CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

BOARD OF DIRECTORS MEETING

Board of Directors

Cory Bantilan Chair, Santa Barbara County Water Agency
Derek Yurosek 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
Steve Jackson 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

AGENDA

September 4, 2024

Agenda for a meeting of the Cuyama Basin Groundwater Sustainability Agency Board of Directors to be held on Wednesday, September 4, 2024, 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/1nxwv or by going to Microsoft Teams, downloading the free application, then entering Meeting ID: 224 192 969 900 Passcode: jVHbgy or enter or telephonically at (469) 480-3918 Phone Conference ID: 956 062 525#.

Teleconference Locations:

4689 CA-166 New Cuyama, CA 93254	1115 Truxtun Ave, 5th Floor, Bakersfield, CA 93301	900 Truxtun Ave, Suite 200, Bakersfield, CA 93301
5319 W Delaware Ave, Visalia, CA 93291	800 S Victoria Ave, Ventura, CA 93009	

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 (Bantilan) (1 min)
2. Roll Call (Blakslee) (1 min)
3. Pledge of Allegiance (Bantilan) (1 min)
4. Meeting Protocols (Blakslee) (2 min)
5. Standing Advisory Committee Meeting Report (Kelly) (3 min)

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.

6. Approve Meeting Minutes (Bantilan) (1 min)

a) May 1, 2024, Regular Board

b) May 23, 2024, Special Board

c) July 31, 2024, Regular Board

7. Approve Payment of Bills for July 2024 (Blakslee) (1 min)

8. Approve Financial Reports for July 2024 (Blakslee) (1 min)

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.

9. Groundwater Sustainability Plan Implementation

   a) Discuss and Take Appropriate Action on Data Management System Update Options (Van Lienden) (5 min)

10. Groundwater Sustainability Plan Amendment Components

    a) Update on GSP Component Schedule (Blakslee/Van Lienden) (5 min)

    b) Review and Take Appropriate Action on CMA Operational Boundary (Beck/Van Lienden) (30 min)

    c) Discuss and Take Appropriate Action on Groundwater Allocation Program

       i. Discuss and Take Appropriate Action on Frequency and Extent of Changes to Groundwater Allocations (Beck) (15 min)

       ii. Discuss and Take Appropriate Action on Implementation of 2025-2030* Groundwater Allocations (Beck/Van Lienden) (30 min)

       iii. Discuss and Take Appropriate Action on Baseline Options (Beck/Van Lienden) (30 min)

    d) Review Public Comments on Amended GSP (excel matrix) (Beck/Van Lienden) (15 min)

    e) Discuss and Take Appropriate Action on Amended GSP (Beck/Van Lienden) (30 min)

REPORT ITEMS

11. Administrative Updates

    a) Report of the Executive Director (Blakslee) (5 min)

    b) Report of the General Counsel (Hughes) (5 min)

12. Technical Updates

    a) Update on Groundwater Sustainability Plan Activities (Van Lienden) (5 min)

    b) Update on Grant-Funded Projects (Van Lienden) (5 min)

    c) Update on July 2024 Groundwater Conditions Report (Van Lienden) (5 min)

13. Report of Ad Hoc Committees (1 min)

14. Directors' Forum (1 min)

15. Public Comment for Items Not on the Agenda (5 min)

16. Correspondence (1 min)

CLOSED SESSION

17. Conference with Legal Counsel – Existing Litigation (15 min)

    Pursuant to Government Code section 54956.9(d)(1)

    (a) Bolthouse Land Company, LLC, et al v. All Persons Claiming a Right to Extract or Store Groundwater in the Cuyama Valley Groundwater Basin (BCV-21-101927)

18. Adjourn (5:39 p.m.)

2024 Board Ad hocs

1	**GSP Amendment**	Albano Paulding Williams, Das Wooster Yurosek
2	**Basin-Wide Water Management Policy**	Anselm Bantilan Williams, Deborah Yurosek
3	**Central Management Area Policy**	Anselm Bantilan Vickery Williams, Deborah Wooster
4	**Grant-Funded Items**	Albano Vickery Williams, Das Williams, Deborah
5	**Unknown Extractors**	Anselm Vickery

Tech Forum Participants

Participants	**Entity**	**Representing**
Aman Singh Anthony Daus	GSI	Bolthouse / Grimmway
Mack Carlson	BHFS	Coalition of Landowners for Commonsense Groundwater Solution
Derrik Williams	Montgomery & Associates	Coalition of Landowners for Commonsense Groundwater Solution
Bob Abrams Sean Hartman	Aquilogic	BBK
Matt Klinchuch	Cuyama Basin Water District	Cuyama Basin Water District
Jeff Shaw John Fio Macy Frost Marco Maneta	EKI	Cuyama Basin Water District
Neil Currie	Cleath-Harris	Grapevine Capital
Matt Young Matt Scrudato	Santa Barbara County Water Agency	Santa Barbara County
Bianca Cabera Steve Johnson Jeff Helsley	Stetson Engineers	Sunrise Olive

Cuyama Basin Groundwater Sustainability Agency
Board of Directors Meeting

May 1, 2024

Draft Meeting Minutes

PRESENT:
Directors
Bantilan, Cory – Chair
Albano, Byron – Treasurer
Anselm, Arne – Secretary
Burnes, Rick
Jackson, Steve
Reely, Blaine
Yurosek, Derek
Williams, Das
Williams, Debby
Wooster, Jane
Zenger, Katelyn

Staff
Beck, Jim – Executive Director
Blakslee, Taylor – Assistant Executive Director
Van Lienden, Brian – Woodard & Curran
Hughes, Joe – Legal Counsel
Dominguez, Alex – Legal Counsel

ABSENT:
None

1. **Call to Order**
   Cuyama Basin Groundwater Sustainability Agency (CBGSA) Chair Cory Bantilan called the meeting to order at 2:01 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. **Meeting Protocols**
   Mr. Blakslee provided an overview of the meeting protocols.

   Incoming Director Steve Jackson introduced himself and thanked the Board for the

opportunity to serve. Mr. Jackson was recently appointed by the Cuyama Basin Water District in place of former Directo Matt Vickery who resigned from the Board.

5. Election of Vice Chair

Chair Bantilan noted that a Vice Chair needs to be appointed since former Vice Chair Matt Vickery resigned from the Board.

MOTION

Director Reely made a motion to appoint Derek Yurosek as Vice Chair. The motion was seconded by Director Anselm, a roll call vote was made and passed with 100%.

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

6. Standing Advisory Committee Meeting Report

Standing Advisory Committee (SAC) Chair Brenton Kelly provided a report on the April 25, 2024, SAC meeting and is included below:

Submitted to the CBGSA Board of Directors on May 1st, 2024 By Brenton Kelly, SAC Chair The Standing Advisory Committee met at the Family Resource Center in a hybrid format, with five Committee Members present in-person and two on the conference line and one Committee Member absent. GSA Staff Taylor Blakeslee and legal counsel Alex Dominguez were present with assistance from Elijah Banda, and they were joined by Jim Beck and Brian Van Lienden on the call. Several public members were in the room and on the video conference line.

It was mentioned in public comment that the Cuyama Basin Groundwater Sustainability Agency has developed a "Cuyama Groundwater Basin Well Issue Reporting Form" that was emailed to stakeholders and is included on the CBGSA website at https://cuyamabasin.org/resources. This reporting, regarding dry and failing wells is vitally helpful for understanding current groundwater conditions in the basin. The Committee discussed how important it is for the GSA to pursue informing people about reporting any dry wells.

Due to an unfortunate mistake, SAC was unable to review and adopt the final edits of Chapter 3 & 5. The Committee spent more than 30 minutes in discussion of edits before a mistake was recognized that the wrong draft version was included in the Packet.

11d. Discuss and Take Appropriate Action on Data Management System Update Options

The SAC approved all the items currently planned for in the update of the DMS, like the automatic integration with publicly available GAMA, CASGEM and ILP data. A number of Committee Members were interested in the additional public facing Allocation vs. Actual Pumping Data tracker that would not violate property owners' data privacy.

Legal Council Alex Dominges said that there are certain protections for public utilities information but if you are over an allocation it would have to be shared. Taylor said last year's Allocations Use Report is posted on the website.

Committee Member DeBranch commented these opportunities are grant funded and implementing 'bells and whistles' with grant funds may be great but the groundwater sustainability agency (GSA) will ultimately be responsible for funding programs long term.

11e. Discuss and Take Appropriate Action on Website Update Options
The SAC approved the $9000 website update. It was agreed that a transition from the development to the Implementation phase of the GSP calls for a new web display. The Resource page is overloaded and it could be made much easier to navigate.
12a. Update on GSP Component Schedule
The SAC accepts the revised schedule and recognizes the compressed timeline to meet our submission deadline in January 2025.

12b. Authorize 90-Day Notice to Cities and Counties for an Amendment to the GSP and Set a Public Hearing on November 6, 2024
The SAC approved the required 90-day Notice for the Public Hearing on November 6th.

12c. Discuss and Take Appropriate Action on Project and Management Action Options
The SAC approved the Projects and Management Actions that are currently Included in the GSP. As for the two new projects for consideration the following opinions were shared.

New Projects for Consideration:

- *<u>Flow Meter Recalibration Program</u>*
  Committee member Caufield questioned the realistic effort of the +/- 5% accuracy goal both technically and financially. Dave Lewis asked if the cost of this policy would fall on the pumpers. Jim Beck said that first a policy plan would need to be worked out before possible funding could be pursued. The SAC recognized the need for Quality Control of flow meter data while avoiding additional financial burdens on top of the property owners' initial cost to install the mandated flow meters. There was general concern that this could be a significant cost to property owners. Taylor replied that no cost estimates are available at this time.

- *<u>Rangeland and Forest Management</u>*
  The Committee recognized the challenges of this project and supported Staff recommendation to not pursue controlled burning in the foothills any further. However, the discussion continued with strong support for the idea of 'Vegetative Management' in the central valley for invasive weed control using prescribed grazing instead of burning. The SAC recommends that grazing management be investigated as a possible solution.

12d. Discuss and Take Appropriate Action on Basin-Wide Water Management

It was explained to us that for this familiar item, at this time, we should focus on the geographic questions that need answers now, while being aware of the policy considerations that will need to be answered next time. The question at the moment was: How many sub-regions to develop individual water budgets for within the basin wide Groundwater Model?

The SAC expresses a variety of opinions regarding the number of sub-regions to be considered. John Caulfield asked for clarification on how the grazing lands and unirrigated croplands will be treated differently than the irrigated acreage? This was a good example of the policy questions for next time. How to track and treat different Land Use?

Robbie Jaffe reflected on how these four areas look a lot like the way we started looking at the basin going back to the USGS in 2014. The problem has always been an issue of 'Data Gaps'. Robbie hoped that the GSA can benefit from the drilling log reports from the 11,000 foot deep exploratory oil well being proposed for drilling in the northwest end of the Basin right now. This data could provide greater understanding of the regional hydrogeology. Anticipating the policy questions ahead, Robbie felt strongly that it would be necessary to identify what type of irrigation is taking place since each farming type and crop uses different amounts of water per acre. She suggests a tiered approach to identify Irrigated lands by amount of the water use

Brian reminded us that currently, Land Use is only identifies as either Irrigated or Non-Irrigated and this is what the Board directed. Taylor said this map will be refined as the land use component is refined in the model.

Joe Haslett suggested that in the west end, each tributary acts unique to the others. The northwest is where they combine with the Cuyama Groundwater at the river. Joe suggested the need to consider bifurcating the west into two or more regions because all the drainages act differently. To manage the area as a whole is not realistic since there are so many different sources and types of water across the region with different dynamics in each canyon. As an example, he highlighted Schoolhouse Canyon vs Cottonwood Canyon.

Vice Chair Brad DeBranch suggested that this subdivision was putting the cart before the horse, because the Basin needs to be managed as one whole. As we are studying the science behind connectivity across these faults, we should consider the Basin as one whole and assume its interconnected. He thought that to study how these 4 regions may be unique and how they might be managed individually was premature. He asked "how can you have multiple management areas with different budgets if they are assumed to be connected".

Brian assured the SAC that the whole Basin Water Budget could be divided up in any number of discrete parts as needed for Basin wide management. The Question was How many? How complex? How simple?

<u>Comments from the Public</u>:
Jane Wooster pointed out that the yellow areas were all parcels outside the orange CMA that chose to be part of the Operational Area and managed as a Farming Unit within the CMA.

Lynn Carlisle suggested that if we go forward with 4 separate water budgets there would need to be strong justification for the setting of those boundaries. The precise location of the Fault lines for example are still in discussion. It was agreed that it would be best if these lines would not need to move during implementation of the GSP.

Adam Lovgren asked If I were in the purple area and my well was being impacted by larger nearby pumpers what can I do? How to determine who is responsible for the drawdown. Answer: All the areas adjacent to the CMA are in that situation and it is a policy consideration that needs to be addressed very soon.

The Committee Members were polled on their recommendation regarding the number of Management area:

- *Robbie Jaffe felt that a more granular approach with the water budget analysis would provide valuable information, especially since the western and northwestern areas are so different. She is in favor of 5 Management Areas.*
- *Jean Gaillard felt that the whole central area should be managed as one MA. He was in favor of only having 3 total areas.*
- *John Caufield agreed with Jean on 3 MAs.*
- *Joe Haslett felt that the CMA was the only cause of the overdraft problem and only 1 MA was needed at this point while monitoring continues basin wide.*
- *Karen Adams agreed with Joe that the entire valley is not evenly interconnected, and is in support of having 1 MA focused on the only place where there is an obvious problem.*
- *Brad DeBranch was in favor of 1 MA for the entire interconnected Basin.*
- *Dave Lewis abstained on a number due to other bigger policy concerns*
- *Chair Kelly agrees with Robbie and supports 3 or more MAs that would more accurately reflect the unique hydrological characteristics of the Cuyama Basin*

12e. Discuss and Take Appropriate Action on GSP Draft Chapters: [Final Discussion] Chapter 3. Undesirable Results & Chapter 5. Sustainability Management Criteria
I wish I could report on the robust discussion SAC to adopt these two Chapters, but I can't. I can report that your Stakeholder Advisory Committee read the many pages in the packet and could not advance staff recommendation for adoption. After serious discussions of disapproval, a text version mistake was realized. Although apologies were made by Staff for the unfortunate time wasted, we wish for all of you to recognize that the SAC Members are the voluntary and unpaid local Quality Control agents of this GSA, not grant funded copy editors. And we encourage you to read the packet carefully.

14a. Technical Updates on Fault Investigation Study
As the Fault Investigation studies continue to consume time and resources, this update did not bring much clarity to the questions that persist. Such as: What effect do the fault zones have on groundwater flow? What does it mean if there is "low resistivity data to the south juxtaposed with high resistivity to the north and another subvertical steeply dipping fault or fault splay to the north" (slide 97)? It now appears that we are less confident about where the east end of the SBC Fault is even located? Shouldn't all this be determined before Management Area boundaries are set in the new GSP? Various members of the SAC and the Public expressed frustration with the inconclusive outcome of this ongoing Investigation, and that important decisions need to be made right now anyway.

14b. Technical Update on the Water Resources Model
Staff is on track to release a new calibrated Water Resources Model by the end of June and is expecting some changes in the new outputs. The current question is why the self-reported metered pumping data was 30% less than the Model projections in both 2022 & 2023. The discrepancy appears to be in the lower water use land crops, the non-irrigated rangeland and the smaller pumpers. Brian expects the reported yield changes will impact the model but they will not likely change the Sustainably Yield

16. Directors' Forum
Committee Member Jaffe asked about the transparency of the new well permitting process with the hydrological study and Staff review. Robbie would like to see this info appear online. Taylor reminded the SAC that the policy is only for new wells, any replacement well does not require a study or Board approval.

Respectfully submitted,
Brenton Kelly, SAC Chairperson

7. Approve Woodard & Curran Contract Change Order for Monitoring Well Installation
Recommended Motion
Mr. Blakslee reported that the requested approval of a change order is due to unanticipated costs for the installation for the grant-funded dedicated monitoring well. He reported that the costs totaling $177,698 is required for traffic control per Caltrans and is reimbursable by the existing grant.

Director Wooster asked if staff attempted to move the site locations onto private property, and W&C hydrogeologist Jim Strandberg reported that staff did try this avenue first, but were unable to get approval from nearby landowners and therefore ended up moving sites in the public right-of-way.

MOTION
Director Reely made a motion to approve the W&C change order. The motion was seconded by Director Debby Williams, a roll call vote was made and passed with 100%.

AYES: Albano, Anselm, Bantilan, Burnes, Jackson, Reely, Das Williams, Debby

	Williams, Wooster, Yurosek, Zenger
NOES:	None
ABSTAIN:	None
ABSENT:	None

CONSENT AGENDA

8-10. Consent Agenda

Chair Bantilan asked if any Directors wanted to move any of the consent items out to discuss in more detail.

Director Jackson said the minutes incorrectly state a motion failed with 88% and should have read it passed.

Director Yurosek asked for a report on the grant reimbursement schedule in the financials and Mr. Blakslee reported that a few invoices have been submitted later than expected to the California Department of Water Resources (DWR) and staff is ensuring futures invoices are submitted in a timely manner. He also noted that DWR grant manager Chris Martinez recently left DWR, and they are trying to backfill those positions which has also contributed to reimbursement delays.

Director Yurosek noted that the Board packet included over 100 pages of receipts and said they Board does not need to see that level of detail going forward and Chair Bantilan agreed and said they can be summarized going forward.

Director Wooster said motion on the basin-wide water management issue should have included a statement that the Cuyama Basin Groundwater Sustainability Agency (CBGSA) would be managing irrigated ground and not grazing ground. Mr. Blakslee said that should have been included in the motion and staff will check this and make the appropriate correction.

MOTION

Director Yurosek made a motion to approve the consent agenda item nos. 8-10, with the corrections noted above. The motion was seconded by Director Anselm, a roll call vote was made and passed with 100%.

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

ACTION ITEMS

11. Groundwater Sustainability Plan Implementation

a. Discuss and Take Appropriate Action on the Fiscal Year 2024-2025 Budget and Cash Flow
Mr. Blakslee provided an overview of Fiscal Year 24-25 Budget and Cash flow which is included in the packet.

Director Yurosek asked if a rate comparison was reviewed by the ad hoc. Mr. Blakslee reported that a 5 percent rate increase for W&C was reviewed by the ad hoc, but Hallmark Group rates were not reviewed. He reported that Jim Beck's rate is not changing and his rate may have increased but he will check on that and include a rate comparison analysis for future budget ad hoc review.

MOTION
Director Anselm made a motion to approve the Fiscal Year 2024-2025 Budget and Cash Flow. The motion was seconded by Director Blaine Reeley, a roll call vote was made and passed with 100%.

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

b. Discuss and Take Appropriate Action on Strategy for Setting Future Groundwater Extraction Fees
Mr. Blakslee reported that during the Budget ad hoc review of the cash flow staff discussed the strategy of setting future fees and review several fee setting strategies with the ad hoc. The ad hoc recommended the strategy for setting future fees be discussed with the entire Board to provide policy direction for setting future fees. He also noted that ins in past fee setting discussions, the CBGSA Board directed staff to target an ending fiscal year cash flow balance of approximately $200,000.

Steve Jackson commented he prefers to keep fees as low, for as long as possible.

Director Yurosek commented he is concerned about financing on the front end and financing for others as some landowners will be reducing quicker than others

Stakeholder Ray Shady asked about the use of cash and if there are any projects previously discussed that could be reassessed with the available cash.

Das commented that he prefers option no. one and it is better to prevent steep increases in fees.

Director Jane Wooster asked if there should be a defined benefit to the fees that are assessed. Legal Counsel Alex Dominguez responded that the current fees are set under

the Sustainable Groundwater Management Act (SGMA) for the purpose of administering the GSA and components of the Groundwater Sustainability Plan (GSP). He said there is a fine line between code section 10730, which we rely on, and 10730.2 and other mechanisms that are available to the GSA to collect fees. He said the fees we are collecting are for the administration of the GSA and project-specific costs will require an in-depth discussion regarding who is benefiting from the project.

Director Byron Albano said he prefers Option 1 and scale up steadily over time and noted he does not like option 2. He also noted that the adjudication may require the CBGSA to maintain a sufficient cash balance.

Director Jane Wooster commented that there should be a discussion of whether the ending cash balance target of $200,000 may not be sufficient and Director Debby Williams concurred.

MOTION
Director Albano made a motion to approve option 1. The motion was seconded by Director Debby Williams, a roll call vote was made and passed with a 69% vote.

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

Chair Bantilan reported that staff will bring this back up for discussion prior to approval of next Fiscal Year's budget.

c. Discuss and Take Appropriate Action on Consultant Task Orders for Fiscal Year 2024-2025
Mr. Blakslee reported that the consultant contracts are based on the amounts approved in the budget and include rate sheets for each consultant. He also noted that due to a timing issue, Provost & Pritchard's contract for groundwater monitoring will be brought to the Board in July 2024.

MOTION
Director Anslem made a motion to approve Hallmark Group and Woodard & Curran task orders for Fiscal Year 2024-2025. The motion was seconded by Director Reely, a roll call vote was made and passed with 100%.

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

d. Discuss and Take Appropriate Action on Data Management System Update Options
Mr. Van Lienden provided an overview of potential updates to the data management system (DMS) which are included in the Board Packet.

SAC Chair Kelly provided the SAC report on this item.

Director Wooster asked if the DMS is the same program used as other GSAs and if there is a cost savings? She also asked if there will be ongoing costs for this program. Mr. Van Lienden responded that the DMS built for Cuyama has already benefited from efficiencies of the work done for other basins and does not anticipate additional, ongoing costs once the improvements have been made.

Director Zenger asked who is completing the integration and asked for a detailed statement of work with costs for this integration.

Director Derek Yurosek commented that the DMS should not give any more information than it has to. He also said he is cautious on access and agrees with requesting a statement of work.

Director Byron Albano commented that a timeframe function would be helpful in querying data and is ok with integrating data, and querying, but not the additional options presented.

Chair Bantilan requested staff bring back a detailed statement of work at the July 2024 meeting.

e. Website Update Options

Mr. Blakslee provided an overview of the plan to update the website. He reported that the website was designed during GSP development, and the proposed redesign will transition the website to a GSP implementation phase will optimize access to data with a focus on current, relevant issues in the basin.

SAC Chair Kelly provided the SAC report on this item.

MOTION

Director Wooster made a motion to approve the website restructuring. The motion was seconded by Director Debby Williams, a roll call vote was made and passed with 100%.

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

12. Groundwater Sustainability Plan Amendment Components

a. Update on GSP Component Schedule

Mr. Blakslee provided an update on the GSP component schedule and noted that minor changes to the schedule and said the project is still on schedule, but the slack has been used up and any potential changes to the schedule may result in requiring additional special meetings.

Director Wooster noted that she is concerned with asking the Board to make decisions on basin-wide water management and boundaries issues when there is not time for peer review of the model. She said W&C will need time to perform quality control and quality assurance and is worried about the timeline proposed.

Director Anslem said this is not the only GSA that has used up all its slack in the schedule and we need to keep moving forward.

b. Authorize 90-Day Notice to Cities and Counties for an Amendment to the GSP and Set a Public Hearing on November 6, 2024

Legal Counsel Alex Dominguez provided an overview of the 90-day notice requirement to amend the GSP.

SAC Chair Kelly provided the SAC report on this item.

MOTION

Director Arnie Anselm made a motion to authorize 90-Day Notice. The motion was seconded by Director Debby Williams, a roll call vote was made and passed with 100%.

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

c. Discuss and Take Appropriate Action on Project and Management Action Options

Mr. Beck provided an overview of current projects and management actions in the GSP.

Mr. Van Lienden provided an update on two new projects being considered for the amended GSP which are (1) flow meter recalibration program, and (2) rangeland and forest management. He reported that the staff recommendation is to not include rangeland and forest management as a project due to uncertain benefits and potential wildlife and air quality impacts from burning land to increase water flow.

SAC Chair Kelly provided the SAC report on this item.

Director Anslem commented that he has managed a certified meter calibration program in the Fox Canyon Groundwater Management Agency (FCGMA) and while it can be burdensome, it is a good idea to add a consideration for low volume flows. He said he has had some users with spare meters sitting unused on the shelf and after three years they would be out of calibration even if they were not used. He also noted that if meters go out of calibration, they start measuring high so there is an incentive to keep them calibrated.

Director Jane Wooster commented that the State requires meter calibration every five years.

Chair Bantilan asked how accurate flow meters can get and Director Anselm said meters can measure within 5 percent accuracy.

Mr. Beck reminded the Board that staff is looking for direction to start the process on which programs to include in the GSP and the program does not need to be fully defined today.

Director Yurosek said the calibration is simpler, but the most important is the proper installation of a flow meter. He said the water district may have some opportunities that the CBGSA can utilize and encouraged W&C to coordinate with EKI on potential grant opportunities.

Director Albano commented that it is important to have a metering program and it will be very important to ensure the program is written correctly to achieve its objective without driving up costs.

Director Wooster said calibrating meters is important to a point, but expressed concern with creating a new regulatory requirement that may not have a benefit to all users.

Poll for Including Flow Meter Calibration:
All Directors responded yes.

Poll for Including a Rangeland/Forest Management Project:
All Directors responded no.

d. Discuss and Take Appropriate Action on Basin-Wide Water Management

Mr. Beck provided an overview of the Board direction from the March 27, 2024, meeting to "continue with cutbacks in the Central Management Area (CMA) while we create water budgets based on physical features and modeling data for the entire basin with the view to balance water in the entire basin and treat grazers different than irrigators." He presented a draft map for Board input on how staff planned to report on water usage by different areas to assist in the discussion of basin-wide water management to occur at the July 2024 Board meeting.

Director Yurosek disagreed with the motion staff captured from the March 27, 2024 meeting and said the Board said "water budget" singular and not "water budgets."

Chair Bantilan suggested the Board consider recording future meetings in Teams.

Director Wooster also expressed concern with the material presented to consider managing the entire basin, and not just the irrigated areas.

Legal Counsel Alex Dominguez responded that the staff interpreted the motion as best as they could and came up with the four potential areas to consider water management in the basin for the Board to consider action on developing a water budget or budgets.

Director Jackson asked staff if the basin is considered one basin, and Mr. Beck replied that

staff's understanding is that it is one basin because that is how it is defined by DWR. However, there may be discrete regions in the basin depending on the results of additional technical work being done in the basin including the fault investigation study.

Director Wooster commented that the basin is complex and described several unique geologic and hydrologic differences in the basin. She said the basin is not a bowl with a flat bottom and said it is conceivable that there are portions of the basin where water can work itself down to a deeper portion and not work its way back up and she believes this is true between Ventucopa and the CMA and the CMA and the west end. She said complicating things are numerous faults (not just the Russell or Santa Barbara Canyon faults) and springs. She said a lot of springs on the lower end have dried out because they are conceivable interconnected to the CMA and noted that Cuyama is a very complicated basin.

Director Albano said the basin may be interconnected in a variety of ways, but asked if the Ventucopa area was severely overdraft in the future would you manage just the Ventucopa area, or the entire basin? Mr. Beck responded that SGMA gives you the tools to manage discrete areas in the GSA to attain sustainability. He said if a portion of the basin becomes unstainable in the future, he believes it would be appropriate to take discrete actions for portions of the basin and commented that SGMA gives you the tools to manage localized areas in a basin differently depending on the conditions occurring in those areas.

Stakeholder Steph Morris introduced herself and said she grew up in the Valley for 17 years and said she is a groundwater rights attorney that has done two groundwater adjudications and have been working for over 20 years. She said legislation never ends up how you want it to, and this is a very complicated piece of the law, but a good thing about SGMA is that it intends to leave control and management in the hands of the locals. She said the basin is not a giant bathtub. She said she represents clients in the Cuyama groundwater adjudication. She went on to read several documents from the CBSGA or comments that attorneys from Bolthouse made. She said in the adopted GSP, it states total basin-wide pumping may be required to be reduced by 50-67 percent with a major proportion of pumping reduction required in the CMA. She said there is already an acknowledgement of more than one management area. She noted that pumping reductions were only set in the CMA, and the GSP would need to determine the sustainable yield for this portion of the basin that is less than the sustainable yield for the entire basin. She also reported that this Board directed its staff to intervene in the adjudication and in the courts findings and said later phases of this adjudication may be used to determine whether management areas should be utilized or not and whether the Basin should be differentially or homogeneously managed. She said the Board received a letter today the surmised that subbasins and management areas are not different and the court excluded them, but they did not. She said as a public agency, it is critical to support the people who live and work in this Valley and to do the right thing for the Basin and to promote and protect the plan that you adopted.

Director Wooster asked Ms. Morris who she represented, and she said several landowners in Ventucopa including Mr. Wegis, Reyes and Albano.

The Groundwater Extraction Fee Public Hearing occurred at 4:30 p.m.

Stakeholder Ray Shady said he manages the North Fork Vineyard and Santa Barbara Highlands Vineyard. He said he was concerned with discussions on a uniform approach to preventing undesirable results and was pleased to see the discussion of management areas to come back up for discussion. He said it is important to consider the geology in the basin that creates perches of water and noted that the Ventucopa basin fills up very quickly in the rainy seasons and it is important to further study the connectivity of different areas in the basin. Chair Bantilan asked what Mr. Shady was advocating for and he responded that he would recommend the same delineations that were represented in the threshold regions.

SAC Chair Kelly provided the SAC report on this item.

Jim Wegis asked if the Board is trying to make management decisions of the entire basin without the results of all the recent technical data. Chair Bantilan said the Board has to wrestle with making a decision now or wait a number of years for now. Mr. Wegis asked what happens if the data proves the decision wrong and Chair Bantilan said the GSP can be amended to make changes based on new technical data. Director Wooster said the Board does not need to decide this issue now and should continue exploring the situation in the basin.

Stakeholder Mark Ellsworth asked if the Board is rejecting the results of phase one of the adjudication where the court rejected the concept of subbasins at the faults. Chair Bantilan responded that no, the Board is considering the issue of management areas. Mr. Ellsworth commented that areas upstream of the CMA does effect the sustainability of the CMA and is concerned that one group of pumpers will be disproportionately burdened with achieving sustainability for the entire basin.

Stakeholder Matt Vickery commented that he was surprised staff interpreted the March 2024 motion they way they did and said it feels like we are trying to speed up decisions that we are not ready for. He urged the board to wait until there is more information and the model before breaking management down by discrete areas and it should be treated as one basin until that technical work is complete.

Director Zenger said the information being presented today looks very similar to option 3 from the March 2024 meeting that did not have the majority of votes in the poll, and said she is very disappointed with what staff brought back and did not reflect the intent of Director Wooster's motion in March.

Director Derek Yurosek said he believes you need management areas for projects and management actions but is frustrated with the term "water budgets." He said the sustainable yield should be a basin-wide number that should be allocated basin-wide. He said he is not comfortable discussing management areas until the Board deals with the

native yield, safe yield or water budget for the basin. He said to get the GSP passed, the Board agreed to cutbacks in the CMA sooner to allow the rest of the basin to determine what that native yield is for the basin, and said the direction being presented by staff is significantly different.

Director Albano asked if that what we are talking about and starting to discuss how to establish the native yield for different portions of the basin to make logical management decisions on how to manage those portions of the basin. He said the Board needs to determine management for local, regional water conditions and noted that the technical forum members have been advising the Board that the faults are significant. He said if Grapevine or western growers make cuts they are irrelevant for folks in the eastern portion of the basin and said he expected the Board was going to get logical about managing water in the basin and uniform pumping reductions basin-wide will not fix the overdraft problem in the basin and water needs to be managed in different regions of the basin.

Director Anslem said the decision before the Board is not setting actions in these management areas but establishing different areas to develop management actions in the future.

Mr. Beck said to-date, there is only one sustainable yield estimate for the basin. He said the Board decided to allocate a portion of the sustainable yield to the CMA to administer groundwater allocations in the CMA. He said the Board has been clear about continuing with managing the CMA, but said staff is looking to get clarity on how the unallocated sustainable yield is managed, if at all. He said staff is not using the model to pull apart the sustainable yield by areas.

Director Wooster said there is no one on the Board that is saying only the CMA should be managed without looking at the other parts of the basin and said the issue is it should not have been sectioned off that it is presented in the packet. She said the Board is saying to keep moving forward but do so with science.

Mr. Dominguez confirmed this is not a final action today, but an attempt to get direction on how to potentially manage water in different portions of the basin.

Director Wooster said the Board did not ask staff to come up with an answer on this in July or in the following month. She said it should not be a staff-directed effort but based on science.

Mr. Beck said the model will be done at the end of June 2024 and understands the Board will review the updated CMA information. He said if you want to see any other information to direct staff and we will present that. Director Wooster replied they would like to see everything staff has, and Mr. Beck said we cannot provide the raw model data files and need to know what the Board wants.

Director Yurosek said he disagrees with Mr. Beck's statement that the Board has approved an allocation to the CMA based on the sustainable yield and said he would like to see

where the Board has provided that action. Mr. Beck said he disagrees, and staff can present how the allocation that was implemented by the Board that includes the sustainable yield portion for the CMA. Director Yurosek said the number was never agreed to by the Board, an while it was part of the math calculation for determining the ramp-down, was never agreed to.

Director Arne Anslem said he never met a hydrogeologist that has enough data and we have had technical folks that have looked at these lines. He also said the Board will not get an extension on submitting the five-year evaluation to DWR, and the Board needs to be mindful of the decisions we need to make.

Director Byron Albano said staff did take the Board's direction and looked at the physical features in the basin and the technical forum has been advising on this for some time and saying the faults are significant in the basin. He said divvying up the sustainable yield by every acre in the basin is completely inappropriate to do so.

Director Wooster said they did not instruct staff to get rid of the threshold regions but told staff we want to look at the physical features and look at data and figure out what to do. She said the data is not available yet and we need to move forward with the plan. She said she is not arguing that these two faults are not significant features, but we need to commit to analyzing the physical features and do not want staff second guessing what those are before we get the data which.

Chair Bantilan said he does not believe that is what staff did. He said they came back with a map and it is fine if we disagree with the map and can provide direction on how to look at different portions of the basin.

Director Wooster said staff has reported that the Santa Barbara Canyon fault (SBCF) has moved but are still trying to draw it on a map. Chair Bantilan noted the fault update is later in the agenda and asked W&C for a brief update.

Mr. Strandberg provided a brief update on the results of the Santa Barbara Canyon fault study and the potential movement of the fault over Hwy 33 where the USGS previously inferred the fault to be.

Director Burnes requested that staff develop options based on science and data and to do so in a clear and concise manner.

Chair Bantilan took a poll of the Board on this issue to determine how the Board would like to handle this issue in July 2024.

Board Poll

1. Director Burnes – Discussion today was good but need more data.
2. Director Jackson – Need more information on water moving across the faults and recommend no discussion in July 2024.
3. Director Katelyn – Support a basin-wide approach until the data says otherwise.
4. Director Wooster – Nothing additional to add.

5. Director Reely – Move down the road to delineate management areas based on physical features and the modeling data. Management area strategies should be considered acknowledging the differences in the basin (i.e. Ventucopa, main basin, etc.).
6. Director Debby Williams – Look at whole area and then decide what we need for management areas at a later time.
7. Director Yurosek – Said the Board needs to address the basin safe yield, native yield.
8. Director Elliott – Recommended the status quo for the GSP update and not discuss until the technical data is complete.
9. Director Albano – Agrees with Director Reely and Elliott.
10. Chair Bantilan – Agreed with pulling this off of next month's agenda and figure out at a later date.

Mr. Beck said he wants to ensure staff has very specific direction from the Board and said he believes the following captures the wishes of the Board to come back with updated model data for two areas, (1) the CMA plus farming units modified by the model, (2) the sustainable yield for the rest of the basin, (3) staff to draft a simple addition to the pumping allocation project to say we will continue investigation of management areas.

Director Wooster said we need to include language in the GSP to reflect the March 2024 Board direction to look at other areas in the basin and look at the physical features and the modeling to see what we need to do with the water situation in those areas.

MOTION
Director Wooster made a motion to include language in the update [GSP] to reflect what we decided at the last meeting that we are going to look at the other areas of the basin and look at their physical features and the modeling to see what we need to do with the water situation in those areas. The motion was seconded by Director Debby Williams, a roll call vote was made and passed with 100%.

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

e. Discuss and Take Appropriate Action on GSP Draft Chapters
Mr. Van Lienden provided an overview of Chapters 3: Undesirable Results, and Chapter 5: Minimum Thresholds, Measurable Objectives, and Interim Milestones which are provided in the packet for consideration of approval.

Stakeholder Ray Shady commented he was concerned with the removal of any language related to threshold regions that were eliminated in setting sustainable management criteria using a common methodology.

Director Wooster said she did not feel prepared to vote on these chapters at this time.

Director Yurosek asked staff what the intent of staff is in removing the threshold regions and Mr. Van Lienden reported that the Chapters follow the Board direction from the January 2024 meeting and threshold regions are no longer applicable to the method in setting sustainable management criteria.

Director Albano said he is uncomfortable voting on these chapters at this time before the Board discusses if additional management areas are going to be created. He said he is concerned with efforts to remove references that describe the differences in the basin.

Chair Bantilan requested Chapters 3 and 5 be deferred to the July 2024 agenda.

REPORT ITEMS

13. Administrative Updates

a. Report of the Executive Director
Mr. Beck provided an update on Hallmark Group progress, 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. Fault Investigation Study
Mr. Strandberg provided an update on the fault investigation study which is included in the packet.

b. Water Resources Model Update
Mr. Van Lienden provided an update on the model timeline which is included in the Board packet.

c. Update on Groundwater Sustainability Plan Activities
Mr. Van Lienden provided an update on the accomplishments for January and February 2024 which are provided in the Board packet.

d. Update on Grant-Funded Projects
Mr. Van Lienden provided an update on grant-funded projects which is provided in the Board packet.

15. Report of Ad Hoc Committees
Nothing to report.

16. Directors' Forum
Nothing to report.

17. Public comment for Items Not on the Agenda
Nothing to report.

18. Correspondence
Nothing to report.

PUBLIC HEARING

19. PUBLIC HEARING: Groundwater Extraction Fee
Chair Bantian opened the public groundwater extraction fee hearing.

Mr. Beck reported that on May 3, 2023, the CBGSA held a public rate hearing and adopted a $12 per acre-foot groundwater extraction fee to fund the cost of the CBGSA's groundwater management program, including the cost of implementing, its GSP, investigation of groundwater conditions, compliance assistance, enforcement, and program administration. He said the proposed Fiscal Year 2024-2025 fee reduction to $5 per acre-foot is based on reported 2023 water use and the Fiscal Year 20240-2025 budget. He said prior to setting a groundwater extraction fee, this public hearing will provide an opportunity for the Board to receive and consider any public comment on the proposed fee.

Mr. Blakslee reported no written comments were received.

Stakeholder Jim Wegis requested the CBGSA to think about the assessments as if you were spending your own money.

Chair Bantilan closed public comment.

20. Consider for Approval Resolution No. 2024-051 Setting a Groundwater Extraction Fee for Fiscal Year 2024-2025 and Authorize Invoicing of Landowners
Mr. Blakslee reported that resolution No. 2024-051 reduces the Fical Year 2024-2025 groundwater extraction fee from $12 per acre-foot to $5 per acre-foot.

Director Derek Yurosek commented that since there is such a high cash balance he recommends setting the fee at $0 per acre-foot. Mr. Beck recommended avoiding a negative cash balance due to the timing of DWR reimbursements.

MOTION
Director Burnes made a motion to approve the proposed reduced fee of $5 per acre-foot. The motion was seconded by Director Albano, a roll call vote was made and passed with 100%.

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

CLOSED SESSION

21. Closed Session

At 7:05 PM, the Board adjourned to closed session. At 8:30 PM, the Board returned from closed session at which time Legal Counsel reported to the public that there was no reportable action.

22. Adjourn

Chair Bantilan adjourned the meeting at 8:34 PM.

BOARD OF DIRECTORS OF THE
CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

Chair: _____

ATTEST:

Secretary: _____

Cuyama Basin Groundwater Sustainability Agency
Board of Directors Special Meeting

May 23, 2024

Draft Special Meeting Minutes

PRESENT:
Directors
Bantilan, Cory – Chair
Albano, Byron – Treasurer
Anselm, Arne – Secretary
Burnes, Rick
DeBranch, Brad
Klinchuch, Matt – Alternate for Vickery, Matt
Reely, Blaine – Alternate for Paulding, Jimmy
Elliot, Darcel – Alternate for Williams, Das
Williams, Debby
Wooster, Jane
Yurosek, Derek
Zenger, Katelyn – Alternate for Scrivner, Zack

Staff
Beck, Jim – Executive Director
Blakslee, Taylor – Assistant Executive Director
Dominguez, Alex – Legal Counsel
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 9:00 a.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. **Meeting Protocols**
   Mr. Blakslee provided an overview of the meeting protocols.

REPORT ITEMS

5. **Public comment for Items Not on the Agenda**
   Nothing to report.

CLOSED SESSION

6. **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

7. **Conference with Legal Counsel – Existing Litigation**
   Pursuant to Government Code section 54956.9(d)(1)
   a. Bolthouse Land Company, LLC, et al v. All Persons Claiming a Right to Extract or Store Groundwater in the Cuyama Valley Groundwater Basin (BCV-21-101927)

   At this point in the meeting, the Board returned to open session. No reportable action was taken.

8. **Adjourn**
   Chair Bantilan adjourned the meeting at 10:36 a.m.

BOARD OF DIRECTORS OF THE
CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

Chair: _____

ATTEST:

Secretary: _____

Cuyama Basin Groundwater Sustainability Agency
Board of Directors Meeting

July 31, 2024

Draft Meeting Minutes

PRESENT:
Directors
Bantilan, Cory – Chair
Yurosek, Derek – Vice Chair
Albano, Byron – Treasurer
Anselm, Arne – Secretary
Barnett, Rob – Alternate
Burnes, Rick
Elliott, Darcel – Alternate
Jackson, Steve
Reely, Blaine – Alternate
Wooster, Jane
Zenger, Katelyn

Staff
Beck, Jim – Executive Director
Blakslee, Taylor – Assistant Executive Director
Van Lienden, Brian – Woodard & Curran
Hughes, Joe – Legal Counsel
Dominguez, Alex – Legal Counsel

ABSENT:
None

1. **Call to Order**
   Cuyama Basin Groundwater Sustainability Agency (CBGSA) Chair Cory Bantilan called the meeting to order at 2:05 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. **Meeting Protocols**
   Mr. Blakslee provided an overview of the meeting protocols.

5. Standing Advisory Committee Meeting Report

Standing Advisory Committee (SAC) Vice Chair Brad DeBranch provided a report on the July 25, 2024 SAC meeting and is included below:

Standing Advisory Committee Report
Meeting Date: July 25th, 2024
Submitted to the CBGSA Board on July 31st, 2024
By Brad DeBranch, SAC Vice-Chair

The Standing Advisory Committee met on July 25th both in person and by teleconference. Quorum was established by five committee members (four present in-person and one present via teleconference). GSA staff including Taylor Blakslee, Grace Bianchi, and Alex Dominguez were present with additional staff online including Jim Beck, Brian Van Lienden and Ali Taghavi. Public participation was comprised of approximately 10-15 members throughout the ~6.5 hour meeting. The SAC's general feedback and recommendations are summarized below per each item of discussion.

Item 7a – Update on Fault Investigation
Staff provided an overview of the latest fault investigation activities related to the Santa Barbara Cayon and Russell Faults. One committee member requested that staff look at recent oil well drill logs to better understand the geologic formations near the Russell Faults. In connection with the SBCF investigation, staff may consider conducting additional resistivity tests north of Transect Line #1, as the fault line was not observed within the targeted study area.

Item 7b – Update on Cuyama Basin Water Resources Modeling
Staff provided an update on the newest Model v0.30. The SAC was informed by staff that a QC effort is being conducted related to the model, and that new model results would be published by the upcoming Board meeting. Several members of the SAC were concerned that smaller growing operations in the western region around Cottonwood Canyon are not accurately being represented on recent GSA maps showing pumping well locations and groundwater service area operating companies. These committee members requested proper representation of these operations along with de minimis pumpers to ensure they're being modeled appropriately.

Item 7c – Monitoring Network Consulting Contract
The SAC unanimously approved a motion recommending approval of the Provost & Pritchard contract to conduct groundwater monitoring efforts as proposed.

Item 7d – Data Management System Update
Staff provided an update on the Data Management System. Brenton Kelly asked about certain well construction and perforation data being added to existing wells, and was concerned that data gaps continue to exist within the monitoring system.

Item 8a – GSP Component & Schedule
Committee members Jaffe and Adams raised concerns that this GSP update process

has been overbearing in relation to the time spent reviewing the various GSP components.

Item 8b – Project and Management Action Options
There was no formal motion or recommendation made by the SAC. During the discussion comments received from the committee included the desire to add stronger wording to assess water wells going below MTs and to investigate the cause of the problem while determining appropriate action. The SAC received public comment which suggested the GSA should consider other useful tools such as cropping alternatives and vegetation management.

Item 8c – Glidepath Methodology
Committee member Adams was concerned that the GSA's 2023 reduction goals were not met. Staff confirmed that the 2023 overall allocation target in the CMA was achieved. There were also concerns about the declining groundwater levels in the CMA and that the current glidepath does not protect groundwater levels. Brenton Kelly was concerned with the timing of when we'll start to see a response in the groundwater conditions and whether all the agreed upon metrics are working.
There was a **motion** that the glidepath be correlated to the groundwater levels in the revised model and that the glidepath be revised with more aggressive reductions earlier in the period and lesser reductions later in the period. The motion passed with 1 "no" vote from Committee member DeBranch.

Item 8d – Basin-Wide Water Management Narrative
There was a **motion** to accept the redlined GSP Section 7.5.2 with the exception that the final sentence related to CCSD be modified to allow for revisiting CCSD water use based on anticipated development. The motion passed unanimously.

Item 8e – Updated Central Management Area Boundary, Management Area Criteria, Operational Boundary and Use of Farm Units
Committee members Gaillard and Adams were both in favor of leaving the CMA as-is, and thought changing back and forth was going to be burden to landowners. Committee member Jaffe expressed concern for those pumpers in close proximity to the CMA boundary. Committee member Lewis was concerned this this model is not accurate enough to make these crucial decisions. Committee member DeBranch expressed support to use the revised CMA boundary and to add in the pumpers within the new boundary. There was one public comment from Anne Myhre that strongly suggested that we rely on the updated science and new groundwater modeling.
There was a **motion** to keep the Central Management Area "as-is" based on the previous model results. The motion passed with 1 "no" vote from Committee member DeBranch.

Item 8f – Groundwater Allocations

1. Options for Allocation Implementation Period – Three SAC members including committee members Lewis, Jaffe and Adams were in favor of using 2yr periods and two SAC members including committee members Gaillard & DeBranch were in favor of using 5yr periods. Brenton Kelly was supportive of

a 5 year time period but only with effective adaptive management.

2. **Applies to CMA + Farming Units –** One SAC member requested that an exception be made for small pumpers. The SAC agreed that the allocations should be inclusive of the CMA plus farming units.

3. Baseline Allocation Amount – A majority of SAC members were supportive of using a historic average to determine the baseline. Committee member Lewis wanted to remain neutral on the matter.

4. Sustainable Yield – Committee member Jaffe provided support for the model. Committee member DeBranch was not comfortable supporting the sustainable yield until after the QC matter is resolved and the final model results are published. Steve Gliessman expressed his concern that the model is a very complicated tool that should be peer reviewed outside of the team that created the model.

5. Allocation Methodology – The SAC was generally supportive of using a historic average to govern the allocation methodology. However, three of the five SAC members including Jaffe, Lewis and Adams wanted to make an exception to exclude smaller pumpers. Two public comments were received that also expressed concern for the smaller pumpers.

6. Carryover – Two SAC members were in favor of some sort of carry over water use and two SAC members were against carryover describing that it won't support recovery of water levels. Two public comments were received that did not support carryover but rather find ways to incentivize growers to cut back water use.

Item 8g – Frequency of Changes to Groundwater Allocations
There was no formal motion or recommendation made by the SAC, but there was general support for some form of quantitative metric to review changes to groundwater allocations outside of the CMA. Committee member DeBranch supported assessing this on an annual basis and Committee members Lewis and Gaillard supported assessing this change every 3 years. There was consensus that 5 years was too long to initiate change.

Item 8h – GSP Draft Chapters
There was general support by the SAC to move revised GSP Chapters 2, 3, 5 & 6 forward for Board review and consideration. No formal action was taken by the SAC.

Item 8i – GSP Amendment Comment Process
There was a **motion** to approve GSP update public review process. The motion passed unanimously.

Respectfully Submitted,
Brad DeBranch

SAC Vice-Chair

CONSENT AGENDA

6-10. Consent Agenda

Chair Bantilan asked if any Directors wanted to move any of the consent items out to discuss in more detail.

MOTION

Director Wooster made a motion to approve the consent agenda item nos. 7-10 without the meeting minutes. The motion was seconded by Director Albano a roll call vote was made and passed.

AYES:	Albano, Anselm, Bantilan, Burnes, Jackson, Reely, Wooster, Yurosek, Zenger
NOES:	None
ABSTAIN:	Barnett
ABSENT:	Elliott

ACTION ITEMS

11. Groundwater Sustainability Plan Implementation

a. Update on Fault Investigation Study

Jim Strandberg provided an update on the Fault Investigation Study on the Santa Barbara Canyon and Russel Faults which is included in the Board packet.

SAC Vice Chair DeBranch provided the feedback from the SAC which is included in the SAC report.

Stakeholder Brenton Kelly asked about the depth of the fault and the northwest line 1 on the figure. Mr. Strandberg responded that there may be an additional fault between MWH and TSS #3 well causing a discrepancy in depth to water.

Stakeholder Ray Shady suggested the Board consider extending the SBCF study line north and south from line 2 using electrode spacing.

Chair Bantilan closed the floor for public comment and opened the floor for Director comments.

Director Jackson asked if the Santa Barbara Canyon is funneling the water recharge into the basin and bringing water into the north part of the fault. Mr. Strandberg responded that approximately 500 of the 3,300 acre-feet of water per year is coming out of the Santa Barbara Canyon and it would flow into the valley, south of the fault and then across the fault.

Chair Bantilan asked if there is an estimated cost to extend the study line and determine the eastern extent of the Santa Barbara Canyon Fault. Mr. Strandberg responded that $60 thousand dollars would fund a transect that runs north and south of line one.

Director Wooster asked if there are any additional references besides United States Geological Survey (USGS) that indicate the location of the Santa Barbara Fault. Mr. Strandberg responded that it is the only report since 1970, and no one has challenged it.

Director Yurosek asked about the effect of the Russel Fault system on the depth to water on either side of the fault system. Mr. Strandberg responded that the fault is buried under 100 to 200 feet of saturated alluvium, where the water flows across.

Director Yurosek asked what causes salinity to increase across a buried fault. Mr. Strandberg replied that there isn't more information on the increase in salinity across the fault. Mr. Strandberg commented it could be associated with the oil and gas development in that area. He said he assumed it is the geologic features that create oil and gas reserves in that area that cause high total dissolved solids (TDS) and high salinity.

Director Yurosek asked what caused the minimal flow across the Russel Fault system. Mr. Strandberg responded that the geologic features and the gradual hydraulic gradient (from high hydraulic pressure to low hydraulic pressure) causes minimal flow.

Darcel Elliott joined the meeting at 2:40 p.m.

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b. Update on Cuyama Basin Water Resources Model

Mr. Beck provided an overview of model presentation progress and review process with the Ad hoc and Standing Advisory committees.

Technical staff Mr. Taghavi provided an overview of the items to be discussed in the model presentation, addressed uncertainty, and assumptions of the model. Mr. Taghavi commented that the committee and stakeholders should consider that the outputs provided are in the context of model uncertainty and an uncertainty analysis will be conducted.

Mr. Blakslee added there was a previous question regarding native land vs idle land and what the trigger is for moving from native to idle. He reported that staff discussed this definition issue with Land IQ and will follow up on this question.

Mr. Van Lienden added that idle land data, collected from Land IQ land use data, was used in the model to represent non-irrigated lands, which are idle in between crop rotations.

Director Albano asked where the old fault stratigraphy information was collected. Mr. Taghavi responded it was collected from USGS's model.

Director Reely asked where the Santa Barbara Canyon Fault was located and if the

Airborne Electromagnetic survey (AEM) data reflected the offset in the fault stratigraphy. Mr. Strandberg responded that staff investigated the distance in between the two transects and DWR invalidated some of the data, so there is a data gap in the AEM dataset for this area.

Mr. Taghavi followed up on the earlier question regarding flow. He commented that the hydraulic gradient is the result of both the water level measurements and the observation wells.

Director Wooster commented on the changes in the evapotranspiration (ET) rates between model update version 0.20 and version 0.30 historical and reported records. She referenced the change in ET rates for the idle land and asked if version 0.30 should be corrected to 0.83 feet per year.

Director Albano asked how the model accounts for water delivered outside farming units compared to the well in which the water was pumped. Mr. Taghavi responded that wells are assigned to service areas and the water use reports from landowners have helped determine water use within a service area. He added Bulletin 118 boundaries were used as the basin boundaries in the model.

Director Yurosek asked if applied water is included as deep percolation. Mr. Taghavi clarified applied water and precipitation are categorized as deep percolation inflows. Mr. Sercan commented that the deep percolation is the model output and additional calculations are done to estimate applied water and precipitation amounts.

Director Albano asked about ET and deep percolation calculations. He commented that deep percolation is the least certain number but is the most important in the model.

Director Jackson asked if vegetation efficiency is included in the model. Mr. Taghavi responded its included and calculated using temperature and ET ranges.

Director Wooster asked if the pumping cap in the Central Management Area (CMA) was based on the 2022 CMA. Mr. Taghavi responded that it is based on 2022 CMA including farming units.

Stakeholder Jim Wegis asked how long it takes for water to percolate to the water table. Mr. Taghavi responded that the only data available/observed is the peaks in water levels; there is not a signature of the time lag between when water is applied and infiltrated in the soil zone.

Stakeholder Guy Lingo asked about the alluvial buildup above the Santa Barbara Canyon Fault. Mr. Strandberg responded it is estimated around 100 feet.

Stakeholder DeBranch asked about the changes in the model from the July 22, 2024 version and the version presented to the Board. Mr. Taghavi responded that the updates were due to continued quality control efforts.

Stakeholder Shady asked about the precision of the alluvial bed and how the resolution can be improved. Mr. Strandberg responded that electrode meter was used for the top 200 feet. The meter spacing between transects could be tighter, but there's bedrock and metal that impacts the reading.

SAC Vice Chair DeBranch provided the SAC report on this item which is provided in the board packet.

In the interest of time, Chair Bantilan deferred agenda items 11c, 12d, and 12g to a subsequent Board meeting

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c. Discuss and Take Appropriate Action on Data Management System Update Options
This item was deferred to the September Board meeting.

12. Groundwater Sustainability Plan Amendment Components

a. Update on GSP Component Schedule
Mr. Blakslee provided an update on the Groundwater Sustainability Plan (GSP) component schedule and noted that minor changes to the schedule and said the project is still on schedule, but any potential changes or delays to the schedule may result in requiring additional special meetings.

There were no public comments on this item.

b. Discuss and Take Appropriate Action on Project and Management Action Options
Mr. Beck reported that CBGSA staff is looking for Board direction on which projects and management actions in the GSP. Mr. Blakeslee added that the flow meter and flower the Board polled in favor to include flow meter recalibration program and remove rangeland and forest management projects from the 2025 GSP updates.

Mr. Van Lienden provided an update on two new projects being considered for the amended GSP which are (1) flow meter recalibration program, and (2) rangeland and forest management. He reported that the staff recommendation is to not include rangeland and forest management as a project due to uncertain benefits and potential wildlife and air quality impacts from burning land to increase water flow.

There were no objections from the Directors to the list of project and management action options.

There were no public comments on this item.

SAC Vice Chair DeBranch provided the SAC report on this item which is provided in the board packet.

c. Discuss and Take Appropriate Action on Glidepath Methodology
Mr. Van Lienden provided an overview of the glidepath schedule for percent reduction each year in the CMA. He reviewed the potential action options for the glidepath for

Board consideration.

SAC Vice Chair DeBranch provided the SAC report on this item which is included in the board packet.

There were no public comments on this item.

Director Jackson recommended keeping the existing glidepath until there is further discussion on basin-wide groundwater management.

The Board agreed to use the existing glidepath methodology for now.

d. Discuss and Take Appropriate Action on Basin-wide narrative
This item was deferred to the September Board meeting.

e. Discuss and Take Appropriate Action on CMA Criteria and Farming Units
Mr. Beck reviewed the previous CMA Boundary in the 2020 GSP and provided the options for CMA Boundary criteria for Board consideration.

Director Yurosek asked if the two-foot contour was defined in the GSP. Mr. Van Lienden responded that there were two management areas identified in the GSP, the CMA and the Ventucopa management area, but it was decided it was too early to implement pumping allocations.

SAC Vice Chair DeBranch provided the SAC report on this item which is included in the board packet.

Chair Bantilan opened the floor for public comments.

Stakeholder Myhre commented that the new boundary line should be accepted as it was provided by the technical consultants.

Chair Bantilan closed the floor to public comment and opened the floor to Director comments.

Director Jackson commented that the boundary line will cause tensions between landowners and the boundary line could continue to change and said he would like to wait to change the boundary.

Director Albano responded that there is a lot of history between the landowners and the CMA is comprised primarily of two large landowners. He commented it does not make sense to start a clean slate and not include the historical use, and it is not fair to landowners who have been in the area for a while.

Director Reely asked about the hydrographs for Ventucopa and how is that area with respect to measurable objectives and minimum threshold. Mr. Taghavi responded that the Ventucopa varies by season and year, and he is not able to state there are long-term

declines in the Ventucopa area like the CMA.

Director Reely asked if areas in Ventucopa that fell in the two-foot contour have recovered. Mr. Taghavi responded it has recovered, but the two-foot contour is an indication to investigate long-term recovery and groundwater level impacts.

Director Burnes cautioned that the model assumptions for irrigation methods will need to be revisited in future model updates.

Director Albano commented on the uncertainty of the model. He questioned the sustainable yield outside the CMA and he added it would be reckless to make cuts outside the CMA.

Director Wooster commented that the new model boundary should be used, and farming units should be used. She commented that if a person's lease runs out then they should not be included in farming units and the Ventucopa area should not be included.

Chair Bantilan agreed with Director Wooster's comment. Chair Bantilan added that the Ventucopa area should be managed.

Director Barnett commented he is in favor of the updated CMA boundary that the two-foot contour presented should be trusted.

Director Yurosek commented on the two-foot per criteria and said there should be a management plan for the areas within the boundary line including Ventucopa.

Director Albano commented that there should be criteria to opt in and out of farming units. Director Wooster commented that there should be a procedure to exit farming units and a determined length of time in which the management area boundary applies. Mr. Beck commented that it will be difficult to remove a farming unit from the management area since the sustainable yield calculation includes the farming unit area.

Director Albano asked about the allocations for farming units. Mr. Beck commented that the current allocations are for two years.

Director Wooster commented that it does not make sense to keep allocations for one year if the model is updated. Mr. Taghavi responded there are two types of updates, annual updates and every five years. Mr. Beck recommended that the model is updated every five years and then determine if there should be a midterm update depending on new data.

Director Elliott asked about the process to change the boundary and amend the GSP, which must be reviewed by DWR. Mr. Beck responded that if the CMA boundary is changed, the GSP would have to be amended, but the section added could be short to expediate the process.

Director Albano asked if the allocation amounts are the same each year or is it adjusted

based on water data. Mr. Van Lienden responded that the calculations included the data available for 2023-2024 allocation and the percent reduction followed the glidepath.

Director Yurosek commented that updating the GSP does not have to be a lengthy process. Mr. Beck commented that the change in farming unit process/administration does not need to be in the supplemental plan.

Poll:

- Director Wooster commented in favor of the new CMA and keeping the operational language but said Ventucopa should be out of the boundary.
- Director Zenger commented in favor of following the scientific data and that management areas should be treated equally and noted she is in favor of using the updated CMA boundary with Ventucopa area.
- Director Jackson commented in favor of using the updated CMA boundary with Ventucopa management area.
- Chair Bantilan said he was in favor of developing a different management area for Ventucopa.
- Director Elliott is in favor of keeping the CMA boundary for now and keeping the Ventucopa management area as included in the 2020 GSP, with the possibility to change later.
- Director Albano is not in favor of including Ventucopa management area.
- Director Barnett is in favor of leaving Ventucopa out of the boundary.
- Director Reely is in favor of the new Ventucopa management area and allocations.
- Director Burnes commented it is too early to decide whether Ventucopa should be included in the boundary.
- Director Yurosek is in favor of including Ventucopa and having a separate management plan to address DWR's comments to investigate the Ventucopa area.
- Director Anslem is in favor of leaving Ventucopa out and following the language in the GSP since the 2-ft contour is forecasted, not measured.

Mr. Beck said because there are less wells in the Ventucopa area therefore, there is more uncertainty about the groundwater levels in that region.

Mr. Blakeslee provided the definition of a farming unit which is "a grouping of two or more parcels of land that is under the ownership or control by lease or otherwise, of a single water user, which includes CMA land and may include non-CMA land provided that lands are served by a common irrigation system."

MOTION

Director Yurosek made a motion to adopt the CMA for a five-year period updated by the model using an operational boundary based on the existing definition and continue the use of farming units based on the existing farming unit policy, however, included farming units that exit before the period ends are still subject to pumping restrictions for that period and develop a management plan for the Ventucopa management area identified in the GSP and on the map. The motion was seconded by Director Reely and did not pass with a 46% vote.

AYES: Jackson, Reely, Yurosek, Zenger
NOES: Albano, Anselm, Bantilan, Barnett, Burnes, Elliott, Wooster
ABSTAIN: None
ABSENT: None

Mr. Taghavi commented that there will be significant data to update the CMA in the next year. Director Wooster asked if the LiDAR would provide more data for the model. Mr. Taghavi responded that the pumping data is the most critical component in refining the model.

Director Burnes asked if the model was complete or if there will be additional revisions. Mr. Taghavi responded that the model is complete and there is no additional quality controls to be performed.

MOTION
Director Albano made a motion to adopt the CMA for a five-year period updated by the model using an operational boundary based on the existing definition, continue the use of farming units based on the existing farm unit policy; however, included farm units that exit before the period ends are still subject to pumping restrictions for that period and update the Ventucopa management area using the model and evaluate the management area at the next model calibration or GSP update, whichever is sooner. The motion was seconded by Director Elliott and did not pass with a 47% vote.

AYES: Albano, Anslem Barnett, Elliott, Wooster
NOES: Bantilan, Burnes, Jackson, Reely, Yurosek, Zenger
ABSTAIN: None
ABSENT: None

MOTION
Director Reely made a motion to adopt the CMA for a five-year period updated by the current model, using an operational boundary based on the existing definition, and continue the use of farming units based on the existing Farm Unit Policy, however, included farm units that exit before the period ends are still subject to pumping restrictions for that period, and develop a management plan for the Ventucopa management area identified in the GSP and on the map, which may or may not provide for pumping restrictions. The motion was seconded by Director Burnes and passed unanimously.

AYES: Albano, Anslem, Bantilan, Barnett, Burnes, Elliott, Jackson, Reely, Wooster, Yurosek, Zenger
NOES: None
ABSTAIN: None
ABSENT: None

f. Discuss and Take Appropriate Action on Groundwater Allocations

Mr. Beck provided a brief overview of the existing groundwater allocation program for 2023 and 2024. He provided options on the implementation period, who the program applies to, baseline (i.e. starting point) amount, sustainable yield, allocation methodology, and carryover, for the Board's consideration.

Director Wooster asked about the difference between the management area and the CMA. Mr. Van Lienden responded that the updated sustainable yield calculation for CMA plus farming units is 11,500 acre-feet.

SAC Vice Chair DeBranch provided the SAC report, which is included in the Board packet.

Chair Bantilan opened the floor for public comment.

Stakeholder Wegis asked for an aerial photograph of the CMA boundary and if his land is included in the CMA.

Chair Bantilan closed the floor public comment and opened the floor for Board comments.

Director Wooster commented that if the new CMA boundary is adopted, the Ventucopa area needs to be managed according to the Ventucopa area and not according to the CMA because the Board has already established a boundary for the CMA.

Options for Allocation Implementation Period

Director Albano commented in favor of the five-year period or if there's a model update, whichever comes first. The Board generally agreed with this approach.

Baseline allocation amount

Mr. Van Lienden commented that if boundary lines change, then the farming units will need to be readdressed.

Chair Bantilan asked if staff could provide additional baseline options including several historical use options for the CMA plus farming units based on historical use. Director Albano asked if allocation amounts for each area will be provided. Mr. Beck responded that staff would provide several options and will have the 2021 baseline updated with the model.

Sustainable Yield Options

Mr. Beck recommended using the updated average sustainable yield, and the Board agreed with this approach.

Allocation Methodology Options

Mr. Beck asked the Directors if they would like to stay with the current model pumping estimates or update them with the recent model to recalculate landowner allocation percentages.

Director Wooster commented it will be more accurate to use updated metered use numbers, but it will be easier to use historic model estimate numbers.

Chair Bantilan commented there is more recent data that can be used, and he added he would like to see 2018-2023 data for allocations.

Director Yurosek commented that the using historical data for allocations provided a reference for usage before SGMA implementation and using new estimates from the updated model may penalize users because usage will continue to change.

Director Albano recommended sticking to the data provided.

Carryover Options

Director Burnes asked for clarification on the carryover policy. Mr. Beck asked if the Board would like the carryover policy to be developed or to be explored.

Director Albano commented that he does not believe the carryover policy should be prioritized in the GSP and staff should include soft language on the policy in the GSP.

Director Jackson asked for staff to explore carryover options early 2025.

The Board directed staff to develop language in the amended 2025 GSP that says staff "shall" develop a policy for carryover.

Applies to CMA + farming units

The Board agreed that the groundwater allocation program should apply to the CMA including Farming Units.

g. Discuss and Take Appropriate Action on Frequency of Changes to Groundwater Allocations

This item was deferred to the September Board meeting.

h. Discuss and Take Appropriate Action on GSP Chapters

Mr. Van Lienden presented updated versions of Chapter 2: Basin Setting; Chapter 3: Undesirable Results; Chapter 5: Minimum Thresholds, Measurable Objectives, and Interim Milestones; and Chapter 6: Data Management System which were provided in the packet for consideration of approval.

SAC Vice Chair DeBranch provided the SAC report, which is included in the Board packet.

Director Barnett it there will be additional chapters up for approval. Mr. Van Lienden responded that Chapters 1 and 4 have been approved by the Board and a public draft of all the chapters will be included for approval at the next meeting in September 2024.

MOTION

Director Albano made a motion to approve the updated versions of the GSP chapters. The motion was seconded by Director Burnes and the motion passed with a 89% vote.

AYES: Albano, Anslem, Bantilan, Burnes, Elliott, Jackson, Reely, Wooster,

	Yurosek, Zenger
NOES:	None
ABSTAIN:	Barnett
ABSENT:	None

i. Discuss and Take Appropriate Action on Public Comment Process

Mr. Blakslee provided an overview of the proposed public comment process for the draft GSP chapters.

MOTION

Director Jackson made a motion to approve the public comment process. The motion was seconded by Director Burnes and the motion passed with a 93% vote

AYES:	Albano, Anslem, Bantilan, Barnett, Burnes, Elliott, Jackson, Reely, Yurosek, Zenger
NOES:	None
ABSTAIN:	None
ABSENT:	Wooster

REPORT ITEMS

13. Administrative Updates

a. Report of the Executive Director

Nothing to report.

b. Report of the General Counsel

Nothing to report.

14. Technical Updates

a. Update on Groundwater Sustainability Plan Activities

Mr. Van Lienden briefly mentioned accomplishments for April, May, and June 2024, which is provided in the Board packet.

b. Update on Grant-Funded Projects

Mr. Van Lienden briefly provided an update on grant-funded projects, which is provided in the Board packet.

c. Update on Quarterly Groundwater Conditions Report

Mr. Van Lienden briefly reviewed the April Groundwater Conditions Report, which is provided in the Board packet.

15. Report of Ad Hoc Committees

Nothing to report.

16. Directors' Forum

Nothing to report.

17. **Public comment for Items Not on the Agenda**
    Nothing to report.

18. **Correspondence**
    Nothing to report.

CLOSED SESSION

19. **Closed Session**
    At 8:06 PM, the Board adjourned to closed session. At 8:30 PM, the Board returned from closed session at which time Legal Counsel reported to the public that there was no reportable action.

20. **Adjourn**
    Chair Bantilan adjourned the meeting at 8:31 PM.

BOARD OF DIRECTORS OF THE
CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

Chair: _____

ATTEST:

Secretary: _____

TO: Board of Directors
Agenda Item No. 7

FROM: Taylor Blakslee, Hallmark Group

DATE: September 4, 2024

SUBJECT: Approve Payment of Bills for July 2024

Recommended Motion
Approve payment of the bills for July 2024 in the amount of $393,744.

Discussion
Consultant invoices for the months of July 2024 are summarized below for consideration of Board approval.

Expense	July
Woodard & Curran – Technical Services	$323,697
Hallmark – Executive Director services	$49,247
P&P – Quarterly Groundwater levels	$6,933
Klein – Legal services	$13,867
TOTALS	$393,744

TO: Board of Directors
Agenda Item No. 8

FROM: Taylor Blakslee, Hallmark Group

DATE: September 4, 2024

SUBJECT: Approve Financial Reports for July 2024

Recommended Motion
Approve financial reports for July 2024.

Discussion
The Cuyama Basin Groundwater Sustainability Agency's financial report for July 2024 is provided as Attachment 1.

The reports include:

- Statement of Financial Position
- Receipts and Disbursements
- A/R Aging Summary
- A/P Aging Summary
- Statement of Operations with Budget Variance
- 2023/2024 Operating Budget

Cuyama Basin GSA

Financial Statements

July 2024

CUYAMA BASIN GSA
Statement of Financial Position
As of July 31, 2024

	Jul 31, 24	Jul 31, 23	$ Change	% Change
ASSETS				
Current Assets				
Checking/Savings				
Chase - General Checking	76,982	1,996,878	-1,919,896	-96%
Total Checking/Savings	76,982	1,996,878	-1,919,896	-96%
Accounts Receivable				
Accounts Receivable	4,036,527	737,372	3,299,156	447%
Total Accounts Receivable	4,036,527	737,372	3,299,156	447%
Total Current Assets	4,113,510	2,734,250	1,379,260	50%
TOTAL ASSETS	**4,113,510**	**2,734,250**	**1,379,260**	**50%**
LIABILITIES & EQUITY				
Liabilities				
Current Liabilities				
Accounts Payable				
Accounts Payable	1,798,643	290,910	1,507,733	518%
Total Accounts Payable	1,798,643	290,910	1,507,733	518%
Other Current Liabilities				
New/Repl Well Deposits	3,100	1,559	1,541	99%
Deferred Revenue - GWE Fees	-602	0	-602	-100%
Total Other Current Liabilities	2,498	1,559	939	60%
Total Current Liabilities	1,801,141	292,469	1,508,672	516%
Total Liabilities	1,801,141	292,469	1,508,672	516%
Equity				
Unrestricted Net Assets	2,527,541	2,080,948	446,593	22%
Net Income	-215,173	360,833	-576,006	-160%
Total Equity	2,312,369	2,441,781	-129,412	-5%
TOTAL LIABILITIES & EQUITY	**4,113,510**	**2,734,250**	**1,379,260**	**50%**

CUYAMA BASIN GSA
Receipts and Disbursements
As of July 31, 2024

Type	Date	Num	Name	Debit	Credit
Chase - General Checking					
Payment	07/10/2024	21016	Groundwater Extraction Fees:Apache Canyon Ranch, Inc	1,639.80	
Payment	07/10/2024	6585029	Groundwater Extraction Fees:Karam Pistachio Farm	2,401.90	
Payment	07/10/2024	2723	Groundwater Extraction Fees:CCSH Farms	497.00	
Payment	07/10/2024	1529	Groundwater Extraction Fees:Brodiaea, Inc	3,991.73	
Payment	07/10/2024	438	Groundwater Extraction Fees:Bosma and Ricci	122.55	
Payment	07/10/2024	1002	Groundwater Extraction Fees:Boyajian, Tanner	40.00	
Payment	07/10/2024	556946	Groundwater Extraction Fees:Perkins Ranch	566.48	
Payment	07/10/2024	556946	Groundwater Extraction Fees:Bolthouse Land Co, LLC	39,047.19	
Payment	07/10/2024	252	Groundwater Extraction Fees:Anderson Development	10.35	
Payment	07/10/2024	22783	Groundwater Extraction Fees:Cuyama Orchards, Inc	4,376.09	
Payment	07/10/2024	8418	Groundwater Extraction Fees:Buck, Ann	522.00	
Payment	07/10/2024	2251	Groundwater Extraction Fees:Highland Vineyard SB, LLC	9,160.00	
Payment	07/10/2024	525138	Groundwater Extraction Fees:E & B Natural Resources Mgmt C...	121.75	
Payment	07/24/2024	806	Groundwater Extraction Fees:Lewis, David	177.06	
Payment	07/24/2024	511533	Groundwater Extraction Fees:Grimmway Enterprises, Inc	61,259.40	
Payment	07/24/2024	1739	Groundwater Extraction Fees:Caliente Ranch	22.38	
Deposit	07/24/2024	134526	Farm Pump and Irrigation Co.	1,200.00	
Payment	07/24/2024	2776	Groundwater Extraction Fees:Adam Family	16.94	
Payment	07/24/2024	10332	Groundwater Extraction Fees:JHP Global, Inc	1,826.40	
Bill Pmt -Check	07/31/2024	1183	BC2 Environmental		237,303.32
Total Chase - General Checking				126,999.02	237,303.32
TOTAL				**126,999.02**	**237,303.32**

CUYAMA BASIN GSA
A/R Aging Summary
As of July 31, 2024

	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL
Department of Water Resources	0	0	1,490,690	0	2,116,327	3,607,017
Groundwater Extraction Fees						
Adam Family	0	2	0	0	0	2
Duncan Family Farms	0	0	424,909	0	0	424,909
Cuyama Dairy Farm	0	115	0	1,154	0	1,269
H Lima Company	0	1	0	11	0	12
JHP Global, Inc	0	183	0	0	0	183
Lear Real Estate Ent LLC	0	284	0	2,841	0	3,125
Lewis, David	0	10	0	0	0	10
Total Groundwater Extraction Fees	0	595	424,909	4,006	0	429,510
TOTAL	**0**	**595**	**1,915,599**	**4,006**	**2,116,327**	**4,036,527**

CUYAMA BASIN GSA
A/P Aging Summary
As of July 31, 2024

	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL
BC2 Environmental	0	0	367,974	229,887	0	597,861
HGCPM, Inc.	49,247	0	12,378	17,820	22,670	102,115
Klein DeNatale Goldner	13,867	0	13,592	17,678	13,846	58,983
Provost & Pritchard Consulting Group	6,933	0	0	1,172	10,473	18,579
U.S. Geological Survey	0	0	13,150	0	0	13,150
Woodard & Curran Inc	323,697	0	221,986	274,806	187,468	1,007,956
TOTAL	**393,744**	**0**	**629,079**	**541,362**	**234,458**	**1,798,643**

CUYAMA BASIN GSA
Statement of Operations with Budget Variance
July 2024

	Jul 24	Budget	$ Over Budget	% of Budget
Ordinary Income/Expense				
Income				
Direct Public Funds				
Groundwater Extraction Fees	171,780	175,000	-3,220	98%
GWE Late Fees	604	0	604	100%
Total Direct Public Funds	172,384	175,000	-2,617	99%
Total Income	172,384	175,000	-2,617	99%
Cost of Goods Sold				
Program Expenses				
Technical Consulting				
Monitoring Network Enhancements	18,208	41,500	-23,292	44%
GSP Implementation - W&C	12,865	17,932	-5,067	72%
Stakeholder Engagement	47,191	35,000	12,191	135%
Technical Support for DWR	0	1,750	-1,750	0%
Outreach	5,985	3,811	2,174	157%
Grant Proposals	0	3,675	-3,675	0%
Grant Administration	10,078	10,000	78	101%
Improve Basin Water Use Info	0	6,300	-6,300	0%
Project & Mgmt Action Impl	25,323	11,200	14,123	226%
5 Year GSP Update - Technical	117,348	110,000	7,348	107%
Fault Investigation	86,700	90,000	-3,300	96%
Well Permit Review - Technical	0	1,050	-1,050	0%
GSP Development	0	3,500	-3,500	0%
Total Technical Consulting	323,697	335,718	-12,021	96%
Other Technical Consulting				
Monitoring Network	6,933	5,674	1,259	122%
Total Other Technical Consulting	6,933	5,674	1,259	122%
Total Program Expenses	330,630	341,392	-10,762	97%
Total COGS	330,630	341,392	-10,762	97%
Gross Profit	-158,246	-166,392	8,146	95%
Expense				
General and Administrative				
Executive Director				
Board Meetings	29,469	25,000	4,469	118%
Consult Mgmt and GSP Devel	6,119	6,137	-18	100%
Financial Information Coor	3,050	3,961	-911	77%
Funding - GWE Fees	1,169	1,200	-31	97%
Outreach	7,306	990	6,316	738%
Adjudication Support	688	180	508	382%
Management Area Admin	0	1,081	-1,081	0%
5-Year GSP Update - Admin	0	1,673	-1,673	0%
Water Use Enforcement	0	2,120	-2,120	0%
Well Permit Review - Admin	0	163	-163	0%
Travel and Direct Costs	884	406	478	218%
Total Executive Director	48,684	42,911	5,773	113%
Other Administrative				
Legal	7,679	20,837	-13,158	37%
Other Admin Expense	21	0	21	100%
Postage	543	0	543	100%
Contingency	0	1,663	-1,663	0%
Total Other Administrative	8,243	22,500	-14,257	37%
Total General and Administrative	56,927	65,411	-8,484	87%
Total Expense	56,927	65,411	-8,484	87%
Net Ordinary Income	-215,173	-231,803	16,630	93%
Net Income	**-215,173**	**-231,803**	**16,630**	**93%**

CUYAMA BASIN GSA
FY 24/25 Budget
July 2024 - June 2025

	Jul '24 - Jun 25
Ordinary Income/Expense	
Income	
Direct Public Funds	
Groundwater Extraction Fees	175,000
Grant Reimbursements	1,670,000
Total Direct Public Funds	1,845,000
Total Income	1,845,000
Cost of Goods Sold	
Program Expenses	
Technical Consulting	
Monitoring Network Enhancements	497,383
GSP Implementation - W&C	215,250
Stakeholder Engagement	114,450
Technical Support for DWR	21,000
Outreach	30,410
Grant Proposals	44,100
Grant Administration	105,000
Improve Basin Water Use Info	75,600
Project & Mgmt Action Impl	134,400
5 Year GSP Update - Technical	309,802
Fault Investigation	121,867
Well Permit Review - Technical	12,600
GSP Development	42,000
Total Technical Consulting	1,723,862
Other Technical Consulting	
Monitoring Network	68,000
Stream Gauge Maintenance	56,650
Total Other Technical Consulting	124,650
Total Program Expenses	1,848,512
Total COGS	1,848,512
Gross Profit	-3,512
Expense	
General and Administrative	
Executive Director	
Board Meetings	110,990
Consult Mgmt and GSP Devel	73,578
Financial Information Coor	47,587
Funding - GWE Fees	5,830
Outreach	11,847
Adjudication Support	2,138
Management Area Admin	13,005
5-Year GSP Update - Admin	20,131
Water Use Enforcement	25,400
Well Permit Review - Admin	2,000
Travel and Direct Costs	4,894
Total Executive Director	317,400
Other Administrative	
Legal	250,000
Insurance Policies	17,000
Audit Fees	10,000
Printing and Copying	4,000
Other Admin Expense	200
Contingency	20,000
Total Other Administrative	301,200
Total General and Administrative	618,600
Total Expense	618,600
Net Ordinary Income	-622,112
Net Income	**-622,112**

Note: The FY24/25 Budget Includes Woodard & Curran Contract Amendments 1 and 2

TO: Board of Directors
Agenda Item No. 9a

FROM: Brian Van Lienden, Woodard & Curran

DATE: September 4, 2024

SUBJECT: Discuss and Take Appropriate Action on Data Management System Update Options

Recommended Motion
Board of Directors feedback requested.

Discussion
A presentation on Data Management System (DMS) option enhancements is provided as Attachment 1, and a scope of work and budget breakdown is provided as Attachment 2.

Cuyama Basin Groundwater Sustainability Agency

Discuss and Take Appropriate Action on Data Management System Options

September 4, 2024

HALLMARK GROUP

Woodard & Curran

Potential DMS Updates

- Available grant budget: ~$40,000
- Staff recommended updates:
  - Implement automated connections to external databases (GAMA, CASGEM)
  - Update DMS input tools
  - Implement SMC displays for TDS
- A scope of work and budget breakdown for the staff recommended updates are provided in the attached document

Potential DMS Updates

No.	Task	Hours	Cost	Deliverable
1	Implement Automated Connections to External Databases	80	$21,290	• DMS connection to California Natural Resources Agency Open Data Portal GAMA and DWR Groundwater Level APIs • Updated data visualization to well chart, table, and information module.
2	Update DMS Input Tools	60	$15,960	• Updated import tool and data quality check functionality • Updated import templates
3	Implement Sustainable Management Criteria Displays for TDS	10	$2,680	• Updated groundwater quality well chart displays

Woodard & Curran recommends the following data management system (DMS) updates. For each task, Woodard & Curran will implement the upgrades in the development environment and perform user testing. Upon completion, Woodard & Curran will migrate the completed enhancements to the production environment in coordination with the GSA. Woodard & Curran will also update the User Guide as needed to accommodate the enhancements.

Implement Automated Connections to External Databases - $21,290 (80 hours)

Woodard & Curran will integrate with readily available and relevant public datasets via published APIs. Dataset linkages will include GAMA and DWR's Period Groundwater Level Measurements (at a minimum) using published APIs on the California Natural Resources Agency Open Data Portal.

Woodard & Curran will copy measurement data and other relevant data (e.g., reference point elevation, ground surface elevation) that does not exist within the DMS for wells that are included in the DMS. The linkage will be automated to run on a monthly basis. Data pulled from API sources shall be displayed and available through the well's graphs, tables, and well information module.

Deliverables:

- *DMS connection to California Natural Resources Agency Open Data Portal GAMA and DWR Groundwater Level APIs*
- *Updated data visualization to well chart, table, and information module.*

Update DMS Input Tools - $15,960 (60 hours)

Woodard & Curran will update input tools and quality check functionality in the DMS to streamline data entry and quality control, and more closely align with recent work done with DWR to standardize groundwater data reporting formats. The updated import tool includes functionality to allow users to enter field measurements, automate calculations for groundwater elevation and depth to water from ground surface based on available reference point data, and automate calculations based on different measurement methods. Quality control functions will be updated based on the new import functionality. Import templates will be updated as needed to implement the upgrade.

Deliverables:

- *Updated import tool and data quality check functionality*
- *Updated import templates*

Implement Sustainable Management Criteria Displays for TDS - $2,680 (10 hours)

Woodard & Curran will integrate sustainable management criteria (SMC) displays for groundwater quality constituent total dissolved solids (TDS). Updated chart display allows for user to easily distinguish SMC values related to the selected well.

Deliverables:

- *Updated groundwater quality well chart displays*

TO: Board of Directors
Agenda Item No. 10a

FROM: Jim Beck / Brian Van Lienden

DATE: September 4, 2024

SUBJECT: Update on GSP Components Schedule

Recommended Motion
None – information only.

Discussion
On July 12, 2023, the Cuyama Basin Groundwater Sustainability Agency Board of Directors reviewed and approved a schedule for updating the Groundwater Sustainability Plan (GSP) ahead of the January 2025 deadline and that schedule is provided as Attachment 1 for reference.

GSP Update and Board Policy Discussions Schedule

Updated/New Schedule

	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:	**Finalize:** Feedback on engagement strategy	Basin-wide pumping restrictions/Central Management Area (CMA) boundary **Finalize:** Groundwater (GW) **levels** & **storage** monitoring networks GW levels & storage sustainable management criteria (SMC) and undesirable results (UR) criteria options Allocation methodology	**Finalize: Subsidence, Interconnected surface water (ISW),** and **water quality (WQ)** monitoring networks GW subsidence ISW, and WQ SMC and UR options Glidepath methodology	**Finalize:** GW levels, storage, subsidence, ISW, WQ SMC and UR	Project and Management Action (PMA) options Sustainable yield (SY) methodology	*Continued:* PMA options Basin-wide pumping restrictions Allocation program --- Issue 90-Day Notice	**Finalize:** Basin-wide Pumping Restrictions/MA Boundary (updated model) Allocation methodology Glidepath methodology PMA options SY approach	Review Public draft	**Public Hearing to adopt amended GSP	Submit revised GSP and periodic evaluation to DWR
GSP Chapter Review:				**Ch 1.** Agency Info/Plan Area **Ch 4.** Monitoring Network		**Ch 3.** URs **Ch 5.** SMCs	**Ch 2.** Basin Setting **Ch 6.** DMS	**Ch 7.** PMAs **Ch 8.** Plan Implementation Executive Summary		
Public Workshop		✓					✓	✓		

TO: Board of Directors
Agenda Item No. 10b

FROM: Taylor Blakslee / Brian Van Lienden

DATE: September 4, 2024

SUBJECT: Review and Take Appropriate Action on the Central Management Area (CMA) Operational Boundary

Recommended Motion
Board of Directors direction requested.

Discussion
On July 31, 2024, the Cuyama Basin Groundwater Sustainability Agency (CBGSA) Board directed staff to update the new Central Management Area (CMA) boundary (updated by the 2024 model [v0.3]) using the existing, July 2022, operational boundary criteria which is, “a whole parcel will be part of the CMA if 50 percent or more of the parcel is in the hydrologic boundary or if 1,000 acres or more of a parcel are in the hydrologic boundary.”

The updated CMA Operational Boundary is provided as Attachment 1.

Attachment 1

Cuyama Basin Groundwater Sustainability Agency

10b. Review and Take Appropriate Action on CMA Operational Boundary

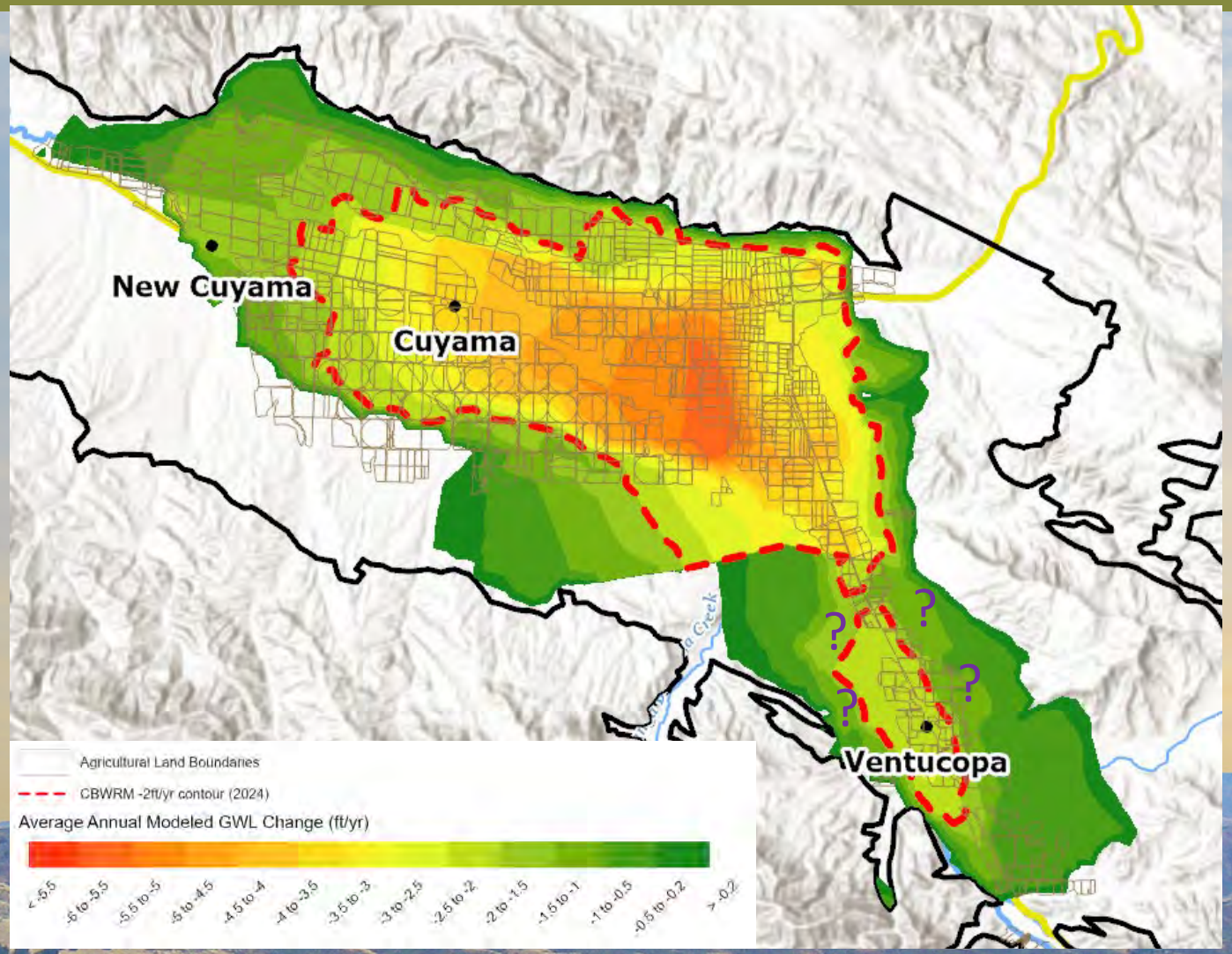
Jim Beck / Brian Van Lienden

September 4, 2024

HALLMARK GROUP Woodard & Curran

Updated Modeled Management Area

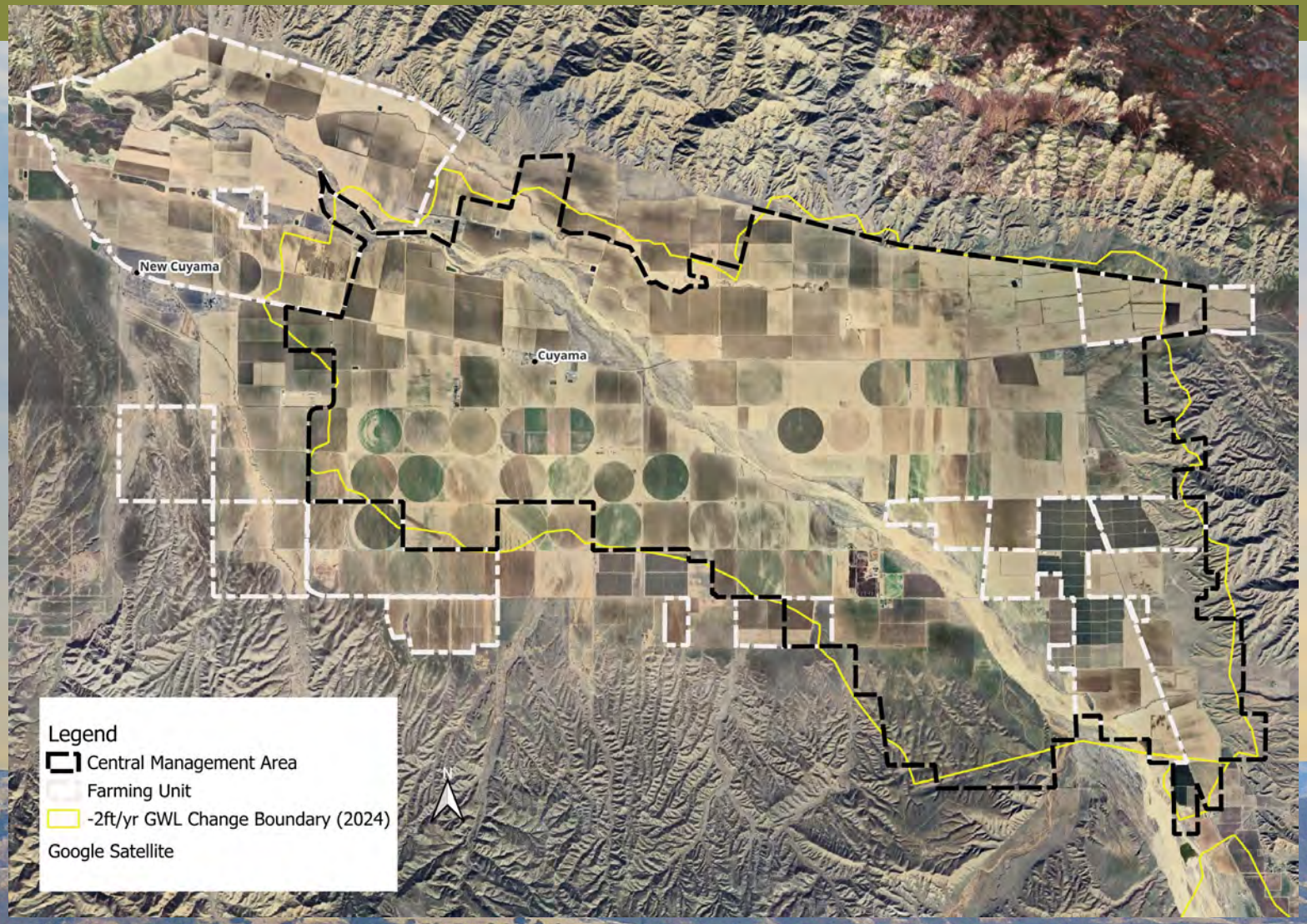
Average Annual Groundwater Level Change during Projected BL



DRAFT

HALLMARK GROUP Woodard & Curran

Updated CMA Operational Boundary with Existing Farming Units



Updated Modeled Management Area
Average Annual Groundwater Level Change during Projected BL

- Model representation of fault follows USGS mapping (in dotted red line)
- Fault investigation did not find the eastern portion of fault at location indicated by USGS
- Area to east of USGS delineation of fault has larger North/South hydraulic connection in model than in area of fault
- Differences in measured groundwater levels North/South of SBCF may indicate a different hydrogeologic regime

TO: Board of Directors
Agenda Item No. 10ci

FROM: Taylor Blakslee / Brian Van Lienden

DATE: September 4, 2024

SUBJECT: Discussion and Take Appropriate Action on Frequency and Extent of Changes to Groundwater Allocations

Recommended Motion
Board of Directors feedback requested.

Discussion
A presentation outlining options for the frequency and extent of changes to groundwater allocations outside the Central Management Area is considered and provided as Attachment 1.

Cuyama Basin Groundwater Sustainability Agency

10ci. Discuss and Take Appropriate Action on Frequency of Changes to Pumping Reduction Program

Jim Beck / Brian Van Lienden

September 4, 2024

Potential Options

- Staff recommends the Board adopt a policy to determine if and when pumping groundwater allocations would be applied to areas outside of the CMA plus farming units
- Potential options include:
  - Identifying a quantitative metric (e.g. based on groundwater level changes or modeled water budgets) that would trigger consideration of allocations
  - Perform a qualitative assessment of whether groundwater allocations should be considered outside the CMA on one of the following intervals:
    - During each Annual Report
    - During each GSP Periodic Evaluation (i.e. every 5 years)
  - Other
- **Which option does the Board want staff to include in the GSP?**

TO: Board of Directors
Agenda Item No. 8cii

FROM: Jim Beck / Brian Van Lienden

DATE: September 4, 2024

SUBJECT: Discussion and Take Appropriate Action on Implementation of 2025-2030* Groundwater Allocations

Recommended Motion
Board of Directors feedback requested.

Discussion
On July 31, 2024, the Cuyama Basin Groundwater Sustainability Agency (CBGSA) Board provided final feedback on groundwater allocation options to be included in the amended Groundwater Sustainability Plan (GSP).

However, CBGSA staff needs direction on the implementation of groundwater allocations starting in 2025, and two draft implementation schedule options are provided as Attachment 1, for Board consideration.

Attachment 1

Cuyama Basin Groundwater Sustainability Agency

10cii. Discuss and Take Appropriate Action on Implementation of 2025-2030* Groundwater Allocations

Jim Beck / Brian Van Lienden

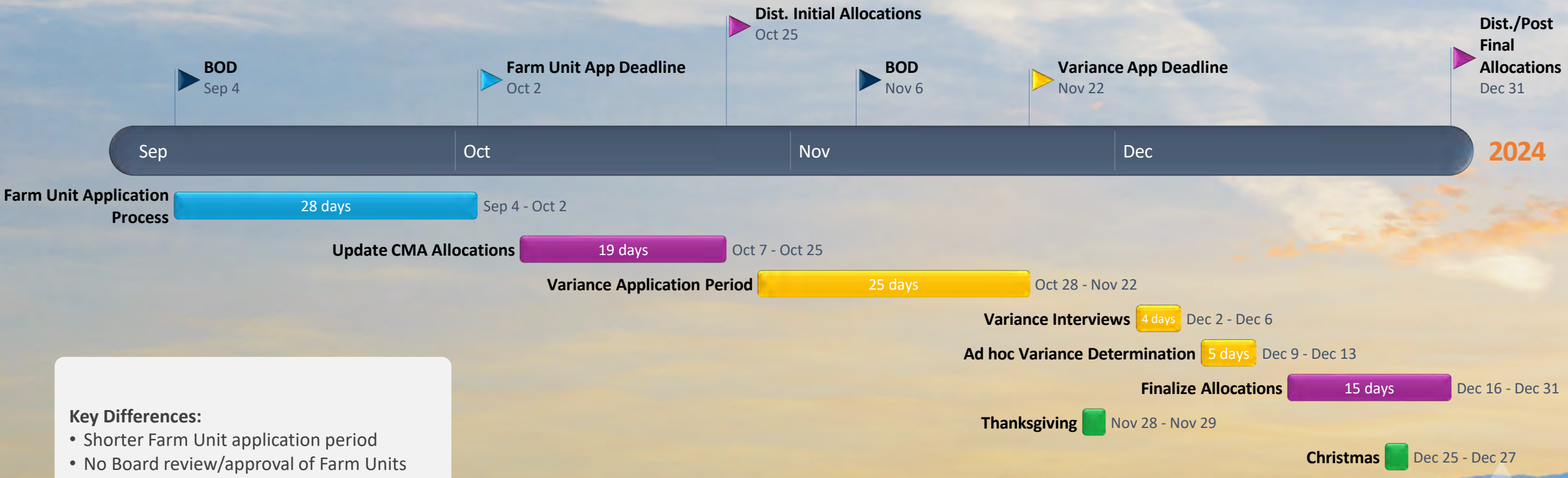
September 4, 2024

2025 Groundwater Allocation Implementation Schedule Options

- Two options for implementing groundwater allocations in the Central Management Area (CMA) are included on the following slides
- As part of either schedule option, staff recommends including a variance process to allow landowners time to review and comment on draft allocations for full Board or an ad hoc of the Board's review and decision of those requests **← Does the SAC/Board agree with including a variance process?**
- Description of draft schedule options:
  - ***Option 1*** is a condensed schedule where the goal is to distribute final 2025-2030 allocations by December 31, 2024. To achieve this goal, staff and a Board ad hoc will perform the review and determination of farm unit and variance requests
  - ***Option 2*** is structured such that the purpose is to allow the full Board to review and provide direction on Farm Unit and variance requests and contemplates a 2nd round variance process (if required). However, final 2025-2030 allocations would not be distributed until February 7, 2025, and may be further delayed if a 2nd variance process is needed
- **Which option does the SAC/Board want staff to implement? Or is there other feedback?**

Option 1 – Condensed

2025 Groundwater Allocation Implementation Schedule

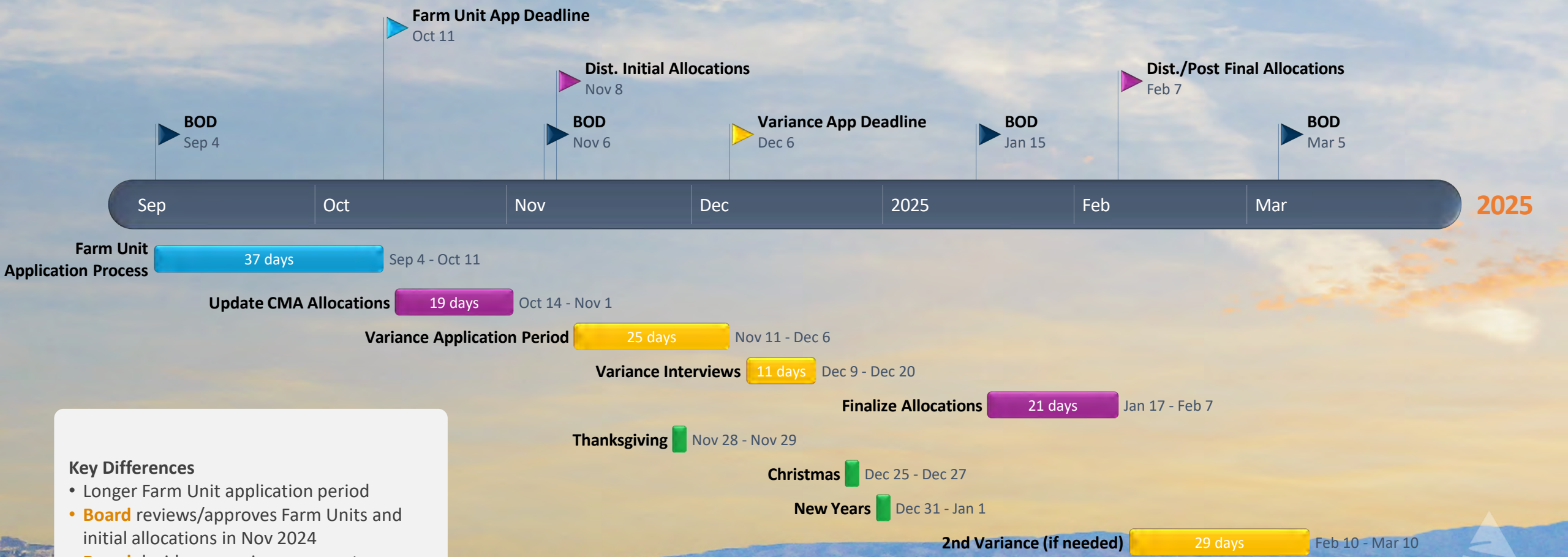


Key Differences:

- Shorter Farm Unit application period
- No Board review/approval of Farm Units and initial allocations
- **Ad hoc** decides on variance requests
- No 2nd round variance process

Option 2 – Expanded

2025 Groundwater Allocation Implementation Schedule



Key Differences

- Longer Farm Unit application period
- **Board** reviews/approves Farm Units and initial allocations in Nov 2024
- **Board** decides on variance requests
- 2nd variance process (if needed)

TO: Board of Directors
Agenda Item No. 10ciii

FROM: Jim Beck / Brian Van Lienden

DATE: September 4, 2024

SUBJECT: Discussion and Take Appropriate Action on Baseline Options

Recommended Motion
Board of Directors feedback requested.

Discussion
In July 2024, the Cuyama Basin Groundwater Sustainability Agency (CBGSA) Board requested that staff draft several groundwater allocation baseline options (single year and multi-year) to review at the September 4, 2024 CBGSA Board meeting, which is provided as Attachment 1 for Board feedback.

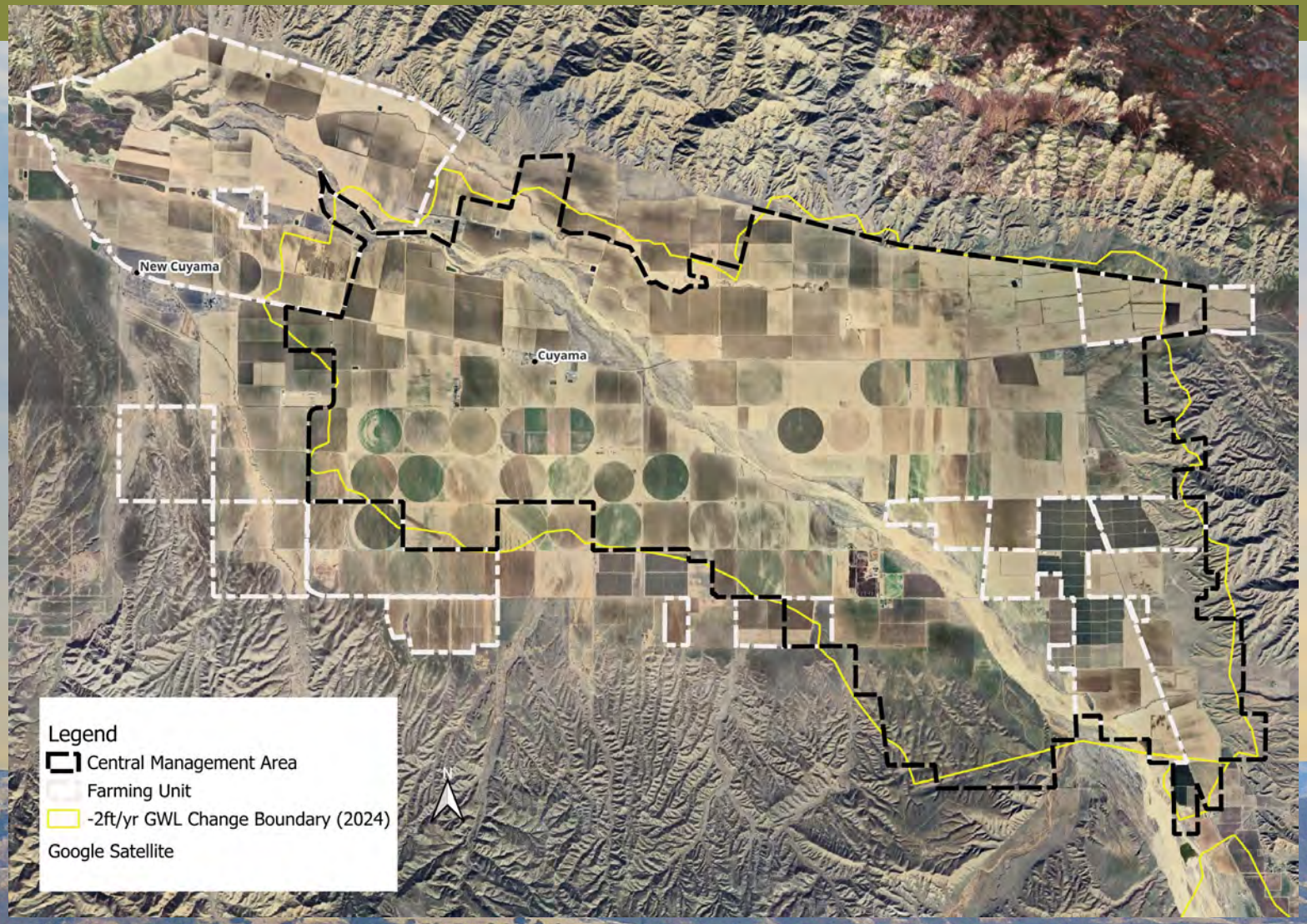
Cuyama Basin Groundwater Sustainability Agency

10ciii. Discuss and Take Appropriate Action on Baseline Options

Jim Beck / Brian Van Lienden

September 4, 2024

Baseline Options were developed for Updated CMA Operational Boundary with Existing Farming Units



Central Management Area Baseline Options

- Options for Updated Baseline:
  - Stay at current 50,600 AF
  - Use a modeled estimate:
    - Updated 2021 estimate: 34,000 AF
    - Use any of the single year options from 2019-2023 (see next slide)
    - Use a multi-year period average (see next slide)
  - Use reported pumping:
    - 2022: 31,300 AF
    - 2023: 25,900 AF
- Note that these estimates will change once CMA and farming unit boundaries are finalized

Central Management Area Baseline Options

No.	Pumping Year(s)	Estimate Method	Estimated Pumping (AF)	Hydrology Year Type	Irrigated Acreage
Single Year Baseline Options					
1	2019	Updated Model	28,200	Above average year	13,200
2	2020	Updated Model	33,700	Below average year	12,400
3	2021	**Old** Model	50,600	Critically dry year	n/a
4		Updated Model	34,000	Critically dry year	12,000
5	2022	Updated Model	33,300	Dry year	10,000
6		Reported/Metered	31,300	Dry year	n/a
7	2023	Updated Model	26,100	Wet year	9,500
8		Reported/Metered	25,900	Wet year	n/a
Multi-Year Baseline Options					
9	1998-2017	Updated Model	39,500	n/a	n/a
10	1998-2023	Updated Model	37,800	n/a	n/a
11	2019-2023	Updated Model	31,200	n/a	11,400
12	2021-2023	Updated Model	33,100	n/a	10,500
13	2020-2022	Updated Model	33,700	n/a	11,500

TO: Board of Directors
Agenda Item No. 10d

FROM: Jim Beck / Brian Van Lienden

DATE: September 4, 2024

SUBJECT: Review Public Comments on Amended Groundwater Sustainability Plan

Recommended Motion
None – information only.

Discussion
On July 31, 2024, the Cuyama Basin Groundwater Sustainability Agency (CBGSA) Board approved a public comment process for the amended Groundwater Sustainability Plan (GSP) including a comment response matrix.

Provided as attachment 1 is the public comment matrix that includes comments from workshop attendees and any comments made on chapters presented in public meetings beginning in 2024.

The matrix includes a draft response from CBGSA staff and is included for Board of Directors review and direction.

Summary of 2025 GSP Public Comments and GSA Staff Response

	Date of Comment	Topic	Comment	GSA Staff Response	Incorporated in Public Draft 2025 GSP?
1	Public Workshop (October 2023)	Basin-Wide Pumping	Since the basin is one interconnected watershed, the GSA should consider applying pumping allocations to everyone.	The Board provided direction to apply groundwater allocations to just the CMA and consider additional areas once data gaps are addressed.	Board direction included in the GSP
2	Public Workshop (July 2024)	Basin-Wide Pumping	The “one-size-fits-all” structure of the program is not appropriate for such a wide range of pumping and uses.	The Board provided direction to apply groundwater allocations to just the CMA and consider additional areas once data gaps are addressed.	Board direction included in the GSP
3	Public Workshop (October 2023)	General	Add major roads to maps in addition to the Highways.	The basemap was updated to include major roads on newly created GSP figures.	Yes
4	Public Workshop (October 2023)	Glidepath	Consider making more aggressive glidepath cuts early on to achieve sustainability more quickly.	The Board considered various glidepath scenarios and elected to continue using the origional glidepath.	Board direction included in the GSP
5	Public Workshop (October 2023)	Glidepath	Consider how the glidepath affects overall aquifer storage.	The Board considered various glidepath scenarios, and impacts to storage, and elected to continue using the origional glidepath.	Board direction included in the GSP
6	Public Workshop (July 2024)	Glidepath	An analysis of how the gradual reduction in pumping to 2038 will affect groundwater levels is needed.	An analysis was previously performed and presented to the Board, and the analysis was considered in setting groundwater levels sustainable managmenet criteria (Ch 5).	Yes
7	Public Workshop (October 2023)	Groundwater Allocations	Concerns with historical use in allocation methodology and impacts on landowner use.	The Board considered various allocation methodologies and decided to allocate based on historic use.	Board direction included in the GSP
8	Public Workshop (July 2024)	Groundwater Allocations	Using historical water use for determining allocation share unfairly disadvantages more recent pumpers and pumpers that have historically conserved water.	The Board considered various allocation methodologies and decided to allocate based on historic use.	Board direction included in the GSP
9	Public Workshop (July 2024)	Projects and Management Actions	Incentivizing certain irrigation practices could increase recharge.	This topic has previously been raised, but the Board has not directed staff to include as option at this time.	No
10	SAC Meeting (January 2024)	Plan Area (Ch 1)	Figure 1-17 shows there is water pumping occurring at locations where there is no pumping occurring in that area.	The figure was notated to say that some areas of the basin are supplied with seep and springs, but exact locations are not shown on the map.	Yes
11	Public Workshop (July 2024)	Projects and Management Actions	Most, if not all, of these projects appear infeasible. Pumping reductions are the only reasonable approach.	Pumping reductions have already been implemented, and the Board directed staff to continue with several projects listed in the GSP.	No
12	Public Workshop (July 2024)	Groundwater Allocations	The pumping reduction program does not consider actual groundwater levels, the potential for going below minimum thresholds, and impacts of climate change.	While pumping reductions were not set based on impacts to minimum thresholds, they were set to achieve sustainability by 2038 and sustainable management criteria was set for representative wells to be protective of groundwater level declines and impacts to beneficial uses and users. Sustainable yield under climate change was estimated and considered when developing pumping allocations.	Board direction included in the GSP
13	Public Workshop (October 2023)	Groundwater Allocations	Consider doing stormwater capture and recharge projects in addition to pumping reductions.	Stormwater capture is included as a project in the GSP.	Yes
14	Public Workshop (October 2023)	Groundwater Allocations	Concern with using historical use as a basis for pumping allocations.	The Board considered various allocation methodologies and decided to allocate based on historic use.	Board direction included in the GSP
15	Public Workshop (October 2023)	Groundwater Allocations	Consider requiring a greater pumping reduction by larger pumpers, perhaps by using a tiered system for pumping reductions.	The Board considered various allocation methodologies (including a tiered system) and decided to allocate based on historic use.	Board direction included in the GSP

Summary of 2025 GSP Public Comments and GSA Staff Response

	Date of Comment	Topic	Comment	GSA Staff Response	Incorporated in Public Draft 2025 GSP?
16	Public Workshop (October 2023)	Groundwater Allocations	Consider pumping allocations in the Northwestern region.	The Board provided direction to apply groundwater allocations to just the CMA and consider additional areas once data gaps are addressed.	Board direction included in the GSP
17	Public Workshop (October 2023)	Groundwater Allocations	Farmers should consider transitioning to lower water use crops.	The GSA has authority to manage groundwater in the basin, and it is not the GSA's role or authority to make land use decisions.	No
18	Public Workshop (July 2024)	Projects and Management Actions	The GSA should consider other types of rangeland management other than prescribed burning.	This is not included in the 2025 GSP, but can be considered in future updates.	No
19	Public Workshop (October 2023)	Sustainable Management Criteria (SMCs) / Data Management System (DMS)	Consider adding more visual displays of basin sustainability criteria and conditions to GSA website or DMS.	An update is being considered for the DMS, and staff will continue to recommend improvements to the DMS and the website as appropriate.	Yes
20	BoD Meeting (May 2024)	Sustainable Management Criteria (SMCs)	Concern with the removal of any language related to threshold regions that were eliminated in setting sustainable management criteria using a common methodology.	The updated SMC methodology considers local conditions at each representative well; therefore, threshold regions are no longer needed.	Board direction included in the GSP
21	Public Workshop (October 2023)	Undesirable Results for GW Levels	Consider including permanent loss of groundwater storage as part of the undesirable results definition.	The Board considered options for groundwater storage SMCs, but decided to continue to use groundwater levels as a proxy for loss of storage.	Board direction included in the GSP
22	Public Workshop (July 2024)	Groundwater Allocations / Water Quality	The pumping reduction program should consider protection of water quality from arsenic and nitrates.	The groundwater allocations were established to achieve sustainability for groundwater levels. The groundwater monitoring program tracks arsenic and nitrates, and potential issues can be addressed using the adaptive management process.	Board direction included in the GSP
23	SAC Meeting (April 2024)	Basin Setting (Ch 2)	Update the hydrographs in the vertical gradient section to display 100 feet so the data can be seen.	The y-axis scale in the hydrographs have been reverted to a reduced scale to allow more visibility of the data.	Yes
24	SAC Meeting (July 2024)	General	Request for better representation of land use in Cuyama (i.e. idle land).	An updated map was included in the July 31, 2024 Board packet, but previous irrigated land use maps may be included in future GSP updates.	No

TO: Board of Directors
Agenda Item No.10e

FROM: Jim Beck / Brain Van Lienden

DATE: September 4, 2024

SUBJECT: Discuss and Take Appropriate Action on Amended GSP [All Chapters]

Recommended Motion
Approve the 2025 amended Groundwater Sustainability Plan.

Discussion
The draft Cuyama Basin Groundwater Sustainability Agency (CBGSA) 2025 amended Groundwater Sustainability Plan is included on the CBGSA website (www.cuyamabasin.org/resources) for review and consideration of preliminary approval.

Redline versions of the below Chapters/sections are provided as Attachment 2 for ease of review, while the clean versions of all chapters/sections are hosted on the Cuyama Basin website.

- Executive Summary
- Chapter 7 “Projects and Management Actions”
- Chapter 8 “Implementation Plan”

Final approval of the GSP will occur at a public hearing on November 6, 2024, and a public workshop presenting the final draft GSP is being scheduled for the September/October 2024.

Cuyama Basin Groundwater Sustainability Agency

8e. Discuss and Take Appropriate Action on Amended GSP

Jim Beck / Brian Van Lienden

September 4, 2024

Discuss and Take Appropriate Action on Amended GSP

- The full public review draft of the amended GSP has been posted on the CBGSA website
  - Redline versions of the following chapters have been provided in Board/SAC packets for review:
    - Executive Summary
    - Chapter 7: Projects and Management Actions
    - Chapter 8: Implementation Plan
- Amended GSP chapters reflect:
  - New information not available when 2020 GSP was developed
  - Updated information developed since previous draft was developed (e.g. water budgets)
  - Updated policies approved by the CBGSA Board
  - Responses to comments received on previously provided draft chapters
- Staff is requesting Board approval to begin 30-day public review period
- Comments can be provided by email or by mail to Taylor Blakslee
  - These will be considered when preparing the full Public Draft version of the GSP in September 2024

Chapter 7 Projects and Management Actions

7.1 Introduction

This chapter of the Cuyama Basin Groundwater Sustainability Agency's (CBGSA's) 2025~~Draft~~ *Groundwater Sustainability Plan* (GSP) includes the Projects, Management Actions and Adaptive Management information that satisfies Sections 354.42 and 354.44 of the Sustainable Groundwater Management Act (SGMA) regulations.[1] These projects and their benefits will help achieve sustainable management goals in the Cuyama Groundwater Basin (Basin).

7.2 Management Areas

The CBGSA has designated two areas in the Basin as management areas: the Central Basin Management Area and the Ventucopa Management Area, which are both defined as regions with modeled overdraft conditions greater than 2 feet per year that are projected by the Cuyama Basin Water Resources Model (CBWRM)~~model~~ to drop below minimum threshold levels before 2040 (see Figure 7-1).~~Figure 7-1).~~ Management actions and projects within these management areas may be managed by the Cuyama Basin Water District pursuant to any agreement with the CBGSA. The two management areas are generally separated from one another by the Santa Barbara Canyon Fault. The remaining areas in the Basin are not included in a management area, and generally operate with balanced groundwater pumping and recharge, based on modeling of Basin water budgets. Future changes in management area boundaries will be considered based on updates to numerical modeling as additional information is collected.

As discussed below in Section 7.5.2, pumping allocations have been developed for the Central Management Area and farming units, but not in other portions of the Basin. However, the CBGSA will develop a management plan for the Ventucopa Management Area, which may or may not include pumping restrictions in the future. This decision will be made as more information becomes available and the basin groundwater model is updated.

Central Basin Management Area

The Central Basin Management Area is located in the middle of the CBGSA area~~,~~ and includes the community of Cuyama as well as the surrounding agricultural land uses that are located in areas with greater than 2 feet overdraft. The Central Management Area has been updated for the 2025 GSP by utilizing the updated 2024 CBWRM. While the Cuyama Community Service District (CCSD) service area also has modeled overdraft exceeding 2 feet, it is not included in the management area because it is a domestic user of relatively small quantity (i.e., about 150 AFY).

[1] SGMA's requirements for GSPs can be read here: https://water.ca.gov/LegacyFiles/groundwater/sgm/pdfs/GSP_Emergency_Regulations.pdf

Ventucopa Management Area

The Ventucopa Management Area is located south of the Central Basin Management Area and includes the community of Ventucopa. ~~The two management areas are generally separated from one another by the Santa Barbara Canyon Fault. Both are located nearly entirely within the boundaries of the Cuyama Basin Water District. The remaining areas in the Basin are not included in a management area, and generally operate with balanced groundwater pumping and recharge, based on modeling of Basin water budgets.~~The 2020 GSP noted that the CBGSA intended to re-evaluate the need for pumping reductions in the Ventucopa region of the Basin after further evaluating groundwater conditions over a two-to-five-year period following submission of the GSP. At this time, the CBGSA still believes that it is premature to prescribe pumping reductions in the Ventucopa region on the basis of CBWRM model results because the development of the model in that portion of the Basin posed significant challenges:

- Limited groundwater level data was available for model calibration. Only three calibration wells were available in that area of the Basin (wells 62, 85, and 617). Since submission of the GSP, a new multi-completion monitoring well has been installed in the area, which will provide additional information for model calibration going forward.
- Characterization of streamflows and their effect on the groundwater aquifer was challenging because there were no streamflow gages on the Cuyama River with measurements taken during the calibration period and limited information was available regarding stream geometry in the region. Since submission of the GSP, a new streamflow gage has been installed on the Cuyama River upstream of the Ventucopa region.
- Groundwater pumping levels in the region were based on estimates from available land use information. However, unlike the central area of the Basin, cropping patterns in this portion of the Basin were not provided by local landowners but were instead estimated using satellite imagery. Furthermore, specific well locations were not available in this portion of the Basin. The CBGSA has addressed these shortcomings through the requirement of landowners to install meters on production wells and to report well information starting in calendar year 2022.
- The magnitude of water budget estimates in the region were relatively small as compared to the Basin as a whole, which meant that a small change in the estimate for a single water budget component could have a large effect on the estimated change in storage (and corresponding estimates of long-term groundwater elevation change). In particular, some Basin stakeholders have raised a concern that the model may be underestimating stream seepage into the aquifer in this stretch of the Cuyama River.
- Due to time and budget constraints during GSP development, model development and calibration prioritized development of an accurate representation of the central Basin portion of the aquifer (where long-term overdraft was known to occur) with lesser emphasis on other parts of the model. The primary model calibration objective during CBWRM development of the Ventucopa region was to ensure that groundwater levels matched historical trends at the boundary of the central Basin and Ventucopa region.

In light of the uncertainties, and lack of sufficient data on the water budget components to verify the model projected water budget, the CBGSA determined that implementing a management action in the region at this stage may be premature. Instead, the CBGSA is determined to continue to compile and analyze additional data and information on groundwater levels, surface water flows, groundwater pumping, as well as information on channel geometry and subsurface conditions. This information will be used to further enhance the capabilities of the model for analysis of projected water budgets and groundwater conditions in the region, and to determine possible management actions to address any possible projected overdraft conditions. As noted above, the CBGSA plans to develop a management plan for the Ventucopa Management Area in the future, which may or may not provide for pumping restrictions.

Northwestern Region (Not a Management Area)

In the northwestern region, management actions were not included in the GSP because the available information did not indicate a projected overdraft in that region. The following information was considered during development of the 2020 GSP, and continues to be relevant for this updated 2025 GSP:

- The CBWRM model indicated a balance between groundwater inflows and outflows in the region in all of the water budget scenarios that were simulated.
- The Cleath-Harris Geologists (CHG) document Sustainability Thresholds for Northwestern Region, Cuyama Valley, dated December 7, 2018, developed under contract with the North Fork Vineyard. This document identified minimum thresholds for this area that would be protective of groundwater pumping capacity for production wells in this area. CHG proposed minimum thresholds for the region would result in a twenty percent reduction in the saturated thickness screened by the production wells, which would produce a similar reduction in transmissivity and pumping capacity of the production wells. As discussed above, the CBGSA set thresholds that are somewhat more conservative than this, representing a fifteen percent reduction in saturated thickness.

The technical analyses described in Section 5.2 regarding Potential Corrective Action 1 indicates that the potential drawdown due to the minimum thresholds set for wells 841 and 845 could have a small effect on GDEs and domestic wells in the area. However, the thresholds set in the monitoring wells located in the vicinity of these Basin resources are set at protective levels that would be indicative of any issues that may arise, allowing the CBGSA to make an appropriate adaptive management response (Section 7.6). Therefore, the available evidence indicates that management actions are not required in this region at this time.

~~<<Insert Management Area map – this is placeholder map only>>~~

Figure 7-1: CBGSA Management Areas

7.3 Overview of Projects and Management Actions

The CBGSA evaluated a range of potential projects and management actions to help address overdraft and move the Basin toward sustainability. Evaluation of the identified projects and management actions ~~has~~ resulted in a set of ~~proposed~~ activities in the first approved GSP.~~,~~ These ~~proposed~~ activities are shown in Table 7-1~~Table 7-1~~~~Table 7-1~~, along with their current status, potential timing, and es~~an~~ti~~mcip~~ated costs.

This list of activities has since been updated~~Benefits are summarized in Section 7.2~~ and expanded throughout implementation. Each annual reported included an updated version of **Table 7-1**, and new projects and management actions have been added. A more through description of each activity, including benefits and justification, are discussed in ~~detail in~~ Sections 7.4 and 7.5.

Table 7-1: Proposed Projects, Management Actions, and Adaptive Management Strategies

Activity	Current Status	Anticipated Timing	Estimated Cost[a]
Project 1: Flood and Stormwater Capture	Water rights analysis of potential water supplies currently underway~~Conceptual project evaluated in 2015~~	• Feasibility study: 0 to ~~85~~ years • Design/Construction: ~~85~~ to 15 years	• Study: $1,000,000 • Flood and Stormwater Capture Project: $600-$800 per ~~-~~AF ($2,600,000 – 3,400,000 per year)
Project 2: Precipitation Enhancement	~~Initial~~ Feasibility Study completed in August 2024 ~~2016~~	• Refined project study: 0 to ~~82~~ years • Implementation of Precipitation Enhancement: ~~80~~ to ~~155~~ years	• Study: $200,000 • Precipitation Enhancement Project: $25 per ~~-~~AF ($150,000 per year)
Project 3: Water Supply Transfers/Exchanges	Not yet begun	• Feasibility study/planning: 0 to ~~85~~ years • Implementation in ~~85~~ to 15 years	• Study: $200,000 • Transfers/Exchanges: $600-$2,800 per ~~-~~AF (total cost TBD)
Project 4: Improve Reliability of Water Supplies for Local Communities	In progress for CCSD; not yet begun for other communities~~Preliminary studies/planning complete~~	• Feasibility studies: 0 to ~~52~~ years • Design/Construction: ~~54~~ to ~~75~~ years	• Study: $100,000 • Design/Construction: • $1,800,000
Project 5: Flow Meter Calibration Program	Not yet begun	• Implementation: 0 to 6 years	• $50,000 for program setup • $2,500 per meter per year (100 meters) = $250,000

Management Action 1: Basin-Wide Economic Analysis	Completed~~Not yet begun~~	December 2020~~ 2021~~	$60~~100~~,000
Management Action 2: Pumping Allocations in Central Basin Management Area	Allocations developed and implemented for 2023 and 2024 ~~Preliminary coordination begun~~	• ~~Pumping Allocation Study completed: 2022~~ • Allocations implemented: 2023 through 2040	• Plan: $300,000 • Implementation: $150,000 per year
Adaptive Management	~~Not yet begun~~Board ad-hoc committee has been formed and is considering potential actions	Only implemented if triggered; timing would vary	TBD
[a] Estimated cost based on planning documents and professional judgment AF = acre-feet			

7.3.1 Addressing Sustainability Indicators

The ~~proposed~~ projects would contribute toward eliminating the projected groundwater overdraft described in the Chapter 2's Water Budget section and in maintaining groundwater levels above those identified in Chapter 5 by reducing groundwater pumping or enhancing net recharge into the groundwater aquifer. The sustainability indicators are measured directly or by proxy, with groundwater elevation used as either the direct or proxy indicator for all sustainability indicators with the exception of water quality and subsidence. Table 7-2~~Table 7-2~~Table 7-2 summarizes of how the projects and management actions in this GSP will address the applicable sustainability indicators for the Basin. Seawater intrusion is not applicable to the Basin, due to distance from the Pacific Coast.

Physical benefits of the projects and management actions in the GSP are described under each project and action in Section 7.4 and Section 7.5, below.

Activity	Sustainability Indicator				
	Chronic Lowering of Groundwater Levels	Reduction of Groundwater Storage	Degraded Water Quality	Subsidence	Depletions of Interconnected Surface Water
Project 1: Flood and Stormwater Capture	Would increase recharge in the Basin, directly contributing to groundwater levels.	Would increase recharge in the Basin, directly contributing to groundwater storage.	Would contribute to groundwater levels through increased recharge, reducing groundwater quality degradation associated with declining groundwater levels.	Would support maintaining groundwater levels in the Basin, reducing potential for subsidence.	Increasing groundwater recharge with flood and stormwater capture would reduce the potential for groundwater levels to decline and negatively impact surface water flows.
Project 2: Precipitation Enhancement	Increases precipitation and associated groundwater recharge; reduces groundwater pumping because increased precipitation would reduce irrigation needs.	Increases volume of stored groundwater; reduces groundwater pumping	Would increase groundwater recharge, reducing groundwater quality degradation associated with declining groundwater levels.	Reduced groundwater pumping and increased groundwater recharge reduces the cause of subsidence	Would increase surface water flows in the Basin and increase groundwater recharge, which together would reduce the potential for negative surface water flow impacts associated with decreasing groundwater levels.
Project 3: Water Supply Transfers/Exports	Would allow for increased stormwater capture without interfering with downstream water rights, directly contributing to groundwater levels.	Would allow additional groundwater recharge of stormwater, directly contributing to groundwater storage.	Would allow for increased groundwater recharge, reducing groundwater quality degradation associated with lowering of groundwater levels.	Would increase potential groundwater recharge, reducing the potential for subsidence.	Would increase groundwater recharge, which would reduce the potential for negative surface water flow impacts associated with decreasing groundwater levels.
Project 4: Improve Reliability of Water Supplies for Local Communities	Would provide an alternate pumping supply for CCSD, CMWC and VWSC customers to reduce water supply reliability issues caused by historical groundwater level reductions in the Basin.	N/A	Provides for improved water quality in the potable water system, and through construction of compliant wells, reduces potential for groundwater quality impacts of improperly designed/constructed wells and failing wells within CCSD and VWSC systems.	N/A	N/A
Project 5: Flow Meter Calibration Program	Would provide irrigation pump operators more accurate flow data to reduce accidental over pumping and better comply with pumping allocations	Would reduce potential unintentional over-pumping directly contributing to groundwater storage.	Could decrease potential unintentional over-pumping and reducing groundwater extraction therefore reducing groundwater quality degradation associated with declining groundwater levels.	Could mitigate unintentional groundwater extraction, reducing the potential for subsidence.	Could decrease potential unintentional over-pumping and reducing groundwater extraction therefore reducing groundwater quality degradation associated with declining groundwater levels.
Management Action 1: Basin-Wide Economic Analysis	Would evaluate the long-term economic impacts of project implementation, which will allow the region to plan for economic changes if implementation is pursued and help avoid economically catastrophic decision-making that could result in dramatic changes to groundwater use and levels.				
Management Action 2: Pumping Allocations in Central Basin Management Area	Would limit groundwater pumping, with allocations decreasing over time until groundwater pumping reaches sustainability	Reducing groundwater pumping will help decrease the reduction of groundwater storage associated with high levels of pumping.	Reducing groundwater pumping will help alleviate groundwater degradation associated with lowering of groundwater levels.	Reduced groundwater pumping would reduce the risk of subsidence associated with lowering of groundwater levels.	Reduced groundwater pumping would help protect groundwater levels, thereby reducing the potential for negative impacts to surface water flows associated with lowering groundwater levels.
Adaptive Management	Adaptive management actions would be triggered if groundwater levels decrease sufficiently or do not demonstrate adequate recovery as projects are implemented. Adaptive management projects that are implemented would be selected because they would help address these sustainability indicators.				

Notes:
CCSD = Cuyama Community Services District
CMWC = Cuyama Mutual Water Company
VWSC = Ventucopa Water Supply Company

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7.3.2 Overdraft Mitigation

The ~~proposed~~ projects and management actions would support maintenance of groundwater levels above minimum thresholds through increased recharge or through reductions in pumping. Overdraft is caused when pumping exceeds recharge and inflows in the Basin over a long period of time. Improving the water balance in the Basin will help to mitigate overdraft.

7.3.3 Water Balance Management for Drought Preparedness

Communities in the Basin rely on groundwater to meet water needs. During drought, groundwater becomes more important due to limited precipitation. Projects that support groundwater levels through increased recharge help to protect groundwater resources for use during future drought, as well as help protect the Basin from the impacts of drought on groundwater storage. Projects that reduce pumping will help manage the Basin for drought preparedness by reducing demands on the Basin both before and during drought, supporting groundwater levels in non-drought years, and decreasing the impacts of drought on users, reducing the need to increase pumping when precipitation levels are low.

7.4 Projects

Projects included in this GSP are generally capital projects that could be implemented by the CBGSA or its member agencies on a volunteer basis that provide physical benefits to enhance supplies.

7.4.1 Flood and Stormwater Capture

Flood and stormwater capture would include infiltration of stormwater and flood waters to the groundwater basin using spreading facilities (recharge ponds or recharge basins) or injection wells. Spreading basins are generally more affordable than injection wells because water does not need to be treated prior to recharge into the Basin. While specific recharge areas have not yet been selected, areas of high potential for recharge were identified north and east of the Cuyama River near the Ventucopa Management Area, as well as in select areas of the Central Management Area. It is likely that locating spreading facilities near the Cuyama River represents the easiest method of capturing and recharging flood and stormwaters. Agricultural lands may be used in lieu of or in addition to specialized spreading facilities, or installation of "mini dams" on the Cuyama river to slow flows and increase in-stream recharge. The likeliest of these flood and stormwater capture and recharge options to be implemented is the use of spreading basins, because it will maximize volumes of water captured and recharged into the groundwater basin. Agricultural spreading is usually achieved through intentional overirrigation; in the Basin, agricultural irrigation uses groundwater, and new facilities would still be required to implement agricultural spreading that would not negatively impact groundwater levels. Mini dams could have negative environmental impacts and would not capture as much flow as dedicated spreading basins.

This project would include development of a feasibility study to identify specific flood capture and recharge locations and to refine the potential yield and cost, as well as determine the downstream impacts of implementation and how to address those potential impacts.~~..~~

Current Status

The CBGSA received SGMA implementation grant funding from DWR to help understand the feasibility of future flood and stormwater capture. Specifically, the funding was sought to perform a water rights analysis on flood and stormwater capture flows in the Basin to understand the feasibility of further developing a stormwater capture project in the Basin given water availability and existing water rights. An analysis was performed using Lake Twitchell historical operations data to identify historical periods in which there were managed releases at the lake and therefore water could be diverted upstream without impacting water storage in the lake. This analysis indicated that upstream diversions could be made in approximately 11% of all years (i.e. 7 out of 62 years from 1962-2023). The CBGSA intends to perform additional analyses following submittal of the 2025 GSP to assess the feasibility of implantation of a flood and stormwater capture project. Updates on this project will continue to be included in Annual Reports and future GSP updates.

Public Notice and Outreach

Project notice and outreach would likely be conducted during implementation of a flood and stormwater capture project. Some of this outreach would likely occur as part of the California Environmental Quality Act (CEQA) process (see below), though additional outreach may be conducted depending on public perception of the proposed project. Public notice and outreach is not anticipated during development of the feasibility study, beyond potential outreach to landowners whose property is identified as potential sites for spreading facilities.

Permitting and Regulatory Processes

Completion of a feasibility study would not require any permits or regulatory approvals beyond approval of the governing board for the agency funding the study or contracting with any potential consultant who may be retained to complete the analysis.

Implementation of a flood and stormwater capture and recharge project would require construction permits, streambed alteration agreements from the California Department of Fish and Wildlife for diversions from the Cuyama River, CEQA compliance, and potential 401 permits from U.S. Army Corps of Engineers. Additional permits may be required to complete construction and initiate operation of spreading facilities. The CBGSA would need to secure easements to or purchase the land for the spreading facilities. Additionally, the CBGSA may need to obtain surface water rights agreements from the California State Water Resources Control Board. Any water rights would need to address water rights existing downstream water rights.

Project Benefits

Implementation of flood and stormwater capture projects would provide additional infiltration into the Basin, which would increase the volume of groundwater in the Basin, reducing overdraft and increasing available supply. The 2015 *Long Term Supplemental Water Supply Alternatives Report* (Santa Barbara County Water Agency [SBCWA], 2015), completed an analysis of potential stormwater recharge options along multiple rivers in Santa Barbara County, including Cuyama River. The analysis assumed the

Cuyama River would experience sufficient flows for stormwater recharge three of every 10 years, and a maximum available stormwater volume during those events as 14,700 acre-feet (AF). Capturing this volume of water would require 300 acres of land for spreading facilities, and could provide ~~a~~ up to 4,400 acre-feet per year (AFY) of stormwater (averaged over 10 years), assuming the maximum event year supply is captured. As noted above, the analysis that was recently conducted of inflows into Lake Twitchell indicate that flows could be diverted approximately once every eleven years; therefore, the actual benefits would likely be lower. Benefits of an implemented floodwater/stormwater capture project would be measured by the volume of flow entering the spreading facility, less an assumed percentage of evaporative loss.

Actual benefits could be lower once evaporative loss is accounted for, and if the final design for spreading facilities is not sized for the maximum storm event, or if the maximum event year is not realized as frequently as anticipated. If coupled with precipitation enhancement (see Section 7.3.2), additional benefits may be realized, though some overlap in benefits may occur.

Project Implementation

The circumstance of implementation for a flood or stormwater capture project would be if the refined feasibility study recommends a project and finds it is both cost effective and would result in a meaningful volume of incremental supply.

~~Completion of the feasibility study would be undertaken by the CBGSA, which would hire a consultant to perform the analysis. In addition, the CBGSA would initiate coordination activities with downstream users to evaluate the potential for a stormwater capture project in the Basin to affect downstream users' supply reliability and develop potential projects or actions to offset supplies that may be diverted by stormwater capture and recharge in the Basin.~~

Implementation of spreading facilities for stormwater capture would require land acquisition, construction of spreading facilities, diversion from Cuyama River, and associated pipelines and pumps. If pursued, the CBGSA anticipates implementing the project either directly or through one of its member agencies.

Supply Reliability

The success of a flood and stormwater capture project depends on the frequency of precipitation events that result in sufficient flows for capture and recharge, the recharge capacity of the spreading facilities, and the location of flows in relation to the diversion point to the spreading facilities. Rainfall is generally limited to November through March in the region, and total rainfall is low, averaging 13 inches over the last 50 years (see Water Budget section of Chapter 2). The project would allow for the limited surface water flows to be captured and used, and if implemented, a flood and stormwater capture project would improve supply reliability in the Basin by increasing groundwater recharge, allowing more water to be available to Basin users.

Legal Authority

The CBGSA, through its member water supply agencies, ~~-~~has the legal authority to develop~~conduct~~ a ~~feasibility study for~~ flood and stormwater capture ~~and recharge~~ project. The CBGSA does not have ~~Once a preferred alternative is identified by~~ the authority to increase its stormwater capture at a level that~~feasibility study, the project~~ would impede downstream senior~~be implemented by the CBGSA or one of its member agencies . Implementation of the project would also depend on the outcomes of a~~ water rights holders from accessing their~~evaluation to clarify the CBGSA's ability capture flood and stormwater without impacting downstream water rights. If this project would affect downstream~~ water rights. ~~, the CBGSA would need to negotiate an exchange with downstream users to avoid adverse downstream effects.~~

~~Implementation would require acquisition of targeted land for spreading facilities, which may require purchase or an easement to allow for project implementation. As public water supply agencies, any of the CBGSA members have authority to implement the project once land is acquired and applicable permits secured.~~

Project Costs

Implementation costs would vary depending on the ultimate size and location of the spreading facilities, and any compensatory measures required for downstream users. Per acre-foot costs would also vary depending on the amount of stormwater captured and successfully recharged. The primary cost for implementation of spreading facilities is the land purchase cost. Because the project would capture flood and stormwater (as opposed to imported or purchased water), there would be no supply costs to operate the project. The 2015 report estimated flood and stormwater capture and recharge from Cuyama River using spreading basins would cost $600 to $800 per AF (SBCWA, 2015).

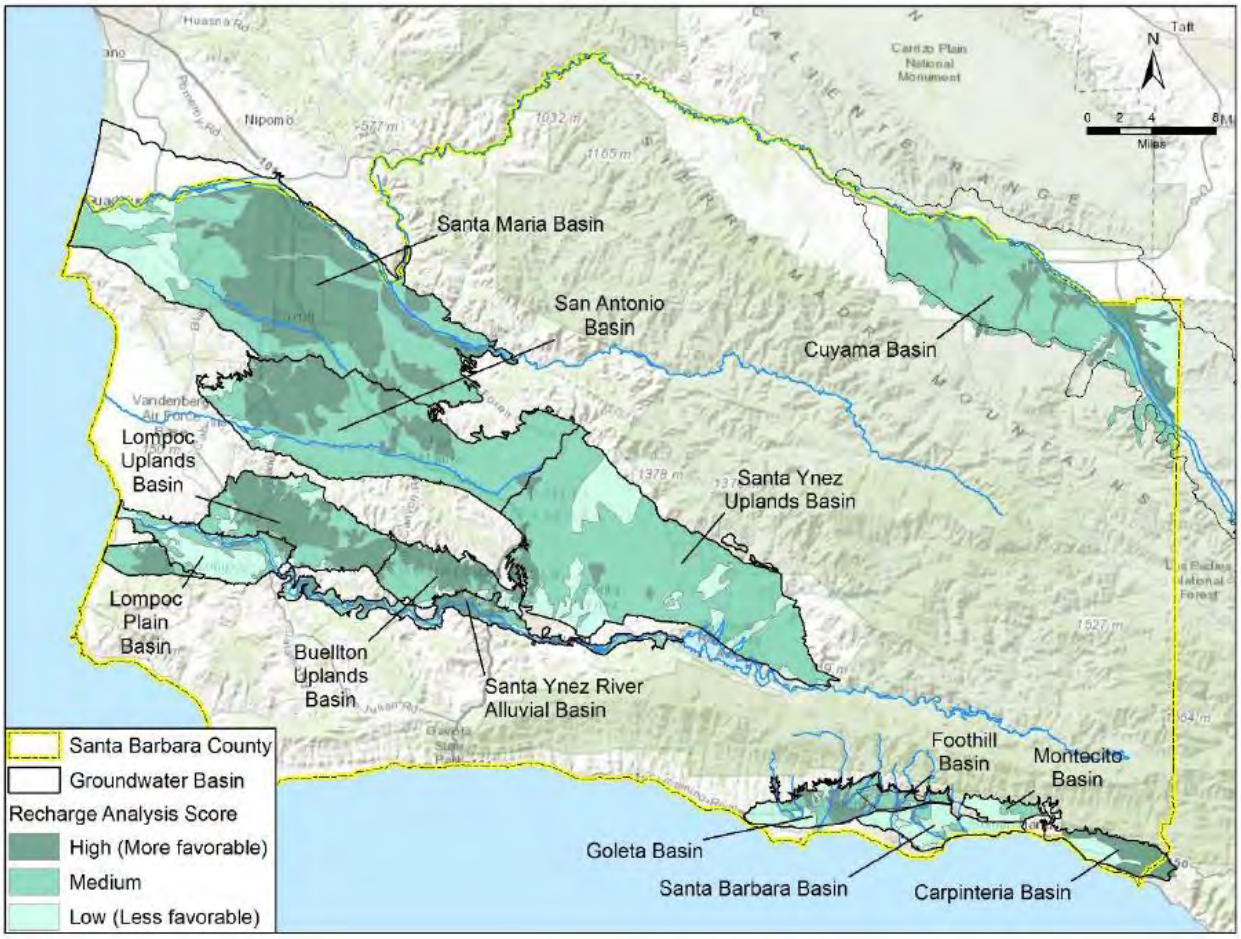
Technical Justification

The use of spreading facilities for groundwater recharge is common in many areas across the state where groundwater basins are used for storage. The 2015 *Long Term Supplemental Water Supply Alternatives Report* (SBCWA, 2015) provides the basis for the estimated maximum volume of water that could be recharged by a flood or stormwater capture and recharge project. The storage potential of the Basin is based on the highest historical storage less the current storage, with the difference being unused storage potential. The Cuyama Basin has a high storage potential, greater than 100,000 AF, meaning it would be able to accommodate recharge of more than 100,000 AF. The size of the spreading facilities is based on the volume of water available for capture, and the recharge factor of a proposed site. The volume of water that could be recharged is based on the volume of water that could be diverted off of the river during peak storm flow events. Recharge potential was determined by analyzing the existing groundwater depth and hydrological soil type, and infiltration rates based on relative infiltration rate for hydrologic soil groups. High recharge potential were areas with hydrologic soils in group A/B, and had infiltration rates of 0.6 feet per day. As shown in Source: SBCWA, 2015

Figure 7-2~~Source: SBCWA, 2015~~

~~Figure 7-2Source: SBCWA, 2015~~

~~Figure 7-2~~, the majority of the Basin located in Santa Barbara County has medium or high potential for groundwater recharge, with the highest potential east of the Cuyama River in the Ventucopa Management Area. The 2015 report was limited to Santa Barbara County and does not cover the portions of the Basin located in Ventura, San Luis Obispo, and Kern counties.



Source: SBCWA, 2015

Figure 7-2: Groundwater Recharge Potential in Santa Barbara County

The 2015 report recommended additional studies to refine the high-level analysis in the report. Under this project, the CBGSA would develop a study to refine the areas of potential recharge, including areas of the Basin with potential to provide land for spreading facilities that were excluded from the 2015 report due to being located outside of Santa Barbara County. The feasibility study would, calculate the potential evaporative loss, evaluate alternatives to determine the preferred size and location of spreading facilities, refine costs for the alternatives, and calculate the potential supply from implementation of the preferred alternative.

Basin Uncertainty

This project would take advantage of the uncertain rainfall in the region and capture it for future use when precipitation levels are high. This would help bolster groundwater supplies and improve supply reliability in the Basin.

CEQA/NEPA Considerations

The feasibility study would not trigger CEQA or National Environmental Policy Act (NEPA) actions because it does not qualify as a project under either program. If a flood and stormwater capture project is implemented, CEQA would be required and completed prior to construction. NEPA would only be required if federal permitting, such as a 401 permit from U.S. Army Corps of Engineers, or if federal funding is pursued.

7.4.2 Precipitation Enhancement

A precipitation enhancement project would involve implementation of a cloud seeding program to increase precipitation in the Basin. This project would target cloud seeding in the upper Basin, southeast of Ventucopa, and would include introduction of silver iodide into clouds to increase nucleation (the process by which water in clouds freeze to then precipitate out). Based on the findings of the *Feasibility/Design Study for a Winter Cloud Seeing Program in the Upper Cuyama River Drainage, California* (SBCWA, 2016), such a program would use both ground-based seeding and aerial seeding to improve the outcomes of the program. Ground-based seeding would be conducted using remote-controlled flare systems, set up along key mountain ridges and could be automated. Aerial seeding would use small aircraft carrying flare racks along its wings to release silver iodide into clouds while flying through and above them.

Precipitation enhancement modeling assumed cloud seeding would increase precipitation by 10 percent from November through March, the time of the year with highest potential for rainfall in the Basin, for an average annual increase in precipitation of about 16,000 AF. With this assumption regarding precipitation increase, the numerical modeling estimated that an increase of 1,500 AF of additional annual average supply within the Basin over 50 years could be achieved. The portion of the increased precipitation would potentially benefit areas downstream of the Cuyama Basin.

This project would complete a detailed study to refine the potential yield and cost of implementation in the Basin.

Current Status

The CBGSA received SGMA implementation grant funding to perform a study to help understand the benefits of a potential precipitation enhancements project and help determine if this action should be pursued and implemented in the Basin. The CBGSA contracted with the Desert Research Institute (DRI) to assess cloud seeding effects on Santa Barbra County and the Cuyama Valley. A proposal was submitted in September 2023 and work was initiated in October 2023. The final report is expected to be competed in October 2023.

Public Notice and Outreach

Completion of thea detailed study included status updateswould include at severalleast one public meeting (potentially at a regularly scheduled CBGSA board meetings. The final results of the study were presented at the MONTH YEAR board meeting. At this time, the CBGSA has not approved the implementationBoard meeting) to present the details of a precipitation enhancement project, costs and benefits, as well as provide an opportunity to receive comments from the public about potential concerns. If a precipitation enhancement project is pursued for implementation, but if it is pursued in the future the projectit would not require public notice or outreach, except for approval by a governing body for the CBGSA that would occur in a public meeting.

Permitting and Regulatory Processes

Completion of a study to refine the feasibility of a precipitation enhancement project didwould not require any permits or undergo a regulatory process. If a precipitation enhancement project is pursued for implementation, it is expected to be implemented under the existing SBCWA program, and would be covered under existing permits for that program.

Project Benefits

The *Feasibility/Design Study for a Winter Cloud Seeing Program in the Upper Cuyama River Drainage, California* (SBCWA, 2016) found that cloud seeding activities both in the region and in other locations around the world resulted in increased precipitation. This increase was found to be an increase in duration, rather than intensity. The existing cloud seeding program in Santa Barbara County was estimated to increase precipitation between 9 and 21 percent between December and March. The feasibility study estimated average seasonal increases of 5 to 15 percent if this program is implemented.

Based on a 10 percent increase in precipitation between November and March, modeling demonstrates an average annual benefit of 1,500 AF per year could be achieved over a 50 year period. This includes an annual average of 400 AF of deep percolation, 400 AF available in stream seepage, and 700 AF in boundary flow. There would also be an average annual increase in Cuyama River outflow of 2,700 AF. Figure 7-3 shows the potential long-term benefits of a precipitation enhancement program. Actual benefits would be measured by evaluating rainfall data after seeding compared to long-term average rainfall in non-seeded years.

The project would complete a refined feasibility study to determine the expected precipitation yield and costs of a precipitation enhancement project. Expected benefits would be refined in that study, prior to the CBGSA making a decision to implement a precipitation enhancement program.

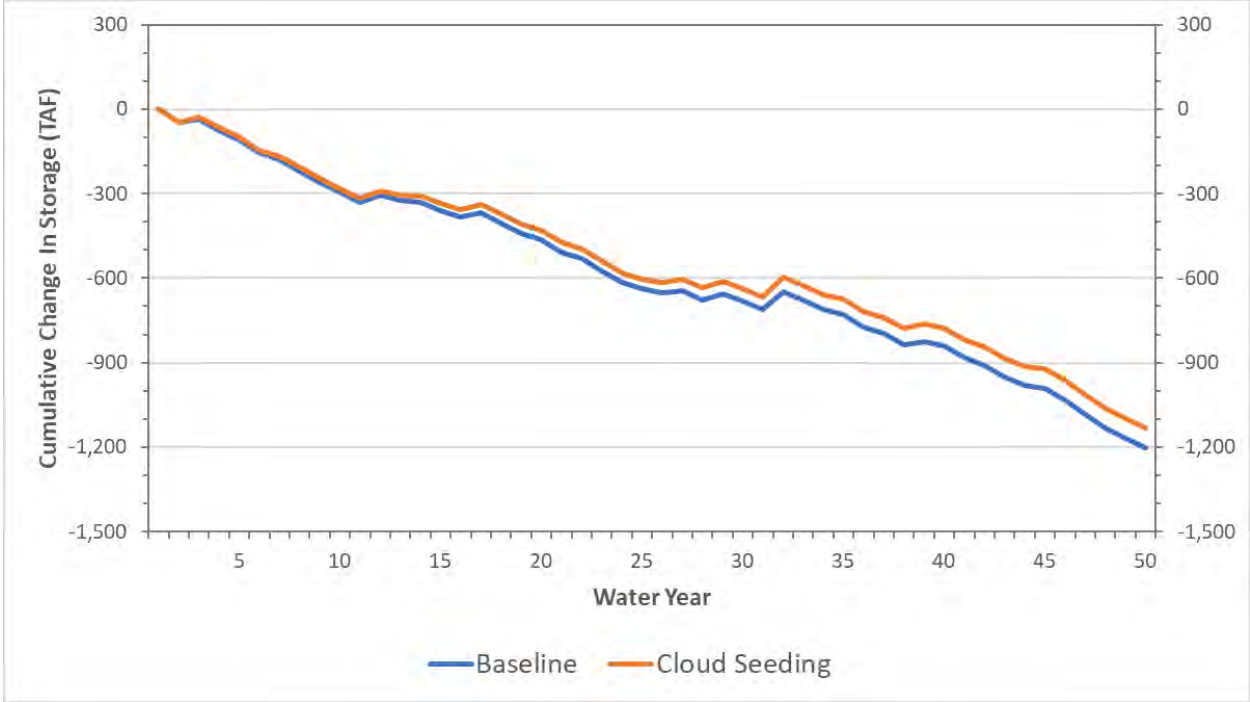


Figure 7-3: Potential Change in Groundwater Storage from Precipitation Enhancement

Project Implementation

The circumstance of implementation for a precipitation enhancement project would be if the refined project study determines it is a cost-effective measure likely to result in meaningful increases in precipitation in the Basin. The circumstance of implementation for the refined study is current conditions, where the CBGSA is ready to consider implementation of precipitation enhancement to support reduced overdraft in the Basin.

Implementation of this project would require installation of two or three additional ground-based seeding sites, referred to as an Automated High Output Ground Seeding System (AHOGS). Each AHOGS site would include:

- Two flare masts, which each hold 32 flares and includes spark arrestors to minimize fire risk
- A control box with communications system, firing sequence relays and controls, data logger, and battery
- A solar panel/charge regulation system to power the site
- Cell phone antenna
- Lightning protection

Aerial seeding would require outfitting the appropriate plane with flare racks.

Implementation of this project would likely be achieved by incorporating it into the existing precipitation enhancement activities being implemented by the SBCWA. Because implementation would be achieved through an existing program, the CBGSA does not anticipate needing to purchase and install new models or control systems beyond those necessary for the additional seeding sites and equipment.

Supply Reliability

Precipitation enhancement has been shown to provide measurable benefit to regions when implemented thoughtfully. Although the amount of precipitation increase that the project could provide is uncertain, evidence suggests potential for an average annual increase of 0.5 to 2.5 inches if this project is implemented (SBCWA, 2016), which would help to improve overall supply reliability in the Basin by increasing precipitation, reducing the need for groundwater pumping and increasing groundwater recharge. This project is not dependent on existing supplies or imported supplies for successful implementation and benefits to the Basin.

Legal Authority

The project would be implemented by the SBCWA, one of the member agencies of the CBGSA. The SBCWA already implements precipitation enhancement in the region, and has the legal authority to expand the program within its service area, which includes the Basin.

Project Costs

The 2016 *Feasibility Study* (SBCWA, 2016) recommended installing two or three AHOGS units for ground-based seeding. Each AHOGS unit would cost $30,000 to build and test, and between $4,000 and $6,000 each to install. Annual maintenance was estimated at $10,000 each. There would be minimal costs associated with initiating aerial seeding for the Basin because it would be implemented as part of the existing precipitation enhancement efforts in the region. Operational costs for aerial seeding would include flight costs ($550 per hour in 2016), and the cost of the seeding flares. Seeding flares in 2016 cost $90 apiece, and up to 50 flares used aerially and approximately 25 flares per AHOGS site in the four-month project period. Annual set-up, take-down, and reporting costs for this project are estimated at $15,000 for a combined ground-based and aerial seeding effort for the Basin, as well as personnel costs of $5,000 per month.

The 2015 *Feasibility Study* estimated that ground-based seeding would cost $45,500 to $67,500 for four months, and aerial seeding would cost $37,750 for four months, assuming that aircraft costs are funded by the existing program.

Total costs are expected to be between $20 and $30 per AF of water under this project, though exact costs would depend on the success of the program in a given year, and market conditions for project materials and aircraft time.

Technical Justification

Cloud seeding as a concept has existed for decades, and target nucleation of supercooled water droplets that exist in clouds. Supercooled water is water that has been cooled below freezing temperatures (0 degrees Celsius or 32 degrees Fahrenheit), but remains in liquid form, rather than frozen. Supercooled water above -39 degrees Celsius must encounter an impurity to freeze, referred to as freezing nuclei. In the 1940s, particles of silver iodide were discovered to be able to cause freezing of supercooled water droplets in clouds. Silver iodide is the most common freezing nuclei used for cloud seeding in which silver iodide is injected into clouds to promote precipitation. A research program in Santa Barbara County on cloud seeding was conducted in the 1960-70s in which silver iodide was released into “convective bands” as random “seeded” or “non-seeded” (no iodide) convective bands, and resulting precipitation measured by a large network of precipitation gauges. This study evaluated both ground-based seeding and seeding by aircraft. Both methods found seeding resulted in a large area of increased precipitation. Additional studies in other regions in the 1990s found that additional precipitation from cloud seeding was a result of the increased duration of the precipitation event, rather than an increase in intensity. Cloud seeding has been conducted most winters since 1981 in portions of Santa Barbara County, which have had an estimated benefit of 9 to 21 percent increase in precipitation. The 2016 *Feasibly Study* for precipitation enhancement in the Upper Cuyama River Basin estimated a potential 5 to 15 percent increase in rainfall if a seeding project was implemented (SBCWA, 2016).

Basin Uncertainty

This project would improve precipitation yields in the Basin, helping to reduce the impacts of variable precipitation and providing for increased opportunities for groundwater recharge and stormwater capture. Further, increased precipitation duration and yields would reduce demands for groundwater for irrigation, reducing the risk of crop failure associated with water supply reliability challenges.

CEQA/NEPA Considerations

If this project is implemented, it is anticipated to be incorporated into the existing cloud seeding program implemented by SBCWA. The existing seeding program achieved CEQA coverage under the Santa Barbara Mitigated Negative Declaration (MND), finalized in 2013. This project would achieve CEQA coverage either under this existing MND, or Santa Barbara Water Agency would be required to prepare an addendum to the MND to incorporate the Cuyama Basin target area for the seeding program. Unless the project pursues federal funding, NEPA is not anticipated to be required.

7.4.3 Water Supply Transfers/Exchanges

This project would evaluate the feasibility of purchasing transferred water and exchanging it with downstream users (downstream of Lake Twitchell) to allow for additional stormwater and floodwater capture in the Basin to protect water rights of downstream users. Because this action is intended only as a complement to a potential stormwater or floodwater capture project, all potential purchase transfer water would originate outside of the Cuyama River watershed, and this action would not include the transfer or sale of existing Cuyama basin groundwater out of the watershed. The study would be coordinated with the floodwater and stormwater capture in Section 7.3.1, as the feasibility of such an exchange would affect the maximum volumes of stormwater that would be captured under that project. If the feasibility study finds there is limited interest from downstream users, implementation would not be pursued.

Current Status

No progress was made toward implementation of this project since completion of the GSP in January 2020. This project will be explored if Project 1 mentioned above: flood and stormwater capture was feasible but greater volumes of water are desired.

Public Notice and Outreach

Public noticing would not be required for the feasibility study though outreach would be conducted as part of the study to determine willingness of downstream users to participate in an exchange.

Permitting and Regulatory Processes

No permits or regulatory processes would be necessary for development of the feasibility study. Agreements would need to be executed to secure additional water supply for use in a transfer/exchange, as well as to exchange water with downstream users. No other permits are anticipated to be required to implemented water transfers/exchanges.

Project Benefits

Implementation of a water transfer/exchange program would allow the CBGSA to increase stormwater capture if the Flood and Stormwater Capture project (see Section 7.3.1) is implemented because it would reduce the potential water rights conflicts that could arise from increased stormwater capture. The Basin does not have a physical connection to supplies outside the Basin, and is therefore limited in the types of projects that could be implemented to increase supplies. This project would allow the CBGSA to maximize the new water supply that could be available to the Basin if flood and stormwater capture is implemented. This project would be limited to the feasibility study, and would not have direct benefits. If a water transfer/exchange program is implemented as a result of the outcomes of the feasibility study, benefits would be measured by the successful execution of transfer/exchange agreements and the increased capacity of the stormwater capture and spreading facilities made possible by these agreements. Water supply benefits would be measured by the volume of water captured above the volume that would have been allowed had the transfer/exchange agreements not been implemented.

Project Implementation

The circumstance for implementation of the feasibility study would be exploration of the feasibility of flood and stormwater capture and recharge (see Section 7.3.1). Implementation of this project would occur if downstream users expressed interest in participation in water transfers/exchanges and the feasibility study determined the potential increase in supply that transfer/exchanges would provide is cost effective for achieving supply reliability and groundwater sustainability goals.

The CBGSA would develop the feasibility study in coordination with the Flood and Stormwater Capture Project's feasibility study. Based on the outcomes of the two feasibility studies and the level of interest of downstream users, the CBGSA would determine whether implementation of a transfer/exchange project is a preferred action for the CBGSA. Implementation of the transfer/exchange program would entail coordination amongst participants: the CBGSA, agencies who own the water to be used in the transfer, and downstream users who participate in the exchange.

Supply Reliability

Transfers and exchanges would require access to a reliable water supply from outside the Basin currently owned by an agency that has sufficient water rights to be willing to sell a portion of their water to the CBGSA for this project. Because this project would be used to increase the capacity of the stormwater capture project, benefits would be experienced only following a heavy precipitation event. It is likely that in years with large precipitation events, other parts of the state will also experience wet winters, increasing available supplies from sources like the State Water project, or other surface water supplies. The feasibility study would require an evaluation of supply reliability, and explore the potential mechanisms for a successful transfer/exchange program that would account for the uncertainty of precipitation events on a year-to-year basis and available supply and potential benefit to the Basin.

Legal Authority

The CBGSA, through its member water supply agencies, has the legal authority to enter into transfer and exchange agreements with other water suppliers and users. The CBGSA does not have the authority to increase its stormwater capture at a level that would impede downstream senior water rights holders from accessing their water rights, making this project a critical component of an expanded capacity stormwater project (beyond what could be achieved without this project).

Project Costs

A feasibility study would likely cost between $100,000 and $200,000 to complete, including outreach to downstream water users and potential sources of supply for the transfer/exchange program. Costs to implement a transfer and exchange program would be evaluated in the feasibility study and are estimated to range from $600 to $2,800 per AF. Costs would vary depending on the details of the transfer/exchange, source of new water, and parties involved.

Technical Justification

A transfer/exchange program would be at minimum a one-to-one exchange, meaning for each AF of water provided to downstream users through the program, the CBGSA could capture an additional AF of stormwater. The feasibility study would identify which supplies could be purchased to exchange with downstream users, based on supply availability, connectivity to downstream users, willingness of supply owners to participate, and cost. One purpose of the feasibility study would be to determine a preferred alternative for the transfer/exchange program, and provide a technical justification of the preferred program. If technical justification cannot be made, the program would be considered infeasible and would not be pursued.

Basin Uncertainty

The transfer/exchange project would help address uncertainty in the basin by allowing the CBGSA to increase groundwater recharge, using years with surplus surface water flows to supplement groundwater during dry years by increasing the volume of stormwater that can be captured without interfering with downstream users' water rights.

CEQA/NEPA Considerations

Development of a feasibility study would not trigger CEQA or NEPA. Water exchanges or transfers are not anticipated to include construction of new facilities. However, since a water exchange or transfer is a discretionary action, they are likely to be considered projects under CEQA or NEPA. NEPA documentation may be required if any of the water being exchanged or transferred is federal agency (i.e. Bureau of Reclamation of Corps of Engineers).

7.4.4 Improve Reliability of Water Supplies for Local Communities

The Basin is experiencing overdraft in the central portion of the ~~Central~~ Basin and Ventucopa ~~management~~ areas, which are the population centers of the Basin. Domestic water users in these areas are experiencing water supply reliability challenges, and in the 2012-2016 drought experienced well failures. While the following actions would not affect the water budget in the Basin, they are intended to address ongoing water supply reliability issues affecting these communities. ~~CCSD only has a single well to serve its customers, and no redundancy in its system.~~ This management action would include consideration of opportunities to improve water supply reliability for Ventucopa and within the CCSD service area. Potential projects that would be considered under this management action include a replacement well for CCSD Well 2, which is currently abandoned, and improvements to Ventucopa Water Supply Company's

(VWSC's) existing well. Specific~~While specific~~ information would be coordinated with the respective community water system entities and is ~~not available for improvements (and are~~ therefore not available for this GSP~~discussed below) for the town of Cuyama, which is served by the CMWC, the CBGSA also supports potential future actions to benefit the town of Cuyama as well~~.

Current Status

Since the 2020 GSP adoption, DWR's IRWM program awarded the CCSD a grant to install a new production well. Work by the CCSD to install the new well is ongoing.

CCSD Replacement Well

The CCSD Replacement Well would drill a new well in CCSD's service area to replace Well 2, which has been abandoned due to an electrical failure that damaged the well and pumping equipment and subsequent damage the well incurred when an attempt was made to remove the pump. Previously, a~~A~~ replacement well for Well 2 was attempted, but found to produce water that was unsuitable for potable use due to the design and construction of the well. Construction of the new well is expected to be completed soon and would include:

- Drilling, installing, and testing a new well
- Installing a well head, submersible well pump, and electrical panel
- Construction of an 8-inch pipeline to connect the new well to CCSD's system

Ventucopa Well Improvements

The Ventucopa Well Improvements would construct a new water supply pump, pipelines, and meters for the existing Ventucopa Well 2 and seek approval for the well's use for drinking water from the County of Santa Barbara's Department of Health Services (DHS). These improvements would:

- Install a pump, electrical service, and controls at Well 2
- Construct an 8-inch pipeline from Well 2 to Ventucopa's existing hydropneumatic tank
- Install meters at Well #1 and Well 2
- Install a SCADA system for Well 2
- Install piping, valves, and inline mixer to blend water from Well 1 and Well 2

Public Notice and Outreach

Public notice and outreach would not be required beyond that necessary for approval at a public Board of Directors meeting or applicable CEQA.

Permitting and Regulatory Processes

CCSD's new well construction would require acquisition of a well drilling permit and approval of well design and well completion report. It would also require well testing that demonstrates the new well is

capable of producing water that is suitable for drinking water. In addition to a well drilling permit from Santa Barbara County, CCSD's existing water system permits would need to be revised to include the new well and associated features.

Improvements to VWSC's well would require compliance with Santa Barbara County's regulations for water systems in the unincorporated county. VWSC would need to acquire the appropriate well drilling permits from the County as well as receive DHS certification of the suitability of the upgraded well for potable use before water from Well 2 can be delivered to customers.

Project Benefits

These projects would improve supply reliability for Ventucopa and CCSD residents and customers by creating system redundancies and upgrades to address challenges with meeting existing demands associated with aging and failing infrastructure. As planned, up to 460 gallons per minute could be made available to CCSD and up to 55 gallons per minute available to VWSC as a result of this project. Benefits of this project would be measured by the volume of water produced by the two improved wells and reduction in the number of days system failures threaten access to water supplies.

Project Implementation

The circumstance of implementation for this project is identified need for system improvements to meet public health and safety concerns. Both CCSD and VWSC have documented challenges with their water supply systems, including lack of redundancy, wells that do not adequately meet domestic water supply requirements, and limited capacity (CCSD, 2018; VWSC, 2007).

The two components of this project would be implemented by their respective system owners, CCSD and VWSC. CCSD is~~would be~~ responsible for planning, design, construction, testing, and permitting of the new Well 4, while VWSC would be responsible for planning, design, construction, testing, and permitting of the Well 2 improvements.

Supply Reliability

This project would improve supply reliability to customers through system improvements designed to address known issues with accessing and conveying groundwater suitable for potable use.

Legal Authority

CCSD owns the property for the proposed well site, and has the legal authority to design and construct a new well. As the owner-operator of the CCSD system, CCSD also has the legal authority to connect the new well to its existing distribution system and deliver water from the new well to customers once all appropriate permits have been acquired.

VWSC already owns Well 2 and the other existing components of the proposed project. It has the legal authority to implement projects that serve the water supply needs of its customers, and once all appropriate permits have been acquired, is legally able to connect Well 2 to its existing system.

Project Costs

In total, these improvements are expected to cost approximately $1,175,000.

CCSD's 2018 Engineering Report for Well 4 estimated project costs of $489,800 for drilling and $485,280 for equipping, for a total cost of $975,080 (CCSD, 2018).

VWSC's 2007 *Ventucopa Water System Evaluation Report* estimated the well improvements included in this GSP would cost $191,200 (VWSC, 2007). Costs are assumed to have increased since 2007, and well improvements are currently expected to cost approximately $200,000 to implement.

Technical Justification

Both components of this project have completed initial planning efforts. Preliminary engineering and design has been completed for the CCSD Well 4 improvements, including the 2018 Engineering Report and preliminary design drawings. VWSC's well improvements were described and evaluated in the 2007 Evaluation Report. Implementation of this project would include final design for all components, as well as testing to ensure that well improvements meet the needs they are designed to address.

Basin Uncertainty

These improvements would reduce uncertainty associated with supply reliability in CCSD and VSWC's service areas.

CEQA/NEPA Considerations

Well drilling permits are a discretionary action in Santa Barbara County, which would trigger CEQA. CCSD and VSWC would need to complete the appropriate CEQA document to comply with these requirements prior to construction of this project. The project would not trigger NEPA unless federal funding or permits are required for completion of the project. The size and location of the project indicates it is unlikely to require federal permits, and NEPA is likely to only be required if federal funding is pursued.

7.4.5 Flow Meter Calibration Program

During the implementation of the 2020 GSP, the CBGSA took action to require non-de minimis groundwater users in the Basin to install water meters on all groundwater extraction wells by the end of 2021. Groundwater flow data are used in conjunction with groundwater level data in a variety of ways, including to provide water production data and information on groundwater basin conditions. This is especially important for sustainable regional management of groundwater resources.

The flow meter recalibration program would require all flow meters to be tested for accuracy once every three years. Flow meters will need to be accurate within +/- 5% of actual flows, and testing would need to be conducted by a qualified company or person approved by the GSA.

Current Status

This project has been recently conceptualized and added this GSP for the first time. Work has not commenced on this project and will only commence if the CBGSA decides to pursue it.

Public Notice and Outreach

Public notice and outreach would not be required beyond that necessary for approval at a public Board of Directors meeting or applicable CEQA.

Permitting and Regulatory Processes

No permits or regulatory processes would be necessary for development of the Flow Meter Calibration Program.

Project Benefits

This project will help ensure the accurate reporting of pumping volumes from metered pumps in the in the Basin. Accurate pumping data is used by the CBGSA to ensure compliance with pumping allocations in the Central Management Area and to help calibrate and update the model. Calibration of the flow meters that provide this data will ensure pump owners have the best available flow data and the CBGSA has accurate data for its monitoring. This will help avoid potential accidental and unknown over-pumping if a flow meter begins to underestimate flows, or potential under-pumping (and therefore reduced water volumes for beneficial uses and users) that could impact pump owners detrimentally.

Project Implementation

The circumstance of implementation for this project is an identified need for meter calibration and verification of pumping volumes by applicable groundwater producers. Implementation would require outreach to stakeholders, and a detailed program for the requirements of meter calibration. A timeline and reporting period and methodology would also need to be established to ensure all calibration information is properly collected and reviewed by the CBGSA.

Supply Reliability

This project would not change supply reliability to beneficial uses and users. It would ensure more accurate data on pumping where flow meters are installed.

Legal Authority

The CBGSA has the legal authority to place reporting requirements on groundwater extractors within the Basin.

Project Costs

In total, it is expected that this project would cost approximately $50,000 for the initial set up, and $250,000 annually. The $250,000 was calculated using conservative flow meter calibration cost estimates of $2,500 per flow meter for the 100 flow meters installed in the Basin. The initial set up cost for this

program includes the development of guidance materials and requirements, a reporting system, and analysis of collected data.

Technical Justification

The flow meter calibration program would ensure that accurate data from applicable groundwater producers is provided to the CBGSA which is used for monitoring groundwater extractions and used in GSP implementation and groundwater modeling. The calibration program will ensure data is accurate and can be used by the CBGSA for implementation of the GSP.

Basin Uncertainty

The flow meter calibration program would ensure that accurate data from applicable groundwater producers is provided to the CBGSA which is used for monitoring groundwater extractions and used in GSP implementation and groundwater modeling. This will ensure data used by the CBGSA for GSP implementation leads to equitable and accurate decision making to reach sustainability.

CEQA/NEPA Considerations

Development of a flow meter calibration program would not trigger CEQA or NEPA. A calibration program is not anticipated to include construction of new facilities.

7.5 Water Management Actions

Water management actions are generally administrative locally implemented actions that the CBGSA or its member agencies could take that affect groundwater sustainability. Typically, management actions do not require outside approvals, nor do they generally involve capital projects.

7.5.1 Basin-Wide Economic Analysis

Changes to pumping in the Basin and access to water supplies may have economic consequences given that the Basin is dominated by agricultural land uses that are dependent on groundwater availability. Implementation of stormwater capture may require purchase of agricultural land for the spreading facilities, which could affect agricultural output in the region. The small population of the Basin limits the available revenue to fund projects. This Project entailed~~would entail~~ developing a study of the economic impacts of the projects and management actions included in the GSP. It included~~This would include~~ an evaluation of how implementation of the project could affect the economic health of the region and the~~on~~ local agricultural industry. It would also consider the projected changes to the region's land uses and population and whether implementation of these projects would support projected and planned growth. The economic analysis will~~would~~ be considered by the CBGSA when deciding whether to implement a proposed project and potentially when to implement the projects.

Current Status

A Basin-wide direct economic analysis of proposed GSP actions has been completed. The results of this analysis were presented to the GSP Board on December 4, 2019, and the final report was completed in December 2019. The final Basin-wide economic analysis report was provided in the 2020 Annual Report. This management action is 100% complete.

Public Notice and Outreach

This project wasis a study and didwould not require public notice or outreach. The results of the economic analysis werewill be presented to the GSPat Stakeholder Advisory Committee (SAC) and CBGSA Board on December 4, 2019meetings.

Permitting and Regulatory Processes

No permits or regulatory approvals werewould be required to complete the economic analysis.

Project Benefits

The economic analysis providedwould provide information to the CBGSA regarding the potential economic benefits and drawbacks to implementation of different projects under the GSP. This project didwould not provide direct benefits as related to water supply or groundwater sustainability, but willwould allow the CBGSA to move forward with implementation of projects that would continue to sustain local economies and would not inadvertently cause substantial economic harm, which could affect the ability of a proposed project to continue to provide benefits.

Project Implementation

The circumstance of implementation for this project were thewould be consideration of the implementation of any project included in this GSP or otherwise considered by the CBGSA. The CBGSA implementedwould implement this project with the assistance of an economic consultant that completedwould complete the analysis based on data for the region and information provided by the CBGSA.

Supply Reliability

This project is a study and diddoes not depend on any water supply for implementation or successful completion.

Legal Authority

The CBGSA is a joint-powers authority with authority to authorize an economic study for the projects in this GSP.

Project Costs

TheA basin-wide economic analysis had a costis expected to range from $50,000 to $100,000 in costs, depending on the available data and level of approximately $60,000. analysis desired. Exact costs would be determined during selection of the economic analyst.

Technical Justification

This project is a study that would use economic methods and analysis tools consistent with the standards and practices of the industry.

Basin Uncertainty

This project willwould help the CBGSA understand the economic uncertainty around implementation of the projects in thecis GSP. Improved understanding of the economic implications of a project willwould help the CBGSA decide which projects should move forward to support basin sustainability without unintended consequences that could increase overall uncertainty in the basin, including uncertainty regarding groundwater demands in the basin associated with the local and regional economy.

CEQA/NEPA Considerations

As a study, the basin-wide economic analysis didwould not trigger CEQA or NEPA.

7.5.2 Pumping Allocations in Central Basin Management Area

As described in Section 2.3 of this GSP, the Basin is in overdraft conditions and to achieve balanced pumping and recharge groundwater users must decrease pumping by approximately 6167 percent, in the absence of projects that increase recharge in the Basin or otherwise offset demands. While the projects identified in Section 7.4 would increase the water available to users in the Basin through increased recharge and precipitation, they are not expected to reduce the groundwater deficit sufficiently to achieve the Basin's sustainability goals. As such, the CBGSA has and will continue to implement pumping allocations.

Outlined here is a framework for how CBGSA has developedwould develop and implemented pumping allocations in the Basin. This project would involve development of pumping allocations in the Central Basin Management Area (CMA). As part of implementation of the pumping allocation program, the CBGSA allowed for operators within the CMA to create farming units, which irrigated land areas outside of the CMA that operate in common with areas inside the CMA. . Consistent with the magnitude of projected overdraft estimated by the CBWRMnumerical model, pumping allocations would not apply to the Ventucopa Management Area or to users outside of the Central Management Area and farming units. Potential pumping allocations in other areas of the Basin may be considered in the future as additional data collection and technical analysis is performed to provide a better understanding of water balance conditions in these areas.Management Area. CCSD would be provided allocations based on historical water use, and would not be required to reduce pumping over time, but would be limited in how much pumping could increase in the future.

There are four key steps to developing pumping allocations:

1. Determine the Sustainable Yield of the Basin and the Central Management Area
2. Allocate sustainable yield of native groundwater to users based on:
   a. Historical use
   b. Land uses and irrigated areas
3. Determine how new/additional supplies would be allocated
4. Develop a timeline for reducing pumping to achieve allocations over time

Current Status

Pumping allocations in the CMA were implemented for 2023 and 2024. A notice of final allocations for these years was posted on the CBGSA website in May 2023. The CBGSA determined in its July 31st, 2024, Board Meeting to continue with allocations going forward, with an adjustment to the Central Management Area Boundary to conform with data available from the updated Cuyama Basin Water Resources Model. The CBGSA intends to use the model update in calculating allocations for the foreseeable future starting with 2025 allocations.

Sustainable Yield of the Basin Absent Projects and Water Management Actions

The sustainable yield of the Basin absent projects and water management actions is the volume of water that can be extracted from the Basin annually without affecting overall groundwater storage. and the sustainable yield of the Basin is estimated to be approximately 1720,000 AFY, as described in the Water Budget section of Chapter 2. The sustainable yield of the Basin represents the volume of groundwater that can be allocated. Because pumping allocations would only be imposed on users in the Central Basin Management Area, the CBGSA would need to determine the sustainable yield for only the Central Basin Management Area, which would be less than the overall sustainable yield of the Basin.

Develop Allocations

The CBGSA will continue towould develop allocations based on estimated historical use, existing land uses, orand total irrigated acreage. For the 2023 and 2024 allocations, theThe CBGSA determinedwould determine historical use by analyzing data about water use during the 20-year historical period from 1998 to 2017. This period aligns with the historical period of the water budget analysis described in Chapter 2. For this period, water Water use waswould be estimated using data from the CBWRM model. In the future, the CBGSA intends to continue to use the same methodology; however, use ofeither using remote sensing and land use data to estimate agricultural consumption or offrom data provided by pumpers in the Basin may be considered in the future., including private pumpers and water agencies. CCSD's allocation iswould be based on historical use, with an allowance for changes in population in the CCSD service area. CCSD iswould not be required to reduce use in the future under this action. As such, once CCSD's allocation has been determined, it iswould be removed from the total volume of groundwater available for allocation to non-CCSD users in the Central Basin Management Area.

A specific approach for allocation of pumping volumes among agricultural users in the Central Basin management area has not been determined. Potential options include allocation on the basis of historical use, on irrigated acreage, or on total acreage. The CBGSA would work with landowners and agencies to determine the appropriate approach for pumping allocations for agricultural users.

Determine Allocation of New or Additional Supplies

As the CBGSA implements projects in this GSP, additional groundwater supplies are expected to become available. These supplies would be used to reduce groundwater overdraft. The CBGSA anticipates that any new supplies made available through project implementation would be added to the total volume of water that would be allocated to the beneficiaries of those projects identified during project development. The mechanism for accounting for additional water made available by project implementation would be determined when the allocation method is refined.

Timeline for Implementation

The required decreases in pumping volumes to achieve balanced groundwater use in the Basin may result in substantial reductions in water availability over current use. The CBGSA completedplans to complete the initial pumping allocation plan in 2022, with pumping reductions beginning in 2023 at 5 percent of the total required reduction to achieve sustainability, and an additional 5 percent reduction in 2024. From

2025 to 2038, pumping will~~would~~ be reduced by 6.5 percent annually, so as to achieve sustainability in the Basin in 2038. Figure 7-4 shows the planned pumping reduction in the Basin. Individual users will~~would~~ be expected to reduce pumping at different rates to achieve the overall pumping reductions and meet their individual pumping allocations. The pumping allocation plan will~~would~~ identify how much each user or user-type would be required to reduce pumping annually to achieve the allocation and the overall Basin sustainability goals.

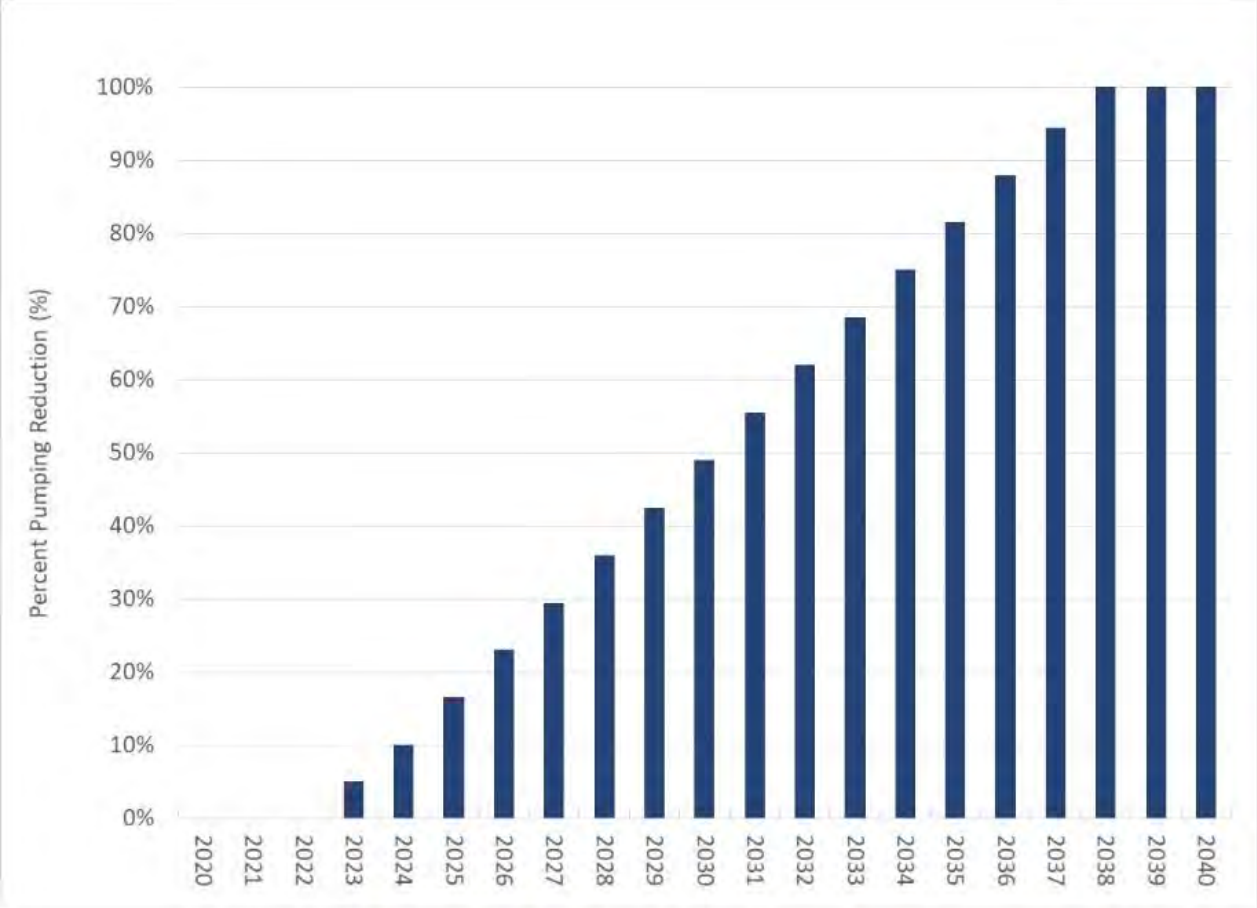


Figure 7-4: Glide Path for Central Basin Management Area Groundwater Pumping Reductions

Public Notice and Outreach

Development of a pumping allocation plan required and will continue to~~would~~ require substantial public input to understand the potential impacts of pumping allocations and baseline needs that should be accounted for. The CBGSA held~~anticipates that public outreach would include multiple~~ public workshops and meetings, updated the~~potential~~ website, and sent out~~/or~~ email announcements and~~, along with~~ other public notices about~~for the~~ workshops. Updates to the~~The~~ pumping allocation plan will~~would~~ be circulated for public comment before finalized, though final approval of the plan would be made by CBGSA in partnership with its member agencies.

Permitting and Regulatory Processes

Development of a pumping allocation plan doeswould not require any permitting, but doeswould require consideration of existing water rights and applicable permits and regulations associated with groundwater pumping in the Basin.

Management Action Benefits

A pumping allocation plan willwould identify how the region will achieve sustainable pumping in the Basin. Implementation and enforcement of a pumping allocation plan willwould directly reduce groundwater pumping. Benefits would be measured by the change in total volume of groundwater pumped from the Basin and how many users are in compliance with their pumping allocations.

Management Action Implementation

The circumstance of implementation for developing a pumping allocation plan is identification of unsustainable groundwater pumping practices in the Basin. The CBGSA recognizeds recharge and pumping in the Basin is and continues to be unbalancedare not balanced, and action must be taken to achieve sustainability. CBGSA developedwould lead development of a pumping allocation plan, in partnership with its member agencies and local groundwater users. The initial planning process was is expected to be completed in 202332, with allocations implemented beginning in 2023. Successful implementation requiredwould require compliance from groundwater users with the pumping allocation plan, and enforcement by the CBGSA and its member agencies. Successful roll-out of the pumping allocation plan requiredwould require substantial public outreach to inform users of their annual allocation and expected annual reduction in groundwater pumping. Mechanisms for enforcement arewould be outlined in the pumping allocation plan, and are expected to be enforced by CBGSA's member agencies.

Supply Reliability

This project does not rely on the supplies from outside the Basin because it is a planning effort that will result in conservation. It will support overall supply reliability by reducing overdraft in the Basin and moving the Basin towards sustainability.

Legal Authority

CBGSA has the authority to develop a pumping allocation plan, and will perform implementation and enforcement of allocations through metering, water accounting, and implementing pumping fees.

Management Action Costs

Development and initiation of a pumping allocation management and tracking program is expected to cost up to $300,000 to conduct the analysis, set up the measurement and tracking system and conduct outreach. Costs to implement the plan would depend on the level of enforcement required to achieve allocation targets and the level of outreach required annually to remind users of their allocation for a

given year. The pumping allocation plan would include a cost estimate for enforcement and implementation. Annual management of the program is estimated to cost about $150,000 per year.

Technical Justification

Pumping allocations will~~would~~ provide direct reductions of groundwater pumping. The pumping allocation plan developed~~would develop~~ allocations based on historical use data and land use data~~,~~ and will~~would~~ clearly describe the methodology and justification for the methodology used when setting pumping allocations.

Basin Uncertainty

The Basin is currently experiencing overdraft, and if current pumping practices continue conditions in the Basin are expected to worsen, increasing uncertainty regarding the availability of reliable groundwater supplies. Development and implementation of a pumping allocation plan will~~would~~ provide an opportunity to reduce overdraft-related uncertainty in the Basin by shifting pumping towards sustainable levels over time.

CEQA/NEPA Considerations

Development and implementation of the~~a~~ pumping allocation plan is ~~most likely~~ not a project as defined by CEQA and NEPA and ~~would~~ therefore did not trigger either. Reducing pumping over time is also not expected to trigger CEQA or NEPA because it does not meet the definition of a CEQA or NEPA project. As any plan is developed, CEQA and NEPA will be considered to determine if compliance is required.

7.6 Adaptive Management

Adaptive management allows the CBGSA to react to the success or lack of success of actions and projects implemented in the Basin and make management decisions to redirect efforts in the Basin to more effectively achieve sustainability goals. The GSP process under SGMA requires annual reporting and updates to the GSP at minimum every 5 years. These requirements provide opportunities for the CBGSA to evaluate progress towards meeting its sustainability goals and avoiding undesirable results.

Adaptive management triggers are thresholds that, if reached, initiate the process for considering implementation of adaptive management actions or projects. For CBGSA, the trigger for adaptive management and CBGSA's next steps would be as follows:

- **Pumping reductions are more than 5 percent off the glide path identified in the pumping allocation plan:** CBGSA would evaluate why pumping allocations are not being met and implement additional outreach or enforcement, as appropriate.
- **If the Basin is within the Margin of Operational Flexibility, but trending toward Undesirable Results, *and* within 10 percent of the Minimum Threshold:** CBGSA will investigate the cause and determine appropriate actions.

Adaptive management strategies may also be triggered for other reasons, such as reports by stakeholders of Basin conditions that have impacted beneficial uses or users. Stakeholders may notify the CBGSA of their concerns by (i) submitting a publicly available well reporting form (available on the CBGSA website) to the GSA, (ii) contacting the Basin manager as described in Section 1.1.1 – Contact Information, or (iii) bringing the concerns to public meetings.

If an investigation based on monitoring data and/or stakeholder reporting indicates that groundwater management in the Basin may be adversely affecting beneficial users, the CBGSA Board will determine if a response by the CBGSA is required. This will include the formation of an ad hoc committee to investigate the cause(s) of changing Basin conditions, conducting data analysis, and discussion of potential adaptive management response strategies. If appropriate, the CBGSA will implement response strategies to correct the issue; these strategies could include localized pumping management plans, installation of additional monitoring, installation of replacement wells, potential changes to sustainability criteria or pumping reduction schedule included in the GSP, or other solutions to address specific concerns and Basin conditions.

7.7 References

Cuyama Community Services District (CCSD). 2018. *Well No. 4 Drilling and Equipping Project Engineering Report*. February.

Santa Barbara County Water Agency (SBCWA). 2015. *Long Term Supplemental Water Supply Alternatives Report*. December.

Santa Barbara County Water Agency (SBCWA). 2016. *Feasibility/Design Study for a Winter Cloud Seeding Program in the Upper Cuyama River Drainage, California*. June.

Ventucopa Water Supply Company (VWSC). 2007. *Water System Evaluation Report*. February.

Chapter 8 Implementation Plan

8.1 Plan Implementation

Implementation of this *Groundwater Sustainability Plan* (GSP) includes implementation of the projects and management actions included in Chapter 7, as well as the following:

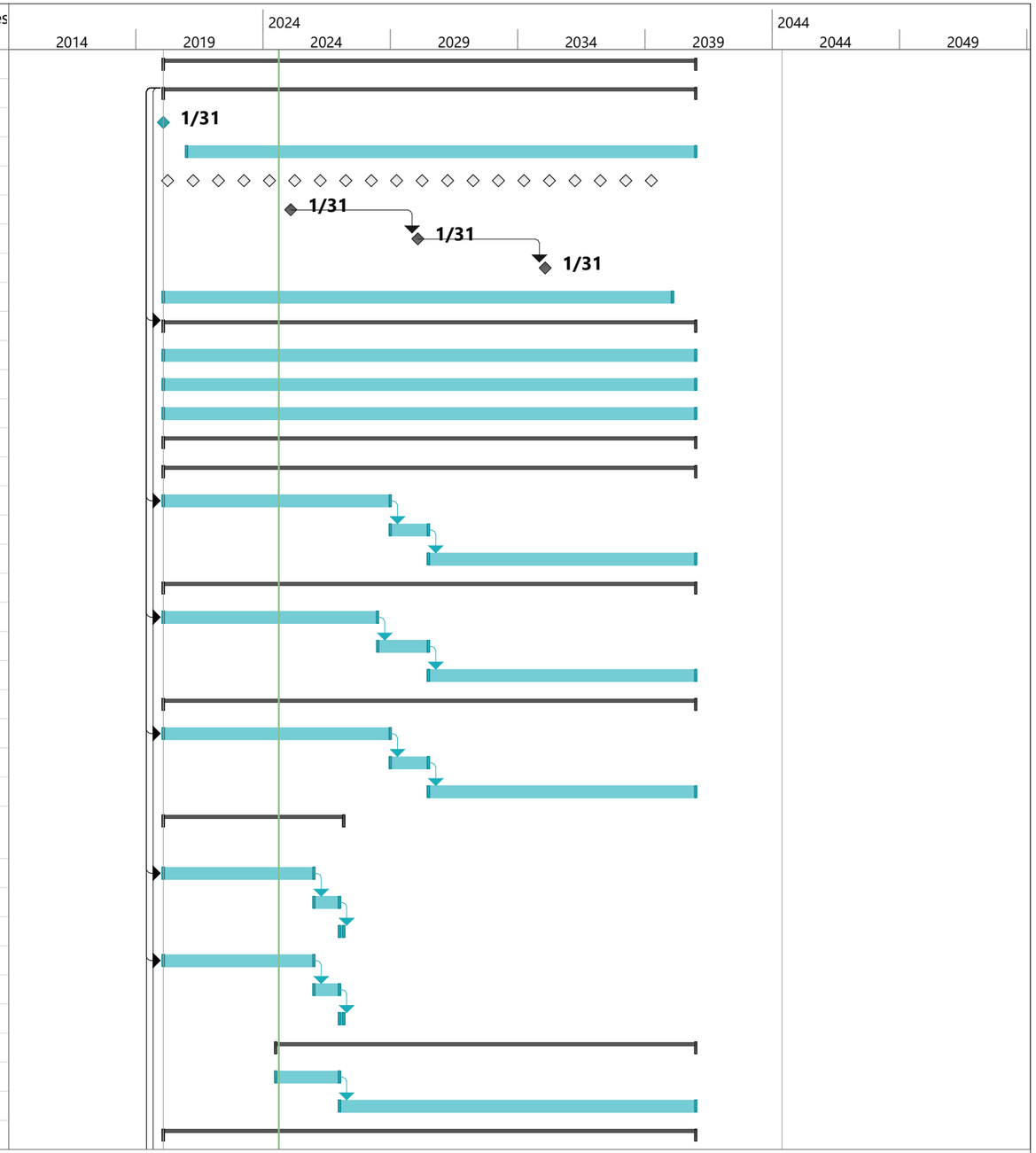
- Cuyama Basin Groundwater Sustainability Agency (CBGSA) administration and management
- Implementing the monitoring program
- Developing annual reports
- Developing required five-year periodic evaluations~~GSP updates~~
- Developing GSP updates as needed

This chapter also describes the contents of both the Annual Report~~annual~~ and five-year Periodic Evaluations~~reports~~ that must be provided to the California Department of Water Resources (DWR) as required by Sustainable Groundwater Management Act (SGMA) regulations.

8.1.1 Implementation Schedule

~~Figure 8-1~~ illustrates the GSP's implementation schedule. Included in the chart are activities necessary for ongoing GSP monitoring and updates, as well as tentative schedules for projects and management actions. Additional details about the activities included in the schedule are provided in these activities' respective sections of this GSP. Adaptive management would only be implemented if triggering events are reached, as described in Chapter 7, and are shown as ongoing in the schedule.

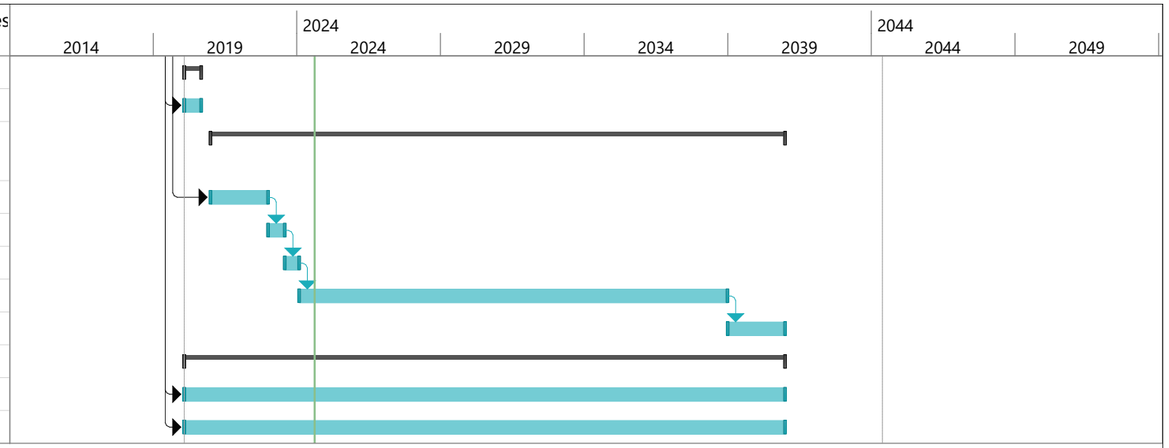
ID	Task Name	Duration	Start	Finish	Predeces
1	**Cuyama GSP Implementation**	**5458 days?**	**Fri 1/31/20**	**Mon 12/31/40**	
2	**Plan Implementation**	**5458 days?**	**Fri 1/31/20**	**Mon 12/31/40**	
3	Plan submittal to the State	0 days	Fri 1/31/20	Fri 1/31/20	
4	Monitoring	5218 days?	Fri 1/1/21	Mon 12/31/40	
5	**Annual Reports**	**4958 days**	**Wed 4/1/20**	**Fri 4/1/39**	
26	Five Year Report/Intern Target Evaluation 1	0 days	Fri 1/31/25	Fri 1/31/25	
27	Five Year Report/Intern Target Evaluation 2	0 days	Thu 1/31/30	Thu 1/31/30	26
28	Five Year Report/Intern Target Evaluation 3	0 days	Wed 1/31/35	Wed 1/31/35	27
29	Plan Updates (as needed)	5219 days	Fri 1/31/20	Tue 1/31/40	
30	**GSP Administration**	**5458 days**	**Fri 1/31/20**	**Mon 12/31/40**	**2SS**
31	CBGSA Administration	5458 days	Fri 1/31/20	Mon 12/31/40	
32	Stakeholder and Board Engagement	5458 days	Fri 1/31/20	Mon 12/31/40	
33	Outreach	5458 days	Fri 1/31/20	Mon 12/31/40	
34	**Project Implementation**	**5458 days?**	**Fri 1/31/20**	**Mon 12/31/40**	
35	**1. Flood and Stormwater Capture**	**5458 days**	**Fri 1/31/20**	**Mon 12/31/40**	
36	Planning	2328 days	Fri 1/31/20	Sun 12/31/28	2SS
37	Construction	391 days	Mon 1/1/29	Mon 7/1/30	36
38	Benefits	2740 days	Tue 7/2/30	Mon 12/31/40	37
39	**2. Precipitation Enhancement**	**5458 days**	**Fri 1/31/20**	**Mon 12/31/40**	
40	Planning	2197 days	Fri 1/31/20	Fri 6/30/28	2SS
41	Construction	522 days	Mon 7/3/28	Tue 7/2/30	40
42	Benefits	2739 days	Wed 7/3/30	Mon 12/31/40	41
43	**3. Water Supply Transfers/Exchanges**	**5458 days?**	**Fri 1/31/20**	**Mon 12/31/40**	
44	Planning	2328 days?	Fri 1/31/20	Sun 12/31/28	2SS
45	Agreement Negotiation	391 days?	Mon 1/1/29	Mon 7/1/30	44
46	Implementation of Transfers	2740 days?	Tue 7/2/30	Mon 12/31/40	45
47	**4. Improve Reliability of Water Supplies for Local Communities**	**1850 days**	**Fri 1/31/20**	**Thu 3/4/27**	
48	CCSD Replacement Well - Planning & Design	1544 days	Fri 1/31/20	Wed 12/31/25	2SS
49	CCSD Replacement Well - Construction & Permitting	261 days	Thu 1/1/26	Thu 12/31/26	48
50	CCSD Replacement Well - Testing	45 days	Fri 1/1/27	Thu 3/4/27	49
51	VWSC Well Improvements - Planning & Design	1544 days	Fri 1/31/20	Wed 12/31/25	2SS
52	VWSC Well Improvements - Construction & Permitting	261 days	Thu 1/1/26	Thu 12/31/26	51
53	VWSC Well Improvements - Testing	45 days	Fri 1/1/27	Thu 3/4/27	52
54	**5. Flow Meter Calibration Program**	**4307 days**	**Mon 7/1/24**	**Mon 12/31/40**	
55	Planning	654 days	Mon 7/1/24	Thu 12/31/26	
56	Program Implementation	3653 days	Fri 1/1/27	Mon 12/31/40	55
57	**Management Action Implementation**	**5458 days?**	**Fri 1/31/20**	**Mon 12/31/40**	



Project: Figure 8-1
Date: Fri 8/16/24

Task
Split
Milestone
Summary
Project Summary
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Deadline
Progress
Manual Progress

ID	Task Name	Duration	Start	Finish	Predeces
58	**1. Basin-Wide Economic Analysis**	**153 days**	**Fri 1/31/20**	**Tue 9/1/20**	
59	Plan Development	153 days	Fri 1/31/20	Tue 9/1/20	2SS
60	**2. Pumping Allocations in Central Basin Management Area**	**5218 days?**	**Fri 1/1/21**	**Mon 12/31/40**	
61	Develop Allocation Method	522 days	Fri 1/1/21	Sat 12/31/22	2SS
62	Determine Allocatio nof New Water Supplies	151 days	Mon 1/2/23	Mon 7/31/23	61
63	Develop Timeline for Pumping Reduction	132 days	Tue 8/1/23	Wed 1/31/24	62
64	Implement Annual Puming Reductions	3892 days	Thu 2/1/24	Thu 12/30/38	63
65	Maintain Pumping Allocations	522 days?	Sat 1/1/39	Mon 12/31/40	64
66	**Adaptive managemetn Action Implementation**	**5458 days?**	**Fri 1/31/20**	**Mon 12/31/40**	
67	Evaluate Unimplemented Projects	5458 days?	Fri 1/31/20	Mon 12/31/40	2SS
68	Revist Projects not included in GSP	5458 days?	Fri 1/31/20	Mon 12/31/40	2SS



Project: Figure 8-1
Date: Fri 8/16/24

Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone	

8.2 Implementation Completed

The CBGSA adopted the Cuyama GSP in 2020 and adopted the amended GSP in 2022. Since the adoption of the first GPS, the CBGSA has successfully implemented and continues to implement many components of the plan. Since January 2020, the CBGSA has:

- Submitted the original version of the GSP and resubmitted an amended GSP in 2022 that was approved by DWR
- Submitted Annual Reports for water years 2020, 2021, 2022, and 2023
- Implemented schedule pumping allocations to move the Basin towards sustainability
- Conducted a water rights analysis of potential water supplies has been initiated to support potential flood and stormwater capture
- Performed a study of potential precipitation enhancement in the Basin
- Installed six new multi-completion wells and three shallow groundwater monitoring wells (piezometers)
- The CCSD secured grant funding for a new well
- Completed a Basin-wide Economic Analysis
- Prepared a 2025 GSP update
- Prepared the Periodic Evaluation

~~8.2~~8.3 Implementation~~Costs~~ Budgets and Funding Sources

CBGSA operations and GSP implementation will incur costs, which will require funding by the CBGSA. The five primary activities that will incur costs are listed here. Table 8-1~~Table 8-1~~Table 8-1 summarizes these activities and ~~their~~ estimated ~~costs~~budgets. These estimates~~d~~ will be refined during GSP implementation as more information ~~is~~becomes available.

- Implementing the GSP
- Implementing GSP-related projects and management actions
- CBGSA operations
- Developing annual reports
- Developing five-year periodic evaluations and potential GSP updates~~evaluation reports~~

Table 8-1: CBGSA and GSP Implementation ~~Costs~~Budgets

Activity	Estimated Budget[a] ~~Cost[a]~~
GSP Implementation and GSA Management	
CBGSA Administration and Legal Support	$390,000 annually
Stakeholder and Board Engagement	$140,000 annually
Outreach	$25,000 annually
GSP Implementation Program Management	$75,000 annually for fiscal years (FYs) ~~with no five-year reports; $125,000 annually for FYs with five-year reports.~~
Monitoring Program, including Data Management	$160,000 annually. Additional costs to establish monitoring program in FY 2021 ($150,000) and FY 2021 ($50,000)
Annual Reporting	$50~~40~~,000 annually
Periodic Evaluations	$40,000 every five years
Five-Year GSP Updates	$1,000~~800~~,000 every five years (across two fiscal years)
Projects and Management Actions	
Project 1: Flood and Stormwater Capture	Construction: $46 million Operations and Maintenance: $500,000
Project 2: Precipitation Enhancement	$150,000 annually
Project 3: Water Supply Transfers/Exchanges	$600 to $2,800 per acre-foot (AF) (total cost to be determined)
~~Project 4: Basin-Wide Economic Analysis~~	~~$100,000~~
Project 4~~Management Action 1~~: Improve Reliability of Water Supplies for Local Communities	$1.8 million
Project 5: Flow Meter Calibration Program	$50,000 for program setup $2,500 per meter per year (100 meters) = $250,000
Management Action 1: Basin-Wide Economic Analysis	$50,000 - $100,000 one-time (completed)
Management Action 2: Pumping Allocations in Central Basin Management Area	Allocation development: $300,000 Implementation/maintenance: $150,000 annually
Adaptive Management	As needed~~To be determined~~

[a] Estimates are rounded and based on full implementation years (FY 2021 through FY 2040). ~~Different costs may be incurred in FY 2020 as GSP implementation begins.~~

~~8.2.1~~8.3.1 GSP Implementation and Funding

Costs associated with GSP implementation and CBGSA operations include the following:

- **CBGSA administration and legal support:** Overall program management, coordination activities, and legal services
- **Stakeholder/Board engagement:** Bi-monthly Stakeholder Advisory Committee (SAC) meetings, bi-monthly CBGSA Board meetings, bi-monthly calls with the CBGSA Board ad-hoc committees, and semi-annual public workshops
- **Outreach:** Email communications, newsletters, and website management
- **GSP implementation program management:** Program management and oversight of project and management action implementation, including coordination among GSA Board, staff and stakeholders, coordination of GSA implementation technical activities, oversight and management of CBGSA consultants and subconsultants, budget tracking, schedule management, and quality assurance/quality control of project implementation activities
- **Monitoring:** pump flow meter monitoring and ~~manage~~ satellite imagery analysis to track water usage, conduct groundwater level and quality monitoring, and manage data

Implementation of this GSP is projected to run between $800,000 and $1.3 million per year, and projects and management actions an additional $650,000 to $3.7 million per year. Development of the 2020~~this~~ GSP was funded through a Proposition 1 Sustainable Groundwater Planning Grant. This GSP Update and CBGSA operations are ~~partially~~ funded through the Sustainable Groundwater Implementation Grant and ~~this grant, as well as~~ volunteer ~~contributions from~~ CBGSA collected fees.~~member agencies.~~ Although ongoing operation of CBGSA could include contributions from its member agencies, which are ultimately funded through customer fees or other public funds, additional funding would be required to implement the GSP. Of the implementation activities in the GSP, only project implementation is likely to be eligible for grant or loan funding; funding through grants or loans have varying levels of certainty. As such, the CBGSA has developed and will refine, as needed,~~develop~~ a financing plan that includes~~will include~~ one or more of the following financing approaches:

- **Pumping Fees**: Pumping fees would implement a charge for pumping that would be used to fund GSP implementation activities. To meet the funding needs of the GSP, fees would be lower when pumping is higher, such as current pumping levels, and higher when pumping is lower, such as when sustainable pumping levels are achieved. Although this funding approach would meet the financial needs of the GSP and CBGSA, it may discourage pumping reductions due to cost. The financing plan developed by the CBGSA would evaluate how to balance the need for funding with encouraging pumpers to commit to compliance with desired groundwater pumping reduction goals.
- **Assessments:** Assessments would charge a fee based on land areas. There are two methods for implementing an assessment based on acreage. The first option would assess a fee for all acres in the Basin outside of those in federal lands. This option would not distinguish between land use types. The second option would be to assess a fee only on irrigated acres. Similar to the pumping fee approach, assessment based on irrigated acreage could affect agricultural operations and contribute to land use conversions, which could affect the assessment amount or ability to fully fund GSP implementation.

- **Combination of fees and assessments:** This approach would combine pumping fees and assessments to moderate the effects of either approach on the economy in the Basin. This approach would likely include an assessment that would apply to all acres in the Basin, rather than just to irrigated acreage. It would be coupled with a pumping fee to account for those properties that use more water than others.

During development or refinement of a financing plan, the CBGSA would also determine whether to apply fees across the Basin as a whole or just within the management areas. The CBGSA may choose to apply an assessment across the Basin and a pumping fee within the management areas, or choose to set different levels of assessments or fees based on location within a management area or not, or they may choose another combination of the above approaches based on location. On July 10, 2019, the CBGSA Board voted to use a groundwater extraction fee to provide funding for CBGSA activities during the first year of GSP implementation and, on November 6, 2019, the Board established a groundwater extraction fee for the 2020 calendar year. The CBGSA has continued to apply groundwater extraction fees annually in the years since then. This strategy may be modified in the future by changing to land assessments, modifying fees/assessments based on location or usage, or some other methodology as deemed appropriate to the CBGSA. Prior to implementing any fee or assessment program, the CBGSA would complete a rate assessment study and other analysis consistent with the requirements of Proposition 218.

The CBGSA will pursue grants and loans to help pay for project costs to the extent possible. If grants or loans are secured for project implementation, potential pumping fees and assessments may be adjusted to align with operating costs of the CBGSA and ongoing GSP implementation activities. A potential hurdle to the utilization of state grant funding is that delays in payment by the state can cause hardships for disadvantaged communities such as the Cuyama Basin. Therefore, it would be appropriate to expedite payments associated with grant funding by DWR.

~~8.2.2~~8.3.2 Projects and Management Actions

Costs for the Projects and Management Actions are described in Chapter 7 of this GSP. Financing of the projects and management actions would vary depending on the activity. Potential financing for projects and management actions are provided in Table 8-2~~Table 8-2~~, though other financing may be pursued as opportunities arise or as appropriate.

Table 8-2: Financing Options for Proposed Projects, Management Actions, and Adaptive Management Strategies

Project/Activity		Responsible Entity	Potential Financing Options
	Feasibility Study	CBGSA	• CBGSA Operating Funds

Table 8-2: Financing Options for Proposed Projects, Management Actions, and Adaptive Management Strategies

Project/Activity		Responsible Entity	Potential Financing Options
Project 1: Flood and Stormwater Capture			• CBGSA Member Agencies
	Project Implementation	CBGSA or Member Agencies	• Grants • Loans • CBGSA Operating Funds • CBGSA Member Agencies
Project 2: Precipitation Enhancement	Feasibility Study	CBGSA	• CBGSA Operating Costs • CBGSA Member Agencies
	Project Implementation	CBGSA or Member Agencies	• CBGSA Operating Costs • CBGSA Member Agencies
Project 3: Water Supply Transfers/Exchanges	Feasibility Study	CBGSA	• CBGSA Operating Costs
	Project Implementation	CBGSA	• CBGSA Operating Costs
Project 4: Improve Reliability of Water Supplies for Local Communities	CCSD Well 4	Cuyama Community Services District (CCSD)	• Grants • Loans • CCSD Operating Costs
	VWSC Well 2	Ventucopa Water Supply Company (VWSC)	• Grants • Loans • VWSC Operating Costs
Project 5: Flow Meter Calibration Program	Project implementation	CBGSA	• Grants • CBGSA Operating Costs
Management Action 1: Basin-Wide Economic Analysis	Economic Study*	CBGSA	• CBGSA Operating Costs
Management Action 2: Pumping Allocations in Central Basin Management Area	Allocation Plan	CBGSA	• CBGSA Operating Costs
	Enforcement	CBGSA or Member Agencies	• CBGSA Operating Costs • Member Agency Operating Costs
Adaptive Management	-	CBGSA	• Grants • Loans

Table 8-2: Financing Options for Proposed Projects, Management Actions, and Adaptive Management Strategies

Project/Activity		Responsible Entity	Potential Financing Options
			• CBGSA Operating Costs
** Project/Management Action Completed*			

~~8.3~~8.4 Annual Reports

Annual reports must be submitted by April 1 of each year following GSP adoption per California Code of Regulations. Annual reports must include three key sections as follows

- General Information
- Basin Conditions
- Plan Implementation Progress

An outline of what information will be provided in each of these sections in the annual report is included below. Annual reporting would be completed in a manner and format consistent with Section 356.2 of the SGMA regulations. As annual reporting continues, it is possible that this outline will change to reflect Basin conditions, CBGSA priorities, and applicable requirements.

~~8.3.1~~8.4.1 General Information

General information included in the ~~will include an~~ executive summary ~~that~~ highlights the key content of the annual report. As part of the executive summary, this section includes~~will include~~ a description of the sustainability goals, provides a description of GSP projects and their progress as well as an annually-updated implementation schedule and map of the Basin. Key components as required by SGMA regulations include:

- Executive Summary
- Map of the Basin

~~8.3.2~~8.4.2 Basin Conditions

The b~~B~~asin conditions section describes~~will describe~~ the ~~current~~ groundwater conditions and monitoring results from the applicable water year.~~.~~ This section includes~~will include~~ an evaluation of how conditions ~~have~~ changed in the Basin since~~over~~ the previous water year and compare conditions ~~groundwater data for the year~~ to historical groundwater data. Pumping data, effects of project implementation (e.g.,

recharge data, conservation, if applicable), surface water flows, total water use, and groundwater storage arewill be included. Key components as required by SGMA regulations include:

- Groundwater elevation data from the monitoring network
- Hydrographs of elevation data
- Groundwater extraction data
- Surface water supply data
- Total water use data
- Change in groundwater storage, including maps

8.3.38.4.3 Plan Implementation Progress

Progress toward successful plan implementation iswould be included in the annual report. This section of the annual report describeswould describe the progress made toward achieving interim milestones as well as implementation of projects and management actions. Key components as required by SGMA regulations include:

- Plan implementation progress
- Sustainability progress

8.48.5 Five-Year Periodic Evaluation Report

SGMA requires GSAs to evaluate theirevaluation GSPs to assessregarding their progress toward meeting approved sustainability goals at least every five years or whenever a plan is amended, which must be done through. SGMA also requires developing a written assessment submitted to DWR. and submitting this assessment to DWR. An evaluation must also be made whenever the GSP is amended. A description of the information that will be included in the Periodic Evaluationfive year report is provided below, and willwould be prepared in a manner consistent with Section 356.4 of the SGMA regulations. The CBGSA will submit its first Periodic Evaluation in 2025 along with this 2025 GSP.

8.4.18.5.1 Sustainability Evaluation

This section will contain a description of current groundwater conditions for each applicable sustainability indicator and will include a discussion of overall Basin sustainability. Progress toward achieving interim milestones and measurable objectives will be included, along with an evaluation of groundwater elevations (i.e., those being used as direct or proxy measures for the sustainability indicators) in relation to minimum thresholds. If any of the adaptative management triggers are found to be met during this evaluation, a plan for implementing adaptive management described in the GSP would be included.

~~8.4.2~~8.5.2 Plan Implementation Progress

This section will describe an updated~~the current~~ status of project and management action implementation, and report on whether any adaptive management action triggers had been activated since the previous periodic evaluation.~~five-year report.~~ An updated project implementation schedule~~s~~ will be included, along with any new projects that were developed to support the goals of the GSP and a description of any projects that are no longer included in the GSP. The benefits of projects that have been implemented will be included, and updates on projects and management actions that are underway at the time of the periodic evaluation~~five-year report~~ will be reported.

~~8.4.3~~8.5.3 Reconsideration of GSP Elements

Part of the periodic evaluation~~five-year report~~ will include a reconsideration of GSP elements. As additional monitoring data are collected during GSP implementation, land uses and community characteristics change over time, and GSP projects and management actions are implemented, it may become necessary to revise the GSP. This section of the periodic evaluation~~five-year report~~ will reconsider the Basin setting, management areas, undesirable results, minimum thresholds, and measurable objectives. If appropriate, the periodic evaluation~~five-year report~~ will recommend revisions to the GSP. Revisions would be informed by the outcomes of the monitoring network, and changes in the Basin, including changes to groundwater uses or supplies and outcomes of project implementation.

~~8.4.4~~8.5.4 Monitoring Network Description

A description of the monitoring network will be provided in the periodic evaluation.~~five-year report.~~ Data gaps, or areas of the Basin that are not monitored in a manner commensurate with the requirements of Sections 352.4 and 354.34(c) of the SGMA regulations will be identified. An assessment of the monitoring network's function will also be provided, along with an analysis of data collected to date. If data gaps are identified, the periodic evaluation may~~GSP will be revised to~~ include information or steps~~a program~~ for addressing these data gaps, along with an implemented schedule for addressing gaps and how the CBGSA will incorporate updated data into the GSP.

~~8.4.5~~8.5.5 New Information

New information that becomes available after the last GSP adoption, ~~five-year evaluation or~~ GSP amendment, or periodic evaluation ~~-~~would be described and evaluated. If the new information would warrant a change to the GSP, this would also be included, as described in Section 8.5.3.

~~8.4.6~~8.5.6 Regulations or Ordinances

The Periodic Evaluation~~five-year report~~ will include a summary of the regulations or ordinances related to the GSP that have been implemented by DWR since the previous report, and address how these may require updates to the GSP.

~~8.4.7~~8.5.7 Legal or Enforcement Actions

The Periodic Evaluation will include enforcement~~Enforcement~~ or legal actions taken by the CBGSA or its member agencies in relation to the GSP will be summarized in this section along with how such actions support sustainability in the Basin.

~~8.4.8~~8.5.8 Plan Amendments

A description of amendments to the GSP will be provided in the Periodic Evaluation~~five-year report~~, including adopted amendments, recommended amendments for future updates, and amendments that are underway ~~during development of the five-year report~~.

~~8.4.9~~8.5.9 Coordination

The CBGSA is the only GSA in the Cuyama Basin. It is adjacent to the Carrizo Basin, the Mil Potrero Area Basin, and Lockwood Valley Basin, which are very low priority basins per the California Statewide Groundwater Elevation Monitoring (CASGEM) Program, and not yet required to comply with SGMA. Downstream from the Basin is the Santa Maria River Valley Basin, which is currently undergoing prioritization evaluation under the CASGEM Program. A GSA has formed for the Santa Maria Basin Fringe Areas, which are located downstream from Twitchell Reservoir, and could be affected by stormwater capture activities by the CBGSA. The CBGSA may need to coordinate with this GSA, and will need to coordinate with various land use agencies and other entities to implement projects. This section of the Periodic Evaluation~~five-year report~~ will describe coordination activities between these entities, such as meetings, joint projects, or data collection efforts. If additional neighboring GSAs have been formed since the previous report, or changes in neighboring basins occurred, that result in a need for new or additional coordination within or outside the Basin, such coordination activities would be included as well.

EXECUTIVE SUMMARY

Introduction

In 2014, the California legislature enacted the Sustainable Groundwater Management Act (SGMA) in response to continued overdraft of California's groundwater resources. The Cuyama Groundwater Basin (Basin) is one of 21 basins and subbasins identified by the California Department of Water Resources (DWR) as being in a state of critical overdraft. SGMA requires preparation of a Groundwater Sustainability Plan (GSP) to address measures necessary to attain sustainable conditions in the Basin. Within the framework of SGMA, sustainability is generally defined as the conditions that result in long-term reliability of groundwater supply, and the absence of undesirable results.

In 2017, in response to SGMA, the Cuyama Basin Groundwater Sustainability Agency (CBGSA) was formed. The CBGSA is a joint-powers agency that is comprised of Kern, Santa Barbara, San Luis Obispo and Ventura counties, the Cuyama Community Services District and the Cuyama Basin Water District. The CBGSA is governed by an 11-member Board of Directors, with one representative from Kern, San Luis Obispo and Ventura counties, two representatives from Santa Barbara County, one member from the Cuyama Community Services District, and five members from the Cuyama Basin Water District.

~~This Draft GSP~~SGMA requires that the CBGSA develop a GSP that achieves groundwater sustainability in the Basin by the year 2040. The Draft Cuyama Basin GSP was adopted on December 4, 2019 by the CBGSA Board and submitted to DWR on January 28, 2020. On January 21, 2021, DWR determined that the GSP was "incomplete" and recommended CBGSA to amend the GSP to address four corrective actions. To address these corrective actions, CBGSA developed supplemental sections to the GSP and resubmitted to DWR on July 18, 2022. On March 2, 2023, DWR announced that the Revised GSP had been Approved.

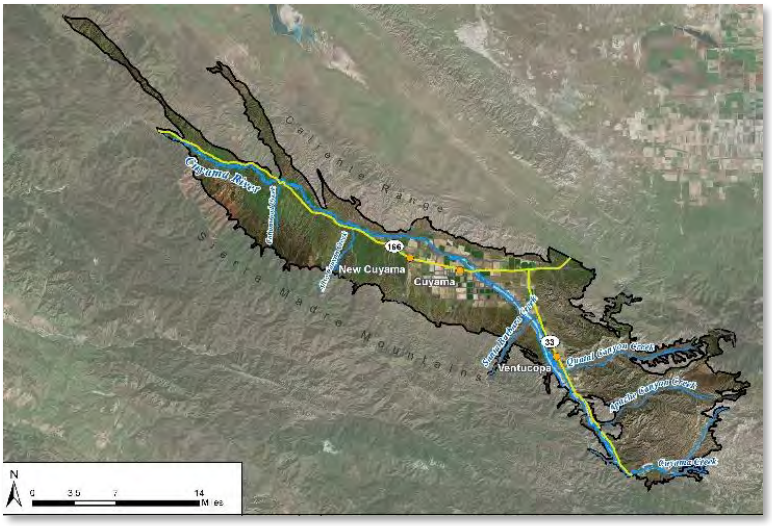


Figure ES- 1: GSP Plan Area

This 2025 GSP Update is now available for public review and comment. SGMA requires the CBGSA to develop a GSP that achieves groundwater sustainability in the Basin by 2040. Although SGMA references 2015 as a basis for groundwater planning, SGMA does not require a GSP to address undesirable results that occurred before 2015. ~~This Draft~~The GSP outlines the need for significant reductions in pumping in the central portion of the Basin~~,~~ and has identified ~~two~~ projects ~~for potential development~~and management actions that could help offset the projected reductions in pumping.

Although current analysis indicates groundwater pumping reductions on the order of ~~50 to 67~~60 percent may be required Basin-wide to achieve sustainability, additional efforts are required to confirm the amount and location of pumping reductions required to achieve sustainability. These efforts include collecting additional data and a review of the Basin's groundwater model, along with other efforts as outlined in this document.

Plan Area

The CBGSA's jurisdictional area is defined by DWR's 2013 Bulletin 118, and in the 2016 Interim Update[1]. The Basin generally underlies the Cuyama Valley, as shown in Figure ES-1, ~~left~~above.

Outreach Efforts

Figure ES- 2: Community Workshops

A stakeholder engagement strategy was developed to ensure that the interests of all beneficial users of groundwater in the Basin were considered. The strategy incorporated monthly CBGSA Standing Advisory Committee (SAC) meetings, monthly CBGSA Board meetings, quarterly community workshops, and information distribution to all property owners and residents in the Basin. A total of ~~55~~131 public meetings were held between June 2017 and ~~July 2019~~August 2024 as summarized in the table below. Figure ES-2 shows attendees at one of the community workshops conducted during development of the GSP.

Public Meeting	Number
Cuyama Basin GSA Board Meetings	59
Cuyama Basin GSA Standing Advisory Committee Meetings	53
Joint Meetings of Cuyama Basin GSA Board and Standing Advisory Committee	10
Community Workshops	9

The SAC was established to encourage active involvement from diverse social, cultural, and economic elements of the population in the Basin. The SAC members represent large and small landowners and growers from different geographic locations in the Basin, longtime residents including Hispanic community members, and a manager of an environmental educational non-

[1] https://water.ca.gov/Programs/Groundwater-Management/Bulletin-118

profit organization. The community workshops were conducted in both English and Spanish creating an opportunity for local individuals to engage in the GSP development process.

Basin Setting

The Basin is at the southeastern end of the California Coast Ranges, near the San Andreas and Santa Maria River fault zones, and is bounded on the north and south by faults. These faults create several constraints on groundwater flow through the Basin. Groundwater and surface water generally flow from the eastern portions of the Basin toward the westernmost portion of the Basin. The major surface stream is the Cuyama River. Multiple smaller streams flow into the Cuyama River; and the Cuyama River flows to the west and eventually joins with the Santa Maria River. The location of the Basin is shown in Figure ES-3.

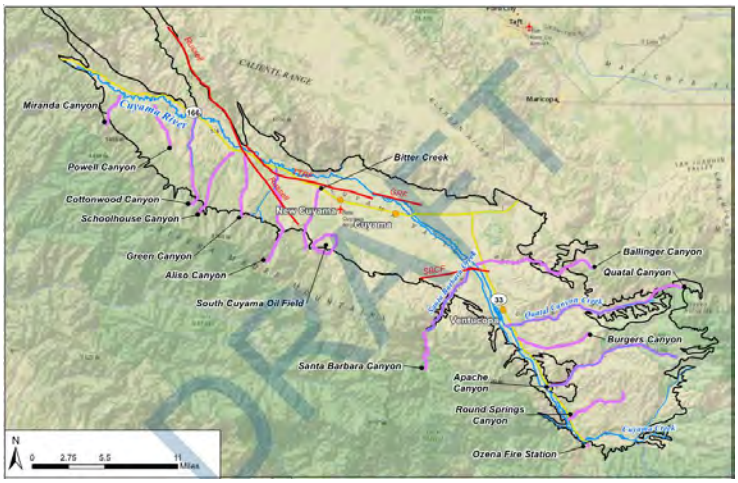


Figure ES- 3: Basin Setting

Existing Groundwater Conditions

Groundwater levels in some portions of the Basin have been declining for many years, while other areas of the Basin have experienced no significant change in groundwater levels. Figure ES-4 shows depth-to-groundwater contours for ~~spring 2018~~fall 2023, which reflects the most recent recorded status of groundwater levels in the Basin. The change in groundwater levels vary across the Basin, with the greatest declines occurring in the central portion of the Basin, where the greatest concentration of irrigated agriculture occurs. The western and eastern portions of the Basin have experienced significantly less change in groundwater levels. However, additional irrigated agricultural acreage has been developed recently in the western portion of the Basin, warranting additional levels of monitoring to determine if there are any impacts to long-term groundwater levels and sustainability.

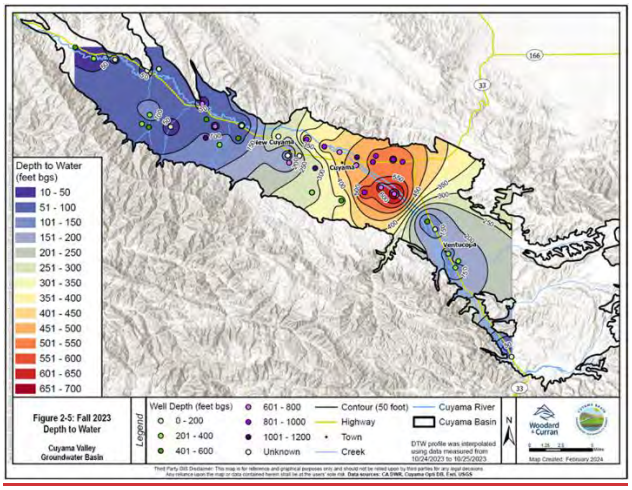


Figure ES-~~4:~~ 4: Depth-to-Groundwater in ~~Spring 2018~~Fall 2023

Groundwater quality in the Basin varies, particularly along the Basin boundary. Water quality in the Basin has historically had high levels of total dissolved solids (TDS) and sulfates. The United States Geological Survey (USGS) has conducted several water quality studies in the Basin. High concentrations of other constituents, including nitrate and arsenic, are generally localized and not widespread. Groundwater quality ranges from hard to very hard and is predominantly of the calcium-magnesium-sulfate type. Average TDS concentrations across the Basin in the last year are ~~as high as~~about 1,~~500~~100 to ~~6,000~~1,300 milligrams per liter (mg/L) along portions of the Basin's southern boundary. These values exceed the California recommended secondary maximum contaminant level (MCL) for drinking water of 500 mg/L.

Undesirable Results

Undesirable results are conditions that cause significant and unreasonable reduction in the long-term viability of domestic, agricultural, municipal, or environmental uses of the Basin's groundwater. SGMA identifies six defined areas for classification of undesirable results, as shown in the adjacent callout. The one undesirable result that does not impact the Basin is seawater intrusion. Water quality in the Basin is generally poor due to high TDS and other constituents, and there is limited subsidence in the Basin, but the major areas of undesirable results are associated with the following:

- Chronic lowering of groundwater levels
- Significant and unreasonable reduction in groundwater storage
- Depletions of interconnected surface water

Figure ES-5 is a graph showing the modeled annual and cumulative long-term reduction in groundwater storage in the Basin. This reduction in groundwater storage coincides with the observed lowering of groundwater levels.

Undesirable Results Categories

- 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 (does not apply in the Basin)
- Significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies
- Significant and unreasonable land subsidence that substantially interferes with surface land uses
- Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water

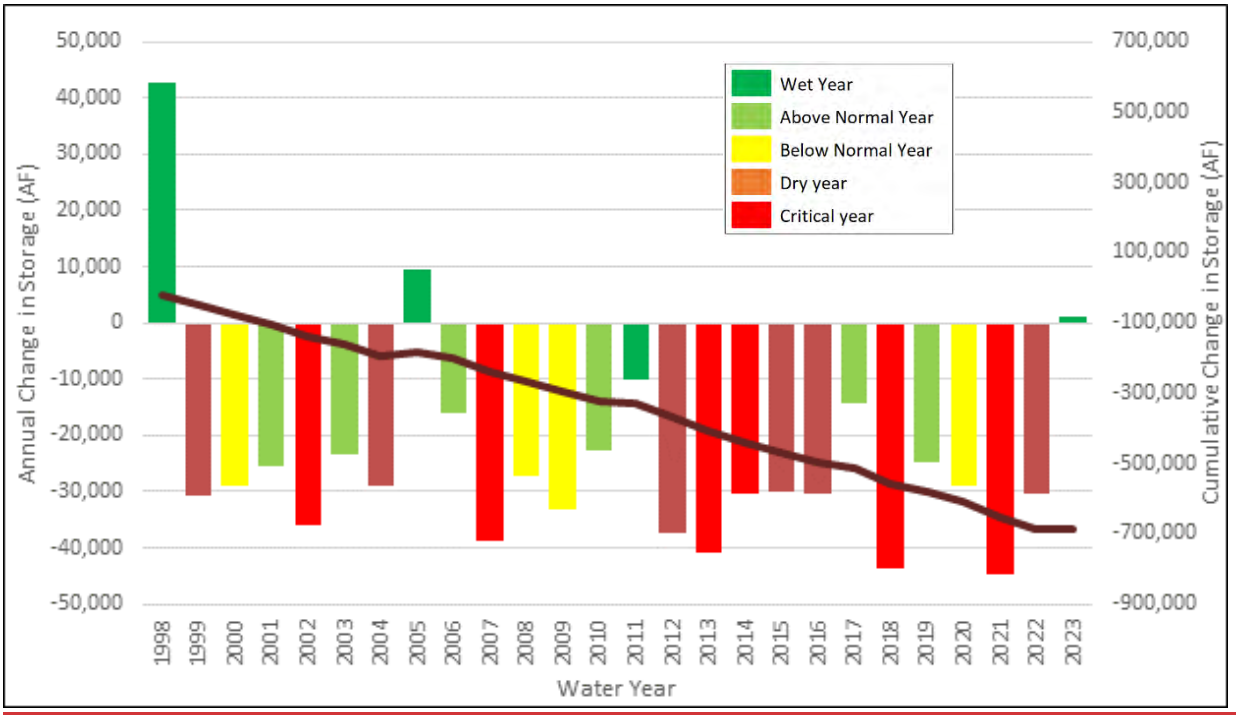


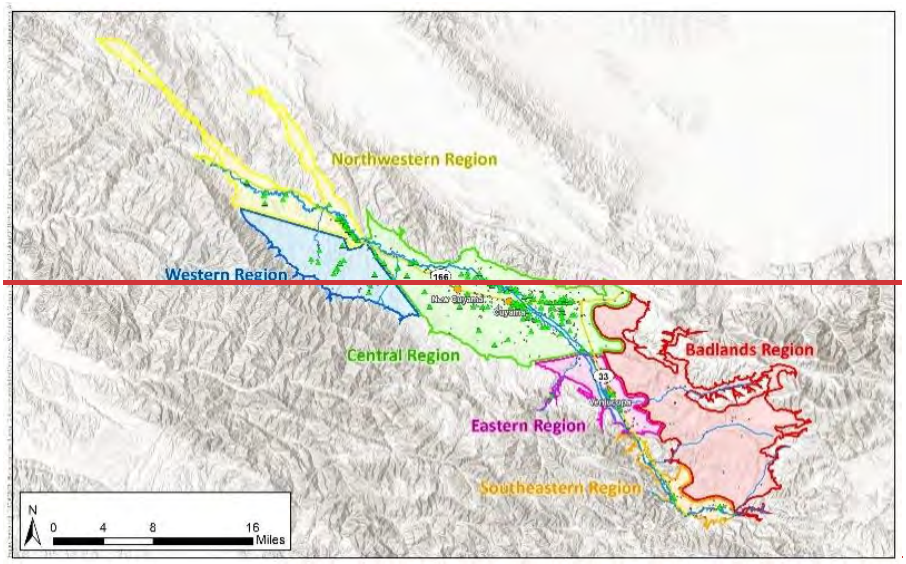
Figure ES- 5: Annual and Cumulative Changes in Groundwater Storage

The lowering of groundwater levels has corresponded with degradation of groundwater quality, and particularly in elevated levels of TDS. Additionally, lowering of groundwater levels has contributed to some subsidence in the central portion of the Basin (i.e., about 1 foot over the past 20 years), and has contributed to depletions in interconnections of surface and groundwater systems.

Sustainability

SGMA introduces several terms to measure sustainability, including the following:

- **Sustainability Goals** – These goals are the culmination of conditions resulting in an absence of undesirable results within 20 years.
- **Undesirable Results** – Undesirable results are the significant and unreasonable occurrence of conditions that adversely affect groundwater use in the Basin.
- **Sustainability Indicators** – ~~Sustanability~~Sustainability indicators refer to any of the adverse effects caused by groundwater conditions occurring throughout the Basin that, when significant and unreasonable, cause undesirable results, including the following:
  - Lowering groundwater levels
  - Reduction of groundwater storage
  - Seawater intrusion (does not apply in the Basin)
  - Degraded water quality
  - Land subsidence
  - Depletion of interconnected surface water
- **Minimum Thresholds** – Minimum thresholds are a numeric value for each sustainability indicator and are used to define when undesirable results occur, including if minimum thresholds are exceeded in a percentage of sites in the Basin's monitoring network.
- **Measurable Objectives** – Measurable objectives are a specific set of quantifiable goals for the maintenance or improvement of groundwater conditions. They will be included in the adopted GSP, and will help the CBGSA achieve their sustainability goal for the Basin.



~~Figure ES-6: Threshold Regions~~

~~The method prescribed by SGMA to measure undesirable results involves setting minimum thresholds and measurable objectives for a series of representative wells. Geologic conditions and land use vary across the Basin. These varying conditions also cause groundwater conditions to vary across the Basin. The CBGSA Board of Directors concluded that one set of minimum thresholds for the entire Basin may not provide the appropriate degree of refinement needed to effectively manage Basin-wide sustainability. As a result, threshold regions were created to establish the appropriate sustainability criteria for separate regions of the Basin. The threshold regions are shown above in Figure ES-6.~~

Representative wells were identified in the Basin to provide a basis for measuring groundwater conditions without having to measure each existing well, which would have been cost prohibitive. Representative wells were selected based on availability, their history of recorded groundwater levels, and their potential to effectively represent groundwater conditions near the identified well. During GSP implementation, well owners ~~will~~ have to consent to the use of their wells for monitoring. During the first four years of GSP implementation, monitoring networks have been revised to provide efficient and adequate coverage of the Basin while expanding data collection efforts.

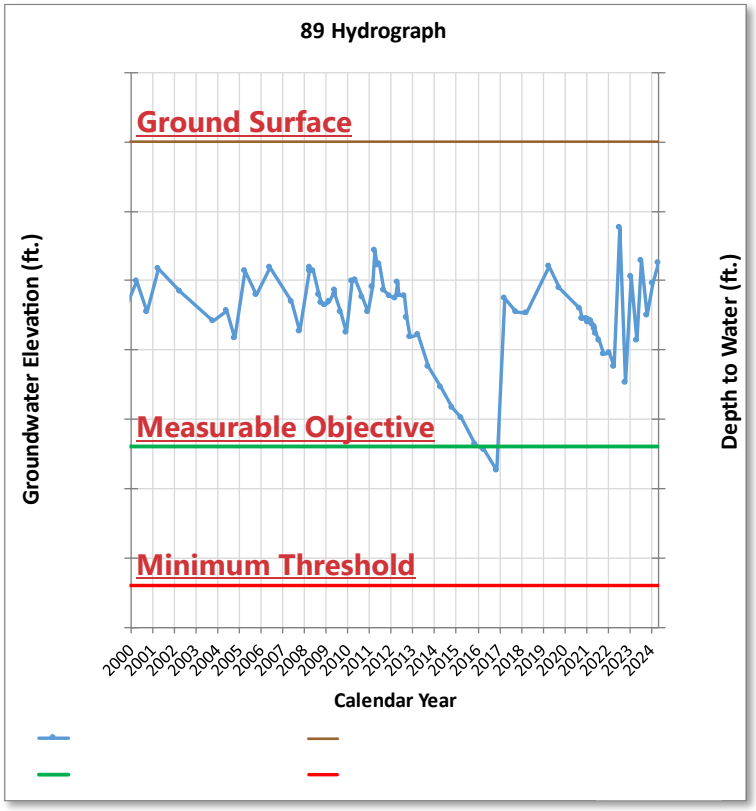


Figure ES- 6: Sample Relationship Between Minimum Threshold and Measurable Objective

~~A total of 60~~The revised groundwater level representative network includes 49 wells~~ have been identified for measurement of groundwater levels in the Basin~~, and ~~64 representative wells have been identified for~~the revised groundwater quality monitoring network includes 27 wells. There are also five selected ground surface subsidence monitoring stations. Using groundwater level data as the basis for measuring change in groundwater storage, these representative wells and subsidence monitoring stations provide the basis for measuring the five potential undesirable results across the Basin.

Minimum thresholds and measurable objectives were developed for each of the identified representative wells. Figure ES-~~7~~6 shows a typical ~~relatonship~~relationship of the minimum thresholds, measurable objectives, and other data for a sample well.

~~Thresholds~~ Minimum thresholds were developed through a stepwise function that utilizes a well/GDE protection depth, historical data, projected modeled glidepath declines, and the saturated thickness in areas with ~~reference to 2015 groundwater levels. In general, measurable~~greater geologic understanding. Measurable objectives were ~~established based on providing a 5-year drought buffer above the~~calculated by using the same margin of operation flexibility as described in the original GSP but utilizing the new minimum ~~threshold. The opposite approach was taken in the southeastern region, where the measurable objective was established based on 2015 groundwater levels and the minimum threshold was determined by providing a 5-year drought buffer below~~thresholds as the ~~established measurable objective based on changes in groundwater levels during the recent extended drought.~~starting value.

A table summarizing minimum thresholds and measurable objectives is included in the ~~Draft~~ GSP Section 5. Graphs showing the minimum threshold and measurable objective for each representative well are in an appendix to the ~~Draft~~ GSP.

Water Budgets

The Basin has been in an overdraft condition for many years. Overdraft conditions in the Basin were first documented in the 1950s. Since then, groundwater pumping has increased in response to increased levels of agricultural production, leading to increased levels of groundwater overdraft.

The current analysis was prepared using the best available information and through development of ~~a new~~ groundwater modeling tool. The groundwater model was significantly updated in advance of the 2025 GSP Update to reflect information collected to date, including updated geologic representation reflecting Airborne Electromagnetic (AEM) survey data and the results of a fault investigation conducted by the CBGSA, updated pumping well location and land use information, and updated evapotranspiration estimates that were calibrated to better match metered pumping data for 2022 and 2023. Although the Basin has been studied for many years, the available data are still not as robust in areas outside the center of the Basin as compared to many other basins, thus leading to some level of uncertainty in the analyses. ~~A data collection program has been designed to augment existing information, and~~ It is ~~included in this Draft GSP. It is anticipated that~~ expected that the model will continue to be refined in the future as ~~additional~~improved and updated monitoring information becomes available~~, the new model can be updated, and more refined estimates of annual pumping and overdraft can be developed~~ for the Basin. These refinements may result in changes in the estimated water budgets in the future.

The groundwater evaluations conducted as a part of this 2025 GSP Update provided estimates of historical, current and future groundwater budget conditions.

These analyses show that at current groundwater pumping levels, the average annual overdraft is estimated to be approximately ~~26~~17,000 acre-feet, and the reduction in groundwater pumping required to achieve sustainability is approximately ~~40~~26,000 acre-feet per year. Future groundwater conditions in the Basin will continue to show decreased groundwater levels based on projections of current land and water uses. Assuming no projected changes in land use or population in the Basin, the projected annual decline in groundwater storage is estimated to be the same as under current conditions.

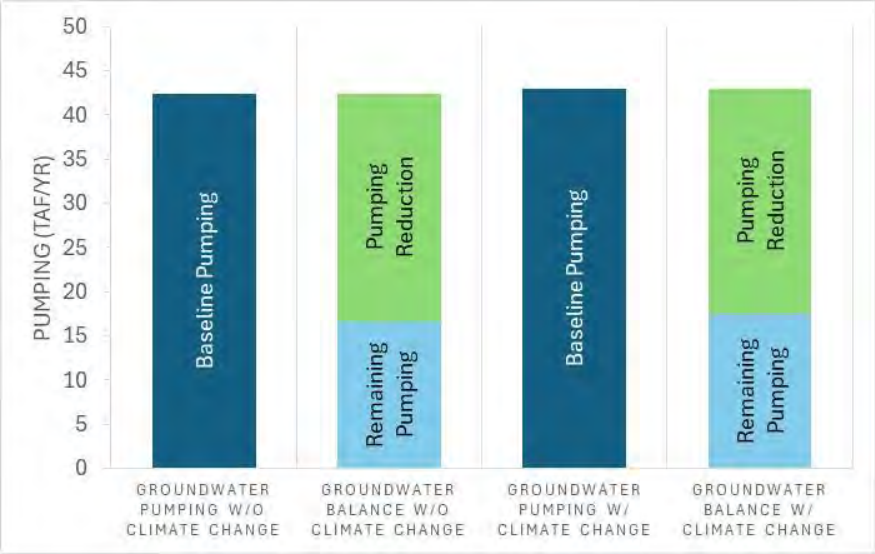


Figure ES-~~8:~~ 7: Basin-Wide Groundwater Pumping and Reductions Required to Achieve Sustainability

The projected Basin water budget was also evaluated under climate change conditions. Under the intermediate climate change scenario prescribed by DWR, the annual groundwater overdraft is projected to increase to approximately ~~27~~20,000 acre-feet, requiring an approximate ~~42~~28,000 acre-feet per year reduction in groundwater pumping to achieve sustainability. These changes are shown in Figure ES-~~8~~7.

Analysis of the Basin as a whole shows that much of the Basin is in hydrologic balance. Existing and projected groundwater levels in the western portions of the Basin, along with the southeastern region, show those areas to be sustainable under current and projected conditions. However, the model results project significant groundwater level reductions in the central portion of the Basin.

Monitoring Networks

~~This Draft~~The GSP outlines the monitoring networks for the five sustainability indicators that apply to the Basin. The objective of these monitoring networks is to monitor conditions across the Basin and to detect trends toward undesirable results. Specifically, the monitoring network was developed to do the following:

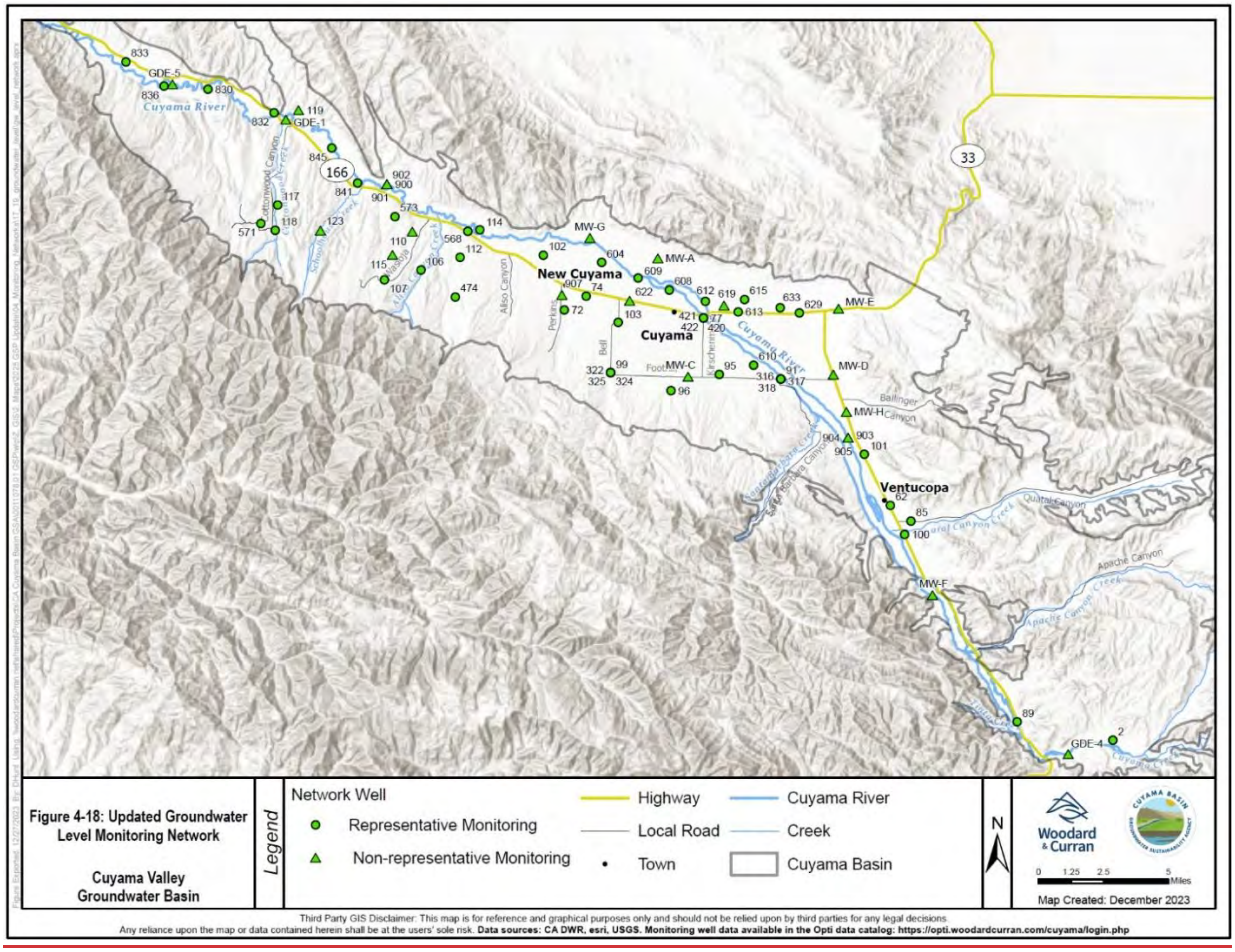
Five Sustainability Indicators Applicable to the Cuyama Groundwater Basin

- Chronic lowering of groundwater levels
- Reduction in groundwater storage
- Degraded water quality
- Land subsidence
- Depletions of interconnected surface water

- Monitor impacts to the beneficial uses or users of groundwater
- Monitor changes in groundwater conditions relative to measurable objectives and minimum thresholds
- Demonstrate progress toward achieving measurable objectives described in the ~~Draft~~ GSP

The monitoring networks, such as the groundwater level monitoring network shown in Figure ES-8, were designed by evaluating data sources provided by DWR, including the California Statewide Groundwater Elevation Monitoring (CASGEM) Program, the USGS, participating counties, and private landowners. The ~~proposed~~ monitoring network consists of wells that are already being used for monitoring in the Basin~~, but there are also current spatial data gaps~~ and was updated in September of 2023 following an evaluation of the ~~Basin~~existing monitoring network~~.~~ by the CBGSA. Additional wells ~~are being~~have been added~~, and there is the potential for installing new dedicated monitoring wells through~~ with DWR grant funding ~~provided~~and by ~~DWR's~~the DWR Technical Support Services program. ~~Most~~The wells in the monitoring network are measured by the CBGSA on either a ~~semi-annual or annual~~quarterly schedule. Historical measurements have been entered into the Basin Data Management System (DMS), ~~and~~as well as data collected during GSP implementation. All future data will also be stored in the Basin DMS.

~~A summary of monitoring wells included in the groudwater levels monitoring network is shown below.~~



~~Number of Wells Selected~~
~~for~~Figure ES- 8: Groundwater Monitoring ~~Network~~Wells

~~CASGEM~~	~~28~~
~~USGS~~	~~43~~
~~Santa Barbara County Water Agency~~	~~36~~
~~San Luis Obispo County Flood Control & Water Conservation District~~	~~2~~
~~Ventura County Watershed Protection District~~	~~5~~
~~Cuyama Community Services District~~	~~1~~
~~Private Landowner~~	~~48~~
~~Total~~	~~101~~
~~Note: Total does not equal sum of rows due to duplicate entries in multiple databases~~	

Data Management System

The Basin DMS was built on a flexible, open software platform that uses familiar Google maps and charting tools. Typical views generated by the Basin DMS are shown in Figure ES-~~10 and ES-11~~9. The Basin DMS serves as a data-sharing portal that enables use of the same data and tools for visualization and analysis. These tools support sustainable groundwater management and create transparent reporting about collected data and analysis results.

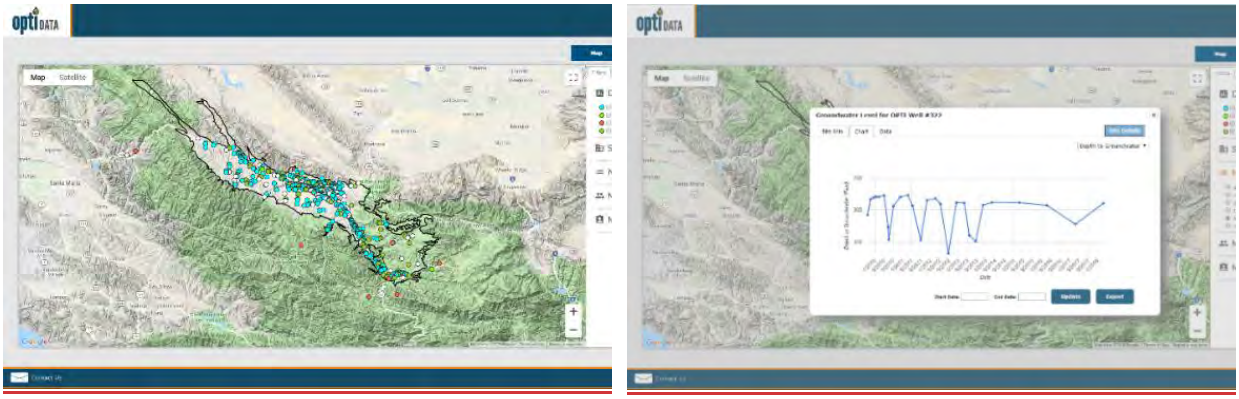


Figure ES- 9: Opti DMS ~~Screenshot~~Screenshots

The Basin DMS is web-based; the public can easily access this portal using common web browsers such as Google Chrome, Firefox, and Microsoft Edge. The Basin DMS is currently populated with available historical data; additional data will be entered into the system as it is collected.

The Basin DMS portal provides easy access and the ability to query information stored in the system. Groundwater data can be plotted for any of the available data points, providing a pictorial view of historical and current data. The DMS can be accessed at https://opti.woodardcurran.com/cuyama/login.php.

Projects and Management Actions

Achieving sustainability in the Basin requires implementation of management actions and, if demonstrated to be feasible, projects that will increase water supply. One management action, reductions in groundwater pumping through pumping allocations, is required to achieve sustainability irrespective of the feasibility of any other water supply projects. The exact amount of required reduction in groundwater pumping ~~will be~~has been reevaluated ~~after additional data are collected~~since the submittal of the original GSP and ~~analyzed.~~updated for the 2025 GSP Update. Based on current information, groundwater pumping ~~in the Basin may have~~reductions are estimated to ~~be reduced by as much as 50~~need to ~~67~~be about 60 percent. Additional evaluations of pumping reductions ~~required to achieve sustainability are planned over the next several years~~will continue during GSP implementation. These additional evaluations may lead to modification of levels of pumping reduction associated with the attainment of reliability.

Additional management actions included in ~~this Draft~~the GSP include the following:

- Monitoring and recording groundwater levels, groundwater quality, and subsidence data
- Maintaining and updating the Basin DMS with newly collected data
- Monitoring groundwater use using satellite imagery
- Annual monitoring of progress toward sustainability
- Annual reporting of Basin conditions to DWR as required by SGMA

Several alternative projects to potentially increase water supply availability in the Basin were identified and considered. The initial set of alternatives were reviewed with the CBGSA SAC and Board of Directors, resulting in two potential water supply projects included in ~~this Draft~~the GSP. These projects require further analysis and permitting to determine feasibility and cost effectiveness, and are listed below.

The first project is rainfall enhancement through what is commonly referred to as cloud seeding. Cloud seeding is a type of weather modification with the objective to increase the amount of precipitation that would fall in the Basin watershed. The concept is to introduce silver iodide, or a similar substance, into the clouds to induce greater rainfall. Cloud seeding has been used in numerous areas throughout California and other western states. Preliminary estimates suggest up to approximately 4,000 acre-feet per year of additional water supply could be added to the Basin. The target area for rainfall enhancement is shown in Figure ES-~~12~~11.

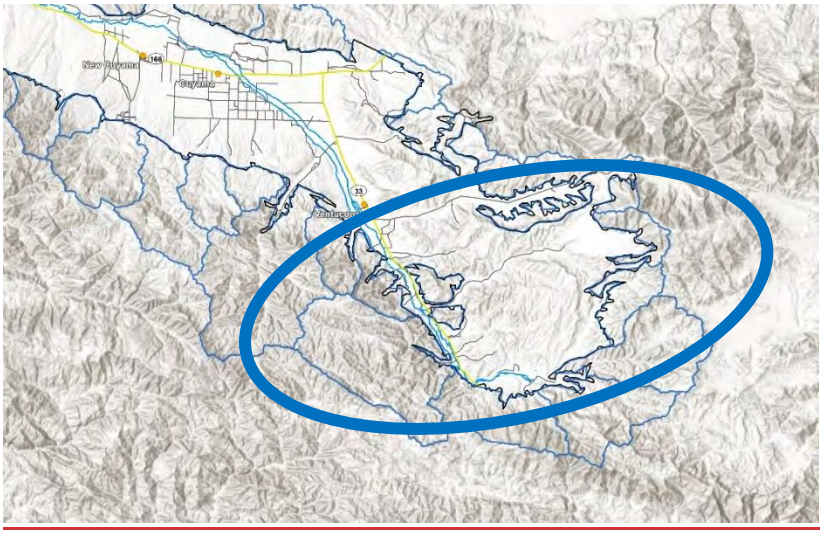


Figure ES- 10: Target Area for Potential Rainfall Enhancement

The next step toward implementation of this water supply project is to refine the analysis to better determine the potential increase in precipitation that could be achieved, and to refine the estimated cost of implementation. ~~The~~An analysis was performed in 2024 to provide updated information. Full implementation of a precipitation enhancement project would require completion of an environmental document consistent with the requirements of the California Environmental Quality Act (CEQA).

The second potential project is capture of high stormwater flows in the Cuyama River and diversion into recharge basins that would be sited in the Central region of the Basin. The captured stormwater flows would percolate into the groundwater basin resulting in increased recharge of groundwater. The potential stormwater recharge project has several challenges associated with it, including water rights availability, managing sediment that will be present in any diverted stormwater flows, and obtaining lands for construction of the recharge basins. Preliminary estimates suggest that up to 4,000 acre-feet per year of additional water supply could be added to the Basin. The general location of the potential recharge basins are shown in Figure ES-~~13~~12.

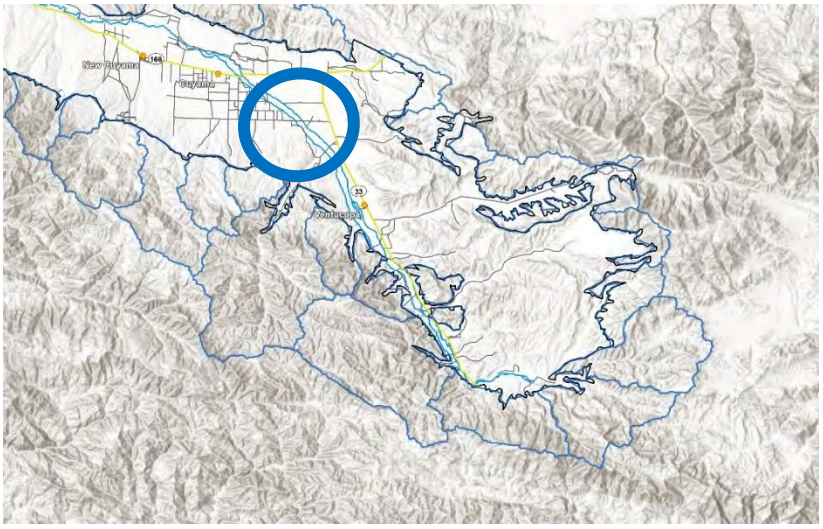


Figure ES- 11: General Location of Potential Recharge Basins

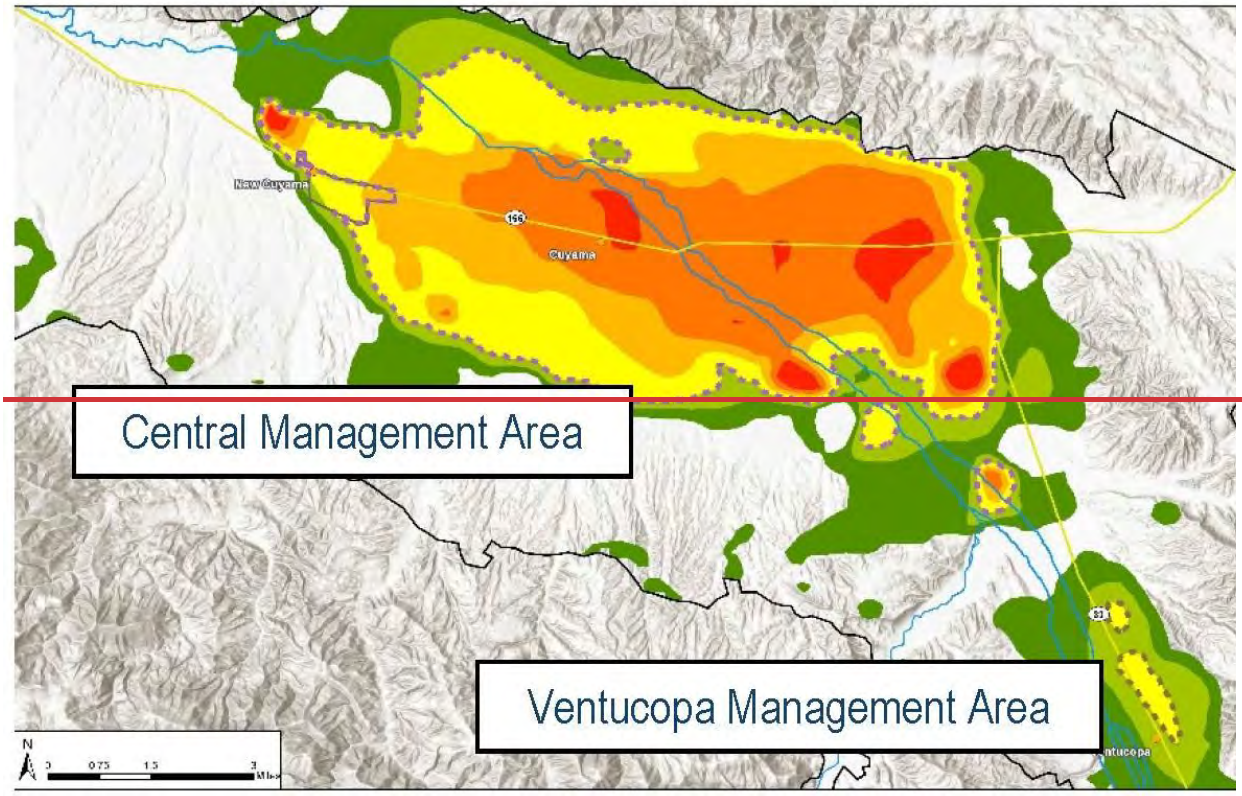
Since the original GSP was submitted, the CBGSA performed an analysis of the frequency of diversions that could be available for diversion, which indicated that upstream diversions could be made in approximately 11% of all years (i.e. 7 out of 62 years from 1962-2023). The next step toward implementation of this potential project is to evaluate each of these areas of uncertainty and to develop more refined estimates of potential water supply benefit and cost.

~~This Draft~~The GSP also includes projects specific to the domestic water systems in Ventucopa, Cuyama, and New Cuyama. These projects include installing new wells to secure reliability of water supply to residents of these communities. Implementation of these community well projects would be the responsibility of each of the three communities, as the projects address reliability of available supply for each community.

GSP Implementation

Achieving sustainability in the Basin requires implementation of management actions and, if demonstrated to be feasible, projects that will increase water supply. One management action, which is

reductions in groundwater pumping, is required to achieve sustainability irrespective of the feasibility of any other water supply projects. Implementing project and management actions can best be achieved through development of Basin Management Areas to focus necessary activities on the areas of the Basin with projected long-term overdraft.


New Cuyama
166
Cuyama
Central Management Area
Ventucopa Management Area
N
0 0.75 1.5 3
Miles

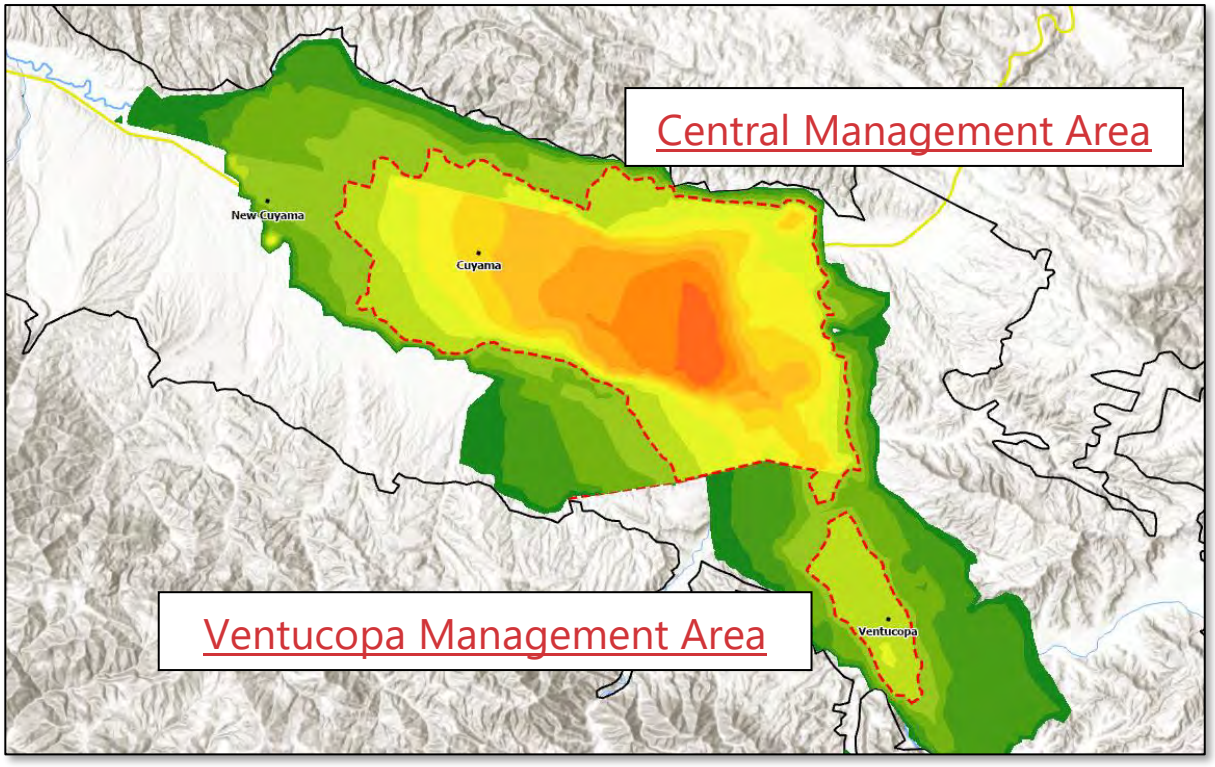


Figure ES-~~14:~~ 12: Location of Central and Ventucopa Management Areas

Two Management Areas have been established in the Basin to aid in administering projects and management actions, as shown in Figure ES-~~14~~13. The Central and Ventucopa management areas were identified based on the model's projection of groundwater levels decreasing at a rate of 2 feet or more per year over ~~over~~ a 50-year hydrologic period.

Figure ES-~~15~~13 depicts the general boundaries of the proposed Management Areas. The highlighted colors show the projected annual change in groundwater levels, with clear and green indicating no change to less than 2 feet of projected annual decline in groundwater levels, and the yellow, orange and red areas indicating areas of increasing projections of annual declines in groundwater levels, ranging from more than 2 feet per year up to more than ~~7~~6 feet per year.

Overdraft conditions in the Central Management Area requires reductions in groundwater pumping. The exact amount of required reduction in groundwater pumping will be reevaluated after additional data are collected and analyzed. However, based on current information, total Basin-wide groundwater pumping may have to be reduced by as much as ~~50 to 67~~60 percent, with the major proportion or reduction required in the Central Management Area.

Both Management Areas will be administered by the CBGSA. However, the CBGSA may elect to delegate administrative responsibility to another party.

Implementing the GSP will require numerous management activities that will be undertaken by the CBGSA, including the following:

- Preparing annual reports summarizing the conditions of the Basin and progress towards sustainability and submitting them to DWR
- Monitoring groundwater conditions for all five sustainability indicators twice each year
- Entering updated groundwater data into the Basin DMS
- Monitoring basin-wide groundwater use using satellite imagery
- Updating the GSP as necessary
- Preparing Periodic Evaluations once every five years and submitting to DWR

The CBGSA Board adopted a preliminary schedule for reduction of groundwater pumping in the Central Management Area.

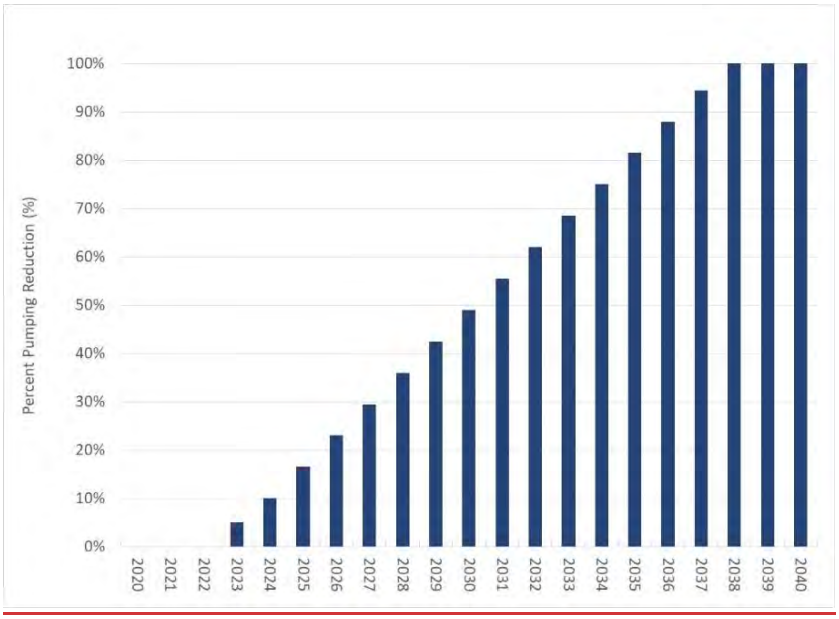


Figure ES-~~15:~~ 13: Schedule for Proposed Reductions in Groundwater Pumping

For the Central Management Area, pumping reductions ~~are scheduled to begin~~began in 2023 with full implementation by 2038, as shown in Figure ES-~~15~~14. This approach provides adequate time to put into place methods necessary to monitor groundwater use and reductions. ~~The specific methods for monitoring and reporting will be developed beginning in 2021, with the target of methods being in place by the end of 2022 to allow effective monitoring and pumping reductions to begin in 2023. Monitoring in 2023 will demonstrate achievement of the proposed levels of pumping reduction by the end of that year~~A pumping reporting program has been established, and a flow meter calibration program is currently being developed.

Pumping reductions are not currently recommended for the Ventucopa Area. The recommendation is to perform additional monitoring, incorporate new monitoring wells, and further evaluate groundwater conditions in the area ~~over the next two to five years.~~. Once additional data are obtained and evaluated, the need for any reductions in pumping will be determined.

~~Evaluation and possible implementation of the two identified projects will also be initiated between 2020 and 2025. Further evaluation of the two projects is necessary to determine technical, economic, and institutional feasibility. A critical aspect of feasibility for the stormwater diversion project will be confirmation of water rights availability. Downstream water right holders will have to be maintained whole for the project to be feasible and will require an in-depth analysis of water flows and availability. As a result, the first step in determining feasibility will be to evaluate the potential for obtaining a right for diversion from the Cuyama River.~~

The CBGSA has also begun implementing other projects and management actions. These include:

- Completing a water rights study for Project 1, Flood and Stormwater Capture
- Completing a preliminary study for Project 2, Precipitation Enhancement.
- Supporting the CCSD in the efforts to replace their supply well (Project 4)
- Completing Management Action 1, Basin-Wide Economic Analysis
- Establishing pumping allocations under Management Action 2 (this will continue)

The table below presents an overall schedule of GSP activities ~~spanning~~over the ~~next~~ 20 ~~years.~~-year planning horizon.

Time Range	2020 to 2024	2025 to 2029	2030 to 2034	2035 to 2040
Phase	Set up and initiate monitoring and pumping allocation programs	Project implementation and GSP evaluation/update	Project implementation and GSP evaluation/update	Achieve Basin sustainability
Tasks	• Establish monitoring network and initiate monitoring and reporting • Evaluate/refine thresholds and monitoring network • Install new wells • Develop pumping monitoring program* • Set up and initiate pumping allocation program* • Project analysis and feasibility • Public outreach	• CBGSA conducts five-year evaluations/update • Monitoring and reporting continues • Evaluate/refine thresholds and monitoring network • Refine water budget • Pumping monitoring program continues* • Continue implementation of pumping allocation program* • Plan/design/construct small- to medium-sized projects* • Public outreach continues	• CBGSA conducts five-year evaluations/update • Monitoring and reporting continues • Evaluate/refine thresholds and monitoring network • Refine water budget • Pumping monitoring program continues* • Continue implementation of pumping allocation program* • Plan/design/construct larger projects* • Public outreach continues	• CBGSA conducts five-year evaluations/update • Monitoring and reporting continues • Evaluate/refine thresholds and monitoring network • Refine water budget • Pumping monitoring program continues* • Pumping allocation program fully implemented* • Project implementation completed* • Public outreach continues
Status	Complete	In Progress	Planned	Planned

*Represents activities that will take place in CBGSA-designated management areas

Funding

Implementation of the GSP requires funding. To the degree they become available, outside grants will be sought to help reduce the cost of implementation. However, funds will need to be collected to support implementation, and costs associated with Basin-wide management and GSP implementation will likely be borne by residents and landowners across the Basin. These costs include the following:

- CBGSA administration
- Groundwater level monitoring and reporting
- Groundwater quality monitoring and reporting
- Ground surface subsidence monitoring and reporting
- Water use estimation
- Data management
- Stakeholder engagement
- Annual report preparation and submittal to DWR
- Funding mechanism development and implementation
- Grant applications
- GSP updates and submittal to DWR (every five years)

For budgetary purposes, the estimated initial cost of these activities ranges from $800,000 to $1.3 million per year. The CBGSA Board of Directors will evaluate options for securing needed funding. Options for funding include instituting fees based on groundwater pumping, acreage, or combinations of these, and pursuit of any available grant funds.

Activities associated with the two Management Areas will be borne by the landowners and water users within the two Management Areas.

~~For the Ventucopa Management Area, costs include monitoring of groundwater level data, evaluating the need for additional or new representative wells, and evaluting the need for pumping allocations. The estimated initial cost of these activities ranges from $40,000 to $80,000 per year.~~

~~For the Central Management Area, costs include the following:~~

- ~~Developing and implementing a system for pumping allocations, tracking, and management~~
- ~~Developing and implementing a funding mechanism~~
- ~~Evaluating and implementing water supply projects~~

~~The estimated initial cost of these activities range from $200,000 to $500,000 per year, plus costs associated with evaluating and implementing either of the two potential water supply projects. Depending~~

~~on feasibility, annual costs of the rainfall enhancement project would be on the order of $150,000 per year. The stormwater water capture project cost is estimated to cost from $3 to $4 million per year to amortize project capital costs and to provide funds for annual operations and maintenance.~~

The CBGSA Board of Directors will evaluate options for securing the needed funding. Similar to the funding options for the CBGSA basin-wide activities, options for funding management area costs include fees based on groundwater pumping, acreage, or combinations of these, and pursuit of any available grant funds.

Funding for new community wells or well improvements is the responsibility of the three Basin communities. There are potential opportunities for securing grant funds, depending on timing and State and federal grant funding availability.

TO: Board of Directors
Agenda Item No. 11a

FROM: Taylor Blakslee

DATE: September 4, 2024

SUBJECT: Report of the Executive Director

Recommended Motion
None – information only.

Discussion
Progress and next steps for the Hallmark Group for July and August 2024, and an overview of consultant budget-to-actuals are provided as Attachment 1.

Cuyama Basin Groundwater Sustainability Agency

13a. Report of the Executive Director

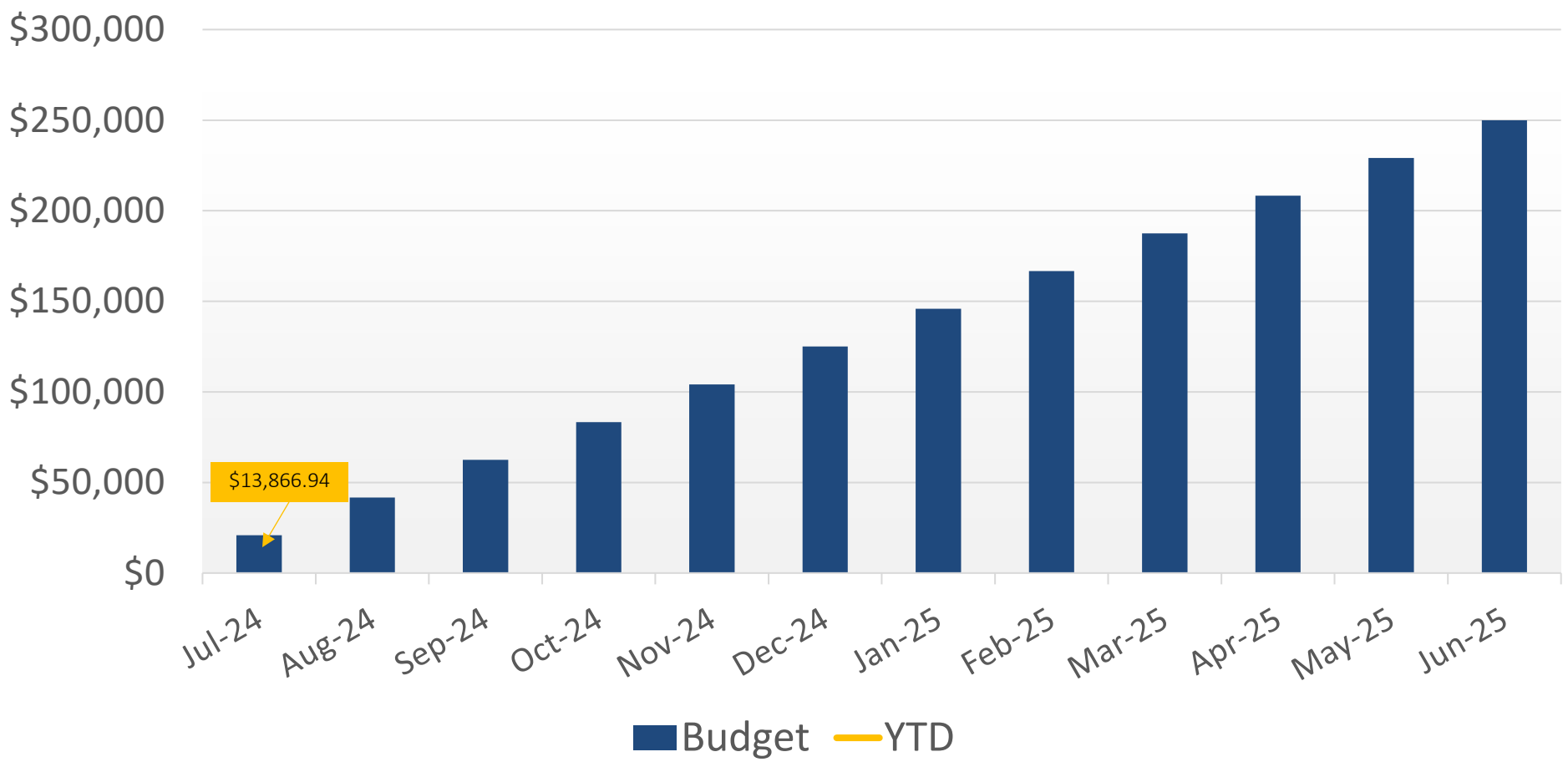
Jim Beck/Taylor Blakslee

September 4, 2024

HALLMARK GROUP Woodard & Curran

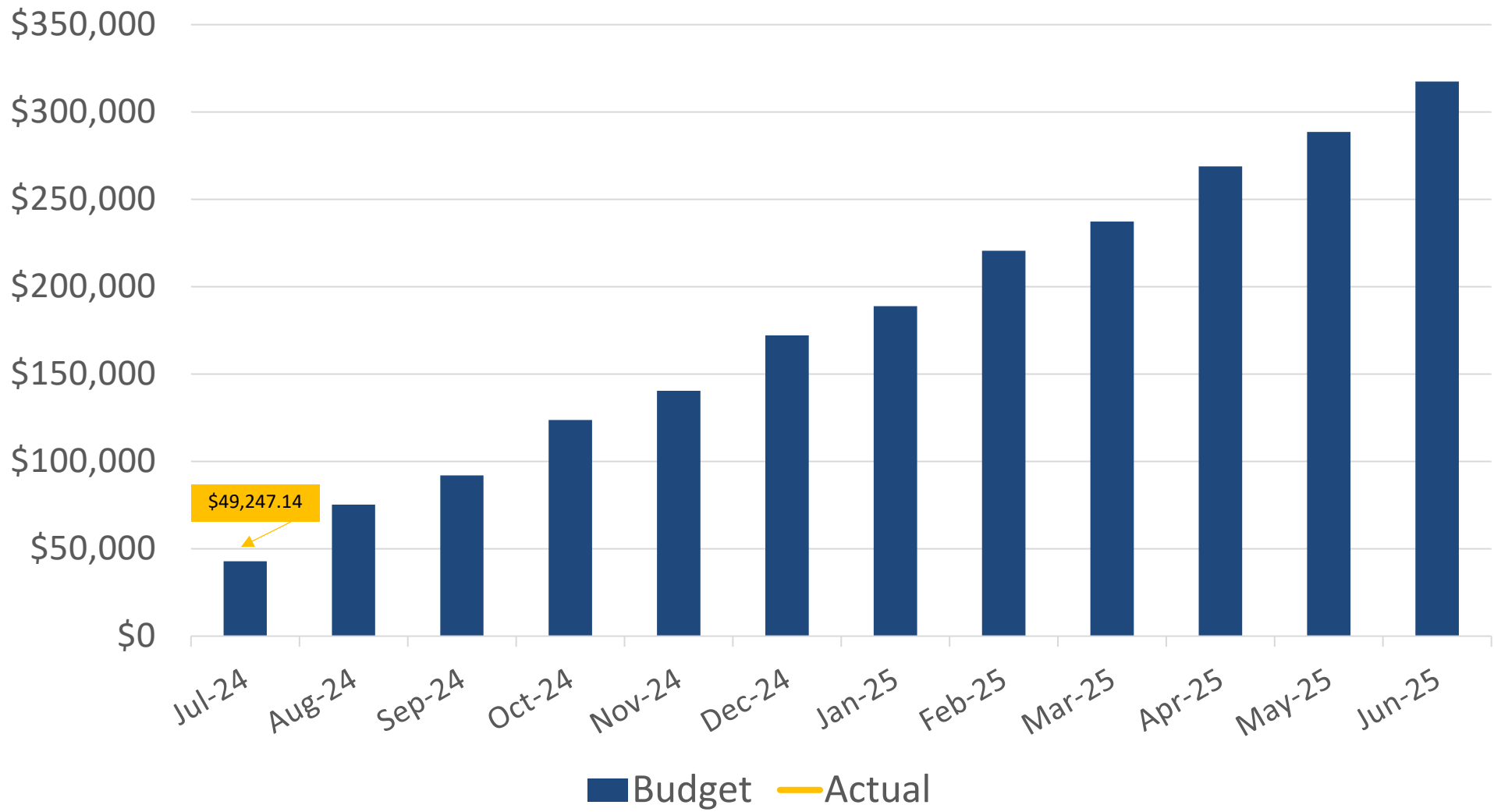
Legal Counsel – Budget-to-Actuals

FY 24/25



Hallmark Group – Budget-to-Actuals

FY 24/25



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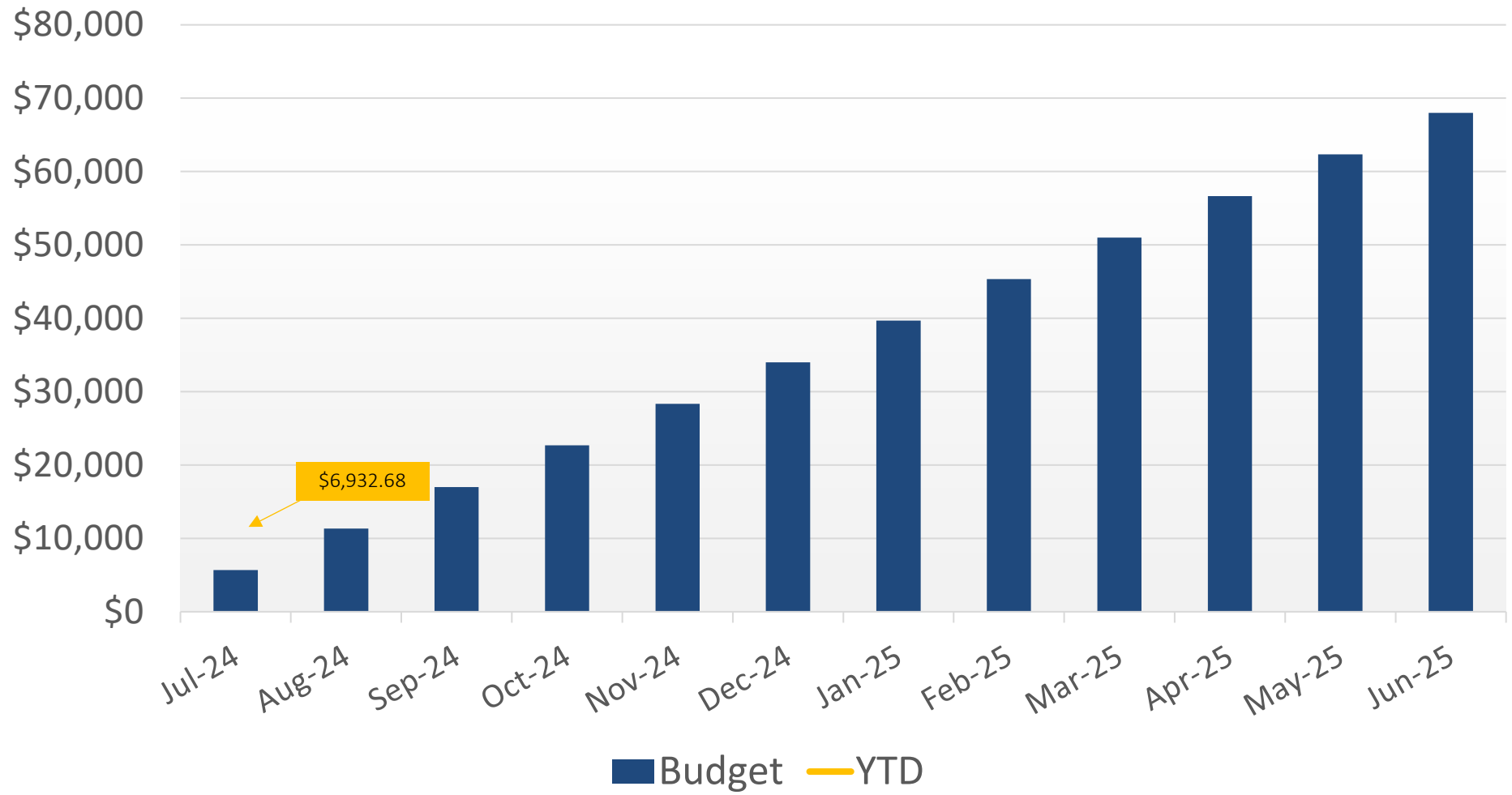
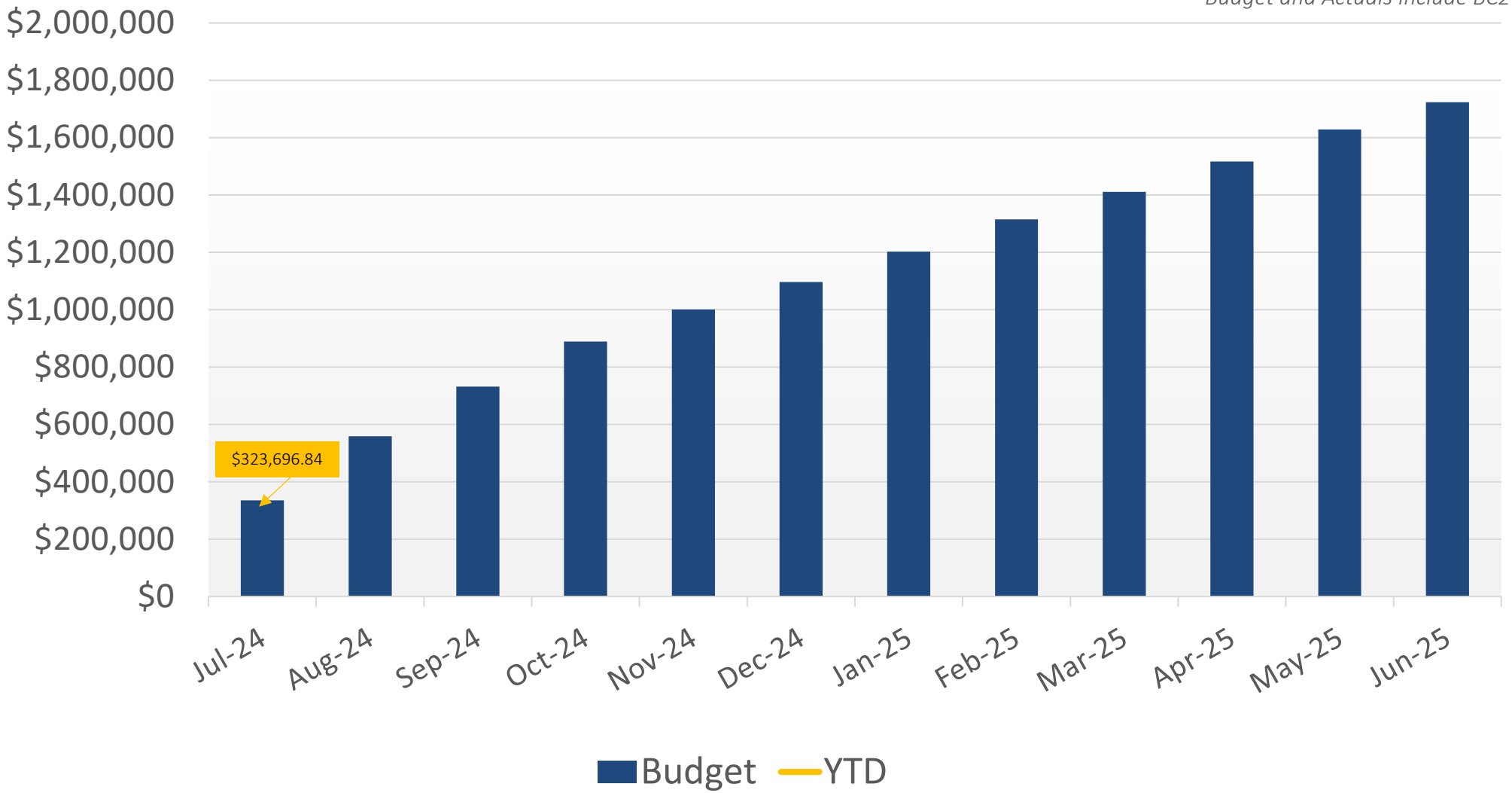


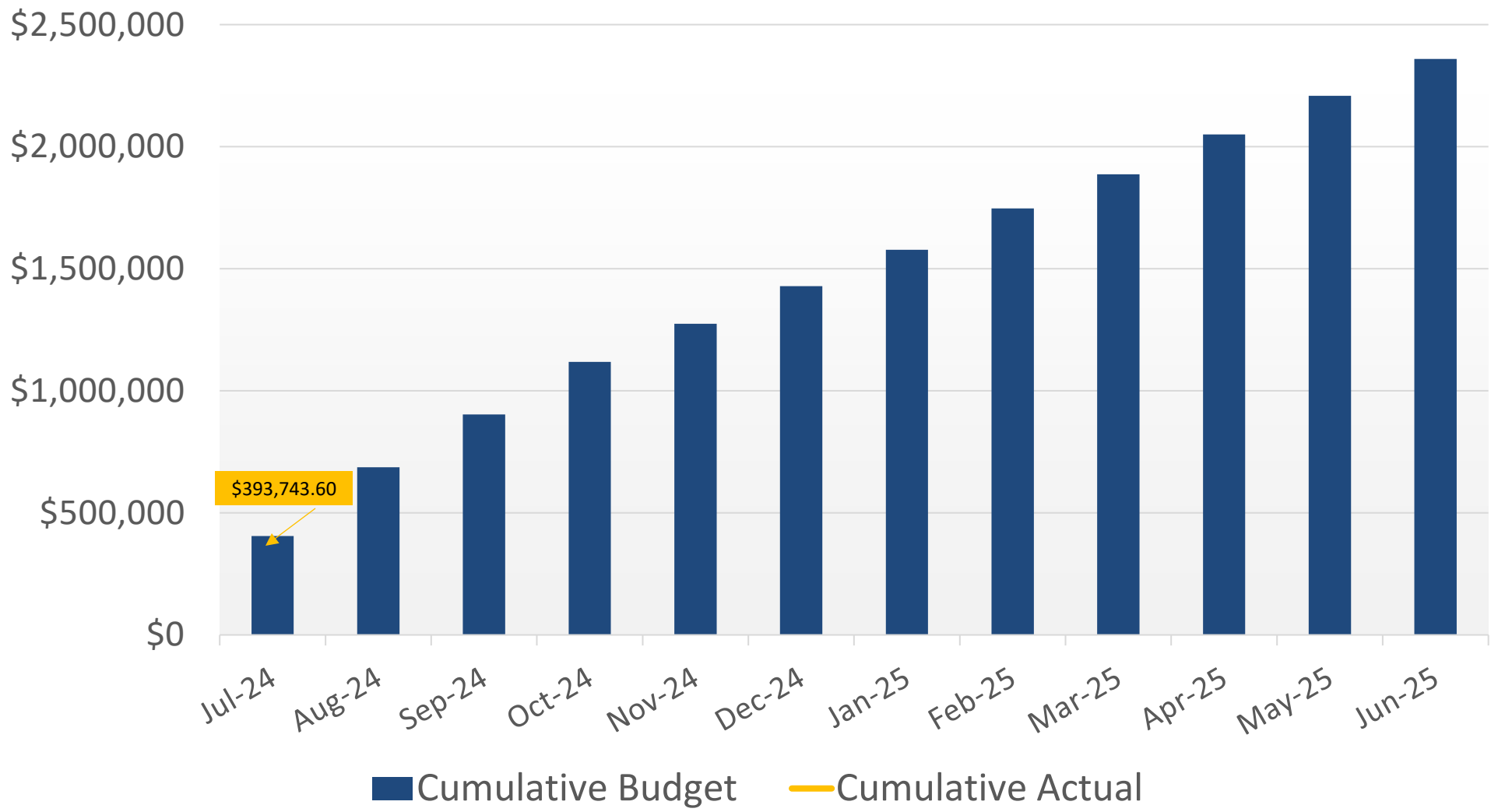
Woodard & Curran – Budget-to-Actuals

FY 24/25

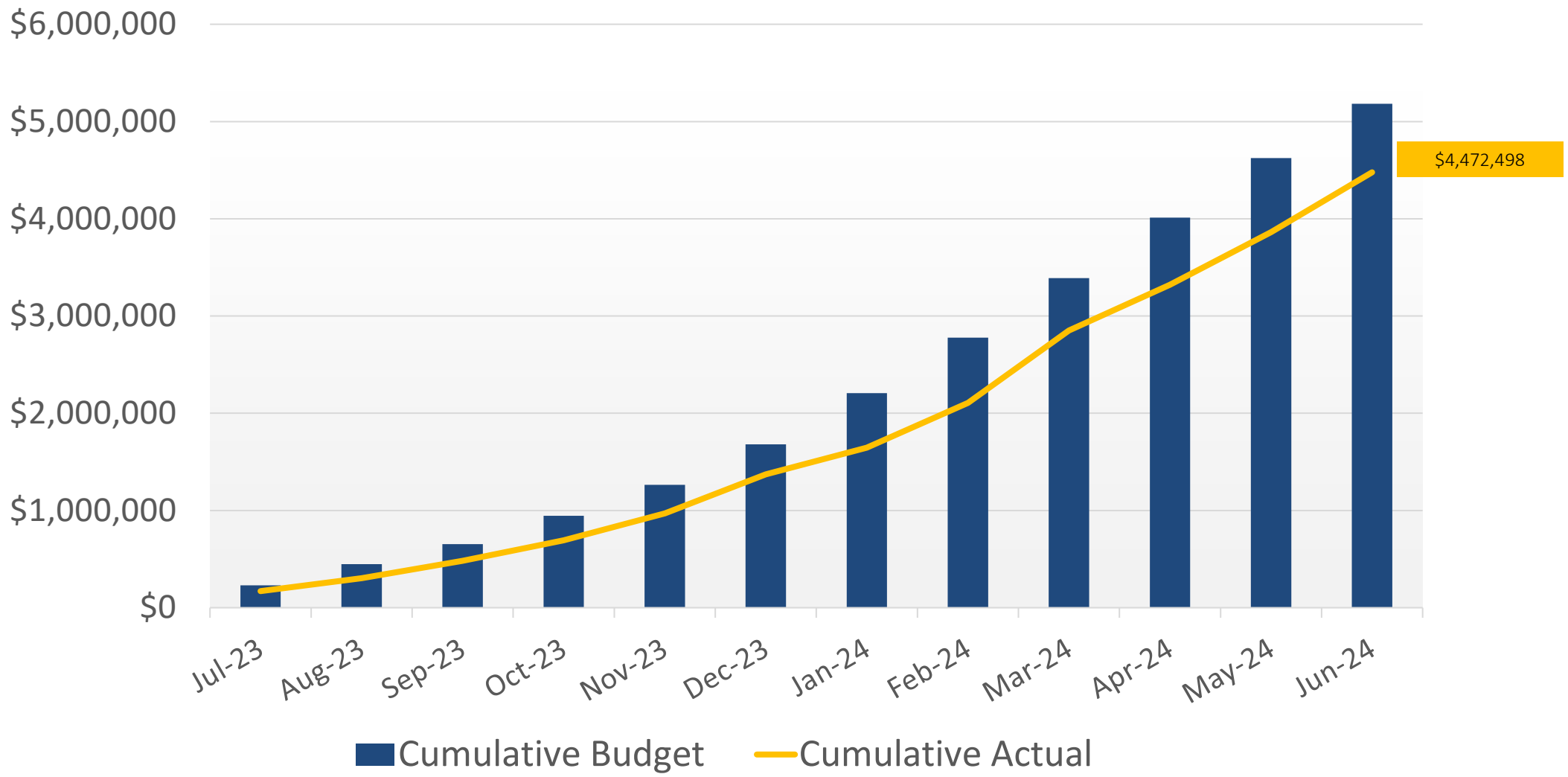
Budget and Actuals Include BC2 Environmental



CBGSA FY 24/25 – Budget-to-Actuals



CBGSA FY 23/24 – Budget-to-Actuals



TO: Board of Directors
Agenda Item No. 12a

FROM: Brian Van Lienden, Woodard & Curran

DATE: September 4, 2024

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.

Jul-Aug Accomplishments

- ✓ Performed installation of two multi-completion monitoring wells
- ✓ Developed and presented results of investigations of Russell and Santa Barbara Canyon Faults
- ✓ Completed update and re-calibration of the Cuyama Basin groundwater model
- ✓ Developed options for projects and management actions for Board consideration
- ✓ Developed updated draft GSP Chapters 7 and 8 and Executive Summary for Board consideration
- ✓ Developed Public Draft of 2025 GSP Update

HALLMARK GROUP Woodard & Curran

TO: Board of Directors
Agenda Item No. 12b

FROM: Brian Van Lienden, Woodard & Curran

DATE: September 4, 2024

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

12b. Update on Grant Funded Projects

Brian Van Lienden

September 4, 2024

HALLMARK GROUP Woodard & Curran

Status of Monitoring Well and Piezometer Installation

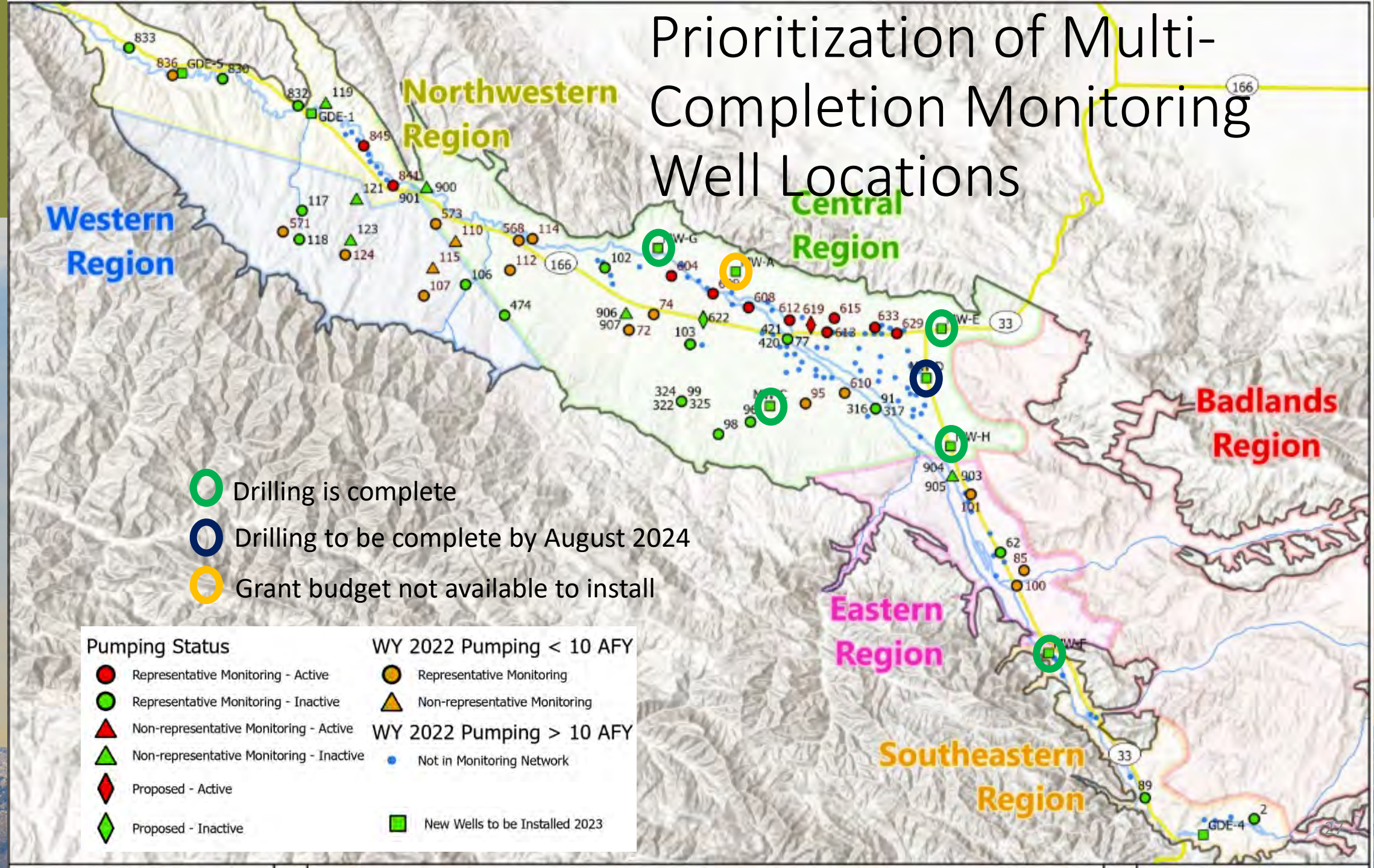
- Piezometer (GDE) Wells:
  - Wells have been constructed at all 3 locations (GDE-1, GDE-4 and GDE-5)
- Multi-Completion Nested Monitoring Wells:
  - MW-F constructed in November 2023. Well screen intervals are 180-200 feet and 350-370 feet.
  - MW-C constructed in February 2024. Well screen interval is 500-520 feet.
  - MW-H constructed in March 2024. Well screen intervals are 660-680 feet and 880-900 feet.
  - MW-E drilling completed in April 2024. Well screen intervals are 610-630 feet and 720-740 feet.
  - MW-G drilling completed in July 2024. Well screen intervals are 280-300 feet and 420-440 feet.
  - MW-D drilling and construction will be complete in August 2024.

Plan and Prioritization for Multi-Completion Monitoring Wells

- Installation of multi-completion wells will be completed at 6 locations with 1 or 2 nested wells at each location

Location	Approximate Depth to Water (Fall 2023)	# of Completions
MW-A	400-500	Removed due to insufficient grant budget
MW-C	480	1
MW-D	600-650	2
MW-E	500-600	2
MW-F	20	2
MW-G	400-500	2
MW-H	610	2

Prioritization of Multi-Completion Monitoring Well Locations



TO: Board of Directors
Agenda Item No. 12c

FROM: Brian Van Lienden, Woodard & Curran

DATE: September 4, 2024

SUBJECT: Update on July 2024 Groundwater Levels Conditions Report

Recommended Motion
None – information only.

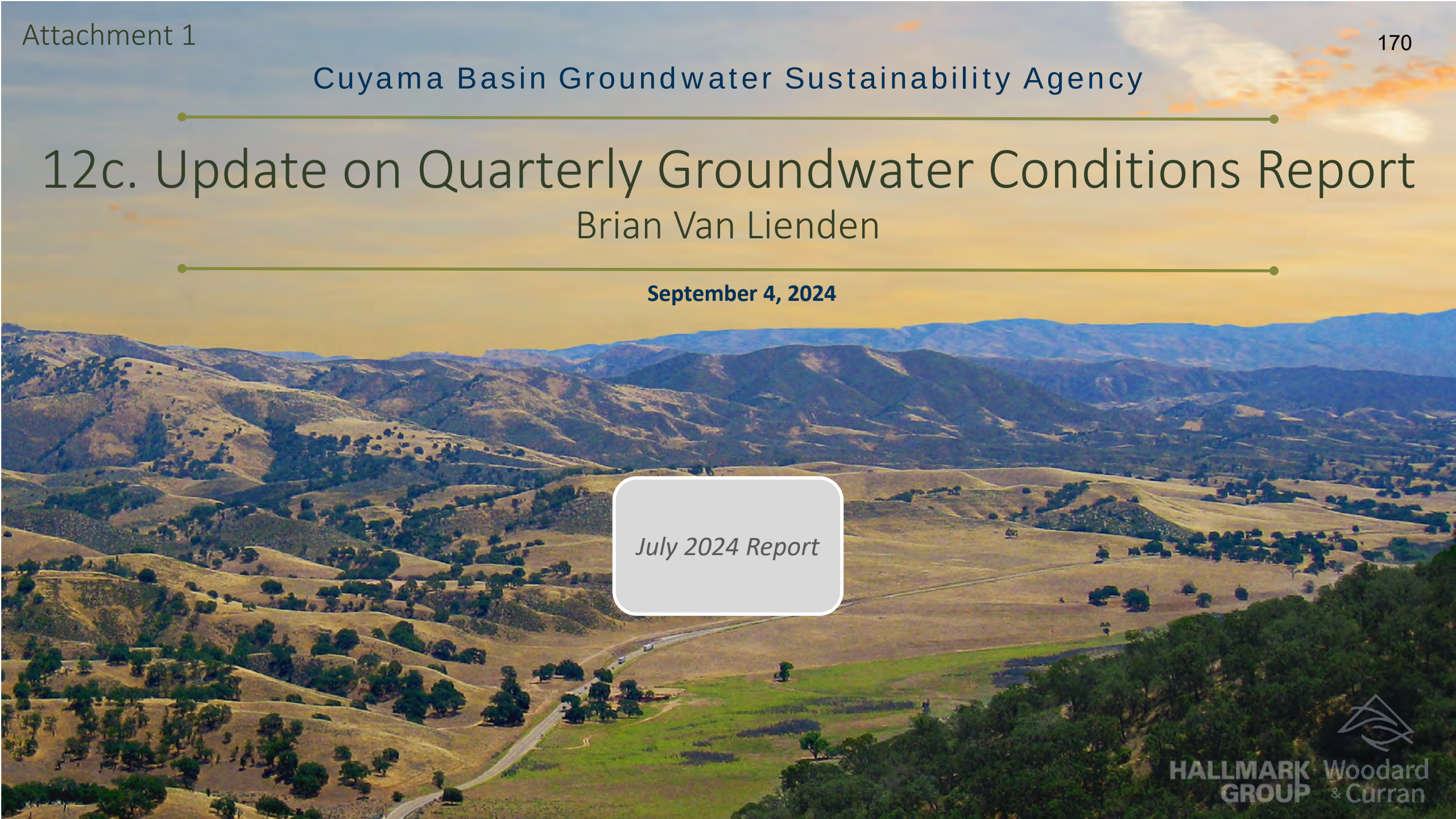
Discussion
The quarterly Groundwater Levels Conditions Report for July 2024 is summarized as Attachment 1. The detailed report is provided as Attachment 2.

Cuyama Basin Groundwater Sustainability Agency

12c. Update on Quarterly Groundwater Conditions Report

Brian Van Lienden

September 4, 2024

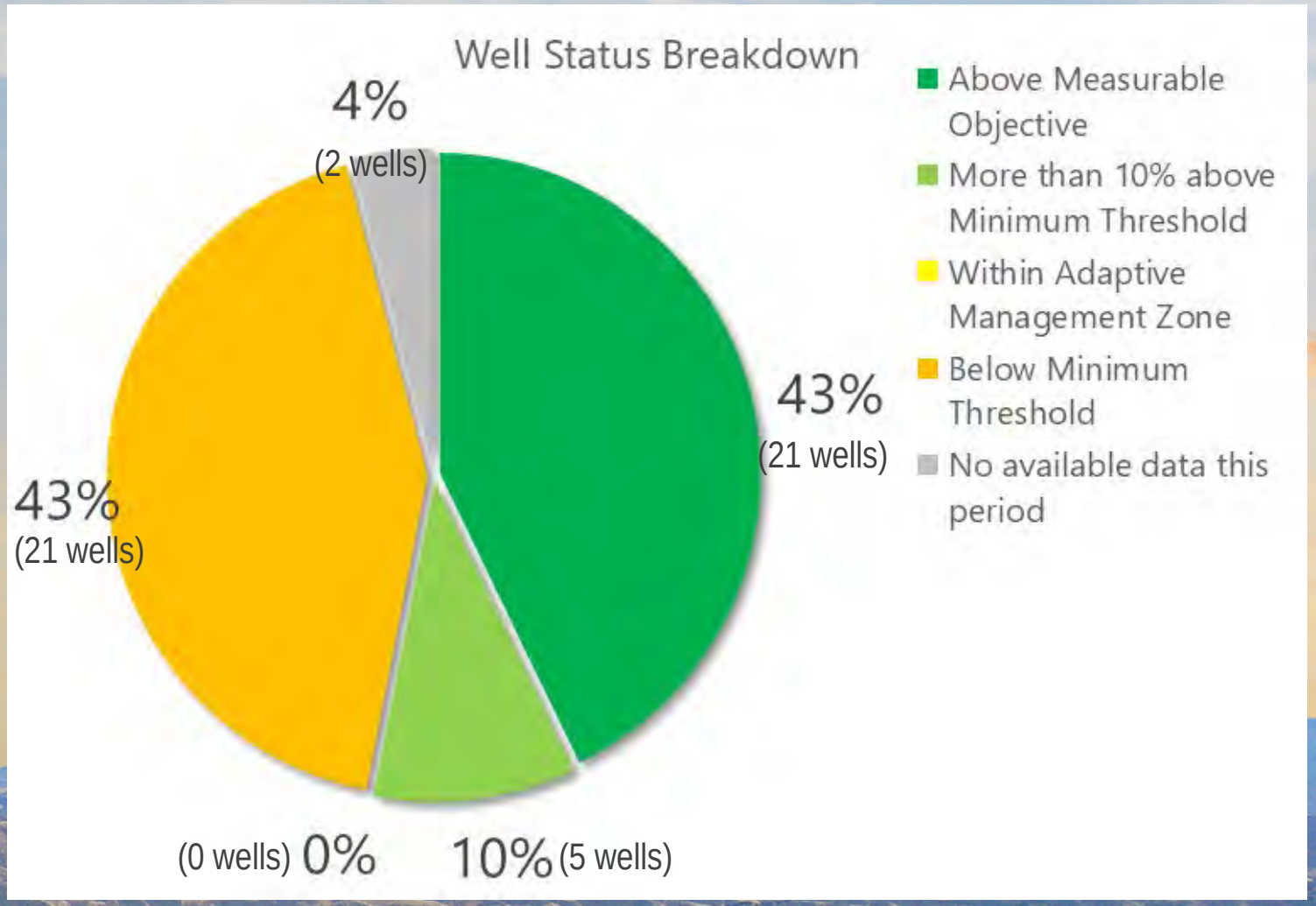


Groundwater Levels Monitoring Network – Summary of Current Conditions

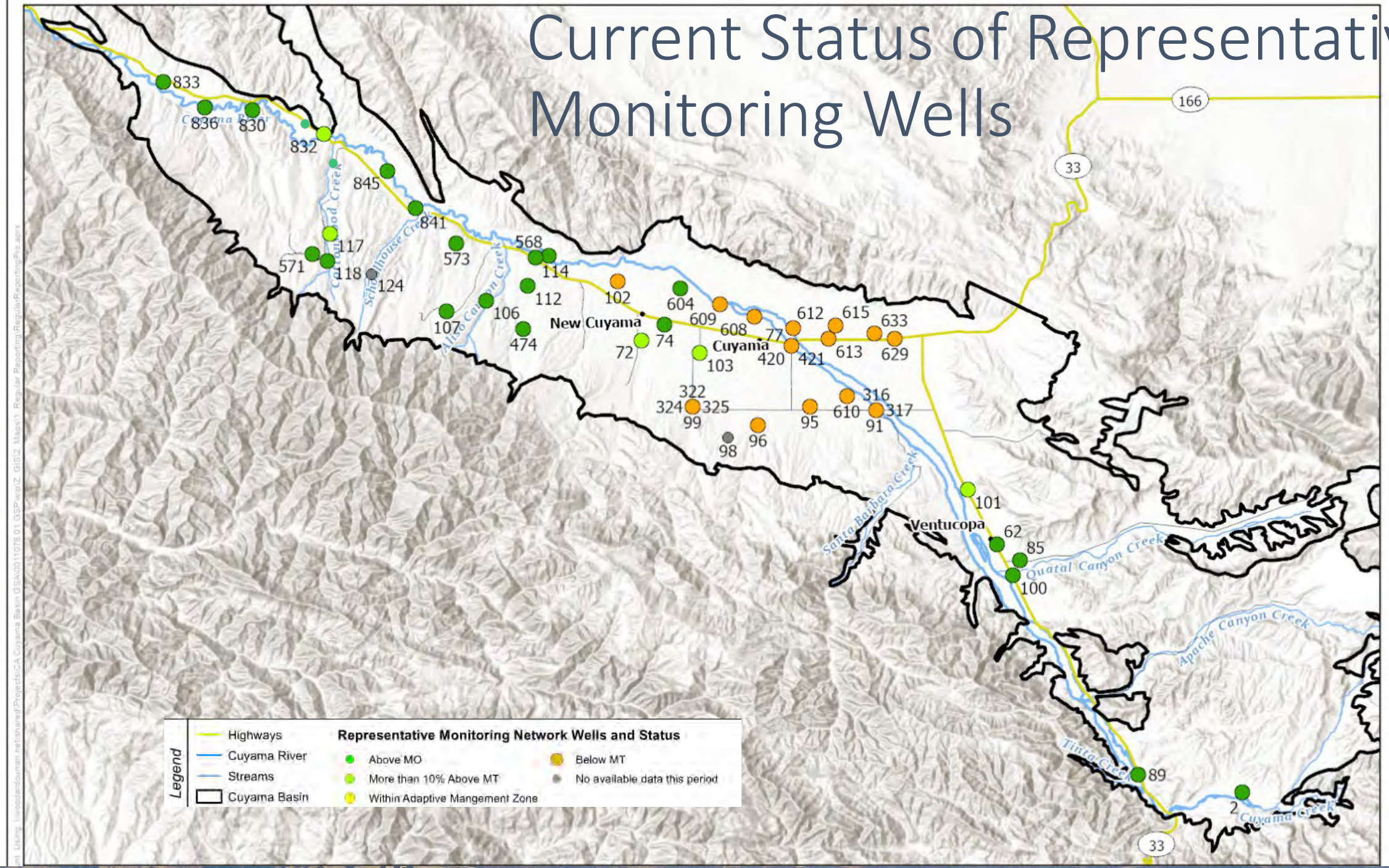
- Monitoring data from January 2024, April 2024 and July 2024 for representative wells is included in the Groundwater Conditions report
- 47 of 49 representative monitoring wells have levels data in at least one out of the previous 12 months
- 21 wells were below the minimum threshold based on latest measurement since October 2023

Summary of Groundwater Well Levels as Compared To Sustainability Criteria

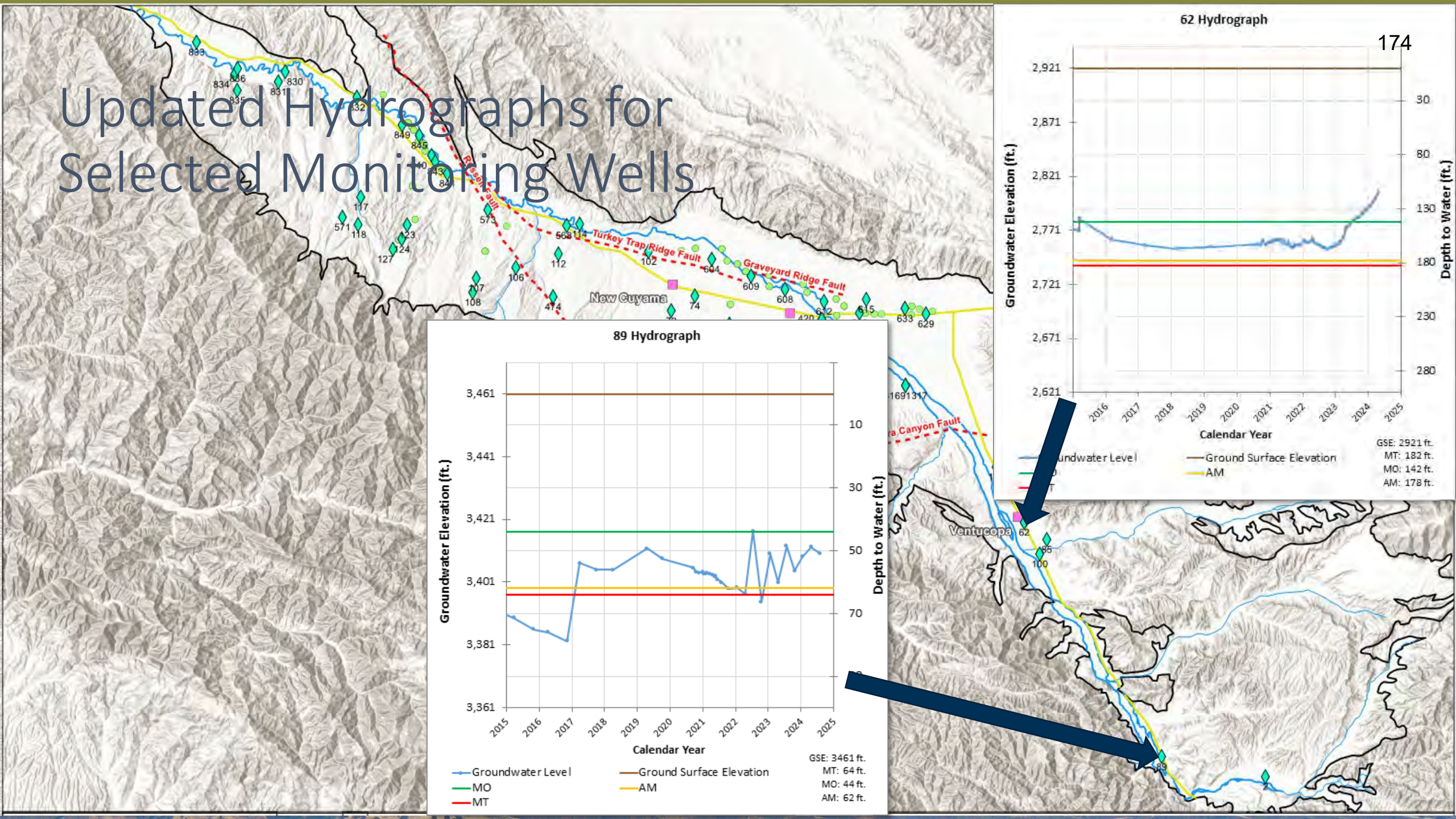
- 21 wells are currently below minimum threshold (MT)
  - 11 wells (22%) have been below the MT for at least 24 months
  - 8 well dropped below the MT this month
  - 0 wells rose above the MT this month



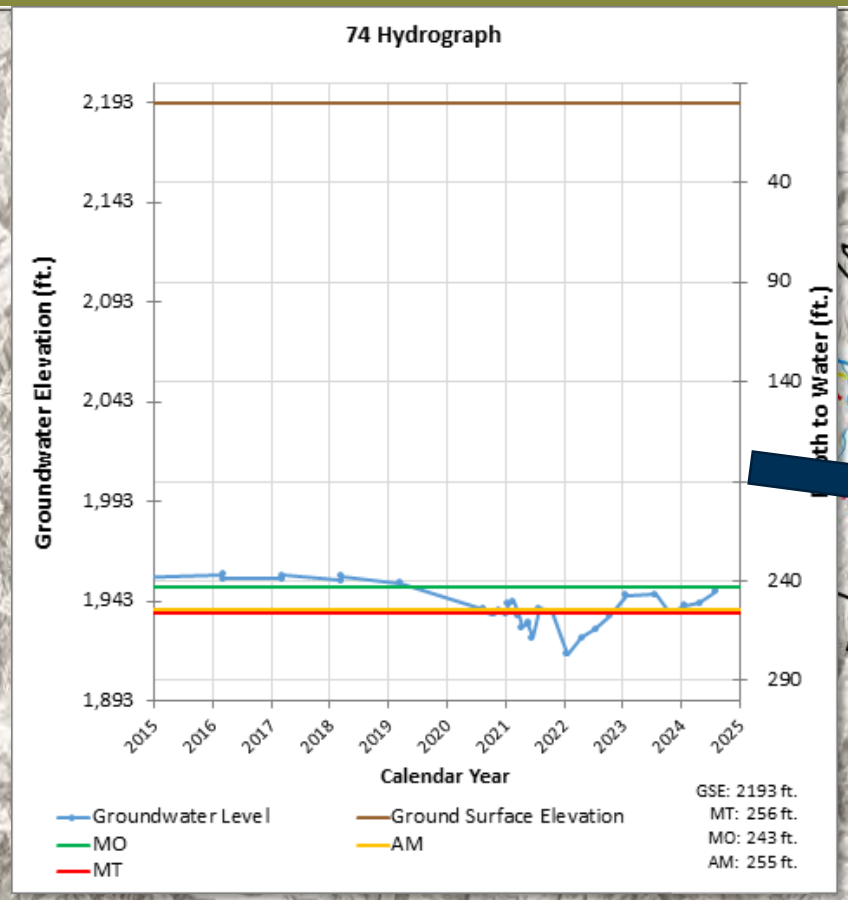
Current Status of Representative Monitoring Wells

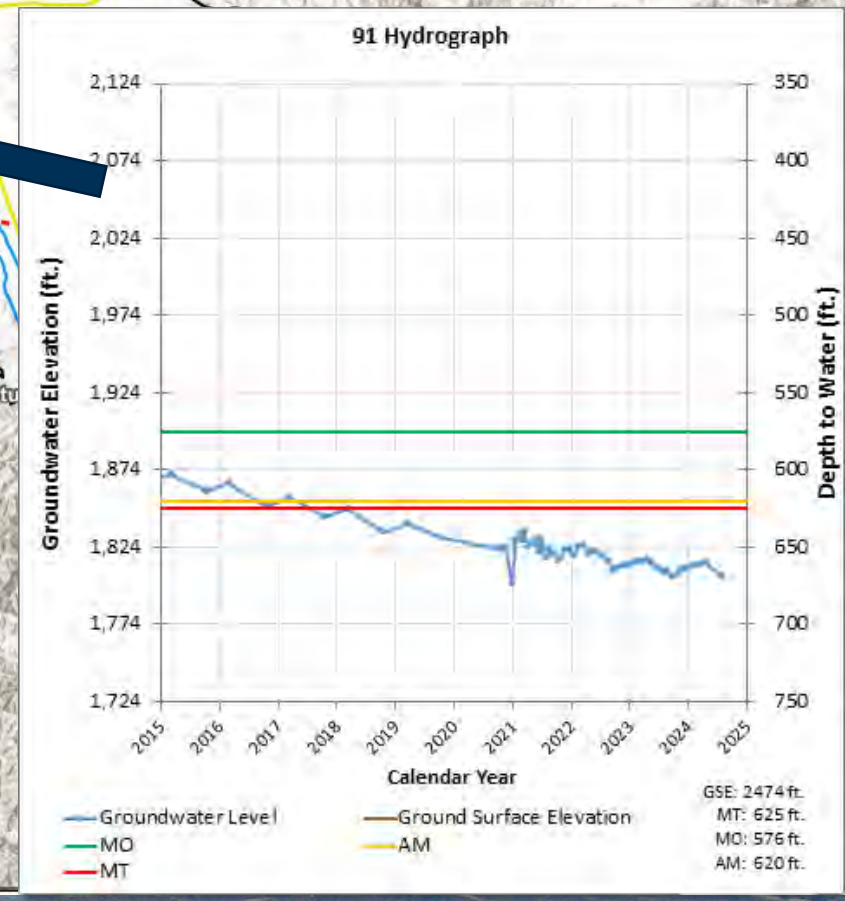


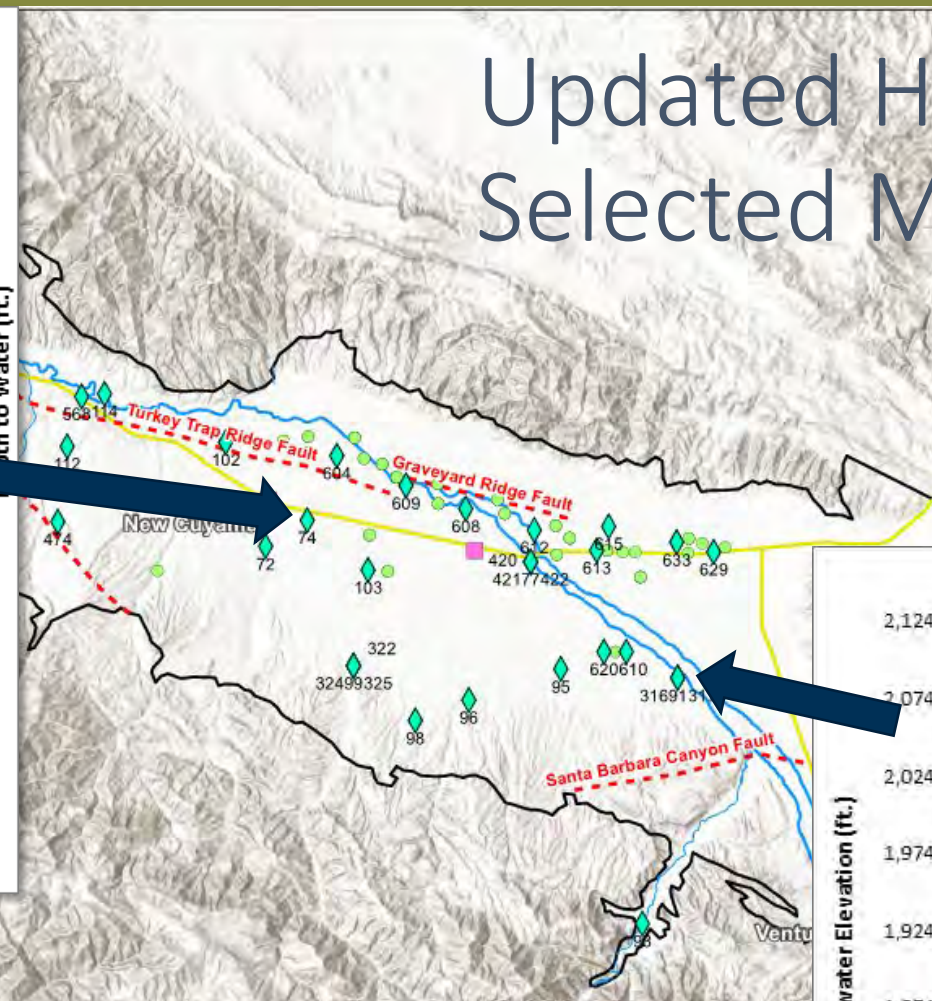
Updated Hydrographs for Selected Monitoring Wells



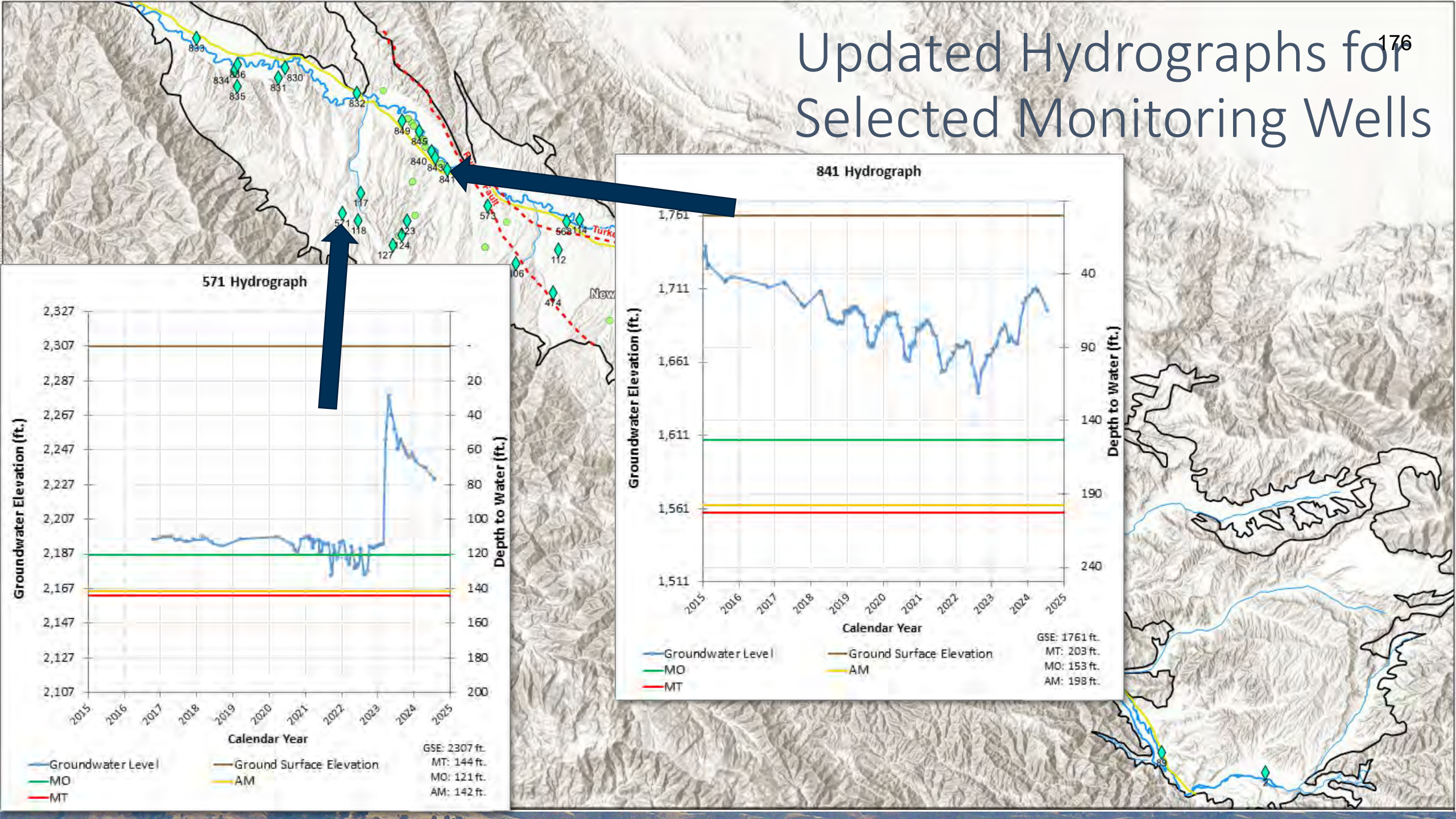
Updated Hydrographs for Selected Monitoring Wells







Updated Hydrographs for Selected Monitoring Wells



GROUNDWATER CONDITIONS REPORT – CUYAMA VALLEY GROUNDWATER BASIN

July 2024

Woodard & Curran

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Sacramento, CA
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woodardcurran.com

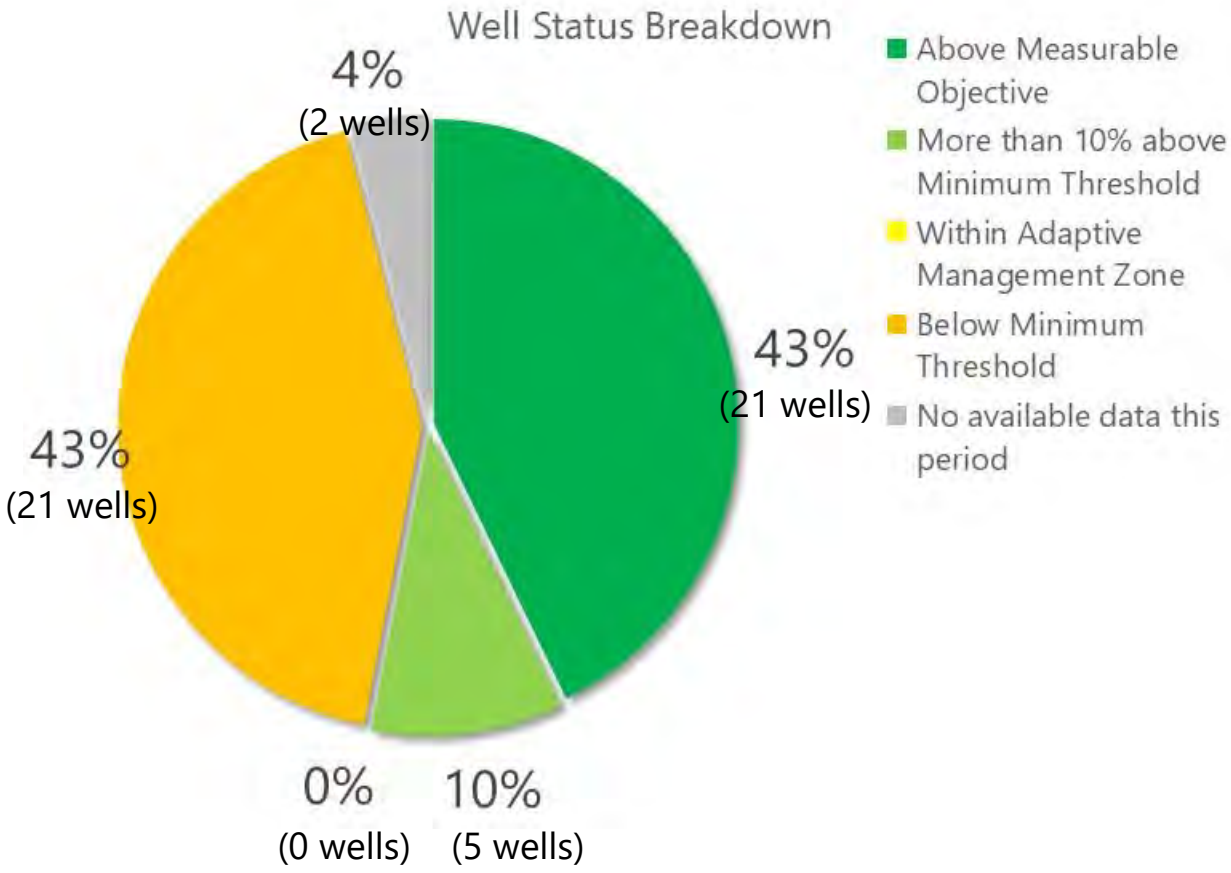
Cuyama Basin Groundwater Sustainability Agency

TABLE OF CONTENTS

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



There are currently 21 wells with groundwater levels exceeding minimum thresholds. 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, 22% of representative monitoring wells (i.e. 11 wells) have exceeded the minimum threshold for 24 or more consecutive months.

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 and the measurement from the same time period in the previous year. 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 are also 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	Jan-24	Apr-24	Jul-24	Last Year		Elevation Change
		GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	Month/ Year	
72	Central	2027	2034	-	2016	Jul-23	-
74	Central	1940	1941	1947	1949	Jul-23	-1.8
77	Central	1804	1795	1754	1781	Jul-23	-27.7
91	Central	1811	1813	1804	1802	Jul-23	2.5
95	Central	1850	2389	1868	1837	Jul-23	31
96	Central	2273	2269	2266	2269	Jul-23	-3.3
98	Central	-	-	-	-	-	-
99	Central	2216	2218	2137	2181	Jul-23	-43.3
102	Central	-	-	-	1598	Jul-23	-
103	Central	2046	2050	2046	2035	Jul-23	11.3
112	Central	2041	2042	2042	2053	Jul-23	-10.8
114	Central	1879	1880	1881	-	-	-
316	Central	1810	1812	1804	1803	Jul-23	0.9
317	Central	1811	1814	1806	1805	Jul-23	0.7
322	Central	2216	2217	2134	2174	Jul-23	-40.2
324	Central	2215	2216	2168	2189	Jul-23	-21.7
325	Central	2215	2216	2194	2202	Jul-23	-8.1
420	Central	1803	1794	1750	1780	Jul-23	-29.9
421	Central	1802	1800	1778	1787	Jul-23	-9.6
474	Central	2228	2232	2234	2206	Jul-23	28.1

Well	Region	Jan-24	Apr-24	Jul-24	Last Year		Elevation Change
		GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	Month/ Year	
568	Central	1874	1874	1873	1869	Jul-23	4.4
604	Central	1655	1655	1661	1669	Jul-23	-7.7
608	Central	-	1778	1740	1799	Jul-23	-59.3
609	Central	1721	1723	1691	1727	Jul-23	-35
610	Central	1808	1808	1797	1806	Jul-23	-9
612	Central	1797	1796	1780	1779	Jul-23	0.8
613	Central	1799	1797	1814	1780	Jul-23	34
615	Central	1808	1806	1794	1812	Jul-23	-17.7
629	Central	1817	1821	1791	1845	Jul-23	-53.9
633	Central	1796	1800	1794	1851	Jul-23	-56.6
62	Eastern	2793	2806	-	2783	Jul-23	-
85	Eastern	2883	2891	2902	2848	Jul-23	54
100	Eastern	2911	2939	2939	2911	Jul-23	28.8
101	Eastern	2653	2658	2654	2634	Jul-23	20.4
841	Northwestern	1706	1709	1695	1680	Jul-23	15.3
845	Northwestern	1641	1643	1632	1638	Jul-23	-5.6
2	Southeastern	3697	3706	3704	3702	Jul-23	2
89	Southeastern	3390	3413	3411	3440	Jul-23	-29.3
106	Western	2175	2175	2176	2184	Jul-23	-8.3
107	Western	2422	2419	2421	2414	Jul-23	7
117	Western	1947	1947	1945	1947	Jul-23	-2.2

Well	Region	Jan-24	Apr-24	Jul-24	Last Year		Elevation Change
		GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	Month/ Year	
118	Western	2211	2213	2212	2216	Jul-23	-4
124	Western	-	-	-	-	-	-
571	Western	2240	2236	2230	2238	Jul-23	-8.6
573	Western	2010	2010	2012	2015	Jul-23	-3.3
830	Far-West Northwestern	1512	1511	1515	1523	Jul-23	-7.5
832	Far-West Northwestern	1604	1604	1606	1596	Jul-23	10.3
833	Far-West Northwestern	1433	1433	1435	1427	Jul-23	8
836	Far-West Northwestern	1479	1479	1478	1459	Jul-23	18.7
*Well 608 is now confirmed to be “destroyed” and is no longer available for monitoring. The landowner and monitoring staff have identified a well within 100 ft that is suitable to continue monitoring in this location, and the groundwater level monitoring network will be modified to remove well 608 and add in this new well. The new well is in the process of being incorporated into Opti and being assigned an ID number.							

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	-	-	169	165	124	790	No available data this period (More than 10% above Mininum Threshold in April 2024)	No
74	Central	240	7/31/2024	256	255	243		Above Measurable Objective	No
77	Central	531	8/1/2024	450	445	400	980	Below Minimum Threshold (47 months)	No
91	Central	677	8/2/2024	625	620	576	980	Below Minimum Threshold (47 months)	No
95	Central	588	8/2/2024	573	570	538	805	Below Minimum Threshold (1 month)	No
96	Central	340	8/1/2024	333	332	325	500	Below Minimum Threshold (4 months)	No
98	Central	-	-	450	449	439	750	No available data this period	No
99	Central	368	7/31/2024	311	310	300	750	Below Minimum Threshold (1 month)	No
102	Central	-	-	235	231	197		No data available this period (Below MT in Oct 2023, 45 months)	No
103	Central	237	8/1/2024	290	285	235	1030	More than 10% above Minimum Threshold	No
112	Central	84	8/2/2024	87	87	85	441	Above Measurable Objective	No
114	Central	44	8/2/2024	47	47	45	58	Above Measurable Objective	No
316	Central	677	8/2/2024	623	618	574	830	Below Minimum Threshold (47 months)	No

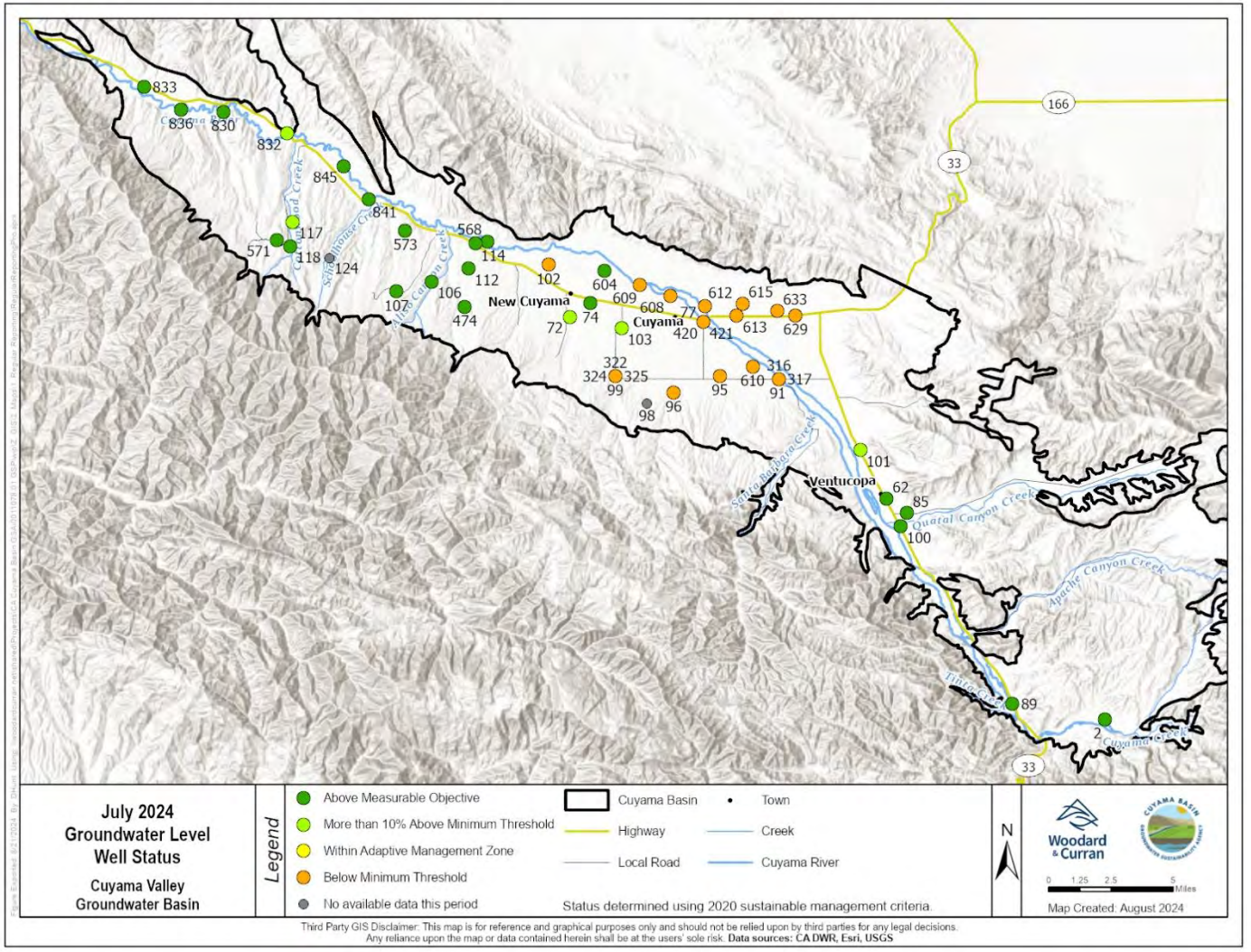
Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Well Depth	Status	GSA Action Required?
		GWL (DTW)	Date						
317	Central	675	8/2/2024	623	618	573	700	Below Minimum Threshold (47 months)	No
322	Central	371	7/31/2024	307	306	298	850	Below Minimum Threshold (1 month)	No
324	Central	338	7/31/2024	311	310	299	560	Below Minimum Threshold (1 month)	No
325	Central	311	7/31/2024	300	299	292	380	Below Minimum Threshold (1 month)	No
420	Central	535	8/1/2024	450	445	400	780	Below Minimum Threshold (47 months)	No
421	Central	507	8/1/2024	446	441	398	620	Below Minimum Threshold (47 months)	No
474	Central	128	8/2/2024	188	186	169	213	Above Measurable Objective	No
568	Central	35	7/31/2024	37	37	36	188	Above Measurable Objective	No
604	Central	454	8/1/2024	526	522	487	924	Above Measurable Objective	No
608*	Central	470	8/1/2024	436	433	407	745	Below Minimum Threshold (1 month)	No
609	Central	466	8/1/2024	458	454	421	970	Below Minimum Threshold (1 month)	No
610	Central	641	8/1/2024	621	618	591	780	Below Minimum Threshold (40 months)	No
612	Central	489	8/1/2024	463	461	440	1070	Below Minimum Threshold (31 months)	No
613	Central	510	8/1/2024	503	500	475	830	Below Minimum Threshold (45 months)	No
615	Central	526	8/1/2024	500	497	468	865	Below Minimum Threshold (44 months)	No

Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Well Depth	Status	GSA Action Required?
		GWL (DTW)	Date						
629	Central	587	8/1/2024	559	556	527	1000	Below Minimum Threshold (1 month)	No
633	Central	569	8/1/2024	547	542	493	1000	Below Minimum Threshold (10 months)	No
62	Eastern	-	-	182	178	142	212	No data available this period (Above MO in April 2024)	No
85	Eastern	146	8/1/2024	233	225	147	233	Above Measurable Objective	No
100	Eastern	67	8/1/2024	181	175	125	284	Above Measurable Objective	No
101	Eastern	92	8/1/2024	111	108	81	200	More than 10% above Minimum Threshold	No
841	Northwestern	64	7/20/2024	203	198	153	600	Above Measurable Objective	No
845	Northwestern	77	7/20/2024	203	198	153	380	Above Measurable Objective	No
2	Southeastern	16	7/31/2024	72	70	55	73	Above Measurable Objective	No
89	Southeastern	23	7/31/2024	64	62	44	125	Above Measurable Objective	No
106	Western	141	8/1/2024	154	153	141	228	Above Measurable Objective	No
107	Western	70	8/1/2024	91	89	72	200	Above Measurable Objective	No
117	Western	153	7/31/2024	160	159	151	212	More than 10% above Minimum Threshold	No
118	Western	50	7/31/2024	124	117	57	500	Above Measurable Objective	No
124	Western	-	-	73	71	57	161	No available data this period	No
571	Western	85	7/31/2024	144	142	121	280	Above Measurable Objective	No
573	Western	66	8/2/2024	118	113	68	404	Above Measurable Objective	No
830	Far-West Northwestern	45	7/31/2024	59	59	56	77	Above Measurable Objective	No

Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Well Depth	Status	GSA Action Required?
		GWL (DTW)	Date						
832	Far-West Northwestern	31	7/31/2024	45	44	30	132	More than 10% above Minimum Threshold	No
833	Far-West Northwestern	19	7/31/2024	96	89	24	504	Above Measurable Objective	No
836	Far-West Northwestern	29	7/31/2024	79	75	36	325	Above Measurable Objective	No
*Well 608 is now confirmed to be "destroyed" and is no longer available for monitoring. The landowner and monitoring staff have identified a well within 100 ft that is suitable to continue monitoring in this location, which is where the measurement shown was taken. The groundwater level representative network will be modified to remove well 608 and add in this new well. The new well is in the process of being incorporated into Opti and being assigned an ID number.									

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 July 2024



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

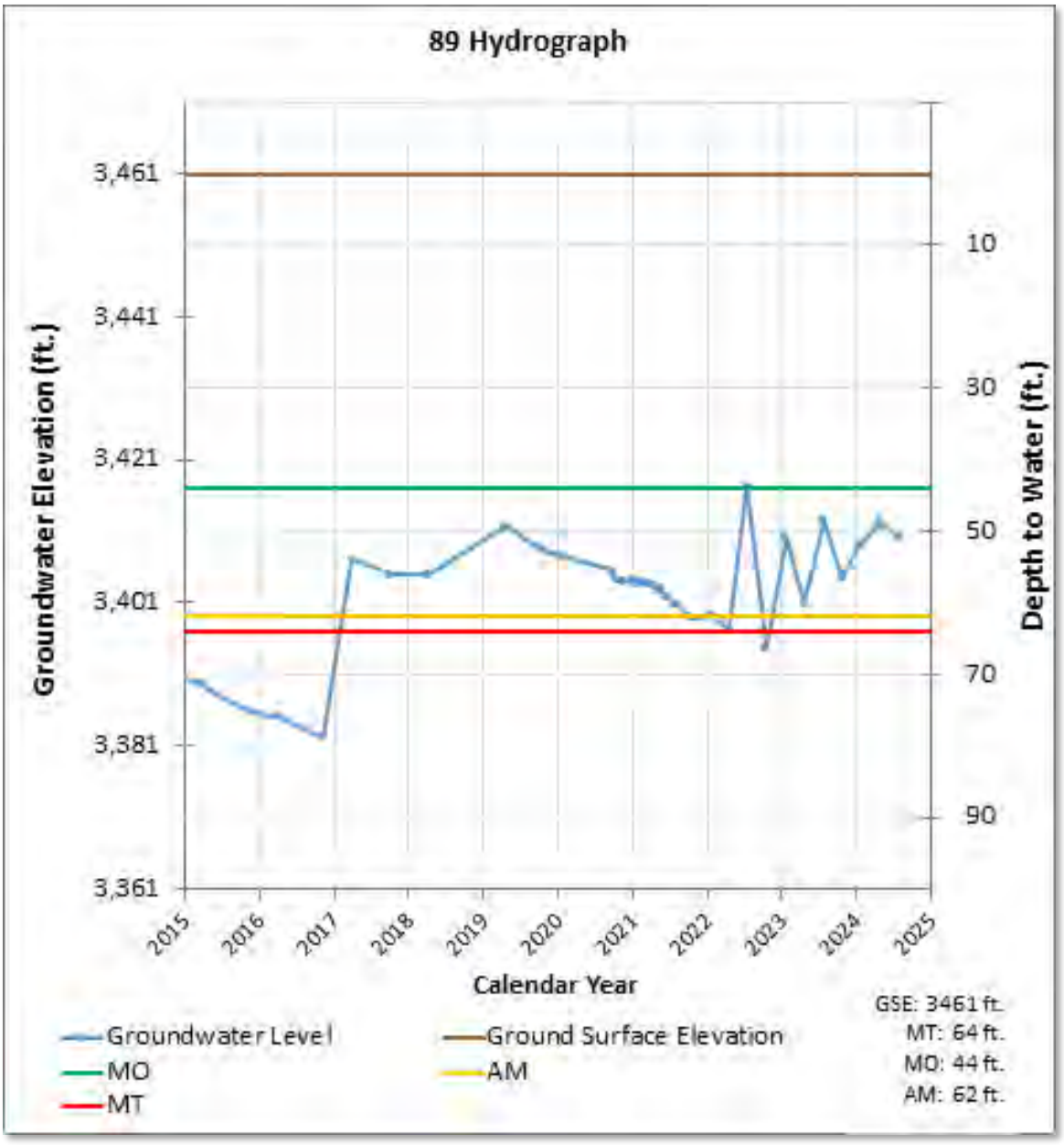


Figure 3: Eastern Region – Well 62

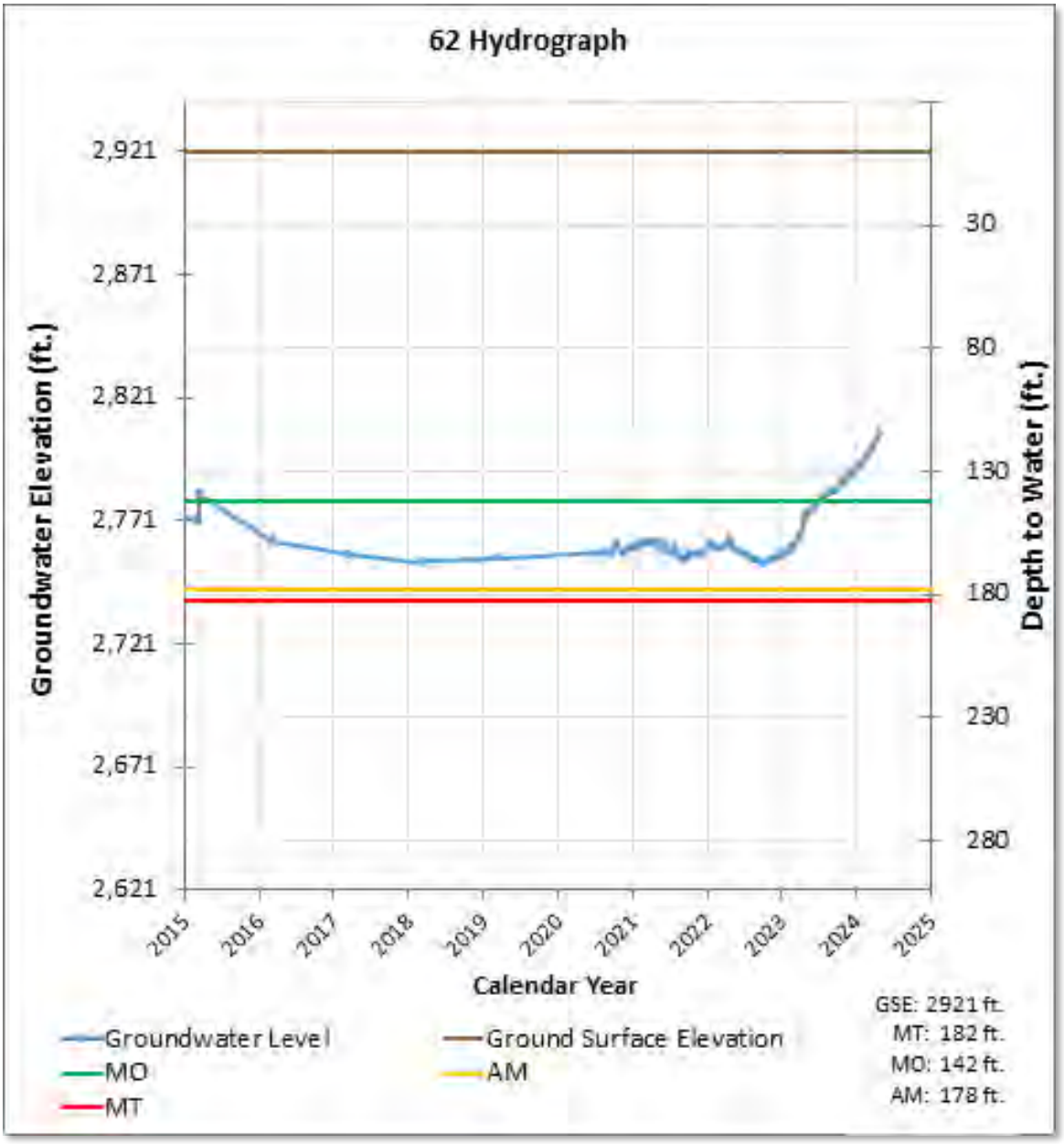


Figure 4: Central Region – Well 91

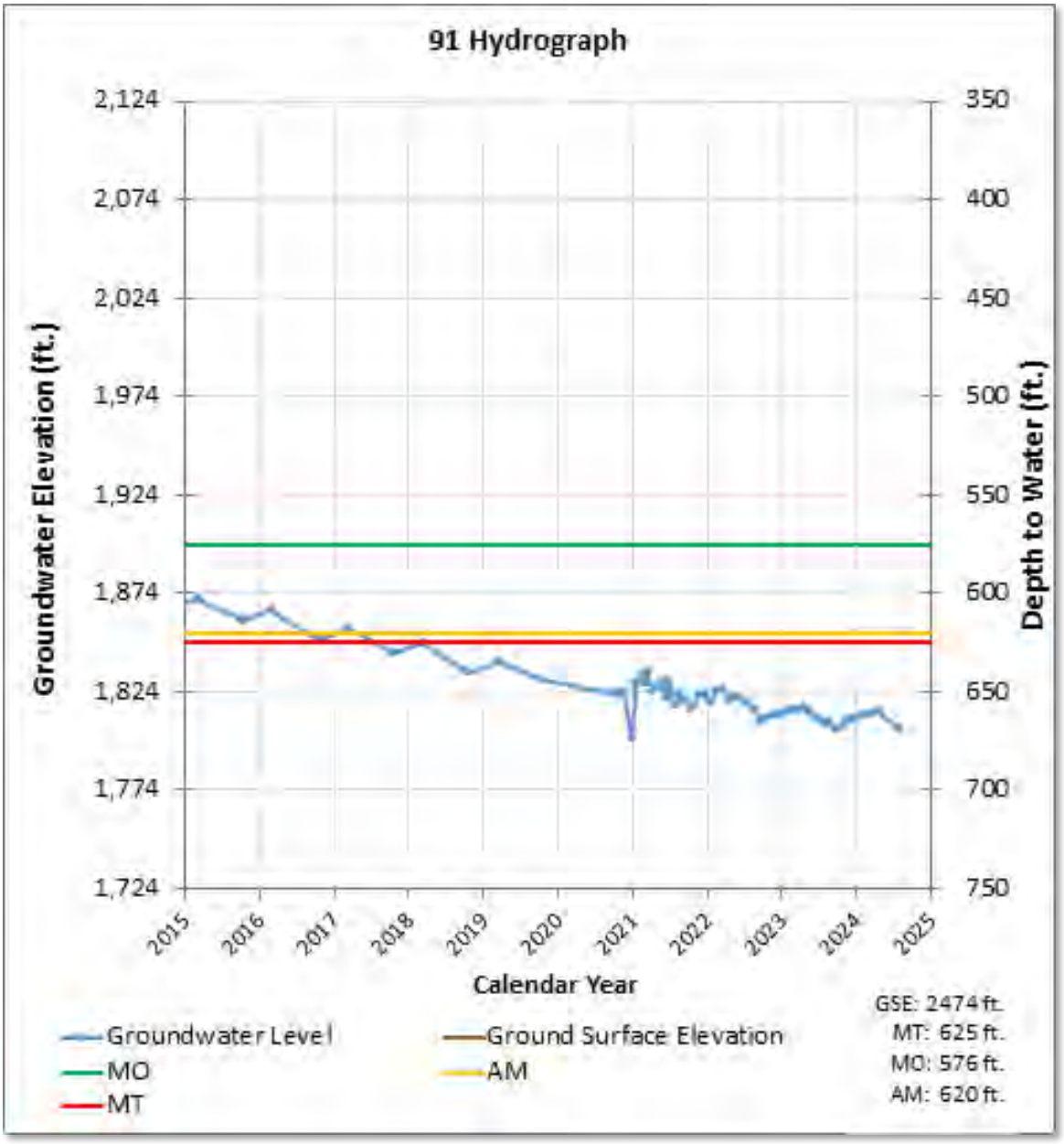


Figure 5: Central Region – Well 74

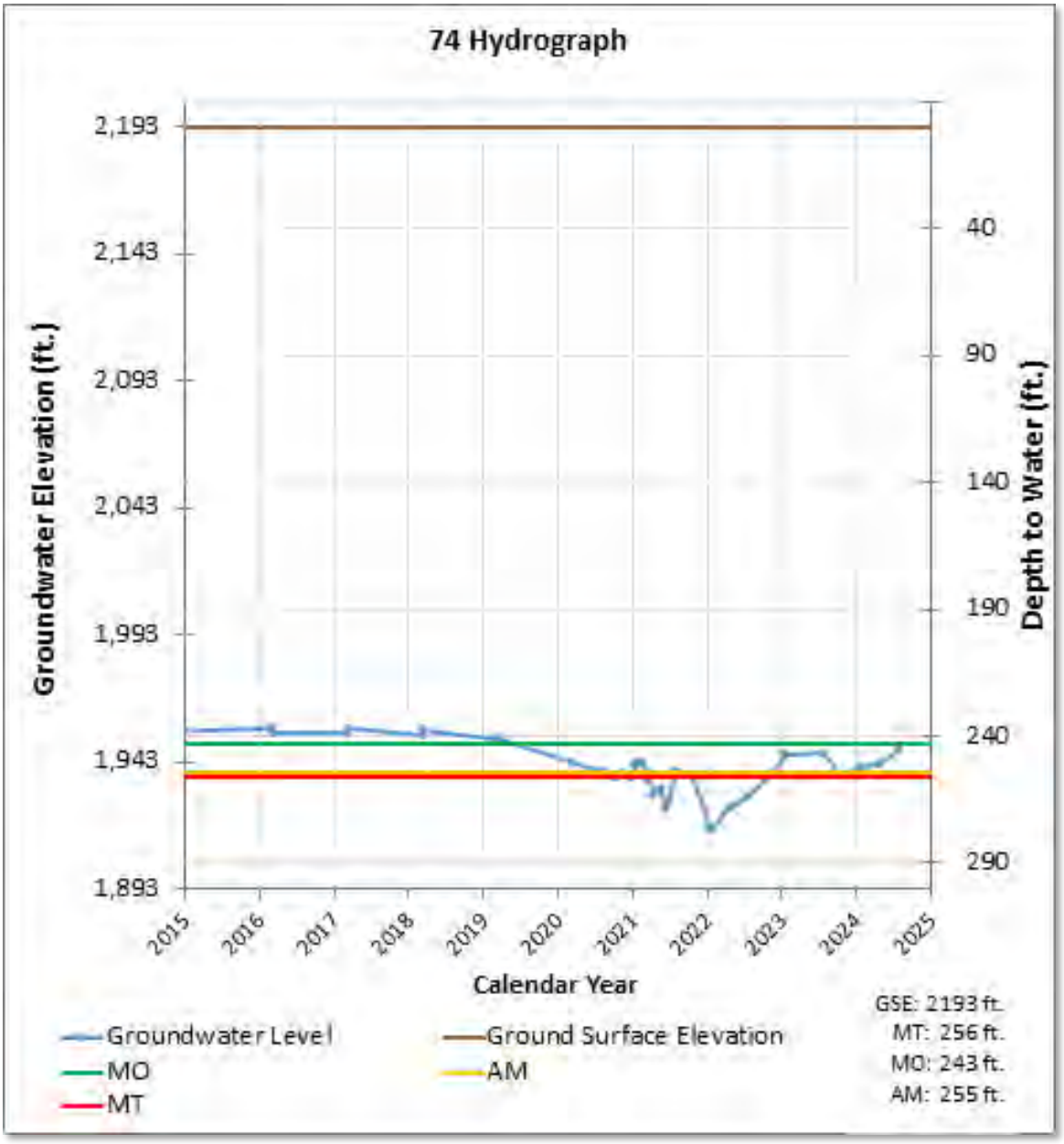


Figure 6: Western Region – Well 571

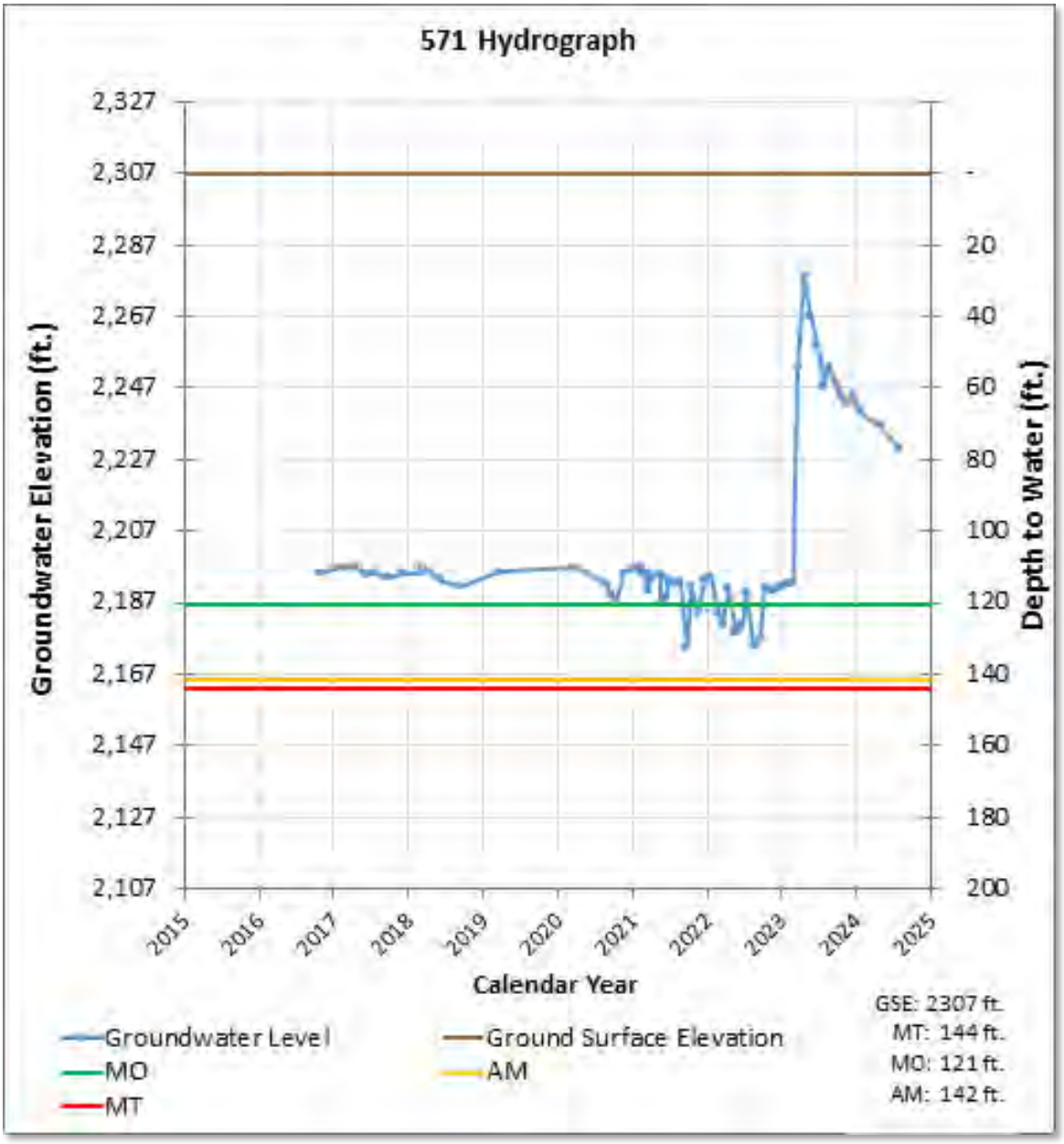
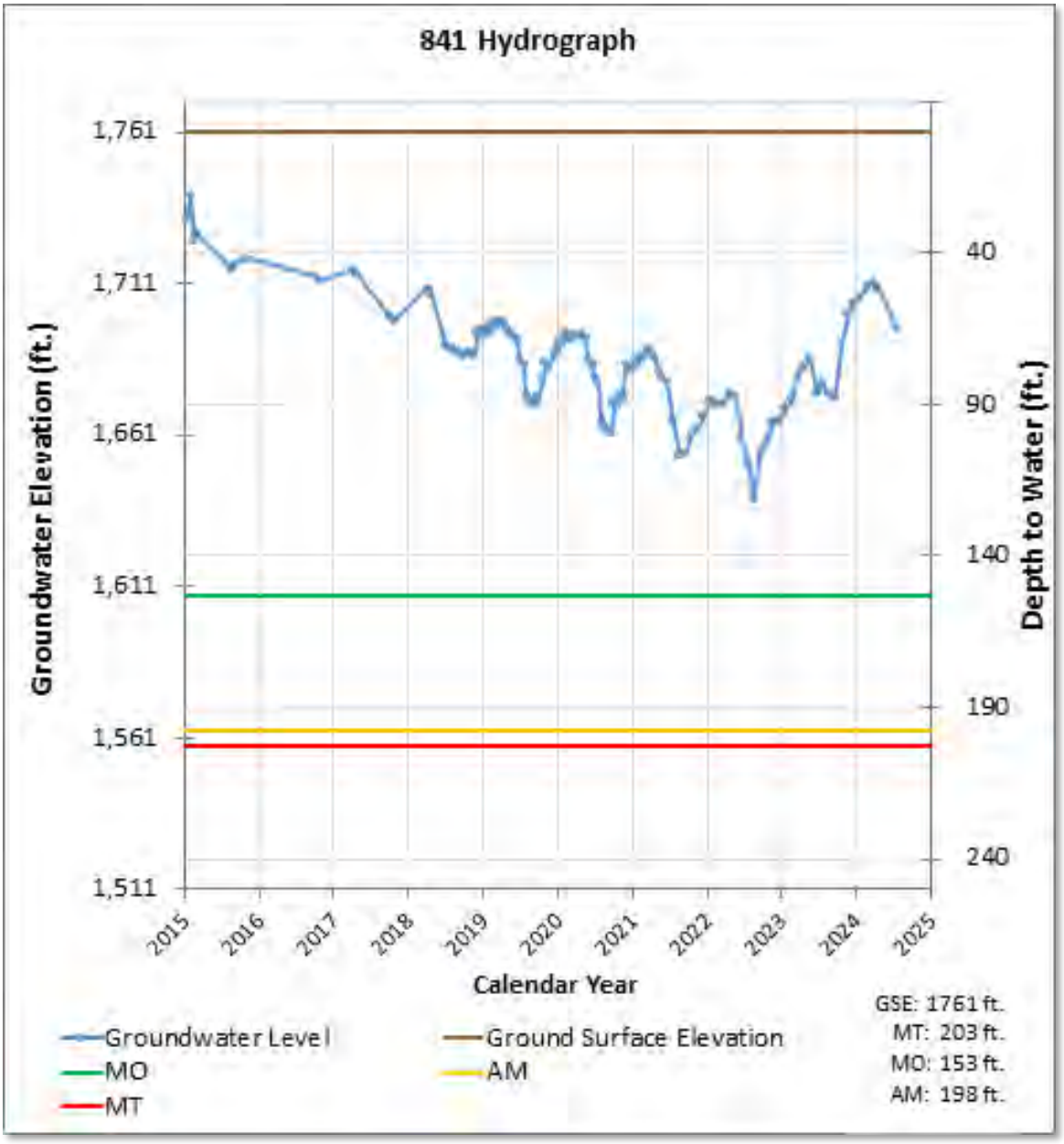


Figure 7: Northwestern Region – Well 841



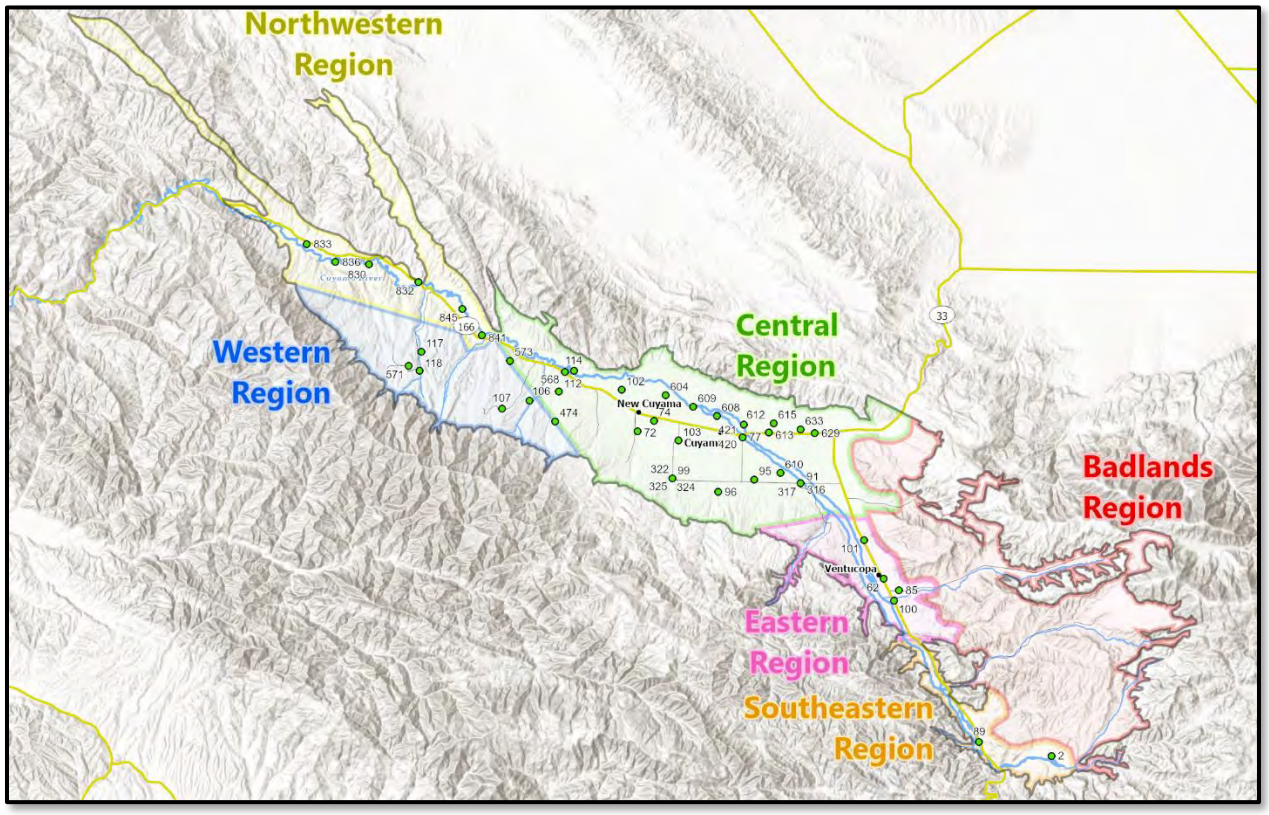


Figure 8: Threshold Regions in the Cuyama Groundwater Basin

5. MONITORING NETWORK UPDATES

As shown in Table 2, there are five 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
- Data not yet available due to transducer malfunction:
  - Wells 62, 102
- Measurement was not possible at the time that the field technician went to take measurements:
  - Well 72

Additionally, well 608 is now confirmed to be "destroyed" and is no longer available for monitoring. The landowner and monitoring staff have identified a well within 100 ft that is suitable to continue monitoring in this location; the data from that new well is reported for well 608 in this version of the report. The groundwater level monitoring network will be modified to remove well 608 and add in this new well. The new well is in the process of being incorporated into Opti. The new well will use historical data from Well 608 as a proxy for future analysis conducted for GSP implementation.

[redacted]