.00	
Bill Pmt -Check	12/12/2022	1120	Daniells Phillips Vaughan & Bock			7,000.00
Bill Pmt -Check	12/12/2022	1121	HGCPM, Inc.			94,657.06
Bill Pmt -Check	12/12/2022	1122	Klein DeNatale Goldner			22,599.50
Bill Pmt -Check	12/12/2022	1123	Provost & Pritchard Consulting Group			44,589.02
Bill Pmt -Check	12/12/2022	1124	U.S. Geological Survey			39,450.00
Bill Pmt -Check	12/12/2022	1125	Woodard & Curran Inc			238,023.71
Payment	12/23/2022	785326	Groundwater Extraction Fees:Cuyama Orchards, Inc		868.27	
Payment	01/10/2023	1002126846	Groundwater Extraction Fees:Cuyama Orchards, Inc	VTA pmt includes \$49.65 collection fee.	19,813.08	
Bill Pmt -Check	01/12/2023	1126	Daniells Phillips Vaughan & Bock			1,000.00
Bill Pmt -Check	01/12/2023	1127	HGCPM, Inc.			22,532.00
Bill Pmt -Check	01/12/2023	1128	Klein DeNatale Goldner			13,132.00
Bill Pmt -Check	01/12/2023	1129	Provost & Pritchard Consulting Group			598.50
Bill Pmt -Check	01/12/2023	1130	Woodard & Curran Inc			63,128.50
Bill Pmt -Check	03/29/2023	1131	CA Assoc of Mutual Water Companies			100.00
Bill Pmt -Check	03/29/2023	1132	Daniells Phillips Vaughan & Bock			450.00
Bill Pmt -Check	03/29/2023	1133	HGCPM, Inc.			62,144.46
Bill Pmt -Check	03/29/2023	1134	Klein DeNatale Goldner			22,102.00
Bill Pmt -Check	03/29/2023	1135	Provost & Pritchard Consulting Group	VOID: Printer Error	0.00	
Bill Pmt -Check	03/29/2023	1136	U.S. Geological Survey	Cust #6000007725		13,150.00
Bill Pmt -Check	03/29/2023	1137	Woodard & Curran Inc			250,923.16
Bill Pmt -Check	03/29/2023	1138	Provost & Pritchard Consulting Group			7,887.76
Payment	04/28/2023	1002145575	Groundwater Extraction Fees:Cuyama Orchards, Inc		19,809.23	
Payment	04/28/2023	04282023	Groundwater Extraction Fees:Cuyama Orchards, Inc		868.13	
Total Chase - General Checking					218,389.41	1,380,243.48
TOTAL					218,389.41	1,380,243.48

**CUYAMA BASIN GSA
A/R Aging Summary
As of April 30, 2023**

	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL
Department of Water Resources	0	391,358	0	0	971,523	1,362,881
Groundwater Extraction Fees						
Cuyama Dairy Farm	0	0	0	0	35,145	35,145
Cuyama Orchards, Inc	0	135	0	271	2,093	2,499
Total Groundwater Extraction Fees	0	135	0	271	37,237	37,643
TOTAL	0	391,493	0	271	1,008,761	1,400,524

CUYAMA BASIN GSA
A/P Aging Summary
As of April 30, 2023

	<u>Current</u>	<u>1 - 30</u>	<u>31 - 60</u>	<u>61 - 90</u>	<u>> 90</u>	<u>TOTAL</u>
HGCPM, Inc.	15,100	42,112	0	0	0	57,213
Insurica	0	0	14,498	0	0	14,498
Klein DeNatale Goldner	10,226	7,661	0	0	0	17,887
Provost & Pritchard Consulting Group	6,239	1,143	0	0	0	7,382
U.S. Geological Survey	0	13,150	0	0	0	13,150
Woodard & Curran Inc	95,109	138,440	0	0	0	233,550
TOTAL	<u>126,675</u>	<u>202,506</u>	<u>14,498</u>	<u>0</u>	<u>0</u>	<u>343,680</u>

CUYAMA BASIN GSA
Statement of Operations with Budget Variance
 July 2022 through April 2023

	Jul '22 - Apr 23	Budget	\$ Over Budget	% of Budget
Ordinary Income/Expense				
Income				
Direct Public Funds				
Groundwater Extraction Fees	1,034,916	1,064,000	-29,084	97%
Grant Reimbursements	1,125,802	2,826,225	-1,700,423	40%
GWE Late Fees	2,451	0	2,451	100%
Total Direct Public Funds	2,163,169	3,890,225	-1,727,056	56%
Total Income	2,163,169	3,890,225	-1,727,056	56%
Cost of Goods Sold				
Program Expenses				
Technical Consulting				
Monitoring Network Enhancements	158,208	104,160	54,048	152%
GSP Implementation - W&C	142,515	229,160	-86,645	62%
Stakeholder Engagement	115,675	90,840	24,835	127%
Monitoring Network - P&P/USGS	106,482	137,500	-31,018	77%
Technical Support for DWR	0	16,670	-16,670	0%
Outreach	2,711	30,567	-27,856	9%
Grant Administration	83,428	83,200	228	100%
Basin Water Use Surveys	63,519	129,160	-65,641	49%
Project & Mgmt Action Impl	262,730	188,300	74,430	140%
Total Technical Consulting	935,269	1,009,557	-74,288	93%
Total Program Expenses	935,269	1,009,557	-74,288	93%
Total COGS	935,269	1,009,557	-74,288	93%
Gross Profit	1,227,900	2,880,668	-1,652,768	43%
Expense				
General and Administrative				
GSA Executive Director				
GSA BOD Meetings	119,275	92,829	26,446	128%
Consult Mgmt and GSP Devel	42,644	61,125	-18,481	70%
Financial Information Coord	29,438	42,797	-13,360	69%
Support for DWR/Public Comments	1,181	15,181	-14,000	8%
Funding Process (GWE Fee)	9,156	4,636	4,520	198%
CBGSA Outreach	10,963	8,935	2,028	123%
Adjudication Support	1,594	1,613	-19	99%
Management Area Admin	32,200	9,806	22,394	328%
Travel and Direct Costs	8,015	4,746	3,269	169%
Total GSA Executive Director	254,465	241,668	12,797	105%
Other Administrative				
Legal	84,745	83,400	1,345	102%
Insurance - D&O and General	14,498	14,000	498	104%
Auditing/Accounting Fees	8,450	9,800	-1,350	86%
Grant Proposals	24,944	35,000	-10,056	71%
Printing and Copying	5,110	0	5,110	100%
Other Admin Expense	151	200	-50	75%
Contingency	0	20,000	-20,000	0%
Total Other Administrative	137,897	162,400	-24,503	85%
Total General and Administrative	392,361	404,068	-11,707	97%
Total Expense	392,361	404,068	-11,707	97%
Net Ordinary Income	835,539	2,476,600	-1,641,061	34%
Net Income	835,539	2,476,600	-1,641,061	34%

CUYAMA BASIN GSA
2022/2023 Operating Budget
 July 2022 through June 2023

	Jul '22 - Jun 23
Ordinary Income/Expense	
Income	
Direct Public Funds	
Groundwater Extraction Fees	1,064,000
Grant Reimbursements	3,731,550
Total Direct Public Funds	4,795,550
Total Income	4,795,550
Cost of Goods Sold	
Program Expenses	
Technical Consulting	
Monitoring Network Enhancements	125,000
GSP Implementation - W&C	275,000
Stakeholder Engagement	109,000
Monitoring Network - P&P/USGS	137,500
Technical Support for DWR	20,000
Outreach	36,667
Grant Administration	100,000
Basin Water Use Surveys	155,000
Project & Mgmt Action Impl	226,000
Total Technical Consulting	1,184,167
Total Program Expenses	1,184,167
Total COGS	1,184,167
Gross Profit	3,611,383
Expense	
General and Administrative	
GSA Executive Director	
GSA BOD Meetings	111,395
Consult Mgmt and GSP Devel	73,351
Financial Information Coor	51,357
Support for DWR/Public Comments	18,217
Funding Process (GWE Fee)	5,562
CBGSA Outreach	10,721
Adjudication Support	1,935
Management Area Admin	11,768
Travel and Direct Costs	5,694
Total GSA Executive Director	290,000
Other Administrative	
Legal	100,000
Insurance - D&O and General	14,000
Auditing/Accounting Fees	9,800
Grant Proposals.	42,000
Other Admin Expense	200
Contingency	20,000
Total Other Administrative	186,000
Total General and Administrative	476,000
Total Expense	476,000
Net Ordinary Income	3,135,383
Net Income	3,135,383



Cuyama Basin GSA

Financial Statements

May 2023

CUYAMA BASIN GSA
Statement of Financial Position
As of May 31, 2023

	May 31, 23	May 31, 22	\$ Change	% Change
ASSETS				
Current Assets				
Checking/Savings				
Chase - General Checking	1,399,747	1,247,068	152,680	12%
Total Checking/Savings	1,399,747	1,247,068	152,680	12%
Accounts Receivable				
Accounts Receivable	1,207,900	1,101,810	106,090	10%
Total Accounts Receivable	1,207,900	1,101,810	106,090	10%
Other Current Assets				
Reimb New/Repl Well Charges	598	0	598	100%
Total Other Current Assets	598	0	598	100%
Total Current Assets	2,608,245	2,348,878	259,367	11%
TOTAL ASSETS	<u>2,608,245</u>	<u>2,348,878</u>	<u>259,367</u>	<u>11%</u>
LIABILITIES & EQUITY				
Liabilities				
Current Liabilities				
Accounts Payable				
Accounts Payable	219,352	298,244	-78,892	-27%
Total Accounts Payable	219,352	298,244	-78,892	-27%
Other Current Liabilities				
Deferred Revenue - GWE Fees	530,133	1,034,916	-504,784	-49%
Total Other Current Liabilities	530,133	1,034,916	-504,784	-49%
Total Current Liabilities	749,484	1,333,160	-583,676	-44%
Total Liabilities	749,484	1,333,160	-583,676	-44%
Equity				
Unrestricted Net Assets				
Net Income	1,115,300	763,431	351,869	46%
	743,460	252,287	491,173	195%
Total Equity	1,858,761	1,015,718	843,043	83%
TOTAL LIABILITIES & EQUITY	<u>2,608,245</u>	<u>2,348,878</u>	<u>259,367</u>	<u>11%</u>

CUYAMA BASIN GSA
Receipts and Disbursements
As of May 31, 2023

Type	Date	Num	Name	Memo	Debit	Credit
Chase - General Checking						
Bill Pmt -Check	07/06/2022	1108	HGCPM, Inc.			56,982.88
Bill Pmt -Check	07/06/2022	1109	Klein DeNatale Goldner			14,654.61
Bill Pmt -Check	07/06/2022	1110	Woodard & Curran Inc			186,637.84
Payment	07/07/2022	2093	Groundwater Extraction Fees:Tri-County Pistachios		34,654.10	
Payment	07/07/2022	4157	Groundwater Extraction Fees:Sunrise Olive Ranch, LLC		73,140.12	
Payment	07/07/2022	20526	Groundwater Extraction Fees:Cuyama Orchards, Inc		36,720.05	
Payment	07/07/2022	3031	Groundwater Extraction Fees:Harrington Farms		4,218.00	
Payment	08/02/2022	655	Groundwater Extraction Fees:Lewis, David		1,624.12	
Payment	08/12/2022	1002107539	Groundwater Extraction Fees:Cuyama Orchards, Inc		175.56	
Payment	08/12/2022	501659	Groundwater Extraction Fees:E & B Natural Resources Mgmt Co...		874.47	
Payment	08/30/2022	167	Groundwater Extraction Fees:Lee, Jennifer		3,444.38	
Deposit	08/30/2022			Deposit - Ventura County Int	9.06	
Bill Pmt -Check	09/07/2022	1111	HGCPM, Inc.			48,709.28
Bill Pmt -Check	09/07/2022	1112	Klein DeNatale Goldner			18,759.40
Bill Pmt -Check	09/07/2022	1113	Woodard & Curran Inc			151,031.80
Payment	10/04/2022	459731	Grimmway		218.97	
Payment	10/04/2022	331457	Groundwater Extraction Fees:Lear Real Estate Ent LLC		21,951.07	
Deposit	11/01/2022			Deposit - SB County Int	0.80	
Bill Pmt -Check	11/03/2022	1114	Daniells Phillips Vaughan & Bock	VOID: BOD Mtg Canceled	0.00	
Bill Pmt -Check	11/03/2022	1115	HGCPM, Inc.	VOID: BOD Mtg Canceled	0.00	
Bill Pmt -Check	11/03/2022	1116	Klein DeNatale Goldner	VOID: BOD Mtg Canceled	0.00	
Bill Pmt -Check	11/03/2022	1117	Provost & Pritchard Consulting Group	VOID: BOD Mtg Canceled	0.00	
Bill Pmt -Check	11/03/2022	1118	U.S. Geological Survey	VOID: BOD Mtg Canceled	0.00	
Bill Pmt -Check	11/03/2022	1119	Woodard & Curran Inc	VOID: BOD Mtg Canceled	0.00	
Bill Pmt -Check	12/12/2022	1120	Daniells Phillips Vaughan & Bock			7,000.00
Bill Pmt -Check	12/12/2022	1121	HGCPM, Inc.			94,657.06
Bill Pmt -Check	12/12/2022	1122	Klein DeNatale Goldner			22,599.50
Bill Pmt -Check	12/12/2022	1123	Provost & Pritchard Consulting Group			44,589.02
Bill Pmt -Check	12/12/2022	1124	U.S. Geological Survey			39,450.00
Bill Pmt -Check	12/12/2022	1125	Woodard & Curran Inc			238,023.71
Payment	12/23/2022	785326	Groundwater Extraction Fees:Cuyama Orchards, Inc		868.27	
Payment	01/10/2023	1002126846	Groundwater Extraction Fees:Cuyama Orchards, Inc	VTA pmt includes \$49.65 collection fee.	19,813.08	
Bill Pmt -Check	01/12/2023	1126	Daniells Phillips Vaughan & Bock			1,000.00
Bill Pmt -Check	01/12/2023	1127	HGCPM, Inc.			22,532.00
Bill Pmt -Check	01/12/2023	1128	Klein DeNatale Goldner			13,132.00
Bill Pmt -Check	01/12/2023	1129	Provost & Pritchard Consulting Group			598.50
Bill Pmt -Check	01/12/2023	1130	Woodard & Curran Inc			63,128.50
Bill Pmt -Check	03/29/2023	1131	CA Assoc of Mutual Water Companies			100.00
Bill Pmt -Check	03/29/2023	1132	Daniells Phillips Vaughan & Bock			450.00
Bill Pmt -Check	03/29/2023	1133	HGCPM, Inc.			62,144.46
Bill Pmt -Check	03/29/2023	1134	Klein DeNatale Goldner			22,102.00
Bill Pmt -Check	03/29/2023	1135	Provost & Pritchard Consulting Group	VOID: Printer Error	0.00	
Bill Pmt -Check	03/29/2023	1136	U.S. Geological Survey	Cust #6000007725		13,150.00
Bill Pmt -Check	03/29/2023	1137	Woodard & Curran Inc			250,923.16
Bill Pmt -Check	03/29/2023	1138	Provost & Pritchard Consulting Group			7,887.76
Payment	04/28/2023	1002145575	Groundwater Extraction Fees:Cuyama Orchards, Inc		19,809.23	
Payment	04/28/2023	04282023	Groundwater Extraction Fees:Cuyama Orchards, Inc		868.13	
Bill Pmt -Check	05/03/2023	1139	HGCPM, Inc.			42,112.25
Bill Pmt -Check	05/03/2023	1140	Insurica	Acct #CUYABAS01C		14,498.00
Bill Pmt -Check	05/03/2023	1141	Klein DeNatale Goldner			7,661.00
Bill Pmt -Check	05/03/2023	1142	Provost & Pritchard Consulting Group			1,142.78
Bill Pmt -Check	05/03/2023	1143	U.S. Geological Survey	Cust #6000007725		13,150.00
Bill Pmt -Check	05/03/2023	1144	Woodard & Curran Inc			138,440.25
Payment	05/18/2023	52093	Groundwater Extraction Fees:Cuyama Dairy Farm		35,144.68	
Payment	05/26/2023	2727	Groundwater Extraction Fees:Kooros Samadzadeh		92.88	
Payment	05/26/2023	20778	Groundwater Extraction Fees:Apache Canyon Ranch, Inc		4,289.40	
Payment	05/26/2023	05-127748	Department of Water Resources		683,230.11	
Total Chase - General Checking					941,146.48	1,597,247.76
TOTAL					941,146.48	1,597,247.76

CUYAMA BASIN GSA
A/R Aging Summary
As of May 31, 2023

	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL
Department of Water Resources	0	0	0	391,358	288,293	679,651
Groundwater Extraction Fees						
Caliente Ranch	0	57	0	0	0	57
Bosma and Ricci	0	163	0	0	0	163
Belden Family Trust	0	7,024	0	0	0	7,024
Bolthouse Land Co, LLC	0	135,804	0	0	0	135,804
Brodiaea, Inc	0	10,032	0	0	0	10,032
Ceferino, Cheng	0	1,911	0	0	0	1,911
Cuyama Community Svcs Dist	0	1,437	0	0	0	1,437
Cuyama Dairy Farm	0	7,584	0	0	0	7,584
Cuyama Orchards, Inc	0	12,683	0	135	2,363	15,181
E & B Natural Resources Mgmt Corp	0	257	0	0	0	257
Feinstein Investments	0	616	0	0	0	616
Grimmway Enterprises, Inc	0	206,559	0	0	0	206,559
H Lima Company	0	29	0	0	0	29
Harrington Farms	0	1,630	0	0	0	1,630
Harrington, Roy	0	4,586	0	0	0	4,586
JHP Global, Inc	0	4,164	0	0	0	4,164
Karam Pistachio Farm	0	3,666	0	0	0	3,666
Kern Ridge Growers, LLC	0	36,399	0	0	0	36,399
Lear Real Estate Ent LLC	0	5,915	0	0	0	5,915
Lee, Jennifer	0	251	0	0	0	251
Lewis, David	0	362	0	0	0	362
Lucky Dog Ranch, LLC	0	4,131	0	0	0	4,131
Highland Vineyard SB, LLC	0	20,109	0	0	0	20,109
Sunridge Nurseries, Inc	0	13,695	0	0	0	13,695
Sunrise Olive Ranch, LLC	0	21,139	0	0	0	21,139
The Ranch	0	222	0	0	0	222
Tri-County Pistachios	0	22,512	0	0	0	22,512
Triangle E. Farms	0	2,811	0	0	0	2,811
Total Groundwater Extraction Fees	0	525,750	0	135	2,363	528,249
TOTAL	0	525,750	0	391,493	290,657	1,207,900

CUYAMA BASIN GSA
A/P Aging Summary
As of May 31, 2023

	<u>Current</u>	<u>1 - 30</u>	<u>31 - 60</u>	<u>61 - 90</u>	<u>> 90</u>	<u>TOTAL</u>
HGCPM, Inc.	16,607	0	15,100	0	0	31,708
Klein DeNatale Goldner	8,009	0	10,226	0	0	18,235
Provost & Pritchard Consulting Group	2,005	0	6,239	0	0	8,244
Woodard & Curran Inc	66,055	0	95,109	0	0	161,165
TOTAL	<u>92,676</u>	<u>0</u>	<u>126,675</u>	<u>0</u>	<u>0</u>	<u>219,352</u>

CUYAMA BASIN GSA
Statement of Operations with Budget Variance
July 2022 through May 2023

	Jul '22 - May 23	Budget	\$ Over Budget	% of Budget
Ordinary Income/Expense				
Income				
Direct Public Funds				
Groundwater Extraction Fees	1,034,916	1,064,000	-29,084	97%
Grant Reimbursements	1,125,802	2,826,225	-1,700,423	40%
GWE Late Fees	2,451	0	2,451	100%
Total Direct Public Funds	2,163,169	3,890,225	-1,727,056	56%
Total Income	2,163,169	3,890,225	-1,727,056	56%
Cost of Goods Sold				
Program Expenses				
Technical Consulting				
Monitoring Network Enhancements	170,034	114,580	55,454	148%
GSP Implementation - W&C	147,805	252,080	-104,275	59%
Stakeholder Engagement	132,322	99,920	32,402	132%
Monitoring Network - P&P/USGS	108,487	137,500	-29,013	79%
Technical Support for DWR	0	18,335	-18,335	0%
Outreach	2,711	33,617	-30,906	8%
Grant Administration	93,081	91,600	1,481	102%
Basin Water Use Surveys	64,189	142,080	-77,891	45%
Project & Mgmt Action Impl	284,365	207,150	77,215	137%
Total Technical Consulting	1,002,994	1,096,862	-93,868	91%
Total Program Expenses	1,002,994	1,096,862	-93,868	91%
Total COGS	1,002,994	1,096,862	-93,868	91%
Gross Profit	1,160,175	2,793,363	-1,633,188	42%
Expense				
General and Administrative				
GSA Executive Director				
GSA BOD Meetings	126,781	102,112	24,669	124%
Consult Mgmt and GSP Devel	45,006	67,238	-22,232	67%
Financial Information Coord	31,025	47,077	-16,052	66%
Support for DWR/Public Comments	1,269	16,699	-15,430	8%
Funding Process (GWE Fee)	11,400	5,099	6,301	224%
CBGSA Outreach	11,475	9,828	1,647	117%
Adjudication Support	1,856	1,774	82	105%
Management Area Admin	32,375	10,787	21,588	300%
Travel and Direct Costs	9,622	5,220	4,402	184%
Total GSA Executive Director	270,810	265,834	4,976	102%
Other Administrative				
Legal	92,753	91,700	1,053	101%
Insurance - D&O and General	14,498	14,000	498	104%
Auditing/Accounting Fees	8,450	9,800	-1,350	86%
Grant Proposals	24,944	38,500	-13,556	65%
Printing and Copying	5,110	0	5,110	100%
Other Admin Expense	151	200	-50	75%
Contingency	0	20,000	-20,000	0%
Total Other Administrative	145,905	174,200	-28,295	84%
Total General and Administrative	416,715	440,034	-23,319	95%
Total Expense	416,715	440,034	-23,319	95%
Net Ordinary Income	743,460	2,353,329	-1,609,869	32%
Net Income	743,460	2,353,329	-1,609,869	32%

CUYAMA BASIN GSA
2022/2023 Operating Budget
 July 2022 through June 2023

	Jul '22 - Jun 23
Ordinary Income/Expense	
Income	
Direct Public Funds	
Groundwater Extraction Fees	1,064,000
Grant Reimbursements	3,731,550
Total Direct Public Funds	4,795,550
Total Income	4,795,550
Cost of Goods Sold	
Program Expenses	
Technical Consulting	
Monitoring Network Enhancements	125,000
GSP Implementation - W&C	275,000
Stakeholder Engagement	109,000
Monitoring Network - P&P/USGS	137,500
Technical Support for DWR	20,000
Outreach	36,667
Grant Administration	100,000
Basin Water Use Surveys	155,000
Project & Mgmt Action Impl	226,000
Total Technical Consulting	1,184,167
Total Program Expenses	1,184,167
Total COGS	1,184,167
Gross Profit	3,611,383
Expense	
General and Administrative	
GSA Executive Director	
GSA BOD Meetings	111,395
Consult Mgmt and GSP Devel	73,351
Financial Information Coor	51,357
Support for DWR/Public Comments	18,217
Funding Process (GWE Fee)	5,562
CBGSA Outreach	10,721
Adjudication Support	1,935
Management Area Admin	11,768
Travel and Direct Costs	5,694
Total GSA Executive Director	290,000
Other Administrative	
Legal	100,000
Insurance - D&O and General	14,000
Auditing/Accounting Fees	9,800
Grant Proposals.	42,000
Other Admin Expense	200
Contingency	20,000
Total Other Administrative	186,000
Total General and Administrative	476,000
Total Expense	476,000
Net Ordinary Income	3,135,383
Net Income	3,135,383



TO: Board of Directors
Agenda Item No. 8

FROM: Jim Beck / Brian Van Lienden

DATE: July 12, 2023

SUBJECT: Discuss and Take Appropriate Action on Action on DWR GSP Approval Staff Report

Recommended Motion

Provide general direction on responses to each corrective action as we prepare for the 5-year Update.

Discussion

On May 25, 2023, the CA Department of Water Resources (DWR) officially approved the 2020 Cuyama Basin GSP but included five recommended corrective actions to address in the GSP periodic evaluation and amendment in January 2025. Staff prepared a matrix showing current GSP actions and potential options for each corrective action which is provided as Attachment 1. Provided as Attachment 2 is DWR approval of the 2020 Cuyama Basin GSP with the corrective actions.

Cuyama Basin Groundwater Sustainability Agency

8. Discuss and Take Appropriate Action on DWR GSP Approval
Staff Report
Beck/Van Lienden

July 12, 2023



Discuss and Take Appropriate Action on DWR GSP Approval Staff Report

- On May 25, 2023, the CA Department of Water Resources (DWR) officially approved the 2020 Cuyama Basin GSP but included five recommended corrective actions to address in the GSP periodic evaluation and amendment in January 2025 (attached)
- Staff prepared a matrix showing current GSP actions and potential options for each corrective action (see attached table)
 - These were discussed on a call with CBGSA and DWR staff on June 29, 2023
- Staff is seeking general direction on responses to each corrective action as we prepare for the 5-year Update

Update on DWR Corrective Actions

	DWR Summary of Corrective Actions	Current CBGSA Actions	Potential Options
1	Clarifying the rationale and methods of simulating impacts to beneficial uses and users in the Northwestern Region	<ul style="list-style-type: none"> Planned installation of 3-4 piezometers (grant-funded) Developing active well dataset and well registration program Additional modeling analysis will be performed for the entire basin (including the Northwestern region) to assess impacts to beneficial uses and users 	<ul style="list-style-type: none"> Provide additional rationale for why Opti wells #841 and #845 were used for Northwestern analysis of impacts to beneficial uses and users

Update on DWR Corrective Actions

	DWR Summary of Corrective Actions	Current CBGSA Actions	Potential Options
2	Continuing to fill data gaps, collect additional monitoring data, and coordinate with agencies and interested parties to understand beneficial uses and users that may be impacted by depletions of interconnected surface water caused by groundwater pumping	<ul style="list-style-type: none"> • Installed 2 new USGS streamflow gauges • Planned installation of 3-4 piezometers (grant-funded) • Planned river channel survey (grant-funded) • Planned model update incorporating newly available data (see tech slide) • Developing active well dataset and well registration program 	<ul style="list-style-type: none"> • <i>Refer to DWR guidance doc in the fall and update options accordingly</i>

Update on DWR Corrective Actions

	DWR Summary of Corrective Actions	Current CBGSA Actions	Potential Options
3	<p>Providing an update on the status of the Improved Reliability of Water Supplies for Local Communities project or if this project is not effective or not implemented by the periodic evaluation, then the GSA <u>should develop sustainable management criteria for arsenic</u></p>	<ul style="list-style-type: none"> • CCSD has received funding through a Water Board grant for a new production well near the townsite which is expected to be installed by 2025 • Once the new well is installed, the CBGSA will review water quality reports in regard to arsenic concentrations 	<ul style="list-style-type: none"> • Consider additional cooperation/assistance with the CCSD to address future water quality issues

Update on DWR Corrective Actions

	DWR Summary of Corrective Actions	Current CBGSA Actions	Potential Options
4	Establishing sustainable management criteria for <u>nitrate</u>	<ul style="list-style-type: none"> Analyze recent nitrate monitoring data to determine if changes have occurred in advance of GSP periodic evaluation in 2025 Discuss strategy for establishing nitrate SMC with Board for 2025 periodic evaluation 	<ul style="list-style-type: none"> Coordinate annually with the Regional Water Quality Control Board to develop strategies for prevention of nitrate migration

Update on DWR Corrective Actions

	DWR Summary of Corrective Actions	Current CBGSA Actions	Potential Options
5	Clarifying the frequency of collecting samples to analyze for <u>arsenic</u> and <u>nitrate</u>	<ul style="list-style-type: none"> • Perform analysis at each 5-year GSP evaluation to monitor constituent level changes and reassess their impacts on the Basin and its beneficial uses and users • Collected nitrate and arsenic samples at WQ monitoring wells in 2022 to establish constituent baseline • Utilize ILP and USGS data to monitor nitrates and arsenic • Coordinate and work with the Regional Water Quality Control Board and other responsible regulatory programs, as needed 	<ul style="list-style-type: none"> • CBGSA to consider more frequent collection of nitrates and arsenic samples • Coordinate with RWQCB and USGS on ongoing monitoring of nitrates and arsenic • Add additional clarifying language to GSP regarding sampling frequency for nitrates and arsenic

Update on DWR Corrective Actions

- General SAC/Board direction/feedback requested

Attachment 2

CALIFORNIA DEPARTMENT OF WATER RESOURCES

**SUSTAINABLE GROUNDWATER
MANAGEMENT OFFICE**

715 P Street | Sacramento, CA 95814 | P.O. Box 942836 | Sacramento, CA 94236-0001

May 25, 2023

James Beck
Cuyama Basin GSA
1901 Royal Oaks Drive
Sacramento, CA 95815
jbeck@hgcpm.com

RE: Approved Determination of the July 2022 Groundwater Sustainability Plan
Submitted for the Cuyama Valley Basin

Dear James Beck,

The Department of Water Resources (Department) has evaluated the resubmitted and revised July 2022 Groundwater Sustainability Plan (GSP) for the Cuyama Valley Basin in response to the Department's incomplete determination on January 21, 2022 and has determined the GSP is approved. The approval is based on recommendations from the Staff Report, included as an exhibit to the attached Statement of Findings, which describes that the Cuyama Valley GSP has taken sufficient action to correct deficiencies identified by the department and satisfies the objectives of the Sustainable Groundwater Management Act (SGMA) and substantially complies with the GSP Regulations. The Staff Report also proposes recommended corrective actions that the Department believes will enhance the GSP and facilitate future evaluation by the Department. The Department strongly encourages the recommended corrective actions be given due consideration and suggests incorporating all resulting changes to the GSP in future updates.

Recognizing SGMA sets a long-term horizon for groundwater sustainability agencies (GSAs) to achieve their basin sustainability goals, monitoring progress is fundamental for successful implementation. GSAs are required to evaluate their GSPs at least every five years and whenever the Plan is amended, and to provide a written assessment to the Department. Accordingly, the Department will evaluate approved GSPs and issue an assessment at least every five years. The Department will initiate the first periodic review of the Cuyama Valley GSP no later than January 28, 2025.

Mr. James Beck
Page 2
May 25, 2023

Please contact Sustainable Groundwater Management staff by emailing sgmps@water.ca.gov if you have any questions related to the Department's assessment or implementation of your GSP.

Sincerely,

Paul Gosselin

Paul Gosselin
Deputy Director
Sustainable Groundwater Management

Attachment:

1. Statement of Findings Regarding the Determination of Approval of the Cuyama Groundwater Sustainability Plan (May 25, 2023)

**STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
STATEMENT OF FINDINGS REGARDING THE
APPROVAL OF THE
CUYAMA VALLEY BASIN
GROUNDWATER SUSTAINABILITY PLAN**

The Department of Water Resources (Department) is required to evaluate whether a submitted groundwater sustainability plan (GSP or Plan) conforms to specific requirements of the Sustainable Groundwater Management Act (SGMA or Act), is likely to achieve the sustainability goal for the basin covered by the Plan, and whether the Plan adversely affects the ability of an adjacent basin to implement its GSP or impedes achievement of sustainability goals in an adjacent basin. (Water Code § 10733.) The Department is directed to issue an assessment of the Plan within two years of its submission. (Water Code § 10733.4.) If a Plan is determined to be Incomplete, the Department identifies deficiencies that preclude approval of the Plan and identifies corrective actions required to make the Plan compliant with SGMA and the GSP Regulations. The GSA has up to 180 days from the date the Department issues its assessment to make the necessary corrections and submit a revised Plan. (23 CCR § 355.2(e)(2)). This Statement of Findings explains the Department's decision regarding the revised July 2022 Plan submitted by the Cuyama Basin Groundwater Sustainability Agency (GSA or Agency) for the Cuyama Valley Basin (Basin No. 3-013).

Department management has discussed the Plan with staff, has reviewed the Department Staff Report, attached as Exhibit A, which recommends approval of the GSP. Department management is satisfied that staff have conducted a thorough evaluation and assessment of the Plan and concurs with staff's recommendation and all the recommended corrective actions. The Department therefore **APPROVES** the Plan and makes the following findings:

- A. The initial Plan for the basin submitted by the GSA for the Department's evaluation satisfied the required conditions as outlined in § 355.4(a) of the GSP Regulations (23 CCR § 350 et seq.), and Department Staff therefore evaluated the initial Plan.
- B. On January 21, 2022, the Department issued a Staff Report and Statement of Findings determining the initial GSP submitted by the Agency for the basin to be incomplete because the GSP did not satisfy the requirements of SGMA, nor did it substantially comply with the GSP Regulations. At that time, the Department provided corrective actions in the Staff Report that were intended to address the deficiencies that precluded approval. Consistent with the GSP Regulations, the Department provided the Agency with up to 180 days to address the deficiencies detailed in the Staff Report. On July 18, 2022, within 180 days of the Staff Report

related to the Department's initial incomplete determination, the Agency submitted a revised 2022 GSP to the Department for evaluation. When evaluating a revised GSP that was initially determined to be incomplete, the Department reviews the materials (e.g., revised or amended GSP) that were submitted within the 180-day deadline and does not review or rely on materials that were submitted to the Department by the GSA after the resubmission deadline. Part of the Department's review focuses on how the Agency has addressed the previously identified deficiencies that precluded approval of the initially submitted Plan. The Department shall find a Plan previously determined to be incomplete to be inadequate if, after consultation with the State Water Resources Control Board, the Department determines that the Agency has not taken sufficient actions to correct the deficiencies previously identified by the Department. (23 CCR § 355.2(e)(3)(C).) The Department shall approve a Plan previously found to be incomplete if the Department determines the Agency has sufficiently addressed the deficiencies that precluded approval. The Department may evaluate other components of the Plan, particularly to assess whether revisions to address deficiencies may have affected other components of a Plan or its likelihood of achieving sustainable groundwater management and may offer recommended corrective actions to deal with any issues of concern.

C. The Department's Staff Report, dated January 21, 2022, identified the deficiencies that precluded approval of the initially submitted Plan. After thorough evaluation of the revised Plan, the Department makes the following findings regarding the sufficiency of the actions taken by the Agency to correct those deficiencies:

1. Deficiency 1: The corrective action advised the Agency to address several aspects of the Plan's discussion, analyses, and justification of groundwater level sustainable management criteria and potential impacts to groundwater uses and users. The Department found that the initial GSP did not adequately justify the established minimum thresholds or undesirable results for chronic lowering of groundwater levels nor discuss their impacts to beneficial uses and users.

The 2023 Staff Report associated with the revised 2022 Plan indicates that the Agency has taken sufficient actions to correct this deficiency such that, at this time, although the Staff Report includes recommended corrective actions to further align this aspect of the Plan with the GSP Regulations, the Department finds Plan approval is not precluded, and further finds that the Agency has the ability to achieve the sustainability goal for the basin on SGMA timelines, and that the Department will be able to periodically monitor and evaluate the likelihood of Plan implementation to achieve sustainability.

2. Deficiency 2: The corrective action advised the Agency to address the Plan's discussion and monitoring of interconnected surface water sustainable management criteria. The initial GSP did not discuss why monitoring groundwater levels in all representative wells in the Basin, including wells located many miles away from the Cuyama River and its major tributaries, was appropriate to use as a proxy to monitor for depletions of interconnected surface water that would have significant and unreasonable impacts on beneficial uses of the surface water.

The 2023 Staff Report indicates that the Agency has taken sufficient actions to correct this deficiency such that, at this time, although the Staff Report includes recommended corrective actions to further align this aspect of the Plan with the GSP Regulations, the Department finds Plan approval is not precluded, that the Agency has the ability to achieve the sustainability goal for the basin on SGMA timelines, and that the Department will be able to periodically monitor and evaluate the likelihood of Plan implementation to achieve sustainability.

3. Deficiency 3: The corrective action advised the Agency to address several aspects of the Plan's discussion and justification of water quality sustainable management criteria and potential impacts to groundwater users and uses. Based on comments submitted to the Department by the public and the State Water Resources Control Board, the initial GSP did not fully evaluate publicly available water quality data. This data may affect the GSA's initial analysis of degraded water quality in the Basin and require the development of sustainable management criteria and monitoring programs.

The 2023 Staff Report indicates that the Agency has taken sufficient actions to correct this deficiency such that, at this time, although the Staff Report includes recommended corrective actions to further align this aspect of the Plan with the GSP Regulations, the Department finds Plan approval is not precluded, that the Agency has the ability to achieve the sustainability goal for the basin on SGMA timelines, and that the Department will be able to periodically monitor and evaluate the likelihood of Plan implementation to achieve sustainability.

4. Deficiency 4: The corrective action advised the Agency to clarify the Plan's rationale to not mitigate the projected overdraft in the Basin. The initial GSP did not provide sufficient explanation of whether or how overdraft would be mitigated in two primary management areas that experienced consistent declines in groundwater storage.

The 2023 Staff Report indicates that the Agency has taken sufficient actions to correct this deficiency such that, at this time, the Department finds Plan approval is not precluded, that the Agency has the ability to achieve the sustainability goal for the basin on SGMA timelines, and that the Department will be able to periodically monitor and evaluate the likelihood of Plan implementation to achieve sustainability.

D. The Plan satisfies the relevant conditions in § 355.4(a) of the GSP Regulations (23 CCR § 350 et seq.):

1. The Plan was complete, meaning it generally appeared to include the information required by the Act and the GSP Regulations sufficient to warrant a thorough evaluation and issuance of an assessment by the Department. (23 CCR § 355.4(a)(2).)
2. The Plan, either on its own or in coordination with other Plans, appears to cover the entire Basin sufficient to warrant a thorough evaluation. (23 CCR § 355.4(a)(3).)

E. The general standards the Department applied in its evaluation and assessment of the Plan are: (1) “conformance” with the specified statutory requirements, (2) “substantial compliance” with the GSP Regulations, (3) whether the Plan is likely to achieve the sustainability goal for the Basin within 20 years of the implementation of the Plan, and (4) whether the Plan adversely affects the ability of an adjacent basin to implement its GSP or impedes achievement of sustainability goals in an adjacent basin. (Water Code § 10733.) Application of these standards requires exercise of the Department’s expertise, judgment, and discretion when making its determination of whether a Plan should be deemed “approved,” “incomplete,” or “inadequate.”

The statutes and GSP Regulations require Plans to include and address a multitude and wide range of informational and technical components. The Department has observed a diverse array of approaches to addressing these technical and informational components being used by GSAs in different basins throughout the state. The Department does not apply a set formula or criterion that would require a particular outcome based on how a Plan addresses any one of SGMA’s numerous informational and technical components. The Department finds that affording flexibility and discretion to local GSAs is consistent with the standards identified above, the state policy that sustainable groundwater management is best achieved locally through the development, implementation, and updating of local plans and programs (Water Code § 113), and the Legislature’s express intent under SGMA that groundwater basins be managed through the actions of local governmental agencies to the greatest extent feasible, while minimizing state intervention to only when necessary to ensure

that local agencies manage groundwater in a sustainable manner. (Water Code § 10720.1(h).) The Department's final determination of a Plan's status is made based on the entirety of the Plan's contents on a case-by-case basis, considering and weighing factors relevant to the particular Plan and Basin under review.

- F. In making these findings and Plan determination, the Department also recognized that: (1) it maintains continuing oversight and jurisdiction to ensure the Plan is adequately implemented; (2) the Legislature intended SGMA to be implemented over many years; (3) SGMA provides Plans 20 years of implementation to achieve the sustainability goal in a Basin (with the possibility that the Department may grant GSAs an additional five years upon request if the GSA has made satisfactory progress toward sustainability); and, (4) local agencies acting as GSAs are authorized, but not required, to address undesirable results that occurred prior to enactment of SGMA. (Water Code §§ 10721(r); 10727.2(b); 10733(a); 10733.8.)
- G. The Plan conforms with Water Code §§ 10727.2 and 10727.4, substantially complies with 23 CCR § 355.4, and, at this time, appears likely to achieve the sustainability goal for the Basin.
1. The sustainable management criteria and the GSP's goal to maintain groundwater conditions at elevations that avoid excessive drawdown, minimize the amount of domestic wells going dry, and avoid adverse impacts on groundwater dependent ecosystems (GDEs) are sufficiently justified and explained. The Plan relies on credible information and science to quantify the groundwater conditions that the Plan seeks to avoid and provides an objective way to determine whether the Basin is being managed sustainably in accordance with SGMA. (23 CCR § 355.4(b)(1).)
 2. The Plan demonstrates a thorough understanding of where data gaps exist (i.e., hydrogeological conceptual model, Ventucopa management area water budget, streamflow, and locations of GDEs) and demonstrates a commitment to eliminate those data gaps. The GSP also intends to address spatial gaps in the monitoring network and develop a coordinated groundwater monitoring schedule. Filling these known data gaps, and others described in the Plan, should lead to the refinement of the GSA's monitoring networks, the Basin's water model, and sustainable management criteria to better inform and guide future adaptive management strategies. (23 CCR § 355.4(b)(2).)
 3. The sustainable management criteria and projects and management actions are commensurate with the level of understanding of the Basin setting. The projects and management actions described in the Plan provide a feasible approach to achieving the Basin's sustainability goal

and should provide the GSA with greater versatility to adapt and respond to changing conditions and future challenges during GSP implementation. (23 CCR § 355.4(b)(3).)

4. The Plan provides a detailed explanation of how the various interests of groundwater uses and users in the Basin were considered in developing the sustainable management criteria and how those interests, including domestic wells, would be impacted by the established minimum thresholds. (23 CCR § 355.4(b)(4).)
5. The Plan's proposed projects and management actions appear feasible at this time and, if implemented expeditiously, appear likely to prevent undesirable results and ensure that the Basin is operated within its sustainable yield on SGMA timelines. The Department will continue to monitor Plan implementation and reserves the right to change its determination if projects and management actions are not implemented or appear unlikely to prevent undesirable results or unlikely to achieve sustainability within SGMA timeframes. (23 CCR § 355.4(b)(5).)
6. The Plan includes a reasonable assessment of overdraft conditions and includes reasonable means to mitigate overdraft, if present. (23 CCR § 355.4(b)(6).)
7. At this time, it does not appear that the Plan will adversely affect the ability of an adjacent basin to implement its GSP or impede achievement of sustainability goals in an adjacent basin. The Plan states that adjacent basins will not be impacted by the established minimum thresholds based on the watershed and groundwater divides that exist between these areas. (23 CCR § 355.4(b)(7).)
8. If required, a satisfactory coordination agreement has been adopted by all relevant parties. (23 CCR § 355.4(b)(8).)
9. The GSA's member agencies are Kern County, San Luis Obispo County, Ventura County, Santa Barbara County Water Agency, Cuyama Basin Water District, and the Cuyama Community Services District. Given the legal authority and financial resources of the GSA's member agencies and the additional authorities granted the GSA under SGMA, the Department concludes the GSA likely has the legal authority and financial resources necessary to implement the Plan. (23 CCR § 355.4(b)(9).)
10. Through review of the Plan and consideration of public comments, the Department determines that the GSA adequately responded to comments that raised credible technical or policy issues with the Plan, sufficient to warrant approval of the Plan at this time. The Department also notes that the recommended corrective actions included in the Staff Report are

important to addressing certain technical or policy issues that were raised and, if not addressed before future, subsequent plan evaluations, may preclude approval of the Plan in those future evaluations. (23 CCR § 355.4(b)(10).)

H. In addition to the grounds listed above, DWR also finds that:

1. The Plan provides additional analyses conducted by the GSA which modeled potential impacts to beneficial uses and users based on the established sustainable management criteria. The first analysis evaluated potential well impacts if groundwater levels reached minimum thresholds in all representative monitoring wells and concluded that five wells out of about 250 wells in the Basin would be impacted under this potentially extreme scenario. The second analysis focused on impacts to beneficial uses and users in the Northwestern Threshold Region and utilized modeled groundwater level data from water years 2011 through 2020. The second analysis concluded that domestic well users in this region would not be impacted and that groundwater dependent ecosystems would be impacted at one monitoring location. The GSP intends to use Adaptive Management actions to prevent adverse impacts to beneficial uses and users in the event that monitoring data or local input indicate that these impacts are present. The Department developed its GSP Regulations consistent with and intending to further the policy through implementation of SGMA and the Regulations, primarily by achieving sustainable groundwater management in a basin. By ensuring substantial compliance with the GSP Regulations, the Department has considered the state policy regarding the human right to water in its evaluation of the Plan. (23 CCR § 350.4(g).)
2. The Plan acknowledges and identifies interconnected surface waters within the Basin. The GSA proposes initial sustainable management criteria to manage this sustainability indicator and intends to improve understanding and management of interconnected surface water. The GSA acknowledges, and the Department agrees, many data gaps related to interconnected surface water exist. The GSA should continue filling data gaps, collecting additional monitoring data, and coordinating with agencies and interested parties to understand beneficial uses and users that may be impacted by depletions of interconnected surface water caused by groundwater pumping. Future updates to the Plan should aim to improve the initial sustainable management criteria as more information and improved methodologies become available.

Statement of Findings
Cuyama Valley Basin (No. 3-013)

May 25, 2023

3. The California Environmental Quality Act (Public Resources Code § 21000 *et seq.*) does not apply to the Department's evaluation and assessment of the Plan.

Accordingly, the 2022 GSP submitted by the Agency for the Cuyama Valley Basin is hereby **APPROVED**. The recommended corrective actions identified in the Staff Report will assist the Department's future review of the Plan's implementation for consistency with SGMA, and the Department therefore recommends the Agency address them by the time of the Department's periodic review, which is set to begin on January 28, 2025, as required by Water Code § 10733.8. Failure to address the Department's Recommended Corrective Actions before future, subsequent Plan evaluations, may lead to the Plan being determined incomplete or inadequate.

Signed:



Karla Nemeth, Director

Date: May 25, 2023

Exhibit A: Groundwater Sustainability Plan Assessment Staff Report – Cuyama Valley Basin (May 25, 2023)

**State of California
Department of Water Resources
Sustainable Groundwater Management Program
Groundwater Sustainability Plan Assessment
Staff Report**

Groundwater Basin Name:	Cuyama Valley Basin (No. 3-013)
Submitting Agency:	Cuyama Basin Groundwater Sustainability Agency
Submittal Type:	Revised Plan in Response to Incomplete Determination
Submittal Date:	July 18, 2022
Recommendation:	Approved
Date:	May 25, 2023

On July 18, 2022, the Cuyama Basin Groundwater Sustainability Agency (GSA or Agency) submitted the revised the Groundwater Sustainability Plan – July 2022 (GSP or Plan) for the Cuyama Valley Basin (Basin) to the Department of Water Resources (Department) in response to the Department’s incomplete determination on January 21, 2022,¹ for evaluation and assessment as required by the Sustainable Groundwater Management Act (SGMA)² and GSP Regulations.³

After evaluation and assessment, Department staff conclude the GSAs have taken sufficient actions to correct deficiencies identified by the Department; however, Department staff have recommended additional corrective actions, which staff recommend the GSA should be required to address by the Plan’s first periodic evaluation.⁴

Overall, Department staff believe at this time, the Plan contains the required components of a GSP; demonstrates a thorough understanding of the Basin based on what appears to be the best available science and information; sets reasonable and supported sustainable management criteria to prevent undesirable results as defined in the Plan; has a reasonable monitoring network; and proposes a set of projects and management actions that, if successfully implemented, are likely to achieve the sustainability goal defined for the Basin.⁵ Department staff will continue to monitor and evaluate the Basin’s progress toward achieving the sustainability goal through annual reporting⁶ and future

¹ Water Code § 10733.4(b); 23 CCR § 355.4(a)(4).

<https://sgma.water.ca.gov/portal/service/gspdocument/download/6152>.

² Water Code § 10720 *et seq.*

³ 23 CCR § 350 *et seq.*

⁴ 23 CCR § 356.4.

⁵ 23 CCR § 354.24.

⁶ 23 CCR § 356.2.

periodic evaluations of the GSP and its implementation. Department staff recommend approval of the Plan subject to recommended corrective actions described herein.

This assessment includes six sections:

- **Section 1 – Summary**: Provides an overview of the Department Staff's assessment and recommendations.
- **Section 2 – Evaluation Criteria**: Describes the legislative requirements and the Department's evaluation criteria.
- **Section 3 – Required Conditions**: Describes the submission requirements of a response to an incomplete determination to be evaluated by the Department.
- **Section 4 – Deficiency Evaluation**: Provides an assessment of whether and how the contents included in the GSP submittal addressed the deficiencies identified by the Department in the initial incomplete determination.
- **Section 5 – Plan Evaluation**: Provides a detailed assessment of the contents included in the GSP organized by each Subarticle outlined in the GSP Regulations.
- **Section 6 – Staff Recommendation**: Includes the staff recommendation for the Plan and any recommended corrective actions.

1 SUMMARY

Department staff conclude that the GSA took sufficient action to correct the deficiencies previously identified. Accordingly, Department staff recommend **approval** of the Groundwater Sustainability Plan for the Cuyama Valley Groundwater Basin, along with implementation of corrective actions described in this Staff Report, which Department staff recommend be addressed by the next periodic evaluation to further improve Plan implementation and achievement of basin sustainability in accordance with SGMA timelines.

The GSA has identified areas for improvement of its Plan (e.g, addressing data gaps related to hydrogeological conceptual model, including dedicated stream gaging; better understanding the water budget of the Ventucopa management area; verification of locations of groundwater-dependent ecosystems (GDEs); researching well construction details; addressing spatial gaps in monitoring; developing a coordinated groundwater sampling schedule; and monitoring land subsidence in the Central management area). Department staff concur that those items are important and recommend that the GSA address them as soon as possible. Department staff have also identified additional recommended corrective actions designed to address shortcomings of the Plan, as described in this Staff Report, that the GSA should consider for the first periodic evaluation of the Plan (see [Section 6](#)). The recommended corrective actions generally focus on the following:

- (1) clarifying the rationale and methods of simulating impacts to beneficial uses and users in the Northwestern Region;
- (2) continuing to fill data gaps, collect additional monitoring data, and coordinate with agencies and interested parties to understand beneficial uses and users that may be impacted by depletions of interconnected surface water caused by groundwater pumping; and
- (3) providing an update on the status of the Improved Reliability of Water Supplies for Local Communities project or if this project is not effective or not implemented by the periodic evaluation, then the GSA should develop sustainable management criteria for arsenic;
- (4) establishing sustainable management criteria for nitrate;
- (5) clarifying the frequency of collecting samples to analyze for arsenic and nitrate.

Addressing the recommended corrective actions identified in Section 6 of this Staff Report will be important to demonstrate, on an ongoing basis, that implementation of the Plan is likely to achieve the sustainability goal.

2 EVALUATION CRITERIA

The Department evaluates whether a Plan conforms to the statutory requirements of SGMA⁷ and is likely to achieve the basin's sustainability goal,⁸ whether evaluating a basin's first Plan,⁹ a Plan previously determined incomplete,¹⁰ an amended Plan,¹¹ or a GSA's periodic evaluation to an approved Plan.¹² To achieve the sustainability goal, each version of the Plan must demonstrate that implementation will lead to sustainable groundwater management, which means the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results.¹³ The Department is also required to evaluate, on an ongoing basis, whether the Plan will adversely affect the ability of an adjacent basin to implement its groundwater sustainability program or achieve its sustainability goal.¹⁴

The Plan evaluated in this Staff Report was previously determined to be incomplete. An incomplete Plan is one which Department staff identified one or more deficiencies that preclude its initial approval. Deficiencies may include a lack of supporting information that is sufficiently detailed or analyses that are sufficiently thorough and reasonable, or where Department staff determine it is unlikely the GSA(s) in the basin/subbasin could

⁷ Water Code §§ 10727.2, 10727.4, 10727.6.

⁸ Water Code § 10733; 23 CCR § 354.24.

⁹ Water Code § 10720.7.

¹⁰ 23 CCR § 355.2(e)(2).

¹¹ 23 CCR § 355.10.

¹² 23 CCR § 355.6.

¹³ Water Code § 10721(v).

¹⁴ Water Code § 10733(c).

achieve the sustainability goal under the proposed Plan. After GSAs have been afforded up to 180 days to address the deficiencies and based on the GSAs' efforts, the Department can either approve¹⁵ the Plan or determine the Plan inadequate.¹⁶

The Department's evaluation and assessment of a Plan previously determined to be incomplete, as presented in this Staff Report, continues to follow Article 6 of the GSP Regulations¹⁷ to determine whether the Plan, with revisions or additions prepared by the GSA, complies with SGMA and substantially complies with the GSP Regulations.¹⁸ As stated in the GSP Regulations, "substantial compliance means that the supporting information is sufficiently detailed and the analyses sufficiently thorough and reasonable, in the judgment of the Department, to evaluate the Plan, and the Department determines that any discrepancy would not materially affect the ability of the Agency to achieve the sustainability goal for the basin, or the ability of the Department to evaluate the likelihood of the Plan to attain that goal."¹⁹

When reviewing a Plan that has previously been determined to be incomplete, Department staff primarily assess whether the GSA(s) have taken sufficient actions to correct any deficiencies identified by the Department.²⁰ A Plan approval does not signify that Department staff, were they to exercise the professional judgment required to develop a Plan for the basin, would make the same assumptions and interpretations as those contained in the revised Plan, but simply that Department staff have determined that the modified assumptions and interpretations relied upon by the submitting GSA(s) are supported by adequate, credible evidence, and are scientifically reasonable. The reassessment of a Plan previously determined to be incomplete may involve the review of new information presented by the GSA(s), including models and assumptions, and a reevaluation of that information based on scientific reasonableness. In conducting its reassessment, Department staff does not recalculate or reevaluate technical information or perform its own geologic or engineering analysis of that information.

The recommendation to approve a Plan previously determined to be incomplete is based on a determination that the GSA(s) have taken sufficient actions (e.g., amended or revised the Plan) to correct the deficiencies previously identified by the Department that precluded earlier approval.

3 REQUIRED CONDITIONS

For a Plan that the Department determined to be incomplete, the Department identifies corrective actions to address those deficiencies that preclude approval of the Plan as

¹⁵ 23 CCR §§ 355.2(e)(1).

¹⁶ 23 CCR §§ 355.2(e)(3).

¹⁷ 23 CCR § 355 *et seq.*

¹⁸ 23 CCR § 350 *et seq.*

¹⁹ 23 CCR § 355.4(b).

²⁰ 23 CCR §§ 355.2(e)(3)(C).

initially submitted. The GSAs in a basin, whether developing a single GSP covering the basin or multiple GSPs, must attempt to sufficiently address those corrective actions within the time provided, not to exceed 180 days, for the Plan to be evaluated by the Department.

3.1 INCOMPLETE RESUBMITTAL

The GSP Regulations specify that the Department shall evaluate a revised GSP in which the GSA has taken corrective actions within 180 days from the date the Department issued an incomplete determination to address deficiencies.²¹

The Department issued the incomplete determination on January 21, 2022. The GSA submitted a revised GSP to the Department on July 18, 2022, in compliance with the 180-day deadline.

4 DEFICIENCY EVALUATION

As stated in Section 355.4 of the GSP Regulations, a basin “shall be sustainably managed within 20 years of the applicable statutory deadline consistent with the objectives of the Act.” The Department’s assessment is based on a number of related factors including whether the elements of a GSP were developed in the manner required by the GSP Regulations, whether the GSP was developed using appropriate data and methodologies and whether its conclusions are scientifically reasonable, and whether the GSP, through the implementation of clearly defined and technically feasible projects and management actions, is likely to achieve a tenable sustainability goal for the basin.

In its initial incomplete determination, the Department identified four deficiencies in the Plan related to groundwater levels, interconnected surface water, degraded water quality, and overdraft, which precluded the Plan’s approval in January 2022.²² The GSA was given 180 days to take corrective actions to remedy the identified deficiencies. Consistent with the GSP Regulations, Department staff are providing an evaluation of the resubmitted Plan to determine if the GSAs have taken sufficient actions to correct the deficiencies.

4.1 DEFICIENCY 1. THE GSP LACKS JUSTIFICATION FOR, AND EFFECTS ASSOCIATED WITH, THE SUSTAINABLE MANAGEMENT CRITERIA FOR GROUNDWATER LEVELS.

4.1.1 Corrective Action

The corrective actions issued by the Department in its January 21, 2022 assessment related to this deficiency are as follows:

²¹ 23 CCR § 355.4(a)(4).

²² <https://sgma.water.ca.gov/portal/service/gspdocument/download/6152>.

“The GSA must provide more detailed information, as required in the GSP Regulations, regarding undesirable results and minimum thresholds for all applicable threshold regions.²³ The GSA should describe the anticipated effects of the established minimum thresholds and undesirable results on the interests of beneficial uses and users and how the GSA determined that those thresholds would avoid undesirable results in the Basin. Department staff suggest the GSA consider and address the following:

1. The GSA should describe the specific undesirable results they aim to avoid through implementing the GSP. For example, if the long-term viability of domestic, agricultural, municipal, or environmental uses is a concern with respect to lowering of groundwater levels, then the GSA should describe the specific effects on those users that the GSA considers significant and unreasonable and define groundwater conditions that would lead to those effects. Clarify how the criteria defining when undesirable results occur in the Basin (i.e., 30 percent exceedance of minimum thresholds for two consecutive years) was established, the rationale behind the approach, and why it is consistent with avoiding the significant and unreasonable effects identified by the GSA.
2. The GSA should either explain how the existing minimum threshold groundwater levels are consistent with avoiding undesirable results or they should establish minimum thresholds at the representative monitoring wells that account for the specific undesirable results the GSA aims to avoid. For each threshold region, the GSA should evaluate and disclose the anticipated effects of the GSP’s minimum thresholds and undesirable results on:
 - a. Well infrastructure, including domestic wells, community and public water supply wells, and agricultural wells. The GSA may utilize the Department’s well completion report dataset²⁴ or other similar data to estimate the number and kinds of wells expected to be impacted at the minimum thresholds identified in the GSP. Public water system well locations and water quality data can currently be obtained using the State Water Resource Control Board’s (State Water Board) Geotracker website.²⁵ Administrative contact information for public water systems and well locations and contacts for state small water systems and domestic wells can be obtained by contacting the State

²³ 23 CCR §§ 354.26, 354.28.

²⁴ Well Completion Report Map Application. California Department of Water Resources, <https://www.arcgis.com/apps/webappviewer/index.html?id=181078580a214c0986e2da28f8623b37>.

²⁵ GeoTracker Application. California State Water Resources Control Board, <https://geotracker.waterboards.ca.gov/map/#>; select “Public Water Wells” under the “Other Sites” option and navigate to the area of interest.

Water Board's Needs Analysis staff.²⁶ The State Water Board is currently developing a database to allow for more streamlined access to this data in the future.

Should wells be identified as at risk of going dry at or near minimum threshold conditions, describe the extent of those impacts on beneficial users including: location, number, and type of wells impacted; the beneficial uses and users [affected]; and any identified project or management action that may be taken to address the condition. If the GSA identifies potential impacts to drinking water wells, including de minimis users and disadvantaged communities, those impacts should be described in the GSP.

By the first five-year update, the GSA should inventory and better define the location of active wells in the Basin. The GSA should document known impacts to drinking water users caused by groundwater management, should they occur, in annual reports and subsequent periodic updates.

- b. Environmental uses and users of groundwater. If data are not available to support evaluation of the effects of established minimum thresholds on environmental uses and users, the GSA should clarify the strategy, mechanism, and timeline for acquiring that data and incorporating that data into management of the Basin."²⁷

4.1.2 Evaluation

The revised GSP reiterates that the original GSP included a definition of the undesirable results that the GSA aimed to avoid—"a result that causes significant and unreasonable reduction in the long-term viability of domestic and agricultural, municipal, or environmental uses over the planning and implementation horizon of this GSP."²⁸

In response to Deficiency 1, the revised GSP explains that the sustainable management criteria were established based on i) input from local interested parties and landowners; ii) the hydrogeologic conceptual model; iii) assessment of current and historical conditions and best available data; and iv) local knowledge and professional opinion. The revised GSP clarifies that the established definition of an undesirable result, occurring when minimum thresholds for groundwater levels have been exceeded in 30 percent of representative wells for 24 consecutive months, allows the GSA flexibility to identify the cause of minimum threshold exceedances, to develop a plan for response, and to implement projects and management actions, as needed. Furthermore, exceedances in 30 percent of representative wells are considered by the GSA to be more indicative of basin-scale decline instead of localized declines, whereas the 24-month criterion

²⁶ DDW-SAFER-NAU@Waterboards.ca.gov.

²⁷ 23 CCR §§ 355.4(b)(2), 355.4(b)(3).

²⁸ Cuyama Basin 2019 GSP, Section 3.2.1, p. 269; Section 5.2, p. 361.

correlates with a sustained exceedance of minimum thresholds, which are considered more significant than short-term exceedances.²⁹ The minimum thresholds were developed with the intent to avoid undesirable results of excessive drawdown in groundwater levels, to minimize the number of domestic wells that could go dry, and to avoid adverse impacts on groundwater dependent ecosystems (GDEs).³⁰

The revised GSP describes two new analyses done by the GSA, which include modeling potential impacts to beneficial uses and users. The first analysis looked at potential well impacts if groundwater levels in all representative wells were to reach their respective minimum thresholds. The analysis utilized available County and public data and removed wells without pump depth or screen interval data from consideration. The simulation resulted in five out of 250 (two percent) production wells going dry. Of these five wells at risk of going dry, three are domestic wells that supply a total of four to five households. The GSP states that the GSA will strive to use adaptive management to prevent these domestic wells from going dry. The remaining two wells that could potentially go dry are agricultural wells that irrigate approximately two acres of vineyard, which the GSP estimates will result in a loss of about \$10,000 to \$15,000 per year. The GSP describes the potential loss of two agricultural wells that irrigate two acres out of the approximately 18,000 (0.01 percent) irrigated acres in the Basin to be less than a significant impact.³¹

The second analysis focused on impacts to beneficial uses and users specifically in the Northwestern Threshold Region by modeling groundwater levels reaching the minimum thresholds at two representative wells, Opti Well 841 and Opti Well 845. The modeled change in local groundwater levels between water years 2011 to 2020 resulted in no active domestic wells being affected. The modeled results indicate the groundwater conditions at the identified GDE located at the confluence of Cottonwood Creek and the Cuyama River would have a decline in groundwater level of fewer than five feet at the nearest representative monitoring well, Opti Well 832, resulting in the depth to water being less than 30 feet below ground surface at this location.³² The GSP states that monitoring impacts to GDEs would occur at Opti Well 832.³³ The GSA intends to use adaptive management if monitoring data or local input indicates that groundwater management may be adversely affecting beneficial users.³⁴ The revised GSP concludes that established minimum thresholds in the Northwestern Region will result in no negative impact on domestic wells in the area and have a minimal impact on one GDE (i.e., groundwater level decline of fewer than five feet).³⁵

²⁹ Cuyama Basin 2022 GSP, Appendix B, Section 2.1.3 pp. 1581-1582.

³⁰ Cuyama Basin 2022 GSP, Appendix B, Section 2.2.3, p. 1586.

³¹ Cuyama Basin 2022 GSP, Section 5.2, p. 390; Appendix B, Section 2.2.3, pp. 1586-1588.

³² Cuyama Basin 2022 GSP, Section 5.2, p. 392; Appendix B, Section 2.2.3, pp. 1589-1590.

³³ Cuyama Basin 2022 GSP, Appendix B, Section 2.2.3, pp. 1586-1587, 1589.

³⁴ Cuyama Basin 2022 GSP, Section 7.6, p. 436.

³⁵ Cuyama Basin 2022 GSP, Section 5.2, p. 389; Appendix B, Section 2.2.3, p. 1586.

4.1.3 Conclusion

Overall, Department staff believe the GSA has taken sufficient action to correct Deficiency 1 by further describing the undesirable results and performing new modeling and impact analyses, as described above and in the revised GSP. However, Department staff believe the GSA should consider the following recommended corrective actions to further their GSP by the periodic evaluation.

Department staff note that the potential effects to beneficial uses and users as discussed in the revised Plan are based on all representative wells being at their respective minimum thresholds, whereas the GSP defines an undesirable result occurring when 30 percent of representative wells have reached their minimum threshold for two consecutive years. Thus, Department staff understand the five wells that could potentially go dry appears to be an extreme scenario. Department staff conclude that the GSA took sufficient action to correct Deficiency 1 by performing new modeling and analysis of potential well impacts, as described in the revised GSP, and supporting and explaining its rationale for concluding that those impacts were not significant and unreasonable as it relates to chronic lowering of groundwater levels undesirable results. Department staff further note the GSA's adaptive management commitment in the Plan (see e.g., Supplemental Section 7.6) to attempt to minimize impacts to, and be protective of, all individual beneficial users of groundwater for domestic purposes by collecting and investigating reports of any domestic wells that are dewatered (i.e., go dry) during implementation of the Plan, and to establish a committee to investigate and develop appropriate responses to such occurrences, including implementing localized pumping management plans, installing additional monitoring wells, installing replacement wells, and developing other appropriate solutions. Given the inherent uncertainty regarding the Plan's projections of domestic well impacts, the importance of domestic beneficial uses of water, and the human hardship that dewatering of domestic wells could cause, Department staff encourage the GSA to monitor and report on this issue. The GSA may wish to review the Department's April 2023 guidance document titled *Considerations for Identifying and Addressing Drinking Water Well Impacts* guidance to assist its adaptive management efforts. (See [Recommended Corrective Action 1a](#))

Department staff also note that for the second analysis, the description of impacts to beneficial uses and users did not clearly explain the rationale for only including the two representative wells in the Northwestern Region model simulations. Department staff are aware of additional representative monitoring wells in the region;³⁶ however, the GSP does not explain how simulating the two representative wells in the region being at their minimum threshold for groundwater levels is appropriate to convey the conditions of the entire Northwestern Region. The GSP also did not appear to account for groundwater levels occurring at their respective minimum thresholds in all available representative wells in the Northwestern Region; expanding that analysis to include more representative

³⁶ Cuyama Basin 2022 GSP, Figure 4-18, p. 326; Figure 5-1, p. 363; Figure 5-6, p. 393; Table 4-5, pp. 322-325; Table 5-1, pp. 371-374.

wells could potentially result in greater impacts to domestic wells, stream depletion, and GDEs, than described in the GSP. Department staff recommend the GSA further explain the methodologies applied to the analysis of impacts to beneficial uses and users in the Northwestern Region including the rationale for how using two wells represent the entire region (See [Recommended Corrective Action 1b](#)).

4.2 DEFICIENCY 2. THE GSP DOES NOT FULLY DESCRIBE THE USE OF GROUNDWATER LEVELS AS A PROXY FOR DEPLETION OF INTERCONNECTED SURFACE WATER.

4.2.1 Corrective Action

The corrective action issued by the Department in January 2022 related to this deficiency stated that:

“The GSA should provide a demonstration, with supporting evidence, for why using the basinwide groundwater level minimum thresholds is a reasonable proxy for thresholds for depletion of interconnected surface water. If the representative monitoring network for interconnected surface water is modified, discuss how the definition of an undesirable result is affected.”³⁷

4.2.2 Evaluation

The revised GSP describes efforts the GSA made to improve the understanding of interconnected surface water, by improving the monitoring network since initial GSP submittal, with the construction of nine monitoring wells at three locations along the Cuyama River and installation of a new streamflow gage on the Cuyama River, upstream of Ventucopa. To address the deficiency regarding the use of all representative monitoring wells for groundwater levels as a proxy for interconnected surface water, the GSA modified the monitoring network for interconnected surface water to be a subset of the basinwide representative wells.³⁸ The subset of wells, which still relies on the proxy relationship between groundwater levels and interconnected surface water, was selected based on:

- i. proximity to major drainages—wells within 1.5 miles of the Cuyama River or within one mile of a major tributary, including Aliso Creek, Santa Barbara Creek, Quantal Canyon Creek, and Cuyama Creek;
- ii. wells that have screen intervals within 100 feet of the ground surface, including some wells with an assumed depth to the top of the screen being shallower than 100 feet below ground surface.³⁹

The GSP explains that these criteria result in a monitoring network that is more appropriate to represent interconnected surface water in the vicinity of the Cuyama River

³⁷ 23 CCR §§ 355.4(b)(2), 355.4(b)(3).

³⁸ Cuyama Basin 2022 GSP, Table 4-8, p. 357; Appendix B, Table 3.1, p. 1595.

³⁹ Cuyama Basin 2022 GSP, Section 4.10, pp. 354-356; Appendix B, Section 3.3.2, p. 1594.

system, rather than including wells that monitor conditions extending into higher elevation foothill areas. Furthermore, the shallow depths of the modified monitoring network are stated to provide more useful information regarding the interaction of surface water and groundwater.

Using these criteria and adjusted monitoring network, the revised GSP establishes the minimum threshold for depletions of interconnected surface water based on threshold regions and using groundwater levels as a proxy. The calculation method of minimum threshold for each threshold region varies and is described in the revised GSP.⁴⁰ An undesirable result for this sustainability indicator is defined as significant and unreasonable reductions in the viability of agriculture or riparian habitat in the Basin over the planning and implementation horizon of the GSP. An undesirable result would occur based on the same criteria as for the groundwater level sustainability indicator—when the minimum threshold is exceeded in 30 percent of representative wells for 24 consecutive months.⁴¹ The GSP explains that by setting minimum thresholds on shallow groundwater wells near surface water and using groundwater levels as a proxy, the GSA can monitor and manage the hydraulic gradient between the surface water body and groundwater elevations.⁴² The GSA will monitor shallow wells located closer to major drainages in the place of deep wells or wells that are far from major drainages is a reasonable approach to obtain better information about the correlation between surface flows and groundwater elevations.

While the GSA appears to have furthered its commitment to use groundwater levels as a proxy for interconnected surface water, the revisions do not demonstrate how monitoring will further the ultimate objective of determining the location, quantity, and timing of depletions of interconnected surface water due to groundwater pumping. The original GSP included a map showing the location of gaining and losing streams in the Basin.⁴³ The revised GSP improves on this by showing locations of potential stream interconnectivity along the Cuyama River and major tributaries within the Basin boundary.⁴⁴ The GSP explains that the figure was based on an analysis of the simulation of the Cuyama Basin Water Resources Model, which analyzed parameters including precipitation in the watershed, water infiltration, runoff, and interactions between surface water flows in the Basin.⁴⁵ Department staff acknowledge that historically measured streamflow data to evaluate the potential interconnected surface water systems in the Basin were limited, so inferred values from ungaged local small watersheds were utilized in the model simulation. Department staff note that the GSP tabulates modeled stream

⁴⁰ Cuyama Basin 2022 GSP, Section 5.2.1 and 5.2.2, pp. 361-369; Table 5-1, p. 371-374; Appendix B, Table 2-1, pp. 1584-1585.

⁴¹ Cuyama Basin 2022 GSP, Section 3.2.6, p. 272; Table 4-8, p. 357; Appendix B, Table 3-1, p. 1595.

⁴² Cuyama Basin 2022 GSP, Section 3.2.6, p. 272.

⁴³ Cuyama Basin 2022 GSP, Section 2.2.8, p. 227; Figure 2-61, p. 228.

⁴⁴ Cuyama Basin 2022 GSP, Figure 4-24, p. 355.

⁴⁵ Cuyama Basin 2022 GSP, Section 2.2.8, p. 227; Section 4.10, Figure 4.24, pp. 354-355; Appendix B, Section 3.3.1, pp. 1591-1593; Chapter 2 Appendix C, pp. 1165-1171.

depletion by river reach⁴⁶ and concludes the model is reasonably calibrated and reflects a reasonable representation of the Basin's hydrologic and hydrogeologic conditions.⁴⁷ The GSA appears to be making progress in identifying depletions; however, the correlation between groundwater levels and those depletions have not been established. While the efforts made to not preclude the Plan from approval, Department staff have provided recommended corrective actions below which will further the establishment of sustainable management criteria for interconnected surface water based on timing, location and volume as required by the GSP Regulations.

The GSP identifies data gaps that continue to limit the GSA's understanding of the timing and location of interconnectivity at the time of the GSP resubmittal.⁴⁸ Department staff recognize that the GSA has improved the Basin's monitoring network for this sustainability indicator since submission of the original GSP. The revised GSP describes a streamflow gage was installed along the Cuyama River in an identified data gap area, upstream of the Ventucopa management area, and describes the construction of nine monitoring wells along the Cuyama River utilizing technical assistance provided by the Department. Department staff encourage the GSA to continue addressing data gaps to improve the overall understanding of the conditions leading to depletions in the Basin.

4.2.3 Conclusion

At this time, Department staff conclude sufficient action has been taken on this deficiency and believe the GSA can work with the Department to further efforts on interconnected surface water. However, Department staff have provided recommended corrective actions in which the GSA should address within the periodic evaluation.

Department staff understand that quantifying depletions of interconnected surface water from groundwater extractions is a complex task that likely requires developing new, specialized tools, models, and methods to understand local hydrogeologic conditions, interactions, and responses. During the initial review of GSPs, Department staff have observed that most GSAs have struggled with this requirement of SGMA. However, staff believe that most GSAs will more fully comply with regulatory requirements after several years of Plan implementation that includes projects and management actions to address the data gaps and other issues necessary to understand, quantify, and manage depletions of interconnected surface waters. Department staff advise that at this stage in SGMA implementation, GSAs address deficiencies related to interconnected surface water depletion where GSAs are still working to fill data gaps and where these data will be used to inform and establish sustainable management criteria based on timing, volume, and depletion as required by the GSP Regulations.

The Department will continue to support GSAs in this regard by providing, as appropriate, financial and technical assistance to GSAs, including the development of guidance

⁴⁶ Cuyama Basin 2022 GSP, Table 2-2, p. 230; Section 2.2.8, p. 227; Figure 2-61, p. 228.

⁴⁷ Cuyama Basin 2022 GSP, Chapter 2 Appendix C, pp. 1161-1197.

⁴⁸ Cuyama Basin 2022 GSP, Section 2.2.10, p. 238; Section 4.10, p. 352, Appendix B, Section 3.3, pp. 1591-1595.

describing appropriate methods and approaches to evaluate the rate, timing, and volume of depletions of interconnected surface water caused by groundwater extractions. Once the Department's guidance related to depletions of interconnected surface water is publicly available, GSAs, where applicable, should consider incorporating appropriate guidance approaches into their future amendment and periodic evaluation of the GSP ([Recommended Corrective Action 2a](#)). GSAs should consider availing themselves of the Department's financial or technical assistance, but in any event must continue to fill data gaps, collect additional monitoring data, and implement strategies to better understand and manage depletions of interconnected surface water caused by groundwater extractions and define segments of interconnectivity and timing within their jurisdictional area ([Recommended Corrective Action 2b](#)). Furthermore, GSAs should coordinate with local, state, and federal resources agencies as well as interested parties to better understand the full suite of beneficial uses and users that may be impacted by pumping induced surface water depletion ([Recommended Corrective Action 2c](#)).

4.3 DEFICIENCY 3. THE GSP DOES NOT FULLY ADDRESS DEGRADED WATER QUALITY.

4.3.1 Corrective Action

The corrective actions issued by the Department in January 2022 related to this deficiency stated that:

“Having identified them as constituents of concern, the GSA should reasonably and thoroughly address nitrate and arsenic in the GSP using best available information. Specifically, the GSA should consider the following:

1. Groundwater conditions. The Department received comments that raise credible technical issues regarding groundwater quality data that apparently were not considered when developing the GSP but are available to the public and likely, in the opinion of Department staff, to alter the GSA's assessment of the Basin conditions. The GSA should coordinate with interested parties that submitted comments, in particular with the Regional Water Quality Control Board, to obtain best available information regarding basinwide water quality. The GSA should evaluate this data, along with their existing data, and update the description of basinwide water quality in the GSP as appropriate.
2. Sustainable management criteria. After updating the information regarding existing groundwater quality conditions, the GSA should revise its discussion of groundwater quality sustainable management criteria to either include criteria for arsenic and nitrate or provide thorough, evidence-based analysis and description for why groundwater management is not likely to cause significant and unreasonable degradation of groundwater by increasing concentrations of those constituents.

3. Monitoring networks. The GSA should appropriately revise its groundwater quality monitoring network based on updates to the GSP noted above. Department staff believe that, at a minimum, the GSA should include monitoring for arsenic and nitrates, as they have been identified as constituents of concern and both appear to be relatively widespread. Monitoring will be important for the GSA to assess whether groundwater quality degradation for those constituents is occurring throughout the planning and implementation horizon. The GSA may leverage existing programs that collect and disseminate water quality data and information. The GSA should address any data gaps in the groundwater quality monitoring network and provide specific schedules to address those data gaps.⁴⁹

4.3.2 Evaluation

4.3.2.1 Groundwater Conditions

To address the first component of the corrective action, the revised GSP now describes its effort to compile available data for nitrate and arsenic that were not incorporated in the original GSP. The GSA compiled additional data from various public databases and coordinated with Regional Water Quality Control Board staff to confirm that all available data had been incorporated. All newly compiled data is summarized in a table and plotted on figures showing the distribution and concentrations of nitrate and arsenic samples collected from wells in the Basin.⁵⁰

The GSP describes the analysis of the newly compiled data and concludes that nitrate and arsenic data from 2010 to 2020 show little change in concentrations from before and after 2015.⁵¹ Department staff acknowledge that the revised GSP contains a more comprehensive dataset of groundwater samples analyzed for nitrate and arsenic, which was evaluated by the GSA and described in the GSP along with new figures and a table.⁵² Department staff believe that the GSA has taken sufficient action to sufficiently address the groundwater conditions component of the corrective action.

4.3.2.2 Sustainable Management Criteria

To address the arsenic component of the sustainable management criteria corrective action, the GSP states that the area impacted by arsenic that exceeds the maximum contaminant level is south of the community of New Cuyama in wells screened deeper than 700 feet below ground surface. The GSP describes a planned project (named Improved Reliability of Water Supplies for Local Communities) to replace an abandoned production well impacted by arsenic and construct a new and more reliable production well that will be screened shallower than the zone with known high arsenic concentrations. The new well will be connected to an existing water supply distribution

⁴⁹ 23 CCR §§ 355.4(b)(2), 355.4(b)(3).

⁵⁰ Cuyama Basin 2022 GSP, Section 2.2.7, pp. 264-266.

⁵¹ Cuyama Basin 2022 GSP, Section 2.2.7, p. 264.

⁵² Cuyama Basin 2022 GSP, Section 5.5, pp. 394-395; Appendix B, Section 4.3.1, pp. 1597-1602.

system operated by the Cuyama Community Services District.⁵³ The GSP states that no domestic users are expected to rely on a well with arsenic concentrations that exceed the maximum contaminant level after the new production well is constructed.⁵⁴ Department staff believe the Plan's approach and discussion related to managing arsenic is appropriate, being that groundwater with elevated arsenic concentrations will be mitigated and that no known drinking water wells are anticipated by the GSA to be impacted by elevated arsenic concentrations. Department staff find that this method of mitigating high levels of arsenic in groundwater used for domestic supply is reasonable and sufficiently addresses this part of the corrective action and substantially complies with SGMA and GSP Regulations. Approval of this approach is dependent on the implementation of the project; however, the GSA must be able to quantitatively demonstrate, on an ongoing basis, that this project is achieving its intended effect of supplying groundwater that maintains arsenic concentrations below the water quality standard. Department staff recommend the GSA discuss the status, timeline, and effectiveness of the planned project to replace the production well that the GSP expects will result in no groundwater users relying on groundwater with high arsenic concentrations. If the project is not effective or not implemented by the periodic evaluation, Department staff recommend the GSA develop sustainable management criteria for arsenic (See [Recommended Corrective Action 3](#)).

To address establishing sustainable management criteria for the nitrate component of the corrective action, the GSA analyzed the available data and concludes that, although 40 percent of wells with nitrate data between 2010 and 2020 exceeded the maximum contaminant level,⁵⁵ the nitrate concentrations were relatively stable—no wells showed water quality degradation to an extent where a well that had not exceeded the maximum contaminant level prior to 2015 subsequently exceeded the maximum contaminant level after 2015.⁵⁶ Using this evidence-based analysis that nitrate concentrations have been relatively stable from 2010 to 2020, the GSA did not establish sustainable management criteria for nitrate, also stating that doing so would not be appropriate because the GSA has no mechanism to directly control nitrate concentrations or associated fertilizer application.⁵⁷

Department staff find that the GSA's stance regarding its lack of authority to manage nitrate concentrations did not consider the potential for degraded groundwater, impacted by nitrate, to migrate toward previously unimpacted areas due to GSA groundwater management activities. Because the GSA has legal authority to regulate groundwater pumping, which affects hydraulic gradients and groundwater flow, the GSA could monitor for and influence the migration of groundwater and has the responsibility to prevent unimpacted areas from becoming significantly and unreasonably impacted by nitrate.

⁵³ Cuyama Basin 2022 GSP, Section 2.2.7, pp. 264-266; Section 7.4.4, pp. 427-430.

⁵⁴ Cuyama Basin 2022 GSP, Section 5.5, p. 394; Appendix B, Section 4.3.2, p. 1601.

⁵⁵ Cuyama Basin 2022 GSP, Appendix B, Section 4.3.1, pp. 1598-1599.

⁵⁶ Cuyama Basin 2022 GSP, Section 2.2.7, p. 264.

⁵⁷ Cuyama Basin 2022 GSP, Section 5.5, p. 394; Appendix B, Section 4.3.2, p. 1601.

However, Department staff acknowledge that because the analysis provided in the revised GSP indicates little change in nitrate concentrations, the likelihood of undesirable results associated with nitrate occurring before the next periodic update is low. Furthermore, because of regulatory oversight by existing water quality programs such as the Irrigated Lands Regulatory Program, California Code of Regulations Title 22 requirements, and SWRCB Groundwater Ambient Monitoring and Assessment Program,⁵⁸ Department staff find the lack of established sustainable management criteria does not preclude approval at this time but encourages the GSA to coordinate closely with existing water quality programs and agencies.

The GSP describes baseline analysis of nitrate to be completed in 2022 and ongoing monitoring of nitrate in the revised GSP,⁵⁹ which will be discussed below; however, Department staff note that the monitoring of nitrate described in the revised GSP needs to be compared to an established water quality standard or criteria (i.e., maximum contaminant level or minimum threshold) that allows the Department, the GSA, and interested parties to quantitatively determine if undesirable results are occurring. The expanded monitoring for nitrate during the next periodic evaluation (five-year update) described in the revised Plan is important and appropriate to demonstrate, on an ongoing basis, that previously unimpacted areas do not become impacted due to migration of groundwater from areas affected by nitrate. However, the Plan should include sustainable management criteria for nitrate because routine analysis of nitrate without a transparent quantitative standard to compare to does not convey to the Department, the GSA, and interested parties whether significant and unreasonable effects have impacted beneficial uses and users in previously unimpacted areas. Therefore, Department staff recommend the GSP establish sustainable management criteria for nitrate by the next periodic evaluation (see [Recommended Corrective Action 4](#)).

4.3.2.3 Monitoring Networks

To address the corrective action related to the monitoring network, a new component of the revised GSP is that in addition to monitoring public water system wells for Title 22 requirements,⁶⁰ which include arsenic and nitrate, the GSA intended to perform a baseline analysis of representative wells for arsenic and nitrate in 2022. The GSP also states that it may analyze arsenic and nitrate concentrations in representative wells at each periodic evaluation.⁶¹ In regard to analyzing arsenic and nitrate in representative wells during the periodic evaluations, Department staff find this topic in the GSP to be not well described; the GSP states that “[a]dditional measurements may be considered by the GSA in the future in anticipation of five-year updates” and also states that “the GSA will reevaluate nitrate and arsenic concentrations at each 5-year GSP update.”⁶² Department staff note that during consultation meetings with the GSA in 2021 and 2022,

⁵⁸ Cuyama Basin 2022 GSP, Section 5.5, p. 394; Appendix B, Section 4.2, p. 1597.

⁵⁹ Cuyama Basin 2022 GSP, Section 5.5, pp. 394-395.

⁶⁰ Cuyama Basin 2022 GSP, Section 1.2.4, p. 70.

⁶¹ Cuyama Basin 2022 GSP, Section 5.5, p. 394; Appendix B, Section 4.3.2, pp. 1601-1602.

⁶² Cuyama Basin 2022 GSP, Section 5.5, p. 394; Appendix B, Section 4.3.2, pp. 1601-1602.

the Department emphasized to the GSA the need to be able to demonstrate, on an ongoing basis, that arsenic and nitrate are not significantly and unreasonably impacting beneficial uses and users. Department staff believe that if the GSA reevaluates historical data without new analytical measurements and data for arsenic and nitrate, the actual conditions and potential impacts to beneficial uses and users during periodic evaluations will not be known. Thus, ongoing monitoring of arsenic and nitrate will be important to comply with SGMA and GSP Regulations. Department staff interpret the GSP's discussion to mean that measurements of arsenic and nitrate will be performed at periodic evaluations; however, because of the ambiguous language in the GSP cited above, Department staff recommend the GSP reconcile the abovementioned statements and clarify the GSP's intent and frequency for ongoing quantitative monitoring (see [Recommended Corrective Action 5](#)).

4.3.3 Conclusion

Overall, Department staff believe the GSA has taken sufficient action to address this deficiency. However, as noted above, the GSA should discuss the status, timeline, and effectiveness of the planned project to replace the production well that the GSP expects will result in no groundwater users relying on groundwater with high arsenic concentrations (see Recommended Corrective Action 3), establish sustainable management criteria for nitrate (see Recommended Corrective Action 4); and reconcile and clarify the intent of ongoing measurements of arsenic and nitrate and what the periodic evaluation entails (see Recommended Corrective Action 5).⁶³ While the topics described in the corrective actions issued in this Staff Report do not, at this time, preclude approval of the Plan, the Department recommends that the issues be addressed to ensure the Plan's implementation continues to be consistent with SGMA and the Department is able to assess progress in achieving the sustainability goal within the Basin.⁶⁴

4.4 DEFICIENCY 4. THE GSP DOES NOT PROVIDE EXPLANATION FOR HOW OVERDRAFT WILL BE MITIGATED IN THE BASIN.

4.4.1 Corrective Action

The corrective actions issued by the Department in January 2022 related to this deficiency are stated as:

“The GSA should explain the rationale for not implementing pumping reductions in the overdrafted Ventucopa management area or any other portion of the Basin where overdraft is expected to continue, and explain the timeline and criteria that may be used to determine whether future pumping reduction allocations are needed.⁶⁵ If the criteria to implement pumping reductions are related to the effects

⁶³ Cuyama Basin 2022 GSP, Section 5.5, pp. 394-395; Appendix B, Section 4.3.3, pp. 1601-1602.

⁶⁴ Water Code § 10733.8.

⁶⁵ 23 CCR §§ 355.2(e)(3)(C), 355.4(b)(3), 355.4(b)(4), 355.4(b)(5), 355.4(b)(6).

on beneficial uses and users, as mentioned in Corrective Action 1, the GSP should clarify what those effects are that would necessitate pumping reductions. If data gaps are known to exist, they should be explained and include a timeline to address them and how they may affect management actions for the Ventucopa management area.

The GSP states well failures occurred during the 2012-2016 drought and projects a lowering of groundwater levels beyond those observed during the drought and below 2015 conditions. If, after considering this deficiency and the deficiency associated with Corrective Action 1 [Section 4.1], the GSA retains minimum thresholds that allow for continued lowering of groundwater levels, then it is reasonable to assume that additional wells may be impacted during implementation of the Plan. While SGMA does not require all impacts to groundwater uses and users be mitigated, the GSA should consider including projects and management actions strategies describing how they may support drinking water impacts that may occur due to continued overdraft during the period between the start of GSP implementation and achievement of the sustainability goal will be addressed. If mitigation strategies are not included, the GSP should contain a thorough discussion, with supporting facts and rationale, explaining how and why the GSA determined not to include specific actions to mitigate drinking water impacts from continued groundwater lowering below 2015 levels.”⁶⁶

4.4.2 Evaluation

To address the first component of Deficiency 4, the revised GSP clarifies the rationale for not implementing pumping reductions in the Ventucopa management area, despite historical and projected groundwater level declines.⁶⁷ The revised GSP explains that pumping reductions for the Ventucopa area were not planned in the GSP due to uncertainties in the reliability of the modeled groundwater level declines:⁶⁸

- i. Limited groundwater level data were available for model calibration. Only three calibration wells were available for that area of the Basin at the time of GSP development. However, after submitting the original GSP, new multi-completion monitoring wells were constructed in this area to provide additional information for future model calibration.
- ii. Characterization of streamflow and their effect on the groundwater aquifer was challenging because there were no streamflow gages on the Cuyama River with flow measurements. Since submission of the original GSP, a new streamflow gage was installed on the Cuyama River upstream of the Ventucopa Region.

⁶⁶ 23 CCR §§ 355.4(b)(2), 355.4(b)(3).

⁶⁷ Cuyama Basin 2022 GSP, Section 7.2, pp. 408-410.

⁶⁸ Cuyama Basin 2022 GSP, Appendix B, Section 5.3.1, pp. 1603-1604.

- iii. Groundwater pumping was based on estimates from available land use information using satellite imagery and limited or no information from the necessary well locations were available. Since submission of the original GSP, the GSA has required landowners to install meters on production wells and to report pumping information to the GSA.
- iv. The magnitude of the estimated water budget in the Ventucopa Region was relatively small, compared to the Basin's overall water budget, which was associated with high sensitivity and uncertainty in these water budget components, when estimating change in storage and long-term groundwater elevation changes for the Basin.
- v. Due to time and budget constraints, groundwater modeling and calibration was prioritized for the central portion of the Basin where overdraft was known to occur.

Department staff find the discussion in the revised GSP justifying why the GSA does not currently plan to administer pumping reductions in the Ventucopa management area to be sufficiently detailed, thorough, and reasonable. Department staff acknowledge that historical surface water and groundwater data in the area are limited and recognize that the GSA has made efforts to improve data gaps in the area by installing a new streamflow gage and constructing multi-completion monitoring wells at three sites along the Cuyama River. Department staff encourage the GSA to continue monitoring the Ventucopa management area and to incorporate data from the new monitoring sites into the model, as they become available.

In response to the second component of Deficiency 4, the revised GSP states that the available information, based on the Cuyama Basin Water Resource Model, did not indicate a projected overdraft in the Northwestern Region. Furthermore, according to the revised GSP, a 2018 investigation that was utilized to establish minimum thresholds for the region indicated those groundwater levels would be protective of groundwater pumping capacity for production wells in the area.⁶⁹ Department staff note, however, that this 2018 investigation did not consider the potential effects on GDEs in its analysis of groundwater levels reaching the minimum thresholds, though these impacts are discussed in other portions of the GSP. In responding to Deficiency 4, the revised GSP refers to the modeled groundwater level conditions at two representative wells, Opti Well 841 and Opti Well 845, being at their minimum thresholds. As summarized in Deficiency 1 above, the GSP concludes that the resulting conditions would not affect any domestic wells in the area but would have relatively minimal impact on GDEs. As described above in Deficiency 1, the GSA will monitor impacts to GDEs at Opti Well 832.⁷⁰

⁶⁹ Cuyama Basin 2022 GSP, Section 5.3.2, p. 1605; Cleath-Harris, 2018, Technical Memorandum: Sustainability Thresholds for Northwestern Region, Cuyama Valley Groundwater Sustainability Plan, <https://cuyamabasin.org/assets/pdf/Cleath-Harris-Sustainability-Thresholds-for-Northwestern-Region.pdf>.

⁷⁰ Cuyama Basin 2022 GSP, Appendix B, Section 2.2.3, pp. 1586-1587, 1589.

4.4.3 Conclusion

Department staff conclude the GSA has taken sufficient action to address the deficiency by describing, in sufficient detail, the rationale for not implementing pumping reductions in the Ventucopa management area and uses evidence-based analysis informed by new simulations of the Cuyama Basin Water Resource Model to discuss the anticipated impacts to beneficial uses and users in the Northwestern Region.

5 PLAN EVALUATION

As stated in Section 355.4 of the GSP Regulations, a basin “shall be sustainably managed within 20 years of the applicable statutory deadline consistent with the objectives of the Act.” The Department’s assessment is based on a number of related factors including whether the elements of a GSP were developed in the manner required by the GSP Regulations, whether the GSP was developed using appropriate data and methodologies and whether its conclusions are scientifically reasonable, and whether the GSP, through the implementation of clearly defined and technically feasible projects and management actions, is likely to achieve a tenable sustainability goal for the basin.

The Department staff’s evaluation of the likelihood of the Plan to attain the sustainability goal for the Basin is provided below. Department staff consider the information presented in the Plan to satisfy the general requirements of the GSP Regulations.

5.1 ADMINISTRATIVE INFORMATION

The GSP Regulations require each Plan to include administrative information identifying the submitting Agency, describing the plan area, and demonstrating the legal authority and ability of the submitting Agency to develop and implement a Plan for that area.⁷¹

The Plan provides administrative information identifying the submitting agency, the Cuyama Basin GSA, and some details regarding the GSA’s authority to manage groundwater in the Basin, which was generally presented in an understandable format using appropriate data. The GSP states that the Agency is the sole GSA covering the Basin and the Plan area. The Agency is a Joint Powers Authority comprised of agency representatives and is governed by a board that receives and considers recommendations from an advisory committee and a technical forum, comprised of and representing various local interests.⁷² The advisory committee represents large and small landowners, agriculture growers, residents, disadvantaged community members, and Hispanic community members,⁷³ whereas the technical forum is comprised of consultants, local water districts, county representatives, and private interests.⁷⁴

⁷¹ 23 CCR § 354.2 *et seq.*

⁷² Cuyama Basin 2022 GSP, Section 1.1.2, p. 41; Section 1.3.1, pp. 86-88.

⁷³ Cuyama Basin 2022 GSP, Executive Summary, p. 25.

⁷⁴ Cuyama Basin 2022 GSP, Section 1.3.1, p. 86.

The GSP describes the Plan area, which coincides with the Basin boundary and encompasses an area of about 378 square miles, which is displayed in various maps showing local agency jurisdictions, historical land use, and nearby groundwater basins.⁷⁵ Neighboring groundwater basins include Carrizo Plain and Mil Potrero Area—both identified as very low priority basins by the Department. The Caliente Range bounds the northwest and the Sierra Madre Mountains bound the southeast. The Basin is primarily located within the Cuyama Watershed and drained by the Cuyama River and its tributaries.⁷⁶

A map displaying the Basin and adjacent basins is shown in Figure 1 below.

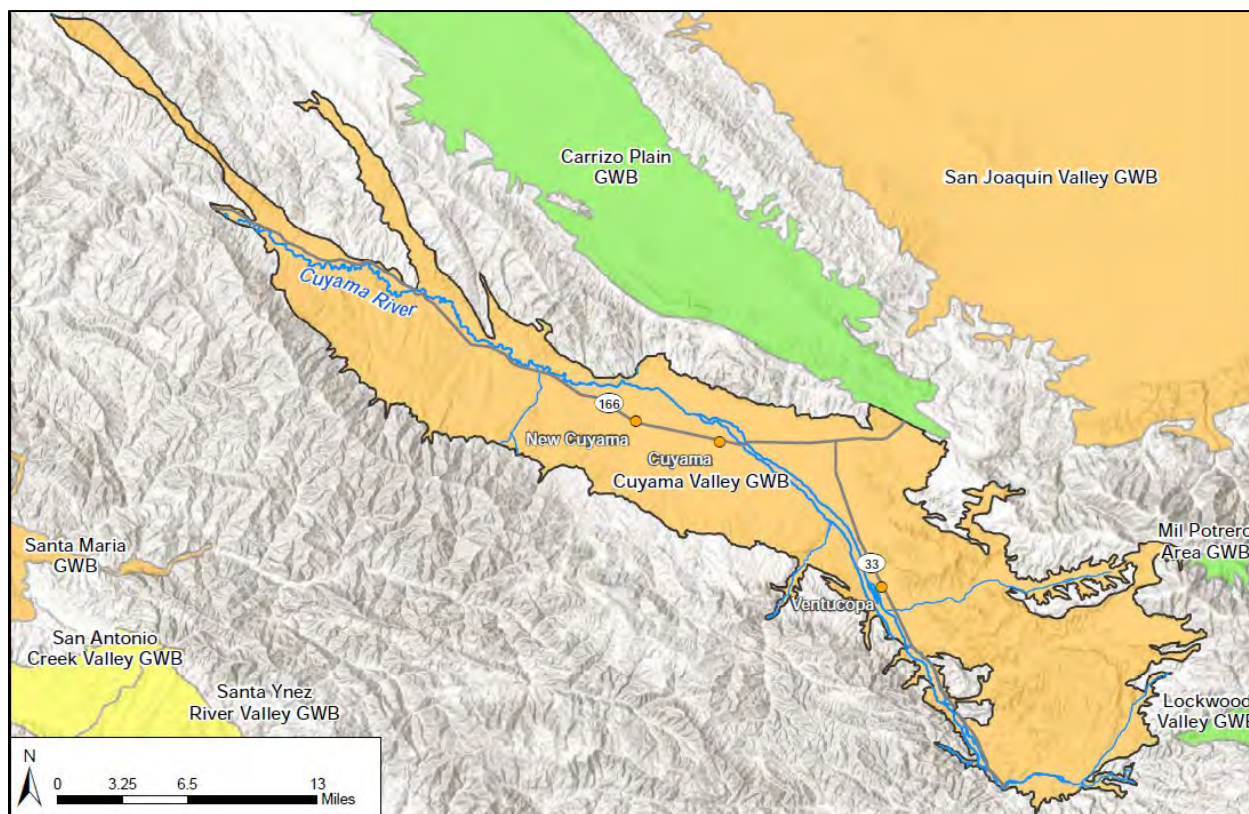


Figure 1: Cuyama Valley Location Map.

Department staff did not note any significant inconsistencies or contradicting information and consider the information presented in the Plan to satisfy the general requirements of the GSP Regulations. The Plan contains sufficient detail regarding the beneficial uses and users of groundwater,⁷⁷ water use types,⁷⁸ existing water monitoring and resource

⁷⁵ Cuyama Basin 2022 GSP, Section 1.2.1, pp. 46-47; Figures 1-3 to 1-14, pp. 49-60.

⁷⁶ Cuyama Basin 2022 GSP, Section 1.2.2, p. 48; Figure 1-19, p. 65.

⁷⁷ Cuyama Basin 2022 GSP, Section 1.3.1, p. 85.

⁷⁸ Cuyama Basin 2022 GSP, Tables 2-4 and 2-5, pp. 246-247.

programs,⁷⁹ and types and distribution of land use and land use plans for the Basin.⁸⁰ The Agency provides a list of public meetings, materials, and notifications on its website, and a table of public comments and how they were addressed by the GSA is included in the appendices of the GSP.⁸¹ The administrative information included in the Plan substantially complies with the requirements outlined in the GSP Regulations.

5.2 BASIN SETTING

The GSP Regulations require information about the physical setting and characteristics of the basin and current conditions of the basin, including a hydrogeologic conceptual model; a description of historical and current groundwater conditions; and a water budget accounting for total annual volume of groundwater and surface water entering and leaving the basin, including historical, current, and projected water budget conditions.⁸²

5.2.1 Hydrogeologic Conceptual Model

The GSP Regulations require a descriptive hydrogeologic conceptual model of the basin that includes a written description supported by cross sections and maps.⁸³ The hydrogeologic conceptual model is a non-numerical model of the physical setting, characteristics, and processes that govern groundwater occurrence within a basin, and represents a GSA's understanding of the geology and hydrology of the basin that support the geologic assumptions used in developing mathematical models, such as those that allow for quantification of the water budget.⁸⁴

The GSP describes the regional geologic setting, geologic structures in the Basin, stratigraphy, and geologic formations; supported by cross-sections, stratigraphic columns, and maps.⁸⁵ The GSP discusses major faults in the Basin, their properties, and known or suspected impacts to groundwater flow.

The GSP identifies one principal aquifer in the Basin, composed of Pliocene to Pleistocene unconsolidated to semi-consolidated alluvial units and the Upper Morales Formation, with a total approximate thickness of 3,000 to 4,000 feet.⁸⁶ The Plan discusses the known aquifer properties⁸⁷ and identifies data gaps in the understanding of the hydrogeologic conceptual model. The primary data gaps include the lack of consistent historical data for groundwater levels and quality; subsidence monitoring in the Central

⁷⁹ Cuyama Basin 2022 GSP, Sections 4.3 to 4.10, pp. 284-352.

⁸⁰ Cuyama Basin 2022 GSP, Section 1.2.2, pp. 47-48, Figures 1-6 to 1-14, pp. 52-59.

⁸¹ Cuyama Basin 2022 GSP, Chapter 1, Appendix D, pp. 520-640

⁸² 23 CCR § 354.12 *et seq.*

⁸³ 23 CCR § 354.12 *et seq.*

⁸⁴ DWR Best Management Practices for the Sustainable Management of Groundwater: Hydrogeologic Conceptual Model, December 2016: [https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents/Files/BMP-3-Hydrogeologic-Conceptual-Model ay 19.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents/Files/BMP-3-Hydrogeologic-Conceptual-Model%20ay%2019.pdf).

⁸⁵ Cuyama Basin 2022 GSP, Section 2.1.2 to 2.1.5, pp. 98-119.

⁸⁶ Cuyama Basin 2022 GSP, Section 2.1.7, p. 121.

⁸⁷ Cuyama Basin 2022 GSP, Section 2.1.7, pp. 123-132.

management area; understanding vertical hydraulic gradients in most of the Basin due to spatial gaps in monitoring locations; and incomplete well construction information.⁸⁸

The primary surface water feature is the Cuyama River and its perennial tributaries. The perennial Cuyama River is 55 miles long and crosses the length of the Basin.⁸⁹ The gaining and losing reaches of the river and major tributaries, as well as primary discharge areas, are shown on maps in the GSP.⁹⁰ However, water supply in the Basin does not include surface water; the Plan identifies groundwater as the sole source of water supply for the Basin. Water use sectors include municipal, agriculture, domestic, and native vegetation.⁹¹

The information provided in the GSP that comprises the hydrogeologic conceptual model substantially complies with the requirements outlined in the GSP Regulations. In general, the Plan's descriptions of the regional geologic setting, the Basin's physical characteristics, the principal aquifer, and hydrogeologic conceptual model appear to utilize the best available science. Department staff are aware of no significant inconsistencies or contrary technical information to that presented in the Plan.

5.2.2 Groundwater Conditions

The GSP Regulations require a written description of historical and current groundwater conditions for each of the six sustainability indicators and GDEs.⁹²

The GSP includes nearly 500 well hydrographs depicting groundwater elevations for the principal aquifer and provides a description of groundwater level trends and the groundwater level monitoring network used to observe groundwater conditions in the Basin. Department staff note that the hydrograph data range from 1959 to 2019, but are mostly discontinuous and exhibit relatively short trends when compared to the overall length of data collection.⁹³

Groundwater level conditions vary in the Basin and depend on precipitation and groundwater pumping. The two primary areas of pumping are in the Central and Ventucopa management areas. Groundwater level data and hydrographs show that groundwater levels have been declining in these areas for decades at an average rate of more than two feet per year.⁹⁴

The GSP discusses calculating the change in groundwater in storage using an integrated hydrologic model for the Basin. Department staff reviewed documentation provided for the integrated hydrologic model and determined that it appears to have been prepared

⁸⁸ Cuyama Basin 2022 GSP, Section 2.2.10, p. 238.

⁸⁹ Cuyama Basin 2022 GSP, Section 2.1.9, p. 133; Figure 2-17, p. 135.

⁹⁰ Cuyama Basin 2022 GSP, Section 2.2.8, pp. 227-228.

⁹¹ Cuyama Basin 2022 GSP, Section 1.3.1, pp.85-86; Table 2-4, p. 246.

⁹² 23 CCR § 354.16(a-f).

⁹³ Cuyama Basin 2022 GSP, Chapter 2, Appendix A, pp. 663-1149.

⁹⁴ Cuyama Basin 2022 GSP, Figure 2-27, p. 152; Figures 2-31 to 2-35, pp. 160-164; Figure 4-2, p. 282; Section 7.2, pp. 408-410.

based on the Integrated Water Flow Model platform, which is designated in SGMA as a model supported by the Department for evaluating integrated surface water and groundwater resources. During 1998 to 2017, groundwater in storage declined 18 out of 20 years, with an average reduction of 23,000 acre-feet per year.⁹⁵

Groundwater quality conditions also vary in the Basin, depending on groundwater recharge and pumping. Historical studies associate varying water quality with recharge location and nearby lithology, largely dependent on proximity to marine sediments. The Plan provides an assessment of existing groundwater quality programs in the Basin and includes maps⁹⁶ and descriptions of current and historical groundwater quality issues present in the Basin. The Plan acknowledges locally high concentrations of total dissolved solids, sulfates, nitrate, arsenic, sodium, boron, and hexavalent chromium, but focuses on total dissolved solids, nitrate, and arsenic because these were discussed during public meetings by interested parties as constituents of concern.⁹⁷

Regarding seawater intrusion, the Basin is far from the coast and is not hydraulically connected to a sea or ocean. The Agency concludes that seawater intrusion is not a relevant sustainability indicator for the Basin⁹⁸ and given the physical location of the Basin, Department staff are aware of no significant inconsistencies or contrary technical information to the Agency's decision.

The GSP describes a United States Geological Survey (USGS) investigation done in 2015 that concluded inelastic subsidence has occurred in the Basin since the 1970s.⁹⁹ One monitoring station near Ventucopa did not record any subsidence since 1999, while another station in the Central management area recorded 12 inches of land subsidence between 1999 and 2019. The USGS investigation estimated total subsidence in the Basin ranged from 0 to 0.4 feet between 2000 and 2012.¹⁰⁰ The GSP provides maps showing the locations of monitoring stations, spatial data gaps, and Interferometric Synthetic Aperture Radar (InSAR) data.¹⁰¹

The GSP includes an evaluation of surface water hydrology from 1998 to 2017 using the integrated hydrologic model prepared for the Basin. In the model, the Cuyama River was divided into five reaches based on precipitation rates, runoff, and infiltration characteristics; four creeks that drain into the Cuyama River were also assigned reaches and modeled.¹⁰² The gaining and losing reaches of the drainages and locations where

⁹⁵ Cuyama Basin 2022 GSP, Section 2.3, pp. 243-247, 250-259.

⁹⁶ Cuyama Basin 2022 GSP, Figures 2-11 to 2-15, p. 130-132; Figures 2-52 to 2-60, pp. 216-226; Figures 2-79 to 2-80, pp. 265-266.

⁹⁷ Cuyama Basin 2022 GSP, Section 2.1.8, p. 129; Section 2.2.7, p. 213.

⁹⁸ Cuyama Basin 2022 GSP, Section 2.2.5, p. 209.

⁹⁹ Cuyama Basin 2022 GSP, Section 2.2.6, p. 209.

¹⁰⁰ Cuyama Basin 2022 GSP, Section 2.2.6, p. 209.

¹⁰¹ Cuyama Basin 2022 GSP, Figures 2-50 to 2-51, pp. 210-211; Figures 4-22 to 4-23, pp. 348, 351; Figure 5-4, p. 387.

¹⁰² Cuyama Basin 2022 GSP, Section 2.2.8, pp. 227-228.

surface water may be connected to groundwater are shown on a map.¹⁰³ The Plan also discusses the conditions associated with GDEs in the Basin.¹⁰⁴

Overall, Department staff believe the Plan sufficiently describes the historical and current groundwater conditions throughout the Basin, and the information included in the Plan substantially complies with the requirements outlined in the GSP Regulations.

5.2.3 Water Budget

The GSP Regulations require a water budget for the basin that provides an accounting and assessment of the total annual volume of groundwater and surface water entering and leaving the basin, including historical; current; and projected water budget conditions, and the change in the volume of water stored, as applicable.¹⁰⁵

The GSP provided the required components for water budgets, including historical, current, and projected water budgets informed by the integrated hydrologic model for the Basin, which simulates surface water and groundwater flow in the Basin and was developed in consultation with the local technical forum.¹⁰⁶ The Plan includes an assessment of the total annual volume of groundwater and surface water entering and leaving the Basin and estimates the Basin's sustainable yield.¹⁰⁷

The hydrologic model projects a continued decline of 23,000 to 27,000 acre-feet per year over the 50-year implementation horizon, based on pre-SGMA conditions with no implementation of projects and management actions. Considering the Basin's sustainable yield of 20,000 to 27,000 acre-feet per year¹⁰⁸ and the average annual volume of groundwater production,¹⁰⁹ Department staff conclude that the Basin is currently in and projected to be in overdraft if no projects and management actions are implemented. However, the projects and management actions described in the revised GSP are intended to allow the Basin to operate within its sustainable yield.

Department staff conclude the historical, current, and projected water budgets included in the Plan substantially comply with the requirements outlined in the GSP Regulations. The GSP provides the required historical, current, and future accounting and assessment of the total annual volume of groundwater and surface water entering and leaving the Basin including an estimate of the sustainable yield of the Basin and projected future water demands.

5.2.4 Management Areas

The GSP Regulations provide the option for one or more management areas to be defined within a basin if the GSA has determined that the creation of the management areas will

¹⁰³ Cuyama Basin 2022 GSP, Figure 3-1, p. 1593.

¹⁰⁴ Cuyama Basin 2022 GSP, Section 2.2.9, pp. 232-236; Appendix B, Section 2.2.3, pp. 1589-1596.

¹⁰⁵ 23 CCR § 354.18 *et seq.*

¹⁰⁶ Cuyama Basin 2022 GSP, Section 2.3, pp. 243-257.

¹⁰⁷ Cuyama Basin 2022 GSP, Section 2.3, pp. 257-259.

¹⁰⁸ Cuyama Basin 2022 GSP, Section 2.3, pp. 257-259.

¹⁰⁹ Cuyama Basin 2022 GSP, Table 2-6, p. 254.

facilitate implementation of the Plan. Management areas may define different minimum thresholds and be operated to different measurable objectives, provided that undesirable results are defined consistently throughout the basin.¹¹⁰

The GSP identifies two management areas within the Basin—Central and Ventucopa.¹¹¹ The management areas delineate the groundwater pumping centers with historical groundwater level declines and are identified for the GSA’s consideration of projects and management actions. The management areas are not associated with differing sustainable management criteria; instead, the GSP proposes managed pumping reductions in the Central management area and states that the GSA will further investigate the need for pumping reductions in the Ventucopa management area, as described above in Deficiency 4.

To facilitate implementation of the Plan, the GSP identifies six threshold regions with varying sustainable management criteria (comparable to management areas as defined in the GSP Regulations).¹¹² The threshold regions are described and shown in Section 5.2.1 of the GSP.¹¹³ The factors provided by the GSA for grouping representative wells and sustainable management criteria by threshold region include the saturated thickness of the aquifer, well depth, historical range of groundwater levels, and annual change in storage.¹¹⁴ The justification for creating each threshold region and its respective method for calculating minimum thresholds for groundwater levels are summarized in Appendix B of the GSP.¹¹⁵

Based on review of the GSP’s use of threshold regions, Department considers these to be equivalent to management areas. Department staff believe the GSP is utilizing the threshold regions consistent with the requirements of the GSP Regulations related to management areas.

5.3 SUSTAINABLE MANAGEMENT CRITERIA

The GSP Regulations require each Plan to include a sustainability goal for the basin and to characterize and establish undesirable results, minimum thresholds, and measurable objectives for each applicable sustainability indicator, as appropriate. The GSP Regulations specify that an agency define conditions that constitute sustainable groundwater management for a basin, including the characterization of undesirable results and the establishment of minimum thresholds and measurable objectives for each applicable sustainability indicator.¹¹⁶

¹¹⁰ 23 CCR § 354.20.

¹¹¹ Cuyama Basin 2022 GSP, Section 7.2, pp. 408-410.

¹¹² 23 CCR § 354.20.

¹¹³ Cuyama Basin 2022 GSP, Section 5.2.1, pp. 361-369.

¹¹⁴ Cuyama Basin 2022 GSP, Section 5.2.1, pp. 361-369; Appendix B, pp. 1584-1585.

¹¹⁵ Cuyama Basin 2022 GSP, Appendix B, Table 2-1 and Figure 2-1, pp. 1583-1585.

¹¹⁶ 23 CCR § 354.22 *et seq.*

5.3.1 Sustainability Goal

The GSP establishes a sustainability goal “[t]o maintain a sustainable groundwater resource for beneficial users now and into the future while being consistent with the California Constitution.”¹¹⁷ The GSA states that it intends to adaptively manage groundwater resources through evaluating annual reports and periodic evaluations to determine progress towards meeting its sustainability goals.¹¹⁸

5.3.2 Sustainability Indicators

Sustainability indicators are defined as any of the effects caused by groundwater conditions occurring throughout the basin that, when significant and unreasonable, cause undesirable results.¹¹⁹ Sustainability indicators thus correspond with the six undesirable results – chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply if continued over the planning and implementation horizon; significant and unreasonable reduction of groundwater storage; significant and unreasonable seawater intrusion; significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies; land subsidence that substantially interferes with surface land uses; and depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water¹²⁰ – but refer to groundwater conditions that are not, in and of themselves, significant and unreasonable. Rather, sustainability indicators refer to the effects caused by changing groundwater conditions that are monitored, and for which criteria in the form of minimum thresholds are established by the agency to define when the effect becomes significant and unreasonable, producing an undesirable result.

The following subsections include details about three facets of sustainable management criteria: undesirable results, minimum thresholds, and measurable objectives for each sustainability indicator. GSAs are not required to establish criteria for undesirable results that the agency can demonstrate are not present and are not likely to occur in a basin.¹²¹

5.3.2.1 Chronic Lowering of Groundwater Levels

The GSP Regulations require the minimum threshold for chronic lowering of groundwater levels to be the groundwater elevation indicating a depletion of supply at a given location that may lead to undesirable results.¹²²

For the chronic lowering of groundwater levels, the GSP defines an undesirable result as a significant and unreasonable reduction in the long-term viability of domestic, agricultural, municipal, or environmental uses over the planning and implementation horizon of the GSP. The GSP describes the potential effects of chronic lowering of groundwater levels on beneficial uses and users including domestic, agricultural, and

¹¹⁷ Cuyama Basin 2022 GSP, Section 3.1, p. 268.

¹¹⁸ Cuyama Basin 2022 GSP, Section 7.6, p. 436.

¹¹⁹ 23 CCR § 351(a-h).

¹²⁰ Water Code § 10721(x).

¹²¹ 23 CCR § 354.26(d).

¹²² 23 CCR § 354.28(c)(1).

ecological uses.¹²³ The undesirable result for chronic lowering of groundwater levels is defined as occurring when 30 percent of representative monitoring wells fall below their minimum groundwater elevation thresholds for two consecutive years. The explanation of anticipated effects on beneficial uses and users is described in the revised GSP and evaluated in Deficiency 1 and Deficiency 4.¹²⁴

The GSA establishes minimum thresholds for chronic lowering of groundwater at 61 wells. The methodology to establish the minimum thresholds vary by threshold region, as discussed above in the Management Area section, and generally relate to historical groundwater elevations, groundwater use type, saturated thickness of aquifer, well depth, well screen intervals, and 2015 groundwater elevations.¹²⁵ Table 4-5 in the GSP lists the sustainable management criteria for all 61 representative monitoring wells, and a map shows the location of those wells.¹²⁶ The measurable objective for each representative well is based on when the threshold region was fully recharged or the early 2015 groundwater elevations or to build in a buffer of five years of change in storage. If data was not available for a criterion, the GSP extrapolated the value using a linear trendline. Interim milestones are set equal to the minimum thresholds in 2025.¹²⁷

Department staff conclude that the sustainable management criteria for groundwater levels are commensurate with the understanding of current conditions, responsive to interested party feedback, and reasonably protective of the groundwater uses and users in the Basin. The revised Plan provides a credible and sufficient assessment of the impacts the minimum thresholds would have on supply wells – including domestic wells – by evaluating the well impact depth, affected households, irrigated acreage, and associated financial impact. However, as highlighted in [Section 4.1](#) above, Department staff do provide a recommended corrective action related to chronic lowering of groundwater levels.

5.3.2.2 Reduction of Groundwater Storage

The GSP Regulations require the minimum threshold for the reduction of groundwater storage to be a total volume of groundwater that can be withdrawn from the basin without causing conditions that may lead to undesirable results. Minimum thresholds for reduction of groundwater storage shall be supported by the sustainable yield of the basin, calculated based on historical trends, water year type, and projected water use in the basin.¹²⁸

The GSP describes a significant and unreasonable reduction of groundwater storage as conditions that would result in “unreasonable reduction in the viability of domestic, agricultural, municipal, or environmental uses over the planning and implementation

¹²³ Cuyama Basin 2022 GSP, Section 3.2.1, p. 269.

¹²⁴ Cuyama Basin 2022 GSP, Appendix B, pp. 1586-1590; 1603-1605.

¹²⁵ Cuyama Basin 2022 GSP, Appendix B, pp. 1583-1585.

¹²⁶ Cuyama Basin 2022 GSP, Section 4.5.5, p. 321-325, Table 4-5, pp. 322; Figure 4-18, p. 326.

¹²⁷ Cuyama Basin 2022 GSP, Section 5.2.2, pp. 366-369.

¹²⁸ 23 CCR § 354.28(c)(2).

horizon of [the] GSP.”¹²⁹ The GSP uses the criteria for chronic lowering of groundwater levels as a proxy for groundwater storage sustainable management criteria, explaining that the change in storage is directly correlated to changes in groundwater elevation, and therefore, managing groundwater elevations effectively manages storage.¹³⁰

As with the chronic lowering of groundwater levels, the GSP defines an undesirable result as occurring when 30 percent of representative monitoring wells fall below their minimum groundwater elevation thresholds for two consecutive years. Additionally, the GSP states that the measurable objectives and interim milestones are the same as those established for the chronic lowering of groundwater.¹³¹ The GSP provides a description of the potential causes of the reduction of groundwater storage undesirable results and the possible effects on beneficial uses and users in the Basin.¹³²

Based on review of the materials referenced in the GSP, staff conclude that the GSP’s discussion and presentation of information related to significant and unreasonable reduction of groundwater storage, including the rationale that maintaining stable groundwater levels indicates groundwater storage is not being reduced, covers the specific items listed in the GSP Regulations in an understandable format using appropriate data.

5.3.2.3 Seawater Intrusion

The GSP states that due to the geographic location of the Basin, seawater intrusion is not a concern, and thus, sustainable management criteria for this sustainability indicator are not required.¹³³ Department staff agree that this sustainability indicator does not apply to the Basin and sustainable management criteria are not required.

5.3.2.4 Degraded Water Quality

The GSP Regulations require the minimum threshold for degraded water quality to be the degradation of water quality, including the migration of contaminant plumes that impair water supplies or other indicator of water quality as determined by the Agency that may lead to undesirable results. The minimum threshold shall be based on the number of supply wells, a volume of water, or a location of an isocontour that exceeds concentrations of constituents determined by the Agency to be of concern for the basin. In setting minimum thresholds for degraded water quality, the Agency shall consider local, state, and federal water quality standards applicable to the basin.¹³⁴

Three constituents of concern – arsenic, nitrate, and total dissolved solids – were identified by the GSA and are included in the GSP based on previous studies of the Basin and discussions during public meetings among interested parties in the Basin.¹³⁵

¹²⁹ Cuyama Basin 2022 GSP, Section 3.2.2, p. 270.

¹³⁰ Cuyama Basin 2022 GSP, Section 3.2.2, p. 270.

¹³¹ Cuyama Basin 2022 GSP, Section 5.3, p. 375.

¹³² Cuyama Basin 2022 GSP, Section 3.2.2, p. 270.

¹³³ Cuyama Basin 2022 GSP, Section 5.4, p. 375.

¹³⁴ 23 CCR § 354.28(c)(4).

¹³⁵ Cuyama Basin 2022 GSP, Section 2.2.7, p. 213.

However, the GSP only established a minimum threshold for total dissolved solids in representative monitoring wells based on the historical range of concentrations in each respective well. The GSP discusses in detail, provides data and maps, and has established sustainable management criteria and routine monitoring for total dissolved solids.¹³⁶ Because rainfall percolates through marine sediments adjacent to the Basin, some local areas naturally contain large amounts of salt, with concentrations ranging in the Basin from 84 to 4,400 milligrams per liter.¹³⁷

The GSP defines an undesirable result for total dissolved solids water quality conditions as “a causal nexus between SGMA-related groundwater quantity management activities and groundwater quality that causes significant and unreasonable reduction in long-term viability of domestic, agricultural, municipal, or environmental uses over the planning and implementation horizon of this GSP.”¹³⁸ The GSP states a water quality undesirable result occurs when 30 percent of the 64 representative monitoring points exceed the minimum threshold for a constituent for two consecutive years. As mentioned above, a GSA’s stance regarding its lack of authority to manage based on a causal nexus does not consider the potential for degraded groundwater to migrate toward previously unimpacted areas due to GSA groundwater management activities. Because the GSA has legal authority to regulate groundwater pumping, which affects hydraulic gradients and groundwater flow, the GSA can monitor for and influence the migration of groundwater and has the responsibility to prevent unimpacted areas from becoming significantly and unreasonably impacted by constituents of concern.

The minimum threshold for total dissolved solids does not utilize threshold regions and does not utilize a proxy. The same approach is used for all representative wells in the Basin. The minimum threshold for total dissolved solids in each representative well is established at 20 percent of the total range of measured values in each respective well above the 90th percentile of measurements. An example of the calculation method is provided in the GSP.¹³⁹ The minimum thresholds, measurable objectives, interim milestones, and monitoring locations are tabulated and shown in the GSP.¹⁴⁰

The GSP states that an acceptable margin of operational flexibility is applied towards the measurable objective, which is established in each representative well based on whichever is lower: the most recent measurement as of 2018, when the majority of data compilation and analysis concluded, or the California Division of Drinking Water and United States Environmental Protection Agency Secondary Drinking Water Standard for short-term use of 1,500 milligrams per liter.¹⁴¹

¹³⁶ Cuyama Basin 2022 GSP, Section 2.1.8, pp. 129-132; Section 2.2.7, pp. 212-218 and 223-226 and 264; Section 3.3.4, p. 274; Section 4.3.3, p. 301; Section 4.8, pp. 332-346; Section 5.5, p. 375-383.

¹³⁷ Cuyama Basin 2022 GSP, Section 1.2.1, p. 42; Section 2.1 pp. 100-108; Section 5.5.3, p. 379.

¹³⁸ Cuyama Basin 2022 GSP, Section 3.2.4, p. 271.

¹³⁹ Cuyama Basin 2022 GSP, Section 5.5.3, p. 379.

¹⁴⁰ Cuyama Basin 2022 GSP, Figure 5-3, p. 377; Table 5-2, pp. 381-383.

¹⁴¹ Cuyama Basin 2022 GSP, Section 5.5.3, p. 379.

Department staff note that some established minimum thresholds in the Basin exceed the temporary secondary maximum contaminant level of 1,500 milligrams per liter. However, due to the naturally elevated concentration of total dissolved solids being associated with a marine depositional setting as described in the GSP,¹⁴² and based on the Department not receiving substantive public comments regarding the values of the established minimum thresholds for total dissolved solids, Department staff believe this substantially complies with the requirements outlined in the GSP Regulations. GSAs should note that compliance with SGMA and the GSP Regulations does not supersede other drinking water standards, such as those set by the California Division of Drinking Water and United States Environmental Protection Agency.

Regarding arsenic, the GSP did not establish sustainable management criteria; however, as evaluated in [Section 4.3.2](#), the revised GSP performed additional work and analyses to comply with the Department's incomplete determination, including the comprehensive compilation of available data for arsenic; describing an analysis of the available data that show no wells exhibited a degradation from being below the maximum contaminant level prior to 2015 to an exceedance of the maximum contaminant level after 2015; and the intent to mitigate groundwater impacted by arsenic by constructing a replacement production well.¹⁴³

Regarding nitrate, neither the original nor resubmitted GSPs set sustainable management criteria for this constituent. As discussed in [Section 4.3.2](#), the GSA utilized available data and an evidence-based approach to show that nitrate concentrations have not substantively changed between 2010 and 2020 and that the Agency will perform additional monitoring for nitrate while leveraging existing regulatory programs for nitrate. As previously discussed above, at this time, Department staff conclude the lack of established sustainable management criteria does not preclude approval and have provided recommended corrective actions.

5.3.2.5 *Land Subsidence*

SGMA defines the undesirable result for subsidence to be significant and unreasonable land subsidence that substantially interferes with surface land uses, caused by groundwater conditions occurring throughout the basin.¹⁴⁴ The GSP Regulations require the minimum threshold for land subsidence to be the rate and extent of subsidence that substantially interferes with surface land uses and may lead to undesirable results.¹⁴⁵ Minimum thresholds for subsidence shall be supported by the identification of land uses and property interests that have been affected or are likely to be affected by land subsidence in the basin, including an explanation of how the Agency has determined and considered those uses and interests, and the Agency's rationale for establishing minimum thresholds in light of those effects and maps and graphs showing the extent and rate of

¹⁴² Cuyama Basin 2022 GSP, Section 1.2.1, p. 42; Section 2.1 pp. 100-108; Section 5.5.3, p. 379.

¹⁴³ Cuyama Basin 2022 GSP, Section 2.2.7, p. 264.

¹⁴⁴ Water Code § 10721(x)(5).

¹⁴⁵ 23 CCR § 354.28(c)(5).

land subsidence in the basin that defines the minimum threshold and measurable objectives.¹⁴⁶

The GSP defines significant and unreasonable conditions as it relates to land subsidence to be the reduction in the viability of the use of infrastructure over the planning and implementation horizon of the GSP, with the potential to damage infrastructure, including water conveyance and flood control facilities, roads, utilities, buildings, and pipelines.¹⁴⁷ The GSP describes the historical subsidence rates, elastic and inelastic subsidence, and the associated factors in the Basin such as natural geologic processes, oil pumping, and groundwater pumping. An undesirable result is described in the GSP to occur when 30 percent of representative monitoring sites exceed the minimum threshold for subsidence for longer than two years.¹⁴⁸ The minimum threshold for subsidence is two inches per year, whereas the measurable objective is zero lowering of ground surface elevations. Of the five monitoring sites in the vicinity, two sites are within the Basin boundary; thus, the GSP states that an exceedance of the minimum threshold at either of those two stations would lead to an undesirable result.¹⁴⁹

Based on review of the GSP, Department staff are aware of no significant inconsistencies or contrary information to what was presented in the GSP and therefore have no significant concerns regarding the quality, data, and discussion of land subsidence and the associated sustainable management criteria.

5.3.2.6 Depletions of Interconnected Surface Water

SGMA defines undesirable results for the depletion of interconnected surface water as those that have significant and unreasonable adverse impacts on beneficial uses of surface water and are caused by groundwater conditions occurring throughout the basin.¹⁵⁰ The GSP Regulations require that a Plan identify the presence of interconnected surface water systems in the basin and estimate the quantity and timing of depletions of those systems.¹⁵¹ The GSP Regulations further require that minimum thresholds be set based on the rate or volume of surface water depletions caused by groundwater use, supported by information including the location, quantity, and timing of depletions, that adversely impact beneficial uses of the surface water and may lead to undesirable results.¹⁵²

Department staff have partially evaluated this sustainability indicator in [Section 4.2.2](#) of this Staff Report. In addition to that evaluation, Department staff note the monitoring network for interconnected surface water includes 12 wells—nine of which are representative wells with defined minimum thresholds and measurable objectives. The

¹⁴⁶ 23 CCR § 354.28(c)(5)(A-B).

¹⁴⁷ Cuyama Basin 2022 GSP, Section 5.6.3, p. 385.

¹⁴⁸ Cuyama Basin 2022 GSP, Section 3.2.5, pp. 271-272.

¹⁴⁹ Cuyama Basin 2022 GSP, Section 3.3.5, p. 274; Section 5.6.3, p. 385.

¹⁵⁰ Water Code § 10721(x)(6).

¹⁵¹ 23 CCR § 354.16(f).

¹⁵² 23 CCR § 354.28(c)(6).

GSP states that the minimum thresholds at the representative well locations are protective of GDE locations.¹⁵³ The GSP acknowledges that the primary beneficial uses of streamflow in the Basin are GDEs and that lowering groundwater levels could result in increased depletion of surface water and reduced streamflow. The intent of the monitoring network for interconnected surface water and established sustainability criteria are to ensure that long-term groundwater level declines do not occur in the vicinity of the potential GDEs upstream of Ventucopa, downstream of the Russell Fault, and on the four major streams contributing to the Cuyama River.¹⁵⁴ At this time, Department staff are satisfied that the GSA has adopted a reasonable approach to identify the location of interconnected surface waters in the Basin and to utilize a reasonable monitoring network.

Based on new analysis by the GSA, one of the impacts to surface water that was not described above in Section 4.2 is simulated stream depletion. In the simulation of impacts to beneficial uses and users based on two representative wells in the Northwestern Threshold Region being at their minimum thresholds, the revised GSP estimates stream depletion of about 1,200 acre-feet per year in the Northwestern Region, which is approximately 12 percent of the total streamflow at this location—10,200 acre-feet per year. The revised GSP states that the actual inflows to the downstream Lake Twitchell would be less than 1,200 acre-feet per year because of stream depletions that would occur between Cottonwood Creek and Lake Twitchell.¹⁵⁵ The GSP acknowledges that additional streamflow gages along the Cuyama River would improve the numerical model used to estimate the depletions of interconnected surface water.¹⁵⁶

Overall, Department staff believe the GSA has provided sufficient information at this time and have provided recommended corrective actions for improvement in the future.

5.4 MONITORING NETWORK

The GSP Regulations describe the monitoring network that must be developed for each basin including monitoring objectives, monitoring protocols, and data reporting requirements. Collecting monitoring data of a sufficient quality and quantity is necessary for the successful implementation of a groundwater sustainability plan. The GSP Regulations require a monitoring network of sufficient quality, frequency, and distribution to characterize groundwater and related surface water conditions in the basin and evaluate changing conditions that occur through implementation of the Plan.¹⁵⁷ Specifically, a monitoring network must be able to monitor impacts to beneficial uses and users,¹⁵⁸ monitor changes in groundwater conditions relative to measurable objectives

¹⁵³ Cuyama Basin 2022 GSP, Section 3.2.6, p. 272; Appendix B, Section 3.3, pp. 1591-1596.

¹⁵⁴ Cuyama Basin 2022 GSP, Appendix B, Section 3.3.1, pp. 1591-1592.

¹⁵⁵ Cuyama Basin 2022 GSP, Appendix B, Section 5.2, p. 392; Section 2.2.3, pp. 1589-1590; Section 5.3.2, p. 1605.

¹⁵⁶ Cuyama Basin 2022 GSP, Section 2.2.10, p. 238; Section 4.10, p. 352.

¹⁵⁷ 23 CCR § 354.32.

¹⁵⁸ 23 CCR § 354.34(b)(2).

and minimum thresholds,¹⁵⁹ capture seasonal low and high conditions,¹⁶⁰ include required information such as location and well construction and include maps and tables clearly showing the monitoring site type, location and frequency.¹⁶¹ Department staff encourage GSAs to collect monitoring data as specified in the GSP, fill data gaps identified in the GSP prior to the first periodic evaluation,¹⁶² update monitoring network information as needed, follow monitoring best management practices,¹⁶³ and submit all monitoring data to the Department's Monitoring Network Module immediately after collection including any additional groundwater monitoring data that is collected within the Plan area that is used for groundwater management decisions. Staff note that if GSAs do not fill their identified data gaps, the GSA's basin understanding may not represent the best available science for use to monitor basin conditions.

The GSP leverages existing monitoring efforts by various agencies to monitor groundwater conditions in the Basin. The monitoring network includes 101 wells, and a subset of those wells are chosen as representative wells that have sustainable management criteria. The groundwater level monitoring network includes 61 representative wells screened at various depths in the principal aquifer.¹⁶⁴ The GSP proposes to use the representative groundwater level monitoring network as a proxy for the groundwater storage monitoring network because it states that changes in groundwater storage are directly dependent on changes in groundwater levels.¹⁶⁵

The groundwater quality monitoring network includes 64 representative monitoring wells.¹⁶⁶ The revised GSP states that the GSA intends to analyze these wells for total dissolved solids, arsenic, and nitrate at each periodic evaluation, in addition to the wells subject to California Code of Regulations Title 22 requirements.¹⁶⁷ As mentioned above, Department staff have provided Recommended Corrective Action 5 as it relates to water quality monitoring.

The land subsidence monitoring network includes five continuous global positioning satellite stations in the vicinity of the Basin. The two stations overlying the Basin are considered by the GSA to be representative, whereas the three stations outside the Basin boundary provide a measure of tectonic movement.¹⁶⁸

The interconnected surface water network utilizes a subset of the groundwater level monitoring network, as described above in [Section 4.2.2](#) and [Section 5.3.2](#) of this Staff Report. Nine of the twelve wells in the interconnected surface water monitoring network

¹⁵⁹ 23 CCR § 354.34(b)(3).

¹⁶⁰ 23 CCR § 354.34(c)(1)(B).

¹⁶¹ 23 CCR §§ 354.34(g-h).

¹⁶² 23 CCR § 354.38(d).

¹⁶³ Department of Water Resources, 2016, [Best Management Practices and Guidance Documents](#).

¹⁶⁴ Cuyama Basin 2022 GSP, Section 4.5.5, p. 321.

¹⁶⁵ Cuyama Basin 2022 GSP, Section 3.2.2, p. 270.

¹⁶⁶ Cuyama Basin 2022 GSP, Section 3.2.4, p. 271; Section 4.8.2, p. 333.

¹⁶⁷ Cuyama Basin 2022 GSP, Section 1.2.4, p. 70; Appendix B, Section 4.3.3, p. 1601.

¹⁶⁸ Cuyama Basin 2022 GSP, Section 4.3.4, p. 311.

are considered by the GSA to be representative wells. In addition to the wells, surface water in the vicinity is measured via three stream gages, one of which is in the Basin, upstream of Ventucopa.¹⁶⁹

Although the GSP provides a robust monitoring network that will monitor the sustainability indicators relevant to the Basin and assist in achieving the sustainability goal, there are some components of the GSP Regulations that the GSP does not address. While the information included in the GSP for the monitoring network does not preclude plan approval, Department staff have recommended corrective actions for further improvement of the Plan, as discussed below.

Surface water monitoring in the Basin relies on a stream gage installed upstream of Ventucopa, after submission of the original GSP, and a stream gage along Santa Barbara Creek. Another stream gage along the Cuyama River is downgradient, but outside of the Basin, and, therefore, influenced by drainages from non-Cuyama Basin watershed areas. Department staff encourage the GSA to improve on the data gap acknowledged in the GSP regarding gaging the Cuyama River within the Basin boundary,¹⁷⁰ so the GSA can better understand the surface flow component of the Basin's water budget and the location, quantity, and timing of stream depletion.¹⁷¹ As indicated in [Recommended Corrective Action 2b](#), Department staff recommend the GSA continue to fill data gaps related to interconnected surface water.

The GSP acknowledges a temporal data gap associated with the lack of a coordinated and synchronized schedule across various agencies for collecting groundwater level and water quality data that would provide representative and comparable basinwide conditions.¹⁷² Department staff encourages the filling of data gaps to work towards filling the temporal data gap.

The GSP provided scientific rationale for the representative monitoring site selections for the chronic lowering of groundwater levels, groundwater in storage, groundwater quality, land subsidence, and surface water monitoring networks. The GSP describes the rationale of selecting monitoring sites, including using a tiered approach to evaluate the quantity and quality of data for each site to determine representative monitoring sites.¹⁷³

Department staff conclude the GSP provides suitable rationale for selecting sites within each of the relevant sustainability indicator monitoring networks. The data management system is described in detail in the GSP.¹⁷⁴ The data management system was constructed to support sustainable groundwater management, to create transparent reporting on collected data and analysis results, and to be flexible enough to be

¹⁶⁹ Cuyama Basin 2022 GSP, Section 4.3.5, pp. 311-312; Appendix B, Section 3.2, p. 1591; Section 3.3.2, pp. 1594-1596.

¹⁷⁰ Cuyama Basin 2022 GSP, Section 2.2.10, p. 238; Section 4.10, p. 352.

¹⁷¹ 23 CCR § 354.16(f).

¹⁷² Cuyama Basin 2022 GSP, Section 4.5.8, p. 328; Section 4.8.3, p. 333; Section 4.8.8, p. 342.

¹⁷³ Cuyama Basin 2022 GSP, Sections 4.4 through 4.10, pp. 313-352.

¹⁷⁴ Cuyama Basin 2022 GSP, Section 6, pp. 396-407.

configured in the future for additional tools and functionality based on the needs of the GSA over time.¹⁷⁵

The description of the monitoring network included in the Plan substantially complies with the requirements outlined in the GSP Regulations. Overall, the Plan describes in sufficient detail a monitoring network that promotes the collection of data of sufficient quality, frequency, and distribution to characterize groundwater and related surface water conditions in the Basin and evaluate changing conditions that occur through Plan implementation. The GSP provides a good explanation for the conclusion that the monitoring network is supported by the best available information and data and is designed to ensure adequate coverage of sustainability indicators. The Plan also describes existing data gaps and the steps that will be taken to fill data gaps and improve the monitoring network.¹⁷⁶ Department staff consider the information presented in the Plan to satisfy the general requirements of the GSP Regulations regarding the monitoring network.

5.5 PROJECTS AND MANAGEMENT ACTIONS

The GSP Regulations require a description of the projects and management actions the submitting agency has determined will achieve the sustainability goal for the basin, including projects and management actions to respond to changing conditions in the basin.¹⁷⁷

To reach the sustainability goal, the GSP outlines a collection of projects and management actions that the GSA will rely on to eliminate the projected groundwater overdraft and to maintain groundwater levels. The Plan's primary method to achieving the sustainability goal is the management action to reduce groundwater production by 50 to 67 percent—to be implemented only in the Central management area using a tiered approach beginning in 2023.¹⁷⁸ The Plan also describes four projects aimed at enhancing precipitation, increasing infiltration of stormwater to enhance recharge into the aquifer, utilizing water transfers with downstream users, and improving the reliability of water supplies by replacing a public supply well and expanding and upgrading water conveyance infrastructure in the two primary pumping centers in the Basin.¹⁷⁹

To achieve the sustainability goal and avoid undesirable results, the GSP proposes projects and management actions in a manner that is consistent and substantially complies with the GSP Regulations.¹⁸⁰ The projects and management actions are directly related to the sustainable management criteria and present a generally feasible approach

¹⁷⁵ Cuyama Basin 2022 GSP, Section 6.1, pp. 396-397.

¹⁷⁶ Cuyama Basin 2022 GSP, Section 2.2.10, p. 238; Section 4.10, p. 352; Appendix B, Section 3.3, pp. 1591-1595.

¹⁷⁷ 23 CCR § 354.44 *et seq.*

¹⁷⁸ Cuyama Basin 2022 GSP, Section 7.5.2, pp. 432-436.

¹⁷⁹ Cuyama Basin 2022 GSP, Section 7.4, pp. 416-430.

¹⁸⁰ 23 CCR §§ 354.44(a), 354.44(b), 354.44(c), 354.44(d).

to achieving the sustainability goal of the Basin. As projects and management actions are implemented, the Department expects that the GSA will continue to communicate with interested parties regarding progress of projects and intention to implement projects per the GSP Regulations,¹⁸¹ and that progress reports will be included in annual reports and any addition or removal of project and management actions be documented in periodic evaluation.

Department staff believe that the GSP's management action to reduce groundwater pumping is an integral component of achieving sustainability and understand that pumping reductions are scheduled to begin in 2023.¹⁸² The Department will continue to evaluate the progress and effectiveness of the pumping reduction management action in annual reports, periodic evaluations, and amendments.

5.6 CONSIDERATION OF ADJACENT BASINS/SUBBASINS

SGMA requires the Department to "...evaluate whether a groundwater sustainability plan adversely affects the ability of an adjacent basin to implement their groundwater sustainability plan or impedes achievement of sustainability goals in an adjacent basin."¹⁸³ Furthermore, the GSP Regulations state that minimum thresholds defined in each GSP be designed to avoid causing undesirable results in adjacent basins or affecting the ability of adjacent basins to achieve sustainability goals.¹⁸⁴

Cuyama Valley has two adjacent groundwater basins: Carrizo Plain and Mil Potrero Area. These adjacent basins are designated very low priority and are not required to be managed under SGMA and a GSP. The adjacent Carrizo Plain basin is separated by a watershed divide and groundwater divide, which exhibit divergent groundwater flow and are generally considered a barrier to groundwater flow across the boundary. The Badlands Threshold Region of the Basin adjacent to Mil Potrero basin is relatively high in elevation, does not have active wells, and is separated from the adjacent basin by a groundwater divide. The Plan does not anticipate any impacts to adjacent basins resulting from the minimum thresholds defined in the Plan.¹⁸⁵

5.7 CONSIDERATION OF CLIMATE CHANGE AND FUTURE CONDITIONS

The GSP Regulations require a GSA to consider future conditions and project how future water use may change due to multiple factors including climate change.¹⁸⁶

Since the original GSP was adopted and submitted in 2020, climate change conditions have advanced faster and more dramatically. It is anticipated that the hotter, dryer conditions will result in a loss of 10 percent of California's water supply. As California

¹⁸¹ 23 CCR § 354.10(d).

¹⁸² Cuyama Basin 2022 GSP, Executive Summary, p. 37; Section 7.5.2, pp. 433-434.

¹⁸³ Water Code § 10733(c).

¹⁸⁴ 23 CCR § 354.28(b)(3).

¹⁸⁵ Cuyama Basin 2022 GSP, Section 2.1.6, p. 120.

¹⁸⁶ 23 CCR § 354.18.

adapts to a hotter, drier climate, GSAs should be preparing for these changing conditions as they work to sustainably manage groundwater within their jurisdictional areas. Specifically, the Department encourages GSAs to explore how the proposed groundwater level thresholds have been established in consideration of groundwater level conditions in the Basin based on current and future drought conditions. The Department encourages GSAs to also explore how groundwater level data from the existing monitoring network will be used to make progress towards sustainable management of the Basin given increasing aridification and effects of climate change, such as prolonged drought. Lastly, the Department encourages GSAs to continually coordinate with the appropriate groundwater users, including but not limited to domestic well owners and state small water systems, and the appropriate overlying county jurisdictions developing drought plans and establishing local drought task forces¹⁸⁷ to evaluate how the Agency's groundwater management strategy aligns with drought planning, response, and mitigation efforts within the Basin.

6 STAFF RECOMMENDATION

Department staff recommend approval of the GSP with the recommended corrective actions listed below. The Cuyama Valley Basin GSP conforms with Water Code Sections 10727.2 and 10727.4 of SGMA and substantially complies with the GSP Regulations. Implementation of the GSP will likely achieve the sustainability goal for the Cuyama Valley Basin. The GSAs have identified several areas for improvement of the Plan, and Department staff concur that those items are important and should be addressed as soon as possible. Department staff have identified recommended corrective actions that will further improve the manner in which the deficiencies were addressed and are expected to be addressed by the first periodic evaluation (due no later than January 28, 2025). Addressing these recommended corrective actions will be important to demonstrate that implementation of the Plan is likely to achieve the sustainability goal.

The recommended corrective actions include:

RECOMMENDED CORRECTIVE ACTION 1

- a. Monitor impacts to beneficial uses and users, including impacts to domestic wells, as Plan implementation continues. Provide the Department with an update of impacts and the adaptive management strategies implemented in annual reports and periodic evaluations. Department staff recommend that the GSA review the Department's April 2023 guidance document titled *Considerations for Identifying and Addressing Drinking Water Well Impacts* guidance to assist its adaptive management efforts.
- b. Explain and justify how and why using a subset of representative wells available in the region is appropriate to simulate the potential impacts to all beneficial uses

¹⁸⁷ Water Code § 10609.50.

and users in the region. Consider including additional wells within the region to further assess the impacts to the Northwestern Region and downstream users. If it is identified that overdraft will occur in this scenario, the GSA should clarify whether the implementation of proposed projects and management actions will avoid or mitigate significant and unreasonable impacts to beneficial users.

RECOMMENDED CORRECTIVE ACTION 2

Department staff understand that estimating the location, quantity, and timing of stream depletion due to ongoing, basinwide pumping is a complex task and that developing suitable tools may take additional time; however, it is critical for the Department's ongoing and future evaluations of whether GSP implementation is on track to achieve sustainable groundwater management. The Department plans to provide guidance on methods and approaches to evaluate the rate, timing, and volume of depletions of interconnected surface water and support for establishing specific sustainable management criteria in the near future. This guidance is intended to assist GSAs to sustainably manage depletions of interconnected surface water.

In addition, the GSA should work to address the following items by the first periodic evaluation:

- a. Consider utilizing the interconnected surface water guidance, as appropriate, when issued by the Department to establish quantifiable minimum thresholds, measurable objectives, and management actions.
- b. Continue to fill data gaps, collect additional monitoring data, and implement the current strategy to manage depletions of interconnected surface water and define segments of interconnectivity and timing.
- c. Prioritize collaborating and coordinating with local, state, and federal regulatory agencies, as well as interested parties, to better understand the full suite of beneficial uses and users that may be impacted by pumping-induced surface water depletion within the GSA's jurisdictional area.

RECOMMENDED CORRECTIVE ACTION 3

Provide an update regarding the status of the planned project to construct a new replacement production well near the community of New Cuyama, including whether wellhead treatment of arsenic will be performed and whether routine analysis of groundwater samples will be performed to monitor the effectiveness of the arsenic mitigation. If this project is not effective or not implemented by the periodic evaluation, then the GSA should develop sustainable management criteria for arsenic.

RECOMMENDED CORRECTIVE ACTION 4

By the periodic evaluation to be submitted by 2025, Department staff recommend the GSA develop sustainable management criteria for nitrate.

RECOMMENDED CORRECTIVE ACTION 5

Clarify the GSA's intent to perform ongoing measurements and analysis of groundwater samples for arsenic and nitrate, which will be important for the GSA to quantitatively demonstrate, using evidence-based analysis, that implementation of the GSP is achieving the intended effect of avoiding significant and unreasonable impacts to beneficial uses and users of groundwater. Discuss the frequency of the ongoing measurements for nitrate and arsenic.



TO: Board of Directors
Agenda Item No. 9

FROM: Jim Beck / Brian Van Lienden

DATE: July 12, 2023

SUBJECT: Discuss and Take Appropriate Action on Action on Plan Amendment to Change Undesirable Results Criteria

Recommended Motion

Due to improvements in Basin conditions, staff now recommends **not** doing a GSP amendment at this time and instead considering potential changes as part of January 2025 GSP amendment.

Discussion

At the May 3, 2023 Board meeting the Board directed staff to develop a draft GSP Supplemental Section to adjust the undesirable results criteria from 2 to 3 years, and Issue a 90-day notice of GSP amendment to cities and counties. Updates and staff recommendation is provided as Attachment 1. Provided as Attachment 2 is the draft GSP Supplemental Section.

Cuyama Basin Groundwater Sustainability Agency

9. Discuss and Take Appropriate Action on Plan Amendment to Change Undesirable Results Criteria

Beck/Van Lienden

July 12, 2023



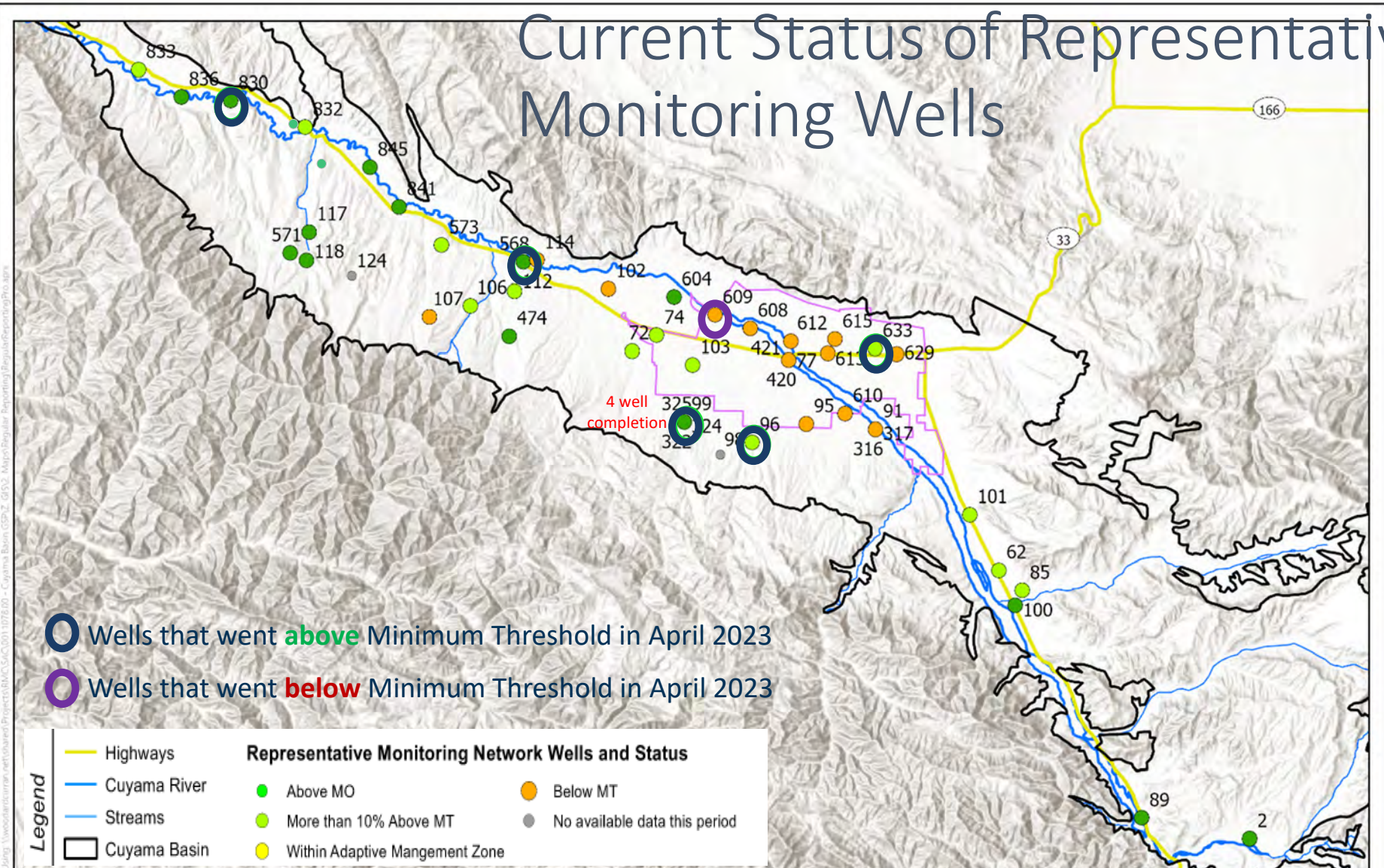
CBGSA Board Direction

- July 2022 Board meeting:
 - Directed staff to perform analysis for options 3 [Revise (Lower) Minimum Thresholds] and 4 [Revise Undesirable Results Trigger (30% for 2-years)]
- March 2023 Board Meeting:
 - Reviewed options as presented by staff: 1) adjust minimum thresholds; and 2) adjust undesirable results definition
 - Directed Staff to work on option 1 as presented and ensure additional production wells are not impacted for presentation at the May 3, 2023 Board meeting
- May 2023 Board Meeting:
 - Reviewed draft GSP Supplemental Section to adjust minimum thresholds
 - Directed staff to:
 - Develop a draft GSP Supplemental Section to adjust the undesirable results criteria from 2 to 3 years (option 2), and
 - Issue a 90-day notice of GSP amendment to cities and counties

Updates and Staff Recommendation for Board Action

- GSP Periodic Evaluation requirement:
 - Document is required at least every five years or whenever the GSP is amended
 - DWR will provide guidance that will likely be available in Fall 2023
- Improved Basin conditions in April 2023 monitoring
 - 8 wells went above MT and 1 well went below MT between January and April 2023
 - **Determination of undesirable results is now predicted to occur in October 2024 instead of July 2023**
- Staff prepared a draft GSP Amendment document reflecting conditions before April 2023 monitoring was known – *this version has not been updated*
- **Recommendation:** Due to improvements in Basin conditions, staff now recommends **not** doing a GSP amendment at this time and instead considering potential changes as part of January 2025 GSP amendment

Current Status of Representative Monitoring Wells



- Wells that went **above** Minimum Threshold in April 2023
- Wells that went **below** Minimum Threshold in April 2023

Legend

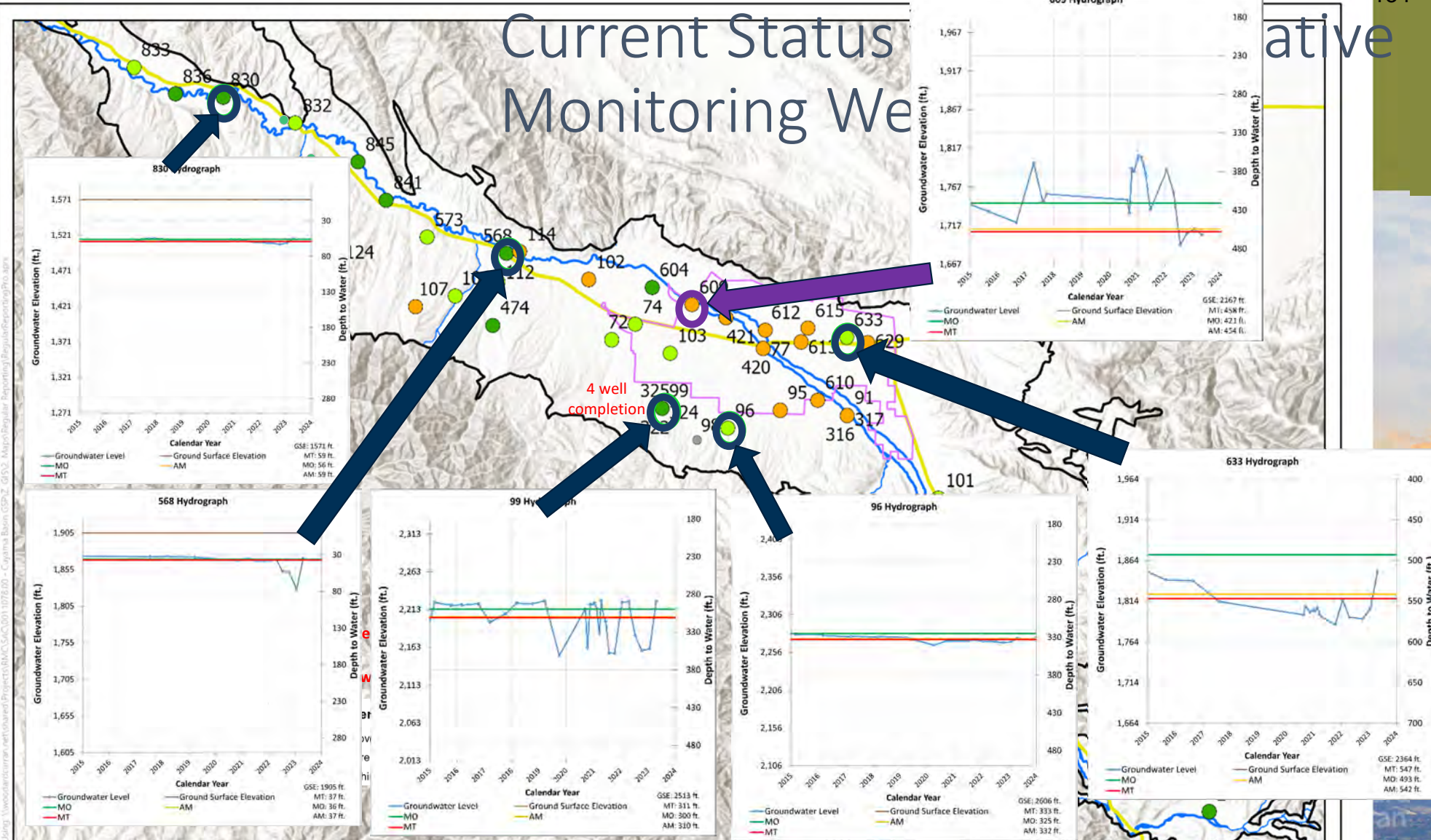
- Highways
- Cuyama River
- Streams
- Cuyama Basin

Representative Monitoring Network Wells and Status

- Above MO
- More than 10% Above MT
- Within Adaptive Mangement Zone
- Below MT
- No available data this period

Current Status Monitoring Wells

ative



Board Direction on Next Steps

- Staff recommends **not** doing a GSP amendment at this time and instead considering potential changes as part of January 2025 GSP amendment
- Does the Board agree with the staff recommendation?
- Or, would the Board like to move forward with the draft Supplemental GSP section and change the undesirable results criteria this fall?
 - If so, would the Board like staff to make any changes to the draft Supplemental GSP section?



Note: This draft GPS supplemental section was prepared per CBGSA Board Guidance provided at the May 2023 Board meeting. It reflects groundwater levels monitoring information available as January 2023 and has not been updated to reflect the April 2023 monitoring.

Supplemental Section 3.2.1: Undesirable Results Statements, Chronic Lowering of Groundwater Levels

This Supplemental Section makes the following revision to Section 3.2.1 of the GSP.

Identification of Undesirable Results:

This result is considered to occur during GSP implementation when 30 percent of representative monitoring wells (i.e. 18 of 60) fall below their minimum groundwater elevation threshold for ~~two~~ three consecutive years.

Rationale for Change in GSP Section 3.2.1

Since submission of the GSP, groundwater levels in the Basin have been declining and multiple representative monitoring wells have exceeded the minimum thresholds (MTs) set forth in the GSP. The *January 2023 Groundwater Conditions Report – Cuyama Valley Groundwater Basin* (Groundwater Conditions Report) reported that 49 percent, or 24 representative wells (out of the 49 wells currently included in the groundwater levels representative monitoring network), are currently below their groundwater level MTs. As previously defined in Section 3.2.1 of this GSP, an Undesirable Result for the chronic lowering of groundwater levels “is considered to occur during GSP implementation when 30 percent of representative monitoring wells (i.e., 18 of 60 wells) fall below their minimum groundwater elevation thresholds for two consecutive years.” With the current representative monitoring network, this condition will occur when 15 representative wells (i.e., 30 percent) are below their MTs for 24 consecutive months. As of January 2023, 15 wells have been below their MTs for 20 consecutive months. Since groundwater levels monitoring occurs on a quarterly schedule, an Undesirable Result is projected to occur during the July 2023 monitoring period if conditions do not improve.

As stated in Section 3.2.1, the Undesirable Results description for the chronic lowering of groundwater levels is, “a result that causes significant and unreasonable reduction in the long-term viability of domestic, agricultural, municipal, or environmental uses over the planning and implementation horizon of this GSP.” The original identification criteria for undesirable results are when 30 percent of representative monitoring wells fall below their minimum groundwater elevation threshold for two consecutive years (15 of the 49 representative wells). As described in Supplemental Section 3.3, the term “significant and unreasonable” is not defined by SGMA regulations. Instead, the conditions leading to this classification are determined by the GSA, beneficial users, and other interested parties in each basin.

The CBGSA recognizes the lack of reliable historical data and acknowledges the limitations and uncertainties it causes (see Data Gaps and Plan to Fill Data Gap subsections of Section 4 – Monitoring



Networks and Section 8 – Implementation Plan for addressing those limitations). However, an impact assessment has been performed using updated data that was acquired since the GSP was developed, which is described in the section below. Based on this assessment, it is not believed that there not be would be significant impacts to production and domestic wells or to groundwater dependent ecosystems due to the proposed change. In addition, current conditions in the Basin are likely exacerbated by the very dry conditions that have been experienced in the Basin since 2015; a review of changes in groundwater levels in historical wet conditions indicates that there would likely be lesser groundwater level reductions and therefore potentially fewer minimum threshold exceedances if wetter conditions had occurred in the Basin in recent years. Therefore, the CBGSA believes that it would be appropriate to extend the period conditions for the Identification of Undesirable Results for an additional year to allow to observe whether groundwater levels in the Basin are able to recover with wetter conditions in the upcoming year.

If the Basin were to be found to meet the Undesirable Result Basin condition as described by SGMA regulations, undue economic and regulatory burden on the CBGSA, stakeholders, and beneficial users in the Basin could occur, including State regulatory oversight, when conditions would not actually be causing “significant and unreasonable reductions in in the long-term viability of domestic, agricultural, municipal, or environmental uses over the planning and implementation horizon of this GSP.” A temporary adjustment of the identification criteria will allow for sufficient time for the CBGSA to thoroughly reassess undesirable result conditions and thresholds using a comprehensive and data driven approach intended for 5-year GSP updates while continuing to implement the projects and management actions included in the GSP to eliminate overdraft in the Cuyama Basin by 2040. In particular, the CBGSA Board has approved and the GSA has begun the initial implementation of pumping allocations in the Central Management Area (i.e., Management Action 2), with a 5 percent pumping reduction in 2023 and a 10 percent pumping reduction in 2024 relative to baseline pumping levels.

In addition, extending the identification of undesirable results criteria from two years to three years allows the CBGSA the flexibility to identify the cause of MT exceedances and to develop a plan for response (per the Adaptive Management approach described in Section 7.6). As the GSA collects new and more comprehensive data through GSP implementation, improved understanding of basin hydrology, patterns, and modeling will help direct the revision of the undesirable result criteria and identification for the 2025 GSP update.



Impact Assessment of Revised Undesirable Results Criteria on Domestic and Production Wells and Groundwater Dependent Ecosystems

An impact assessment was performed to gauge the impact that the revised Undesirable Results criteria and potential conditions would have on production wells and domestic wells and groundwater dependent ecosystems (GDEs) in the Basin. The goal of this analysis was to estimate the number of production and domestic wells that would be at risk of going dry in July 2023 (when Undesirable Results are currently project to occur) and in July 2024 (when they would be projected to occur if the Identification of Undesirable Results definition were to be changed as proposed above) to determine the projected impact to users of groundwater within the Basin due to the change in the Identification of Undesirable Results definition. The assessment was performed using well location and construction information for domestic and production wells that the CBGSA has confirmed as recently active, based on information provided by GSP implementation programs and during GSP development.

The assessment used an estimated protective depth for production and domestic wells throughout the Basin (i.e., groundwater level depth needed to ensure the quality of pumped groundwater). For wells with a known screen interval, the protective depth was estimated to be at the middle of the screen interval. If the screen interval was not known but the well depth was known, then the protective depth was calculated as 10 feet above well depth or 5 percent of well depth, whichever is greater. If only the hole depth was known, the protective layer was calculated as 20 feet above well depth or 5 percent of well depth, whichever is greater. Some basic filtering criteria were also applied to the analysis to remove wells from consideration, including those wells that are inactive, wells without known construction data, wells that are distant from active groundwater management and monitoring, and wells that were already dry as of January 1, 2015. Following the application of the filtering criteria, a total of 97 production wells were available for evaluation.

Using data from the representative monitoring network, projected groundwater levels were estimated for at each representative well in July 2023 and July 2024 based on a projection of the historical trends at each well since 2015. These levels were used to estimate interpolated groundwater level depths for projected groundwater levels in July 2023 and July 2024 and those depths were compared to the protective depth at each of the 97 production and domestic wells to determine the number of wells that were at risk. The results of the analysis found that, out of 97 production and domestic wells evaluated, a total of 11 (11 percent of the total) would potentially be at risk of going dry in July 2023, and that a total of 9 (9 percent of the total) would potentially be at risk of going dry in July 2024. These results are shown in Tables 3-1 and 3-2 below. Therefore it is estimated that two additional wells would be at risk if exceedance of minimum thresholds occurred for one additional year. Both of these wells are agricultural production wells; no additional domestic wells were projected to be at risk. The CBGSA will continue to use adaptive management to safeguard the domestic and production wells throughout the Basin.



Table 3-1: Impact Assessment for Production and Domestic Wells Against July 2023 Projected Groundwater Levels

Threshold Region	Production Wells			Domestic Wells			Total Wells		
	Total	At Risk	% At Risk	Total	At Risk	% At Risk	Total	At Risk	% At Risk
Northwestern	4	1	25%	0	0	0%	4	1	4
Western	3	1	33%	3	0	0%	6	1	3
Central	61	6	10%	4	1	25%	65	7	61
Eastern	9	1	11%	5	0	0%	13	1	9
Southeastern	6	0	0%	3	0	0%	9	0	6
Total	83	9	11%	15	1	7%	97	10	83

Notes:

The total number of wells assessed is less than the sum of production wells and domestic wells because there is some overlap between production wells and domestic wells.

Table 3-2: Impact Assessment for Production and Domestic Wells Against July 2024 Projected Groundwater Levels

Threshold Region	Production Wells			Domestic Wells			Total Wells		
	Total	At Risk	% At Risk	Total	At Risk	% At Risk	Total	At Risk	% At Risk
Northwestern	4	1	25%	0	0	0%	4	1	25%
Western	3	1	33%	3	0	0%	6	1	17%
Central	61	8	13%	4	1	25%	65	9	14%
Eastern	9	1	11%	5	0	0%	13	1	8%
Southeastern	6	0	0%	3	0	0%	9	0	0%
Total	83	11	13%	15	1	7%	97	12	12%

Notes:

The total number of wells assessed is less than the sum of production wells and domestic wells because there is some overlap between production wells and domestic wells.

In addition to the above analysis, a review of GDEs was conducted that compared the projected depths of groundwater at GDE locations in July 2023 and July 2024. It was found that all GDE locations that are projected to have relatively shallow groundwater depths (i.e. less than 50 feet) in July 2023 were projected to have similar groundwater depths in July 2024. Therefore, no additional impacts to GDEs are expected to occur with the proposed change in the Identification of Undesirable Results definition.



TO: Board of Directors
Agenda Item No. 10

FROM: Jim Beck / Brian Van Lienden

DATE: July 12, 2023

SUBJECT: Discuss and Take Appropriate Action on Action GSP Periodic Evaluation

Recommended Motion

Staff is asking for approval of engagement plan and overall GSP development schedule.

Discussion

An update on GSP Periodic Evaluation is provided as Attachment 1.

Cuyama Basin Groundwater Sustainability Agency

10. Discuss and Take Appropriate Action on GSP Periodic
Evaluation
Beck/Van Lienden

July 12, 2023



GSP Periodic Evaluation Requirement and Schedule

- DWR requires a GSP Periodic Evaluation a minimum of every five years
- GSP amendment is optional, but based on previous Board direction, the Cuyama Basin GSA will do an amendment involving an update of all GSP chapters to be submitted by January 28, 2025
- The following schedule shows anticipated Board and stakeholder engagement plan and dates for consideration of draft GSP chapters
- **Staff is asking for approval of engagement plan and overall GSP development schedule**

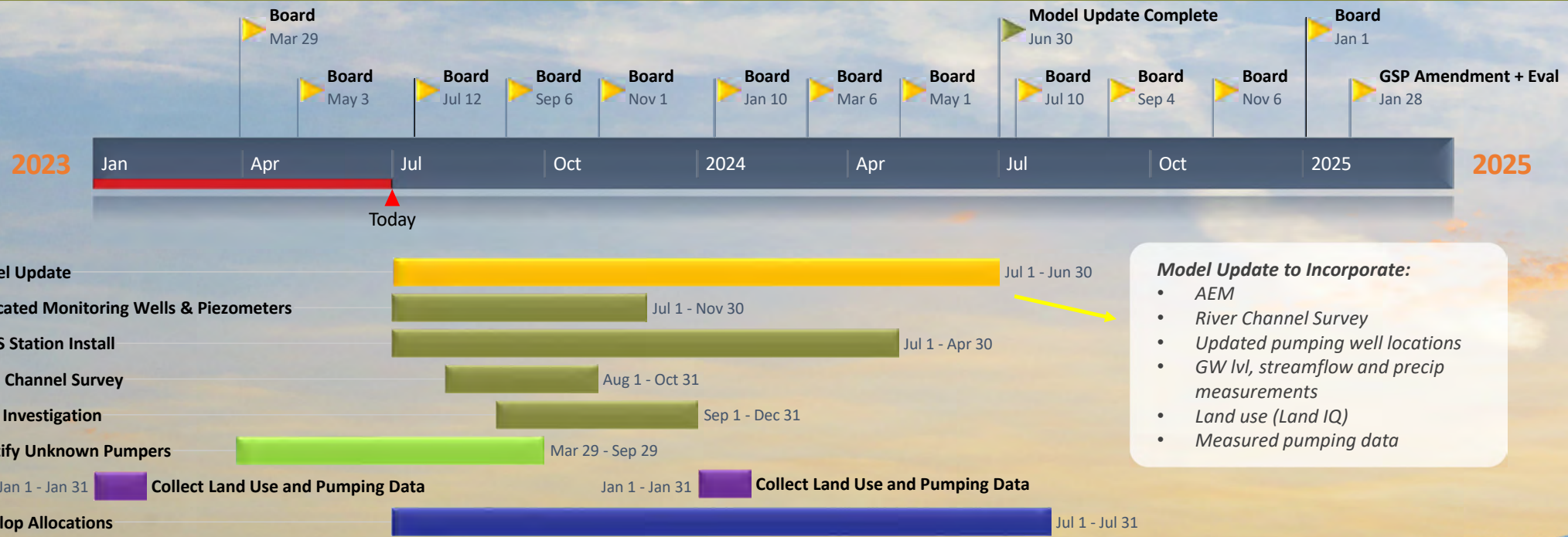
Proposed Review/Discussion Sequence

Typical Issue Resolution Process



Schedule for Technical Work Required for GSP Amendment and Periodic Evaluation

Taylor Blakslee



Proposed GSP Chapter Update Schedule and Related Policy Items

	1	2	3	4	5	6	7	8	9	10	
	2023			2024							2025
	July	Sep	Nov	Jan	Mar	May	Jul	Sep	Nov	Jan	
Board Direction:	<p>Finalize: Feedback on engagement strategy</p>	<p>Basin-wide pumping restrictions/Central Management Area (CMA) boundary</p> <p>Finalize: Groundwater (GW) levels & storage monitoring networks</p> <p>GW levels & storage sustainable management criteria (SMC) and undesirable results (UR) criteria options</p> <p>Allocation methodology</p>	<p>Finalize: Subsidence, Interconnected surface water (ISW), and water quality (WQ) monitoring networks</p> <p>GW subsidence ISW, and WQ SMC and UR options</p> <p>Glidepath methodology</p>	<p>Finalize: GW levels, storage, subsidence, ISW, WQ SMC and UR</p>	<p>Project and Management Action (PMA) options</p> <p>Sustainable yield (SY) methodology</p> <p>-----</p> <p>Issue 90-Day Notice</p>	<p>Finalize:</p> <ul style="list-style-type: none"> Basin-wide Pumping Restrictions/MA Boundary (updated model) Allocation methodology Glidepath methodology PMA options SY approach 		<p>Review Public draft</p>	<p>**Public Hearing to adopt Amended GSP</p>		
GSP Chapter Review:				<p>Ch 1. Agency Info/Plan Area</p> <p>Ch 4. Monitoring Network</p>		<p>Ch 2. Basin Setting</p> <p>Ch 3. URs</p> <p>Ch 5. SMCs</p>	<p>Ch 6. DMS</p> <p>Ch 7. PMAs</p>	<p>Ch 8. Plan Implementation Executive Summary</p>			
Public Workshop		✓			✓			✓			



TO: Board of Directors
Agenda Item No. 11

FROM: Brian Van Lienden, Woodard & Curran

DATE: July 12, 2023

SUBJECT: Discuss and Take Appropriate Action on Precipitation Enhancement Study by Desert Research Institute

Recommended Motion

Approve the precipitation enhancement Proposal from Desert Research Institute for a cost not to exceed of \$20,000.

Discussion

An update and next steps on Precipitation Enhancement Study by Desert Research Institute is provided as Attachment 1. The proposal to assess the cloud seeding effects from the Santa Barbara County cloud seeding program on the Cuyama Valley by Desert Research Institute is provided as Attachment 2.

Cuyama Basin Groundwater Sustainability Agency

11. Discuss and Take Appropriate Action on Precipitation Enhancement Study by Desert Research Institute Van Lienden

July 12, 2023



Proposed Precipitation Enhancement Study by Desert Research Institute

■ Summary and Status of Grant Task

- Perform technical analysis to improve understanding of precipitation enhancement feasibility and potential effectiveness in the Basin including benefits and costs
- Available funding: \$30,000
- Reviewed recently available studies and had discussions with Santa Barbara County and Desert Research Institute

■ Desert Research Institute Proposal

- DRI provided \$20k proposal to provide additional info on timing and magnitude of potential Cuyama Valley cloud seeding operation
- Work to be performed in conjunction with ongoing DRI study on Santa Barbara County cloud seeding operations
- Work would be completed in July 2024
- **SAC/Board Direction Needed:** Staff requests approval to accept DRI proposal

■ Next Steps

- Perform model simulation with updated model to obtain improved estimate of benefits
- Develop summary Tech Memo and updated info for GSP





June 11, 2023

Assessing the Cloud Seeding Effects from the Santa Barbara County Cloud Seeding Program on the Cuyama Valley

Frank McDonough
Desert Research Institute (DRI)

Introduction

The northern Santa Barbara County Cloud Water Agency (SBCWA) Seeding Program has operated for over 50-years. The goal of the project is to generate additional rainfall over the headwaters area of Twitchell Reservoir. This area includes the Cuyama River (Fig 1).

A set of tasks to assess the question as to whether this existing cloud seeding program is successfully increasing precipitation and potentially increasing ground water resources in the Cuyama Valley (Fig 2) is proposed.



Figure 1. The Santa Maria River (Cuyama and Sisquoc) watershed, blue ellipse is the areas that will be analyzed for potential cloud seeding effects.

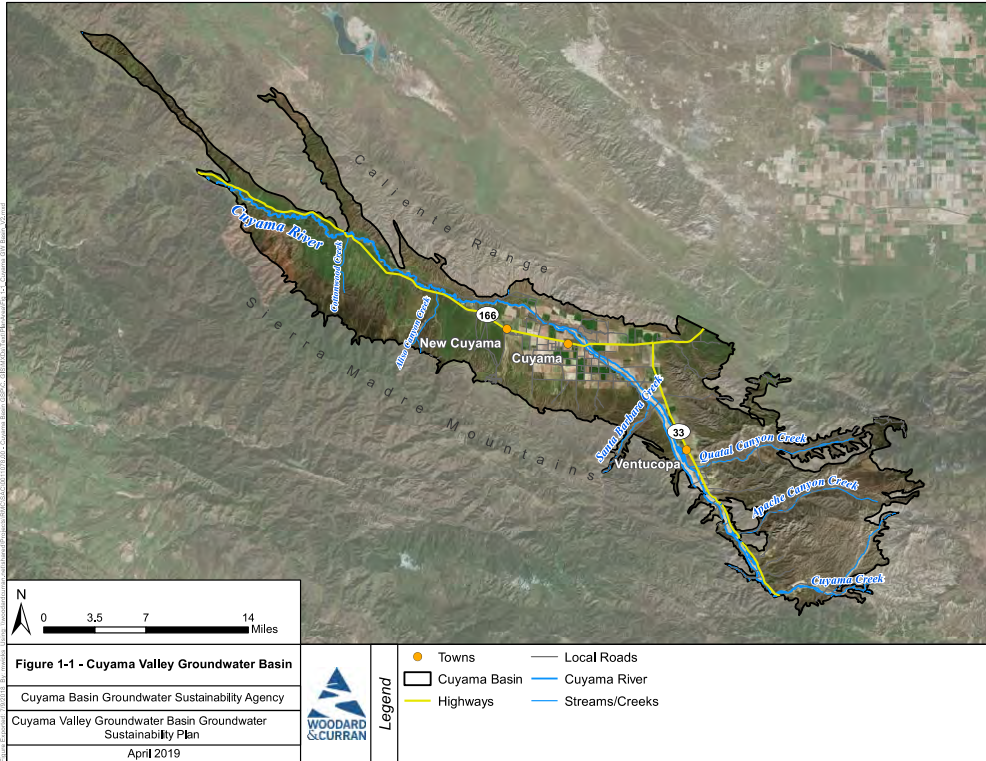


Figure 2. The Cuyama Valley ground water recharge target area.

Validation Overview

There are three proposed tasks in the verification proposal plan. The goal of this verification is to first (Task 1) determine all of the times that weather conditions were favorable for cloud seeding the Cuyama Valley and its headwaters area. In Task 2 we travel to the Cuyama Valley area and drive into the mountains to collect fresh precipitation samples from during a seeded winter storm. The samples are then analyzed for elemental silver and evidence of possible cloud seeding using the DRI Trace Chemistry Lab (Warburton et. al. 1995). Task 3 determines the estimated the amount of additional seeded precipitation, if any, that is produced across the Cuyama Valley by the existing SBCWA cloud seeding program.

Budget

The total costs for each of the three tasks are shown in Table 1.

Table 1. The total costs for each task and the final assessment.

Task Number	Cost (\$)
1	\$8,000
2	\$5,000
3	\$7,000
=====	
Total	\$20,000

Validation Task Updates

Task 1. Determine the date/times/hours when cloud seeding is possible over the target area. (\$8,000)

DRI proposes to analyze all of the storms and cloud structures for 4 winter seasons over the Cuyama Valley, and the adjacent mountains which feed runoff towards the Valley (Fig. 2). This analysis will be done using a high-resolution (3-km) state-of-the-art cloud resolving numerical weather model. The model produces gridded simulations with new data every hour for the entire winter season (Dec 1 – April 15). From these model simulations the duration, altitudes, temperatures, and wind direction and speed when cloud seeding conditions are present can be computed and summarized. The results of this task will provide the number of ‘seedable’ hours during each of the 4 winter seasons, how long the seeding periods lasted, which portions of the winter storms have seeding opportunities, and what wind speed and directions are associated with the cloud seeding weather.

With the review all of the storms crossing the primary Cuyama Valley target areas and the comparison of hourly seeding operations computed, the days/times and number of seeding hours impacting the Cuyama Valley target area locations shown in the blue ellipse areas of Fig 1 will be calculated.

The storms will be compared to the operations log from the SBCWA and the weather data. The results from the analysis will allow an assessment of the frequency of storms that may have had a seeding effect over the Cuyama Valley headwaters area.

Milestones for Task 1:

- Obtain cloud seeding model data (by Oct, 1, 2023)
- Analyze storms and determine Cuyama Valley effected times (by Feb 1, 2024)
- Create summary statistics (by April 1, 2024)
- Write Task 1 summary and report (June 30, 2024 – July 15, 2024).

Task 2. Assessing extra area seeding using snow chemistry. (\$5,000)

One of the main challenges of conducting cloud seeding from the ground is ensuring that the cloud seeding materials (silver iodide) reach the clouds and are deposited in the target area. Successful targeting can be potentially proven by showing slightly elevated silver concentrations in fresh precipitation (about 40 parts per trillion for seeded precipitation compared to about 5 parts per trillion in unseeded precipitation is what has been measured in the Sierra Nevada). Unseeded samples, which will provide background silver values in precipitation during unseeded storms will be collected as part of the SBCWA project.

Seeded rain and potentially snow samples will be collected during storms as part of the Santa Barbara County Water Agency validation project, as well as an analysis of the elements in the snow samples by the DRI trace chemistry lab. In this proposal 2 additional sample sites

important to ground water recharge in the Cuyama Valley will be added to the collection network. Precipitation will be collected during active cloud seeding operations and the collected precipitation will also be analyzed by the DRI trace chemistry lab. If increased silver is found over the Cuyama Valley compared to the unseeded values from the SBCWA samples then successful seeding is possible.

Ideal sites will be selected in two locations within the blue ellipses in Fig 1. During winter 2023-2024 two DRI technicians travel to the Cuyama Valley sites. Clean suits and sterile gloves will be put on and precipitation collection equipment will be set up. Falling precipitation will be collected. The samples will be collected, transported to DRI, and then analyzed for silver content at the DRI Ultra Trace Chemistry Lab. Fig. 3 shows a fresh snow sample being collected after a storm in the northern Sierra Nevada and analyzed in the Trace Chemistry Lab.

If the slightly elevated silver values are found in the collected snow, compared to the unseeded silver measured from snow collected from the SBCWA target areas, we can confirm that seeding material is being transported from the existing cloud seeding generator sites to the Cuyama Valley area.



Figure 3. DRI snow chemistry collection and analysis methods.

Milestones for Task 2:

- Identify collection areas (November 1, 2023 – December 31, 2023).
- Travel to collect seeded samples for one storm (Jan 1, 2024 – March 31, 2024)
- Have the samples analyzed by Trace Chemistry Lab (April 15, 2024 – June 15, 2024)
- Write Task 2 summary and report (June 30, 2024 – July 15, 2024).

Task 3. Calculating the potential seeding precipitation increases. (\$5,000)

The additional rainfall potentially impacting the Cuyama Valley areas during the SBCWA seeding periods will be estimated. Precipitation rates during these seeding periods will be estimated using remote sensing and, if possible, observations. If the cloud seeding plumes from the existing generator sites are successfully reaching the Cuyama Valley region as determined from the modeling in Task 1, then ten percent of the precipitation for that time period will be assumed to be from the seeding if favorable seeding weather was present.

The total winter season increases in water resources reaching the ground in the Cuyama Valley from cloud seeding can then be calculated by multiplying the additional seeded precipitation by the impacted area.

(Seeded precipitation) X (impacted area) = (acre-feet of additional water resources from seeding)

Milestones for Task 3:

- Identify weather station and remote sensing data sets (December 1, 2023 – February 29, 2024)
- Quality control data (March 1, 2024 – April 30, 2024)
- Determine effective seeding periods and estimate precipitation contributions from cloud seeding. (May 1, 2024 – June 15, 2024)

Additional Details

The SBCWA is funding a validation study to assess their Twitchell Reservoir and Cachuma Reservoir Cloud Seeding Programs. It is assumed that data produced from this study will in part be used for the Cuyama Valley Study.

References

Friedrich, K., K. Ikeda, S. A. Tessendorf, S. Parkinson (2020). Quantifying snowfall from orographic cloud seeding. PNAS 117(1) 5190-5195, February 2020.

Griffith, D.A., D. P. Yorty, S. D. Beall (2015). Target/Control analysis for Santa Barbara County's Operational Winter Cloud Seeding Program, J. Wx. Mod. v 47. April 2015.

McDonough, F, (2019). Water Year 2019 Results from the Tahoe-Truckee Cloud Seeding Program, Northern Nevada Water Planning Commission Meeting, Reno, NV, Oct 2, 2019.

Silverman, B. A., (2010). An evaluation of eleven operational cloud seeding programs in the watershed of the Sierra Nevada Mountains. Atmos. Res. 97, 526-539, 2010.

Warburton, J. A., L. G. Young, R. H. Stone (1995). Assessment of Seeding Effects in Snowpack Augmentation Programs: Ice Nucleation and Scavenging of Seeding Aerosols. J. of Appl. Meteo. Vol 34, Jan 1995.

Personnel

Mr. Frank McDonough. MS Atmospheric Science- Colorado State University. 25 years experience studying subfreezing clouds.

<https://www.dri.edu/wp-content/uploads/resume-1517.pdf>

Mr. Jesse Juchtzer. BS Environmental Science – Sierra Nevada University. 10 years experience as a cloud seeding scientist, 5-year experience as a hydrologist USGS.

<https://www.dri.edu/directory/jesse-juchtzer/>

Mr. Patrick Melarkey BS - University of Nevada Reno. Field and Instrument Technician

Mr. Nathan Chellman PhD Hydrology – University of Nevada Reno. Ice Core specialist

<https://www.dri.edu/directory/nathan-chellman/>



TO: Board of Directors
Agenda Item No. 12

FROM: Taylor Blakslee, Hallmark Group

DATE: July 12, 2023

SUBJECT: Discuss and Take Appropriate Action on Proposed Modifications to Water Use Reporting Procedures

Recommended Motion

Provide direction on potential modifications to water use reporting procedures.

Discussion

Proposed modifications to water use reporting procedures are provided as Attachment 1.

Cuyama Basin Groundwater Sustainability Agency

12. Discuss and Take Appropriate Action on Proposed Modifications to Water Use Reporting Procedures

Blakslee

July 12, 2023



Proposed Modifications to Water Use Reporting Procedures

- Staff is seeking SAC/Board direction on potential modifications to the following water use reporting procedures
 1. Meter reporting guidance
 2. Flow meter reporting form
 3. Small pumper form

1. Meter Reporting Guidance

Item	Meter Reporting Guidance
Description	Currently, <u>monthly</u> photos of meters are requested annually
Potential Issue	Taking monthly photos may be burdensome on landowners and requires additional staff time to check against monthly reported volumes
Options to Consider	Clarify that only single photo of meter required in early January (annually) for staff to QA/QC against reported flow volume
Project Fiscal Impact	<ol style="list-style-type: none"> 1. Low implementation cost 2. Reduced admin costs

SAC/Board Direction Requested

Section 3. Well Flow Meter Reporting

Well flow meter data will be collected by January 31st each year for the preceding calendar year for each non-de minimis production well in the Basin using the **Well Flow Meter Reporting Template**. For model calibration and improvement purposes, the CBGSA requests that flow data be provided in **monthly** intervals to better understand the seasonal fluctuations in groundwater demands throughout the Basin. Data reported to the CBGSA includes:

- Local Well Name
- State Well Number (SWN)
- Flow meter serial number
- Monthly flow meter reading for the volume (including units) for the calendar year with date and time of recording
- Calculated total volume (including units) for the calendar year
- Monthly photograph of the well flow meter at the time of reading showing the totalizer value

There are two options for reporting flow meter volumes (required for each well):

1. **Electronically:** Download the Well Flow Meter Reporting Template at <https://cuyamabasin.org/resources>, and submit electronically to Taylor Blakslee at tblakslee@hgcpm.com.
2. **Mail:** Download the Well Flow Meter Reporting template at <https://cuyamabasin.org/resources> and submit via mail to: Cuyama Basin Groundwater Sustainability Agency, 4900 California Ave, Tower B, Suite 210, Bakersfield, CA 93309.

To minimize costs associated with data collection, the GSA is relying on well operators to collect and record monthly data. Therefore, pictures of the flow meter totalizer are requested to validate flow values and should be submitted with the Well Flow Volume Reporting Template. Pictures for each month for each flow meter are preferred, but at a minimum are required annually to show the total flow volume for

2. Flow Meter Reporting Form

Item	Flow Meter Reporting Form
Description	Flow meter reporting forms require parcels irrigated (not crop type)
Potential Issue	Without user-reported cropping data, land use characterization in the model will be limited to Land IQ and DWR datasets
Options to Consider	Require crop types to be reported on flow meter form
Project Fiscal Impact	<ol style="list-style-type: none"> 1. Low implementation cost 2. No significant admin cost changes

SAC/Board Direction Requested



Well Flow Meter Reporting Form

Cuyama Basin Groundwater Sustainability Agency

Water users using more than 25 acre-feet per year must report monthly flow meter data for each well and include a photograph of the meter at the time of the end of year measurement. This information must be submitted to the Cuyama Basin GSA by January 31st for the previous calendar year. Please contact Taylor Blakslee at tblakslee@hgcom.com or (661) 477-3385 if you have any questions.

Landowner and Well Information

- 1 Landowner name _____
- 2 Company/organization _____
- 3 Well name/number _____
- 4 Flow meter make/manufacture _____
- 5 Flow meter serial number _____
- 6 APN or Township/Range/Section served by well _____

Flow Meter Measurement Data

	Measurement Date	Totalizing Flow Measurement	Flow Measurement Unit (acre-feet, acre inch, etc.)	Notes
December (previous year)				
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

Attachments

Please attach the following to an email and send to Taylor Blakslee at tblakslee@hgcom.com by January 31st for the previous calendar year:

- Well Flow Meter Reporting Form
- Picture of totalizing flow meter for the December reading (file name format: "Serial-number_FlowPhoto_YYYY_MM_DD.jpeg")

3. Small Pumper Form

Item	Small pumper form crop factors
Description	Small pumpers (<25AFY) report water use via predefined crop factors
Potential Issue	Existing crop factors do not: <ol style="list-style-type: none"> 1. Precisely account for all crops in the basin 2. Account for immature crops
Options to Consider	Work with ad hoc to determine appropriate refinements to the crop factors
Project Fiscal Impact	<ol style="list-style-type: none"> 1. Implementation costs – unbudgeted; technical and ad hoc meetings be required 2. No significant change in admin costs

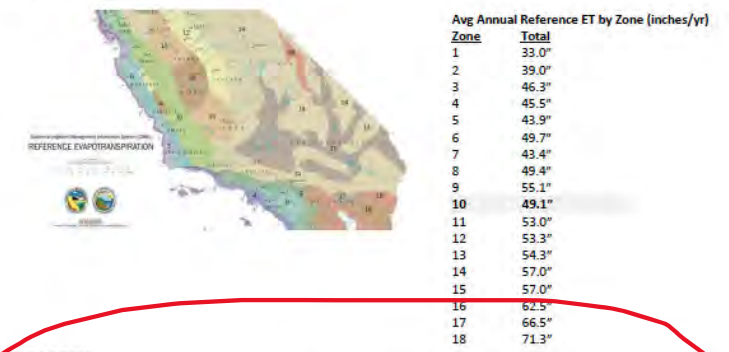
SAC/Board Direction Requested

Exhibit I-1 – Crop Factors

Source Information

Crop Factors are evapotranspiration (ET) values from California Polytechnic State University's Irrigation Training and Research Center (ITRC) California Crop and Soil Evapotranspiration Report (Crop Report), ITRC Report No. R 03-001 accessible at www.itrc.org/reports/pdf/californiacrop.pdf.

The below values were calculated using ET reference averages for zone 10 from the Crop Report (see below figure).



Crop	ET	Crop	ET
Alfalfa Hay	4.02	Melon, Radish, Squash, & Cucumbers	1.62
Alfalfa Seed, Sudan	3.60	Olives, Mature	3.27
Almonds	3.32	Olives, Deficit	2.58
Apples ¹ (Drip)	2.50	Onions and Garlic	1.99
Apples, Pear, Cherry, Plum, and Prune	3.33	Permanent Pasture	3.93
Barley Wheat, Oats	1.97	Pistachios	2.99
Blackeyed Peas	1.97	Potatoes	3.00
Carrots	2.20	Rootstock	2.23
Corn	2.43	Sorghum Grain	2.43
Cotton	2.70	Sugar Beets	2.70
Citrus	3.45	Tomatoes	2.20
Grapes with 40% cover crop	1.56	Walnuts	3.53
Grapes with 60% cover crop	2.02	Cannabis ²	TBD
Grapes with 100% cover crop	2.24	Hemp ³	TBD
Lettuce	2.20		

¹Value determined by local expertise in the Cuyama Valley.
²Value based on _____.
³Value based on _____.

2022/FY 23-24
Small Pumper Summary
 No. of Small Pumpers: 9
 Reported Water Use: ~90 AF
 Total FY 23-24 Fees Paid: ~\$1,000



TO: Board of Directors
Agenda Item No. 13

FROM: Taylor Blakslee, Hallmark Group

DATE: July 12, 2023

SUBJECT: Discuss and Take Appropriate Action on Well Registration Program

Recommended Motion

Feedback/direction is requested on the draft well registration program and form.

Discussion

An update on the draft well registration program is provided as Attachment 1. Provided as Attachment 2 is the proposed well registration form.

Cuyama Basin Groundwater Sustainability Agency

13. Discuss and Take Appropriate Action on Well Registration Program

Blakslee

July 12, 2023



Well Registration Program

- On March 29, 2023, staff presented an update on the effort to address well data gaps
- One component of the well data improvement strategy is to enact a GSA well registration program
- The purpose of a well registration program is to ensure new wells, or changes to use, status or construction of existing wells, are included/updated appropriately in the GSA active well dataset
- A draft well registration form is provided for review/edit by the SAC/Board and contains the same information in the well survey that was previously distributed to update the initial well dataset
- Approved forms would be:
 - Emailed to stakeholders
 - Posted on the CBGSA website
 - Communicated and sent to County permitting agencies

Well Registration Form



All new wells, or changes in use, status, or construction, must complete the below well registration form and submit to the CBGSA at tblakslee@hgcpm.com, or 4900 California Avenue, Tower B, Suite 210, Bakersfield, CA 93309.

Landowner Information

Landowner name (First and Last, or Organization): _____

Well Operator Name (First and Last, or Organization): _____

Owner Contact Information:

Email: _____

Phone: _____

Operator Contact Information:

Email: _____

Phone: _____

Well Information

Well Name/number (please provide all known names/IDs separated by a semicolon (;, " ")): _____

State Well ID# (if any): _____

Geographical coordinates (decimal degree)

Latitude: _____

Longitude: _____

Location description: _____

Well Type: Irrigation Industrial Municipal Residential Monitoring

Other: _____

Well Status: Active Inactive Planned Out of Service Abandoned

Well Completion Report # (if applicable): _____

(Please provide a copy of the completion report, if available)



Date Constructed: _____

Date Abandoned: _____

Date Destroyed (Report #: _____ Report #: _____)

Reference Point Elevation: _____

Total Well Depth: _____

Is Bottom Open?: Yes No

Upper & Lower Casing Perforations:

Upper - Perforation 1: _____

Lower - Perforation 1: _____

Upper - Perforation 2: _____

Lower - Perforation 2: _____

Upper - Perforation 3: _____

Lower - Perforation 3: _____

Casing Material: _____

Casing Diameter: _____

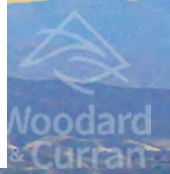
Pump Information

Pump manufacturer: _____

Pump model: _____

Pump Horsepower (HP): _____

Pump submergence (depth of bowl location): _____





Well Registration Form

All new wells, or changes in use, status, or construction, must complete the below well registration form and submit to the CBGSA at tblakslee@hgcpm.com, or 4900 California Avenue, Tower B, Suite 210, Bakersfield, CA 93309.

Landowner Information

Landowner name (First and Last, or Organization): _____

Well Operator Name (First and Last, or Organization): _____

Owner Contact Information:

Email: _____

Phone: _____

Operator Contact Information:

Email: _____

Phone: _____

Well Information

Well Name/number (please provide all known names/IDs separated by a semicolon (“;”)):

State Well ID# (if any): _____

Geographical coordinates (decimal degree)

Latitude: _____

Longitude: _____

Location description: _____

Well Type: Irrigation Industrial Municipal Residential Monitoring

Other: _____

Well Status: Active Inactive Planned Out of Service Abandoned

Well Completion Report # (if applicable): _____

(Please provide a copy of the completion report, if available)



Date Constructed: _____

Date Abandoned: _____

Date Destroyed (Report #): _____ Report #: _____

Reference Point Elevation: _____

Total Well Depth: _____

Is Bottom Open?: Yes No

Upper & Lower Casing Perforations:

Upper – Perforation 1: _____

Lower – Perforation 1: _____

Upper – Perforation 2: _____

Lower – Perforation 2: _____

Upper – Perforation 3: _____

Lower – Perforation 3: _____

Casing Material: _____

Casing Diameter: _____

Pump Information

Pump manufacturer: _____

Pump model: _____

Pump Horsepower (HP): _____

Pump submergence (depth of bowl location): _____



TO: Board of Directors
Agenda Item No. 14

FROM: Taylor Blakslee, Hallmark Group

DATE: July 12, 2023

SUBJECT: Discuss and Take Appropriate Action on Monitoring Network Consultant Contract for FY 23-24

Recommended Motion

Approve a groundwater level and water quality monitoring contract with P&P for Fiscal Year 2023-2024 for an amount not to exceed \$68,000.

Discussion

Staff is looking for approval of monitoring network consultant contract for FY 23-24. Provost & Pritchard (P&P) have been collecting groundwater level and water quality samples in the Cuyama Basin. An update on the proposal is provided as Attachment 1. The proposal from P&P is provided as Attachment 2.

Cuyama Basin Groundwater Sustainability Agency

14. Discuss and Take Appropriate Action on a Monitoring Network Consultant Contract for FY 23-24

Blakslee

July 12, 2023



Approval of Monitoring Network Consultant Contract for FY 23-24

- Provost & Pritchard (P&P) have been collecting groundwater level and water quality samples in the Cuyama Basin
- Groundwater levels are collected quarterly for roughly 50 wells and water quality for electroconductivity (EC) (a proxy for total dissolved solids (TDS)) is collected annually in-field at roughly 20 wells
- A contract for P&P to continue performing these services totals \$68,000 and is within the budgeted amount approved by the Board on May 3, 2023
- **Recommend motion:** Approve a groundwater level and water quality monitoring contract with P&P for Fiscal Year 2023-2024 for an amount not to exceed of \$68,000



400 East Main Street, Suite 300
Visalia, CA 93291-6367
Tel: (559) 636-1166
Fax: (559) 636-1177
www.ppeng.com

July 5, 2023

Taylor Blakslee
Cuyama Basin Groundwater Sustainability Agency
4900 California Ave, Tower B, 2nd Floor
Bakersfield, CA 93309

Subject: CBGSA – Groundwater Monitoring (WY 2024)

Dear Mr. Blakslee:

Thank you for the opportunity to submit this proposal to provide consulting and monitoring services for the Cuyama Basin groundwater level monitoring network. This proposal discusses our understanding of the project, recommends a scope of services together with associated fees, deliverables, and approximate schedules, sets forth our assumptions and discusses other offered services that may be of interest as the project proceeds.

The dedicated and experienced team at Provost & Pritchard's Visalia and Bakersfield offices have extensive experience with the Sustainable Groundwater Management Act (**SGMA**), groundwater monitoring network development, groundwater level measurements, and coordinating with multiple agencies to unify efforts and accomplish varied goals.

Project Understanding

The Cuyama Basin Groundwater Sustainability Agency (**CBGSA**) developed a Groundwater Sustainability Plan (**GSP**) as required by SGMA.

For the 2024 water year, the CBGSA would like to continue monitoring groundwater levels quarterly. The 2024 network will include 53 wells at 44 locations.

Ultimately, the CBGSA desires to continue to obtain representative groundwater level data throughout the basin. The network will be monitored quarterly during the months of October, January, April, and July.

Scope of Services

Provost & Pritchard will continue to be in contact the CBGSA to prepare for the work and ensure all requirements will be met. Our scope of work for this proposal will be completed in two phases, described below.

Phase LVL: Groundwater Level Monitoring

1. Project Administration and Management
 - a. Provide consistent and available communications with CBGSA.
 - a. Track project deliverables, budget, and schedule.
2. Quarterly groundwater level measurements for up to 53 wells at approximately 44 locations and Quarterly Water Quality Measurements for up to 10 transducer equipped wells.
 - a. Groundwater levels in excel format reporting groundwater surface elevation, reference point elevation, and depth to groundwater with measurement reference on a quarterly basis.
 - b. Groundwater quality measurements in excel format reporting electroconductivity and water temperature on a quarterly basis for a preselected list of transducer-equipped wells
3. Technical Memo
 - a. Summary memorandum to the CBGSA documenting work performed at the conclusion of the 12-month reporting period.

Deliverables:

- Signed access and monitoring agreement from landowners that require them.
- Technical memorandum summarizing work performed.
- Excel workbook including date, time, location, groundwater level, water quality metrics for qualifying wells and pertinent notes for each measurement.
- Individual well dossier sheets for each well with measurements and pertinent notes for any newly added wells.

Phase QLT: Groundwater Quality Monitoring

1. Project Administration and Management
 - a. Provide consistent and available communications with CBGSA.
 - b. Track project deliverables, budget, and schedule.
2. Obtain Landowner Agreements
 - a. Research missing contact information.
 - b. Request access from landowners/managers to sample wells.
 - c. Provide Access and Monitoring Agreements upon request and follow up.
3. Water quality measurements
 - a. Review any new wells for suitability.
 - b. Coordinate water quality testing with well owners.
 - c. Measure salinity as EC and TDS at each well. Measurement will be taken with a Horiba multimeter according to Standard Operating Procedures, including meter calibration, well purging, and applicable site condition notes.
 - d. Collect salinity as EC and TDS data at each well equipped with a transducer.
4. Data management and reporting
 - a. Compile water quality data and complete data quality assurance and control measures.

- b. Develop technical memorandum documenting work performed.
- c. Complete Excel workbook with EC and TDS results.
- d. Complete dossier sheets for each well.

Deliverables:

- Signed access and monitoring agreement from landowners that require them.
- Technical memorandum summarizing work performed.
- Excel workbook including date, time, location, EC, TDS, and pertinent notes for each measurement.
- Individual well dossier sheets for each well with measurements and pertinent notes.
- All analyses documents provided by the lab.

Professional Fees

Provost & Pritchard Consulting Group will perform the services on a time and materials basis, in accordance with our Standard Fee Schedule in effect at the time services are rendered. For budgeting purposes, our preliminary estimate is that our fees will be **\$68,000**. Reimbursable expenses and professional fees are included in the estimate. These fees will be invoiced monthly as they are accrued, and our total fees, including reimbursable expenses, will not exceed our estimate without additional authorization.

Schedule

Provost & Pritchard is prepared to begin immediately upon authorization to proceed. Once we receive an executed copy of this Proposal along with the Consultant Services Agreement, and are authorized to proceed, we will work with the CBGSA to develop a mutually agreed upon schedule.

Assumptions

Phase LVL

- Survey by a CA State licensed surveyor is additional work and not included in the scope or fee estimate.
- Landowners are assumed to be amenable to monitoring and prompt in their communication. Landowners that require more than three (3) communication attempts to sign land access permissions and schedule a sample date are additional work and outside of the scope and fee estimate.
- Landowners are not required to be on premises for level measurements. Expecting field staff to communicate and meet discrete measurement appointments to allow landowner supervision is additional work, reduces the number of wells that can be measured within a day, and outside the scope of work and the fee estimate.
- Monitoring agreement and land access agreement language will be developed by the CBGSA and council.
- The CBGSA will provide the informational well template and the accompanying well completion reports (or equivalent) for prospective wells. Inquiries to Kern County

Department of Public Health for missing well completion reports are time-consuming and expensive and not included in this scope of work or fee estimate.

- Wells are in sufficient condition to be measured and modifications are not necessary.
- No additional added wells for which landowner introductions and, site information forms, and/or access agreement are anticipated or necessary.

Phase QLT

- If any of the proposed wells are not suitable for sampling, then upon CBGSA's prior approval, other wells can be added for additional scope and fee. Wells without pumps will be sampled with passive sampling equipment, if possible.
- Landowners are assumed to be amenable to sampling and prompt in their communication. Landowners that require more than three (3) communication attempts to sign land access permissions and schedule a sample date are additional work and outside of the scope and fee estimate.
- Landowners are not required to be on premises for well sampling if the well will be running. Expecting field staff to communicate and meet discrete sampling appointments to allow landowner supervision is additional work, reduces the number of wells that can be sampled within a day, and outside the scope of work and the fee estimate.
- Surveying (establishing elevations) will not be required for wells which are not included in the Groundwater Level Monitoring Network.
- Data is to be reported to Woodard & Curran via Excel spreadsheet.
- Wells are in sufficient condition to be sampled and modifications are not necessary.
- Well Completion Reports will not be needed at this time.
- Without Well Completion Reports, the volume of three well casings cannot be calculated. Therefore, a standard purge time and/or volume will be utilized, which will be based on purge requirements for similar water quality networks.
- Provost & Pritchard will not turn pumps on or off. The landowner or authorized manager will need to be present if a well is not in operation.
- Landowners will provide guidance regarding discharge locations for purged water.

Additional Services

The following services are not included in this proposal. However, these and others can be provided at additional cost, either directly by Provost & Pritchard Consulting Group or through subconsultants, upon request.

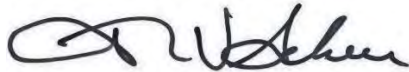
- Data management system.
- Expansion of the CBGSA's monitoring network if the original wells are not sufficient.
- Licensed survey of ground surface elevation and well reference point elevation.

Terms and Conditions

If this proposal is acceptable, please sign the Consultant Services Agreement, and return a copy to our office. These documents will serve as our Notice to Proceed. This proposal is valid for 60 days from the date above.

Respectfully,

Provost & Pritchard Consulting Group



Jon Vander Schuur QSD/QSP CPESC
Project Manager



Soo Ho Park, RCE 89361
Director of Operations

Terms and Conditions Accepted

By: Cuyama Basin Groundwater Sustainability Agency

Signature

Printed Name

Title

Date



TO: Board of Directors
Agenda Item No. 15a

FROM: Jim Beck, Executive Director

DATE: July 12, 2023

SUBJECT: Report of the Executive Director

Recommended Motion

None – information only.

Discussion

Progress and next steps for the Hallmark Group are provided as Attachment 1 for April and May 2023. An overview of consultant budget-to-actuals is provided as Attachment 2.

April and May 2023 Accomplishments & Next Steps

Accomplishments

- ✓ Prepared for and facilitated budget ad hoc on April 10, 2023
- ✓ Attended DWR spring workshop on April 19, 2023
- ✓ Facilitated SAC meeting on April 27, 2023
- ✓ Finalized draft Fiscal Year 2023-2024 Budget and cash flow
- ✓ Finalized draft Fiscal Year 2023-2024 groundwater extraction fee report
- ✓ Facilitated Board meeting and public rate hearing on May 3, 2023
- ✓ Attended meeting with Anita Regmi with DWR on May 10, 2023 regarding potential GSP amendment
- ✓ Developed GSP update strategy for the 2025 GSP periodic evaluation
- ✓ Finalized and sent invoices for fiscal year 2023-2024 groundwater extraction fee to landowners
- ✓ Reviewed May 25, 2023, DWR approved GSP staff report

Next Steps

- Finalize and present the GSP amendment plan for 2025
- Analyze and present options for addressing DWR's corrective actions
- Continue assisting in the implementation of grant-funded work
- Develop a well registration program
- Work on identifying potential non-reporting pumpers



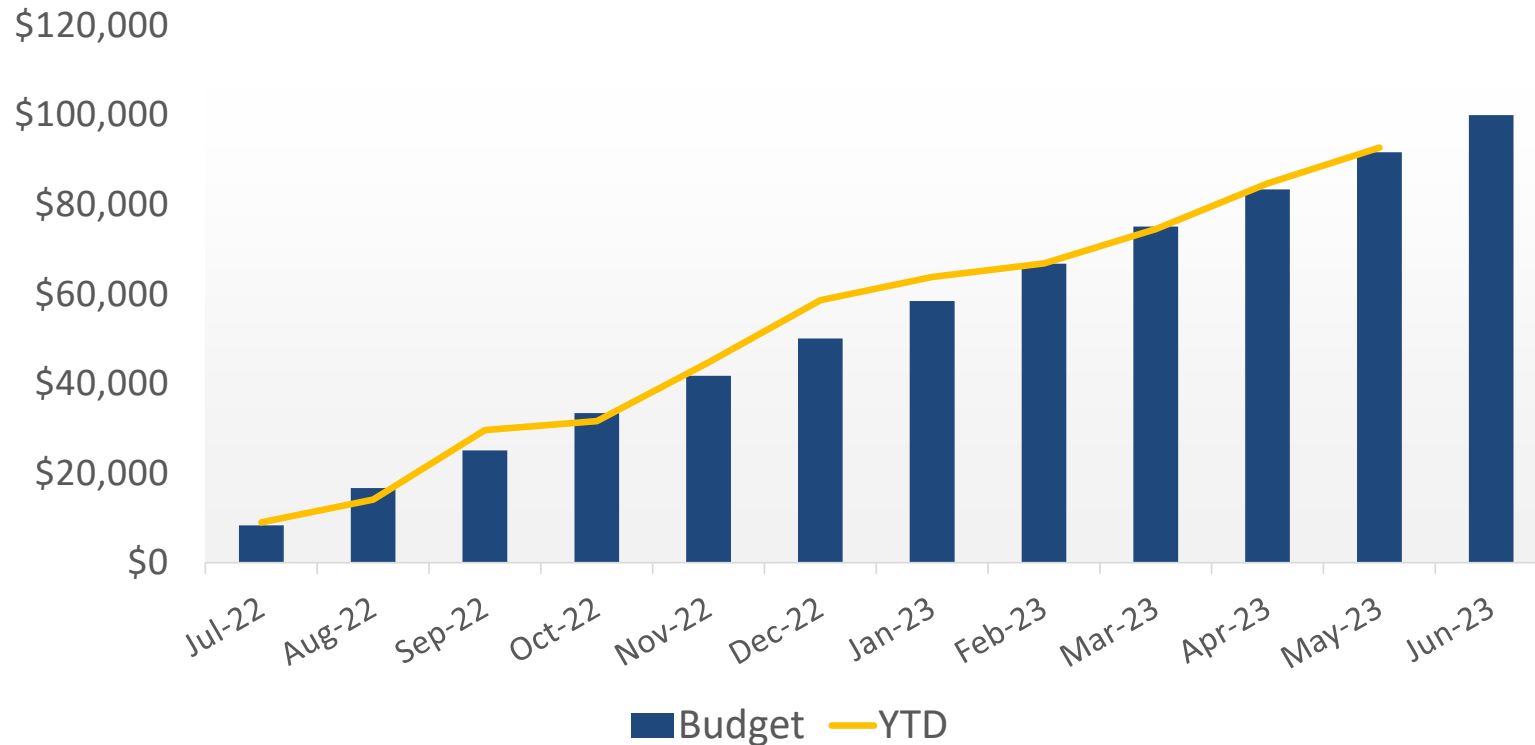
Cuyama Basin Groundwater Sustainability Agency

Financial Report

July 12, 2023

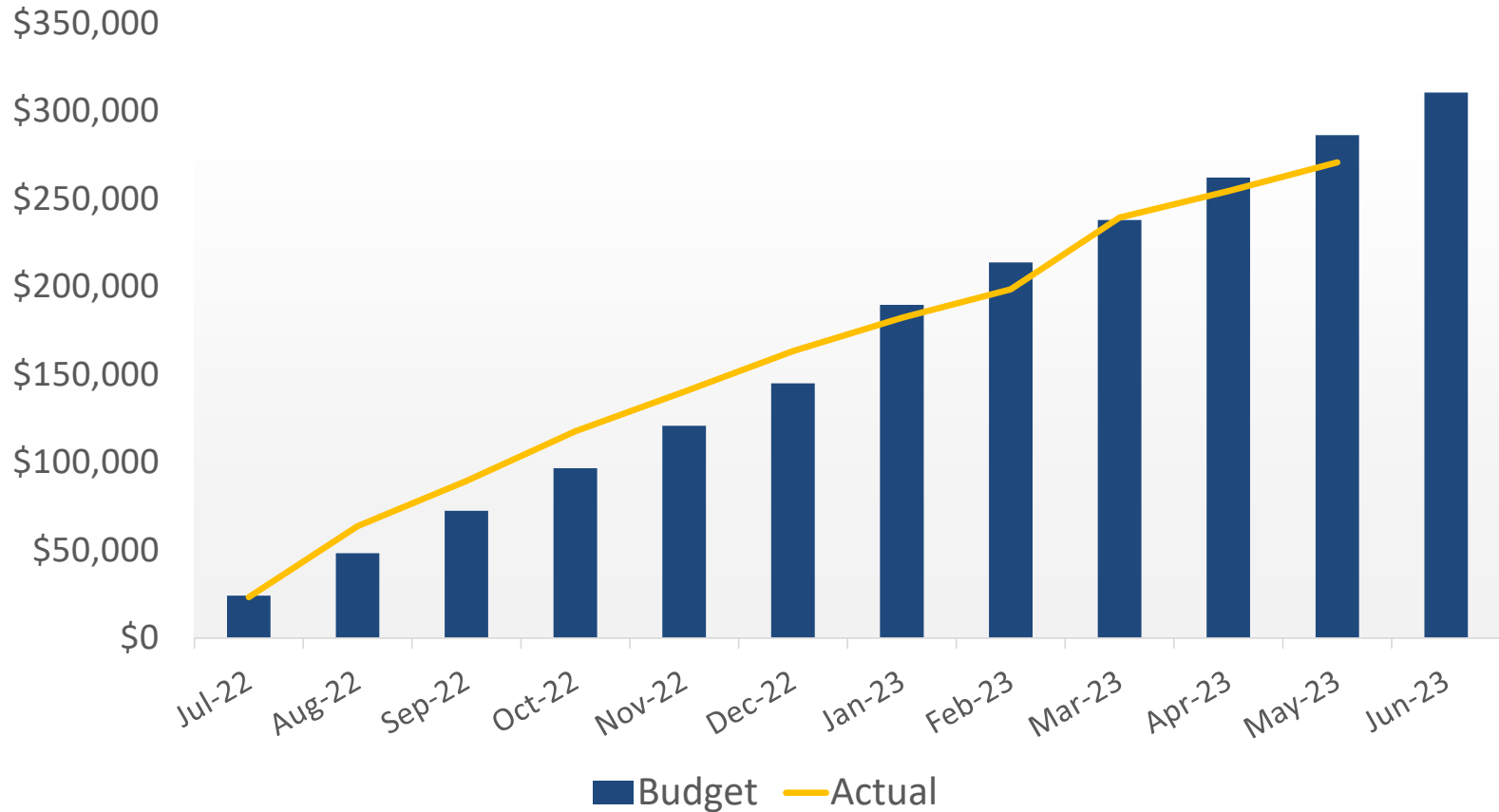
Legal Counsel – Budget-to-Actuals

FY 22-23



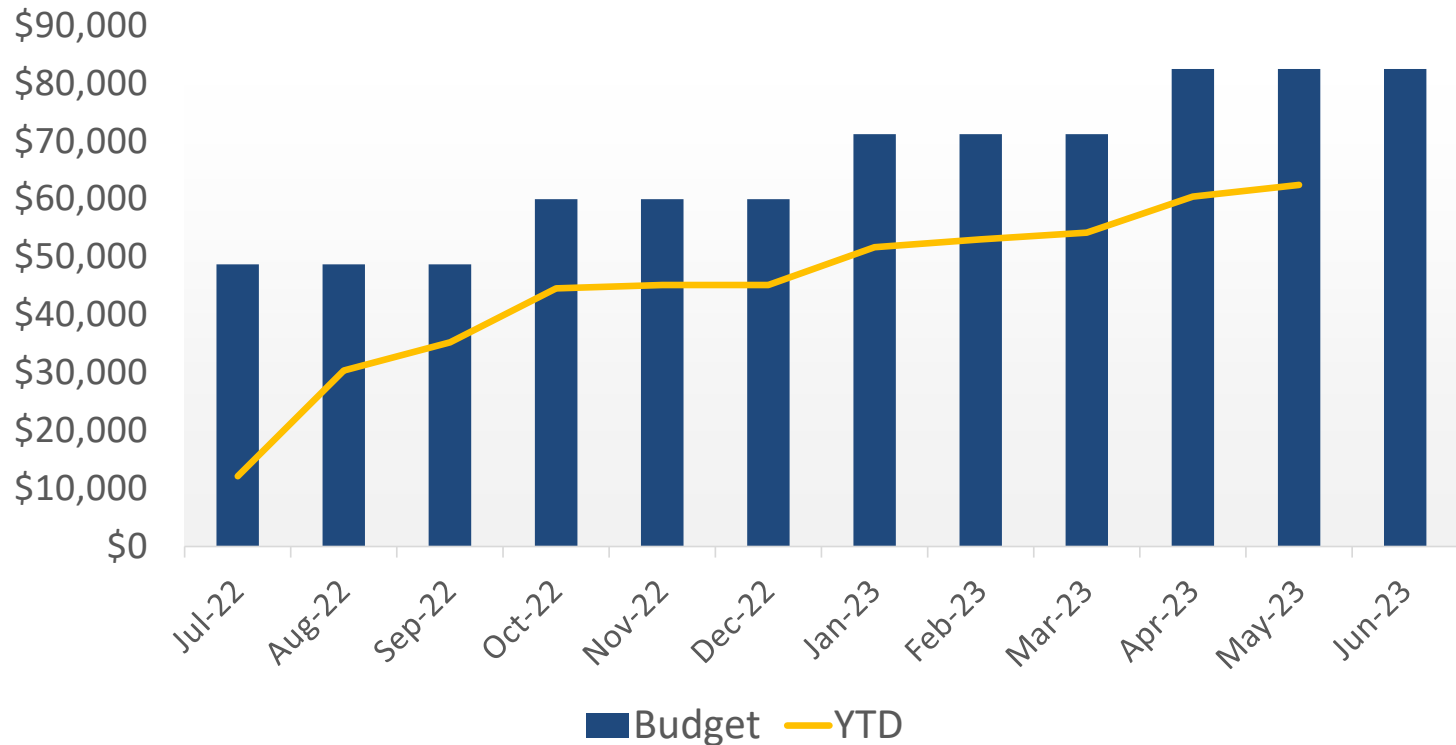
Hallmark Group – Budget-to-Actuals

Task Order No. 8



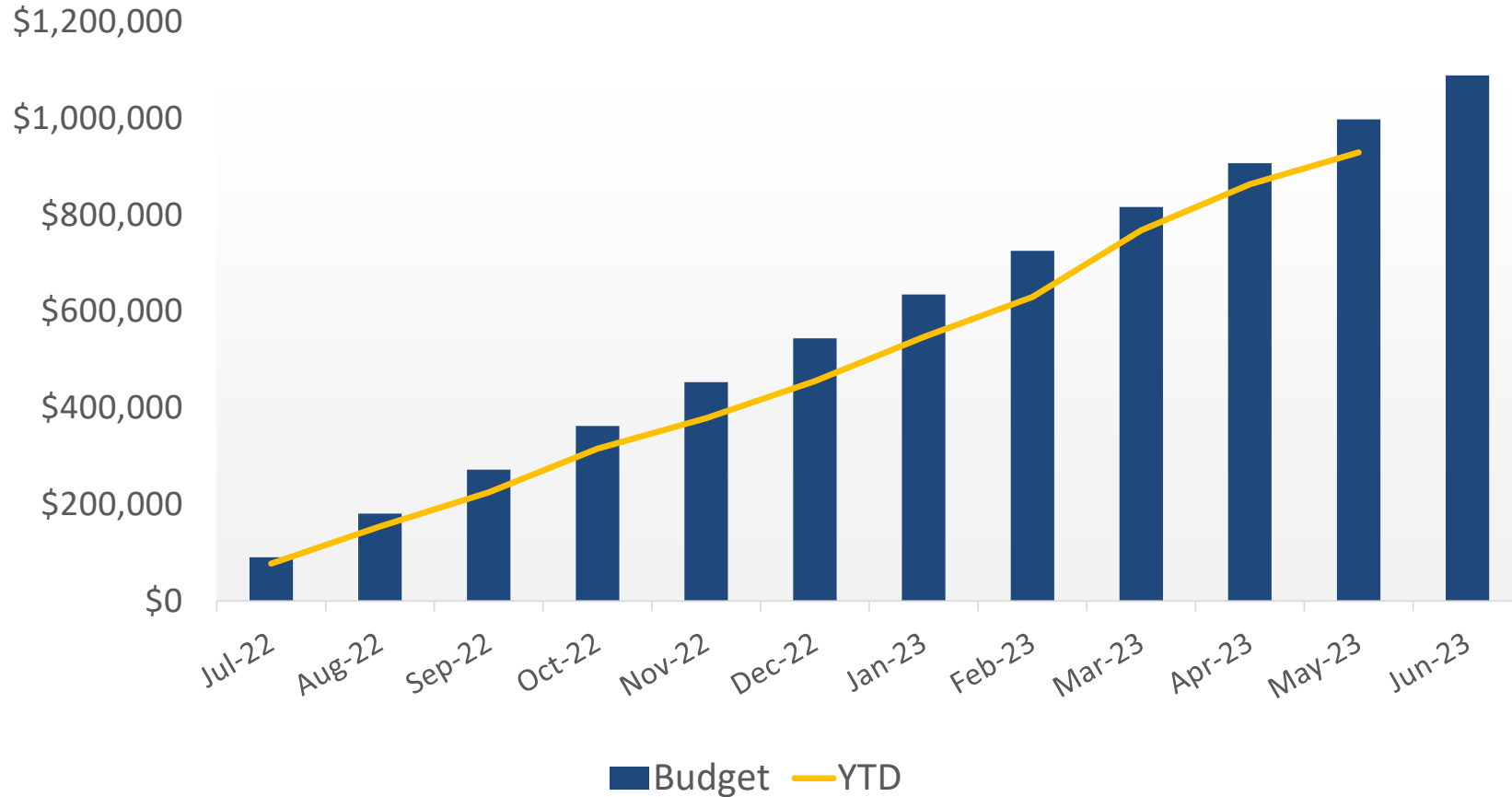
Provost & Pritchard – Budget-to-Actuals

FY 22-23



Woodard & Curran – Budget-to-Actuals

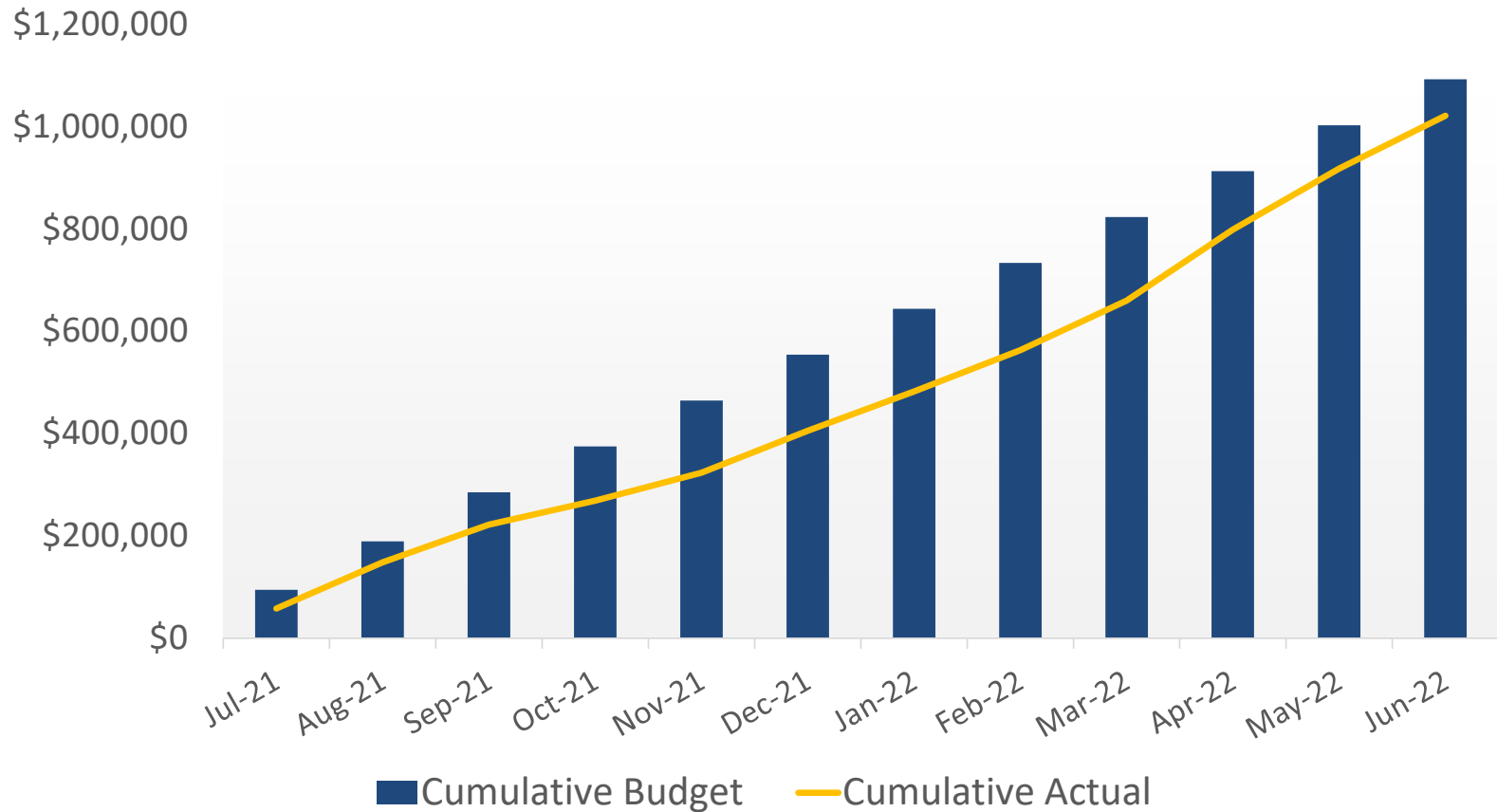
Task Order No. 10



CBGSA FY 22-23 – Budget-to-Actuals



CBGSA FY 21-22 – Budget-to-Actuals





TO: Board of Directors
Agenda Item No. 16a

FROM: Brian Van Lienden, Woodard & Curran

DATE: July 12, 2023

SUBJECT: Update on Groundwater Sustainability Plan Activities

Recommended Motion

None – information only.

Discussion

Cuyama Basin Groundwater Sustainability Agency (CBGSA) Groundwater Sustainability Plan (GSP) activities and consultant Woodard & Curran's (W&C) accomplishments are provided as Attachment 1.

Cuyama Basin Groundwater Sustainability Agency

16a. Update on Groundwater Sustainability Plan Activities

Brian Van Lienden

July 12, 2023



May-June Accomplishments

Brian Van Lienden

- ✓ Secured driller contract and pursued permits for implementation of new monitoring wells and piezometers
- ✓ Conducted landowner outreach and DWR engagement on potential CIMIS stations
- ✓ Developed draft supplemental GSP section on modification of Undesirable Results statements for consideration by CBGSA Board
- ✓ Consulted with DWR on GSP periodic evaluation and Plan amendment and prepared schedule
- ✓ Developed interactive map for active well dataset
- ✓ Submitted quarterly grant submittal and coordinated with DWR on grant reimbursements
- ✓ **Began review of model water use versus user-reported data for 2022**



TO: Board of Directors
Agenda Item No. 16b

FROM: Brian Van Lienden, Woodard & Curran

DATE: July 12, 2023

SUBJECT: Update on Grant-Funded Projects

Recommended Motion

None – information only.

Discussion

An update on Cuyama Basin Groundwater Sustainability Agency (CBGSA) Grant-Funded Projects is provided as Attachment 1.

Cuyama Basin Groundwater Sustainability Agency

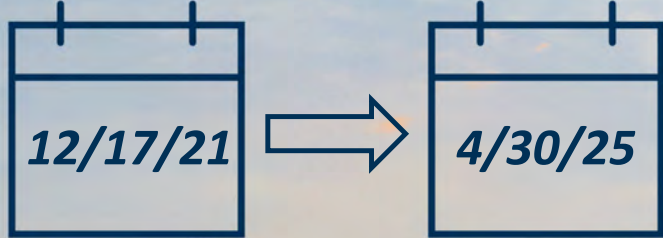
16b. Update on Grant Funded Projects

Brian Van Lienden

July 12, 2023

- Ad hoc met on June 19, 2023

Grant Funding - 2021 SGMA Implementation Round 1 Grant Award

- Purpose: Support implementation of GSP to achieve sustainability with investments in groundwater recharge
- **\$7,600,000 ÷ 3 years**
- Grant Period of Performance: 
- Grant funded tasks:
 1. Grant Administration
 2. Perform Monitoring and Monitoring Network Enhancements
 3. Project and Management Action Implementation
 4. GSP Implementation, Outreach, and Compliance Activities
 5. Improve Understanding of Basin Water Use

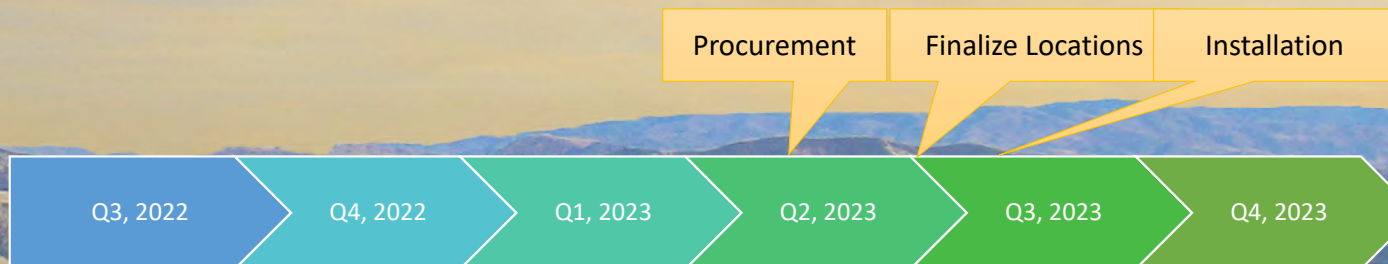
Installation of Monitoring Wells and Piezometers

Monitoring Wells

- Objective
 - Refinement of existing groundwater level monitoring network
- Grant funding
 - Installation of minimum of four (4) multi-level monitoring wells (3 casings each) with an average depth of ~750 ft.
 - Available funding: \$2,415,000

Piezometers

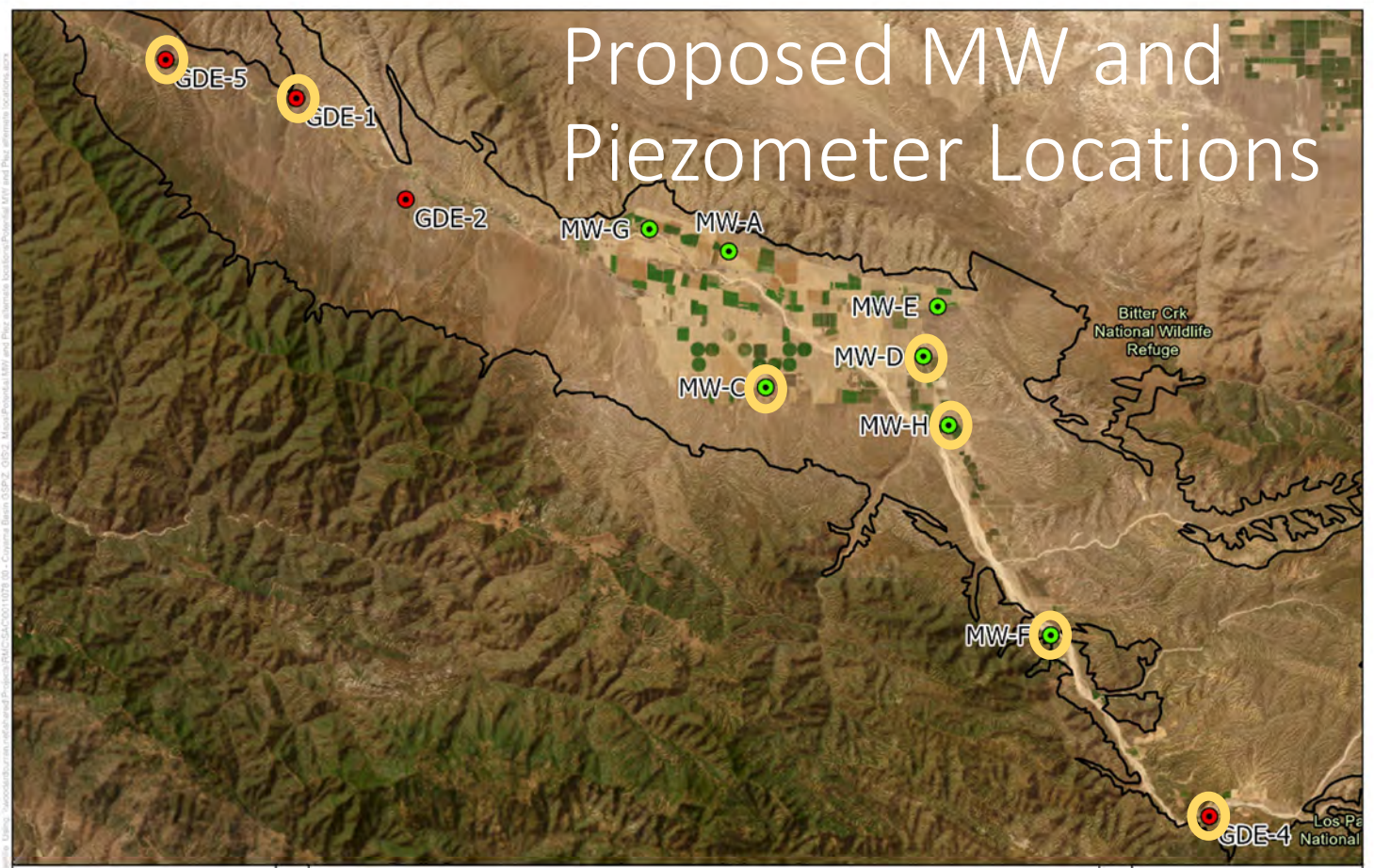
- Objective
 - Monitoring shallow groundwater levels near mapped occurrences of potential GDEs
- Grant funding
 - Installation of minimum of four (4) piezometers about 50-100 feet deep, small diameter
 - Available funding: \$210,000



Status of Monitoring Well and Piezometer Landowner Outreach

- **Multi-Completion Monitoring Well Locations:**
 - Landowner at one location has agreed to participate
 - Three locations are in right-of-way locations
 - Landowners at three locations will indicate this month whether they will participate
- **Piezometer Locations:**
 - Landowners at two locations have agreed to participate
 - One location is a right-of-way location
 - Landowner at one location has not confirmed participation

Proposed MW and Piezometer Locations



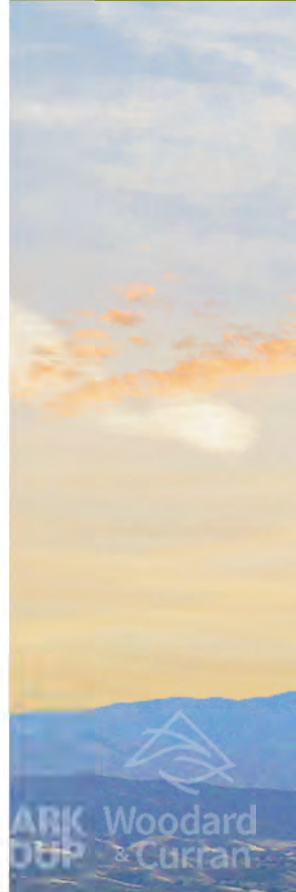
Proposed Locations of Monitoring Wells
Cuyama Basin

Legend	Proposed Monitoring Well	Locations have been marked; permit applications in process
	Proposed GDE Well	

0 2.5 5 Miles

Woodard & Curran
Project #: 0011078.00
Map Created: May 2023

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk. **Data Sources:**



Next Steps for Monitoring Well and Piezometer Installation

- Finalize locations and landowner access agreements
 - 4-5 multi-completion monitoring wells
 - 3-4 piezometers
- Obtain well permits
- Mobilization of drill rig and crew expected to begin in August 2023
- Completion expected in November or December 2023

CIMIS/Weather Stations

Objective

- Improve estimates of reference evapotranspiration in the model and expand spatial coverage of reference evapotranspiration across the basin

Grant funding

- Enhance or replace the existing CIMIS station and installation of two or more additional CIMIS stations
- Available funding: \$80,000

Status and Next Steps

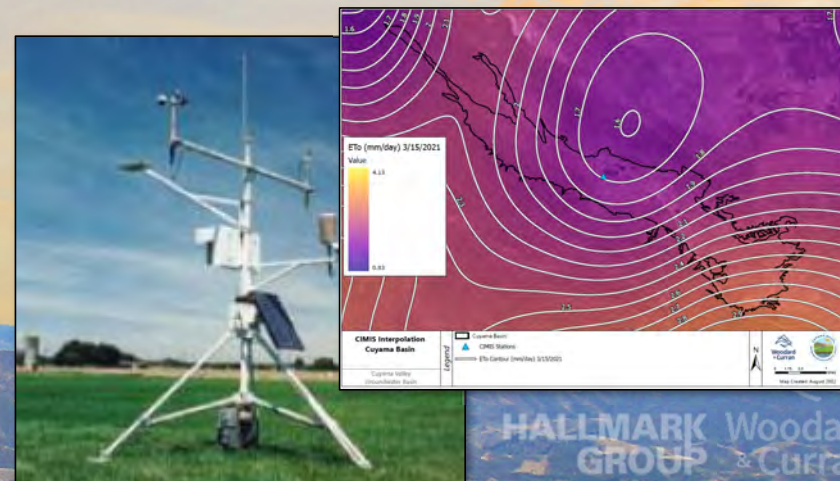
- Met with DWR to discuss overall approach: recommended 3-4 stations (1 in West, 1 near Ventucopa, 1-2 in Central Basin)
- Met and with 3 landowners to discuss interest and potential siting options
 - 2 located in Central Basin, 1 near Ventucopa
 - Still seeking a meeting with Western landowner
- Will follow up with DWR staff to discuss specific locations

Outstanding Issues

- Source of water allocation and funding to maintain grass or vegetation

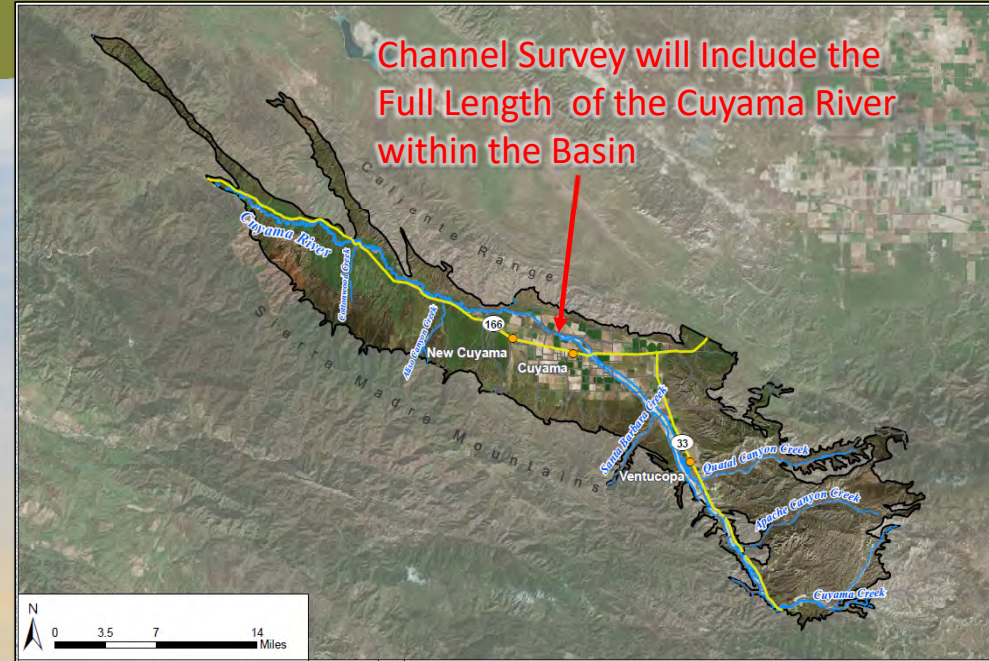
Schedule:

- Anticipate completing CIMIS station installation in Q2 of 2024



River Channel Survey

- **Objective**
 - Improve understanding of river channel geometry to improve estimates of stream seepage in the GW model
- **Grant funding**
 - Survey a minimum of four (4) miles of the river channel for photogrammetry, ~0.5 foot accuracy
 - Available funding: \$45,000
- **Status**
 - Staff has determined that doing a flight of the full river channel is feasible with the current grant budget
 - A contractor is scheduled to perform a single-path flight from ~1,000' in the first week of August, when river flows have receded
 - Contractor Cost = \$29,600
 - Contractor will provide digital terrain model data and 1-foot contours in October
- **Outreach**
 - No specific landowner outreach needed for this item



Field Work

Reporting

Q3, 2022

Q4, 2022

Q1, 2023

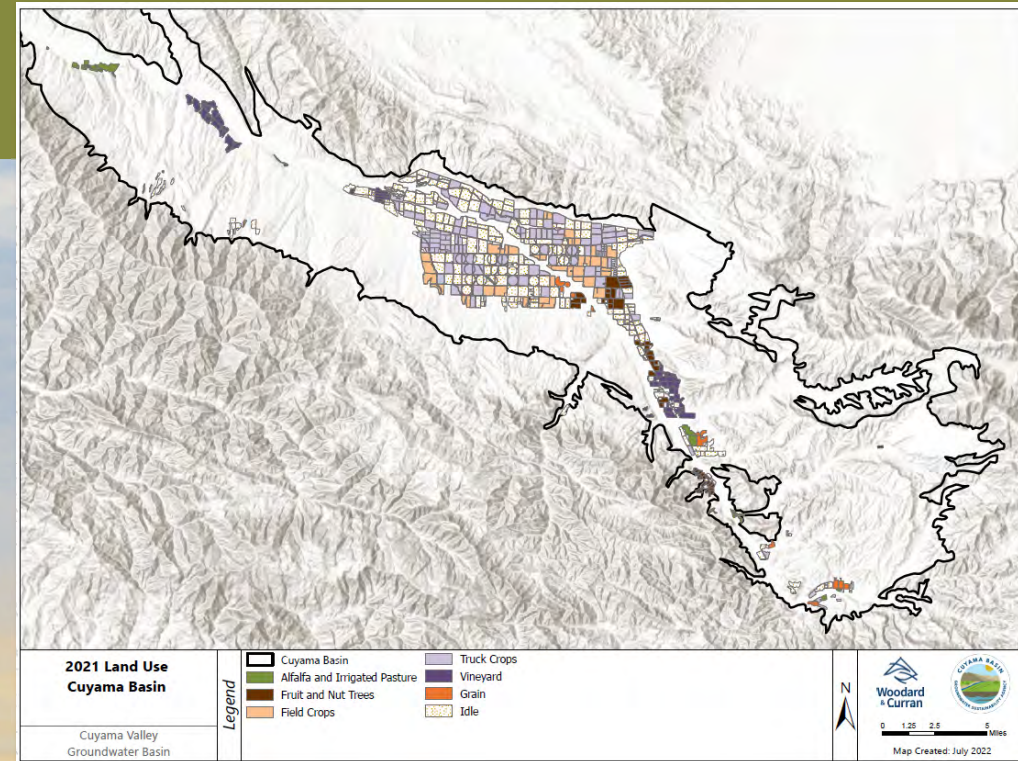
Q2, 2023

Q3, 2023

Q4, 2023

Update Land Use Data

- **Objective**
 - Develop basin-wide land use dataset to better understand current and cyclical land use trends, as well as to improve estimation of water use in the Basin
- **Grant funding**
 - Available funding: \$30,000
- **Entered Contract with LandIQ that includes the following:**
 - Calendar Year and Water Year 2020-2024 crop mapping estimates
 - Updates to historical crop mapping
 - Ground truthing of irrigation status for 2023 and 2024



Reporting of WY 22 data

Reporting of WY 23 data

Q3, 2022

Q4, 2022

Q1, 2023

Q2, 2023

Q3, 2023

Q4, 2023

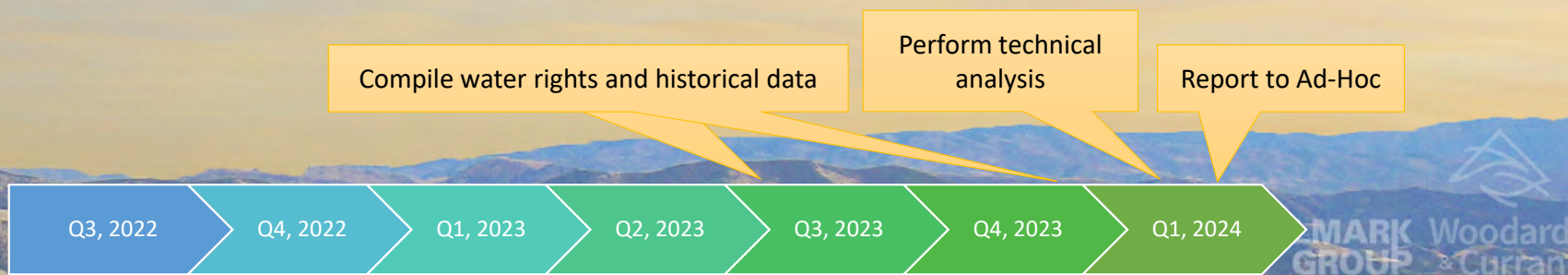
Technical Analysis of Flood and Stormwater Capture

- **Objective**
 - Perform a water rights analysis to understand the legal implications of potential flood and stormwater capture projects
- **Grant funding**
 - Perform technical analysis of water available for recharge
 - Available funding: \$55,000
- **Next Steps**
 - Compile and review existing water rights on the Cuyama River
 - Compile historical data related to Cuyama River flows and Lake Twitchell operations
 - Perform a water availability analysis to estimate the timing and quantity of Cuyama River water that could be diverted



Source: SBCWA, 2015

Figure 7-2: Groundwater Recharge Potential in Santa Barbara County





TO: Board of Directors
Agenda Item No. 16c

FROM: Brian Van Lienden, Woodard & Curran

DATE: July 12, 2023

SUBJECT: Update on Active Well Dataset

Recommended Motion

None – information only.

Discussion

An update on the active well dataset is provided as Attachment 1.

Cuyama Basin Groundwater Sustainability Agency

16c. Update on Active Well Dataset

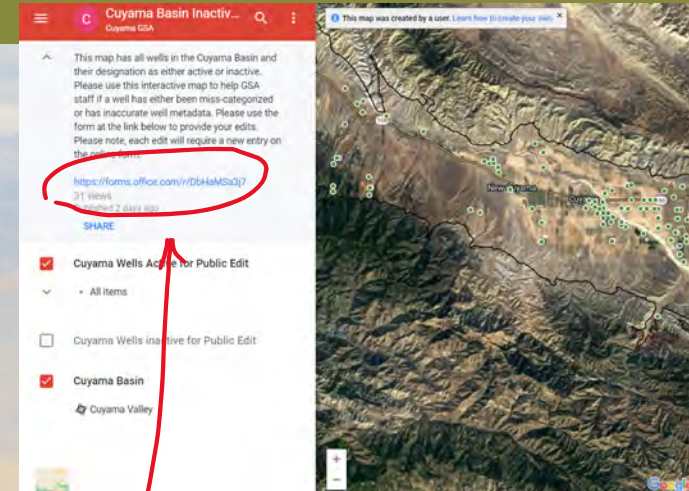
Van Lienden

July 12, 2023



Update on Active Well Dataset

- On March 29, 2023, staff presented a well data improvement strategy
- One of the strategy components to improve the accuracy of the active well dataset is to use a stakeholder review process
- Stakeholder opportunity to review active well data
 - Interactive map has been developed and is hosted on the CBGSA website at:
<https://www.google.com/maps/d/u/2/viewer?mid=1AGTzyBEfP-AGvFwyMmZCx-4eoc995mY&ll=34.824776693607326%2C-119.691968&z=9>
 - Stakeholders can review active and inactive well datasets and provide any corrections to the data using a form link on the website
- Staff is requesting SAC/Board feedback on the interactive map and data correction form





TO: Board of Directors
Agenda Item No. 16d

FROM: Taylor Blakslee, Hallmark Group

DATE: July 12, 2023

SUBJECT: Update on Potential Non-Reporting Pumpers

Recommended Motion

None – information only.

Discussion

An update on potential non-reporting pumpers is provided as Attachment 1.

Cuyama Basin Groundwater Sustainability Agency

16d. Update on Potential Non-Reporting Pumpers

Blakslee

July 12, 2023



Update on Non-Reporting Pumpers

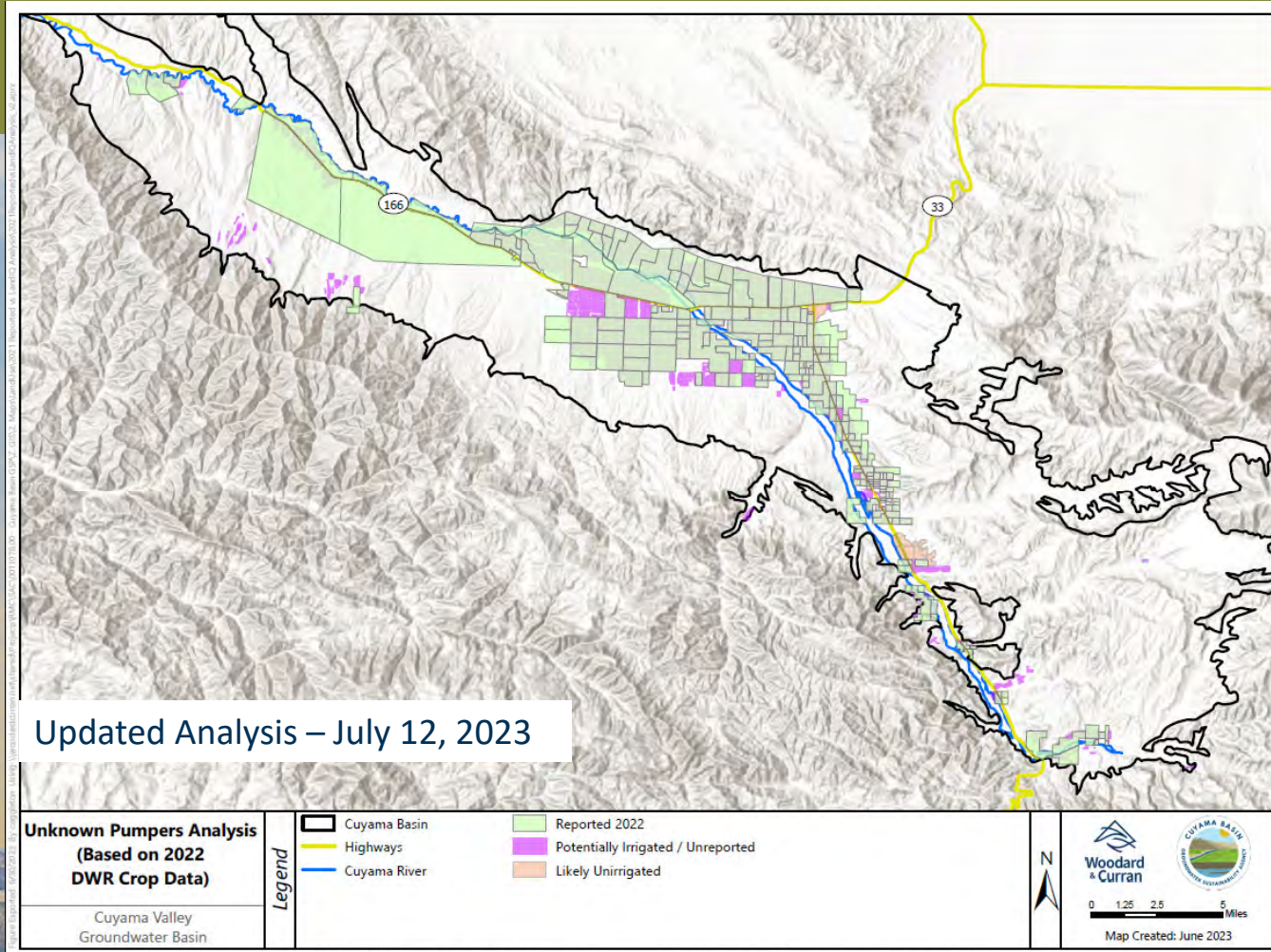
- On March 29, 2023, the GSA Board directed staff to consider enforcement options for potentially non-reporting pumpers in the FY 23-24 budget
- On May 3, 2023, the Board adopted the FY 23-24 budget that included enforcement options for non-reporting pumpers

Update on Non-Reporting Pumpers

Current
Step

- Step 1 - Identify/confirm un-reported pumpers
 - Refine existing analysis with 1) Land IQ 2022 water use data and 2) reported 2022 water use – Completed (see next slide for original Dec 12, 2022, analysis and updated Jul 12, 2023, analysis)
 - Land IQ to assist in QA/QC of potential un-reported (“purple”) areas
 - Mail potential out of compliance letters to identified landowners
 - Attempt to contact landowners via phone (if known; work with ad hoc/stakeholders)
 - Perform in-field visits to interface with landowner/drop off letter at gate, etc.
- Step 2 – Enforcement
 - Staff to develop plan for out of compliance landowner to be current
 - Coordinate with ad hoc and communication with landowner
 - Hold hearing with landowner at Board meeting
 - Place outstanding fees owed on tax roll
 - Legal involvement for un-cooperating/un-responsive landowners
- Step 3 – Progress on identifying landowners

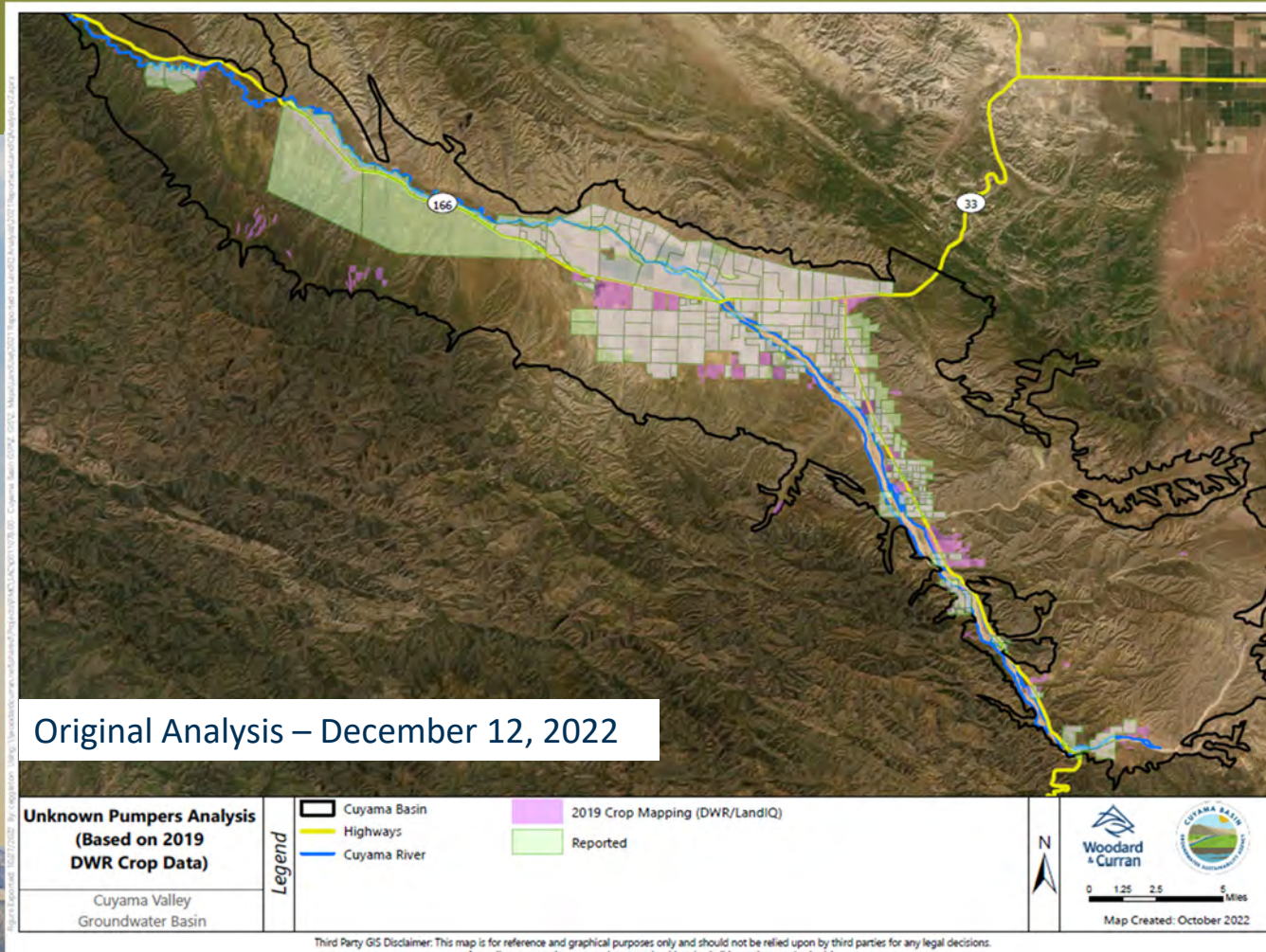
Update on Non-Reporting Pumpers



Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk.



Update on Non-Reporting Pumpers





TO: Board of Directors
Agenda Item No. 16e

FROM: Brian Van Lienden, Woodard & Curran

DATE: July 12, 2023

SUBJECT: Update on April 2023 Groundwater Conditions Report

Recommended Motion

None – information only.

Discussion

An update on the groundwater levels representative monitoring network and select hydrographs is provided as Attachment 1 and the detailed January 2023 Groundwater Conditions Report is provided as Attachment 2.

Cuyama Basin Groundwater Sustainability Agency

16e. Update on April 2023 Groundwater Conditions Report
Van Lienden

July 12, 2023

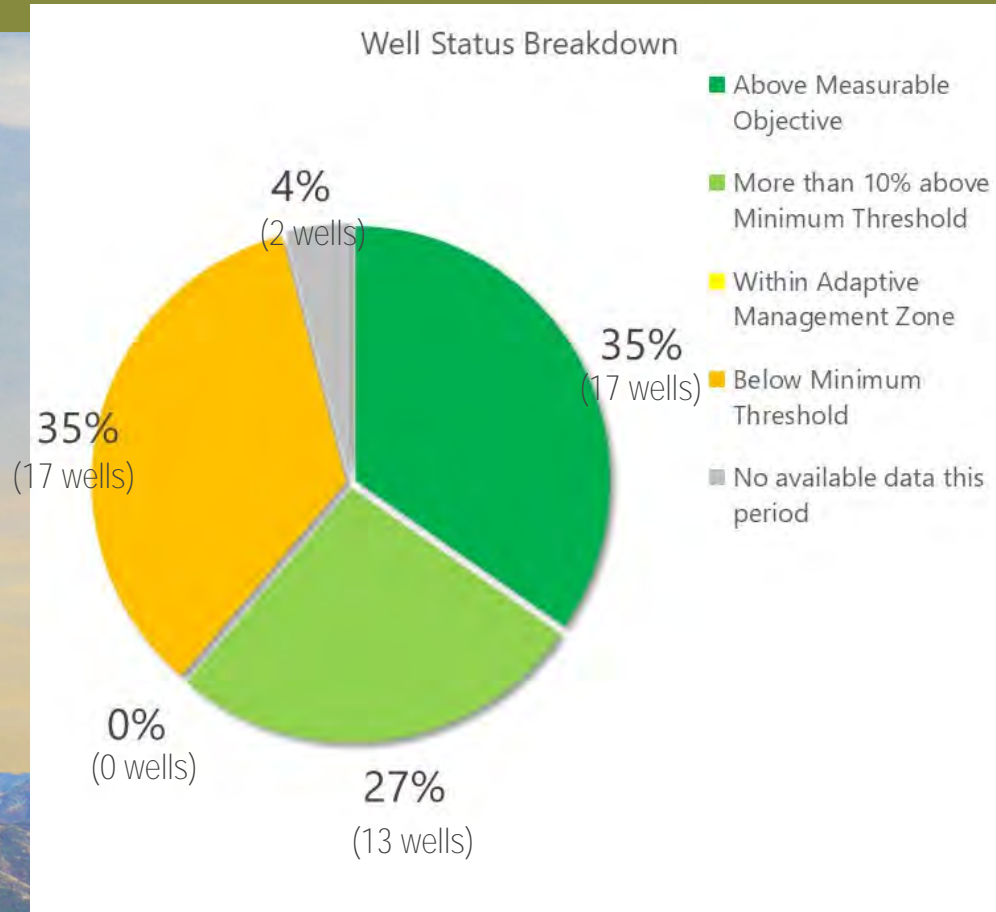
[Link to April Report](#)

Groundwater Levels Monitoring Network – Summary of Current Conditions

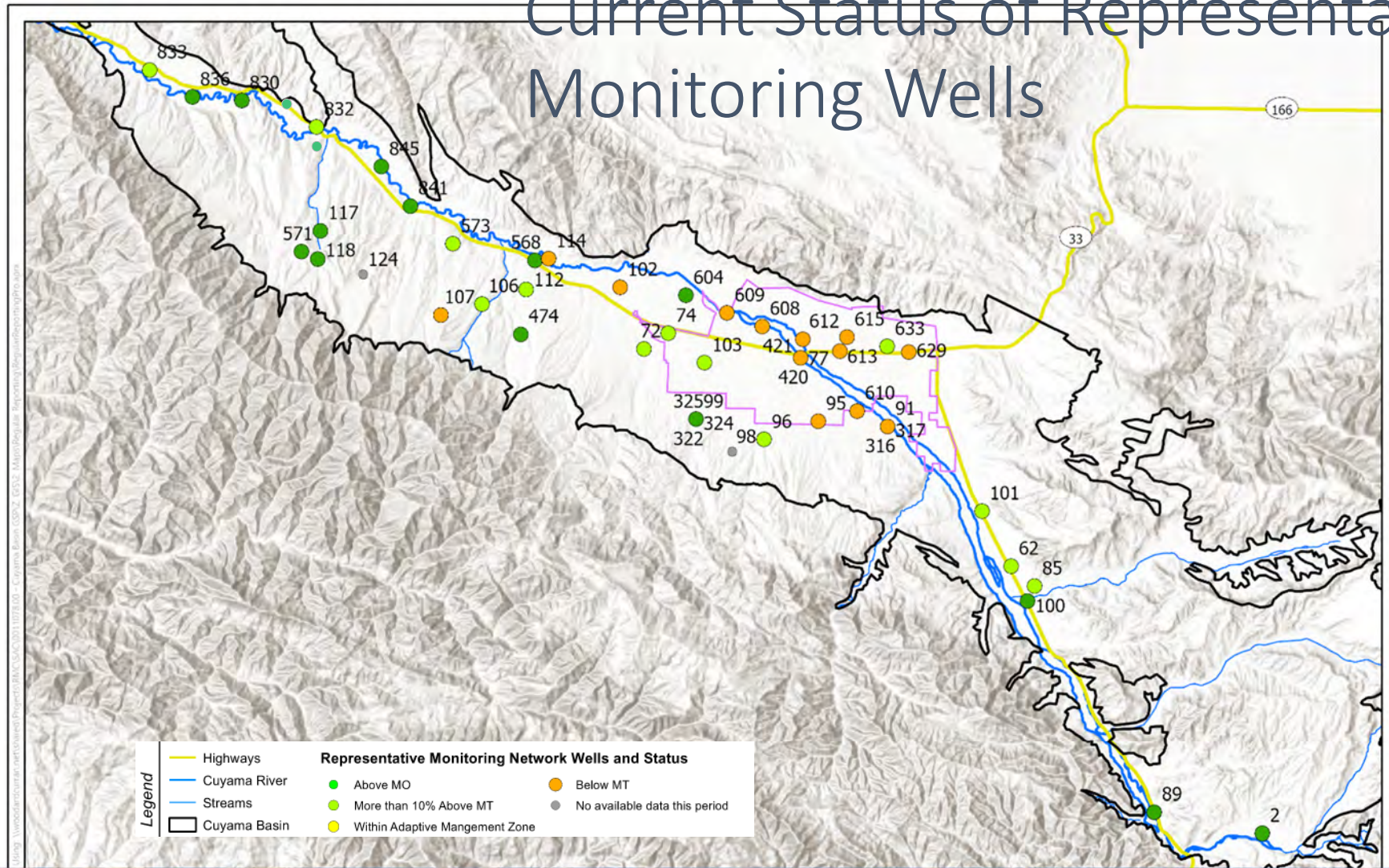
- Monitoring data from October 2022, January 2023 and April 2023 for representative wells is included in the Groundwater Conditions report
- 47 of 49 representative monitoring wells have levels data in at least one out of the previous 16 months
- 17 wells were below the minimum threshold based on latest measurement since January 2022
 - 24 wells were below MTs in the January 2023 report

Summary of Groundwater Well Levels as Compared To Sustainability Criteria

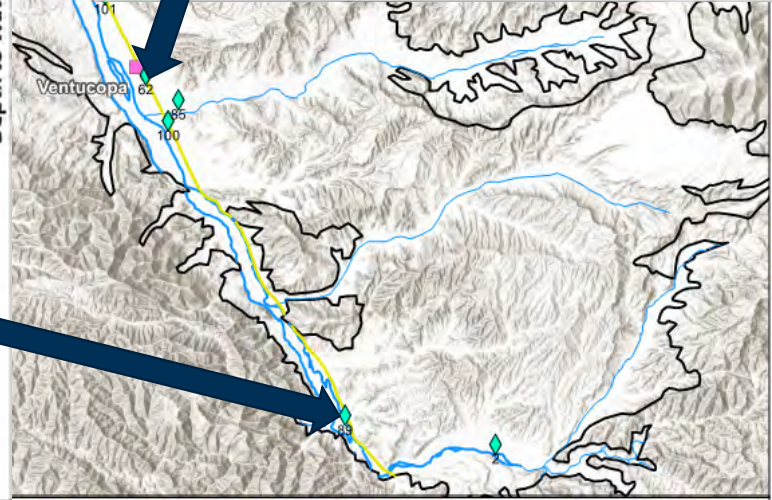
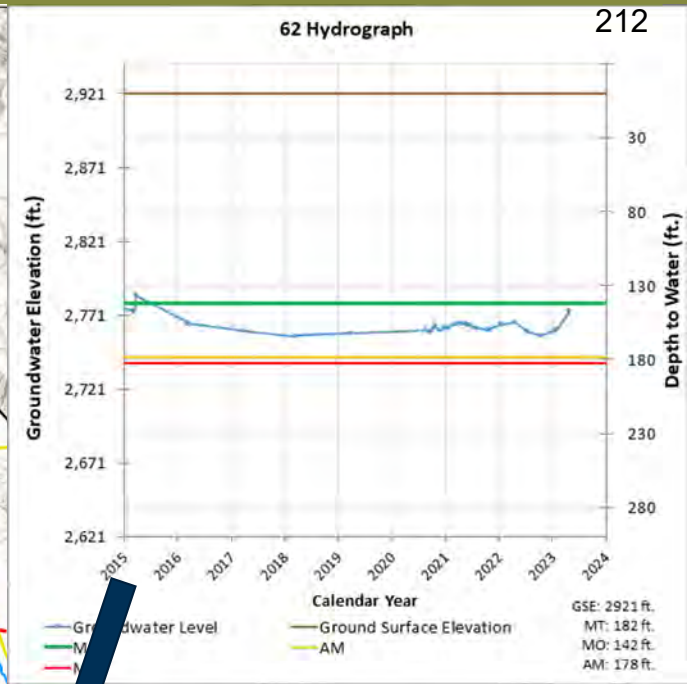
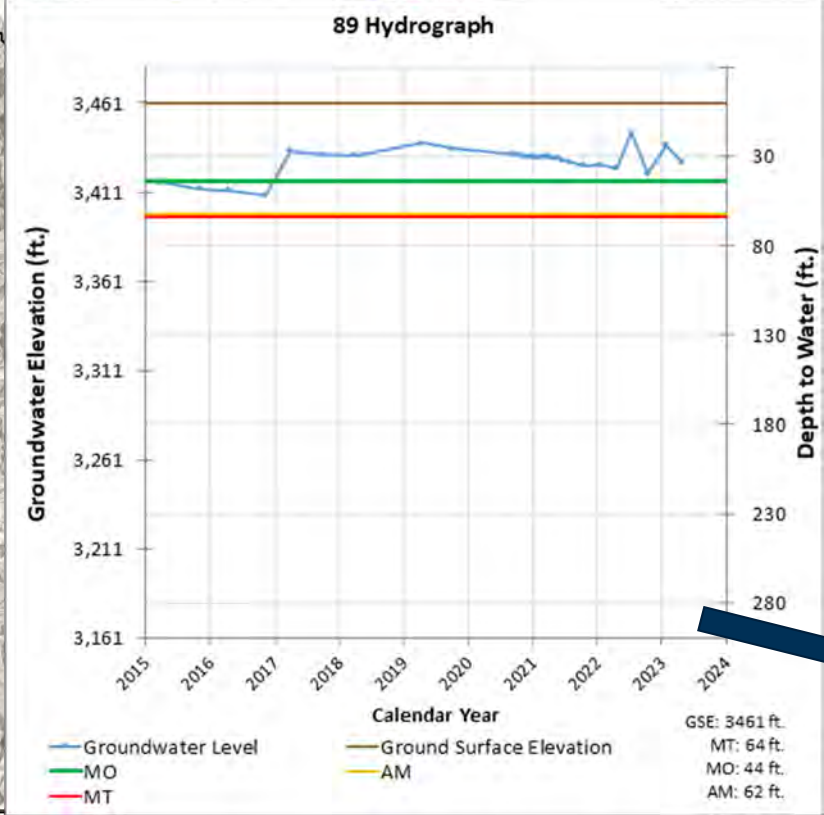
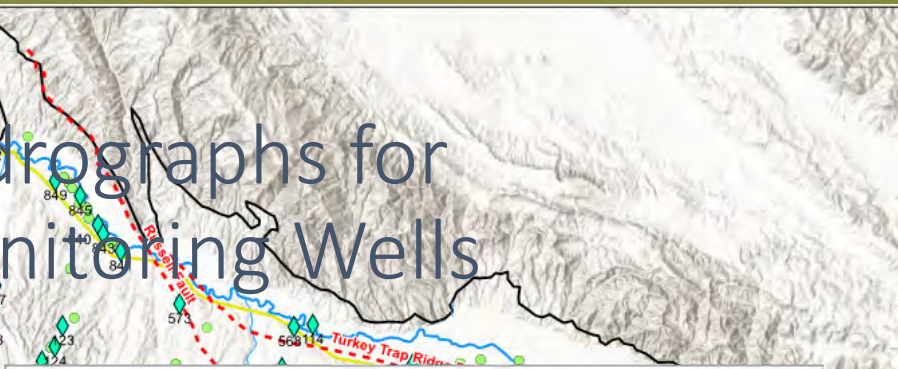
- 17 wells are currently below minimum threshold (MT)
 - 30% of wells (i.e. 15 wells) below MT for 7 months
 - 8 of these were already below MT at time of GSP adoption
 - If conditions do not improve, Basin is now projected to reach Undesirable Results in Oct 2024 (previously was July 2023)



Current Status of Representative Monitoring Wells

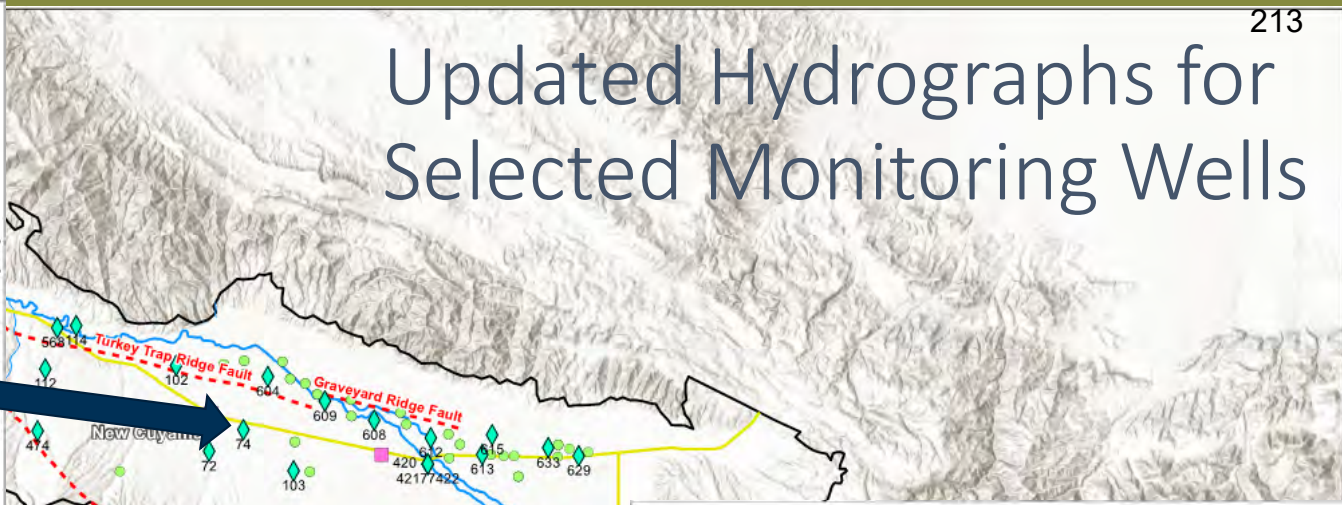
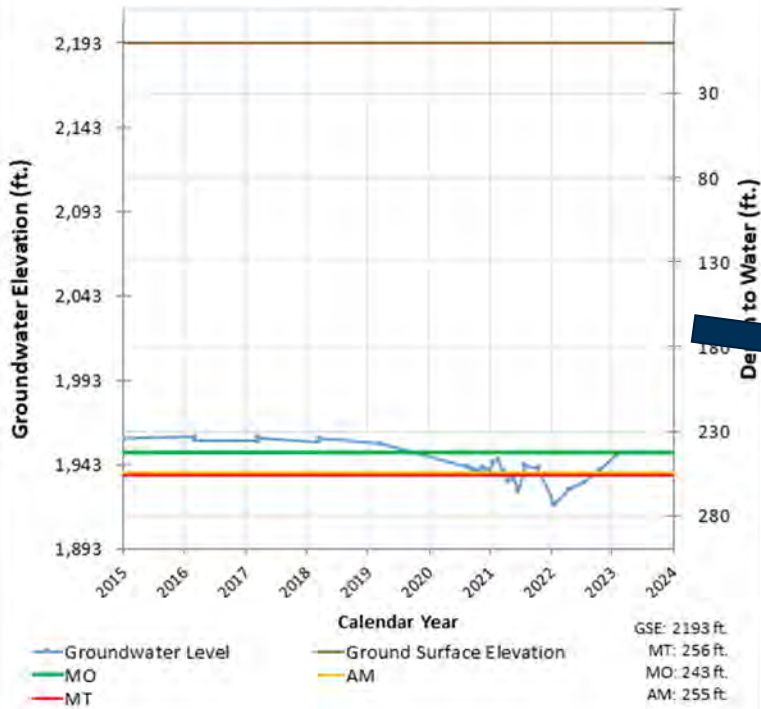


Updated Hydrographs for Selected Monitoring Wells

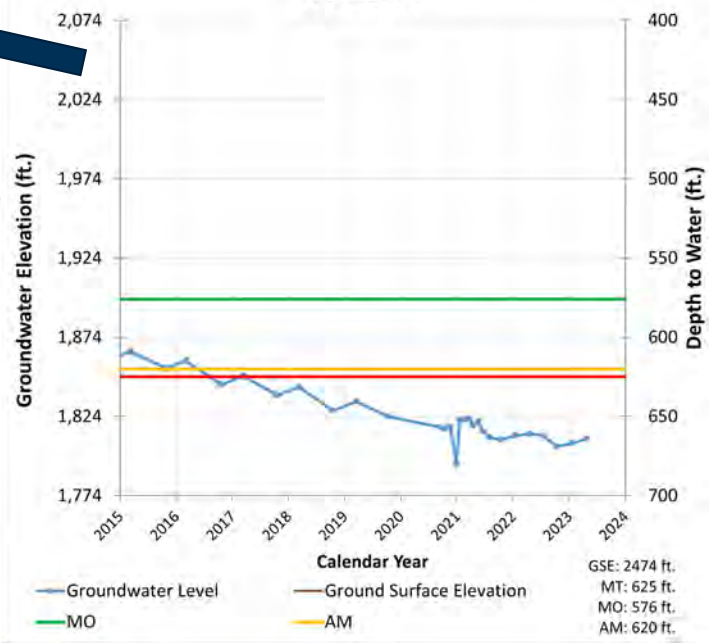


Updated Hydrographs for Selected Monitoring Wells

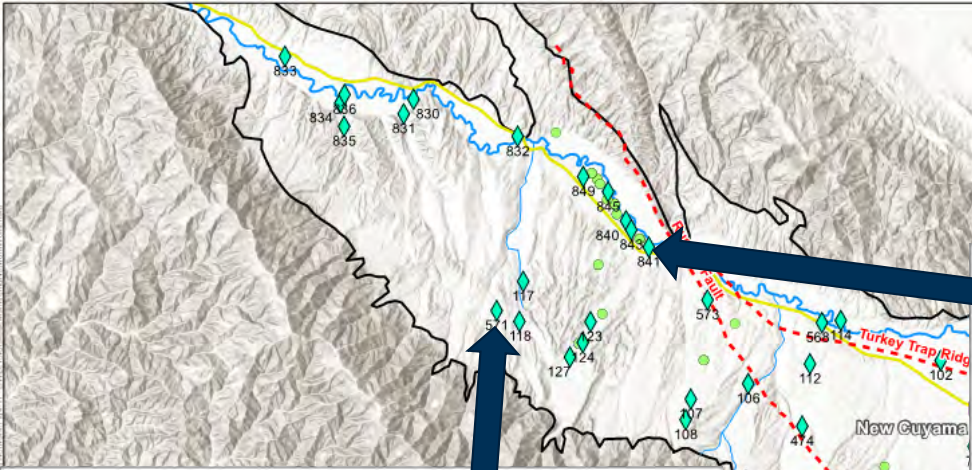
74 Hydrograph



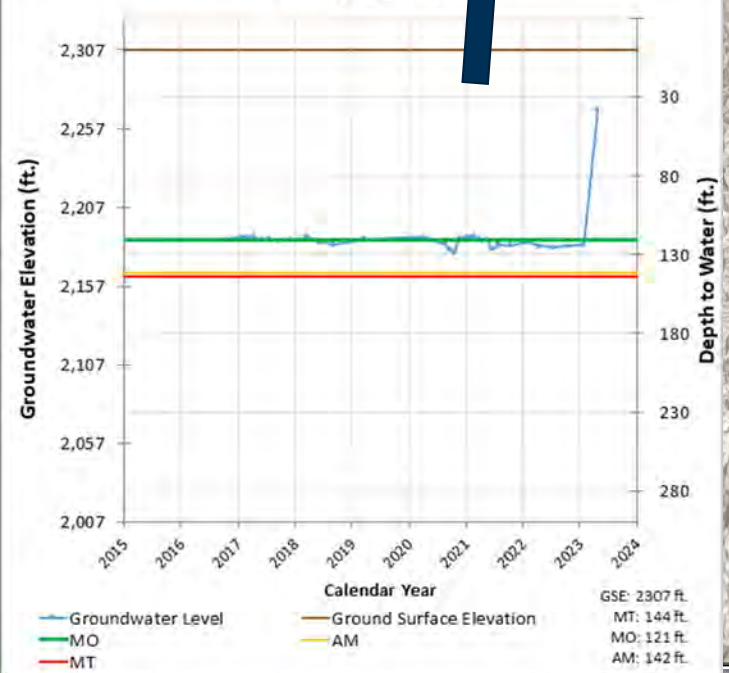
91 Hydrograph



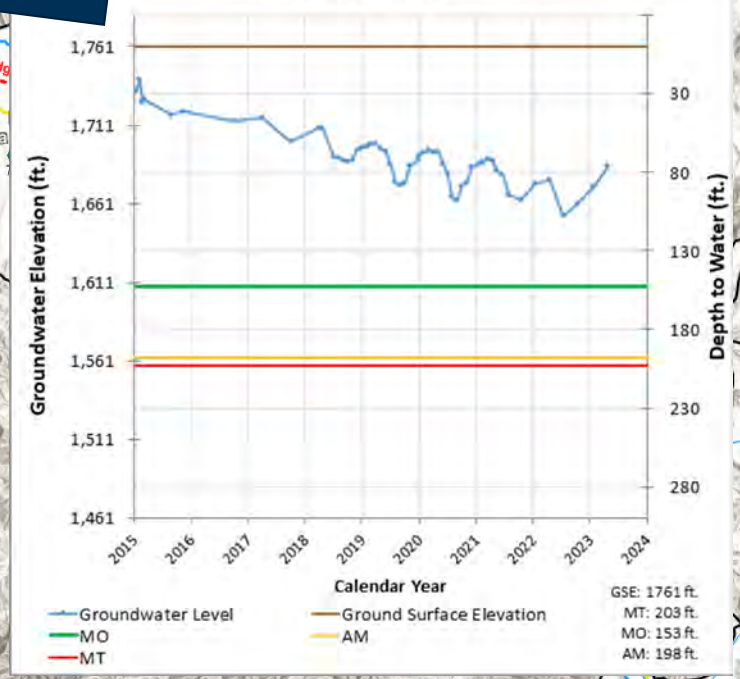
Updated Hydrographs for Selected Monitoring Wells



571 Hydrograph



841 Hydrograph



Parameter	Elevation (ft.)
Ground Surface Elevation (GSE)	2307
Monitoring Objective (MO)	144
Action Monitor (AM)	121

Parameter	Elevation (ft.)
Ground Surface Elevation (GSE)	1761
Monitoring Objective (MO)	203
Action Monitor (AM)	153



**GROUNDWATER
CONDITIONS
REPORT –
CUYAMA VALLEY
GROUNDWATER
BASIN**

April 2023

801 T Street
Sacramento, CA
916.999.8700

woodardcurran.com

**Cuyama Basin
Groundwater
Sustainability Agency**

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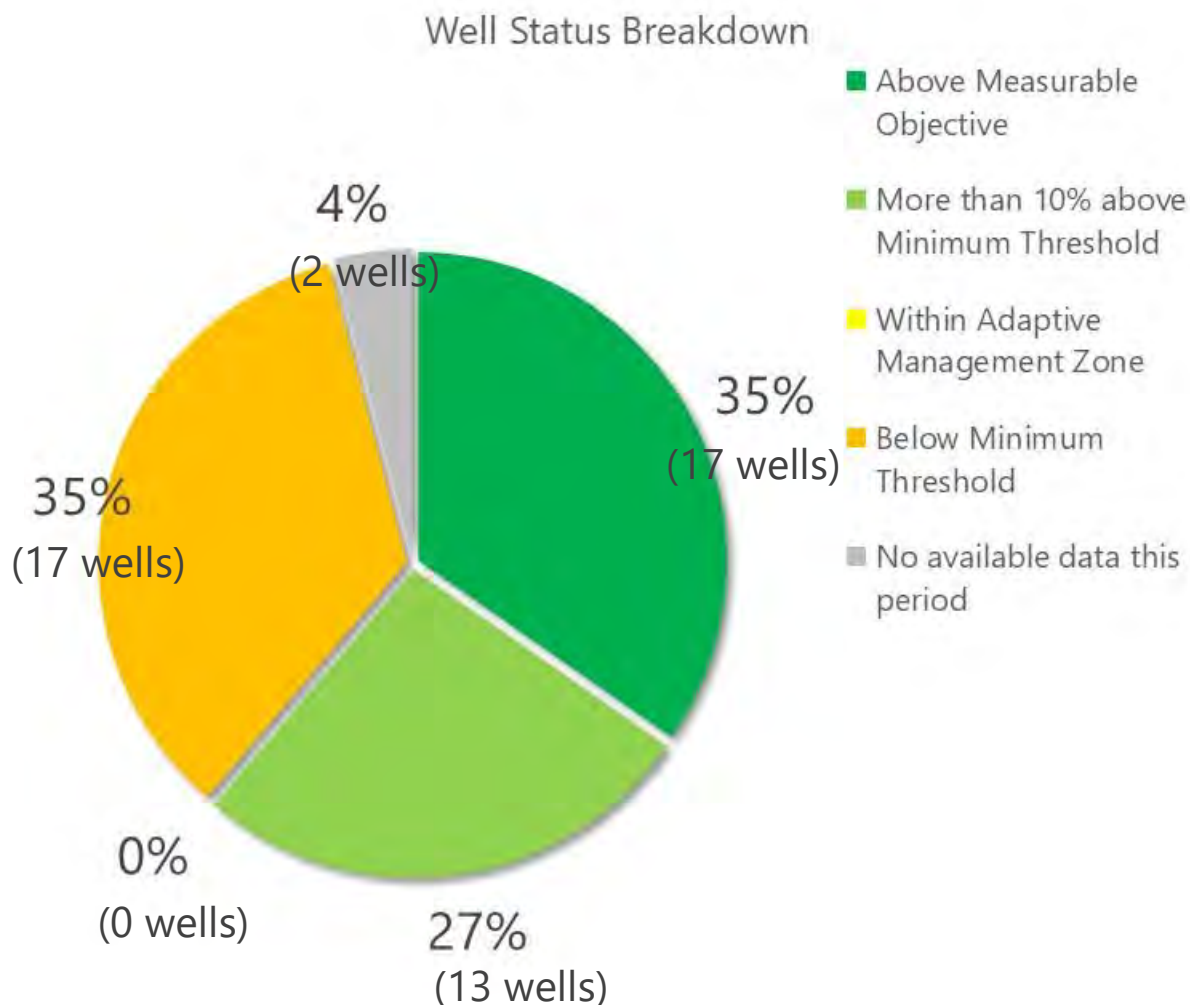
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1. INTRODUCTION

This report is intended to provide an update on the current groundwater level conditions in the Cuyama Valley Groundwater Basin. This work is completed by the Cuyama Basin Groundwater Sustainability Agency (CBGSA), in compliance with the Sustainable Groundwater Management Act (SGMA).

2. SUMMARY STATISTICS



Groundwater conditions have improved with the relatively wet conditions the basin has experienced since January. There are currently 17 wells with groundwater levels exceeding minimum thresholds, compared to 24 wells that exceeded minimum thresholds in January 2023. As outlined in the GSP, undesirable results for the chronic lowering of groundwater levels occurs, "when 30 percent of representative monitoring wells... fall below their minimum groundwater elevation threshold for two consecutive years." (Cuyama GSP, pg. 3-2). Currently, 30% of representative monitoring wells (i.e. 15 wells) have been below the minimum threshold for 7 or more consecutive months (compared to 15 wells below the minimum threshold for 20 or more months in January 2023).

3. CURRENT CONDITIONS

Table 1 includes the most recent groundwater level measurements taken in the Cuyama Basin from representative wells included in the Cuyama GSP Groundwater Level Monitoring Network, as well as the previous two measurements. Table 2 includes all of the wells and their current status in relation to the thresholds applied to each well. This information is also shown on Figure 1.

All measurements have also been incorporated into the Cuyama DMS, which may be accessed at <https://opti.woodardcurran.com/cuyama/login.php>.

Table 1: Recent Groundwater Levels for Representative Monitoring Network

Well	Region	Oct-22	Jan-22	Apr-23	Last Year		Annual Elevation Change (ft)
		GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	Month/ Year	
72	Central	2014	2036	2019	2021	Apr-22	-2
74	Central	1939	1949	-	1928	Apr-22	-
77	Central	1779	1808	1798	1803	Apr-22	-5
91	Central	1805	1807	1810	1813	Apr-22	-4
95	Central	1851	-	-	1847	Apr-22	-
96	Central	2269	2270	2275	2271	Apr-22	4
98	Central	-	-	-	-	-	-
99	Central	2158	2160	2223	2223	Apr-22	0
102	Central	1622	-	-	1622	Apr-22	-
103	Central	2032	2041	2045	2007	Apr-22	37
112	Central	2053	-	2053	2053	Apr-22	0
114	Central	1877	-	-	1878	Apr-22	-
316	Central	1803	1806	1808	1813	Apr-22	-5
317	Central	-	-	-	1813	Apr-22	-
322	Central	2156	2155	2222	2222	Apr-22	0
324	Central	2178	2181	2220	2220	Apr-22	-1
325	Central	2200	2203	2222	2222	Apr-22	0
420	Central	1725	1807	1795	1792	Apr-22	3
421	Central	1787	1806	1802	1793	Apr-22	8
474	Central	2203	2206	2202	2204	Apr-22	-2



Well	Region	Oct-22	Jan-22	Apr-23	Last Year		Annual Elevation Change (ft)
		GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	Month/Year	
568	Central	1851	1828	1870	1868	Apr-22	2
604	Central	-	1655	1656	-	-	-
608	Central	1782	-	-	1817	Apr-22	-
609	Central	1707	1713	1705	1760	Apr-22	-55
610	Central	1808	1812	1813	1814	Apr-22	-1
612	Central	1786	1792	1801	1793	Apr-22	8
613	Central	1794	1798	1788	1809	Apr-22	-21
615	Central	1814	1816	1810	1813	Apr-22	-3
629	Central	1812	1819	1803	1807	Apr-22	-5
633	Central	1792	1805	1851	1794	Apr-22	57
62	Eastern	2757	2761	2774	2766	Apr-22	8
85	Eastern	2841	2845	2844	2847	Apr-22	-2
100	Eastern	2846	2850	2901	2850	Apr-22	51
101	Eastern	-	-	-	-	-	-
841	Northwestern	1661	1672	1685	1676	Apr-22	9
845	Northwestern	1638	1644	1647	1645	Apr-22	3
2	Southeastern	-	-	3704	-	-	-
89	Southeastern	3422	3438	3428	3425	Apr-22	4
106	Western	2182	-	2184	2183	Apr-22	1
107	Western	2390	-	2390	2383	Apr-22	7
117	Western	1945	-	1950	1946	Apr-22	4

Well	Region	Oct-22	Jan-22	Apr-23	Last Year		Annual Elevation Change (ft)
		GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	Month/ Year	
118	Western	2212	2212	2214	2210	Apr-22	4
124	Western	-	-	-	-	-	-
571	Western	2182	2183	2269	2182	Apr-22	87
573	Western	2012	-	2015	2013	Apr-22	2
830	Far-West Northwestern	1508	1510	1516	1510	Apr-22	7
832	Far-West Northwestern	1588	1589	1596	1590	Apr-22	6
833	Far-West Northwestern	-	-	1426	-	-	-
836	Far-West Northwestern	1447	1450	1450	1448	Apr-22	3



Table 2: Well Status Related to Thresholds

Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Well Depth	Status	GSA Action Required?
		GWL (DTW)	Date						
72	Central	152	4/24/2023	169	165	124	790	More than 10% above Minimum Threshold	No
74	Central	-	4/25/2023	256	255	243		No available data this period (>10% above MT in Jan 2023)	No
77	Central	488	4/24/2023	450	445	400	980	Below Minimum Threshold (32 months)	No
91	Central	664	4/25/2023	625	620	576	980	Below Minimum Threshold (32 months)	No
95	Central	-	4/25/2023	573	570	538	805	No available data this period (below MT in Oct 2022, 32 months)	No
96	Central	331	4/24/2023	333	332	325	500	More than 10% above Minimum Threshold	No
98	Central	-		450	449	439	750	No available data since GSA monitoring began	No
99	Central	289	4/24/2023	311	310	300	750	Above Measurable Objective	No
102	Central	-		235	231	197		No available data this period (below MT in Apr 2022, 25 months)	No
103	Central	244	4/24/2023	290	285	235	1030	More than 10% above Minimum Threshold	No
112	Central	86	4/25/2023	87	87	85	441	More than 10% above Minimum Threshold	No
114	Central	-	4/25/2023	47	47	45	58	No available data this period (below MT in Oct 2022, 13 months)	No
316	Central	666	4/25/2023	623	618	574	830	Below Minimum Threshold (32 months)	No



Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Well Depth	Status	GSA Action Required?
		GWL (DTW)	Date						
317	Central	-	4/25/2023	623	618	573	700	No available data this period (below MT in Jul 2022, 32 months)	No
322	Central	291	4/24/2023	307	306	298	850	Above Measurable Objective	No
324	Central	293	4/24/2023	311	310	299	560	Above Measurable Objective	No
325	Central	290	4/24/2023	300	299	292	380	Above Measurable Objective	No
420	Central	491	4/24/2023	450	445	400	780	Below Minimum Threshold (32 months)	No
421	Central	484	4/24/2023	446	441	398	620	Below Minimum Threshold (32 months)	No
474	Central	167	4/25/2023	188	186	169	213	Above Measurable Objective	No
568	Central	35	4/25/2023	37	37	36	188	Above Measurable Objective	No
604	Central	469	4/25/2023	526	522	487	924	Above Measurable Objective	No
608	Central	-	4/24/2023	436	433	407	745	No available data this period (below MT in Oct 2022, 7 months)	No
609	Central	462	4/25/2023	458	454	421	970	Below Minimum Threshold 1 month)	No
610	Central	628	4/25/2023	621	618	591	780	Below Minimum Threshold (24 months)	No
612	Central	466	4/24/2023	463	461	440	1070	Below Minimum Threshold (16 months)	No
613	Central	542	4/25/2023	503	500	475	830	Below Minimum Threshold (30 months)	No
615	Central	517	4/24/2023	500	497	468	865	Below Minimum Threshold (29 months)	No
629	Central	576	4/25/2023	559	556	527	1000	Below Minimum Threshold (25 months)	No
633	Central	513	4/25/2023	547	542	493	1000	More than 10% above Minimum Threshold	No



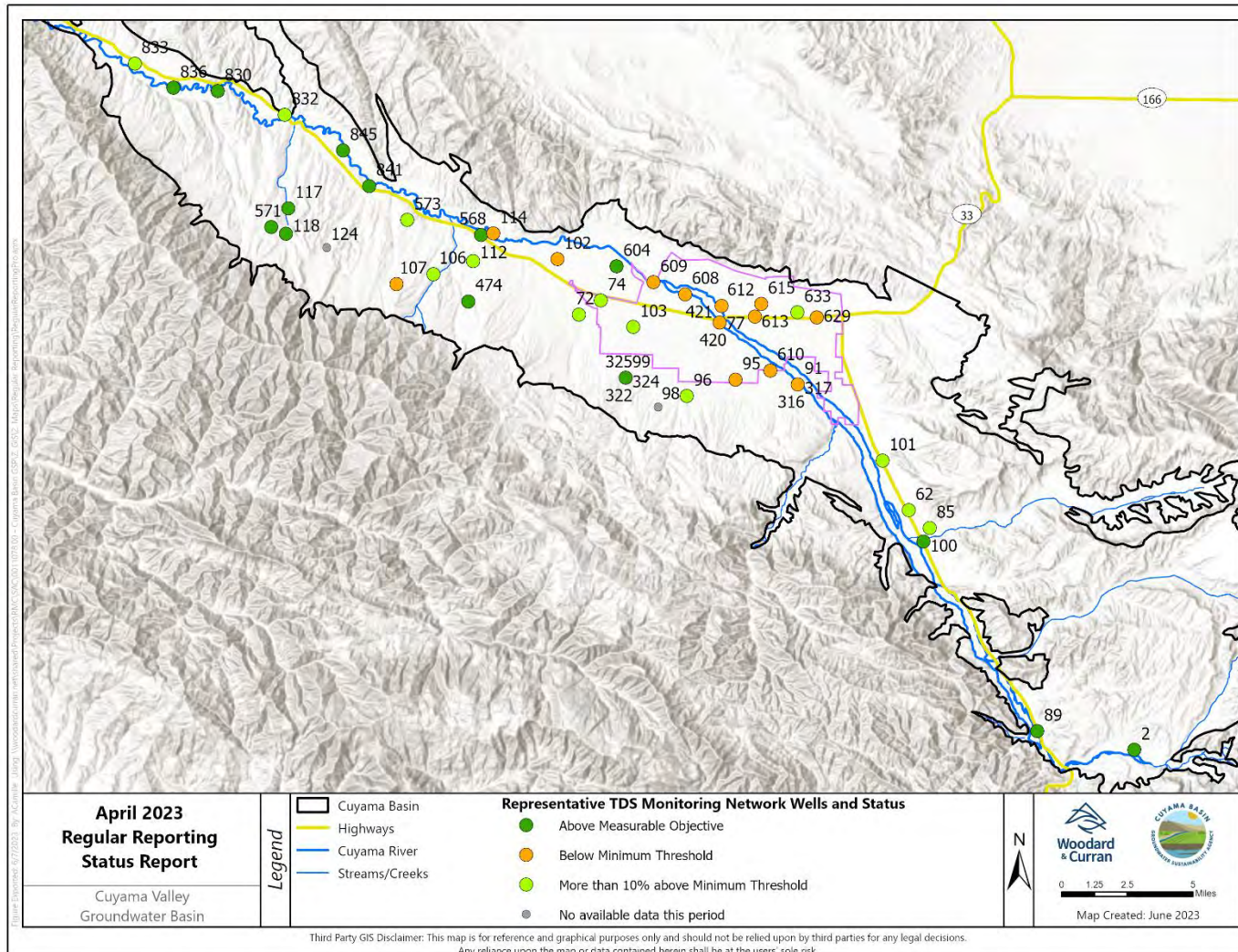
Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Well Depth	Status	GSA Action Required?
		GWL (DTW)	Date						
62	Eastern	147	4/24/2023	182	178	142	212	More than 10% above Minimum Threshold	No
85	Eastern	203	4/24/2023	233	225	147	233	More than 10% above Minimum Threshold	No
100	Eastern	103	4/24/2023	181	175	125	284	Above Measurable Objective	No
101	Eastern	-	4/24/2023	111	108	81	200	No available data this period (>10% above MT in Jan 2022)	No
841	Northwestern	76	4/25/2023	203	198	153	600	Above Measurable Objective	No
845	Northwestern	64	4/25/2023	203	198	153	380	Above Measurable Objective	No
2	Southeastern	16	4/24/2023	72	70	55	73	Above Measurable Objective	No
89	Southeastern	33	4/24/2023	64	62	44	125	Above Measurable Objective	No
106	Western	142	4/25/2023	154	153	141	228	More than 10% above Minimum Threshold	No
107	Western	92	4/25/2023	91	89	72	200	Below Minimum Threshold 7 months)	No
117	Western	148	4/25/2023	160	159	151	212	Above Measurable Objective	No
118	Western	56	4/25/2023	124	117	57	500	Above Measurable Objective	No
124	Western	-		73	71	57	161	No available data since GSA monitoring began	No
571	Western	38	4/25/2023	144	142	121	280	Above Measurable Objective	No
573	Western	69	4/25/2023	118	113	68	404	More than 10% above Minimum Threshold	No
830	Far-West Northwestern	55	4/25/2023	59	59	56	77	Above Measurable Objective	No
832	Far-West Northwestern	34	4/24/2023	45	44	30	132	More than 10% above Minimum Threshold	No



Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Well Depth	Status	GSA Action Required?
		GWL (DTW)	Date						
833	Far-West Northwestern	31	4/24/2023	96	89	24	504	More than 10% above Minimum Threshold	No
836	Far-West Northwestern	36	4/24/2023	79	75	36	325	Above Measurable Objective	No

Note: Wells only count towards the identification of undesirable results if the level measurement is below the minimum threshold for 24 consecutive months.

Figure 1: Groundwater Level Representative Wells and Status in April 2023



4. HYDROGRAPHS

The following hydrographs provide an overview of conditions in each of the six areas threshold regions identified in the GSP.

Figure 2: Southeast Region – Well 89

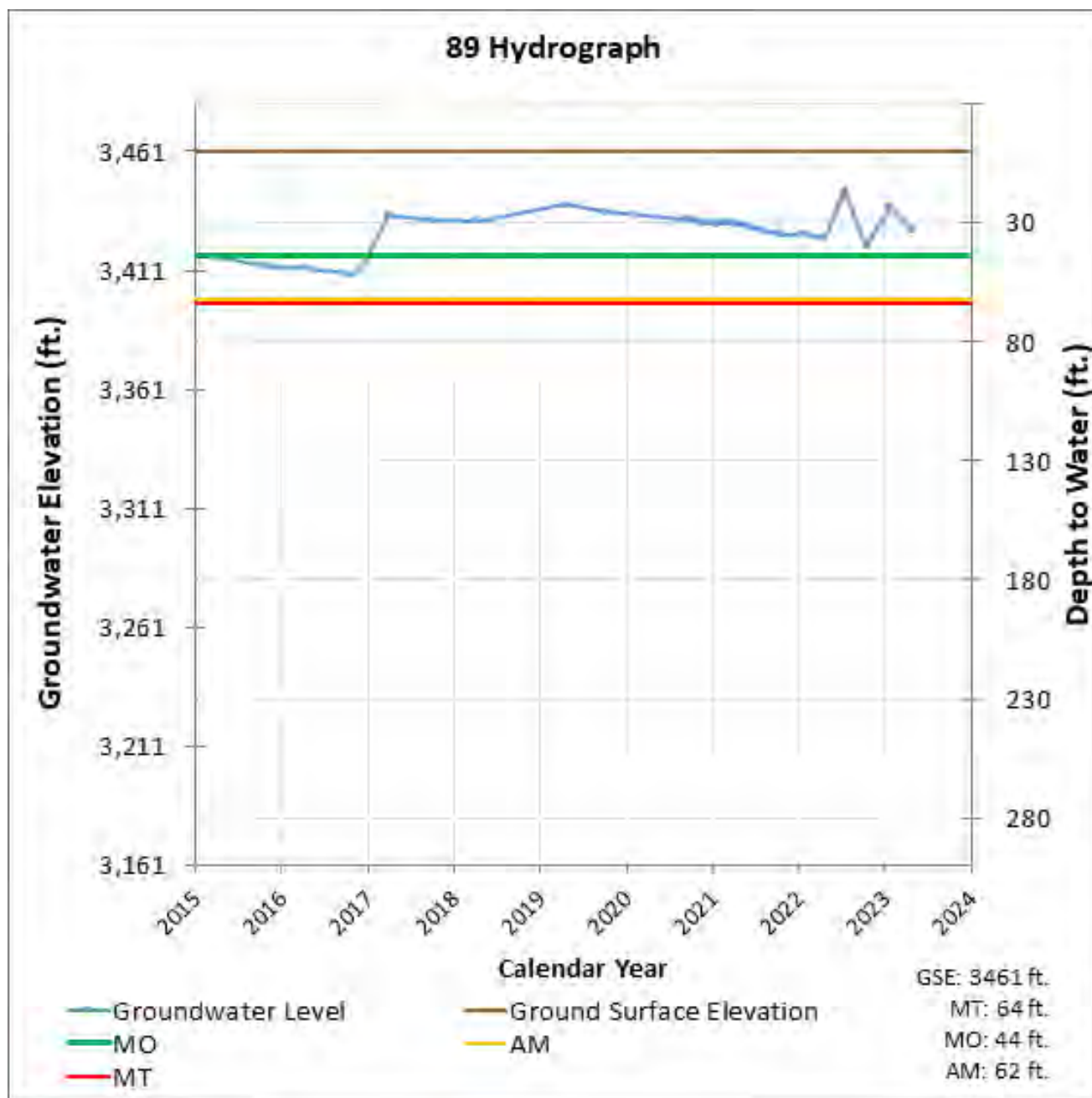


Figure 3: Eastern Region – Well 62

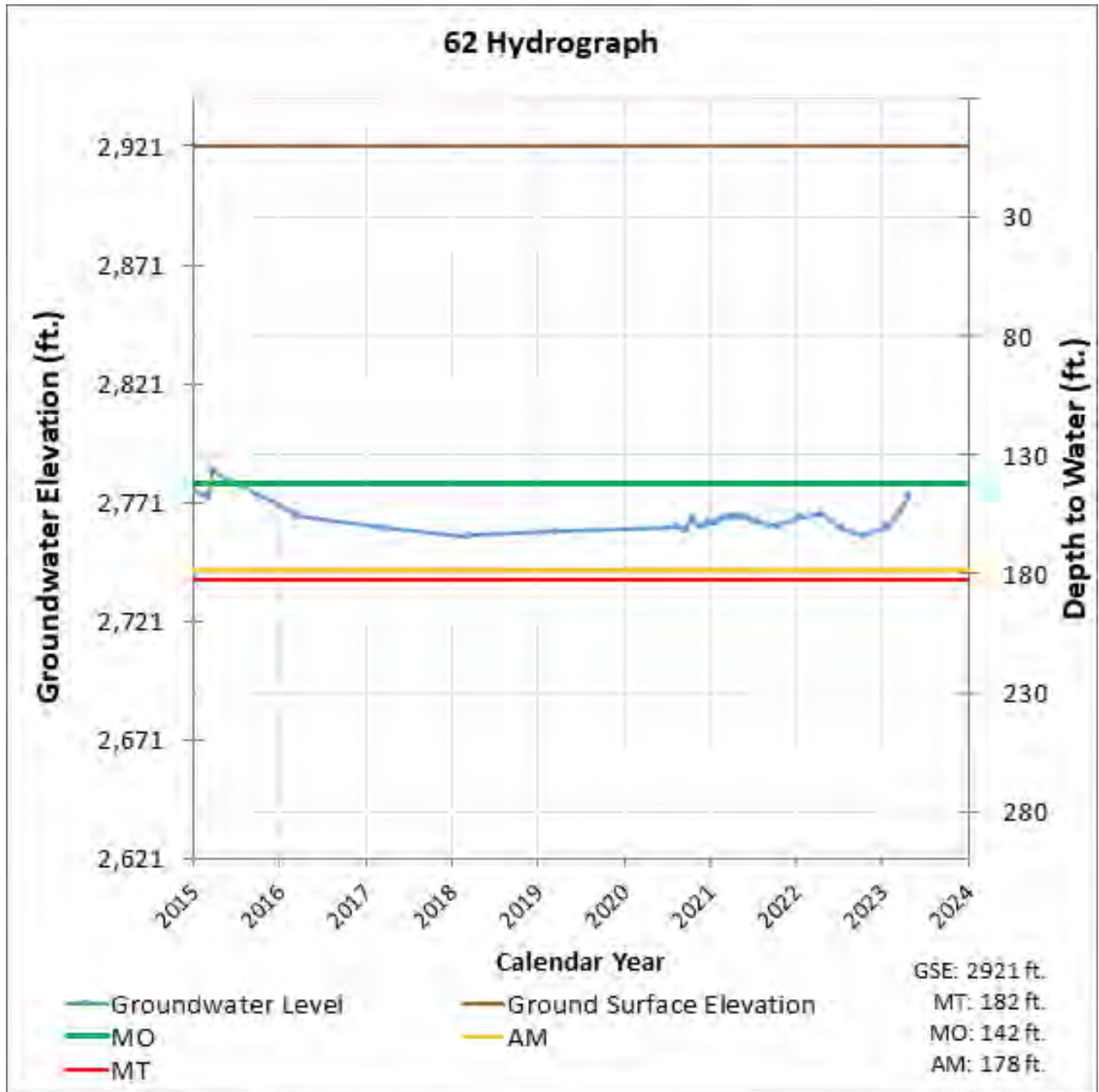


Figure 4: Central Region – Well 91

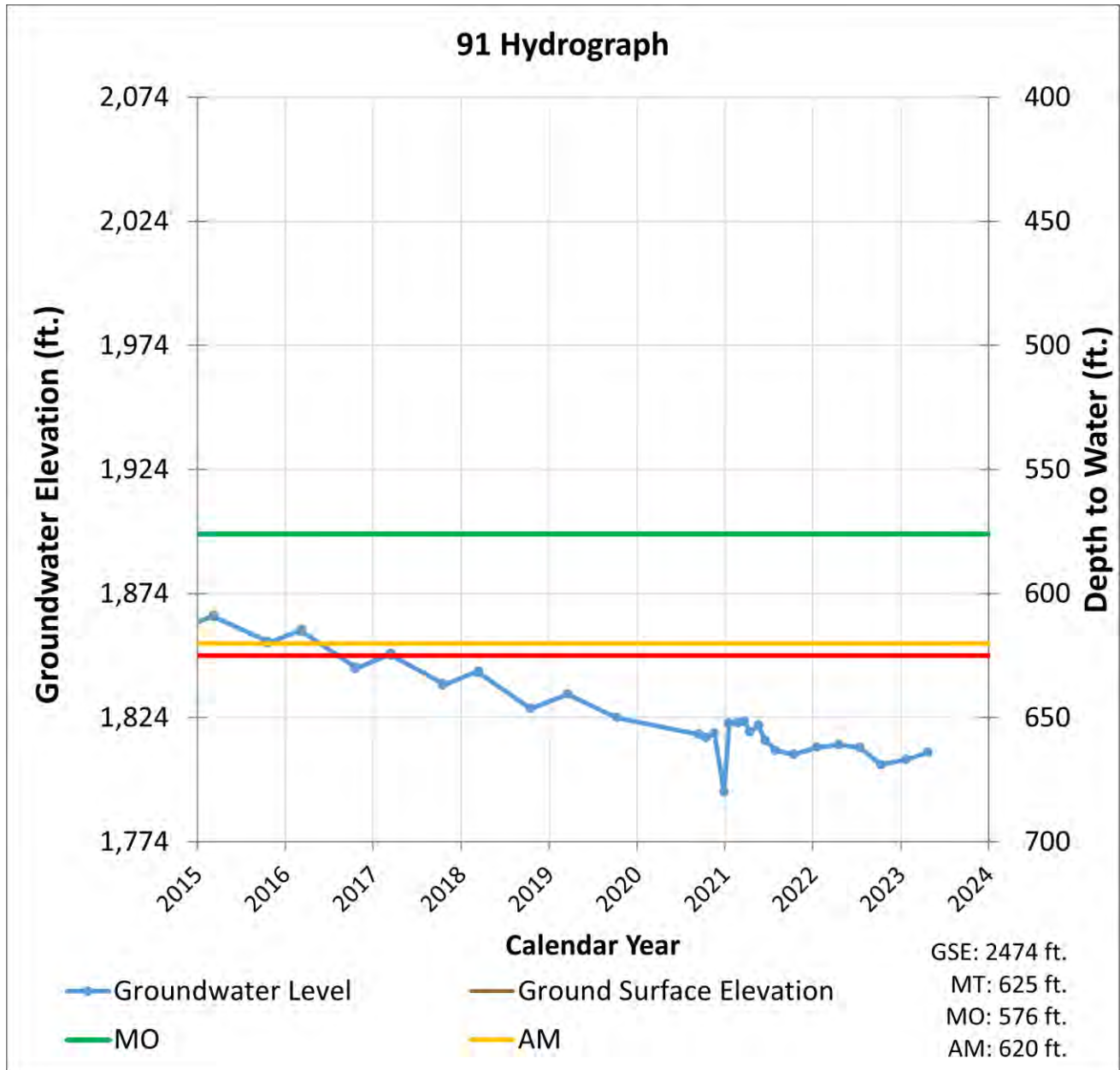


Figure 5: Central Region – Well 74

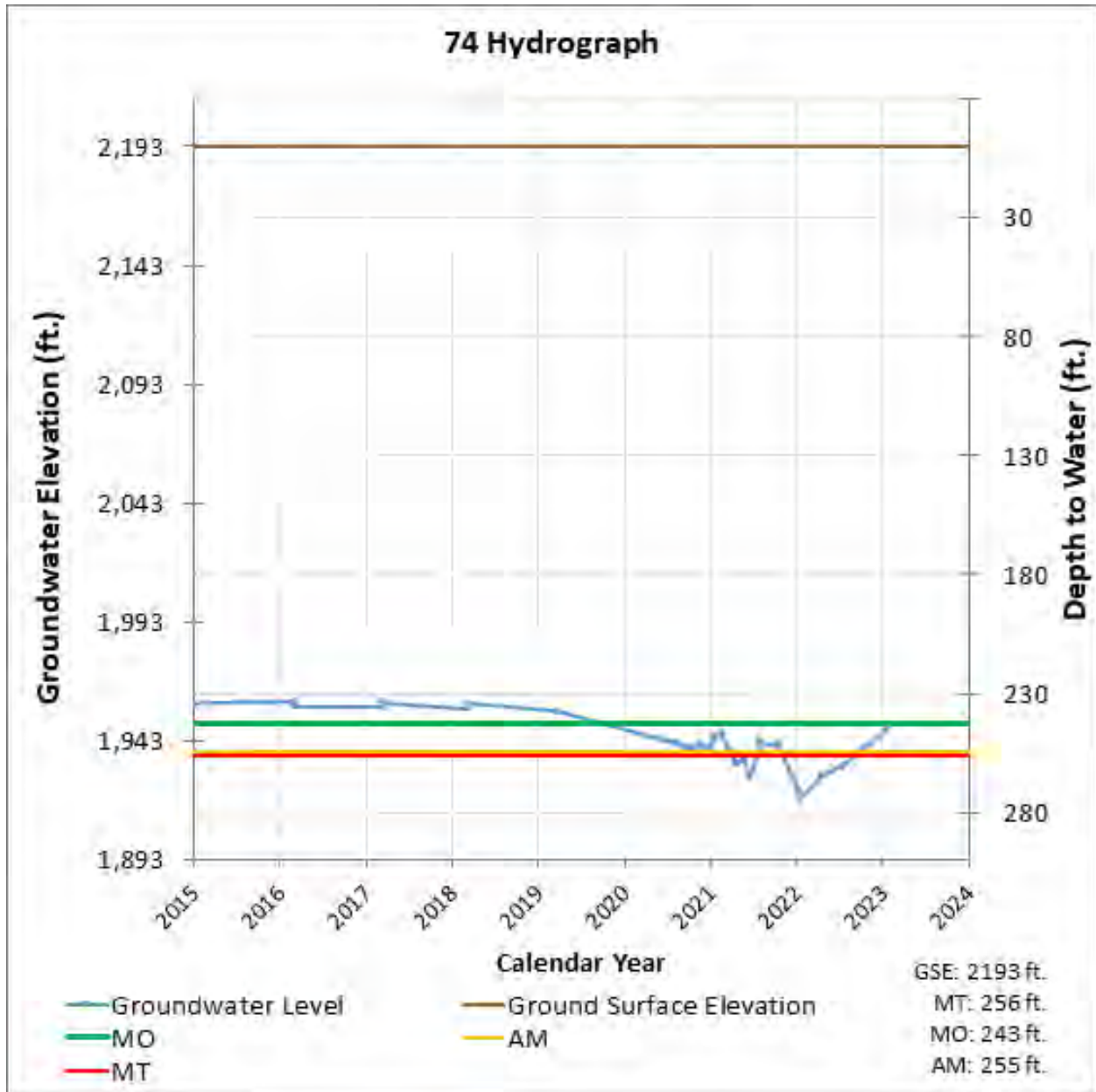


Figure 6: Western Region – Well 571

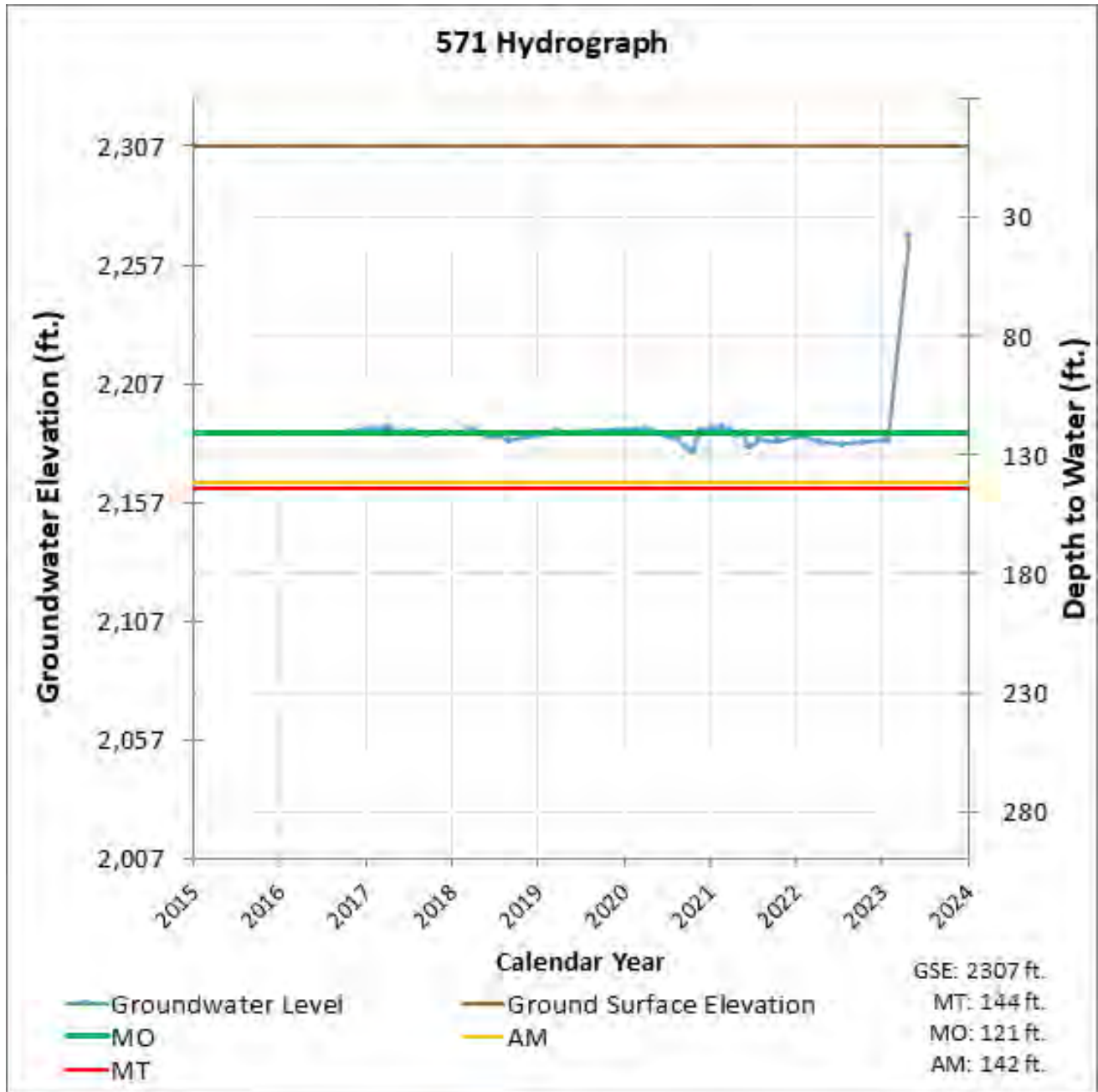
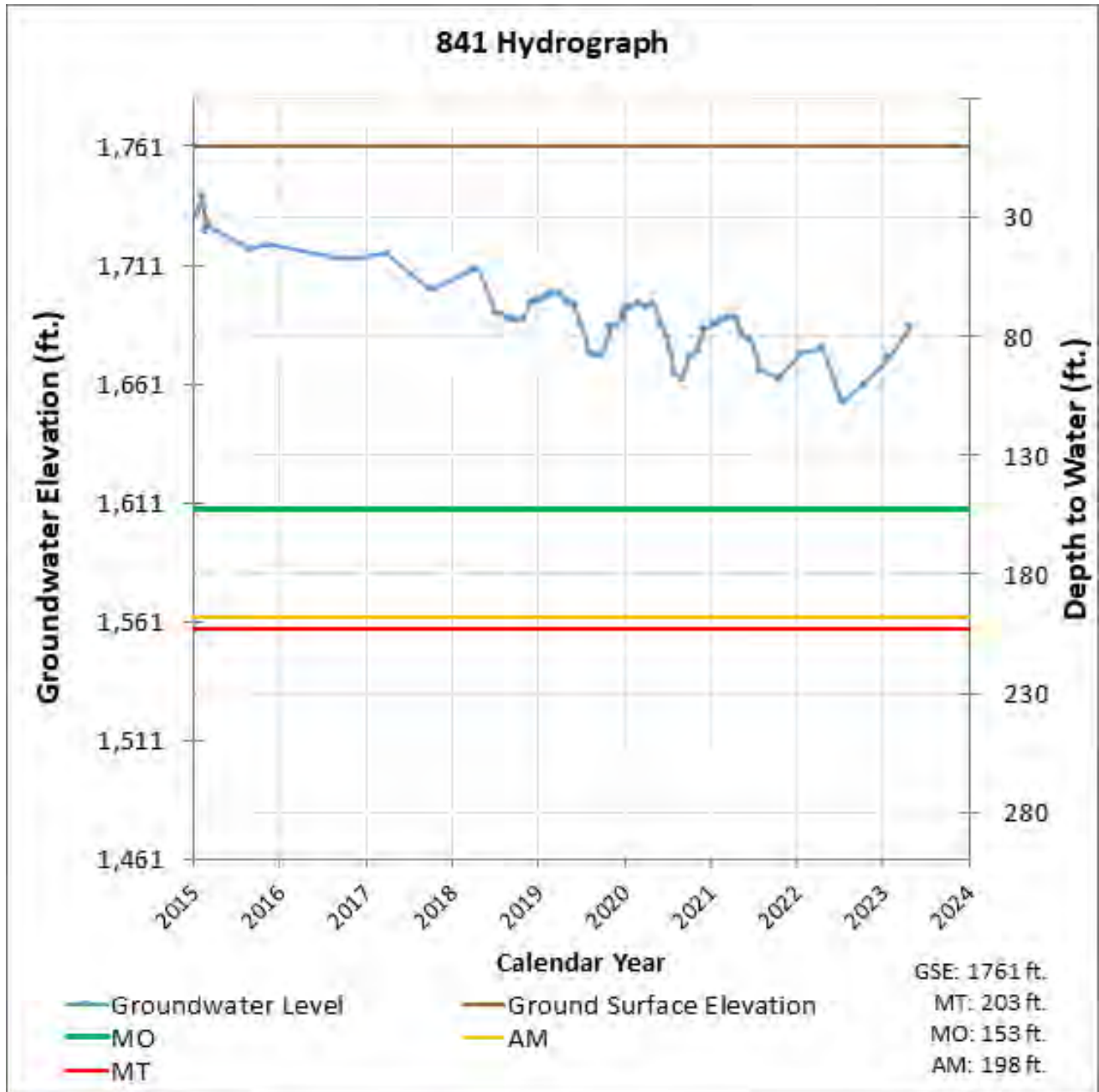


Figure 7: Northwestern Region – Well 841



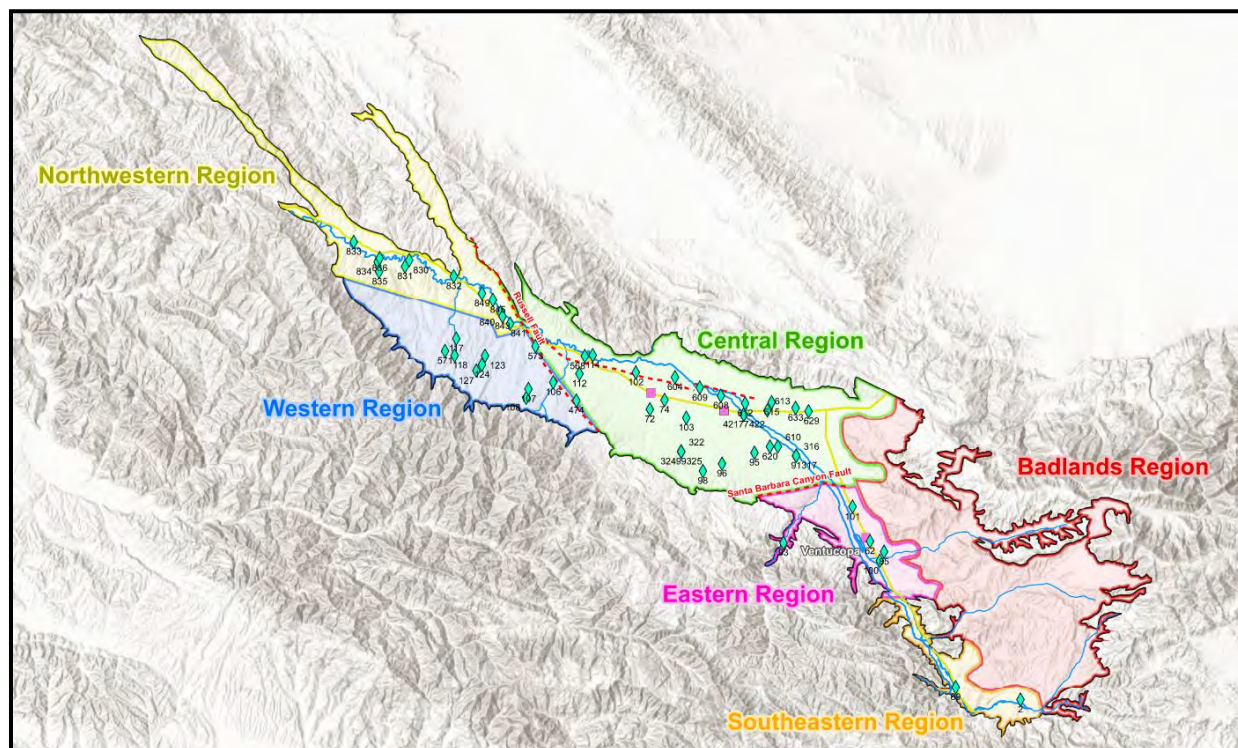


Figure 8: Threshold Regions in the Cuyama Groundwater Basin

5. MONITORING NETWORK UPDATES

As shown in Table 2, there are 9 wells with no measurement during the current monitoring period. These “no measurement codes” can have different causes as described below.

- Access agreements have not been established with the landowner:
 - Wells 98, 124
- Transducer data was not able to be downloaded:
 - Wells 102, 317
- Measurement was not possible at the time when the field technician went to take measurements:
 - Wells 74, 95, 101, 114, 608



**Woodard
& Curran**

woodardcurran.com

To: Chair Bantilan and Directors of the CBGSA
From: Roberta Jaffe, Cuyama Valley resident and farmer.



July 6, 2023

Over the past several Cuyama Basin Standing Advisory Committee (SAC) meetings various SAC members including myself have asked questions and shared community concerns regarding the adjudication that is taking place in the Basin. The adjudication is impacting significantly all landowners from the school district, the disadvantaged communities water providers (New Cuyama, Ventucopa, Old Cuyama), to small, mid-size and larger scale pumpers. Many of us also believe it will impact the Cuyama Basin GSP.

I am writing to bring to the attention of the GSA Directors the article that appears in the *Santa Barbara Independent* and other local news outlets about the adjudication filed by Grimmway and Bolthouse Corporations. You can access the article here:

<https://www.independent.com/2023/07/06/a-water-war-is-underway-in-santa-barbara-countys-carrot-country/>

The article interviews a cross-section of farmers, ranchers and residents of the Cuyama Valley who are all very impacted by what is happening through adjudication and the economic hardship it is causing. I am making the effort to share this with you so that all of you are informed about the community's concern and level of impact and because the response we have heard from the GSA has been one of disengagement. There is concern that the 7-year effort that has gone into developing a GSP based on all stakeholders will be overridden by adjudication. I ask the GSA to better represent the community, keep focused on the need to bring our Basin into sustainability, and not to ignore adjudication.



TO: Board of Directors
Agenda Item No. 20

FROM: Taylor Blakslee, Hallmark Group

DATE: July 12, 2023

SUBJECT: Correspondence

Recommended Motion

None – information only.

Discussion

A letter from Roberta Jaffe, Cuyama Valley resident and farmer.

To: Chair Bantilan and Directors of the CBGSA
From: Roberta Jaffe, Cuyama Valley resident and farmer.



July 6, 2023

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