

# CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY STANDING ADVISORY COMMITTEE MEETING

#### **Committee Members**

Brenton Kelly (Chair)
Brad DeBranch (Vice Chair)
Louise Draucker

Jake Furstenfeld Jean Gaillard Joe Haslett Roberta Jaffe Vacant Vacant

#### **AGENDA**

August 31, 2023

Agenda for a meeting of the Cuyama Basin Groundwater Sustainability Agency Standing Advisory Committee meeting to be held on Thursday, August 31, 2023, at 5:00 PM at the **Cuyama Valley Family Resource Center 4689 CA-166, New Cuyama, CA 93254**. Participate via computer at: <a href="https://rb.gy/c490p">https://rb.gy/c490p</a> or by going to Microsoft Teams, downloading the free application, then entering Meeting ID: 290 937 651 464 Passcode: z8mi9V, or telephonically at (469) 480-3918, Phone Conference ID: 588 047 246#.

The order in which agenda items are discussed may be changed to accommodate scheduling or other needs of the 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 Committee discussion of all items in which they are interested.

#### **Teleconference Locations:**

4689 CA-166	11601 Bolthouse Drive, Suite 200	2474 NW 77 Blvd
New Cuyama, CA 93254	Bakersfield, CA 93311	Gainesville, FL 32606

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 Wednesday prior to this meeting. The Cuyama Basin Groundwater Sustainability Agency reserves the right to limit each speaker to three (3) minutes per subject or topic.

- 1. Call to Order
- 2. Roll Call
- 3. Pledge of Allegiance
- 4. Update on SAC Membership

#### **ACTION ITEMS**

- 5. Approval of July 6, 2023, Minutes
- 6. Groundwater Sustainability Plan Amendment Components
  - a. Discuss and Make Appropriate Recommendation on Pumping Reduction Implementation [Initial Discussion]
  - b. Discuss and Make Appropriate Recommendation on Basin-Wide Pumping Restrictions [Initial Discussion]
  - c. Discuss and Make Appropriate Recommendation on Central Management Area Boundary [Initial Discussion]
  - d. Discuss and Make Appropriate Recommendation on Groundwater <u>Levels</u> Monitoring Network [Final Discussion]
  - e. Discuss and Make Appropriate Recommendation on Groundwater <u>Storage</u> Monitoring Network [Final Discussion]

- f. Discuss and Make Appropriate Recommendation on Sustainable Management Criteria and Undesirable Results Definitions for Groundwater <u>Levels</u> [Initial Discussion]
- g. Discuss and Make Appropriate Recommendation on Sustainable Management Criteria and Undesirable Results Definitions for Groundwater <a href="Storage">Storage</a> [Initial Discussion]
- 7. Discuss and Make Appropriate Recommendation on Plan for Public Workshops
- 8. Discuss and Make Appropriate Recommendation on Annual Reporting Requirement for Local Crop
- 9. Discuss and Make Appropriate Recommendation on Plan to Revise Crop Factors on Small Pumper Water Use Reporting Form
- 10. Discuss and Make Appropriate Recommendation to Identify Location of Tamarisk in the River Channel

#### **REPORT ITEMS**

#### 11. Technical Updates

- a. Update on Groundwater Sustainability Plan Activities
- b. Update on Modeled Pumping vs User-Reported Pumping
- c. Update on Grant-Funded Projects
- d. Update on Active Well Dataset
- e. Update on July 2023 Groundwater Conditions Report

#### 12. Administrative Updates

- a. Report of the Executive Director
- b. Report of the General Counsel
- c. Board of Directors Agenda Review
- 13. Items for Upcoming Sessions
- 14. Committee Forum
- 15. Public Comment for Items Not on the Agenda

At this time, the public may address the Committee on any item not appearing on the agenda that is within the subject matter jurisdiction of the Committee.

- 16. Correspondence
- 17. Adjourn

#### 2023

#### **Board Ad hocs**

#### CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

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

## Cuyama Basin Groundwater Sustainability Agency Standing Advisory Committee Special Meeting

July 6, 2023

#### **Draft Meetings Minutes**

#### PRESENT:

Kelly, Brenton – Chair DeBranch, Brad – Vice Chair Furstenfeld, Jake Gaillard, Jean Haslett, Joe Jaffe, Roberta

-----

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

#### ABSENT:

Draucker, Louise

#### 1. Call to Order

Cuyama Basin Groundwater Sustainability Agency (CBGSA) Standing Advisory Committee (SAC) Chair Kelly called the meeting to order at 5:00 p.m. and Assistant Executive Director Taylor Blakslee provided direction on the meeting protocols in facilitating a remote meeting.

#### 2. Roll Call

Mr. Blakslee called roll of the Committee (shown above).

#### 3. Pledge of Allegiance

Mr. Blakslee led the pledge of allegiance.

#### 4. Update on SAC Membership

Chair Kelly reported that there remain two vacancies for representatives of the Hispanic community and said if anyone knows someone that is interested in serving to let himself or Mr. Blakslee know.

#### **ACTION ITEMS**

#### 5. Approval of Minutes

Chair Kelly opened the floor for comments on the April 27, 2023, CBGSA SAC meeting minutes.

#### **MOTION**

Vice Chair DeBranch made a motion to approve the April 27, 2023, CBGSA SAC meeting minutes with the correction of changing the opening of item 5 from Chair Kelly to Vice Chair DeBranch and the vote on item 7 for Gaillard from NOE to AYE. The motion was seconded by Committee Member Haslett, a roll call vote was made, and the motion passed.

AYES: DeBranch, Furstenfeld, Gaillard, Haslett, Jaffe, Kelly

NOES: None
ABSTAIN: None
ABSENT: Draucker

#### 6. Discuss and Appropriate Action on DWR GSP Approval Staff Report

Mr. Beck provided background on the DWR GSP Approval staff report which is included in the SAC packet. Mr. Van Lienden walked through each of the corrective actions which is included in the SAC packet.

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

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

Chair Kelly asked if it is possible if the river channel survey is photographic and if it can be beneficial for vegetation classification. Mr. Van Lienden replied this is an optional part of the survey but this may not be more useful information than what is provided by DWR.

Lynn Carlisle commented the information for vegetation classification can be used to remove invasive species. Mr. Van Lienden replied he would need to check whether that level of detail can be provided and what the cost would be.

Committee Member Haslett asked if DWR differentiates between agricultural water and drinking water for nitrate. He continued to explain the nitrate is only harmful if it is in drinking water since the nitrate in agricultural water is absorbed by the plants. Mr. Van Lienden replied DWR is most concerned with drinking water.

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

Committee Member Jaffe expressed support for coordinating with the Regional Water Quality Control Board (RWQCB).

Chair Kelly asked how frequently groundwater quality needs to be taken. Mr. Beck replied the shortest interval would be annually and the longest would be every 3 years.

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

Mr. Beck provided background on the plan amendment to change undesirable results criteria which is included in the SAC packet. Mr. Van Lienden reviewed the current status of the monitoring wells, which are included in the SAC packet.

#### **MOTION**

Committee Member Haslett makes a motion to accept staff recommendation to not do a GSP amendment at this time and consider potential changes as part of the January 2024 GSP amendment. The motion was seconded by Committee Member Gaillard, a roll call vote was made, and the motion passed.

AYES: Furstenfeld, Haslett, Jaffe, Kelly, DeBranch, Gaillard

NOES: None ABSTAIN: None ABSENT: Draucker

#### 8. Discuss and Take Appropriate Action on GSP Periodic Evaluation

Mr. Beck provided background for the GSP periodic evaluation which is provided in the SAC packet. Mr. Blakslee reviewed the typical issue resolution process which is provided in the SAC packet.

Committee Member Haslett asked if the technical forums are open for people who have technical knowledge but are not a representative of the GSA. Mr. Beck responded if someone has technical knowledge they can be included in the meetings.

Mr. Van Lienden reviewed the schedule for technical work required for GSP amendment and periodic evaluation which is included in the SAC packet.

Committee Member Gaillard asked who selected the well driller for the monitoring wells. Mr. Blakslee responded the Board selected the well driller for the monitoring wells.

Mr. Van Lienden reviewed the proposed GSP chapter update schedule and related policy items which is included in the SAC packet.

Committee Member ask where basin-wide pumping restrictions came from. Mr. Blakslee explained the Board directed staff to have an ad hoc to address the basin-wide pumping restrictions and include this for discussion to determine whether this level of restriction is needed.

Lynn Carlisle commented a workshop on the relationship between the GSA and the adjudication would be helpful for the community to help understand and the need for boundary modification. Legal Counsel Alex Dominguez responded this will be discussed with the Board.

Committee Member Haslett asked if legal counsel is aware of the state assembly bill that would require DWR and GSA to participate in the review of an adjudication. Mr. Dominguez responded legal counsel is following this bill among others and there is some uncertainty on whether this bill will pass.

# 9. Discuss and Take Appropriate Action on Precipitation Enhancement Study by Desert Research Institute Mr. Van Lienden reviewed the proposed precipitation enhancement study by Desert Research Institute (DRI) which is provided in the SAC packet.

Committee Member Haslett commented the GSA money would be better spent on other items and does not

July 6, 2023, Draft Minutes

Cuyama Basin GSA Standing Advisory Committee

support doing this study.

Committee Member Gaillard commented he is in favor of this study if it can bring in more rain.

Vice Chair DeBranch asked if the grant funds can be repurposed for another activity. Mr. Blakslee responded an amendment may be written to reallocate the funds to a different activity.

Vice Chair DeBranch asked how much it would cost to actually perform the cloud seeding. Mr. Beck responded the study would tell us if this would be effective.

#### MOTION

Committee Member Gaillard makes a motion to accept DRI proposal. The motion was seconded by Committee Member Haslett, a roll call vote was made, and the motion passed.

AYES: Haslett, Kelly, DeBranch, Gaillard

NOES: None ABSTAIN: Jaffe

ABSENT: Draucker, Furstenfeld

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

Mr. Blakslee reviewed the proposed modifications well flow meter reporting which is provided in the SAC packet.

Vice Chair DeBranch commented it may be too soon to start relaxing some the requirements and at the bare minimum should require bi-annual pictures of the meters.

Committee Member Jaffe asked if there is a meter report for 2022 and if it will be available to the public. Mr. Blakslee replied staff provided an update in the water use for the pumpers in the packet, but there is no formalized report.

Committee Member Jaffe commented if it is burdensome then we can cut it back to quarterly.

Committee Member Gaillard commented there are some months that there are no irrigation so it may be better to have the irrigators take pictures during time period irrigators are pumping water.

Committee Member Haslett commented to keep the process the same for 2023 and 2024.

Committee Member Jaffe and Chair Kelly agreed with Committee Member Haslett.

Mr. Blakslee reviewed the flow meter reporting form which is included in the SAC packet.

Committee Member Gaillard commented the form should include the crops that are being watered.

Committee Member Haslett commented there should be a reference sheet attached that allows pumpers to indicate what crops they are watering.

Chair Kelly commented it is important to know where the water is going and what it is watering.

Vice Chair DeBranch agreed with the staff recommendation.

Committee Member Jaffe agreed with staff recommendation.

Mr. Blakslee reviewed the small pumper form which is included in the SAC packet.

Committee Member Haslett commented he does not believe the crop factors are accurate and it does not take into account rainfall.

Vice Chair DeBranch commented there should always be an effort to improve the method.

Chair Kelly, Committee Member Gaillard, and Committee Member Jaffe agreed the method to report water use needs to be updated.

#### 11. Discuss and Take Appropriate Action on Well Registration Program

Mr. Blakslee provided an update on the well registration program which is provided in the SAC packet.

Committee Member Gaillard asked if a well is temporary sanded, should the well owner report this to the GSA. Mr. Beck responded this would be reported on a different form. Mr. Blakslee commented there is a form online to report any well issues.

The committee agreed on the proposed well registration form.

#### **REPORT ITEMS**

#### 12. Technical Updates

#### a. Update on Groundwater Sustainability Plan Activities

Mr. Van Lienden provided an update on the accomplishments for May and June 2023 which is provided in the SAC packet.

#### b. Update on Grant-Funded Projects

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

Committee Member Haslett asked how staff will know there is water to measure. Mr. Van Lienden replied the contour mapping along with data from nearby wells will inform staff whether it is likely there is water in those locations.

Committee Member Haslett asked what service the CIMIS station uses. Mr. Van Lienden replied this CIMIS station uses cell service.

Committee Member Haslett asked if the river channel survey only included the Cuyama river channel. Mr. Van Lienden responded that is correct. Committee Member Haslett continued to say all the tributaries that feeds into the river channel, need to be mapped in the same way as the river channel because this will provide a better picture of the entire river in the basin. Mr. Van Lienden responded he will check what the additional cost will be for this.

#### c. Update on Active Well Dataset

Mr. Van Lienden provided an update on the active well dataset which is provided in the SAC packet.

Vice Chair DeBranch commented he found a lot of errors in the dataset. Mr. Van Lienden replied staff can check the data.

Chair Kelly asked how staff will reach out to the public to get this information. Mr. Blakslee responded staff can look at doing a mailout, emailing stakeholders, or posting online.

#### d. Update on Potential Non-Reporting Pumpers

Mr. Blakslee provided an update on the potential non-reporting pumpers which is provided in the SAC packet.

Chair Kelly explained the water district has information on which parcels are irrigated and which ones are not irrigated.

#### e. Update on April 2023 Groundwater Conditions Report

Mr. Van Lienden provided an update on the April 2023 groundwater conditions report which is provided in the SAC packet.

Committee Member Haslett asked why well 124 is on the map. Mr. Van Lienden replied staff has not been able to get data for this well.

#### 13. Groundwater Sustainability Agency

#### a. Report of the Executive Committee Member

Nothing to report.

#### b. Report of the General Counsel

Nothing to report.

#### c. Board of Directors Agenda Review

Mr. Blakslee provided an overview of the July 12, 2023, CBGSA Board Meeting agenda which is provided in the SAC packet.

#### 14. Items for Upcoming Sessions

Nothing to report.

#### 15. Committee Forum

Committee Member Haslett commented the Twitchell reservoir dredging project will be doing work on the sediment from Cuyama river upstream that eventually makes it way to Twitchell reservoir.

Committee Member Jaffe commented in the Santa Barbara Independent there was an article posted on the Cuyama Valley and the concerns of stakeholders in regards to the adjudication. Committee Member Jaffe commented at the May 10 Santa Barbara planning commission they denied the three large reservoir project and an appeal is being filed to the Board of Supervisors.

#### 16. Public Comment for Items Not on the Agenda

Nothing to report.

17. Correspoi	าdence
---------------	--------

Nothing to report.

ΤΟ.	Aajourn
	Chair Kelly

Chair Kelly adjourned the	meeting at 8:48 p.m	n.
STANDING ADVISORY COMMIT CUYAMA BASIN GROUNDWATE		AGENCY
Chair Kelly:		_
	ATTEST:	

Vice Chair DeBranch:



TO: Standing Advisory Committee

Agenda Item No. 6

FROM: Jim Beck / Brian Van Lienden

DATE: August 31, 2023

SUBJECT: Groundwater Sustainability Plan Amendment Components (Items 6a-f)

#### **Recommended Motion**

Standing Advisory Committee feedback requested.

#### Discussion

On July 12, 2023, the Cuyama Basin Groundwater Sustainability Agency Board of Directors reviewed a schedule for updating the Groundwater Sustainability Plan (GSP) ahead of the January 2025 deadline. In accordance with the schedule, staff prepared the following GSP components for discussion and potential recommendation by the Standing Advisory Committee which is provided as Attachment 1.

- a. Discuss and Make Appropriate Recommendation on Pumping Reduction Implementation
- b. Discuss and Make Appropriate Recommendation on Basin-Wide Pumping Restrictions
- c. Discuss and Make Appropriate Recommendation on Central Management Area Boundary
- d. Discuss and Make Appropriate Recommendation on Groundwater Levels Monitoring Network
- e. Discuss and Make Appropriate Recommendation on Groundwater Storage Monitoring Network
- f. Discuss and Make Appropriate Recommendation on Sustainable Management Criteria and Undesirable Results Definitions for Groundwater <u>Levels</u>
- g. Discuss and Make Appropriate Recommendation on Sustainable Management Criteria and Undesirable Results Definitions for Groundwater <u>Storage</u>

**Attachment 1** 

## Groundwater Sustainability Plan Amendment Components



## Background

- Review GSP Update and Board Policy Discussions Schedule
- Key Policy Items
  - Pumping Reduction Program
  - Basin-Wide Pumping Restrictions
  - Central Management Area (CMA) Boundary
  - Groundwater Levels Monitoring Network
  - Groundwater Storage Monitoring Network
  - Groundwater Levels Sustainable Management Criteria and Undesirable Results Definitions
  - Groundwater Storage Sustainable Management Criteria and Undesirable Results Definitions

# GSP Update and Board Policy Discussions Schedule

		1	2	3	4	5	6	7	8	9	10
-			2023		-	2	2024		-	7	2025
	Board Direction:	July Finalize: Feedback on engagement strategy	Sep 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	Nov Finalize: Subsidence, Interconnected surface water (ISW), and water quality (WQ) monitoring networks  GW subsidence ISW, and WQ SMC and UR options  Glidepath methodology	Jan Finalize: GW levels, storage, subsidence, ISW, WQ SMC and UR	Mar Project and Management Action (PMA) options  Sustainable yield (SY) methodology  Issue 90-Day Notice	May Finalize:  Basin-wide Pumping Restrictions/MA Boundary (updated model)  Allocation methodology Glidepath methodology PMA options SY approach	Jul	Sep Review Public draft	Nov **Public Hearing to adopt Amended GSP	Jan
	GSP Chapter Review:				Ch 1. Agency Info/Plan Area Ch 4. Monitoring Network		Ch 2. Basin Setting Ch 3. URs Ch 5. SMCs	Ch 6. DMS Ch 7. PMAs	Ch 8. Plan Implementation Executive Summary		
	Public Workshop		1			1			✓		5

## Cuyama Basin Groundwater Sustainability Agency

6a. Discuss and Make Appropriate Recommendation on Pumping Reduction Implementation

Alex Dominguez / Taylor Blakslee

August 31, 2023



# SGMA & Water Rights

- Groundwater management under SGMA must be consistent with section 2 of article X of the California Constitution regarding the reasonable and beneficial use of water
- Nothing in SGMA, or in any groundwater management plan adopted under SGMA, determines or alters surface water rights or groundwater rights
- (Wat. Code § 10720.5.)

## CBGSA GSP

- "The CBGSA would develop allocations based on estimated historical use, existing land uses, and total irrigated acreage."
  - "The CBGSA would determine historical use by analyzing data about water use during the 20-year historical period from 1998 to 2017..."
  - "Water use would be estimated either using remote sensing and land use data to estimate agricultural consumption or from data provided by pumpers in the Basin, including private pumpers and water agencies."

# Existing Methodology

## Allocation Methodology:

- Allocation implementation: Calendar years 2023 and 2024
- Applied to: Central Management Area (CMA) + Farming Units
- Baseline Allocation Amount: 2021 modeled water use in the CMA excluding CCSD metered use and residential pumping (estimated by model)
- Sustainable Yield: Calculated by the model for the CMA (including Farm Units)
- Allocation Methodology: estimated historic water use averaged from the 1998-2017
   Water Year period for each parcel in the CMA<sup>1</sup>

<sup>1</sup>Water use estimates for each parcel in the CMA were calculated using the updated CBWRM model version 0.20. These estimates are based on the CBWRM inputs using the best available data and include evapotranspiration and land use time series, parameters representing soil hydraulic properties and irrigation practices. For the land use time series, available local crop data is used as the main source and data gaps were filled by the datasets provided by Land IQ. Evapotranspiration time series was estimated using remote sensing by David's Engineering. Soil and irrigation practice related parameters were calibrated by David's Engineering to represent soil drainage conditions and irrigation efficiencies in the Cuyama Valley. Using all of this information, CBWRM land surface component dynamically simulates soil moisture routing in the entire model domain on a daily time step and calculates the estimated applied water amount required to maintain the soil moisture levels as needed by the crops.

# Existing Methodology

### Administrative policy (adopted on January 18, 2023):

- The CBGSA will develop a water allocation for each parcel in the CMA and part of a "Farming Unit"
- Each landowner/operator must submit monthly meter readings for the preceding year by January 31st according to the CBGSA meter reporting instructions (provided at www.cuyamabasin.org)
- Each landowner must list the APNs the well served and how many acre-feet of water was used on each APN as listed in the water use reporting forms
- Staff will develop a water accounting to report at the March Board meeting to confirm annual pumping reduction goals are met for the net water use for landowners/operators

### Penalty Fees/Enforcement (adopted July 6, 2022):

- If a landowner/farming unit does not meet their annual pumping reduction target (allocation), any and all over-pumped water will be debited against that landowner's allocation for the following year. Additional over-pumping will carry a tiered financial penalty as follows:
  - Tier 1: 5 percent over pumping = \$250/acre-foot
  - Tier 2: >5 percent pumping = \$500/acre-foot
- These penalties fees for over-pumping will be invoiced in March and be due by May 1st of each year and any penalty fees collected will be used for projects in the CMA. If a landowner over-pumps 20% or more of his or her allocation in any given year, the CBGSA may consider legal action

## Lessons Learned from 2023 Allocation

- Management Area Boundaries
- Farming Units
- Entities to Exclude from Pumping Restrictions
- Model Pumping Data vs. Actual Pumping Data
- Variance Requests



## Management Area Boundaries

STAKEHOLDER FEEDBACK: During the variance process, CBGSA staff heard complaints claiming that the CMA boundary is arbitrary and that it is unfair that landowners outside of the CMA boundary can continue to pump without restriction

## OPTIONS TO ADDRESS FEEDBACK:

- 1. Continue using the same CMA boundary and associated methodology
- 2. Update the CMA boundary on a more periodic basis
- 3. Establish a new methodology to update the CMA boundary
- 4. Establish a new management area(s)

## Farming Units

- STAKEHOLDER FEEDBACK: During the variance process, CBGSA heard requests that CBGSA should recognize "farming units" – those are parcels that are located outside the CMA but historically irrigated from groundwater wells located inside the CMA
- OPTIONS TO ADDRESS FEEDBACK: CBGSA addressed this matter during the 2023 allocation process. Currently, a landowner may submit a "farming unit request form" that is considered and processed by CBGSA staff. If approved, the landowner's parcel(s) located outside the CMA as part of the "farming unit" are included in the Sustainable Yield determination and subject to pumping restrictions

# Entities to Exclude from Pumping Restrictions

- STAKEHOLDER FEEDBACK: During the variance process, CBGSA staff heard complaints that CBGSA did not consider all appropriate entities that should be excluded from pumping restrictions (i.e., school district, etc.)
- OPTIONS TO ADDRESS FEEDBACK: CBGSA addressed this matter during the 2023 allocation process. Currently, the following entities located within the CMA are excluded from pumping restrictions: CCSD (based on metered data) and residential users (determined by the model)
- The Ad Hoc Committee should consider whether there are any additional entities within the CMA that should be similarly be excluded from future pumping restrictions

## Modeled Pumping Data vs. Actual Pumping Data

 STAKEHOLDER FEEDBACK: During the variance process, CBGSA staff heard requests that landowners be able to substitute actual or estimated pumping records for the CBGSA's modeled pumping estimates

## OPTIONS TO ADDRESS FEEDBACK:

- 1. Continue using modeled pumping data
- 2. Allow landowners to substitute in actual pumping records
- 3. Use landowner groundwater extraction reports
- 4. Use landowner meter reports

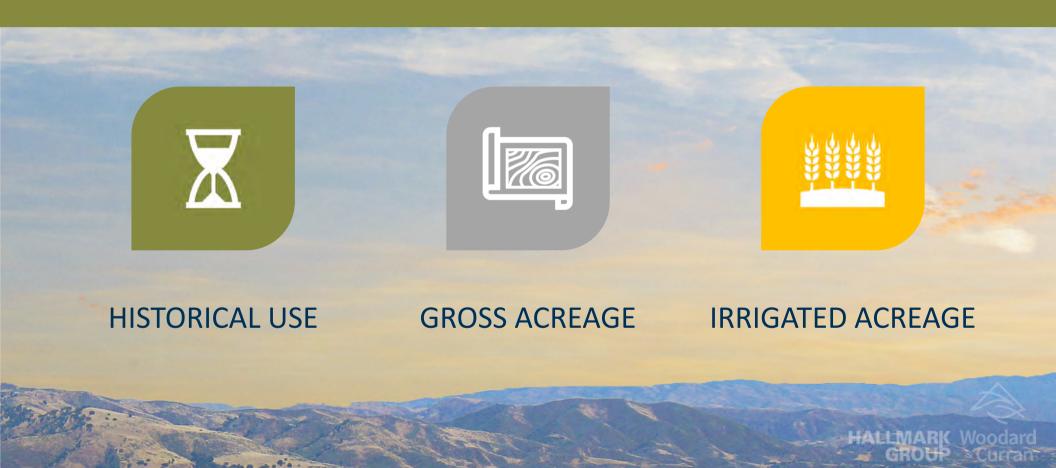
## Variance Process

GENERAL NOTES: While the variance process allowed for landowner to contest their respective allocations, under the 2023 allocation process, if CBGSA staff were to approve even one variance request, it would result in a change to all allocations

## OPTIONS TO ADDRESS FEEDBACK:

- 1. Follow the same process as during the 2023 allocation process
- Create a "Variance Pool" that is pulled from the Sustainable Yield and used to address potential increases to allocation amounts
- Create a list of criteria that landowners can use to determine whether a variance request is likely to be approved

# Methodologies to Consider Going Forward



## Historical Use

- HOW DOES IT WORK: The GSA establishes allocations based on historical groundwater use over a base period (e.g., 1998 2017).
- EXAMPLE: Existing Methodology

PROS	VS.	CONS
Acknowledges historical uses		Excludes landowners who have not developed groundwater resources
May reduce conflict among users		GSA may not have sufficient data

## Gross Acreage

- HOW DOES IT WORK: The GSA allocates the sustainable yield among overlying landowners proportionate to acreage. Additionally, the GSA may develop other pools of water (i.e., penalty pools, overdraft pools, etc.)
- **EXAMPLE**: East Kaweah GSA provides: (1) a Native Yield allocation of 0.85 AF/Ac; (2) a Penalty Tier 1 allocation of 0.3 AF/Ac at \$500 per AF\*; and (3) a Hard Cap allocation of 2.5 AF/Ac at \$500 per AF\*.

PROS	VS.	CONS
Treats all landowners equally		Ignores current and historical uses
Simple calculation		

<sup>\*=</sup> includes a one for one reduction of water user's 2024 water year allocation HALLMARK Wooda

## Irrigated Acreage

- HOW DOES IT WORK: The GSA certifies all existing overlying groundwater use and develops allocation proportionate to land use.
- **EXAMPLE**: Tri-County Water Authority GSA provides a Native Yield allocation to all parcels 5 acres or larger and then provides "overdraft" water only to irrigated lands.

PROS	VS.	CONS
Reduction in use would be felt proportionately across all historic users		Does not give differential allocations based on historical use
		Potentially favors certain land uses
		Potentially discourages water conservation

## 8-21-23 Tech Forum Feedback

- Too early to assess success of current pumping reduction program
- Landowners should be allocated on same basis, asset for some landowners (i.e. water market)
- Need to consider actual data in future allocation methodology

# SAC Feedback Requested

- Is there any other analysis or information the SAC would like staff to provide?
- Does the SAC want staff to develop additional details on potential options for establishing an allocation methodology?

## Cuyama Basin Groundwater Sustainability Agency

# 6b. Discuss and Make Appropriate Recommendation on Basin-Wide Pumping Reductions Taylor Blakslee / Brian Van Lienden



# What does the GSP say?

- **Executive Summary (p. ES-1)**: "Although current analysis indicates groundwater pumping reductions on the order of 50 to 67 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."
- Pumping reductions outside the CMA were contemplated but not mandated under the current version of the GSP

# Options to Consider Regarding Pumping Allocations Outside the Central Management Area

		OPTIONS	NOTES	PROS	CONS
1		Do nothing (at this time)	No GSP amendment Lower required signific		May not achieve basin-wide sustainability; incentivize development outside the CMA
2		Do something	Now or later?		
	а	Create multiple Management Areas	GSP amendment required (new MA criteria to be developed)	Better representation for local conditions	Boundary issues remain; administration of multiple MAs = multiple methodologies
	b	Create one (1) new MA that's everything outside the CMA	GSP amendment required (new MA criteria to be developed)	Everyone in an overdrafted portion of the basin is treated similarly	Boundary issues remain; administration of two different MA = two different methodologies
	С	Eliminate all MAs and manage basin as a whole	GSP amendment	Consistent with basin boundary and ease of administration (everyone treated the same)	May not reflect local groundwater conditions within the basin

## 8-21-23 Tech Forum Feedback

Similar hydrologic/geologic areas should be managed together

# SAC Feedback Requested

- Is there any other analysis or information the SAC would like staff to provide?
- Does the SAC recommend one of the options presented by staff?

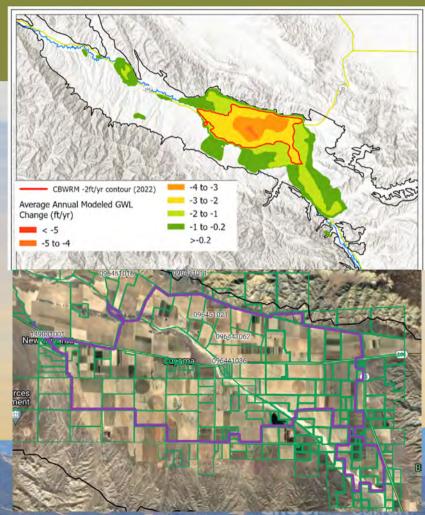
#### Cuyama Basin Groundwater Sustainability Agency

## 6c. Discuss and Make Appropriate Recommendation on Central Management Area Boundary Taylor Blakslee / Brian Van Lienden



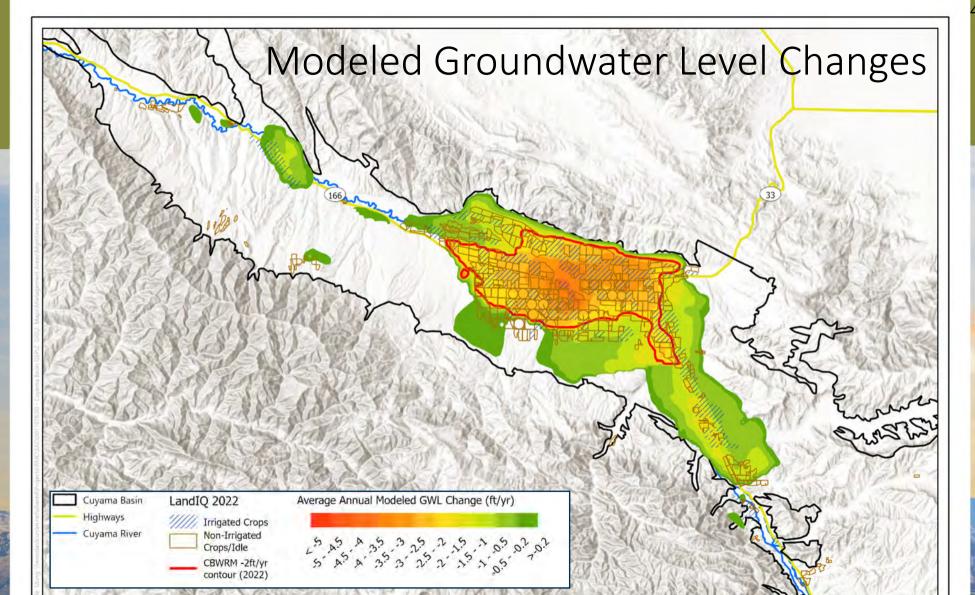
#### GSP Approach and Subsequent Board Direction

- GSP Chapter 7 (p. 7-1): "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 model to drop below minimum threshold levels before 2040."
- Modeled boundary was updated with model update and the Board voted to use an "operational boundary" in July 2022



#### Options for Management Area Boundaries

- Model-Based CMA Boundary:
  - Use existing boundary
  - Keep 2 feet per year rule, but update operational boundary when model updated in Spring 2024
  - Change the 2 feet per year rule
  - Draw a boundary based on model-estimated pumping
- Measured Groundwater Level-Based CMA Boundary:
  - Buffer around representative wells below minimum thresholds
  - Buffer around representative wells with levels dropping more than X feet per year
- Physical Features-Based CMA Boundary:
  - Use faults or other geologic features to determine edges of boundary
  - Use institutional boundaries (e.g. counties or CBWD)
- If SAC chooses to manage pumping outside the CMA, other Management Areas could potentially be developed using the same or different criteria from the CMA boundary



#### 8-21-23 Tech Forum Feedback

- Similar hydrologic/geologic areas should be managed together
- Support for physical feature-based management approach
- Dynamic boundary makes it harder for ag planning; fixed boundary most practical for planning purposes
- Consider impact to potential water markets

## SAC Feedback Requested

- Is there any other analysis or information the SAC would like staff to provide?
- Does the SAC recommend one of the options presented by staff?

#### Cuyama Basin Groundwater Sustainability Agency

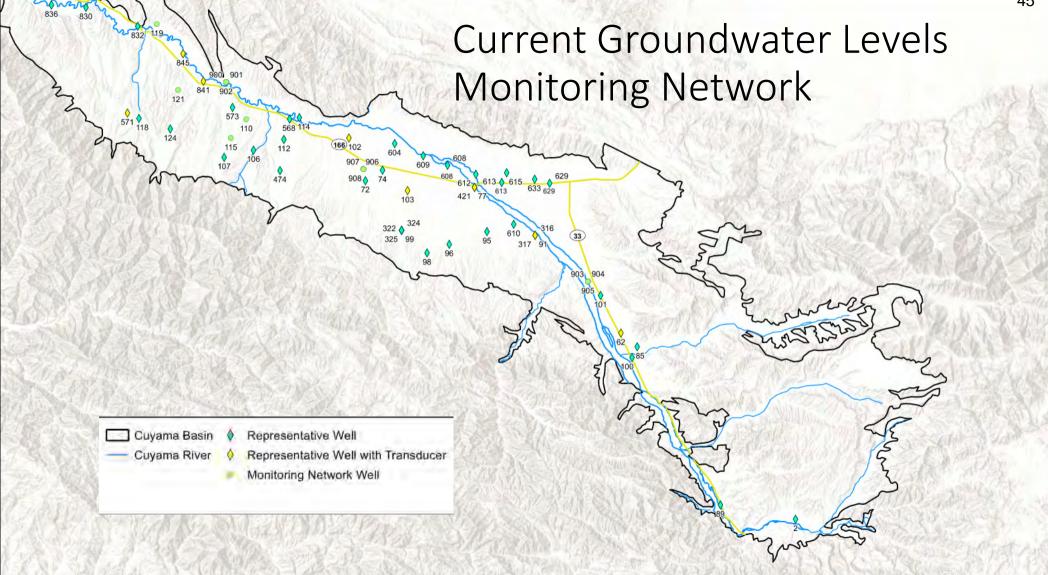
# 6d. Discuss and Make Appropriate Recommendation on Groundwater Levels Monitoring Network Taylor Blakslee / Brian Van Lienden

August 31, 2023



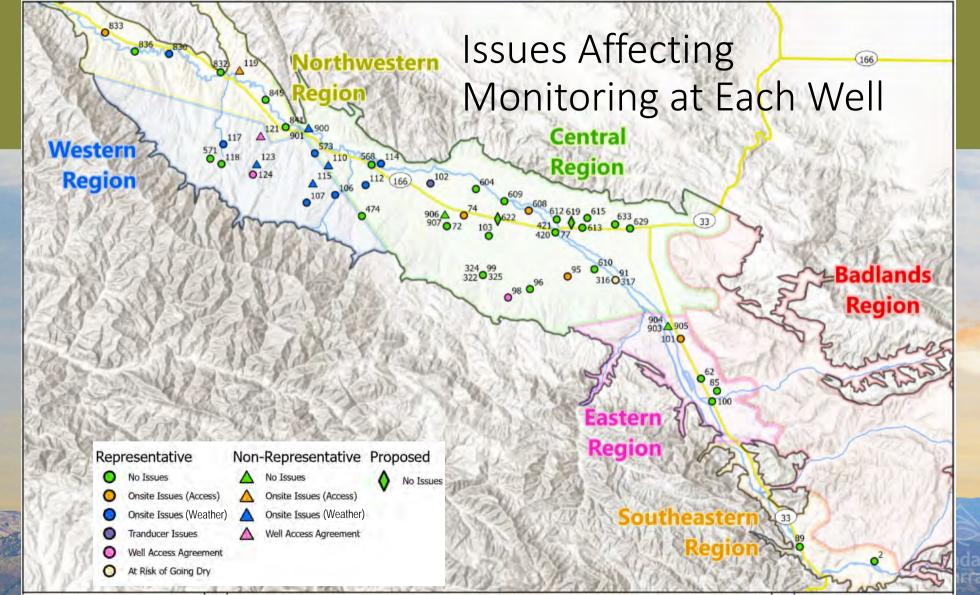
#### GSP Approach and Subsequent Board Direction

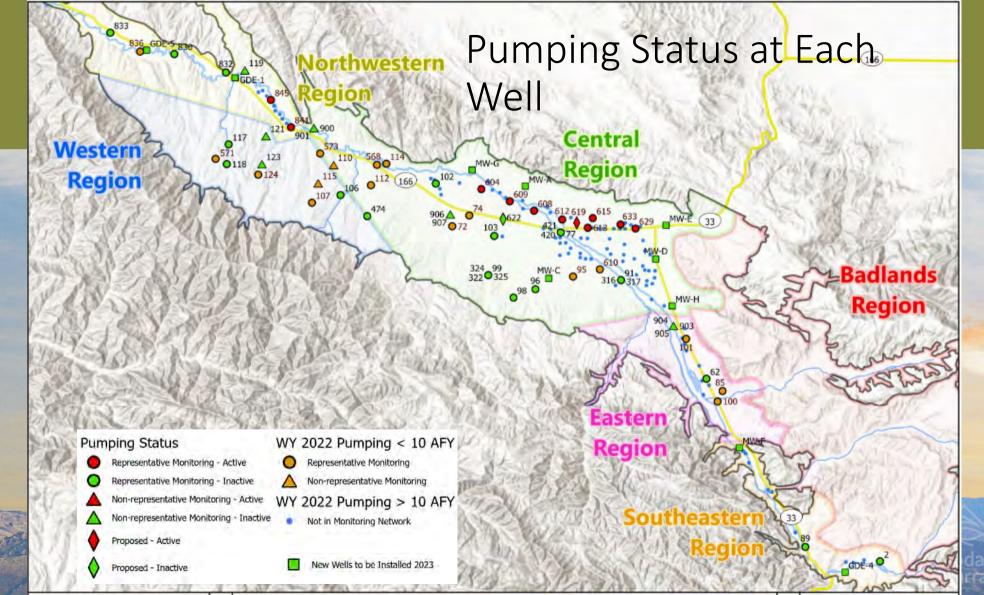
- GSP Section 4.5 (p. 4-35) describes the development of the GW levels monitoring network
  - Included 101 wells, including 61 representative wells
- As described in the WY 2019-2020 and WY 2020-2021 Annual Reports, the monitoring networks were refined to remove spatially redundant wells and to add in wells installed by DWR's Technical Support Services
  - The current monitoring network includes 61 wells, including 49 representative wells

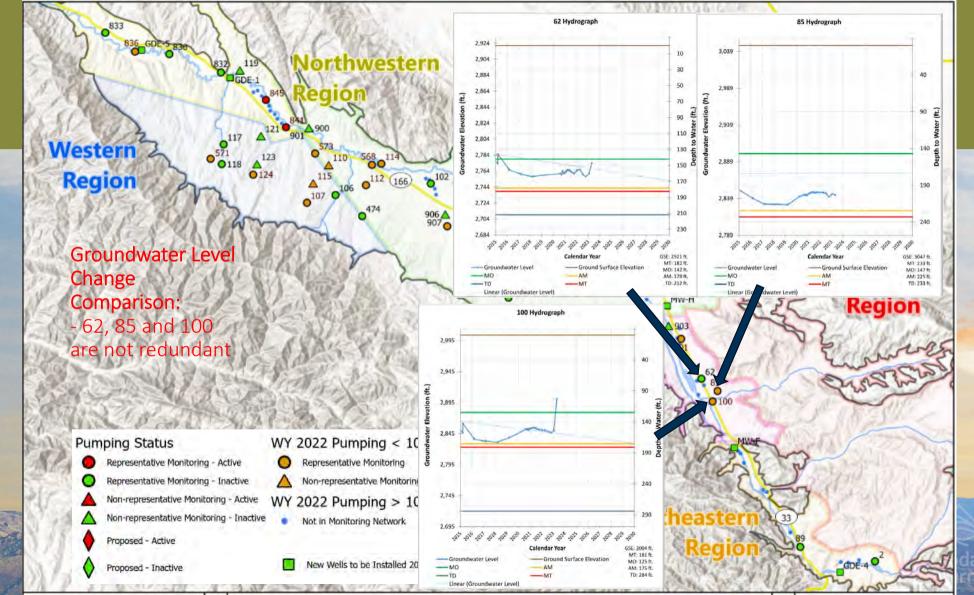


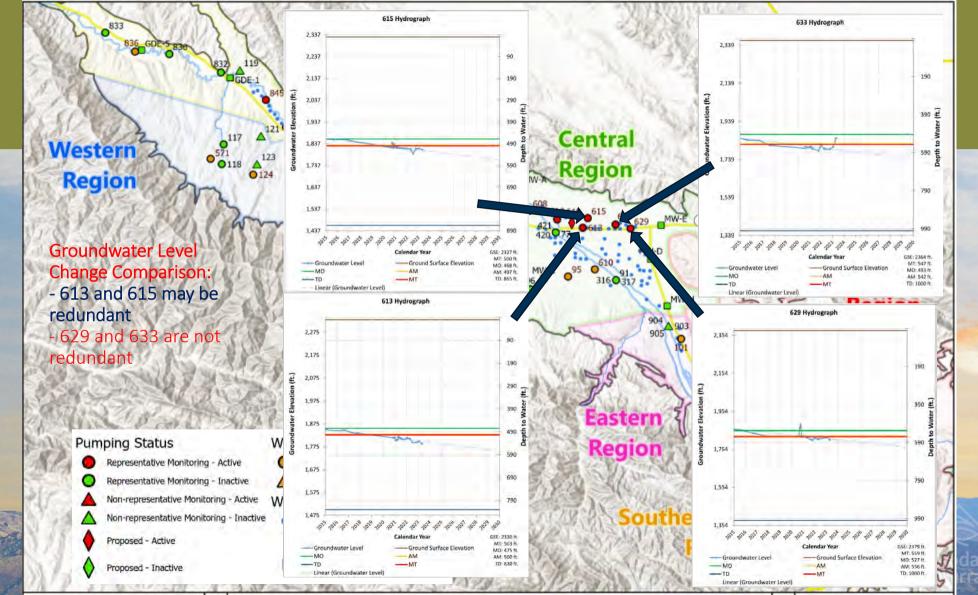
#### Review of Groundwater Levels Monitoring Network

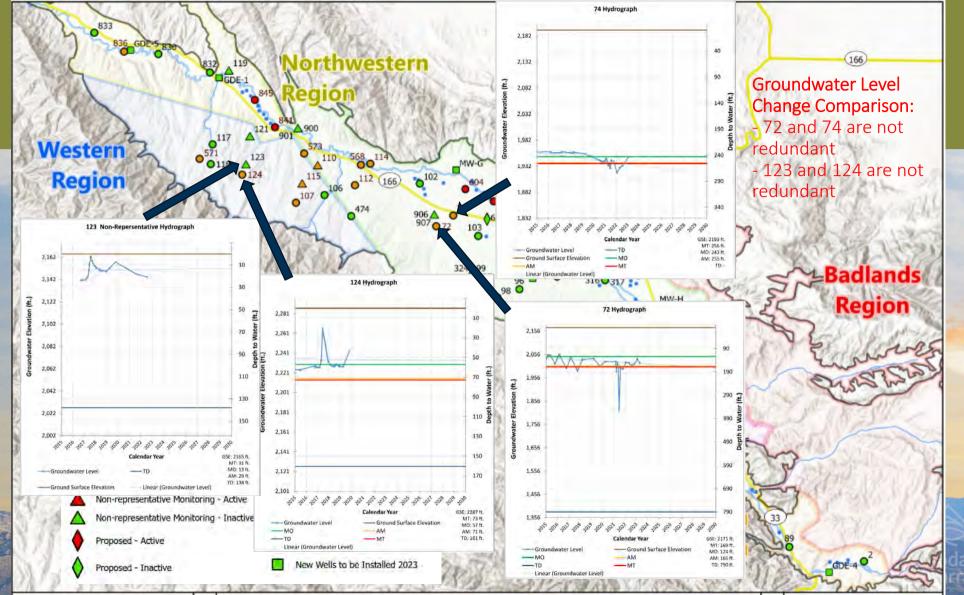
- The existing groundwater levels monitoring wells were reviewed with respect to the following issues:
  - Lack of landowner agreement for monitoring
  - Access issues due to issues at the wellsite
  - Access issues due to winter flooding
  - Whether the well is projected to go dry between now and 2030
  - Whether or not the well is an active pumping well and the magnitude of pumping in 2022
  - Whether nearby similar wells have shown similar groundwater level changes and are therefore redundant

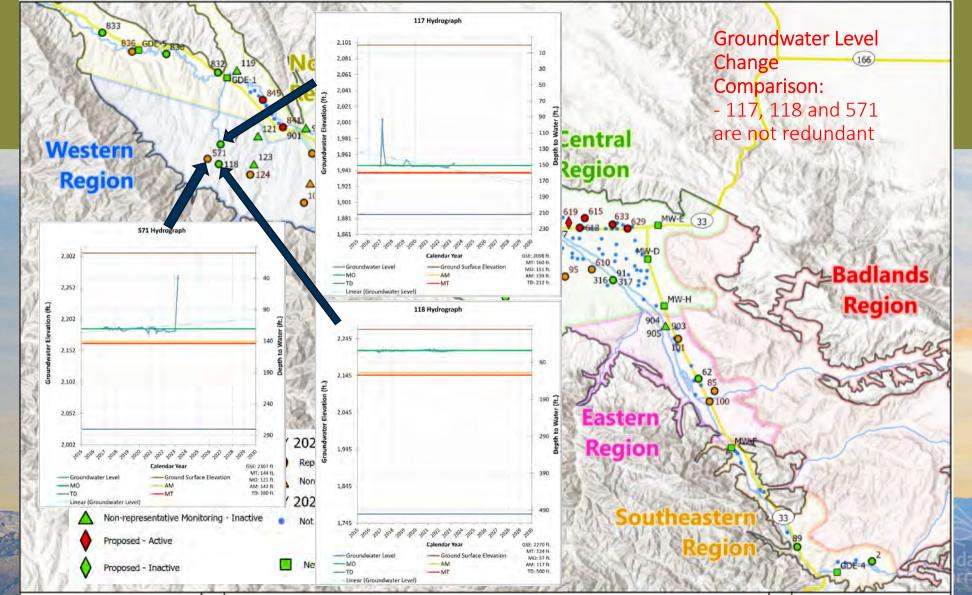






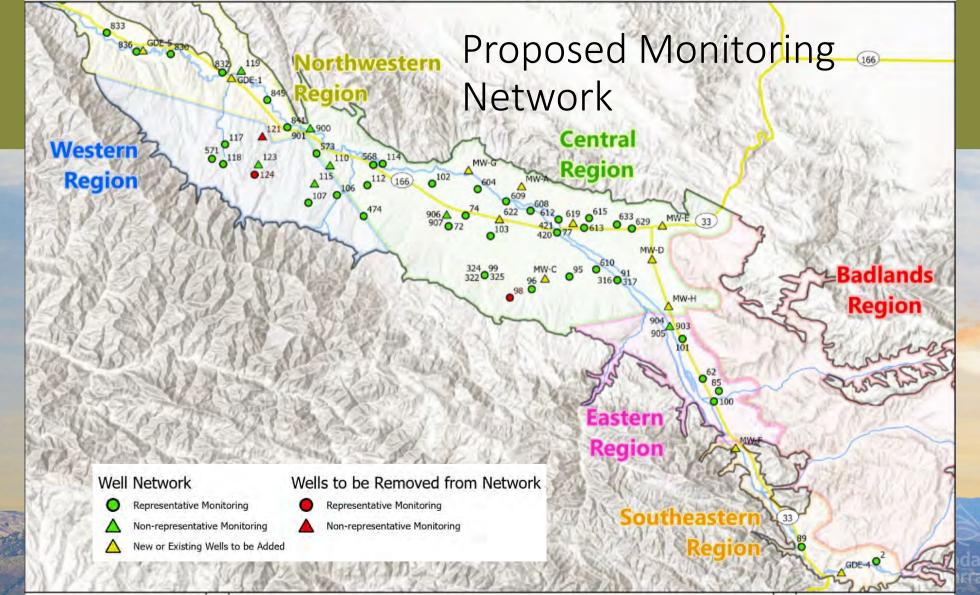






## Recommendation for Groundwater Levels Monitoring Network

- Representative wells:
  - include all existing wells except for 2 wells (98 and 124) where an agreement has not been able to be obtained
  - Consider removal of well 613 or 615 due to redundancy
  - No new representative wells because other available monitoring wells do not yet have enough data to reliably set a minimum threshold and measurable objective
- Other Monitoring wells:
  - Remove 1 well (121) as it was previously replaced by well 123
  - Add 2 wells (619 and 622) that have been offered by local landowner
  - Add new piezometers and multi-completion monitoring wells that will be constructed this
    year under the DWR grant
- Revised network would include 79 wells, 47 of which are representative wells
- Over the long-term, wells that are active pumping wells with significant pumping should have transducers installed and/or be replaced with dedicated monitoring wells



#### 8-21-23 Tech Forum Feedback

- Generally support staff approach
- Recommend additional analysis on potential redundant wells
- Recommend transducers in production wells

## SAC Feedback Requested

- Does the SAC approve the staff-recommended groundwater levels monitoring network?
- If not, what other options does it want staff to consider?

#### Cuyama Basin Groundwater Sustainability Agency

# 6e. Discuss and Make Appropriate Recommendation on Groundwater Storage Monitoring Network Taylor Blakslee / Brian Van Lienden

August 31, 2023



## GSP Approach and Potential Options

- GSP Section 4.6 (p. 4-50): "Groundwater in storage is monitored through the measurement of groundwater levels. Therefore, the groundwater storage monitoring network will use the groundwater level monitoring network."
- GSP uses groundwater levels as a proxy for groundwater storage
- Potential Options:
  - Continue to use groundwater levels as a proxy for groundwater storage
  - Use model estimates of change in groundwater storage to monitor groundwater storage

#### 8-21-23 Tech Forum Feedback

- Use levels as proxy for now
- Consider model-based storage estimate in 5+ years

## SAC Feedback Requested

- Staff recommends continuing to use groundwater levels as a proxy for monitoring of groundwater storage
- Does the SAC approve the staff recommendation?

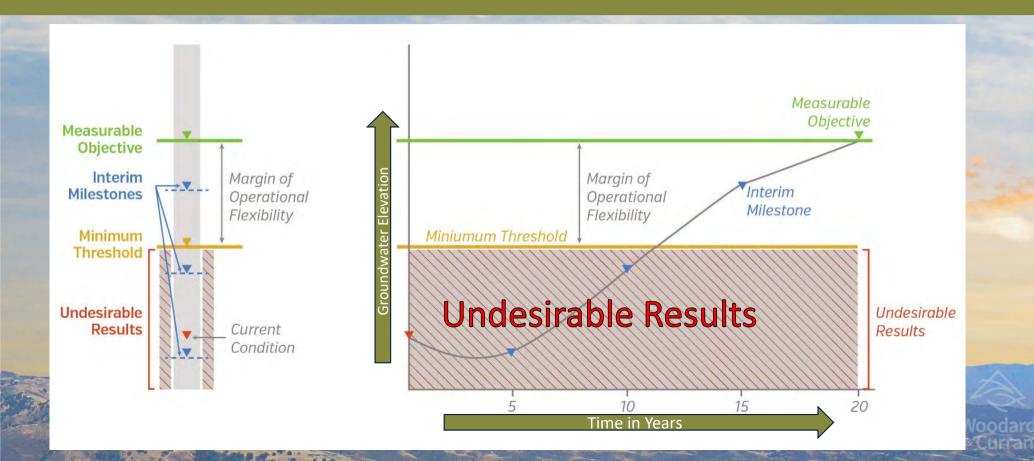
#### Cuyama Basin Groundwater Sustainability Agency

6f. Discuss and Make Appropriate Recommendation on Sustainable Management Criteria and Undesirable Results Definitions for Groundwater Levels

Taylor Blakslee / Brian Van Lienden



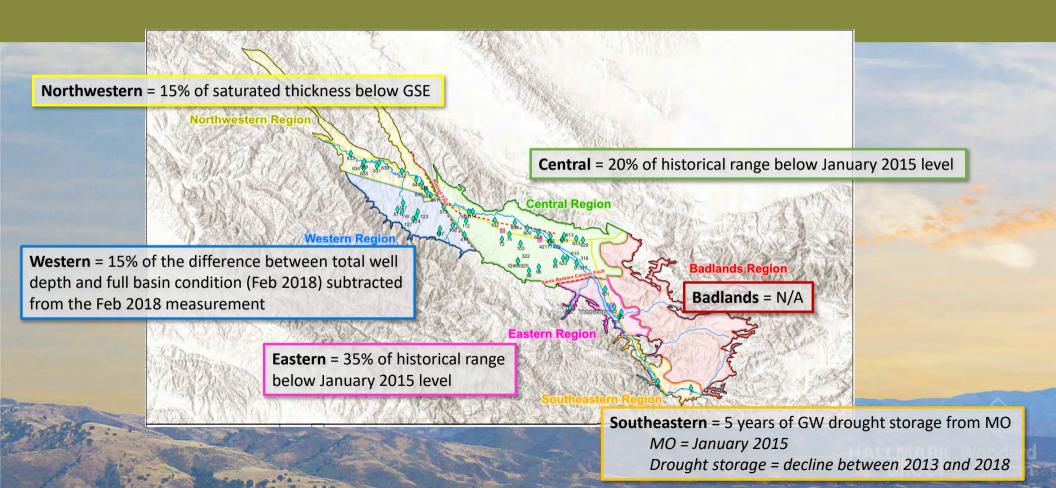
## Sustainability Thresholds Overview



#### GSP Approach

- GSP Section 3.2.1 Identification of Undesirable Results (p. 3-2): "This result is considered to occur during GSP implementation when 30 percent of representative monitoring wells (i.e., 18 of 60 wells) fall below their minimum groundwater elevation thresholds for two consecutive years."
- GSP Section 5.2.1 Threshold Regions (p. 5-2): "Six threshold regions were defined to allow areas with similar conditions to be grouped together for calculation of MOs, MTs, and IMs."
- GSP Section 5.2.2 Minimum Thresholds, Measurable Objectives, and Interim Milestones (p. 5-6): "This section describes how MTs, MOs, and IMs were established by threshold region, and explains the rationale behind each selected methodology."

## GSP Threshold Region MT Strategies



## Options for Groundwater Levels Sustainability Criteria – Minimum Thresholds

- Keep existing MTs
- Update previous MTs using similar methods but accounting for drought years since 2015
- Set MTs based on well protection depth for active pumping wells and GDE locations
- Set MTs based on modeling projection of glidepath, while also accounting for well protection depths and GDEs
- Set MTs based on continuation of historical groundwater level trends
- Set MTs based on historical low values or a percentage below the historical low value



#### Options for Groundwater Levels Sustainability Criteria – Measurable Objectives

- Keep same MOs
- January 2015 levels
- January 2021 levels
- Retain existing Margin of Op adjusted for new MT
- Apply a minimum buffer (sliding scale or consistent) to MOof

## Options for Groundwater Levels Undesirable Results Definitions

- Keep the existing definitions
- Update to 30% of wells over 3 years instead of 2 years
- Attempt to develop a percentage threshold based on projected impacts to beneficial users
- Develop separate undesirable results statements for different threshold regions

#### 8-21-23 Tech Forum Feedback

#### **Minimum Thresholds**

- Consider projections under glidepath and impacts to beneficial uses and users
- Reconsider use of threshold regions and potential simplified methodology
- If threshold regions remain, consider potential gradient impacts

#### **Measurable Objectives**

General support for minimum buffer

#### **Undesirable Results**

- Consider impacts to beneficial uses and users
- Continue with basin-wide definition



## SAC Feedback Requested

- Is there any other analysis or information the SAC would like staff to provide?
- Of the options presented by staff, which ones does the SAC want staff to analyze and develop specific proposals for?

#### Cuyama Basin Groundwater Sustainability Agency

6g. Discuss and Make Appropriate Recommendation on Sustainable Management Criteria and Undesirable Results Definitions for Groundwater Storage

Taylor Blakslee / Brian Van Lienden



## GSP Approach and Potential Options

- GSP Section 3.2.2 Identification of Undesirable Results (p. 3-3): "This result is considered to occur during GSP implementation when 30 percent of representative monitoring wells (i.e., 18 of 60 wells) fall below their minimum groundwater elevation thresholds for two consecutive years."
- GSP Section 5.3.2 Reduction of Groundwater Storage (p. 5-15): "Reduction of groundwater storage in the Basin uses groundwater levels as a proxy for determining sustainability, as permitted by Title 23 of the California Code of Regulations in Section 354.26 (d), Chapter 1.5.2.5. Additionally, there are currently no state, federal, or local standards that regulate groundwater storage. As described above, any benefits to groundwater storage are expected to coincide with groundwater level management."

#### Potential Options:

- Continue to use groundwater levels as a proxy for groundwater storage
- Define sustainability criteria in terms of annual change in groundwater storage as estimated by the groundwater model



#### 8-21-23 Tech Forum Feedback

#### Minimum Thresholds/Measurable Objectives/Undesirable Results Criteria

- Use levels as proxy for now
- Consider model-based change in storage estimate in 5+ years

## SAC Feedback Requested

- Staff recommends continuing to use groundwater levels as a proxy for setting sustainable management criteria and undesirable results criteria for groundwater storage
- Does the SAC agree with the staff recommendation?



Agenda Item No. 7

FROM: Charles Gardiner, Woodard & Curran

DATE: August 31, 2023

SUBJECT: Discuss and Make Appropriate Recommendation on Plan for Public Workshops

### **Recommended Motion**

Standing Advisory Committee feedback requested.

### Discussion

At the July 12, 2023, Board meeting the Board directed staff to hold a public workshop several weeks after the September Board meeting. Updates and staff recommendation are provided in Attachment 1.



## Fall 2023 Community Workshop

- Purpose: Initiate discussion of GSP update and provide relevant feedback
- Audience: Cuyama Basin landowners, groundwater users and other stakeholders
- Topics:
  - GSP activities status and GSP update process/schedule
  - Data and understanding developed since 2020
  - Overview and initial discussion of:
    - Monitoring networks updates
    - Sustainable Management Criteria and Undesirable Results
    - Management Areas and pumping allocation approach
- Timing and Notice:
  - October 12, 6:00 to 8:00 p.m., Cuyama Valley Recreation District, in-person with online/call-in option
     Notices via email, postcard, Facebook, and flyer posting and distribution





Agenda Item No. 8

FROM: Taylor Blakslee / Brian Van Lienden

DATE: August 31, 2023

SUBJECT: Discuss and Make Appropriate Recommendation on Annual Reporting Requirement for

Local Crop Data

### **Recommended Motion**

Standing Advisory Committee feedback requested.

### **Discussion**

An update on Annual Reporting Requirement for Local Crop Data is provided as Attachment 1.

## Cuyama Basin Groundwater Sustainability Agency

8. Discuss and Make Appropriate Recommendation on Annual Reporting Requirement for Local Crop Data

Brian Van Lienden / Taylor Blakslee

August 31, 2023



## Background

- On July 12, 2023, the Board directed staff to work on the form and documentation on well reporting, acreage, and crop type
- Staff drafted a separate form for reporting crop type and acreage by parcel for Board consideration of approval (attached)

## Timing Issue

- Land use data for the Water Year (Oct 1<sup>st</sup> Sep 30<sup>th</sup>) is collected in October and processed in the model for the Annual Report (Due April 1<sup>st</sup> each year)
- Staff recommendation: request updated land use data for the WY in October each year (with a projected land use for Oct-Dec)



## Land Use Reporting Form

Cuyama Basin Groundwater Sustainability Agency

The Cuyama Basin Groundwater Sustainability Agency uses land data from the California Department of Water Resources to update its water resource model. However, to ensure the most accurate land use data is included, the CBGSA requests landowners submit their actual land use data for the Water Year (October 1<sup>st</sup> through September 30<sup>th</sup>), and projected land use data for the subsequent October through December using the below form. Please submit this data **by October 31<sup>st</sup>** (each year) to <a href="mailto:tblakslee@hgcpm.com">tblakslee@hgcpm.com</a>. If have you any questions, please contact Taylor Blakslee at (661) 477-3385, or via email.

\*\*\*Landowners should submit a separate form for each APN (parcel)\*\*\*

Lando	wner, Well I	Information			
1 Landowner Name					
2 Company/Organization					
3 APN/Parcel Number					
4 Total Acreage					
5 ١	Well Name(s)/	Number(s)			
Land l	Jse/Croppin	g Data (per APN/F	Parcel)		
		Land Use (Irrigated, non- irrigated, fallowed, other)	Crop Type(s)	Cropped Acreage by Crop	Notes
Previo	ous Water Yea	ir			
Exam	ple:	Irrigated	Grain/Safflower	50/10	
Oc.	tober				
No	vember				
December					
Jan	iuary				
Fel	oruary				
Ma	ırch				
Ар	ril				
Ma	ıy				
Jur	ne				
Jul	У				
Au	gust				
Sep	otember				
Remainder of Calendar Year (Projected Land Use)					
Oc.	tober				
No	vember				
De	cember				



Agenda Item No. 9

FROM: Taylor Blakslee, Brian Van Lienden

DATE: August 31, 2023

SUBJECT: Discuss and Make Appropriate Recommendation on Plan to Revise Crop Factors on

Small Pumper Water Use Reporting Form

### **Recommended Motion**

Standing Advisory Committee feedback requested.

### **Discussion**

Proposed modifications to crop factors on small pumper water use reporting form is provided as Attachment 1.

## Cuyama Basin Groundwater Sustainability Agency

9. Discuss and Make Appropriate Recommendation on Plan to Revise Crop Factors on Small Pumper Water Use Reporting Form

Taylor Blakslee / Brian Van Lienden

August 31, 2023

## Background

 On July 12, 2023, the Board directed staff to develop a cost estimate for updating the small pumper form crop factors

## Potential Options

- Total 2022 reported pumping
  - Metered: 44,088 AF (~\$530,000 collected from recent fee)
  - Small pumpers: 90 AF (~\$1,000 collected from recent fee)
- Option 1:
  - Keep same crop factors (no cost impact)
- Option 2:
  - Use model data to update crop types/factors used for small pumpers
  - Staff to coordinate/outreach with specific landowners to confirm crop factors are accurate (ad hoc to confirm documentation supports potential change to crop factors)
    - Assumptions:
      - Direct email to known irrigators
      - 4-hour group irrigator meeting with staff
      - 2, 1-hour ad hoc meetings
  - Estimated cost: \$6,000



Agenda Item No. 10

FROM: Jim Beck, Brian Van Lienden

DATE: August 31, 2023

SUBJECT: Discuss and Make Appropriate Recommendation to Identify Location of Tamarisk in the

**River Channel** 

### **Recommended Motion**

Standing Advisory Committee feedback requested.

### **Discussion**

On July 12, 2023, the Board directed staff to research the cost to identify Tamarisk (a non-native plant) for potential removal. Approximate cost estimates to digitally map tamarisk locations is provided as Attachment 1.

## Cuyama Basin Groundwater Sustainability Agency

10. Discuss and Make Appropriate Recommendation to Identify Location of Tamarisk in the River Channel

Brian Van Lienden

August 31, 2023

## Identification of Tamarisk in River Channel

- On July 12, 2023, the Board directed staff to research the cost to identify Tamarisk (a non-native plant) for potential removal
- The concern expressed was that Tamarisk uses a material amount of water that might recharge in the basin
- Removal of tamarisk in the Cuyama river channel would reduce groundwater consumption but could also increase velocities of river flow out of the basin, thereby potentially reducing stream seepage into the groundwater aquifer
- Approximate cost estimates to digitally map tamarisk locations:
  - Airplane: ~\$90k for the full length of the river channel
    - Includes hyper-spectral capture in place of LiDAR (\$60k increase)
  - Drone: ~\$84-112k (\$30-40k per 5 miles)
- Would the SAC like staff to continue to investigate potential options?



Agenda Item No. 11a

FROM: Brian Van Lienden, Woodard & Curran

DATE: August 31, 2023

SUBJECT: Update on Groundwater Sustainability Plan Activities

### **Recommended Motion**

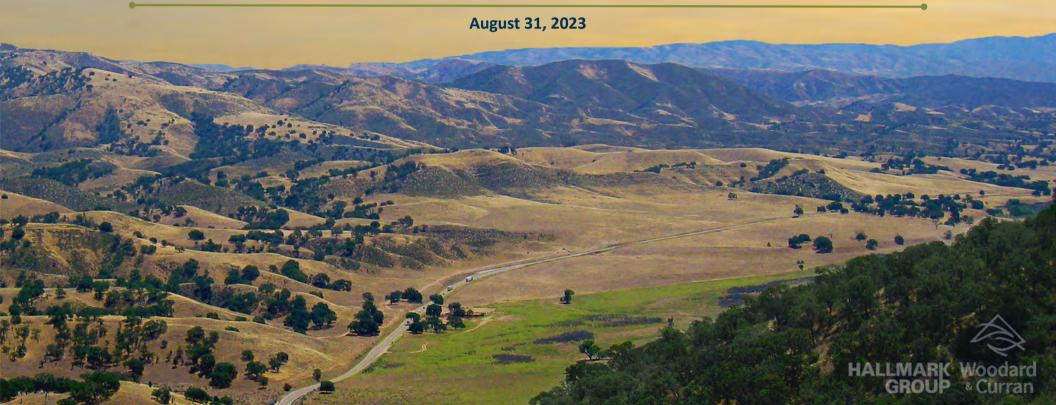
None – information only.

### Discussion

Cuyama Basin Groundwater Sustainability Agency (CBGSA) Groundwater Sustainability Plan (GSP) activities and consultant Woodard & Curran's (W&C) accomplishments are provided as Attachment 1.

Cuyama Basin Groundwater Sustainability Agency

## 11a. Update on Groundwater Sustainability Plan Activities Brian Van Lienden



## July-August Accomplishments

Brian Van Lienden

- Completed permits and agreements for implementation of new monitoring wells and piezometers
- Reviewed monitoring program data and developed proposal for revision of groundwater levels monitoring network
- Developed approaches for sustainability criteria, management area boundary and allocation approach for Board consideration
- Developed agreements for performance of river channel survey and cloud seeding analysis
- Developed plan for fall 2023 stakeholder workshop
- Developed grant submittal documents and coordinated with DWR on grant reimbursements





Agenda Item No. 11b

FROM: Brian Van Lienden, Woodard & Curran

DATE: August 31, 2023

SUBJECT: Update on Modeled Pumping vs User-Reported Pumping

### **Recommended Motion**

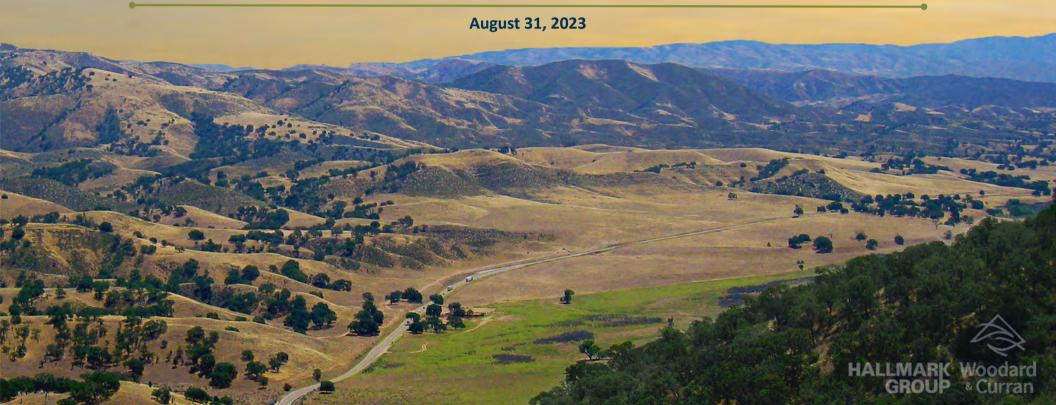
None – information only.

### **Discussion**

An update on modeled pumping vs user-reported pumping is provided as Attachment 1.

Cuyama Basin Groundwater Sustainability Agency

## 11b. Update on Model Pumping vs User-reported Pumping Brian Van Lienden



## Model Estimated vs User-reported Pumping

- Modeled pumping estimate was compared to reported pumping for Jan-Sep 2022
- Data was compared for each reporting operating company
- Potential issues were
   observed in the reported
   APNs for some landowners –
   these will need to be
   reviewed and addressed



# Potential Causes of Differences Between Model Estimate and Reported Pumping in 2022

- Differences in Land Use Assumptions
  - In 2022 land use, the landowner reported "Cover Mix" crop type was classified as an irrigated misc. field crop
  - Small discrepancy in GIS mapping for some fields (field area vs. pivot area)
  - A revised model run was developed with these changes (see chart at right)
- Water use for non-irrigated land use types (to be discussed in later slides)

Agricultural Pumping 01/2022 - 09/ 2022	Annual Report Model Estimate (AF)	Revised Land Use Model Estimate (AF)	Reported (AF)
Total in Reported Area	54,700	47,500	38,500
Outside Reported Area	3,900	3,900	N/A
Total for Entire Basin	58,600	51,400	N/A

## 2022 Land Use Revision (continued)

- 2022 Land Use in the Annual Report model was revised to adjust the crop designation and GIS mapping issues
- These revisions will result in minimal changes to land use for years prior to 2022

2022 Crop Type (acres)	Annual Report	Revised	Land IQ*
Idle / Fallow	12,065	18,261	19,296
Carrot	9,599	7,199	6,256
Field (inc. grain)	5,334	1,537	1,445
Truck (inc. cole)	1,337	1,337	1,359
Other	5,656	5,656	5,635

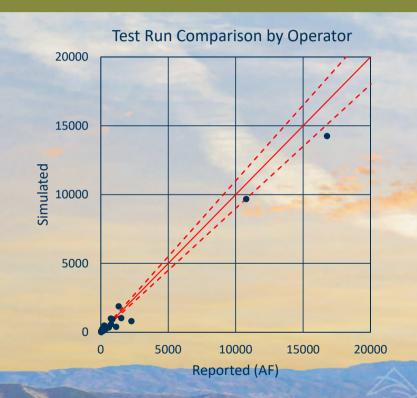
<sup>\*</sup> Some fields reported by the landowner as idle was identified as carrot in LandIQ.

## Test Run for Non-irrigated Land Use Types

- Discussions with operators indicated that some land use types (field crops, grains, pasture, idle) receive <u>less irrigation</u> than is reflected by the model.
- A test run was made by turning off the irrigation for the following crop types:
  - Field crops
  - Grain
  - Pasture
  - Safflower
  - Idle

# Test Run for Non-irrigated Land Use Types (continued)

Agricultural Pumping 01/2022 - 09/ 2022	Annual Report Model Estimate (AF)	Revised Land Use Model Estimate (AF)	Reported (AF)	Test Run (AF)
Total in Reported Area	54,700	47,500	38,500	32,700
Outside Reported Area	3,900	3,900	N/A	1,300
Total for Entire Basin	58,600	51,400	N/A	34,000



## Recommendations

- Reach out to Operating Companies & Landowners to clarify service areas and the discrepancy between reported and Land IQ land use
- Use the revised land use for 2022 to update the reported values for the WY 2022-23 Annual Report
- Implement changes regarding water use for non-irrigated land use types during model update & recalibration in early 2024. 2023 pumping data will also become available at that time.



Agenda Item No. 12b

FROM: Brian Van Lienden, Woodard & Curran

DATE: August 31, 2023

SUBJECT: Update on Grant-Funded Projects

### **Recommended Motion**

None – information only.

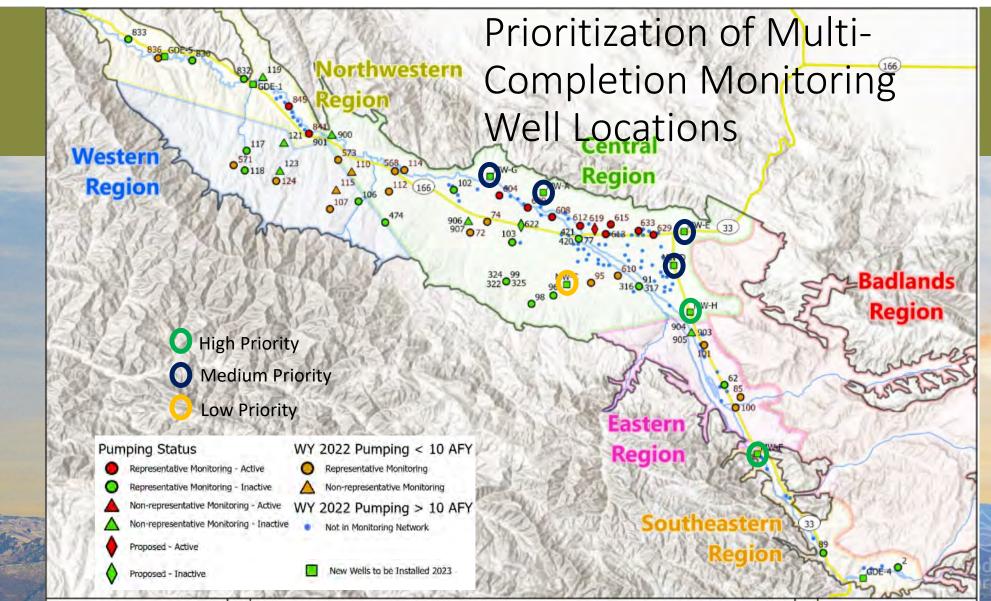
### **Discussion**

An update on Cuyama Basin Groundwater Sustainability Agency (CBGSA) Grant-Funded Projects is provided as Attachment 1.



# Status of Monitoring Well and Piezometer Installation Planning

- Piezometer (GDE) Locations:
  - Planning to mobilize driller on September 11
  - Permits/agreements are in place at 2 locations (GDE-4 and GDE-5)
  - Permits/agreements at 1 location is in process (GDE-1)
- Multi-Completion Monitoring Well Locations:
  - Planning to mobilize driller on September 18
  - Permits/agreements are in place at 2 locations
  - Permits/agreements are in process at 5 locations
    - Working with Caltrans on encroachment permits for locations D and H
    - Working with landowner to finalize agreements at locations A, E and G



# Plan and Prioritization for Multi-Completion Monitoring Wells

- The objective is to install at least 1 well at each of the 7 nest locations
  - Installation at 7 locations may be achievable within the budget by installing only 1 or 2 wells at most nest locations; this should be acceptable because of the depth to water at these locations
- Recommendation:

Location	Approximate Depth to Water (Spring 2022)	Recommended # of Completions	
MW-A	400-600	2	
MW-C	500-600	1	
MW-D	600-650	2	
MW-E	400-600	2	
MW-F	30-80	3	
MW-G	400-600	2	
MW-H	400-450	3	

## Other Updates

- River Channel Survey
  - Flight to be performed in September; data will be available in November
- CIMIS/Weather Stations
  - Woodard & Curran will coordinate with DWR regarding potential locations discussed with landowners
- Land Use
  - LandIQ performed ground-truthing during first week of September; this will inform the 2023 cropping data that they provide at the end of the year



Agenda Item No. 11d

FROM: Brian Van Lienden, Woodard & Curran

DATE: August 31, 2023

SUBJECT: Update on Active Well Dataset

### **Recommended Motion**

None – information only.

### **Discussion**

An update on the active well dataset is provided as Attachment 1.



## Update on Active Well Dataset

- The confirmed active well dataset is posted on the Cuyama Basin website
- Data on wells has been collected from multiple sources:
  - Initial data collection for GSP (USGS/DWR/counties/CCSD/local landowners)
  - County well permit databases
  - GSA metering program
  - Landowner survey (voluntary)
  - Groundwater extraction fee reporting (i.e. de minimis wells)
- The dataset uploaded in advance of the July meeting was missing data due to an issue with the translation from ArcGIS Pro to the Google maps file format; this has now been corrected and additional review was performed to ensure that all provided data has been included
- Stakeholder input is still welcome to improve the dataset
- Link: https://www.google.com/maps/d/u/2/viewer?mid=1AGTzyBEfP-AGvFwyMmZCx-4eoc995mY&ll=34.9520046667195%2C-119.69758949999998z=10



TO: Standing Advisory Committee

Agenda Item No. 11e

FROM: Brian Van Lienden, Woodard & Curran

DATE: August 31, 2023

SUBJECT: Update on July 2023 Groundwater Conditions Report

# **Recommended Motion**

None – information only.

# Discussion

An update on the groundwater levels representative monitoring network and select hydrographs is provided as Attachment 1 and the detailed July 2023 Groundwater Conditions Report is provided as Attachment 2.

Cuyama Basin Groundwater Sustainability Agency

# 11e. Update on Quarterly Groundwater Conditions Report Brian Van Lienden

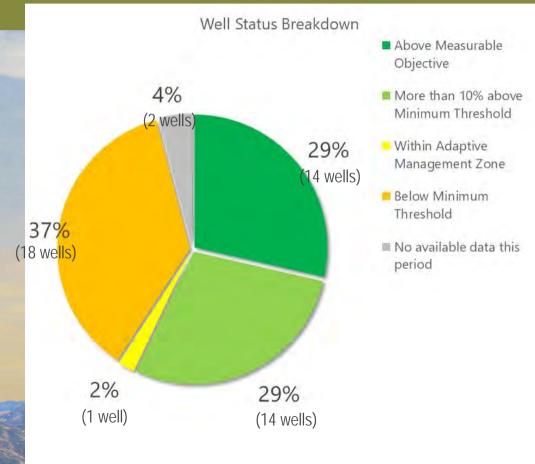


# Groundwater Levels Monitoring Network – Summary of Current Conditions

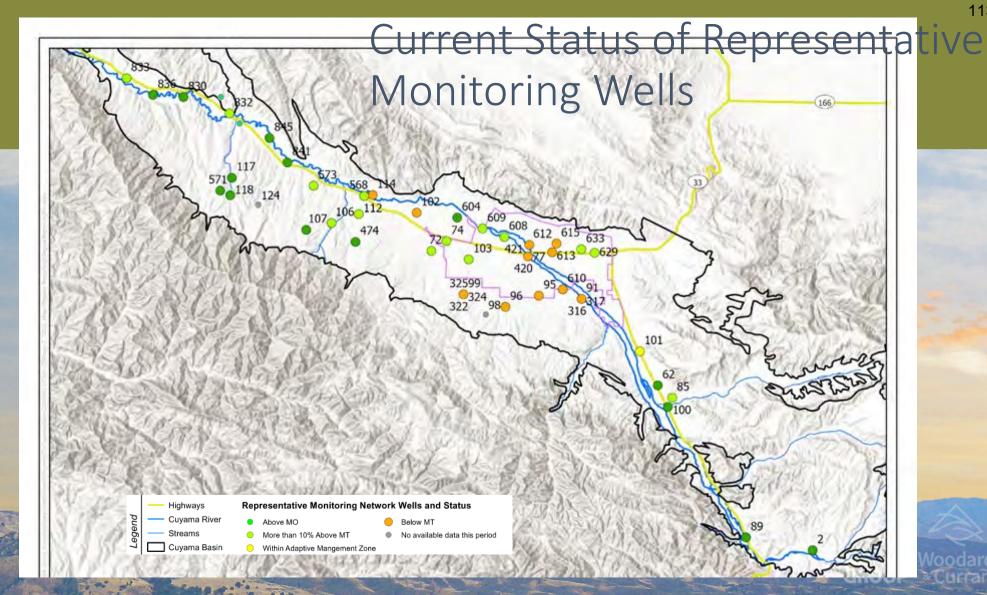
- Monitoring data from January 2023, April 2023 and July 2023 for representative wells is included in the Groundwater Conditions report
- 47 of 49 representative monitoring wells have levels data in at least one out of the previous 12 months
- 18 wells were below the minimum threshold based on latest measurement since October 2022

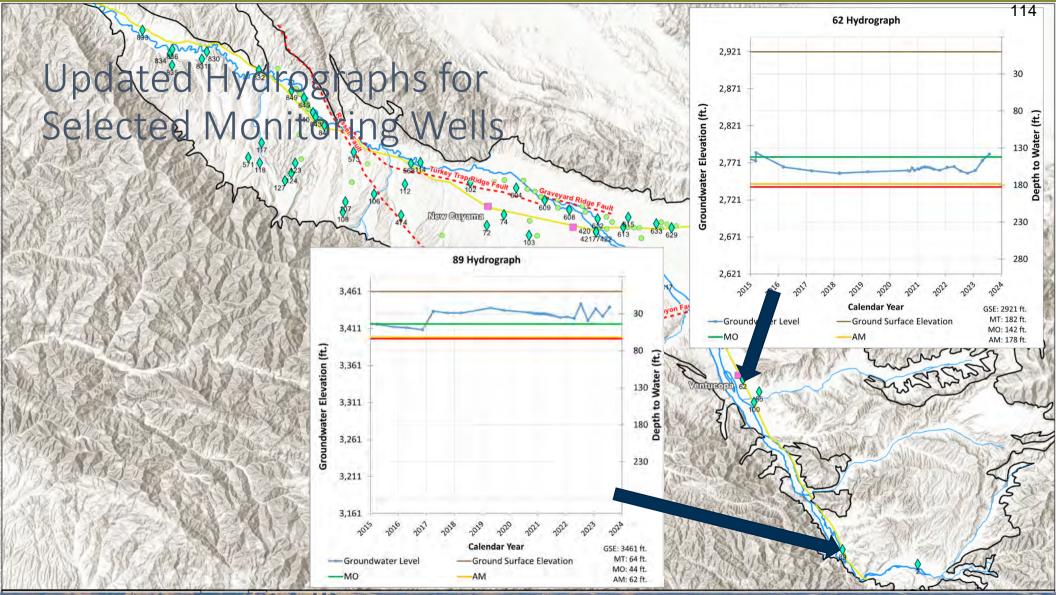
# Summary of Groundwater Well Levels as Compared To Sustainability Criteria

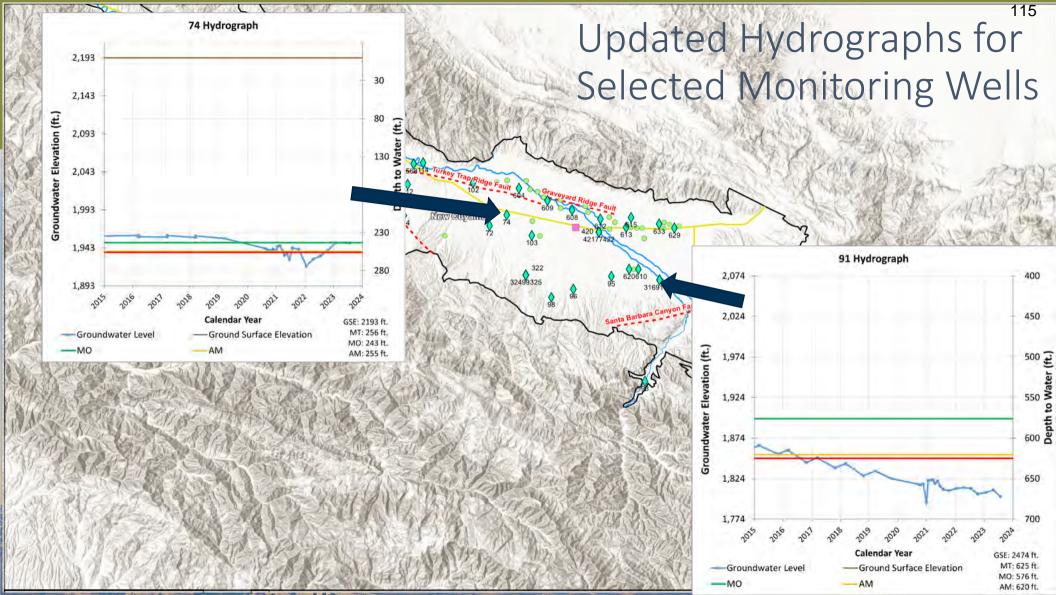
- 17 wells are currently below minimum threshold (MT)
  - 30% of wells (i.e. 15 wells)below MT for 1 month
  - 5 wells dropped below the MT since April
  - 4 wells increased to above the MT since April

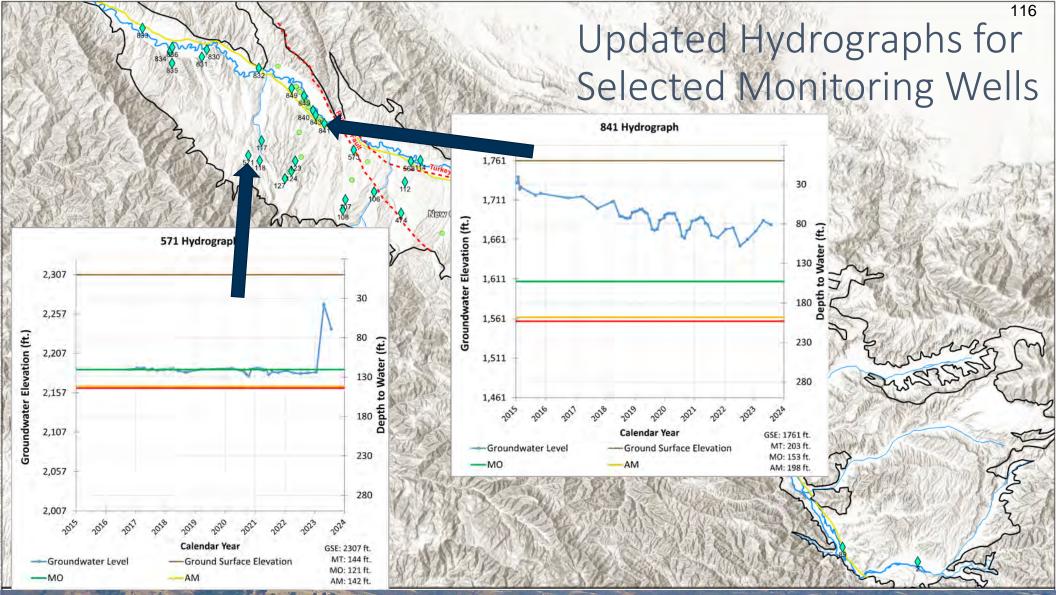














# GROUNDWATER CONDITIONS REPORT – CUYAMA VALLEY GROUNDWATER BASIN

July 2023

801 T Street Sacramento, CA 916.999.8700

woodardcurran.com

Cuyama Basin Groundwater Sustainability Agency



# **TABLE OF CONTENTS**

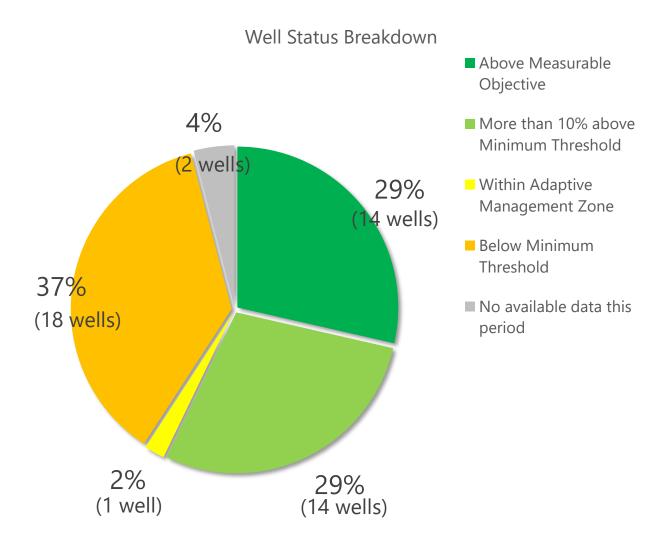
SECTION		PAGE NO.
1. INTRO	DDUCTION	1
2. SUMN	1ARY STATISTICS	1
3. CURR	ENT CONDITIONS	2
4. HYDR	OGRAPHS	11
5. MONI	TORING NETWORK UPDATES	17
	TABLES	
Table 1: Rec	ent Groundwater Levels for Representative Monitoring Network	3
Table 2: Wel	l Status Related to Thresholds	6
	FIGURES	
	oundwater Level Representative Wells and Status in July 2023	
Figure 2: So	utheast Region – Well 89	11
Figure 3: Eas	stern Region – Well 62	12
Figure 4: Ce	ntral Region – Well 91	13
Figure 5: Ce	ntral Region – Well 74	14
Figure 6: We	estern Region – Well 571	15
Figure 7: No	rthwestern Region – Well 841	16
Figure 8: Thi	reshold Regions in the Cuyama Groundwater Basin	17



# 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 18 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, 30% of representative monitoring wells (i.e. 15 wells) have been below the minimum threshold for 1 or more consecutive months.

1



# 3. CURRENT CONDITIONS

Table 1 includes the most recent groundwater level measurements taken in the Cuyama Basin from representative wells included in the Cuyama GSP Groundwater Level Monitoring Network, as well as the previous two measurements. Table 2 includes all of the wells and their current status in relation to the thresholds applied to each well. This information is also shown on Figure 1.

All measurements have also been incorporated into the Cuyama DMS, which may be accessed at <a href="https://opti.woodardcurran.com/cuyama/login.php">https://opti.woodardcurran.com/cuyama/login.php</a>.



**Table 1: Recent Groundwater Levels for Representative Monitoring Network** 

		Jan-23	Apr-23	Jul-23		t Year	Annual
Well	Region	GWL	GWL	GWL	GWL	Month/	Elevation
		(ft. msl)	(ft. msl)	(ft. msl)	(ft. msl)	Year	Change (ft)
72	Central	2036	2019	2016	2010	Jul-22	6
74	Central	1949	-	1949	1932	Jul-22	17
77	Central	1808	1798	1781	1772	Jul-22	10
91	Central	1807	1810	1802	1812	Jul-22	-10
95	Central	-	-	1837	1841	Jul-22	-4
96	Central	2270	2275	2269	2270	Jul-22	-1
98	Central	-	-	-	-	-	-
99	Central	2160	2223	2181	2178	Jul-22	3
102	Central	-	-	1598	-	-	-
103	Central	2041	2045	2035	2014	Jul-22	22
112	Central	-	2053	2053	2053	Jul-22	0
114	Central	-	-	-	1878	Jul-22	-
316	Central	1806	1808	1803	1811	Jul-22	-8
317	Central	-	-	1805	1813	Jul-22	-8
322	Central	2155	2222	2174	2169	Jul-22	5
324	Central	2181	2220	2189	2187	Jul-22	2
325	Central	2203	2222	2202	2201	Jul-22	1
420	Central	1807	1795	1780	1768	Jul-22	12
421	Central	1806	1802	1787	1789	Jul-22	-1
474	Central	2206	2202	2206	2203	Jul-22	2



		Jan-23	Apr-23	Jul-23	Las	t Year	Annual
Well	Region	GWL	GWL	GWL	GWL	Month/	Elevation
		(ft. msl)	(ft. msl)	(ft. msl)	(ft. msl)	Year	Change (ft)
568	Central	1828	1870	1869	1852	Jul-22	17
604	Central	1655	1656	1669	-	1	-
608	Central	1	1	1799	-	1	-
609	Central	1713	1705	1727	1692	Jul-22	35
610	Central	1812	1813	1806	1801	Jul-22	5
612	Central	1792	1801	1779	-	1	-
613	Central	1798	1788	1780	1792	Jul-22	-12
615	Central	1816	1810	1812	1795	Jul-22	17
629	Central	1819	1803	1845	-	-	-
633	Central	1805	1851	1851	-	1	-
62	Eastern	2761	2774	2783	2760	Jul-22	23
85	Eastern	2845	2844	2848	2846	Jul-22	2
100	Eastern	2850	2901	2911	2849	Jul-22	62
101	Eastern	-	-	2634	-	1	-
841	Northwestern	1672	1685	1680	1653	Jul-22	27
845	Northwestern	1644	1647	1638	1633	Jul-22	5
2	Southeastern	-	3704	3702	-	1	-
89	Southeastern	3438	3428	3440	3445	Jul-22	-5
106	Western	-	2184	2184	2183	Jul-22	1
107	Western	-	2390	2414	2392	Jul-22	23
117	Western	-	1950	1947	1945	Jul-22	2



		Jan-23	Apr-23	Jul-23	Las	t Year	Annual
Well	Region	GWL	GWL	GWL	GWL	Month/	Elevation
		(ft. msl)	(ft. msl)	(ft. msl)	(ft. msl)	Year	Change (ft)
118	Western	2212	2214	2216	2210	Jul-22	6
124	Western	-	-	-	-	-	-
571	Western	2183	2269	2238	2181	Jul-22	57
573	Western	-	2015	2015	2012	Jul-22	2
830	Far-West Northwestern	1510	1516	1523	1509	Jul-22	13
832	Far-West Northwestern	1589	1596	1596	1590	Jul-22	6
833	Far-West Northwestern	-	1426	1427	1423	Jul-22	3
836	Far-West Northwestern	1450	1450	1459	1447	Jul-22	12



**Table 2: Well Status Related to Thresholds** 

		Currei	nt Month		Within 10%				GSA
Well	Region	GWL	Date	Minimum	Minimum	Measurable	Well	Status	Action
		(DTW)		Threshold	Threshold	Objective	Depth		Required?
72	Central	156	7/24/2023	169	165	124	790	More than 10% above Minimum Threshold	No
74	Central	244	7/24/2023	256	255	243		More than 10% above Minimum Threshold	No
77	Central	504	7/24/2023	450	445	400	980	Below Minimum Threshold (35 months)	No
91	Central	672	7/25/2023	625	620	576	980	Below Minimum Threshold (35 months)	No
95	Central	612	7/25/2023	573	570	538	805	Below Minimum Threshold (35 months)	No
96	Central	337	7/25/2023	333	332	325	500	Below Minimum Threshold (1 month)	No
98	Central	-		450	449	439	750	No available data since GSA monitoring began	No
99	Central	332	7/25/2023	311	310	300	750	Below Minimum Threshold (1 month)	No
102	Central	448	7/25/2023	235	231	197		Below Minimum Threshold (28 months)	No
103	Central	254	7/25/2023	290	285	235	1030	More than 10% above Minimum Threshold	No
112	Central	86	7/25/2023	87	87	85	441	More than 10% above Minimum Threshold	No
114	Central	-		47	47	45	58	No available data this period (below MT in Oct 2022, 16 months)	No
316	Central	671	7/25/2023	623	618	574	830	Below Minimum Threshold (35 months)	No



Well	Region	Currei GWL (DTW)	nt Month Date	Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Well Depth	Status	GSA Action Required?
317	Central	669	7/25/2023	623	618	573	700	Below Minimum Threshold (35 months)	No
322	Central	339	7/25/2023	307	306	298	850	Below Minimum Threshold (1 month)	No
324	Central	323	7/25/2023	311	310	299	560	Below Minimum Threshold (1 month)	No
325	Central	310	7/25/2023	300	299	292	380	Below Minimum Threshold (1 month)	No
420	Central	506	7/24/2023	450	445	400	780	Below Minimum Threshold (35 months)	No
421	Central	498	7/24/2023	446	441	398	620	Below Minimum Threshold (35 months)	No
474	Central	163	7/25/2023	188	186	169	213	Above Measurable Objective	No
568	Central	36	7/24/2023	37	37	36	188	More than 10% above Minimum Threshold	No
604	Central	456	7/25/2023	526	522	487	924	Above Measurable Objective	No
608	Central	425	7/25/2023	436	433	407	745	More than 10% above Minimum Threshold	No
609	Central	440	7/25/2023	458	454	421	970	More than 10% above Minimum Threshold	No
610	Central	636	7/25/2023	621	618	591	780	Below Minimum Threshold (27 months)	No
612	Central	487	7/25/2023	463	461	440	1070	Below Minimum Threshold (19 months)	No
613	Central	550	7/25/2023	503	500	475	830	Below Minimum Threshold (33 months)	No



		Curre	nt Month		Within 10%				GSA
Well	Region	GWL	Date	Minimum	Minimum	Measurable	Well	Status	Action
		(DTW)		Threshold	Threshold	Objective	Depth		Required?
615	Central	515	7/25/2023	500	497	468	865	Below Minimum Threshold (32 months)	No
629	Central	534	7/25/2023	559	556	527	1000	More than 10% above Minimum Threshold	No
633	Central	513	7/25/2023	547	542	493	1000	More than 10% above Minimum Threshold	No
62	Eastern	138	7/24/2023	182	178	142	212	Above Measurable Objective	No
85	Eastern	199	7/24/2023	233	225	147	233	More than 10% above Minimum Threshold	No
100	Eastern	93	7/24/2023	181	175	125	284	Above Measurable Objective	No
101	Eastern	108	7/25/2023	111	108	81	200	Within Adaptive Management Zone	No
841	Northwestern	81	7/25/2023	203	198	153	600	Above Measurable Objective	No
845	Northwestern	74	7/25/2023	203	198	153	380	Above Measurable Objective	No
2	Southeastern	18	7/24/2023	72	70	55	73	Above Measurable Objective	No
89	Southeastern	22	7/24/2023	64	62	44	125	Above Measurable Objective	No
106	Western	142	7/25/2023	154	153	141	228	More than 10% above Minimum Threshold	No
107	Western	68	7/25/2023	91	89	72	200	Above Measurable Objective	No
117	Western	151	7/25/2023	160	159	151	212	Above Measurable Objective	No
118	Western	54	7/25/2023	124	117	57	500	Above Measurable Objective	No
124	Western	-		73	71	57	161	No available data since GSA monitoring began	No
571	Western	68	7/25/2023	144	142	121	280	Above Measurable Objective	No

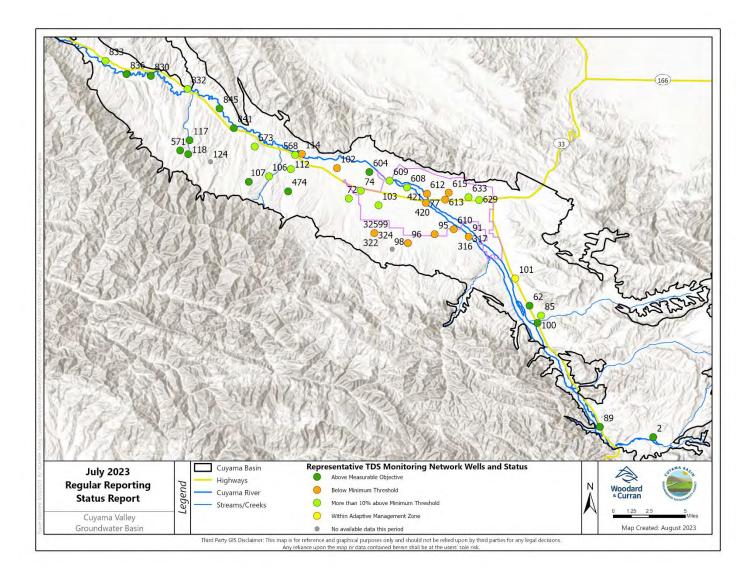


		Curre	nt Month		Within 10%				GSA
Well	Region	GWL	Date	Minimum	Minimum	Measurable	Well	Status	Action
		(DTW)		Threshold	Threshold	Objective	Depth		Required?
573	Western	69	7/25/2023	118	113	68	404	More than 10% above Minimum Threshold	No
830	Far-West Northwestern	48	7/25/2023	59	59	56	77	Above Measurable Objective	No
832	Far-West Northwestern	34	7/24/2023	45	44	30	132	More than 10% above Minimum Threshold	No
833	Far-West Northwestern	31	7/24/2023	96	89	24	504	More than 10% above Minimum Threshold	No
836	Far-West Northwestern	27	7/25/2023	79	75	36	325	Above Measurable Objective	No

Note: Wells only count towards the identification of undesirable results if the level measurement is below the minimum threshold for 24 consecutive months.



Figure 1: Groundwater Level Representative Wells and Status in July 2023





# 4. HYDROGRAPHS

The following hydrographs provide an overview of conditions in each of the six areas threshold regions identified in the GSP.

Figure 2: Southeast Region – Well 89

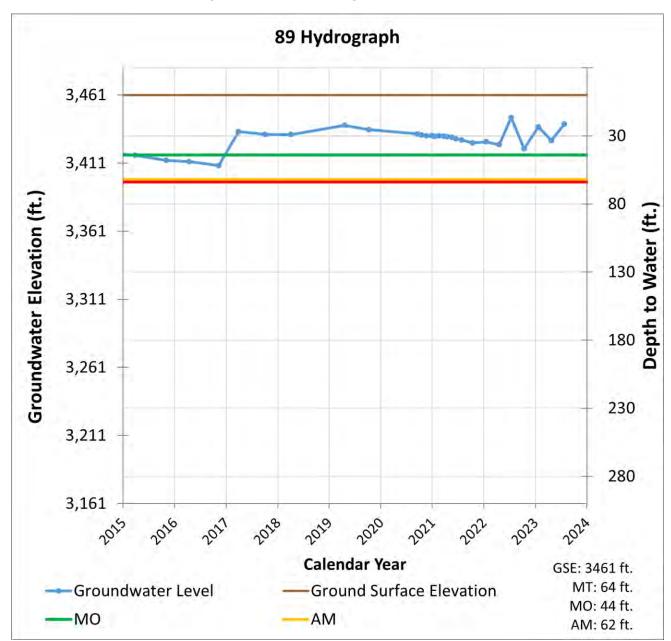




Figure 3: Eastern Region – Well 62

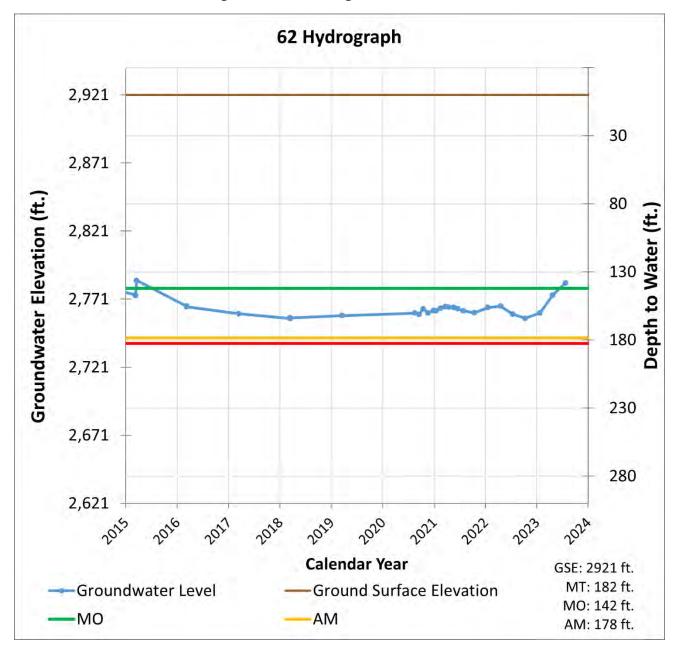




Figure 4: Central Region – Well 91

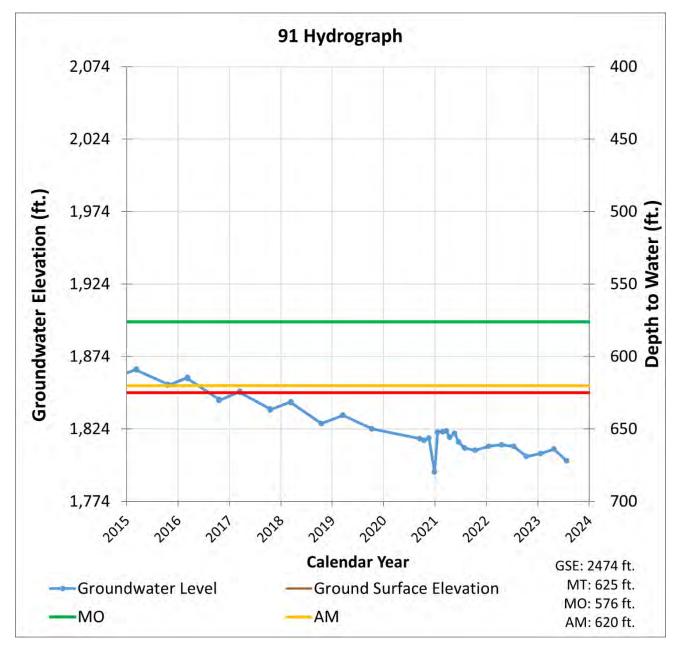




Figure 5: Central Region – Well 74

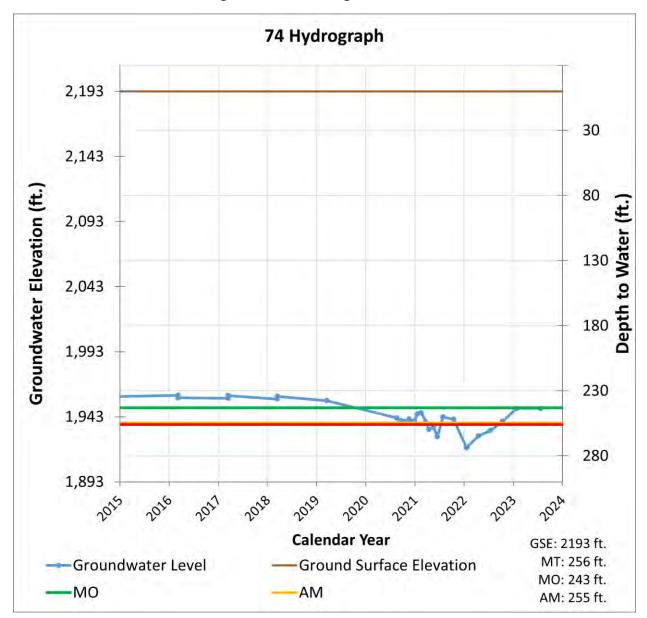




Figure 6: Western Region - Well 571

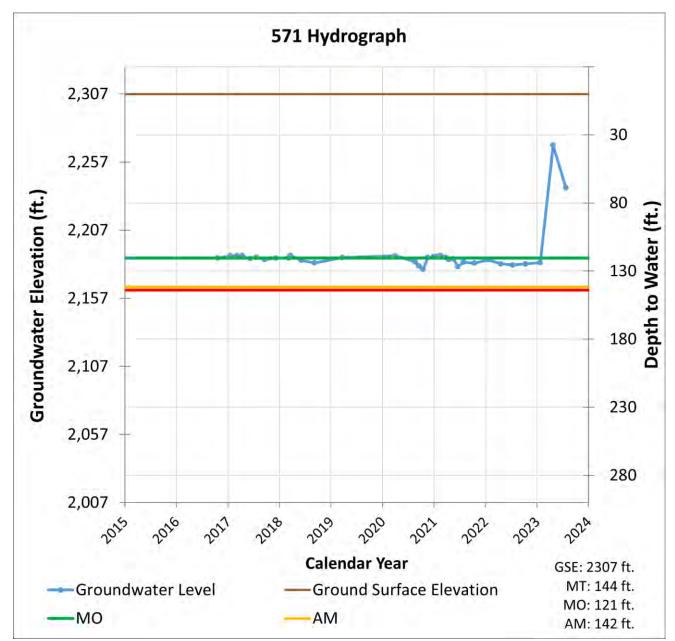
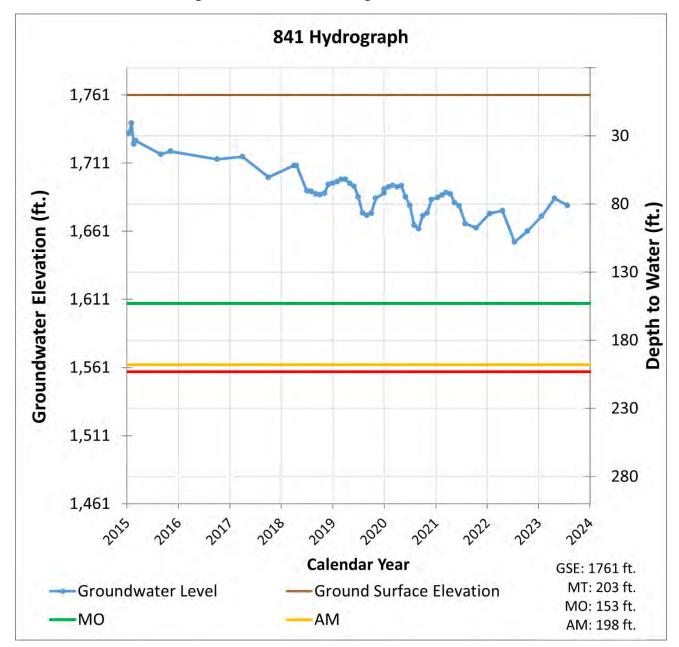




Figure 7: Northwestern Region - Well 841





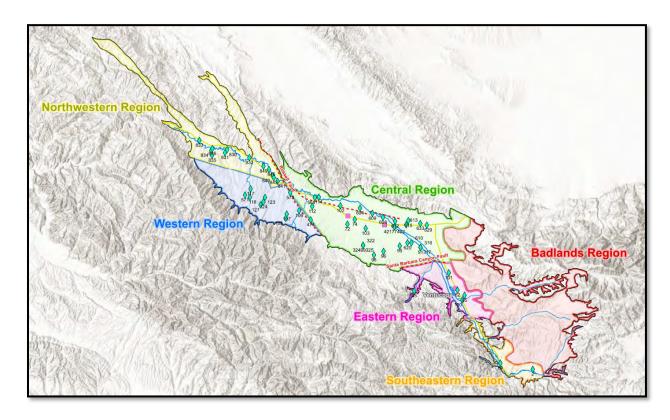


Figure 8: Threshold Regions in the Cuyama Groundwater Basin

# 5. MONITORING NETWORK UPDATES

As shown in Table 2, there are 3 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:
  - o Wells 98, 124
- Measurement was not possible at the time when the field technician went to take measurements:
  - o Wells 114





woodardcurran.com



TO: Standing Advisory Committee

Agenda Item No. 12c

FROM: Jim Beck, Executive Director

DATE: August 31, 2023

SUBJECT: Board of Directors Agenda Review

# **Recommended Motion**

None – informational only.

# **Discussion**

The Cuyama Basin Groundwater Sustainability Agency Board of Directors agenda for the September 6, 2023, Board of Directors meeting is provided as Attachment 1.

# CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

# **BOARD OF DIRECTORS MEETING**

#### **Board of Directors**

Cory Bantilan Chair, Santa Barbara County Water Agency Matt Vickery Vice Chair, Cuyama Basin Water District Arne Anselm Secretary, County of Ventura Byron Albano Treasurer, Cuyama Basin Water District Rick Burnes Cuyama Basin Water District Jimmy Paulding County of San Luis Obispo Zack Scrivner County of Kern
Das Williams Santa Barbara County Water Agency
Deborah Williams Cuyama Community Services District
Jane Wooster Cuyama Basin Water District
Derek Yurosek Cuyama Basin Water District

## **AGENDA**

September 6, 2023

Agenda for a meeting of the Cuyama Basin Groundwater Sustainability Agency Board of Directors to be held on Wednesday, September 6, 2023, at 2:00 PM at the **Cuyama Valley Family Resource Center 4689 CA-166, New Cuyama, CA 93254.** Participate via computer at: <a href="https://rb.gy/lnxwv">https://rb.gy/lnxwv</a> 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,	1st District Carpinteria Office	800 S. Victoria Ave.
CA 93254	5201 8th St. Carpinteria, CA 93013	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
- 2. Roll Call
- 3. Pledge of Allegiance
- 4. Standing Advisory Committee Meeting Report

### **CONSENT AGENDA**

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

- 5. Approve Minutes July 11, 2023
- 6. Approve Payment of Bills for June and July 2023
- 7. Approve Financial Report for June and July 2023

#### **ACTION ITEMS**

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

- 8. Groundwater Sustainability Plan Amendment Components
  - a) Discuss and Take Appropriate Action on Basin-Wide Pumping Restrictions [Initial Discussion]
  - b) Discuss and Take Appropriate Action on Central Management Area Boundary [Initial Discussion]
  - c) Discuss and Take Appropriate Action on Pumping Reduction Implementation [Initial Discussion]
  - d) Discuss and Take Appropriate Action on Groundwater <u>Levels</u> Monitoring Network [Final Discussion]
  - e) Discuss and Take Appropriate Action on Groundwater <u>Storage</u> Monitoring Network [Final Discussion]
  - f) Discuss and Take Appropriate Action on Sustainable Management Criteria and Undesirable Results Criteria for Groundwater <u>Levels</u> [Initial Discussion]
  - g) Discuss and Take Appropriate Action on Sustainable Management Criteria and Undesirable Results Criteria for Groundwater Storage [Initial Discussion]
- 9. Discuss and Take Appropriate Action on Plan for Public Workshops
- 10. Discuss and Take Appropriate Action on Annual Reporting Requirement for Local Crop Data
- 11. Discuss and Take Appropriate Action on Plan to Revise Crop Factors on Small Pumper Water Use Reporting Form
- 12. Discuss and Take Appropriate Action to Identify Location of Tamarisk in the River Channel

## **REPORT ITEMS**

- 13. Administrative Updates
  - a) Report of the Executive Director
  - b) Report of the General Counsel
- 14. Technical Updates
  - a) Update on Groundwater Sustainability Plan Activities
  - b) Update on Modeled Pumping vs User-Reported Pumping
  - c) Update on Grant-Funded Projects
  - d) Update on Active Well Dataset
  - e) Update on July 2023 Groundwater Conditions Report
- 15. Report of Ad Hoc Committees
- 16. Directors' Forum
- 17. Public Comment for Items Not on the Agenda
- 18. Correspondence

#### **CLOSED SESSION**

- 19. 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

20. Adjourn (xx p.m.)