

CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

Board of Directors

Derek Yurosek Chair, Cuyama Basin Water District Lynn Compton Vice Chair, County of San Luis Obispo Das Williams Santa Barbara County Water Agency Cory Bantilan Santa Barbara County Water Agency Glenn Shephard County of Ventura Zack Scrivner County of Kern Paul Chounet Cuyama Community Services District Byron Albano Cuyama Basin Water District Lorena Stoller Cuyama Basin Water District Matt Vickery Cuyama Basin Water District Jane Wooster Cuyama Basin Water District

AGENDA

NOVEMBER 3, 2021

Agenda for a meeting of the Cuyama Basin Groundwater Sustainability Agency Board of Directors to be held on Wednesday, November 3, 2021, at 4:00 PM. Participate via computer at: <u>https://global.gotomeeting.com/join/203153453</u>, or telephonically at (646) 749-3122, code: 203-153-453#.

- 1. Call to Order
- 2. Roll Call
- 3. Pledge of Allegiance
- 4. Adopt Resolution No. 21-112 Authorizing Use of Teleconferencing for Public Meetings Under AB 361
- 5. Standing Advisory Committee Meeting Report

CONSENT AGENDA

- 6. Approval of Minutes August 18, 2021
- 7. Approval of Payment of Bills for July, August, September 2021
- 8. Approval of Financial Report for July, August, September 2021

ACTION ITEMS

- 9. Review of Memorandum in Response to DWR's Consultation Letter Dated June 3, 2021
- 10. Adopt Resolution No. 21-113 Enacting Corrective Actions in Response to DWR's Consultation Letter Dated June 3, 2021
- 11. Direction on Aquifer Test Program
- 12. Authorize Work to Pursue DWR Grant Opportunity
- 13. Approval of Comment Letter on DWR Draft Grant Proposal Solicitation Package
- 14. Authorize a Change Order for the Hallmark Group
- 15. Adopt the 2022 Meeting Schedule

REPORT ITEMS

- 16. Administrative Updates
 - a) Report of the Executive Director
 - b) Report of the General Counsel
 - c) Update on Coordination with Counties and Well Permitting Process
 - d) Update on Additional Grant Opportunities
- 17. Technical Updates
 - a) Update on Groundwater Sustainability Plan Activities
 - b) Update on Monitoring Network Implementation
 - c) Update on Monthly Groundwater Conditions Report

CLOSED SESSION

- 18. Conference with Legal Counsel Anticipated Litigation
 Significant exposure to litigation pursuant to Government Code section 54956.9, subdivision (d)(2)
 - a) Number of Potential Cases: One
- 19. Report of the Ad Hoc Committee
- 20. Directors' Forum
- 21. Public Comment for Items Not on the Agenda
- 22. Correspondence
- 23. Adjourn

RESOLUTION 21-112

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY AUTHORIZING USE OF TELECONFERENCING FOR PUBLIC MEETINGS UNDER AB 361

WHEREAS, the Governor of the State of California (Governor) proclaimed a State of Emergency to exist as a result of the threat of COVID-19. (Governor's Proclamation of a State of Emergency (Mar. 4, 2020));

WHEREAS, the Governor's Executive Order No. N-25-20 (Mar. 12, 2020); Governor's Executive Order No. N-29-20 (Mar. 17, 2020); and Governor's Executive Order No. N-08-21 (Jun. 11, 2021) provided that local legislative bodies may hold public meetings via teleconferencing and make public meetings accessible telephonically or otherwise electronically to all members of the public seeking to observe and to address the local legislative body and waived the Brown Act provisions found in Government Code section 54953(b)(3) which require the physical presence of the members, the clerk, or other personnel of the body, or the public, as a condition of participation in, or quorum for, a public meeting, including the requirement that:

- 1. State and local bodies notice each teleconference location from which a member will be participating in a public meeting.
- 2. Each teleconference location be accessible to the public.
- 3. Members of the public may address the body at each teleconference location.
- 4. State and local bodies post agendas at all teleconference locations.
- 5. During teleconference meetings at least a quorum of the members of the local body participate from locations within the boundaries of the territory over which the local body exercises jurisdiction.

WHEREAS, the provisions of Governor's Executive Order No. N-25-20 (Mar. 12, 2020); Governor's Executive Order No. N-29-20 (Mar. 17, 2020); and Governor's Executive Order No. N-08-21 (Jun. 11, 2021) expired on September 30, 2021 and will no longer remain in effect thereafter;

WHEREAS, the Center for Disease Control is currently contending with the Delta Variant of the COVID-19 virus and anticipates the development of potential other strains which may further impede public agency operations and prolong the need for social distancing requirements; and

WHEREAS, recent legislation (AB 361) authorizes a local legislative body to use teleconferencing for a public meeting without complying with the Brown Act's teleconferencing quorum, meeting notice, and agenda requirements set forth in Government Code section 54953(b)(3), in any of the following circumstances:

- 1. The legislative body holds a meeting during a proclaimed state of emergency, and state or local officials have imposed or recommended measures to promote social distancing.
- 2. The legislative body holds a meeting during a proclaimed state of emergency for purposes of determining, by majority vote, whether as a result of the emergency, meeting in person would present imminent risks to the health and safety of attendees.
- 3. The legislative body holds a meeting during a proclaimed state of emergency and has determined by majority vote pursuant to 2 above that, as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Cuyama Basin Groundwater Sustainability Agency as follows:

1. <u>Determination of Imminent Health or Safety Risks</u>. The Board of Directors hereby determines by majority vote that, as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees.

2. <u>Continued Implementation of AB 361</u>. If the state of emergency remains in effect and meeting in person would present imminent risks to the health or safety of attendees, the Board of Directors shall, to continue meeting subject to the provisions set forth in AB 361 and the Brown Act, no later than 30 days after it adopts this Resolution and every 30 days thereafter, make the following findings by majority vote:

- 1. The Board of Directors has reconsidered the circumstances of the state of emergency; *and*
- 2. Either (1) the state of emergency continues to directly impact the ability of the members to meet safely in person; or (2) state or local officials impose or recommend measures to promote social distancing.

PASSED, APPROVED AND ADOPTED this 3rd day of November 2021.

Derek Yurosek, Chair

ATTEST:

Standing Advisory Committee Report Meeting Date: October 28th, 2021 Submitted to the CBGSA Board on November 3rd, 2021 By Brenton Kelly, SAC Chair

The Standing Advisory Committee met in a completely virtual format. All Committee members were present for most of the meeting. Jim & Taylor were joined by Alex Dominguez and Brian Van Lienden on the call. Anita Regmi from DWR joined several public members in attendance. The meeting lasted 3 ¹/₂ hrs.

Update on SAC membership.

There remain 2 vacancies on the SAC for representation from the Latino community. Any nominations or interested parties should contact Taylor Blakslee or myself.

Item 9. Review of Memorandum in Response to DWR's Consultation Letter Dated 6-3-21

The Advisory Committee spent two hours going through the response to each of the four deficiencies that were pointed out in the DWR's Consultation Letter. While it was generally understood that this was not an opportunity to rewrite the GSP and that some timely response was required, many concerns were shared regarding whether this response adequately addressed the deficiencies DWR noted in the GSP as written. The SAC was informed that this response was not expected to change our Incomplete determination in January from DWR, and that the 180 day correction timeline would take effect until July 2022. Still, the Committee found several points for improvements and Staff has agreed to incorporate a couple of changes into the text before you today. The Resolution to adopt this memorandum passed with a split vote.

The following is a summary of the issues raised in the lengthy discussion. The SAC wishes to thank Taylor Blakslee for the comprehensive minutes which are certainly recommended reading for the informative dialogue that it captures.

Corrective Action No. 1 – Justification for the Sustainable Management Criteria

It was noted that in order to perform the theoretical analysis of how MT thresholds would impact the rest of the basin and in order to bring all the Monitoring wells down to their MTs, it was necessary to bring **up** the groundwater elevations for 43% of the Representative wells that are currently measuring **below** their Minimum Thresholds. Only 67% were brought down.

It appeared that one of the five wells potentially at risk of going dry in the Eastern Region (Table 2-2, pg.9) is, or is very near the Ventucopa townsite well. This response memo to the DWR still does not acknowledge the potential impacts on drinking water to the disadvantaged communities in the Basin.

The Technical Memorandum did not originally recognize the current overdraft as a potential cause of MT exceedance, so it was agreed that the reference to 'new pumping' on page 3 of the memo could be shortened to suggest any pumping.

The modeled results in the northwestern region do not give convincing assurance of the suggested protective measures provided by the Sustainable Criteria. Threshold conditions would appear to cause

depletion of one of the only gaining reaches of the Cuyama River. This seems to demonstrate the deficiency and not to justify the MTs. Members of the public and the Committee expressed concern with groundwater levels potentially dropping over 100 feet in the northwestern region and felt the GSP should not allow the groundwater levels to decline so much.

When asked for the justification of the basin wide approach to the 30% exceedance threshold when the sustainability criteria (see Table 2-1) are calculated so differently for each region, Mr. Van Lienden replied that the Board directed management at a basin-wide scale and that is why the 30 percent was used over the entire basin. This answer suggests priorities other than science.

Corrective Action No. 2 – Depletion of Interconnected Surface Water

The Committee asked for the packet slide of Interconnected Surface Waters to be compared to the slide of potential draw downs in the northwestern region and it was not reassuring or convincing. The model simulation predicted a decrease in stream flows in the area where the Cuyama River becomes interconnected and currently still resurfaces.

Although we were told that the analysis in Corrective Action 1 was done on 250 wells with known screened depth and construction information, it was noted that the new ISW Monitoring Network in Table 3-1 in the technical memo shows all but 1 in 12 of the proposed network wells have "*unknown*" screen intervals and this represents a significant limitation when analyzing data and making decisions.

Corrective Action No. 3 – Further address degraded water quality

This Committee has consistently advocated for a more comprehensive water quality monitoring network for many of the same reasons that DWR considered the GSP's approach deficient. This response, of a one-time sampling, will barely establish a baseline understanding and is inadequate to monitor for any trends in concentrations. The DWR letter clearly states that "*Department staff believe that, at a minimum, the GSA should include monitoring for arsenic and nitrates as they have been identified as constituents of concern and both appear to be relatively widespread.*"

Other important points raised include:

- Best to form Partnerships with other water quality regulators
- The additional data for more constituents is not a high cost
- The additional data is more useful for understanding the aquifer
- Nitrates can accumulate and migrate over time
- Extraction of deeper and older groundwater can cause arsenic to migrate

Corrective Action No. 4. Explanation how overdraft will be mitigated

The DWR letter asks the same question the SAC has brought up all along; What are the triggers, and what are the potential corrective actions when Ventucopa and the northwestern regions continue to predict overdraft?

It is very concerning that a non-peer reviewed study sponsored by the property owner was used to establish and defend the management criteria in the northwestern region. It was agreed that it was important to note that the Cleath-Harris Report was the commissioned product of the pumper in the region.

Stakeholders questioned the assumptions of the presumed groundwater recharge into the NW region and were reminded that, when available, the new data from DWR's Aerial Electromagnetic Survey will help to indicate areas where recharge is occurring.

The DWR letter simply states that "the GSP should clarify what those effects are that would necessitate pumping reductions" in Ventucopa and the Northwestern regions. This memorandum does not provide that clarity.

Item 10. Adopt Resolution No. 21-113 Enacting Corrective Actions in Response to DWR's Consultation Letter Dated June 3, 2021

MOTION

Committee Member DeBranch made a motion to support the technical memorandum with the inclusion of the following two edits: (1) remove the word "new" from the third bullet on page 3 in the technical memorandum, and (2) reference that Cleath-Harris is employed by a pumper in the northwestern region. The motion was seconded by Committee Member Jaffe, a roll call vote was made, and the motion passed.

AYES:DeBranch, Draucker, Furstenfeld, Gaillard, HaslettNOES:Jaffe, KellyABSTAIN:NoneABSENT:None

Item 17. c) Technical Update on Monthly Groundwater Conditions Report

This item brought up the Committee's repeated concerns and questions which are in line with the above comments regarding the deficiency to mitigate chronic continuing overdraft. What does the '30% exceedance in 24 months' mean will actually happen?

The Committee asked for clarity about how the adjudication will connect to the GSP, and counsel's response was that they will function as two independent processes that must not contradict one another.

The SAC recommends the adoption of the 2022 calendar as presented.

The SAC requested the discussion of how the allocation process will proceed with landowners' engagement by this time next year.

Respectfully, Brenton Kelly SAC Chair

Cuyama Basin Groundwater Sustainability Agency Board of Directors Meeting

August 18, 2021

Draft Meeting Minutes

PRESENT:

Yurosek, Derek – Chair Arnold, Debbie / Compton, Lynn – Vice Chair Bantilan, Cory – Secretary Vickery, Matt – Treasurer Albano, Byron Chounet, Paul Scrivner, Zack Anselm, Arne – Alternate for Glenn Shephard Stoller, Lorena Williams, Das Wooster, Jane Beck, Jim – Executive Director Hughes, Joe – Legal Counsel

ABSENT:

None

1. Call to Order

Cuyama Basin Groundwater Sustainability Agency (CBGSA) Chair Derek Yurosek called the meeting to order at 4:00 p.m. Hallmark Group Project Manager Taylor Blakslee provided direction on the meeting protocols in facilitating a hybrid remote and in-person meeting.

2. Roll Call

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

3. Pledge of Allegiance

The pledge of allegiance was led by Chair Yurosek.

13c. Legal Counsel Report

Chair Yurosek made a change to the agenda and moved the legal counsel report between item nos. 3 and 4.

Legal counsel, Joe Hughes, reported that staff has been made aware of an adjudication action had been filed the previous evening. He said he has not seen an endorsed copy yet, and has only reviewed a copy at a high level. Mr. Hughes noted he does not believe the filing changes the purpose or mission of the CBGSA, and will be reviewing the filing and its impact on the Groundwater Sustainability Plan. Lynn Carslile asked if it covered the whole basin, Mr. Hughes confirmed that it did. Legal counsel was asked to address the filers and how it will this affect GSA role in the adjudication. Mr. Hughes noted that he will look into the impacts in more detail and that Bolthouse and three Grimmway entities were the filers. Director Vickery added that the GSA was not a named party in the adjudication and believes SGMA contemplated adjudication further noting that Grimmway is supportive of the GSA's goals and mission. Director Yurosek added that it was Bolthouse Properties and Bolthouse Land Company that filed. It was requested by SAC Member Jaffee that Legal Counsel address possible conflicts of interest at a future BoD and SAC meeting. Mr. Hughes noted that conflict of interest with specific board members would have to be addressed with them directly.

4. Standing Advisory Committee Meeting Report

SAC Chair Brenton Kelly provided a report on the August 11, 2021, SAC meeting and is included below.

Standing Advisory Committee Report Meeting Date: August 13th, 2021

Submitted to the GSA Board on August 18, 2021 By Brenton Kelly, SAC Chair

The Standing Advisory Committee met in a hybrid fashion with some in-person at the FRC and others were present on the public virtual format. All SAC members were present for most of the meeting, with one committee member on the call. Taylor was joined in the room by Alex Dominguez, with Jim, Brian and other staff on the call. Anita Regmi from DWR was one of a number of public attendees. This was Committee Member Jean Gaillard's first meeting and I wish to thank him and commend all my colleges on the Committee for their participation in this public process. The meeting was informative and engaging. It lasted a little over 4 hours.

Update on SAC membership.

There remain 2 vacancies on the SAC for member representation from the Latino community. Any nominations or interested parties should contact Taylor Blakslee or myself.

Item 8. Direction on DWR's GSP Consultation Letter Dated June 3, 2021

This item took half the meeting as we went through each of the four deficiencies that were identified in the DWR Letter. Anita Regmi confirmed that to the best of their abilities, DWR is available for consultation assistance. The timeline was discussed with the response strategy. All effort will be made to satisfactorily address the deficiency before the January deadline in attempt to get an Approved determination in January.

<u>Corrective Action No. 1 – Provide justification for, and effects associated with, the</u> <u>sustainable management criteria</u>

Concerns were raised regarding the Undesirable Results Statement which is the foundation of the Sustainable Management Criteria.

"The definition of undesirable results is thus critical to the establishment of an objective method to define and measure sustainability for a basin."

This GSP only recognizes any Undesirable Results when 30% of the Monitoring Network wells are below their Minimum Thresholds for more than two years. Currently 45% or more are below their MT.

The SAC questioned the effectiveness of this criteria for identifying the problem, much less preventing the continuing overdraft. Specific concern was expressed regarding the need for immediate action in the Northwest Region. The groundwater level has decreased from 20 feet b 80-100 feet. The current ground water level is falling below the root depth of the GDEs in that area. SAC members expressed that there is enough evidence based on monitoring to take appropriate action to protect the GDE in this area.

A unanimous recommendation was made to perform the technical analysis included in staff observations to assess the impacts of minimum thresholds on domestic and public wells and GDEs, along with revisions to the undesirable results statements and the sustainability criteria with an action plan and schedule.

<u>Corrective Action No. 2 – Use of aroundwater levels as a proxy for depletion of</u> <u>interconnected surface water</u>

The SAC recommends the options included in staff observations to create a discrete Monitoring Network for the Interconnected Surface Water along with revisions to the undesirable results statement and sustainability criteria described in an action plan and schedule.

Corrective Action No. 3 – Further address degraded water quality

It was generally agreed that data was needed to either characterize existing groundwater quality conditions or to determine if any undesirable results were to occur as a result of groundwater extraction. Arsenic and Nitrate are recognized as constituents of concern in Cuyama. Anita Regmi reiterated that another choice was to try to better justify the current plan. The concern was without any baseline data that would be hard to do in an 'evidence-based' way.

The SAC unanimously recommends the development of the following potential options:

• The GSA should develop nitrate and arsenic sustainability criteria at each water quality monitoring well where historical data exists and will consider background water quality and agricultural and domestic water criteria.

A single measurement of nitrate and arsenic should be taken in 2022 at all water quality wells to establish a Baseline and then the GSA can consider refinement of the size of the network once we have this baseline data.

The memorandum should include description of a monitoring network and developsustainability criteria (including MT and MO) for arsenic and nitrates in addition to TDS and include an updated undesirable results narrative for water quality, with an action plan and schedule.

<u>Corrective Action No. 4 – Provide explanation for how overdraft will be mitigated in</u> <u>the Basin</u> It was recognized several times in the meeting that groundwater overdraft was continuing, and that groundwater elevations are expected to decline for some time, especially noticeable in the NW region. The concern for how the remaining GDEs will be protected if the groundwater elevations are allowed to drop over 100' in the NW region was not resolved.

The Letter states "the GSA should consider including mitigation strategies describing how drinking water impacts that may occur due to continued overdraft during the period between the start of GSP implementation and achievement of the sustainability goal will be addressed."

The SAC could not understand how overdraft was being avoided, much less mitigated in any way. The SAC discussed that this corrective action will require more than just a plan to 'quantify metrics' or to modify the narrative. The SAC could not endorse the staff recommendation or

provide any advice other than to carefully read and answer the specifics of the letter. No motion was made.

Item 11. Direction on Adaptive Management

This item evoked many more questions than understanding. SAC appreciates that an ad hoc has convened and anticipates the development of further model analysis to inform any needed actions. However, talk of well production declines in the basin are concerning. It was asked howlandowners should report these developments. Mr. Beck suggested that staff could add a survey to the website for landowners to report issues with their wells. The SAC would like to review these reports of production declines and well failures, and encourage this well owner communication.

The SAC continues to ask what action can be taken and when would that happen?

Item 14, d. Update on Monthly Groundwater Conditions Report

This item continues to raise concerns from the SAC. What can be done about the three wells without landowner permission for access? How do these wells affect the pie chart, and can they be eliminated from the representative monitoring network? Concern was raised for the trends of the seven wells without data this time. It appears that in April's report, three of this report's grey area wells were already below their minimum thresholds (orange) and one was within 10% (yellow). That would likely make it **51%** or even 56% w/o the 3 no-shows (possibly 26 out of 46 wells).

Mr. Beck expressed the need for better monitoring well options and would encourage any potential cooperating landowner to contact Mr. Blakslee, particularly in the data gap areas of the Eastern and Southeastern Regions.

Update on Cannabis Industry Activities

Committee Member Jaffe reported on the Cuyama Valley Cannabis Advisory Committee (CVCAC) guidelines that were approved by the CVCAC and the County of Santa Barbara that establish offsets within the same Threshold Region for new irrigation of cannabis, and precautions against nearby well interference. Santa Barbara County's Planning and Development Department will enforce the offsets as established in the Guidelines. She reiterated that the CVCAC hopes that the CBGSA will adopt policies in the future to provide these protections that are within their jurisdictional authority.

Letter from CBWD

Although the SAC was unable to discuss the ramifications of the Districts disinclination to pursue the delegation of managing the pumping reductions, Mr. Beck did suggest that staff had been considering options in the event that the CBWD was not able to meet the required delegation timeline.

Respectfully submitted, Brenton Kelly Standing Advisory Committee Chair

CONSENT AGENDA

5-7. Consent Agenda

Chair Yurosek asked if any Directors wanted to discuss one of the consent agenda items in more detail, but no requests were made.

MOTION

Director Chounet made a motion to approve the consent agenda consisting of agenda items: 5. Approval of the May 5, 2021, 6. Payment of bills for April, May, and June 2021; and 7. Financial Reports for April, May, and June 2021. The motion was seconded by Director Stoller, a roll call vote was made and passed with 88.89%

AYES:Albano, Arnold, Bantilan, Chounet, Scrivner, Stoller, Vickery, Williams, Wooster,
and YurosekNOES:NoneABSTAIN:AnselmABSENT:None

ACTION ITEMS

8. Direction on DWR's GSP Consultation Letter Dated June 3, 2021

Mr. Beck provided background on the process with the goal of the Board providing direction as to how to proceed in responding to DWR's comment letter.

Director Wooster asked which public agency technical staff reviewed the information and Mr. Blakslee replied that technical staff from the four counties (Kern, San Luis Obispo, Santa Barbara and Ventura), Cuyama Basin Water District (CBWD) and the Cuyama Community Services District (CCSD).

Woodard & Curran Project Manager, Brian Van Lienden, provided an overview of the proposed schedule to respond to the California Department of Water Resources (DWR) and address their proposed corrective actions.

Lynn Compton joined at 4:30 pm and replaced alternate Debbie Arnold

Corrective Action No. 1

Director Vickrey asked if the CBWD August 5, 2021 comments would be included/considered, Mr. Van Lienden confirmed.

Director Wooster requested we assess individual wells that may be subject to minimum threshold classification and would like to understand what is being classified as a GDE and what wells are dropping by 80 feet. Said she believes most GDEs are supported by surface water and not groundwater. Doesn't believe outlier wells have been considered, and you are missing a lot of details by looking at an aggregate.

Mr. Van Lienden agreed that individual wells should be addressed to help identify outliers after data accumulation. Director Wooster continued that depth of wells have not been considered as related to minimum thresholds.

Director Albano suggested not changing thresholds at this time and said he did not appreciate DWR recommending changes to the Groundwater Sustainability Plan at this time.

Mr. Beck said staff is not suggesting adjusting thresholds at this time, but to provide clarification on the technical basis for how thresholds and undesirable results were determined.

Director Albano appreciated staff's presentation but said he is very concerned that there is consideration to altering minimum thresholds at this point.

Lynn Carlisle asked how the adjudication will impact effort to address GSP comments. Mr. Hughes said some of this we will have to let play out noting that the action was just filed and is still under review.

Director Wooster commented that the response should outline the specific conditions they are trying to avoid by implementing the provisions.

Kathleen Marsh commented she does not think DWR can approve the GSP with some wells experiencing declining groundwater levels, further adding that she believes the plan does too little and takes too long and should address immediate actions.

Robbie Jaffee said she is impressed to hear the technical analysis can be done by October 2021 she said she hopes that the drawdown allowed in the Northwestern region will be addressed in the technical analysis and said the pumping, as indicated in Opti well 841, is at 80 feet below the ground surface and that does not support Groundwater Dependent Ecosystem (GDE) root depths.

DWR representative Anita Regmi clarified that DWR's letter was not rushing the GSAs to submitting within a couple of months, but to provide the CBGSA with more time to respond to the DWR review.

Director Vickery suggested doing something now which would provide two bites of the apple and attempt to address DWR's comments. He said he is concerned with waiting too long.

MOTION

Director Vickery made a motion to implement the potential options as described in agenda item no. 8, excluding potential revisions to minimum thresholds while maintaining flexibility to analyze wells on an individual basis and with consideration of the August 5, 2021, CBWD letter, to be included in an action plan and schedule. The motion was seconded by Director Stoller, a roll call vote was made and passed with 100.00%

AYES:Albano, Anselm, Arnold, Bantilan, Chounet, Scrivner, Stoller, Vickery, Wooster,
and YurosekNOES:WilliamsABSTAIN:NoneABSENT:None

Director Albano said he cannot vote on the motion unless we specify that we are not contemplating changing thresholds at this time.

Director Chounet agreed with waiting to consider threshold adjustments until more data is received.

Director Williams suggested that not considering changes to the thresholds based on the analysis prejudges the results of the analysis.

The motion was refined per the Board's directive.

Corrective Action No. 2

Mr. Van Lienden provided an overview of the Basin interconnection of groundwater and surface water, noting lack of historical information the full groundwater monitoring network for Interconnected Surface Water (ISW) was utilized. The goal was to demonstrate why this is appropriate.

Director Wooster noted the there is a new dedicated monitoring well near the river.

SAC Chair Kelly provided the SAC recommendation.

MOTION

Director Stoller made a motion to implement the potential options as outlined in agenda item no. 8 and consider including a DWR TSS well near the Cuyama River. The motion was seconded by Director Albano, a roll call vote was made and passed with 100.00%

AYES: Albano, Anselm, Arnold, Bantilan, Chounet, Scrivner, Stoller, Vickery, Williams, Wooster, and Yurosek

NOES:	None
ABSTAIN:	None
ABSENT:	None

Corrective Action No. 3

Mr. Van Lienden provided background on corrective action three that further addressed degraded water quality.

Director Vickery said he believes the SAC recommendation is requesting more than SGMA requires, he noted they already respond to nitrates as it relates to ag production and does not believe the CBGSA Board should go down this route.

Director Wooster suggested there exists enough data from USGS to establish a baseline.

Director Albano asked why we would develop a monitoring network that cannot be influenced.

Executive Director Beck responded that it is not so much a financial question, since it costs roughly \$5,000 for additional analysis, but is more of a policy question as to whether the background should be established by CBGSA. He suggested the GSA should look at other regulatory entities with existing authority in the management to provide oversight as to avoid duplication.

Director Wooster said she recommends explaining to DWR the extensive efforts irrigators are required to track and monitor nitrates. She also suggested reviewing existing USGS water quality data.

Chair Yurosek commented that he believes DWR is over-reaching on the nitrates. He said landowners are already spending a significant amount of money on nitrates and does not believe this should be required by SGMA.

MOTION

Director Albano made a motion to direct staff to develop a memorandum describing the evidence-based description for why groundwater management is unlikely to cause significant and unreasonable degradation of groundwater with respect to nitrates and arsenic. The motion was seconded by Director Stoller, a roll call vote was made and the motion failed with a 26.67% vote.

AYES:	Albano, Stoller, Vickery, and Yurosek
NOES:	Anselm, Bantilan, Chounet, Compton, Scrivner, Williams, Wooster
ABSTAIN:	None
ABSENT:	None

Discussion continued prior to vote.

Director Williams said he believes this is a foolish motion and thinks the CBGSA should choose its battle and does not believe this is one to fight.

Director Anselm said if this does not satisfy DWR we will hear back from them requesting additional information, Mr. Beck confirmed.

Director Wooster said the downstream well from Grapevine Capital analysis for nitrates came back nondetectable.

Lynn Carlisle said she thinks the migration of degraded water quality constituents as a result of pumping, should also be considered.

Ms. Regmi noted that tracking the avoidance of migrating water quality is the law and that GSAs have coordinated with existing regulatory agencies to determine if pumping is exacerbating water quality issues.

Director Chounet asked how we could prove there are not water quality issues without collecting additional water quality. Mr. Van Lienden responded that existing data would be used, but would be challenging due to limited available data.

Director Albano asked legal counsel Mr. Hughes what his opinion is on what SGMA requires is to eliminate arsenic/nitrate flow, or is it to ensure the management actions we perform do not cause adverse and Mr. Hughes said he believes to not cause adverse effects.

Discussion continued after motion did not pass.

Director Williams asked if we have enough data to develop an evidence-based approach.

Mr. Beck noted that some nitrate data exists for findings but would need to groundwater quality modeling and unknown with existing data and hydrogeological model. It will be difficult to support evidenced-based descriptions to satisfy DWR.

Director Williams asked if we collected data and could demonstrate responsiveness to letter and evidence that it is not of adverse effect.

Mr. Beck suggested collecting data to perform an evidence-based approach over an acceptable timeframe, as cannot be completed by January.

Director Albano asked if "evidence-based" term is the issue, Mr. Beck agreed that term as provided by DWR is unclear and may need follow-up with DWR. CBGSA could provide additional description, but lacks quantitative data to support.

Director Wooster suggested a motion, which was not supported by a second, using available USGS and DWR TSS water quality data to develop an evidence-based description of why pumping is unlikely to cause groundwater quality degradation and perform a single measurement of nitrates and arsenic in 2022 to establish a baseline.

Chair Yurosek opened for further discussion.

Director Chounet asked how old data will be appropriate to make current decisions and believes the CBGSA should provide current data to show that current actions are not impacting water quality.

Director Williams agreed the CBGSA does not have regulatory authority, but believes we should perform the monitoring of these constituents.

Chair Yurosek asked why the CBGSA would test with no follow up actions and commented that going down this route concerns him.

Director Vickery commented that the CBGSA repacking nitrate data from IRLP that the State already has is very inefficient and does not agree with performing additional groundwater modeling.

MOTION

Director Vickery made a motion (1) to direct staff to review all available existing water quality data to develop an evidence-based description for why groundwater management is unlikely to cause significant and unreasonable degradation of groundwater, (2) that staff identify existing agencies that serve as primary regulators of water quality in the Cuyama Basin and inform DWR of CBGSA's intent to have those agencies continue serving that regulatory role, specifically related to arsenic and nitrates, and (3) to perform a single measurement of nitrate and arsenic in 2022 and consider if additional monitoring is required following analysis of the data collected. The motion was seconded by Director Williams, a roll call vote was made, and the motion passed with a 93.33%.

AYES:	Albano, Anselm, Bantilan, Chounet, Compton, Scrivner, Vickery, Williams,
	Wooster, and Yurosek
NOES:	Stoller
ABSTAIN:	None
ABSENT:	None
	Hone

Robbie Jaffee commented she is very supportive of the monitoring of arsenic and nitrates. She said arsenic originates from ancient water and comes up with additional pumping.

Corrective Action No. 4

Mr. Van Lienden provided an update on potential response options related to DWR's request to clarify rational for not implementing actions in the northwestern region and explain the timeline and criteria to determine whether further pumping allocations are needed.

Director Albano said the Ventucopa area defies technical explanations. He said the basin in Ventucopa is bounded by clay around 200 feet.

Director Wooster said the Board had good reasons for both the Ventucopa and Northwestern region threshold decisions that did not make it into the GSP.

Additional discussion proceeded with the group and after additional clarifications a motion was proposed.

MOTION

Director Chounet made a motion, for the Ventucopa area, to direct staff to address the model deficiencies with operational knowledge and local expertise for that region, and for the northwestern region, incorporate the analysis to be performed under corrective action no. 1. The motion was seconded by Director Albano, a roll call vote was made and passed with 100.00%.

AYES:	Albano, Anselm, Arnold, Bantilan, Chounet, Scrivner, Stoller, Vickery, Williams,
	Wooster, and Yurosek
NOES:	None
ABSTAIN:	None
ABSENT:	None

9. Direction on Management Area Implementation Policy

Executive Director Jim Beck recommended tabling this item considering the recent adjudication filing and the need for staff to determine potential impacts to the management area implementation.

Chair Yurosek asked for Board consensus to table this item based on staff's recommendation and there were no objections to this.

Director Wooster said the Board has never received a map large enough to view.

10. Direction on Small Pumpers Policy

Mr. Beck provided an overview of the Board's decision from May that would require meters from all non-diminimus water users. The meter requirement for water users using 25 acre-feet or less per year to report pumping using forms based on evapotranspiration values with a factor to approximate gross water use. He suggested waiting to determine a verification process until after a year.

Director Wooster commented that the forms look good, but include should include an option to report metered use. She also suggested adding the Opti well number on the form. Director Vickery and Wooster commented that meters would be required on all new wells as the incremental cost of including a meter on a new well is minimal.

MOTION

Director Chounet made a motion to adopt the proposed policy and require meters for all new wells or reconstructed wells. The motion was seconded by Director Vickery, a roll call vote was made and passed with 100.00%

AYES:	Albano, Anselm, Bantilan, Chounet, Compton, Scrivner, Stoller, Vickery,
	Williams, Wooster, and Yurosek
NOES:	None
ABSTAIN:	None
ABSENT:	None

11. Direction on Adaptive Management

Mr. Beck provided an overview of adaptive management and the Adaptive Management ad hoc recommendation.

SAC Chair Kelly provided SAC feedback on this item and expressed concern with the lack of timeline for determining action under adaptive management.

Director Wooster agreed with performing an analysis of nearby wells to determine if they are in danger

of going dry.

Director Vickery said the thresholds were set without sufficient data and it is frustrating to be managed to these thresholds without additional data.

Robbie Jaffee commented that we are not considering the data that reflects the current situation.

MOTION

Director Vickery made a motion to (ad hoc) and the well in question (add to third bullet point) and provide a link on the website. The motion was seconded by Director Wooster, a roll call vote was made and passed with 100.00%

AYES:	Albano, Anselm, Arnold, Bantilan	, Chounet, Scrivner, Stoller, Vickery, Williams,
	Wooster, and Yurosek	
NOES:	None	
ABSTAIN:	None	
ABSENT:	None	

12. Approval of Monitoring Network Consultant Contract for FY 21-22

Taylor Blakslee provided an overview of contracts with Provost & Pritchard to continue annual water quality monitoring and quarterly monitoring of groundwater levels.

MOTION

Director Vickery made a motion to approve both contracts including the optional water quality task. The motion was seconded by Director Chounet, a roll call vote was made and passed with 100.00%

 AYES:
 Albano, Anselm, Arnold, Bantilan, Chounet, Scrivner, Stoller, Vickery, Williams, Wooster, and Yurosek

 NOES:
 None

 ABSTAIN:
 None

REPORT ITEMS

13. Administrative Updates

ABSENT:

a. Report of the Executive Director

None

Mr. Beck provided an update on the near-term schedule, tasks and progress and the overall CBGSA program budget. Mr. Beck notes that staff will begin planning for upcoming landowner workshops to provide updates and prepare for metering. Staff is also working on potential grant funding opportunities and is working with DWR for additional support. Mr. Blakslee also participated in the Santa Barbara County Drought Planning team to provide GSA perspective. It is recommended that the SAC August 26th meeting and BoD September 1st meetings be cancelled. Staff will need time to develop technical memos in October prior to DWR submittal in November. SAC and BOD meetings to occur in October. Mr. Blakslee

will poll the group for dates after the meeting.

b. CBGSA Staffing Update

Woodard & Curran new staff was introduced. Richard Stern taking over for John Ayres for hydrogeology. Provided a brief review of experience and expertise.

c. Report of the General Counsel

Mr. Hughes had no additional update to report.

d. Update on FY 21-22 Groundwater Extraction Fee Collections

Mr. Blakslee provided and update noting that the Board had passed resolution 21053 setting a groundwater extraction fee of \$39.00/af packet contains summary of payments received.

e. Update on Coordination with Counties and Well Permitting Process

Mr. Beck previously received direction from Board to look into concerns of county well permits being approved too close to existing wells. He then provided an overview of a meeting with Santa Barbara County Water Agency (SBCWA). They discussed ways to coordinate with new well owners and determined that Environmental Health Services would assist with facilitating information on the Cuyama basin to landowners and provide the CBGSA with well permits for informational purposes. He reported that staff will work with the remaining counties to ensure a similar process. He also reported that the CBGSA new landowner information sheet was being updated with additional water management information.

Director Vickery thanked staff for holding these meetings and stressed the importance of letting new landowners know of potential restrictions.

14. Technical Updates

a. Review of Model Update Process

Mr. Van Lienden provided an update on the anticipated schedule for aquifer testing, model refinement, and application. Intent is to coordinate with an ad hoc committee and have data reporting near January. Model data will extend to include 2021 then perform model calibration in the spring, along with updated sustainability budgets.

b. Update on Groundwater Sustainability Plan Activities

Mr. Van Lienden provided an update on the Groundwater Sustainability Plan (GSP) activities and the overall project schedule which are included in the Board packet. DWR will has conducted aerial surveys and staff will engage with DWR for data refinement. Mr. Van Linden reviewed flight lines of the valley.

c. Update on Monitoring Network Implementation

Mr. Van Lienden provided an update on monitoring network implementation activities including a status on (1) drilling of DWR TSS wells nearly complete, (2) installation of transducers, and (3) installation of two stream gauges which is included in the Board packet.

d. Update on Monthly Groundwater Conditions Report

Mr. Van Lienden provided an update on the groundwater level monitoring network and levels for April-June 2021 which is included in the Board packet.

Jim said staff can develop memo to address impacts as related to calculations for GSA policy for wells that cannot be monitored.

Chair Yurosek added that it should be clarified what is systemic versus onetime issue.

15. Closed Session

Closed session started at 8:23 pm and concluded at 9:00 pm. The meeting was opened back to open session and staff noted that no reportable action was taken.

16. Report of the Ad Hoc Committee

Nothing to report.

17. Directors' Forum

Director Yurosek and other Directors did not note any agenda items that have not been covered.

18. Public Comment for Items Not on the Agenda

Nothing to report.

19. Correspondence

Mr. Blakslee reported a letter was received from the Cuyama Basin Water District on August 5, 2021, which is in the Board Packet.

20. Adjourn

Chair Yurosek adjourned the meeting at 9:05 p.m.

Minutes approved by the Board of Directors of the Cuyama Basin Groundwater Sustainability Agency the 3rd day of November 2021.

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:	November 3, 2021
SUBJECT:	Approval of Payment of Bills for July through September 2021

<u>Issue</u>

Consider approving the payment of bills for July through September 2021.

Recommended Motion

Approve payment of the bills for July through September 2021 in the amount of \$228,539.85.

Discussion

Consultant invoices for the months of July through September are provided as Attachment 1 and summarized below.

Expense	Jul	Aug	Sep	Totals
Hallmark – Administration	\$17,989.85	\$29,821.52	\$15,128.51	\$62,939.88
P&P – Monitoring	5,341.18	3,131.00	11,643.47	20,115.65
Klein – Legal	1,771.00	7,785.50	1,717.00	11,273.50
W&C – Technical	32,994.88	49,521.28	44,463.21	126,979.37
DPVB – Auditor		3,500.00	3,000.00	6,500.00
Sign Creation – Signs for stream gauges			731.45	731.45
				\$228,539.85

HALLMARK GROUP Capital Program Management Attachment 1

To: Cuyama Basin GSA Please Remi Attn: Jim Beck 4900 California Avenue, Ste B Bakersfield, CA 93309		sin GSA Please Remit To: eck nia Avenue, Ste B CA 93309	Hallmark Group 500 Capitol Mall, Ste 2350 Sacramento, CA 95814 P: (916) 923-1500	Invoice No Task Order No Agreement No Dat	D:: 2021-CBC D:: CB-HG-00 D:: 201709-0 D:: Septemb	3SA-09 07 CB-001 ier 30, 2021
For professional service	es rendered j	for the month of September 2021:				1
Task Order	Sub Task	Task Description	Billing Classification	Hours	Rate	Amount
CB-HG-007	1	Board of Directors and Advisory Committee Meetings	Executive Director - J. Beck	0.00	\$ 350.00	\$ -
			Project Coordinator - T. Blakslee	4.25	\$ 175.00	\$ 743.75
				Total Sul	b Task 1 Labor	\$ 743.75
CB-HG-007	2	Consultant Management and GSP Implementation	Executive Director - J. Beck	7.75	\$ 350.00	\$ 2,712.50
			Project Coordinator - T. Blakslee	14.25	\$ 175.00	\$ 2,493.75
				Total Su	b Task 2 Labor	\$ 5,206,25
CB-HG-007	3	Financial Information Coordination	Executive Director - Beck	0.75	\$ 350.00	\$ 262.50
	5		Project Controls - Harris	21.25	\$ 200.00	\$ 4 250 00
			Project Coordinator - T. Blakslee	7 25	\$ 175.00	\$ 1,250.00
			Toject coordinator - 1. blaksiee	7.25	\$ 175.00	Ş 1,200.75
				Total Sul	b Task 3 Labor	\$ 5,781.25
CB-HG-007	4	CBGSA Outreach	Executive Director - J. Beck	0.00	\$ 350.00	\$ -
			Project Coordinator - T. Blakslee	2.50	\$ 175.00	\$ 437.50
				Total Su	b Task 4 Labor	\$ 437.50
CB-HG-007	5	Groundwater Extraction Fee - Funding	Executive Director - J. Beck	0.00	\$ 350.00	\$ -
			Project Controls - J. Harris	0.00	\$ 200.00	\$ -
			Project Coordinator - T. Blakslee	0.00	\$ 175.00	\$ -
				Total Sul	h Task 5 Labor	ć
	6	Support for CBGSA Response to DWR and Public Comments	Executive Director I Pack	0.00	\$ 250.00	3 -
CB-IIG-007	U	support for ebds/(nesponse to b/// and i dbile comments	Broject Coordinator T. Blaksloo	14.50	\$ 330.00	\$ 2 5 2 7 5 0
			Project Coordinator - 1. Blakslee	14.50	\$ 175.00	\$ 2,557.50
				Total Sul	b Task 6 Labor	\$ 2,537.50
					Total Labor	\$ 14,706.25
		Drawast & Dritchard	(Menitorian Natural) Catur and Data Callestian) Contomber 2021		ć 11 407 27
		Provost & Pritchard	(Nonitoring Network Setup and Data Collection	.) - September 2021	L	5 11,467.27
		Provost & Pritchard	(Groundwater Quality Monitoring) - September	2021		\$ 156.20
		Sign Creations - Stre	am Gauge Project			\$ /31.45
		GoloMeeting Confe	rence Calls N	linutes: 69	3.05¢	\$ 34.65
			SubTo	tal Travel and Oth	er Direct Costs	\$ 12,409,57
			54010			+ 12,405.57
		ODC Mark Up - Prov	ost & Pritchard		3%	\$ 349.30
		ODC Mark Up - Othe	er		5%	\$ 38.31
			10	tai i ravei and Othe	er Direct Costs	\$ 12,797.18
			TOTAL A	MOUNT DUE TH	HIS INVOICE!	\$ 27,503.43

MAXIMUM CONTRACT VALUE AND PROGRESS BILLING											
Task Order		Original Totals		Amendment(s)		Total Committed		Previously Billed		Current Billing	Remaining Balance
CB-HG-007	\$	207,440.00	\$	-	\$	207,440.00	\$	47,431.25	\$	14,706.25	\$ 145,302.50
Provost & Pritchard	\$	-	\$	230,000.00	\$	230,000.00	\$	168,441.24	\$	11,643.47	\$ 49,915.29
Travel and ODC	\$	2,985.00	\$	768.00	\$	3,753.00	\$	380.12	\$	1,153.71	\$ 2,219.17
Total	\$	210,425.00	\$	230,768.00	\$	441,193.00	\$	216,252.61	\$	27,503.43	\$ 197,436.96

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INVOICE

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HALLMARK GROUP Capital Program Management

CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

PROGRESS REPORT FOR TASK ORDER CB-HG-007

Client Name:	Cuyama Basin Groundwater Sustainability Agency	Agreement Number:	201709-CB-001
Company Name:	HGCPM, Inc. DBA The Hallmark Group	Address:	500 Capitol Mall, Suite 2350 Sacramento, CA 95814
Task Order Number:	CB-HG-007	Report Period:	September 1-30, 2021
Progress Report Number:	31	Project Manager:	Jim Beck
Invoice Number:	2021-CBGSA-09	Invoice Date:	September 30, 2021

SUMMARY OF WORK PERFORMED

Task 1: Board of Directors and Advisory Committee Meetings

- Drafted August BOD meeting minutes.
- Correspondence with legal regarding BOD meeting cancelation, drafted cancelations and posted online.
- Touched base with directors on motion language.
- Touched base with legal on ad hoc issues.

Task 2: Consultant Management and GSP Implementation

- Respond to DWR on monitoring network review.
- Prepared for and facilitated weekly Program Management Team (PMT) meetings regarding GSP implementation efforts.
- Prepared for and attended meetings with DWR and ad hoc regarding adjudication and corrective actions letter.
- Coordinated with DWR's Jack Tung regarding transducer request.
- Coordinated with K. Dlubac and W&C's Brian Van Lienden regarding aerial electromagnetic groundwater level calibration and well survey information.
- Coordinated with W&C on review and response to DWR's monitoring network sustainability management criteria review and sent corrections to DWR.
- Coordinated stream gauge signage with USGS's B. Glass of USGS and GSI's D. O'Rourke.
- Coordinated and purchased stream gauge signage with Central Coast Sign Creation.
- Reviewed technical memo for stream gauge installation prepared by D. O'Rourke.
- Reviewed CBWD model update presentation.
- Correspondence with DWR's C. Baker on transducers.

Task 3: Financial Information Coordination

- Billing, accounting, and administration.
- Developed monthly progress report.



- Developed budget tracking tool and reviewed with internal staff.
- Drafted audit documentation and transmitted to DPVB.
- Correspondence with DPVB on annual audit.
- Coordinated and attended Grant Close-Out meeting with W&C.
- Coordinated and attended Grant Close-Out meeting with DWR.
- Correspondence with DWR's Anita Regmi regarding additional grant opportunities.

Task 4: Cuyama Basin GSA Outreach

- Touched base with W&C on well completion reports for wells in Cuyama at the request of a landowner.
- Updated Cuyama landowner representative on water management in the basin.
- Correspondence with interested party regarding cannabis development.

Task 5: Groundwater Extraction Fee Funding Process and Administration

• No efforts conducted under this task in September.

Task 7: Support for CBGSA Response to DWR and Public Comments

- Updated BOD on DWR meeting with ad hoc.
- Touched base with W&C on schedule changes.
- Correspondence with D. Yurosek and team regarding DWR meeting.
- Coordinated with DWR on adjudication questions.
- Prepared for and attended meetings with legal and W&C teams regarding DWR coordination meeting.
- Coordinated with ad hoc on DWR GSP review meeting.
- Correspondence with a Director regarding pumper contact information.
- Finalized agenda and materials for DWR meeting with ad hoc.
- Attended DWR meeting and debrief with team.
- Organized DWR debrief calls with team and D. Yurosek.
- Prepared DWR review of corrective action response and debriefed with D. Yurosek and legal.
- Touched base with DWR on meeting debrief and submitted summary to the BOD.
- Coordinated ad hoc meeting and drafted agenda and materials.
- Correspondence with a Director on the development of a management area map.

DELIVERABLES AND COMPLETED TASKS

- Coordinated the installation and signage for two stream gauges in Cuyama.
- Facilitated review meeting with DWR on potential corrective actions and debrief with the ad hoc.

PLANNED OBJECTIVES FOR NEXT REPORTING PERIOD

- Facilitate bi-weekly CBGSA program management team meetings.
- Facilitate bi-weekly grant administration update meetings.

SIGNIFICANT ISSUES OR CHALLENGES (IF ANY) AND POTENTIAL RESOLUTIONS

• N/A

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



CBGSAOctober 12, 2021Hallmark GroupProject: No:03616-20-001Attn: Taylor BlaksleeInvoice No:87918500 Capital Mall, Ste 2350Sacramento, CA 95814Sacramento, CA 95814

Project Name: Cuyama Basin Groundwater Sustainability Agency Monitoring Network Setup and Data Collection Client Project #:

Phase SUR: \$11,487.27 - Site Survey and Data processing. Site Visit. Well Survey. Project updates. Create Survey point spreadsheet. Survey of GSE discussion. Process Excel tables to KMZ.

Professional Services from September 1, 2021 to September 30, 2021

Phase:	SUR	CBGSA Survey		
Labor				10,652.00
Reimbursab	le Expenses			835.27
			Total this Phase:	\$11,487.27
			Total this Invoice	\$11,487.27

*** Please make checks payable to Provost & Pritchard Consulting Group *** For billing inquiries, please email BillingInquiries@ppeng.com.



CBGSA Hallmark Group Attn: Taylor Blakslee 500 Capital Mall, Ste 2350 Sacramento, CA 95814

October 12, 2021	
Project: No:	03616-20-002
Invoice No:	87919

CBGSA - Groundwater Quality Monitoring Project Name:

Client Project #:

Phase T1: Network update. Project team coordination. Professional Services from September 1, 2021 to September 30, 2021

Phase: Labor	T1	CBGSA Landowner A	greements			
			Hours	Rate	Amount	
Associate	e Engineer		1.10	142.00	156.20	
	Totals		1.10		156.20	
	Total La	bor				156.20
				Total this	Phase:	\$156.20
				Total this	Invoice	\$156.20



INVOICE

BILL TO Cuyama Basin Gro Ordered By: Taylor (661) 477-3385	undwater Sustainability Agency Blakslee		INVOICE DATE TERMS DUE DATE	31562 09/20/2021 Due on receipt 09/20/2021	
DATE		DESCRIPTION	QTY	RATE	AMOUNT
09/20/2021	Services	3' x 4' x 6 mil DiBond (Stream Gauge Project)	2	285.00	570.00T
	Services	7' U channel postmasters	2	51.30	102.60T
		SUBTOTAL			672.60
		TAX			58.85
		TOTAL			731.45
		BALANCE DUE			\$731.45

HALLMARK Capital GROUP Program Management To: Cuyama Basin GSA Please Remit To: Hallmark Group Invoice No.: 2021-CBGSA-08 Attn: Jim Beck 500 Capitol Mall, Ste 2350 Task Order No.: CB-HG-007 4900 California Avenue, Ste B Sacramento, CA 95814 201709-CB-001 Agreement No.: Bakersfield, CA 93309 P: (916) 923-1500 Date: August 31, 2021 For professional services rendered for the month of August 2021: Sub Task Task Description **Billing Classification** Hours Rate Amount 1 Board of Directors and Advisory Committee Meetings Executive Director - J. Beck 19.50 \$ 350.00 \$ 6,825.00 11,331.25 Project Coordinator - T. Blakslee 64.75 \$ 175.00 \$ Total Sub Task 1 Labor \$ 18,156.25 Consultant Management and GSP Implementation \$ 350.00 \$ 2 Executive Director - J. Beck 8.00 2,800.00 Project Coordinator - T. Blakslee 20.75 \$ 175.00 \$ 3,631.25 Total Sub Task 2 Labor \$ 6,431.25 3 Financial Information Coordination Executive Director - J. Beck 0.00 \$ 350.00 \$ \$ 200.00 \$ 2,650.00 Project Controls - J. Harris 13.25 Project Coordinator - T. Blakslee \$ 175.00 \$ 350.00 2.00 Total Sub Task 3 Labor \$ 3,000.00

Executive Director - J. Beck

0.00

\$ 350.00 \$

Task Order

CB-HG-007

CB-HG-007

CB-HG-007

CB-HG-007

CBGSA Outreach

4

			Project Coordinator - T. Blakslee	3.75	\$ 175.00	\$	656.25
				Total Sul	Task 4 Labor	\$	656.25
CB-HG-007	5	Groundwater Extraction Fee - Funding	Executive Director - J. Beck	0.00	\$ 350.00	\$	-
			Project Controls - J. Harris	0.00	\$ 200.00	\$	-
			Project Coordinator - T. Blakslee	0.00	\$ 175.00	\$	-
				Total Sul	Task 5 Labor	Ś	-
CB-HG-007	6	Support for CBGSA Response to DWR and Public Comments	Executive Director - J. Beck	0.00	\$ 350.00	\$	-
			Project Coordinator - T. Blakslee	8.00	\$ 175.00	\$	1,400.00
	_			Total Sul	Task 6 Labor	Ś	1.400.00
						Ŧ	_,
					Total Labor	\$	29,643.75
						-	
		Provost & Pritchard (Mo	nitoring Network Setup and Data Collection) - A	August 2021		\$	2,756.60
		Provost & Pritchard (Gro	undwater Quality Monitoring) - August 2021			\$	374.40
		GoToMeeting Conference	e Calls Minu	tes: 1,597	7.05¢	\$	79.85
			SubTotal	Travel and Othe	r Direct Costs	\$	3,210.85
		ODC Mark Up - Provost 8	& Pritchard		3%	\$	93.93
		ODC Mark Up - Other			5%	\$	3.99
			Total	Travel and Othe	r Direct Costs	\$	3,308.77
			TOTAL AM			ć	22 052 52

MAXIMUM CONTRACT VALUE AND PROGRESS BILLING												
Task Order		Original Totals		Amendment(s)		Total Committed		Previously Billed		Current Billing		Remaining Balance
CB-HG-007	\$	207,440.00	\$	-	\$	207,440.00	\$	17,787.50	\$	29,643.75	\$	160,008.75
Provost & Pritchard	\$	-	\$	230,000.00	\$	230,000.00	\$	165,310.24	\$	3,131.00	\$	61,558.76
Travel and ODC	\$	2,985.00	\$	-	\$	\$ 2,985.00		985.00 \$ 202.35 \$ 177.		\$ 177.77		2,604.88
Total	\$	210,425.00	\$	230,000.00	\$	440,425.00	\$	183,300.09	\$	32,952.52	\$	224,172.39

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HALLMARK GROUP Capital Program Management

CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

PROGRESS REPORT FOR TASK ORDER CB-HG-007

Client Name:	Cuyama Basin Groundwater Sustainability Agency	Agreement Number:	201709-CB-001
Company Name:	HGCPM, Inc. DBA The Hallmark Group	Address:	500 Capitol Mall, Suite 2350 Sacramento, CA 95814
Task Order Number:	CB-HG-007	Report Period:	August 1-31, 2021
Progress Report Number:	30	Project Manager:	Jim Beck
Invoice Number:	2021-CBGSA-08	Invoice Date:	August 31, 2021

SUMMARY OF WORK PERFORMED

Task 1: Board of Directors and Advisory Committee Meetings

- Drafted Board of Directors (BOD) and Standing Advisory Committee (SAC) meeting agendas and coordinated review meetings.
- Prepared for and attended Cuyama Basin Groundwater Sustainability Agency (CBGSA) BOD and SAC meetings.
- Drafted and distributed SAC meeting packet.
- Touched base with D. Yurosek and Cuyama Basin Water District Manager M. Klinchuch regarding adjudication.
- Coordinated and reviewed BOD meeting agenda items with D. Yurosek and legal team.
- Drafted Management Area policy memo.
- Drafted CBGSA legal issues document and discussed with legal team.
- Met with Santa Barbara and Environmental Health Services regarding permitting and coordination.
- Followed up with Santa Barbara County planning staff and coordinated with other counties.
- Coordinated with stakeholders on BOD meeting dates.
- Coordinated with L. Carlisle on Cuyama Valley Family Resource Center facility availability for Board and SAC meetings.
- Coordinated Director and Committee member meeting attendance.
- Reviewed P&P level and water quality scopes.
- Coordinated with the California Department of Water Resources and USGS on stream gauge signage.
- Purchased, tested, and setup A/V equipment for public meetings.
- Submitted Santa Barbara tax roll documents to legal.
- Prepared BOD meeting minutes.
- Discussed adjudication strategy with legal and D. Yurosek.
- Participated in BOD meeting debrief with D. Yurosek and finalized Board motions.
- Confirmed Board motions with Board members.
- Reviewed BOD tasks with Woodard & Curran project manager Brian Van Lienden.
- Coordinated the formation of ad hocs and communicate with legal on potential issues.
- Coordinated with D. Yurosek and M. Klinchuch on BOD meeting dates for November meetings.



• Updated website with meeting notices.

Task 2: Consultant Management and GSP Implementation

- Correspondence and meeting with Santa Barbara County staff regarding well permitting coordination.
- Coordinated and attended meeting with relevant parties regarding adjudication filing.
- Continued correspondence regarding adjudication filing.
- Performed task tracking coordination and updates.
- Discussed GDE monitoring with W&C hydrologist R. Sturn.
- Coordinated with DWR and USGS on CEQA and NEPA requirements for stream gauges.
- Reviewed CBGSA sustainability information.
- Coordinated environmental documents for stream gauges.
- Coordinated with W&C's M. Eggleton on DWR's review of groundwater level sustainability management criteria.
- Drafted and distributed DWR aerial electromagnetic survey notice to stakeholders.
- Drafted SAC August 11, 2021, presentation.
- Corresponded with R. Shady regarding northwestern region related to potential corrective actions.
- Coordinated and submitted grant survey to DWR.
- Coordinated with W&C on stream gauge signage and costs with DWR and USGS.
- Corresponded with M. Scrudato and W&C on shallow wells and GDE root depth.
- Coordinated with Primetime Signs and P. Dorion regarding stream gauge signage.
- Touched base with W&C on Board motion language and Water Board review of GSPs.
- Correspondence with W&C R. Sturn and Grimmway's C. Voss regarding meter requirements.
- Prepared for and facilitated weekly Program Management Team (PMT) meetings regarding GSP implementation efforts.

Task 3: Financial Information Coordination

- Billing, accounting, and administration.
- Developed monthly progress report.
- Prepared annual audit documentation and transmitted to Daniells Philips Vaughn & Bock (DPVB).
- Corresponded with DPVB on annual audit.
- Corresponded with landowner regarding groundwater extraction payments.

Task 4: Cuyama Basin GSA Outreach

- Reviewed newsletter, sent to D. Yurosek for review, coordinated edits and distributed to stakeholders and posted on website.
- Discussed management area and parcel lookup for landowner.
- Updated R. Shady on hydrologic/geologic data.
- Corresponded with G. Zannon on adjudication.

Task 5: Groundwater Extraction Fee Funding Process and Administration

• No efforts conducted under this task in August.

Task 7: Support for CBGSA Response to DWR and Public Comments



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- Drafted Cuyama letter in response to DWR's potential corrective actions, facilitated review among the ad hoc and submitted to DWR.
- Correspondence with W&C on GSP implementation impacts.
- Update with DWR on BOD meetings, adjudication, and grant closeout.
- Coordinated with CBWD staff on CBGSA GSP impacts.
- Correspondence with legal regarding DWR review.
- Distributed adjudication filing to DWR.
- Drafted adjudication impact questions, facilitated review among the ad hoc and distributed to DWR ahead of a review meeting.
- Distributed CBGSA response letter to BOD, SAC, and stakeholders.
- Touched base with an ad hoc member on the DWR response letter.
- Corresponded with DWR regarding schedule updates.

DELIVERABLES AND COMPLETED TASKS

• Developed agendas, SAC and Board packet, and facilitated remote meetings.

PLANNED OBJECTIVES FOR NEXT REPORTING PERIOD

- Facilitate bi-weekly CBGSA program management team meetings.
- Facilitate bi-weekly grant administration update meetings.
- Meet with DWR staff regarding the CBGSA response to potential corrective actions and adjudication impacts.
- Finalize stream gauge installation and required grant components.

SIGNIFICANT ISSUES OR CHALLENGES (IF ANY) AND POTENTIAL RESOLUTIONS

• N/A

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



CBGSA Hallmark Group Attn: Taylor Blakslee 500 Capital Mall, Ste 2350 Sacramento, CA 95814

 September 17, 2021

 Project: No:
 03616-20-001

 Invoice No:
 87437

Project Name: Cuyama Basin Groundwater Sustainability Agency Monitoring Network Setup and Data Collection Client Project #:

Phase DAT - \$901.00 - Well information sheets. Data reporting. Coordination.

Phase MON – \$1,699.40 – Review monthly monitoring schedules. Data QA/QC. Timeline update with GSA. Submittals.

Phase SUR - \$156.20 - Coordinate survey.

Professional Services from August 1, 2021 to August 31, 2021

Phase: Labor	DAT	CBGSA Data Reporting		901.00	
			Total this Phase:	\$901.00	
Phase: Labor	MON	CBGSA Monthly Monitoring		1,699.40	
			Total this Phase:	\$1,699.40	
Phase: Labor	SUR	CBGSA Survey		156.20	
			Total this Phase:	\$156.20	
			Total this Invoice	\$2,756.60	

455 W. Fir Avenue (559) 449-2700 Fax (559) 449-2715



CBGSA Hallmark Group Attn: Taylor Blakslee 500 Capital Mall, Ste 2350 Sacramento, CA 95814

September 17, 2021	
Project: No:	03616-20-002
Invoice No:	87438

Project Name: CBGSA - Groundwater Quality Monitoring

Client Project #:

Phase T2 - \$90.40 - Outreach coordination for network expansion and proposal.

Phase T3 - \$284.00 - Memo re network growth. Review and finalize memo.

Professional Services from August 1, 2021 to August 31, 2021

Phase: Labor	T2	CBGSA Water Quality Measurements	3		
Assistant	Engineer Totals Total Labor	Hours .80 .80	Rate 113.00	Amount 90.40 90.40	90.40
			Total this	Phase:	\$90.40
Phase: Labor	Т3	CBGSA Data Management and Repo	rting		
		Hours	Rate	Amount	
Associate	Engineer	2.00	142.00	284.00	
	Totals	2.00		284.00	
	Total Labor				284.00
			Total this	Phase:	\$284.00
			Total this	nvoice	\$374.40

INVOICE

<

To:	Cuyama Ba Attn: Jim B 4900 Califor Bakersfield,	sin GSA eck rnia Avenue, Ste B , CA 93309	Please Remit To:	Ha 500 Sao P: 0	llmark Group 0 Capitol Mall, Ste 2350 cramento, CA 95814 (916) 923-1500	Ta: Ag	Invoice No.: sk Order No.: reement No.: Date:	2021-C CB-HG- 201709 July 31,	3GSA- 007 -CB-0 2021	07 01
For professional service	es rendered	for the month of July 2021:			Pilling Classification		Hours	Data		Amount
		Board of Directors and Advisory Commi	ittee Meetings		Executive Director L Back		1.00	\$ 250.0) ć	250.00
CB-110-007	1	board of Directors and Advisory commi	ittee meetings		Project Coordinator - T. Blaksley	`	12.50	\$ 175.0		2 187 50
					Project Administrator	-	0.00	\$ 175.0		2,107.50
					Toject Administrator		0.00	Ş 125.0	, ,	_
							Total Sub T	ask 1 Labo	r \$	2,537.50
CB-HG-007	2	Consultant Management and GSP Imple	ementation		Executive Director - J. Beck		8.25	\$ 350.0	\$	2,887.50
					Project Coordinator - T. Blakslee	9	23.25	\$ 175.0)\$	4,068.75
							Total Sub T	ask 2 Labo	r \$	6,956.25
CB-HG-007	3	Financial Information Coordination			Executive Director - J. Beck		0.00	\$ 350.0)\$	-
					Project Controls - J. Harris		9.75	\$ 200.0	\$	1,950.00
					Project Coordinator - T. Blakslee	9	1.75	\$ 175.0	\$	306.25
						_	Total Sub 1	ask 3 Labo	r Ś	2,256,25
CB-HG-007	4	CBGSA Outreach			Executive Director - J. Beck		0.00	\$ 350.0) \$	
					Project Coordinator - T. Blakslee	2	7.75	\$ 175.0	5	1.356.25
						-	Total Cub 7			,
CD UC 007		Croundwater Extraction Fee Euroding			Europetico Disentes - L. Deele			ask 4 Labo	r ş	1,356.25
CB-HG-007	5	Groundwater Extraction Fee - Funding			Executive Director - J. Beck		0.00	\$ 350.0	, ,	-
					Project Controls - J. Harris	`	3.50	\$ 200.0	, , , ,	1 837 50
						-	10.50	Ş 175.0	, ,	1,037.50
							Total Sub 1	ask 5 Labo	r \$	2,537.50
CB-HG-007	6	Support for CBGSA Response to DWR and	nd Public Comments		Executive Director - J. Beck		0.00	\$ 350.0	\$	-
					Project Coordinator - T. Blakslee	9	12.25	\$ 175.0)\$	2,143.75
							Total Sub T	ask 6 Labo	r \$	2,143.75
				_						
								Total Labo	r \$	17,787.50
			Provost & Pritchard (Mor	nitoring Network Setup and Data Collect	ction) - July	2021		\$	4,733.18
			Provost & Pritchard (Grou	undwater Quality Monitoring) - July 20	21			\$	608.00
			GoToMeeting Confer	rence	e Calls	Minutes:	802	.05 ¢	\$	40.10
					Su	ibiotal Irav	ei and Other	Direct Cost	s Ş	5,381.28
			ODC Mark Up - Prove	ost &	Pritchard			3%	\$	160.24
			ODC Mark Up - Othe	r				5%	\$	2.01
						Total Trav	el and Other	Direct Cost	s \$	5,543.53
					TOT				ć	22 221 02
					1017		VI DUE I HI		-	23,331.03

HALLMARK GROUP Capital Program Management

MAXIMUM CONTRACT VALUE AND PROGRESS BILLING												
Task Order	Task Order Original Totals Amend					Total Committed		Previously Billed		Current Billing		Remaining Balance
CB-HG-007	\$	207,440.00	\$	-	\$	207,440.00	\$	-	\$	17,787.50	\$	189,652.50
Provost & Pritchard	\$	-	\$	230,000.00	\$	230,000.00	\$	159,969.06	\$	5,341.18	\$	64,689.76
Travel and ODC	\$	2,985.00	\$	-	\$	2,985.00	\$	-	\$	202.35	\$	2,782.65
Total	\$	210,425.00	\$	230,000.00	\$	440,425.00	\$	159,969.06	\$	23,331.03	\$	257,124.91

Persistence | Proficiency | Performance

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HALLMARK Capital Program Management CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

PROGRESS REPORT FOR TASK ORDER CB-HG-007

Client Name:	Cuyama Basin Groundwater Sustainability Agency	Agreement Number:	201709-CB-001
Company Name:	HGCPM, Inc. DBA The Hallmark Group	Address:	500 Capitol Mall, Suite 2350 Sacramento, CA 95814
Task Order Number:	CB-HG-007	Report Period:	July 1-31, 2021
Progress Report Number:	30	Project Manager:	Jim Beck
Invoice Number:	2021-CBGSA-07	Invoice Date:	July 31, 2021

SUMMARY OF WORK PERFORMED

Task 1: Board of Directors and Advisory Committee Meetings

- Drafted Board of Directors (BOD) and Standing Advisory Committee (SAC) meeting agendas and coordinated review meetings.
- Coordinated and rescheduled BOD and SAC meetings.
- Reviewed BOD memo development process with Woodard & Curran project manager Brian Van Lienden.
- Touched base with Directors on technical DWR GSP review meeting.
- Processed updated insurance documents.
- Reviewed BOD meeting minutes and task tracking.
- Processed COI code to FPPC.
- Draft Cuyama legal issues agenda and supporting documentation.
- Coordinate with stakeholder on cannabis guidelines for BOD packet inclusion.
- Distributed DWR BOD slides.
- Coordinated with Cuyama Valley Family Resource Center Executive Director Lynn Carlisle on hosting SAC and Board meetings.
- Updated website with meeting schedules.

Task 2: Consultant Management and GSP Implementation

- Prepared for and facilitated weekly Program Management Team (PMT) meetings regarding GSP implementation efforts.
- Reviewed DWR GSP comments and related correspondence and discussed with DWR.
- Prepared for and met with DWR regarding comment letter.
- Corresponded with a Director regarding cannabis committee agreement.
- Coordinated and facilitated a technical review meeting regarding DWR comments.
- Correspondence with DWR regarding well installation and soil samples.
- Correspondence with DWR on AEM flight lines and reviewed revised flight lines.
- Discussed responses to DWR comments with legal counsel.



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- Coordinated with W&C regarding J. Caulfield flow meter questions.
- Coordinated with legal on management area strategy.
- Corresponded with a Director regarding meters and monitoring letter review with DWR.
- Corresponded with W&C and landowners on meter requirements and questions.
- Discussed stream gauge environmental documents with DWR staff.
- Scheduled Santa Barbara County Planning meeting regarding well permits.
- Corresponded with M. Klinchuch regarding groundswell technology firm.
- Discussed Groundwater Dependent Ecosystem and supporting studies with R. Shady.
- Reviewed cannabis guidelines.
- Discussed monitoring network issues, tasks, and strategies with W&C.
- Reviewed DWR TSS screens and mailed TSS lock to DWR staff.
- Prepared, processed and scanned monitoring agreements and requested transducers from J. Tung for TSS wells.
- Touched base with legal regarding Cuyama issues.
- Correspondence regarding County permitting.
- Set up DWR Tech call and distributed materials.
- Corresponded with landowners on meter certification inquiries and meter documentation.
- Corresponded with B. Glass of USGS regarding stream gauge work and environmental documents.
- Corresponded with W&C on Ventucopa issues regarding the DWR update letter.
- Touched base with M. Klinchuch regarding management area scope.
- Corresponded with P&P regarding June water level data.
- Corresponded with W&C on modeling and management area two-year criteria.
- Coordinated with P&P's T. Jeffcoach on monitoring network survey.
- Touched base with W&C regarding spring data QA/QC for DWR.

Task 3: Financial Information Coordination

- Billing, accounting, and administration.
- Developed monthly progress report.
- Reviewed and discussed grant invoices and documents with W&C staff.
- Developed financial reports for Board meeting.
- Close FY 20-21 and prepare for annual audit.

Task 4: Cuyama Basin GSA Outreach

- Coordinated with Santa Barbara County staff on request to meet with groundwater sustainability tracking firm.
- Corresponded with several cannabis industry representatives regarding potential water restrictions.
- Distributed media notice to the Board and SAC.
- Coordinated interview with Executive Director and research reporter and distributed printed article to the SAC/Board.
- Corresponded with SAC member on DWR letter process.
- Attended Santa Barbara County Emergency Office drought meeting.
- Coordinated with San Luis Obispo regarding new development policies.

Task 5: Groundwater Extraction Fee Funding Process and Administration

• Corresponded with landowners regarding groundwater extraction fees and funding requirements.



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- Developed and processed groundwater extraction fee invoice revisions and late payments invoices.
- Processed fee payments.
- Coordinated with legal and drafted documents for late fees on tax roll.
- Researched APN and acreage data to determine fees.
- Identify and communicate with potential landowner extractors.
- Follow-up with landowners on outstanding payments and notification of potential late fees.

Task 7: Support for CBGSA Response to DWR and Public Comments

- Prepared for DWR GSP review meeting.
- Corresponded with Chair Yurosek on DWR meeting.
- Reviewed Board presentation on the updated to DWR's consultation letter.
- Prepared meeting materials and agenda for tech review meeting and coordinated meeting schedule.
- Distributed DWR proposed slides to SAC.
- Coordinated a DWR meeting and followed up on task assignments.

DELIVERABLES AND COMPLETED TASKS

• Developed agendas, SAC and Board packet, and facilitated remote meetings.

PLANNED OBJECTIVES FOR NEXT REPORTING PERIOD

- Facilitate bi-weekly CBGSA program management team meetings.
- Facilitate bi-weekly grant administration update meetings.
- Submit response letter to DWR regarding potential corrective actions.

SIGNIFICANT ISSUES OR CHALLENGES (IF ANY) AND POTENTIAL RESOLUTIONS

• N/A

455 W. Fir Avenue (559) 449-2700 Fax (559) 449-2715



CBGSA Hallmark Group Attn: Taylor Blakslee 500 Capital Mall, Ste 2350 Sacramento, CA 95814

August 12, 2021 Project: No: Invoice No:

03616-20-002 86728

Project Name: CBGSA - Groundwater Quality Monitoring

Client Project #:

Phase T2 - \$113.00 – Correspondence with Admin on contact info. Tracking.

Phase T3 - \$495.00 – Summary memo review. Finalize report.

Professional Services from July 1, 2021 to July 31, 2021

Phase: Labor	T2	CBGSA Water Quality Measurements			
		Hours	Rate	Amount	
Assistant	Engineer	1.00	113.00	113.00	
	Totals	1.00		113.00	
	Total Labor				113.00
			Total this	Phase:	\$113.00
Phase:	T3	CBGSA Data Management and Repo	rting		
Labor					
		Hours	Rate	Amount	
Associate	e Engineer	.50	142.00	71.00	
Assistant	Engineer	4.00	106.00	424.00	
	Totals	4.50		495.00	
	Total Labor				495.00
			Total this	Phase:	\$495.00
			Total this	Invoice	\$608.00

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



CBGSA Hallmark Group Attn: Taylor Blakslee 500 Capital Mall, Ste 2350 Sacramento, CA 95814

August 12, 2021 Project: No: Invoice No:

03616-20-001 86727

Project Name: Cuyama Basin Groundwater Sustainability Agency Monitoring Network Setup and Data Collection Client Project #:

Phase CO – \$318.00 – Measurement coordination.

Phase MON – \$4,216.38 – Travel to job site. Review monthly monitoring schedules. Data collection. GW measurements, historical database updates. Data QA/QC.

Phase SUR - \$198.80 – Survey correspondence and scheduling. Review access agreements.

Phase:	СО	CBGSA Coordination		318 00	
Lubor			Total this Phase:	\$318.00	
Phase: Labor	MON	CBGSA Monthly Monitoring		3,945.90	
Reimbursable Expenses			270.48		
			Total this Phase:	\$4,216.38	
Phase: Labor	SUR	CBGSA Survey		198.80	
			Total this Phase:	\$198.80	
			Total this Invoice	\$4,733.18	

Professional Services from July 1, 2021 to July 31, 2021

4550 CALIFORNIA AVENUE, SECOND FLOOR BAKERSFIELD, CA 93309

Invoice No.

Client No.

Matter No.

Billing Attorney:

MAILING ADDRESS: P.O. BOX 11172 BAKERSFIELD, CA 93389-1172 (661) 395-1000 FAX (661) 326-0418 E-MAIL: accounting@kleinlaw.com

September 30, 2021

1182870

22930

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JDH

CUYAMA BASIN GROUNDWATER SUSTAINABILITY C/O HALLMARK GROUP ******EMAIL INVOICES*****

Klein DeNatale Goldner

ATTORNEYS AT LAW

INVOICE SUMMARY

For Professional Services Rendered for the Period Ending: September 20, 2021.

RE: CUYAMA BASIN GROUNDWATER SUSTAINABILITY GENERAL BUSINESS

Professional Services Costs Advanced	\$ 1,717.00 <u>\$.00</u>
TOTAL THIS INVOICE	\$ 1,717.00
Prior Balance	\$ 9,556.50
TOTAL BALANCE DUE	<u>\$ 11,273.50</u>

KLEIN DENATALE GOLDNER

Invoice No. 1182870

PROFESSIONAL SERVICES

September 30, 2021

Date	Init	Description	Hours	Amount
8/23/21	AND	REVIEWED DOCUMENTS PROVIDED BY VENTURA COUNTY ASSESSORS OFFICE; E-MAILED T. BLAKSLEE REGARDING SAME.	.20	46.00
8/23/21	JDH	TELEPHONE CONFERENCE WITH R. KUHS REGARDING ADJUDICATION STATUS.	.30	88.50
8/25/21	AND	REVIEWED AND REVISED RESPONSE TO DWR COMMENT LETTER ON GSP.	1.00	230.00
8/25/21	JDH	TELEPHONE CONFERENCE WITH J. BECK.	.20	59.00
8/26/21	JDH	TELEPHONE CONFERENCE WITH R. KUHS REGARDING ADJUDICATION.	.30	88.50
8/27/21	AND	RESEARCHED ADJUDICATION STATUTES; E-MAILED J. BECK AND T. BLAKSLEE REGARDING SAME.	.20	46.00
8/27/21	AND	RESEARCHED ENDORSED ADJUDICATION COMPLAINT; COMPARED COMPLAINTS ON FILE; E-MAILED T. BLAKSLEE REGARDING SAME.	.30	69.00
8/30/21	AND	TELEPHONE CALL WITH T. BLAKSLEE REGARDING AD HOC COMMITTEE TO MEET WITH DEPARTMENT OF WATER RESOURCES.	.20	46.00
8/30/21	AND	REVIEWED E-MAILS FROM J. HUGHES REGARDING AD HOC CONFLICT ISSUE; OFFICE CONFERENCE WITH J. HUGHES REGARDING SAME; E- MAILED T. BLAKSLEE REGARDING SAME.	.20	46.00
8/30/21	AND	TELEPHONE CALL WITH T. BLAKSLEE REGARDING AD HOC COMMITTEE TO MEET WITH DEPARTMENT OF WATER RESOURCES AND QUESTIONS TO ASK TO DWR; REVIEWED LIST OF EXISTING QUESTIONS.	.20	46.00
8/31/21	AND	REVIEWED CONTRACTS; RESEARCHED ADJUDICATION PROCEEDING STATUTES; E-MAILED T. BLAKSLEE AND J. BECK COMMENTS AND CONCERNS; TELEPHONE CALL WITH T. BLAKSLEE REGARDING SAME.	.80	184.00
9/10/21	AND	REVIEWED AGENDA AND ASSOCIATED DOCUMENTS; VIDEO CONFERENCE WITH DEPARTMENT OF WATER RESOURCES REGARDING ADJUDICATION AND STATUS OF GSP REVIEW.	1.80	414.00
9/20/21	JDH	CONFERENCE WITH J. BECK, T. BLAKSLEE, B. LIENDEN, AND A. DOMINGUEZ REGARDING MEETING WITH DWR; CONFERENCE WITH D. YUROSEK, J. BECK, T. BLAKSLEE, AND A. DOMINGUEZ REGARDING SAME.	1.20	354.00

TOTAL PROFESSIONAL SERVICES

\$ 1,717.00

SUMMARY OF PROFESSIONAL SERVICES

Name	Init	Rate	Hours	Total
DOMINGUEZ, ALEX	AND	230.00	4.90	1,127.00
HUGHES, JOSEPH	JDH	295.00	2.00	590.00
Total			6.90	\$ 1,717.00

TOTAL THIS INVOICE

\$ 1,717.00

Invoice No. 1182870

September 30, 2021

OUTSTANDING INVOICES

Invoice No.	Date	Invoice	Payments	Ending
		Total	Received	Balance
1179260	7/30/21	1,771.00	.00	1,771.00
1180680	8/31/21	7,785.50	.00	7,785.50
	PRIOR BA	LANCE		\$ 9,556.50
	Balance D	ue This Invoice		\$ 1,717.00
	TOTAL BA	ALANCE DUE		<u>\$ 11,273.50</u>

AGED ACCOUNTS RECEIVABLE

Current - 30	31 - 60	61 - 90	91 - 120	Over 120	Total
\$ 7,785.50	\$.00	\$ 1,771.00	\$.00	\$.00	\$ 9,556.50

4550 CALIFORNIA AVENUE, SECOND FLOOR BAKERSFIELD, CA 93309

Invoice No.

Client No.

Matter No.

Billing Attorney:

MAILING ADDRESS: P.O. BOX 11172 BAKERSFIELD, CA 93389-1172 (661) 395-1000 FAX (661) 326-0418 E-MAIL: accounting@kleinlaw.com

September 30, 2021

1182870

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JDH

CUYAMA BASIN GROUNDWATER SUSTAINABILITY C/O HALLMARK GROUP ******EMAIL INVOICES*****

Klein DeNatale Goldner

ATTORNEYS AT LAW

REMITTANCE

RE: CUYAMA BASIN GROUNDWATER SUSTAINABILITY GENERAL BUSINESS

BALANCE DUE THIS INVOICE	\$ 1,717.00
Prior Balance	\$ 9,556.50
TOTAL BALANCE DUE	<u>\$ 11,273.50</u>

All checks should be made payable to: (Please return this advice with payment.)	Klein, DeNatale, Goldner, Cooper, Rosenlieb & Kimball, LLP P.O. Box 11172 Bakersfield, CA 93389-1172
For payment by wire in USD:	Bank of America
(Please reference:	5021 California Avenue
Client-Matter No. 22930-001,	Bakersfield, CA 93309
Invoice No. 1182870)	Account No. 001499407875

We accept all major credit cards. If you wish to pay by credit card call Accounting at (661) 395-1000.

DUE UPON RECEIPT

FEDERAL I.D. No. 95-2298220

Thank you! Your business is greatly appreciated.

4550 CALIFORNIA AVENUE, SECOND FLOOR BAKERSFIELD, CA 93309

Invoice No.

Client No.

Matter No.

Billing Attorney:

MAILING ADDRESS: P.O. BOX 11172 BAKERSFIELD, CA 93389-1172 (661) 395-1000 FAX (661) 326-0418 E-MAIL: accounting@kleinlaw.com

August 31, 2021

1180680

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JDH

CUYAMA BASIN GROUNDWATER SUSTAINABILITY C/O HALLMARK GROUP ******EMAIL INVOICES*****

ATTORNEYS AT LAW

INVOICE SUMMARY

For Professional Services Rendered for the Period Ending: August 19, 2021.

RE: CUYAMA BASIN GROUNDWATER SUSTAINABILITY GENERAL BUSINESS

Professional Services Costs Advanced	\$ 7,636.00 \$ 149.50
TOTAL THIS INVOICE	\$ 7,785.50
Prior Balance	\$ 14,984.62
TOTAL BALANCE DUE	<u>\$ 22,770.12</u>



Invoice No. 1180680

PROFESSIONAL SERVICES

August 31, 2021

Date	Init	Description	Hours	Amount
7/20/21	AND	TELEPHONE CALL WITH T. BLAKSLEE REGARDING INFORMATION FOR COUNTY ASSESSORS OFFICES.	.20	46.00
7/22/21	AND	REVIEWED DATA FOR VENTURA COUNTY ASSESSOR; E-MAILED T. BLAKSLEE REGARDING BILLING CONTRACT FOR SANTA BARBARA COUNTY; E-MAILED VENTURA COUNTY WITH UPDATED DATA.	.20	46.00
7/22/21	JDH	TELEPHONE CONFERENCE WITH A. DOUD REGARDING DISTRICT ISSUES.	.40	118.00
7/23/21	AND	REVIEWED BILLING CONTRACT WITH SANTA BARBARA COUNTY FOR TAX DELINQUENCY COLLECTION; E-MAILED SANTA BARBARA COUNTY ASSESSOR'S OFFICE REGARDING SAME; TELEPHONE CALL WITH T. BLAKSLEE REGARDING SAME; REVISED DATA FOR VENTURA COUNTY; E- MAILED T. BLAKSLEE REGARDING SAME; E-MAILED VENTURA COUNTY ASSESSOR'S OFFICE REGARDING SAME.	.60	138.00
7/28/21	AND	RESEARCHED PROPOSITION 218 PROCESS; RESEARCHED EFFECTS OF AMENDED BOUNDARIES IN PROP 218 PROCESS; TELEPHONE CALL WITH T. BLAKSLEE REGARDING POTENTIAL PROPOSITION 218 ACTION.	2.50	575.00
8/02/21	AND	REVIEWED DELEGATION AGREEMENT AND REIMBURSEMENT PROCESS; RESEARCHED CLASSES OF FEE PAYERS UNDER PROP. 218.	.50	115.00
8/03/21	AND	VIDEO CONFERENCE WITH J. HUGHES, J. BECK, AND T. BLAKSLEE REGARDING UPCOMING BOARD MEETING.	1.20	276.00
8/03/21	JDH	CONFERENCE WITH J. BECK, T. BLAKSLEE, AND A. DOMINGUEZ REGARDING LEGAL ISSUES.	1.20	354.00
8/05/21	AND	REVIEWED UPDATED BILLING AGREEMENT AND BILLING CERTIFICATE FROM SANTA BARBARA COUNTY ASSESSOR'S OFFICE.	.20	46.00
8/05/21	AND	TELEPHONE CALL WITH T. BLAKSLEE REGARDING REVIEW OF DRAFT AGENDA, NO LEGAL CHALLENGES LETTER, PRE-BOARD MEETING WITH STAFF, AND SANTA BARBARA TAX ASSESSOR DOCUMENTS.	.20	46.00
8/05/21	AND	REVISED UPDATED BILLING AGREEMENT FROM SANTA BARBARA COUNTY ASSESSOR'S OFFICE; E-MAILED SANTA BARBARA COUNTY ASSESSOR'S OFFICE REGARDING SAME.	.50	115.00
8/05/21	AND	REVIEWED AGENDA PACKET; REVISED MEMORANDUM FROM T. BLAKSLEE; E-MAILED J. HUGHES REGARDING SAME.	.50	115.00
8/05/21	AND	REVIEWED NOTICES OF EXEMPTION FOR STREAM GAGES PROJECTS AND TRANSDUCER PROJECT; DRAFTED NO LEGAL CHALLENGES LETTER.	.70	161.00
8/05/21	AND	REVIEWED NOTICES OF EXEMPTION FOR STREAM GAGES PROJECTS AND TRANSDUCER PROJECT; DRAFTED NO LEGAL CHALLENGES LETTER; E- MAILED T. BLAKSLEE REGARDING SAME.	.30	69.00
8/06/21	AND	VIDEO CONFERENCE WITH J. HUGHES, D. YUROSEK, J. BECK AND T. BLAKSLEE REGARDING AUGUST BOARD MEETING.	.50	N/C
8/06/21	AND	REVISED SANTA BARBARA COUNTY BILLING AGREEMENT REGARDING DELINQUENT FEES; E-MAILED COUNTY ASSESSOR REGARDING SAME.	.30	69.00
8/06/21	AND	TELEPHONE CALL WITH T. BLAKSLEE REGARDING AGENDA LANGUAGE FOR AUGUST SAC MEETING AND BOARD MEETING.	.20	46.00
8/06/21	JDH	CONFERENCE WITH D. YUROSEK, J. BECK, T. BLAKSLEE, AND A. DOMINGUEZ.	.50	147.50
8/10/21	AND	TELEPHONE CALL WITH T. BLAKSLEE REGARDING SAC MEETING.	.20	46.00

KLEIN DENATALE GOLDNER

Invoice No. 1180680

August 31, 2021

Date	Init	Description	Hours	Amount
8/11/21	AND	REVIEWED SMALL PUMPER POLICY; REVIEWED ADAPTIVE MANAGEMENT POLICY; REVIEWED GSP; REVIEWED DWR GSP COMMENT LETTER; TELEPHONE CALL WITH T. BLAKSLEE REGARDING SAC MEETING.	.80	184.00
8/11/21	AND	ATTENDED SAC MEETING.	4.00	920.00
8/12/21	AND	VIDEO CONFERENCE WITH J. HUGHES, J. BECK, T. BLAKSLEE, D. YUROSEK, AND OTHERS REGARDING CUYAMA BASIN ADJUDICATION.	1.00	N/C
8/12/21	JDH	CONFERENCE WITH D. YUROSEK, D. CLIFFORD, M. VICKORY, J. BECK, T. BLAKSLEE, AND A. DOMINGUEZ REGARDING POTENTIAL LITIGATION.	1.00	295.00
8/13/21	AND	VIDEO CONFERENCE WITH J. HUGHES, J. BECK, AND T. BLAKSLEE REGARDING CUYAMA BASIN ADJUDICATION.	1.00	230.00
8/13/21	AND	VIDEO CONFERENCE WITH J. HUGHES, J.BECK, T. BLAKSLEE AND L. COMPTON REGARDING CUYAMA BASIN ADJUDICATION.	.40	N/C
8/13/21	AND	RESEARCHED CLOSED SESSION LANGUAGE REGARDING EXPOSURE TO LITIGATION; E-MAILED T. BLAKSLEE REGARDING SAME.	.20	46.00
8/13/21	JDH	CONFERENCE WITH J. BECK, T. BLAKSLEE, AND A. DOMINGUEZ.	1.00	295.00
8/13/21	JDH	CONFERENCE WITH L. COMPTON, J. BECK, T. BLAKSLEE, AND A. DOMINGUEZ.	.50	147.50
8/13/21	JDH	TELEPHONE CONFERENCE WITH R. KUHS; E-MAILED J. BECK AND T. BLAKSLEE REGARDING SAME.	.80	236.00
8/17/21	JDH	REVIEWED AND REPLIED TO E-MAIL FROM T. BLAKSLEE.	.20	59.00
8/18/21	AND	VIDEO CONFERENCE WITH J. HUGHES, J. BECK, T. BLAKSLEE REGARDING AGENDA FOR BOARD MEETING AND EFFECTS OF ADJUDICATION.	1.00	230.00
8/18/21	JDH	ATTENDED AUGUST REGULAR BOARD MEETING.	7.50	2,212.50
8/18/21	JDH	TELEPHONE CONFERENCE WITH J. BECK, T. BLAKSLEE, B. VAN LIENDEN, AND A. DOMINGUEZ REGARDING BOARD MEETING PREPARATION.	.70	206.50
8/19/21	AND	TELEPHONE CALL WITH T. BLAKSLEE REGARDING AD HOC COMMITTEE; E- MAILED J. HUGHES REGARDING SAME.	.20	46.00

TOTAL PROFESSIONAL SERVICES

\$ 7,636.00

SUMMARY OF PROFESSIONAL SERVICES

Name	Init	Rate	Hours	Total
DOMINGUEZ, ALEX	AND	230.00	15.50	3,565.00
HUGHES, JOSEPH	JDH	295.00	13.80	4,071.00
Total			29.30	\$ 7,636.00

Invoice No. 1180680

August 31, 2021

COSTS ADVANCED

 Date	Description	Amount
8/11/21	TRAVEL EXPENSES TRAVELED TO CUYAMA FOR CBGSA SAC MEETING.	74.75
 8/18/21	TRAVEL EXPENSES TRAVELED TO CUYAMA FOR CBGSA BOARD MEETING	74.75
	TOTAL COSTS ADVANCED	\$ 149.50
		¢ 7 705 50
	IUTAL INIS INVOICE	ͽ /,/85.50

Invoice No. 1180680

August 31, 2021

OUTSTANDING INVOICES

Invoice No.	Date	Invoice	Payments	Ending
		Total	Received	Balance
1174886	4/30/21	5,382.50	.00	5,382.50
1176416	5/28/21	5,532.62	.00	5,532.62
1177994	6/30/21	2,298.50	.00	2,298.50
1179260	7/30/21	1,771.00	.00	1,771.00
	PRIOR BA	LANCE		\$ 14,984.62
	Balance D	ue This Invoice		\$ 7,785.50
	TOTAL BA	ALANCE DUE		<u>\$ 22,770.12</u>

AGED ACCOUNTS RECEIVABLE

Total	Over 120	91 - 120	61 - 90	31 - 60	Current - 30
\$ 14,984.62	\$ 5,382.50	\$ 5,532.62	\$ 2,298.50	\$ 1,771.00	\$.00

4550 CALIFORNIA AVENUE, SECOND FLOOR BAKERSFIELD, CA 93309

Invoice No.

Client No.

Matter No.

Billing Attorney:

MAILING ADDRESS: P.O. BOX 11172 BAKERSFIELD, CA 93389-1172 (661) 395-1000 FAX (661) 326-0418 E-MAIL: accounting@kleinlaw.com

August 31, 2021

1180680

22930

001

JDH

CUYAMA BASIN GROUNDWATER SUSTAINABILITY C/O HALLMARK GROUP ******EMAIL INVOICES*****

Klein DeNatale Goldner

ATTORNEYS AT LAW

REMITTANCE

RE: CUYAMA BASIN GROUNDWATER SUSTAINABILITY GENERAL BUSINESS

BALANCE DUE THIS INVOICE	\$ 7,785.50
Prior Balance	\$ 14,984.62
TOTAL BALANCE DUE	<u>\$ 22,770.12</u>

All checks should be made payable to: (Please return this advice with payment.)	Klein, DeNatale, Goldner, Cooper, Rosenlieb & Kimball, LLP P.O. Box 11172 Bakersfield, CA 93389-1172
For payment by wire in USD: (Please reference: Client-Matter No. 22930-001, Invoice No. 1180680)	Bank of America 5021 California Avenue Bakersfield, CA 93309 Account No. 001499407875
	ABA No. 121000358

We accept all major credit cards. If you wish to pay by credit card call Accounting at (661) 395-1000.

DUE UPON RECEIPT

FEDERAL I.D. No. 95-2298220

Thank you! Your business is greatly appreciated.

4550 CALIFORNIA AVENUE, SECOND FLOOR BAKERSFIELD, CA 93309

Invoice No.

Client No.

Matter No.

Billing Attorney:

MAILING ADDRESS: P.O. BOX 11172 BAKERSFIELD, CA 93389-1172 (661) 395-1000 FAX (661) 326-0418 E-MAIL: accounting@kleinlaw.com

July 30, 2021

1179260

22930

001

JDH

CUYAMA BASIN GROUNDWATER SUSTAINABILITY C/O HALLMARK GROUP ******EMAIL INVOICES*****

INVOICE SUMMARY

For Professional Services Rendered for the Period Ending: July 19, 2021.

RE: CUYAMA BASIN GROUNDWATER SUSTAINABILITY GENERAL BUSINESS

Professional Services Costs Advanced	\$ 1,771.00 <u>\$.00</u>
TOTAL THIS INVOICE	\$ 1,771.00
Prior Balance	\$ 13,213.62
TOTAL BALANCE DUE	<u>\$ 14,984.62</u>



KLEIN DENATALE GOLDNER

Invoice No. 1179260

PROFESSIONAL SERVICES

July 30, 2021

Date	Init	Description	Hours	Amount
6/19/21	AND	REVIEWED SANTA BARBARA COUNTY AGREEMENT TO ADD DELINQUENT FEES TO TAX COLLECTOR'S ROLL AND ASSOCIATED ATTACHMENTS; RESEARCHED FILE CODES FOR COUNTY SUBMISSIONS; E-MAILED T. BLAKSLEE REGARDING SAME.	.50	115.00
6/21/21	AND	E-MAILED SANTA BARBARA TAX COLLECTOR'S OFFICE REGARDING ADDING DELINQUENT GROUNDWATER EXTRACTION FEES TO TAX COLLECTOR'S ROLE.	.20	46.00
6/28/21	AND	REVIEWED STATE WATER RESOURCES CONTROL BOARD DRAFT RESOLUTION ON RACISM AND WATER RIGHTS.	.20	46.00
6/28/21	AND	TELEPHONE CALL WITH T. BLAKSLEE REGARDING BROWN ACT AND IN- PERSON MEETINGS.	.10	23.00
6/29/21	AND	RESEARCHED BROWN ACT REGARDING SPECIAL MEETINGS; E-MAILED T. BLAKSLEE REGARDING SAME.	.30	69.00
7/01/21	AND	EXCHANGED E-MAILS WITH COUNTY TAX ASSESSOR REGARDING DELINQUENT GROUNDWATER EXTRACTION FEES; EXCHANGED E-MAILS WITH T. BLAKSLEE REGARDING SAME.	.20	46.00
7/02/21	AND	RESEARCH GSA ENFORCEMENT MECHANISMS FOR METER INSTALLMENT; REVIEWED AGENDAS MINUTES REGARDING METER INSTALLMENT POLICY.	1.00	230.00
7/02/21	AND	TELEPHONE CALL WITH T. BLAKSLEE REGARDING DELINQUENT GROUNDWATER EXTRACTION FEES ON COUNTY TAX ROLLS AND OTHER RESEARCH PROJECTS; REVIEWED COUNTY TAX ASSESSOR DISTRICT SUBMISSION PACKETS.	1.00	230.00
7/05/21	AND	COLLECTED AND REVIEWED GSA FORMATION DOCUMENTS AND FEE DOCUMENTS FOR SUBMISSION TO COUNTY TAX ASSESSORS OFFICE; E- MAILED T. BLAKSLEE REGARDING SAME.	1.50	345.00
7/06/21	AND	TELEPHONE CALL WITH T. BLAKSLEE REGARDING DOCUMENTS TO SUBMIT TO COUNTY TAX ASSESSORS.	.30	69.00
7/06/21	AND	TELEPHONE CALL WITH T. BLAKSLEE REGARDING DOCUMENTS TO SUBMIT TO COUNTY TAX ASSESSORS.	.20	46.00
7/06/21	AND	COLLECTED AND REVIEWED GSA FORMATION DOCUMENTS AND FEE DOCUMENTS FOR SUBMISSION TO COUNTY TAX ASSESSORS OFFICE; REVISED CERTIFICATES OF SECRETARY; E-MAILED COUNTY TAX ASSESSOR REQUIRED DOCUMENTS; TELEPHONE CALL WITH VENTURA COUNTY TAX ASSESSOR'S OFFICE REGARDING SAME.	1.30	299.00
7/13/21	AND	DRAFTED ADDITIONAL SECRETARY'S CERTIFICATE FOR DOCUMENTS SUBMITTED TO VENTURA COUNTY TAX ASSESSOR AS REQUESTED BY COUNTY.	.90	207.00

TOTAL PROFESSIONAL SERVICES

\$ 1,771.00

Invoice No. 1179260

July 30, 2021

SUMMARY OF PROFESSIONAL SERVICES

Name	Init	Rate	Hours	Total
DOMINGUEZ, ALEX	AND	230.00	7.70	1,771.00
Total			7.70	\$ 1,771.00

TOTAL THIS INVOICE

\$ 1,771.00

Invoice No. 1179260

July 30, 2021

OUTSTANDING INVOICES

Invoice No.	Date	Invoice	Payments	Ending
		Total	Received	Balance
1174886	4/30/21	5,382.50	.00	5,382.50
1176416	5/28/21	5,532.62	.00	5,532.62
1177994	6/30/21	2,298.50	.00	2,298.50
	PRIOR BA	LANCE		\$ 13,213.62
	Balance D	ue This Invoice		\$ 1,771.00
	TOTAL BA	ALANCE DUE		<u>\$ 14,984.62</u>

AGED ACCOUNTS RECEIVABLE

Current - 30	31 - 60	61 - 90	91 - 120	Over 120	Total
\$ 2,298.50	\$.00	\$ 10,915.12	\$.00	\$.00	\$ 13,213.62

4550 CALIFORNIA AVENUE, SECOND FLOOR BAKERSFIELD, CA 93309

Invoice No.

Client No.

Matter No.

Billing Attorney:

MAILING ADDRESS: P.O. BOX 11172 BAKERSFIELD, CA 93389-1172 (661) 395-1000 FAX (661) 326-0418 E-MAIL: accounting@kleinlaw.com

July 30, 2021

1179260

22930

001

JDH

CUYAMA BASIN GROUNDWATER SUSTAINABILITY C/O HALLMARK GROUP ******EMAIL INVOICES*****

Klein DeNatale Goldner

ATTORNEYS AT LAW

REMITTANCE

RE: CUYAMA BASIN GROUNDWATER SUSTAINABILITY GENERAL BUSINESS

BALANCE DUE THIS INVOICE	\$ 1,771.00
Prior Balance	<u>\$ 13,213.62</u>
TOTAL BALANCE DUE	<u>\$ 14,984.62</u>

All checks should be made payable to: (Please return this advice with payment.)	Klein, DeNatale, Goldner, Cooper, Rosenlieb & Kimball, LLP P.O. Box 11172 Bakersfield, CA 93389-1172
For payment by wire in USD: (Please reference: Client-Matter No. 22930-001, Invoice No. 1179260)	Bank of America 5021 California Avenue Bakersfield, CA 93309 Account No. 001499407875
	ABA No. 121000358

We accept all major credit cards. If you wish to pay by credit card call Accounting at (661) 395-1000.

DUE UPON RECEIPT

FEDERAL I.D. No. 95-2298220

Thank you! Your business is greatly appreciated.

			T-4-1 4	hia Dhana	¢ = 0 . 0.0
					30.00
	l otals	.50		58.00	50 00
O'Dell, De	bora	.50	116.00	58.00	
Project Assista	ant				
Professional Pers	onnel	Hours	Rate	Amount	
Phase	U15 Project Manag	jement (Cat 1 – Task	4)		
	Consultant 10tal		1.1 times Total fl	his Phase	\$15,175,96
012712021	INC.		A A 4im	10,000.00	11 044 40
Sub - Enginee	GSI WATER SOLUTIONS	GSI Inv 0747 00	2-20	10 858 60	
Consultant					
	Labor Total	11.00		0,201.00	3,231.50
Van Liend	en, Brian Totals	11.50 11.50	281.00	3,231.50 3 231 50	
Project Manag	er 2				
	OUUGI	Hours	Rate	Amount	
Profossional Para	oppol				
Phase	014 Surface Water	⁻ Monitoring Program	(Cat 1 – Task 3		
Professional Serv	ices for the period ending Sep	<u>tember 24, 2021</u>			
Project	0011078.01 CUYA	MA GSP			
Sacramento, CA 9	5815				
1901 Royal Oaks [, Drive, Suite 200				
Agency					
Executive Director	undwater Sustainability		Project No: Invoice No:	0011078.01 195898	
Jim Beck			October 14, 2	021	
CONTAIN		■■211274430 ■■ 2	427002390"		
		Electronic Trans	sfer:		
		TD BANK			
		Boston, MA 022	205-5008	F 207.774.6635	
	DRIVE RESULTS	PO Box 55008		T 207.774.2112	
	COMMITMENT & INTEGRITY	Remit to:		T 800.426.4262	

Phase

034

FY 20/21 DWR Grant Agreement Administration

						58
Project	0011078.01	CUYAMA GSP			Invoice	195898
Profession	nal Personnel					
			Hours	Rate	Amount	
Planne Me	er 1 eyer, Nolan t Managar 2		2.50	171.00	427.50	
Projec Va	an Lienden, Brian Totals		1.50 4.00	281.00	421.50 849.00	
	Labor Total				0.000	849.00
				Total thi	s Phase	\$849.00
Phase	039	FY 21/22 OUTREACH				
Professior	nal Personnel					
			Hours	Rate	Amount	
Graph	ics Manager		25	158 00	39 50	
10	Totals		.25	100.00	39.50	
	Labor Total					39.50
				Total thi	s Phase	\$39.50
Phase	040	FY 21/ 22 SUPPORT F	OR DWR TE	CHNICAL SUPF	 >	
Professior	nal Personnel					
			Hours	Rate	Amount	
Projec	t Manager 2					
Va	an Lienden, Brian		3.00	281.00	843.00	
	l otais		3.00		843.00	843.00
	Labor rotar			-		043.00
				l otal thi	s Phase	\$843.00
Phase	041	FY 21/22 GSP IMPLEN	IENTATION	SUPPORT		
Profession	nal Personnel					
Dianna			Hours	Rate	Amount	
Planne	eyer, Nolan er 3		14.75	171.00	2,522.25	
Eg Projec	ggleton, Charles t Engineer 1		78.50	224.00	17,584.00	
Ce Projec	eyhan, Mahmut t Manager 2		7.75	234.00	1,813.50	
Me	edlin, William		1.00	281.00	281.00	
Va	an Lienden, Brian		6.00	281.00	1,000.00	

Leader otal FY 21/22 CUYAN	6.50 3.00 117.50 IA BASIN MODEL	298.00 324.00 Total this	1,937.00 972.00 26,795.75 5 Phase	26,795.75 \$26,795.75	
Leader otal FY 21/22 CUYAM	6.50 3.00 117.50 IA BASIN MODEL	298.00 324.00 Total this	1,937.00 972.00 26,795.75 s Phase	26,795.75 \$26,795.75	
Leader otal FY 21/22 CUYAM	3.00 117.50 1A BASIN MODEL	324.00 Total this	972.00 26,795.75 s Phase	26,795.75 \$26,795.75	
otal FY 21/22 CUYAN	3.00 117.50 1A BASIN MODEL	324.00 Total this	972.00 26,795.75 s Phase	26,795.75 \$26,795.75	
otal FY 21/22 CUYAN	117.50 IA BASIN MODEL		26,795.75 s Phase	26,795.75 \$26,795.75	
otal FY 21/22 CUYAN	1A BASIN MODEL		s Phase	26,795.75 \$26,795.75	
FY 21/22 CUYAN	1A BASIN MODEL		s Phase	\$26,795.75	
FY 21/22 CUYAN	IA BASIN MODEL				
		REFINEMENT			
	Hours	Rate	Amount		
	3.00	234.00	702.00		
	3.00		702.00		
otal				702.00	
		Total this	s Phase	\$702.00	
		Total this	Invoice	\$44,463.21	
Date	Balance				
9/21/2021	32,994.88				
10/8/2021	49,521.28				
	82,516.16				
Current Fee 44,463,21	Previous Fee 3.078.688.85	Total 3.123.152.06			
	otal Date 9/21/2021 10/8/2021 Current Fee 44,463.21	3.00 3.00 3.00 Total Balance 9/21/2021 32,994.88 10/8/2021 49,521.28 82,516.16 Current Fee Previous Fee 44,463.21 3,078,688.85	3.00 234.00 3.00 Total this Date Balance 9/21/2021 32,994.88 10/8/2021 49,521.28 82,516.16 Current Fee Previous Fee Total 44,463.21 3,078,688.85 3,123,152.06	3.00 234.00 702.00 3.00 Total Total this Phase Total this Invoice Date Balance 9/21/2021 32,994.88 10/8/2021 49,521.28 82,516.16 State Current Fee Previous Fee Total 44,463.21 3,078,688.85 3,123,152.06	3.00 234.00 702.00 3.00 702.00 702.00 Total this Phase \$702.00 Total this Phase \$702.00 Total this Invoice \$44,463.21 Date Balance 9/21/2021 32,994.88 10/8/2021 32,994.88 82,516.16 Current Fee Previous Fee Total 44,463.21 3,078,688.85 3,123,152.06

Brian Van Lienden Project Manager Woodard & Curran



60

Cuyama Basin Groundwater Sustainability Plan Development

Subject:	September 2021 Progress Report
Prepared for:	Jim Beck, Executive Director, Cuyama Basin Groundwater Sustainability Agency (CBGSA)
Prepared by:	Micah Eggleton, Woodard & Curran
Reviewed by:	Brian Van Lienden, Woodard & Curran
Date:	October 13, 2021
Project No.:	0011078.01

This progress report summarizes the work performed and project status for the period of August 28, 2021 through September 24, 2021 on the Cuyama Basin Groundwater Sustainability Plan Development project. The work associated with this invoice was performed in accordance with our Consulting Services Agreement dated December 6, 2017, and with Task Order 5, issued by the CBGSA on June 6, 2018, Task Order 6, issued by the CBGSA on August 7, 2019, Task Order 7, issued by the CBGSA on December 4, 2019, and Task order 8, issued by the CBGSA on June 25, 2020. Task Order 8 was amended and Task Order 9 was issued by the CBGSA on May 5, 2021.

The progress report contains the following sections:

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

1 Work Performed

A summary of work performed on the project during the current reporting period is provided in Tables 1, 2, 3 and 4 below. Table 1 shows work performed under Task Orders 2 and 4, which include tasks identified in the Category 2 grant from the California Department of Water Resources (DWR). Table 2 shows work performed under Task Orders 3 and 5, which includes tasks identified in the Category 1 grant from DWR. Table 3 shows work performed under Task Order 7. Table 5 shows work under Task Order 8.

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 1: Initiate Work Plan for GSP and Stakeholder Engagement Strategy Development	 Task 1 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 1 is completed; no further work is anticipated
Task 2: Data Management System, Data Collection and Analysis, and Plan Review	 Task 2 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 2 is completed; no further work is anticipated
Task 3: Description of the Plan Area, Hydrogeologic Conceptual Model, and Groundwater Conditions	 Task 3 is completed; no work was undertaken on this task during this reporting period 	100%	Task 3 is completed; no further work is anticipated
Task 4: Basin Model and Water Budget	Task 4 is completed; no work was undertaken on this task during this reporting period	100%	• Task 4 is completed; no further work is anticipated
Task 5: Establish Basin Sustainability Criteria	 Task 5 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 5 is completed; no further work is anticipated
Task 6. Monitoring Networks	 Task 6 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 6 is completed; no further work is anticipated
Task 7: Projects and Actions for Sustainability Goals	 Task 7 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 7 is completed; no further work is anticipated
Task 8. GSP Implementation	 Task 8 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 8 is completed; no further work is anticipated

Table 1: Summary of Task/Deliverables Status for Category 2 Tasks (Task Orders 2 and 4)

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 9. GSP Development	 Task 9 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 9 is completed; no further work is anticipated
Task 10: Education, Outreach and Communication	 Task 10 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 10 is completed; no further work is anticipated
Task 11: Project Management	 Task 11 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 11 is completed; no further work is anticipated

Table 2: Summary of Task/Deliverables Status for Category 1 Tasks (Task Orders 3 and 5)

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 12: Groundwater Monitoring Well Network Expansion	• The final transducers were installed and the reporting to DWR was completed as part of the latest grant invoice.	100%	 Task 12 is completed; no further work is anticipated
Task 13: Evapotranspiration Evaluation for Cuyama Basin Region	 Task 13 is completed. No work was performed on Task 13 during this period. 	100%	 Task 13 is completed; no further work is anticipated
Task 14: Surface Water Monitoring Program	 Prepared tech memo and other documentation required by DWR grant. 	98%	 Final grant documentation will be performed through the end of September This task is expected to be completed in September 2021.
Task 15: Category 1 Project Management	Ongoing project management and grant administration activities	100%	Task 15 is completed; no further work is anticipated

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 16: Finalize GSP Development	 Task 16 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 16 is completed; no further work is anticipated
Task 17: Stakeholder & Board Engagement	 Task 17 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 17 is completed; no further work is anticipated.
Task 18: Outreach Support	 Task 18 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 18 is completed; no further work is anticipated.
Task 19: Support for DWR Technical Support Services	 Task 19 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 19 is completed; no further work is anticipated.
Task 20: Prepare SGM Planning Grant Application	 Task 20 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 20 is completed; no further work is anticipated
Task 21: Development of a CBGSA Fee Structure	• Task 21 is completed; no work was undertaken on this task during this reporting period	100%	 Task 21 is completed; no further work is anticipated

Table 4: Summary of Task/Deliverables Status for Task Order 7

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 22: Stakeholder & Board Engagement	• Task 22 is completed. No work was performed on Task 22 during this period.	100%	 Task 22 is completed; no further work is anticipated.
Task 23: Outreach Support	 Task 23 is completed. No work was performed on Task 23 during this period. 	100%	 Task 23 is completed; no further work is anticipated.

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 24: Support for DWR Technical Support Services	 Task 24 is completed. No work was performed on Task 24 during this period. 	100%	 Task 24 is completed; no further work is anticipated.
Task 25: Cuyama Basin GSP Implementation Support	• Task 25 is completed. No work was performed on Task 25 during this period.	100%	 Task 25 is completed; no further work is anticipated.
Task 26: Development of Management Area Policies and Guidelines	 Task 26 is completed. No work was performed on Task 26 during this period. 	100%	 Task 26 is completed; no further work is anticipated.
Task 27: Support for Determining a Funding Mechanism for FY 20-21	 Task 27 is completed. No work was performed on Task 27 during this period. 	100%	 Task 27 is completed; no further work is anticipated.

Table 5: Summary of Task/Deliverables Status for Task Order 8

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 28: FY21 Stakeholder & Board Engagement	 No work was performed on Task 28 during this period 	100%	 Task 28 is completed; no further work is anticipated
Task 29: FY21 Outreach Support	 Prepared final CBGSA Newsletter 	100%	 Task 29 is completed; no further work is anticipated
Task 30: FY21 Support for DWR Technical Support Services	 No work was performed on Task 30 during this period 	100%	 Task 30 is completed; no further work is anticipated

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 31: FY21 Cuyama Basin GSP Implementation Support	 No work was performed on Task 31 during this period 	100%	 Task 31 is completed; no further work is anticipated
Task 32: FY21 Development of Management Area Administration	 No work was performed on Task 32 during this period 	100%	 Task 36 is completed; no further work is anticipated
Task 33: FY21 Support for Determining a Funding Mechanism	 No work was performed on Task 33 during this period 	100%	 Task 36 is completed; no further work is anticipated
Task 34: FY21 DWR Grant Agreement Administration	 Ongoing grant agreement administration Grant scheduling and completion of grant invoice documents 	98%	 Continued grant agreement administration Task 34 will be completed once the final grant invoice is submitted in Q2 of FY 2021-22
Task 35: FY21 Preparation of Grant Application	 No work was performed on Task 35 during this period 	100%	 Task 35 is completed; no further work is anticipated
Task 36: FY21 Indirect and Induced Economic Impacts Analysis	 No work was performed on Task 36 during this period 	100%	 Task 36 is completed; no further work is anticipated
Task 37: FY21 Develop Strategy for Update/ Refinement of Cuyama Basin GW Model	 No work was performed on Task 37 during this period 	100%	 Task 37 is completed; no further work is anticipated

Table 6: Summary of Task/Deliverables Status for Task Order 9

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 38: FY22 Stakeholder & Board Engagement	Participation in adaptive management ad-hoc call	15%	 Participation in future ad-hoc calls Preparation for and participation in future CBGSA Board and SAC meetings
Task 39: FY22 Outreach Support	Ongoing stakeholder outreach activities related to GSP implementation	15%	Ongoing stakeholder outreach activities related to GSP implementation
Task 40: FY22 Support for DWR Technical Support Services	Coordination and technical input with DWR related to AEM survey	15%	 Continued support for TSS well installation Continued support for AEM survey
Task 41: FY22 Cuyama Basin GSP Implementation Support	 Monitoring implementation support and development of monitoring reporting documentation DMS updates and data integration Perform technical analyses and prepare draft tech memo for response to DWR comment letter on the GSP 	35%	 Continued monitoring implementation, DMS, DWR comment response and metering support Finalize tech memo in response to DWR comment letter
Task 42: FY22 Cuyama Basin Model Refinement	Performed QA/QC of model performance in Northwestern region	1%	 Perform data extension through WY 2020
Task 43: FY22 Perform Aquifer Testing	 No work was performed on Task 43 during this period 	0%	Identify locations for aquifer testing and monitoring
Task 44: FY22 Preparation of Grant Applications	 No work was performed on Task 44 during this period 	0%	Begin work on grant applications as directed by the CBGSA Board

2 Budget Status

Table 6 shows the percent spent for each task under Task Order 1. 100% of the available Task Order 1 budget has been expended (\$321,135.00 out of \$321,135).

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
1	\$ 35,768.00	\$ 35,755.53	\$-	\$ 35,755.53	\$ 12.47	100%
2	\$ 61,413.00	\$ 61,413.00	\$-	\$ 61,413.00	\$-	100%
3	\$ 45,766.00	\$ 45,766.00	\$-	\$ 45,766.00	\$-	100%
4	\$ 110,724.00	\$ 110,724.00	\$-	\$ 110,724.00	\$-	100%
5	\$-	\$-	\$-	\$-	\$-	n/a
6	\$-	\$-	\$-	\$-	\$-	n/a
7	\$ 12,120.00	\$ 12,120.00	\$-	\$ 12,120.00	\$-	100%
8	\$-	\$-	\$-	\$-	\$-	n/a
9	\$-	\$-	\$-	\$-	\$-	n/a
10	\$ 45,420.00	\$ 45,432.47	\$-	\$ 45,432.47	\$ (12.47)	100%
11	\$ 9,924.00	\$ 9,924.00	\$-	\$ 9,924.00	\$-	100%
Total	\$ 321,135.00	\$ 321,135.00	\$-	\$ 321,135.00	\$ -	100%

Table 6: Budget Status for Task Order 1

Table 7 shows the percent spent for each task under Task Order 2. 100% of the available Task Order 2 budget has been expended (\$399,469.00 out of \$399,469).

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
1	\$-	\$-	\$-	\$-	\$-	n/a
2	\$ 48,457.00	\$ 48,458.00	\$-	\$ 48,458.00	\$ (1.00)	100%
3	\$ 24,182.00	\$ 24,182.00	\$-	\$ 24,182.00	\$-	100%
4	\$ 103,880.00	\$ 103,880.00	\$-	\$ 103,880.00	\$-	100%
5	\$ 60,676.00	\$ 60,676.00	\$-	\$ 60,676.00	\$-	100%
6	\$ 65,256.00	\$ 65,255.00	\$-	\$ 65,255.00	\$ 1.00	100%
7	\$ 36,402.00	\$ 36,402.00	\$-	\$ 36,402.00	\$-	100%
8	\$-	\$-	\$-	\$-	\$-	n/a
9	\$-	\$-	\$-	\$-	\$-	n/a
10	\$ 45,420.00	\$ 45,420.00	\$ -	\$ 45,420.00	\$ -	100%
11	\$ 15,196.00	\$ 15,196.00	\$ -	\$ 15,196.00	\$ -	100%
Total	\$ 399,469.00	\$ 399,469.00	\$ -	\$ 399,469.00	\$ -	100%

Table 7: Budget Status for Task Order 2

Table 8 shows the percent spent for each task under Task Order 3. 100% of the available Task Order 3 budget has been expended (\$188,238.00 out of \$188,238).

Task	T	otal Budget	Spent Previously	Spent t	his Period	Total Spen Date	t to	Budge Remain	et ing	% Spent to Date
12	\$	53,244.00	\$ 53,244.00	\$	-	\$ 53,244	.00	\$	-	100%
13	\$	69,706.00	\$ 69,706.00	\$	-	\$ 69,706	.00	\$	-	100%
14	\$	53,342.00	\$ 53,342.00	\$	-	\$ 53,342	.00	\$	-	100%
15	\$	11,946.00	\$ 11,946.00	\$	-	\$ 11,946	.00	\$	-	100%
Total	\$	188,238.00	\$ 188,238.00	\$	-	\$ 188,238	.00	\$	-	100%

Table 8: Budget Status for Task Order 3

Table 9 shows the percent spent for each task under Task Order 4. 100% of the available Task Order 4 budget has been expended (\$764,394.14 out of \$764,396).

Task	Т	otal Budget	Р	Spent reviously	An Invo N	mount iced This Aonth	Т	otal Spent to Date] Re	Budget emaining	% Spent to Date
1	\$	-	\$	-	\$	-	\$	-	\$	-	n/a
2	\$	24,780.00	\$	24,793.50	\$	-	\$	24,793.50	\$	(13.50)	100%
3	\$	26,912.00	\$	26,894.00	\$	-	\$	26,894.00	\$	18.00	100%
4	\$	280,196.00	\$	280,190.26	\$	-	\$	280,190.26	\$	5.74	100%
5	\$	47,698.00	\$	47,641.88	\$	-	\$	47,641.88	\$	56.12	100%
6	\$	-	\$	-	\$	-	\$	-	\$	-	n/a
7	\$	117,010.00	\$	117,009.20	\$	-	\$	117,009.20	\$	0.80	100%
8	\$	69,780.00	\$	69,831.25	\$	-	\$	69,831.25	\$	(51.25)	100%
9	\$	91,132.00	\$	91,567.49	\$	-	\$	91,567.49	\$	(435.49)	100%
10	\$	70,236.00	\$	69,766.10	\$	-	\$	69,766.10	\$	469.90	100%
11	\$	36,652.00	\$	36,700.46	\$	-	\$	36,700.46	\$	(48.46)	100%
Total	\$	764,396.00	\$	764,394.14	\$	-	\$	764,394.14	\$	1.86	100%

Table 9: Budget Status for Task Order 4

Table 10 shows the percent spent for each task under Task Order 5 as of September 24, 2021. 92% of the available Task Order 5 budget has been expended (\$421,242.37 out of \$459,886).

Table 10: Budget Status for Task Order 5

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
12	\$196,208.00	\$195,786.23	\$0.00	\$195,786.23	\$421.77	100%
13	\$24,950.00	\$24,933.01	\$0.00	\$24,933.01	\$16.99	100%
14	\$204,906.00	\$152,384.82	\$15,175.96	\$167,560.78	\$37,345.22	82%
15	\$33,822.00	\$32,904.55	\$58.00	\$32,962.55	\$859.45	97%
Total	\$459,886.00	\$406,008.61	\$15,233.96	\$421,242.57	\$38,643.43	92%

Table 11 shows the percent spent for each task under Task Order 6. 96% of the available Task Order 6 budget has been expended (\$344,372.37 out of \$357,405). Work on Task Order 6 is completed.

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
16	\$195,658.00	\$195,630.29	\$0.00	\$195,630.29	\$27.71	100%
17	\$57,406.00	\$57,379.17	\$0.00	\$57,379.17	\$26.83	100%
18	\$12,901.00	\$12,929.91	\$0.00	\$12,929.91	(\$28.91)	100%
19	\$18,848.00	\$18,835.50	\$0.00	\$18,835.50	\$12.50	100%
20	\$40,032.00	\$40,007.00	\$0.00	\$40,007.00	\$25.00	100%
21	\$32,560.00	\$19,590.50	\$0.00	\$19,590.50	\$12,969.50	60%
Total	\$357,405.00	\$344,372.37	\$0.00	\$344,372.37	\$13,032.63	96%

Table 11: Budget Status for Task Order 6

Table 12 shows the percent spent for each task under Task Order 7. 59% of the available Task Order 7 budget has been expended (\$160,318.09 out of \$273,655.00). Work on Task Order 7 is completed.

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
22	\$29,262.00	\$8,736.00	\$0.00	\$8,736.00	\$20,526.00	30%
23	\$12,901.00	\$7,571.88	\$0.00	\$7,571.88	\$5,329.12	59%
24	\$18,848.00	\$15,301.46	\$0.00	\$15,301.46	\$3,546.54	81%
25	\$160,028.00	\$120,728.75	\$0.00	\$120,728.75	\$39,299.25	75%
26	\$49,608.00	\$4,977.00	\$0.00	\$4,977.00	\$44,631.00	10%
27	\$3,008.00	\$3,003.00	\$0.00	\$3,003.00	\$5.00	100%
Total	\$273,655.00	\$160,318.09	\$0.00	\$160,318.09	\$113,336.91	59%

Table 12: Budget Status for Task Order 7

Table 13 shows the percent spent for each task under Task Order 8 as of September 24, 2021. Note that the budget for Task 31 has been amended. 66% of the available Task Order 8 budget has been expended (\$448,959.31 out of \$683,291.00).

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
28	\$90,052.00	\$47,073.72	\$0.00	\$47,073.72	\$42,978.28	52%
29	\$18,057.00	\$15,064.92	\$0.00	\$15,064.92	\$2,992.08	83%
30	\$32,192.00	\$9,468.00	\$0.00	\$9,468.00	\$22,724.00	29%
31	\$273,926.00	\$170,469.50	\$0.00	\$170,469.50	\$103,456.50	62%
32	\$22,584.00	\$0.00	\$0.00	\$0.00	\$22,584.00	0%
33	\$25,076.00	\$0.00	\$0.00	\$0.00	\$25,076.00	0%
34	\$50,020.00	\$46,452.79	\$849.00	\$47,301.79	\$2,718.21	95%
35	\$40,400.00	\$40,294.75	\$0.00	\$40,294.75	\$105.25	100%
36	\$90,000.00	\$89,982.13	\$0.00	\$89,982.13	\$17.87	100%
37	\$40,984.00	\$29,304.50	\$0.00	\$29,304.50	\$11,679.50	72%
Total	\$683,291.00	\$448,110.31	\$849.00	\$448,959.31	\$234,331.69	66%

Table 13: Budget Status for Task Order 8

Table 14 shows the percent spent for each task under Task Order 9 as of September 24, 2021. Note that the budget for Task 31 has been amended. 11% of the available Task Order 9 budget has been expended (\$75,053.58 out of \$674,308.00).

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
38	\$108,084.00	\$11,257.08	\$0.00	\$11,257.08	\$96,826.92	10%
39	\$15,089.00	\$125.00	\$39.50	\$164.50	\$14,924.50	1%
40	\$16,520.00	\$763.50	\$843.00	\$1,606.50	\$14,913.50	10%
41	\$173,683.00	\$34,497.75	\$26,795.75	\$61,293.50	\$112,389.50	35%
42	\$179,120.00	\$0.00	\$702.00	\$702.00	\$178,418.00	0%
43	\$101,556.00	\$0.00	\$0.00	\$0.00	\$101,556.00	0%
44	\$80,256.00	\$0.00	\$0.00	\$0.00	\$80,256.00	0%
Total	\$674,308.00	\$46,643.33	\$28,380.25	\$75,023.58	\$599,284.42	11%

Table 14: Budget Status for Task Order 9

3 Schedule Status

The project is on schedule. Work authorized under Task Orders 1, 2, 3, 4, 6, and 7 are complete.

4 Outstanding Issues to be Coordinated

None



COMMITMENT & INTEGRITY DRIVE RESULTS **Remit to:** PO Box 55008 Boston, MA 02205-5008 T 800.426.4262 T 207.774.2112 F 207.774.6635

INVOICE

TD BANK Electronic Transfer: •:211274450 •: 2427662596**

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

 October 8, 2021

 Project No:
 0011078.01

 Invoice No:
 195760

Project 0011078.01 CUYAMA GSP

Professional Services for the period ending August 27, 2021

Phase 014 Surface Water Monitoring Program (Cat 1 – Task 3)

Professional Personnel

	Hours	Rate	Amount	
Software Engineer 1				
Rutaganira, Thierry	4.00	156.00	624.00	
Software Engineer 2				
Nguyen, John	2.00	175.00	350.00	
Project Manager 2				
Van Lienden, Brian	19.00	281.00	5,339.00	
Totals	25.00		6,313.00	
Labor Total				6,313.00
Consultant				
Sub - Consultant Miscellaneous				
8/27/2021 GSI WATER SOLUTIONS, INC.	O'Rourke, David		6,035.38	
Consultant Total		1.1 times	6,035.38	6,638.92
		Total this Phase		\$12,951.92
Phase 029 FY 20/21 Outrea	ach			
Consultant				
Sub - Consultant Miscellaneous				

	Consultant Total	1.1 011165	2,212.30	2,433.55
8/27/2021 THE CATALYST GROUP		2,212.30		2 133 53

Phase

034

FY 20/21 DWR Grant Agreement Administration
Project	001107	8.01	CUYAMA GSP			Invoice	195760
Profession	al Personn	el					
				Hours	Rate	Amount	
Planne	r 1						
Me	yer, Nolan			2.25	171.00	384.75	
Project	Manager 2						
Va	n Lienden,	Brian		1.50	281.00	421.50	
		Totals		3.75		806.25	
		Labor Total					806.25
					Total th	is Phase	\$806.25
^o hase	03	8 F	Y 21/22 STAKE	HOLDER/BOARD	ENGAGEMEN	 r	
Profession	al Personn	el					
				Hours	Rate	Amount	
Proiect	Manager 2					<i>i</i> ount	
Va	n Lienden.	Brian		16.00	281.00	4,496.00	
Senior	Technical F	Practice Leader				.,	
Та	ghavi, Ali			7.00	324.00	2,268.00	
		Totals		23.00		6,764.00	
		Labor Total					6,764.00
Reimbursa	ble						
Vehicle	Expenses						
8/18	3/2021	Van Lienden, E	Brian	Participation in Cl meeting	3GSA Board	56.07	
8/19	9/2021	Van Lienden, E	Brian	Participation in Cl meeting	3GSA Board	126.46	
8/19	9/2021	Van Lienden, E	Brian	Participation in Cl meeting	BGSA Board	54.13	
Travel	& Lodging						
8/18	3/2021	Van Lienden, E	Brian	Participation in Cl meeting	BGSA Board	117.89	
8/18	3/2021	Van Lienden, E	3rian	Participation in Cl meeting	3GSA Board	12.02	
Meals							
8/19	9/2021	Van Lienden, E	3rian	Participation in Cl meeting	BGSA Board	13.96	
		Reimbursable	Total		1.1 times	380.53	418.58
					Total th	is Phase	\$7,182.58

Phase

FY 21/22 OUTREACH

Project	0011078.01	CUYAMA GSP			Invoice	195760
Professior	nal Personnel					
			Hours	Rate	Amount	
Graphi	ic Artist					
Fo	ox, Adam		1.00	125.00	125.00	
	Totals		1.00		125.00	
	Labor To	tal				125.00
				Total this	s Phase	\$125.00
Phase	041	FY 21/22 GSP IMPLE	MENTATION S			

Professional Personnel

	Hours	Rate	Amount	
Planner 1				
Meyer, Nolan	15.00	171.00	2,565.00	
Planner 3				
Eggleton, Charles	57.50	224.00	12,880.00	
Software Engineer 1				
Aquino, Justin	2.00	156.00	312.00	
Project Engineer 1				
Ceyhan, Mahmut	13.50	234.00	3,159.00	
Project Manager 2				
Medlin, William	5.00	281.00	1,405.00	
Van Lienden, Brian	10.00	281.00	2,810.00	
Scientist 2				
Heaton, Christian	4.00	198.00	792.00	
Senior Project Assistant				
Hughart, Desiree	1.00	136.00	136.00	
Senior Project Manager				
Long, Jeanna	.50	298.00	149.00	
Senior Technical Manager				
Sturn, Richard	5.00	298.00	1,490.00	
Senior Technical Practice Leader				
Taghavi, Ali	1.00	324.00	324.00	
Totals	114.50		26,022.00	
Labor Total				26,022.00
		Total th	is Phase	\$26,022.00
		Total this	s Invoice	\$49,521.28
tstanding Invoices				

Number	Date	Balance
195022	9/21/2021	32,994.88
Total		32,994.88

Project	0011078.01	CUYAMA GSI	Ρ		Invoice	195760	
		Current Fee	Previous Fee	Total			
Project Sum	mary	49,521.28	3,029,167.57	3,078,688.85			

Approved by:

Ballahid

Brian Van Lienden Project Manager Woodard & Curran



55 SW Yamhill Street, Suite 300 Portland, OR 97204 P: 503.239.8799 accounting@gsiws.com www.gsiws.com

Brian Van Lienden, PE Woodard & Curran, Inc. 1545 River Park Drive, Suite 425 Sacramento, CA 95815 September 8, 2021 Invoice No: 0747.002 - 19

Project	0747.002	Groundwater and Surface Water Monitoring Tasks
Activities this	s Billing Period:	

- Communications with client and USGS regarding stream gauge installation and monitoring well network.
- Observation and supervision of USGS staff during installation of stream gauges at Ventucopa and Spanish Ranch sites.

Professional Services from Augu	st 1, 2021 to August	<u>51, 2021</u>			
Task .004	Stream Gage Installa	ation			
Labor					
		Hours	Rate	Amount	
Supervising Hydrogeologist					
O'Rourke, David		26.00	221.00	5,746.00	
Administrative Assistant					
Mackey, Emily		.25	98.00	24.50	
Totals		26.25		5,770.50	
Total Labor					5,770.50
Reimbursable Expenses					
Mileage				240.80	
Total Reim	oursables		1.1 times	s 240.80	264.88
			Tota	al this Task	\$6,035.38
Project Summary	Current	Period Pi	rior Periods	Invoiced to Date	
Project Summary Total Billings	Current	Period Pi 035.38	rior Periods 54,136.39	Invoiced to Date 60,171.77	
Project Summary Total Billings Authorized Budget	Current 6,	Period P 035.38	rior Periods 54,136.39	Invoiced to Date 60,171.77 81,300.00	
Project Summary Total Billings Authorized Budget Budget Remaining	Current 6,	Period Pi 035.38	rior Periods 54,136.39	Invoiced to Date 60,171.77 81,300.00 21,128.23	
Project Summary Total Billings Authorized Budget Budget Remaining	Current 6,	Period Pi 035.38	rior Periods 54,136.39 Total t	Invoiced to Date 60,171.77 81,300.00 21,128.23 his Invoice	\$6,035.38
Project Summary Total Billings Authorized Budget Budget Remaining Outstanding Invoices	Current 6,	Period Pi 035.38	rior Periods 54,136.39 Total t	Invoiced to Date 60,171.77 81,300.00 21,128.23 his Invoice	\$6,035.38
Project Summary Total Billings Authorized Budget Budget Remaining Outstanding Invoices Number	Current 6, Date	Period Pi 035.38 Balance	rior Periods 54,136.39 Total t	Invoiced to Date 60,171.77 81,300.00 21,128.23 his Invoice	<u>\$6,035.38</u>
Project Summary Total Billings Authorized Budget Budget Remaining Outstanding Invoices Number 17	Current 6, Date 5/6/2021	Period Pi 035.38 Balance 4,489.50	rior Periods 54,136.39 Total t	Invoiced to Date 60,171.77 81,300.00 21,128.23 his Invoice	\$6,035.38
Project Summary Total Billings Authorized Budget Budget Remaining Outstanding Invoices Number 17 18	Current 6, Date 5/6/2021 7/8/2021	Period Pr 035.38 Balance 4,489.50 928.00	rior Periods 54,136.39 Total t	Invoiced to Date 60,171.77 81,300.00 21,128.23 his Invoice	<u>\$6,035.38</u>

The Catalyst Group, Inc. 25 Brushwood Lane Greenbrae, CA 94904

⁷⁷ Invoice

Date	Invoice #		
9/8/2021	584		

Bill To

Woodard & Curran Brian Van Lienden 1545 River Park Drive, Suite 425 Sacramento, CA 95815

			Project #		Project	
					Cuyama GSP	
Date	Item		Description	Quantity	Rate	Amount
8/2/2021	Task 10-Gardiner	Newslett	er, scheduling	0.5	205.00	102.50
8/11/2021	Task 10-Gardiner	Worksho	p planning call	0.5	205.00	102.50
8/12/2021	Task 10-Gardiner	Newslette	er distribution	0.5	205.00	102.50
8/18/2021	Task 10-Gardiner	Newslett	er distribution	1	205.00	205.00
8/5/2021	Task 10-Pope	Newslett	er research	0.75	160.00	120.00
8/8/2021	Task 10-Pope	SAC mee	eting notes	0.75	160.00	120.00
8/9/2021	Task 10-Pope	Newslett	er edits, translation	0.75	160.00	120.00
8/11/2021	Task 10-Pope	Worksho SAC pac	p planning call, revised ket	1.5	160.00	240.00
8/12/2021	Task 10-Pope	Newslett	er posting	0.75	160.00	120.00
8/15/2021	Task 10-Pope	Board pa	cket	0.75	160.00	120.00
8/16/2021	Task 10-Pope	Newslett	er	0.25	160.00	40.00
8/18/2021	Task 10-Pope	Board me	eeting	2.5	160.00	400.00
	Reimh Groun					
8/12/2021	Renno Group	Newslett	er Translation		321.64	321.64
8/18/2021		Newslett	er Fnglish & Spanish		98.16	98.16
0,10,2021		Total Rei	mbursable Expenses		>0.10	419.80
		100001000	incursuere zinpenses			
Job Tota	I Balance	•	\$6,656.59	Total		\$2,212.30
				Current	Due	\$2,212.30

Please remit to:

Invoice



International Effectiveness Center 21 Tamal Vista Blvd. - Suite 234 Corte Madera, CA 94925 - (800) 292-9246

Client: The Catalyst Group	Account #	Date Ordered:	8/9/2021
Contact: Aaron Pope		Date Requested by:	8/12/2021
The Catalyst Group	Job Delivery:	Client Job #	
The Cataryst Gloup	Date: 8/12/2021	P.O. #	
Bill To:	Method: email	Cost Center:	
		Terms: Upon Receipt	t
	Invoice Amou	nt: \$321.64	

Description: CBGSA Newsletter Edition 8-Final Enlgish revised

Task # Task Type	Language Source to Translation	Unit	Qty	Rate	Total Charge
1 Translation	English to Spanish	Words	1729	\$0.16	\$276.64
2 Desktop P	Publish	English t	o Spanish	Hours	0.75
				\$60.00	\$45.00
					\$321.64

78



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8/18/2021 5:16:05 PB PST Team Nember: Crista! G. Customer: CHARLES GARDINER

SALE

*

ShipTo: Martha Ypea 4689 Highway 166, Unit B New Cuyama, CA 93254

FedEx Tracking #: 27020659L

Total-Shipments

rEditim8-Fial	0t M	M.M
BW 2S 32t 11x17 000223 Reg. Price	50 0 0.88	0.8800 T
Fold Per Sheet	2 0	0.0300 T
Folding Setup Fee 0003T4 Res. Price	0.03 10 1.49	1.4900 T
Priceperpiece RegularTotal Discounts	0.91 45.55 0.00	
etter Edition 8 - Fi	Oty 50	45.M
BW 2S 32* 11x17	50 0	0.8800 T
Fold Per Sheet	20	0.0300 T
Foldin0 \$etup Fee	0.03 10	1.4900 T
000374Res.Price	1.49	
Price per piece Reeu1ar Tota1 Discounts	0.91 45.SS 0.00	
DeliYezy	QtY1	0.0
Delivery 002922 Reg. Price	10 0.00	0.0000 N
Price per piece Regular Total Discounts	0.00 0.00 0.00	
Sub-Total Tax		91.10 7.06
Deposit		98.16

98.16

Total Tender	0.00
Change Due	0.00

Total 9Jscaxits 0.tXI



Tell us how we're doing and receive A5 off your next A30 pFint Order fedex.com/welisten or 1-800-398-0242 Offer Code: ____Offer expires 12/31/2021

Get your message out in a blg way with everything from fu1J-co1or banners to photo-4uallt(posters yard signs,



MonthlyProgressReport-August2021

To: Brian Van Lienden

From: Aaron Pope

Date: September 8, 2021

Re: August 2021 Progress Report

The following summarizes the Catalyst activities for the Cuyama Groundwater Sustainability Plan for the month of August 2021.

Work Completed

- Distributed newsletter.
- Reviewed project documents.
- Attended project meeting to discuss landowner workshop.
- Attended August 18 Board meeting.

Work Planned for Next Month

• Plan public workshop.

Issues for Resolution

• None.

The Catalyst Group, Inc.

Woodard & Curran Project Manager:

Original Contract Amount (Task Order 1)

Task Order 2 Task Order 3 Task Order 4 Task Order 5

Task Order 6



Billing Summary

Cuyama GSP Brian Van Lienden

> \$32,000.00 \$49,575.00 \$50,000.00 \$61,291.00 \$13,500.00 \$16,939.00

Invoices						Payments			
Date	No.	Task 1	Task 10	Expenses	Total	Date	Amount	Owed	
1/7/2018	272	\$820.00	\$0.00	\$0.00	\$820.00	2/23/2018	\$820.00		\$0.00
2/9/2018	277	\$13,648.75	\$0.00	\$0.00	\$13,648.75	3/16/2018	\$13,648.75		\$0.00
3/3/2018	286	\$13,665.00	\$0.00	\$937.45	\$14,602.45	5/29/2018	\$14,602.45		\$0.00
4/6/2018	295	\$0.00	\$14,937.50	\$1,562.13	\$16,499.63	7/31/2018	\$16,499.63		\$0.00
5/6/2018	301	\$0.00	\$6 <i>,</i> 273.75	\$843.51	\$7,117.26	7/31/2018	\$7,117.26		\$0.00
6/7/2018	309	\$0.00	\$8,055.00	\$891.59	\$8,946.59	10/7/2019	\$8,946.59		\$0.00
7/3/2018	323	\$0.00	\$11,526.25	\$1,072.29	\$12,598.54	9/3/2019	\$12,598.54		\$0.00
8/5/2018	327	\$0.00	\$8,492.50	\$1,223.19	\$9,715.69	9/3/2019	\$9,715.69		\$0.00
9/3/2018	335	\$0.00	\$8,201.25	\$1,272.19	\$9,473.44	9/3/2019	\$9,473.44		\$0.00
10/4/2018	348	\$0.00	\$6,720.00	\$921.02	\$7,641.02	9/3/2019	\$7,641.02		\$0.00
11/5/2018	356	\$0.00	\$6,655.00	\$961.91	\$7,616.91	9/3/2019	\$7,616.91		\$0.00
12/9/2018	367	\$0.00	\$7,822.40	\$1,866.84	\$9,689.24	9/3/2019	\$9,689.24		\$0.00
1/7/2019	372	\$0.00	\$4,688.75	\$494.97	\$5,183.72	9/3/2019	\$5,183.72		\$0.00
2/4/2019	380	\$0.00	\$10,682.50	\$1,381.18	\$12,063.68	9/3/2019	\$12,063.68		\$0.00
3/1/2019	387	\$0.00	\$7,807.50	\$1,556.60	\$9,364.10	9/3/2019	\$9,364.10		\$0.00
4/1/2019	393	\$0.00	\$9,907.50	\$1,175.45	\$11,082.95	9/3/2019	\$11,082.95		\$0.00
5/6/2019	399	\$0.00	\$11,702.50	\$1,754.76	\$13,457.26	9/3/2019	\$13,457.26		\$0.00
6/6/2019	409	\$0.00	\$8,063.75	\$620.72	\$8,684.47	1/28/2020	\$8,684.47		\$0.00
7/2/2019	413	\$0.00	\$3,448.75	\$0.00	\$3,448.75	1/28/2020	\$3,448.75		\$0.00
8/6/2019	420	\$0.00	\$4,116.25	\$460.47	\$4,576.72	1/28/2020	\$4,576.72		\$0.00
9/9/2019	426	\$0.00	\$1,828.75	\$544.14	\$2,372.89	1/28/2020	\$2,372.89		\$0.00
10/4/2019	434	\$0.00	\$1,595.00	\$0.00	\$1,595.00	1/28/2020	\$1,595.00		\$0.00
11/5/2019	440	\$0.00	\$1,697.10	\$634.22	\$2,331.32	2/18/2020	\$2,331.32		\$0.00
12/6/2019	451	\$0.00	\$1,875.00	\$505.76	\$2,380.76	3/11/2020	\$2,380.76		\$0.00
3/5/2020	473	\$0.00	\$371.25	\$0.00	\$371.25	4/10/2020	\$371.25		\$0.00
4/3/2020	474	\$0.00	\$412.50	\$0.00	\$412.50	5/8/2020	\$412.50		\$0.00
5/2/2020	480	\$0.00	\$1,926.25	\$0.00	\$1,926.25	11/10/2020	\$1,926.25		\$0.00
6/2/2020	485	\$0.00	\$1,223.75	\$223.84	\$1,447.59	7/12/2020	\$1,447.59		\$0.00
7/1/2020	490	\$0.00	\$792.50	\$40.71	\$833.21	8/10/2020	\$833.21		\$0.00
9/10/2020	500	\$0.00	\$123.75	\$0.00	\$123.75	12/15/2020	\$123.75		\$0.00
11/4/2020	511	\$0.00	\$1,122.50	\$0.00	\$1,122.50	2/9/2021	\$1,122.50		\$0.00
12/3/2020	517	\$0.00	\$410.00	\$177.70	\$587.70	2/9/2021	\$587.70		\$0.00
2/2/2021	529	\$0.00	\$885.00	\$0.00	\$885.00	3/2/2021	\$885.00		\$0.00
3/3/2021	537	\$0.00	\$582.50	\$0.00	\$582.50	3/29/2021	\$582.50		\$0.00
5/4/2021	546	\$0.00	\$1,307.50	\$0.00	\$1,307.50			\$1,3	307.50
6/2/2021	556	\$0.00	\$2,033.75	\$0.00	\$2,033.75			\$2,0	033.75
7/8/2021	570	\$0.00	\$400.00	\$0.00	\$400.00			\$4	400.00
8/5/2021	575	\$0.00	\$953.75	\$0.00	\$953.75			\$9	953.75
9/8/2021	584	\$0.00	\$1,792.50	\$419.80	\$2,212.30			\$2,2	212.30
Totals		\$28,133.75	\$160,434.50	\$21,542.44	\$210,110.69				
Current Due					\$2,212.30	Rem	aining Owed	\$6,9	907.30
Total Budget					\$223,305				
Remaining Budget					\$13,194.31				

RANIA OIL 09491671 15060 ROGERS RD PATTERSON , CA 08/18/2021 926975753 10:43:19 AM XXXX XXXX XXXX 4762 VISA INVOICE 103946 AUTH 00-02224D REF0818103946100 *** REPRINT *** REPRINT *** REPRINT PUMP# 2 REGULAR 12.191G PRICE/GAL \$4.599 FUEL TOTAL \$ 56.07 *** REPRINT *** REPRINT *** REPRINT *** CREDIT \$ 56.07

VISA CREDIT AID: A000000031010 TC: ACOAF4BE294DA642 COMPLETION Entry: CHIP Batch: 19 Seq Num: 25 Term ID: 2 ZIP ENTERED Workstation ID: 00 Tell us about your visit for a chance to win a gas gift card! Gasfeedback.com

Brian Van Lienden

From:	Customerservice@enterprise.com
Sent:	Thursday, August 19, 2021 2:56 PM
To:	Brian Van Lienden
Subject:	ENTERPRISE RENTAL AGREEMENT 462CVJ

ENTERPRISE RENT-A-CAR COMPANY OF SACRAMENTO, 928 MAIN ST, WOODLAND, CA 956953529 (530) 668-9900

RENTAL AGREEMENT 775557	REF# 462CVJ	SUMMARY OF CHARGES					
RENTER		Charge Description	Date	Quantity	Per	Rate	Total
VANLIENDEN, BRIAN		TIME & DISTANCE	08/17 - 08/19	2	DAY	\$57.00	\$114.00
DATE & TIME OUT					Subtotal:		\$114.00
08/17/2021 03:57 PM		Taxes & Surcharges					
DATE & TIME IN		SALES TAX	08/17 - 08/19			8%	\$9.12
08/19/2021 02:54 PM		VEHICLE LICENSE RECOVERY FEE	08/17 - 08/19	2	DAY	\$1.67	\$3.34
				Total	Charges:		\$126.46
BILLING CYCLE		Bill-To /Deposits					
24-HOUR		DEPOSITS					(\$126.46)
VEH #1 2021 KIA SPO	R 4LX2						
VIN# KNDPM3AC5M78	68831	Total Amount Due					\$0.00
LIC# 484N47							
MILES DRIVEN 6	547	PAYMENT INFORMATION					
		AMOUNT PAID	TYPE		CREDIT CA	RD NUMBER	2
RATE SOURCE ACCOUN	ЛТ	\$126.46	Visa		*****	xx4762	
WOODARD & CURRAN -	BUSINESS USE						

J S T LLC 00010186898 25203 W DORRIS ST COALINGA , CA 08/19/2021 221654044

XXXX XXXX XXXX 4762 VISA INVOICE 103735 AUTH 00-25468D REF0819103735753

PUMP# 9 REGULAR 11.6446 PRICE/GAL \$4.649 FUEL TIJTAL \$?4.1.8

CREDIT \$ 54.13

TC: 3A60F2E32BAEB5 COMPLETION

Term ID: {

Workstation ID: 88

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COMPLETE A SURVE

Kettleman City Inn & Suites 33410 POWERS DR PO Box 539 KETTLEMAN CITY, CA 93239

00/10/2021 04-10 414



00/ 19 / 2021 04.	I 9 AIVI				
Loyalty Club:	60066	537597523596	PLATINUM	Room #	109-A
Reg1stered To:				Conf # Arrivat Departure	917720333-01 08/ 18/21 08/19/21
VANLIENDEN, BRIA 1329 COX DR Y/OODLAND, CA 9 UNITED STATES	AN 25776			Room Type Guests	KNS-1 KING NON-SMO! 1 <i>1</i> 0
(207) 874-7400				Payment Acct	Visa / Master XXXX-XXXX-XXXX-4762
Posting Date	e Oper	AcctCode	Description	m Reference	Amount_
08/18/21	Gaby	RC	ROOMCHRG REVENUE		f117.89
08/18/21	Gaby	9	SALES TAX		t11.79
08/18/21	Gaby	TT	Tourism Tax		\$0.23
08/19/21	ANNA	VS	PAYMENT VISA/MC	47ô2 - 83252D	(129.91)

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

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GUESTDGNATURE

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COMMITMENT & INTEGRITY DRIVE RESULTS

Remit to: PO Box 55008 Boston, MA 02205-5008 T 800.426.4262 T 207.774.2112 F 207.774.6635

TD BANK **Electronic Transfer:** L211274450 L2427662596

86 INVOICE

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

014

028

September 21, 2021 Project No: 0011078.01 Invoice No: 195022

Project 0011078.01 CUYAMA GSP

Professional Services for the period ending July 30, 2021

Phase

Surface Water Monitoring Program (Cat 1 – Task 3)

Professional F	Personnel
----------------	-----------

	Hours	Rate	Amount	
Software Engineer 2				
Nguyen, John	16.00	175.00	2,800.00	
Project Manager 2				
Van Lienden, Brian	1.00	281.00	281.00	
Senior Project Manager				
Long, Jeanna	.50	298.00	149.00	
Senior Technical Manager				
Sturn, Richard	11.00	298.00	3,278.00	
Totals	28.50		6,508.00	
Labor Total				6,508.00
		Total thi	is Phase	\$6,508.00

FY 20/21 Stakeholder/Board Engagement

Professional Personnel

			Hours	Rate	Amount	
Project N	Manager 2					
Van	Lienden, Brian		2.00	281.00	562.00	
	Totals		2.00		562.00	
Labor Total					562.00	
				Total this	s Phase	\$562.00
Phase	029	FY 20/21 Outreach				



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TD BANK Electronic Transfer: 1:211274450 1: 2427662596"

Project	0011078.01	CUYAMA GS	SP.		Invoice	195022
Professiona	al Personnel					
			Hours	Rate	Amount	
Graphic	c Artist					
Fox	k, Adam		.50	125.00	62.50	
Project	Manager 2					
Var	n Lienden, Brian		1.50	281.00	421.50	
	lotals		2.00		484.00	
	Labor Total					484.00
Consultant						
Sub - E	ngineering					
7/30	/2021 THE CATAL	YST GROUP	Catalyst Inv #575		953.75	
	Consultant	Total		1.1 times	953.75	1,049.13
				Total this	Phaso	\$1 533 13
				i otai tiiis	i nuse	ψ1,000.10
Phase	 	EY 20/21 Supp	ort for DWR Technical	Support Service		
Thase	000	1 1 20/21 Oupp			5	
Professiona	al Personnel					
110103310110			Hours	Pata	Amount	
Senior I	Project Manager		nours	Nale	Amount	
Stra	andhera James		4 00	298.00	1 192 00	
018	Totals		4.00	230.00	1,192.00	
	l abor Total		4.00		1,152.00	1,192,00
				Total this	Phase	\$1,192.00
Phase	031	FY 20/21 GSP	Implementation Suppo	ort		
Professiona	al Personnel					
			Hours	Rate	Amount	
Planner	3					
Egg	gleton, Charles		10.00	224.00	2,240.00	
Project	Engineer 1					
Cey	yhan, Mahmut		3.50	234.00	819.00	
Project	Manager 2					
Var	n Lienden, Brian		11.50	281.00	3,231.50	
Senior F	Project Assistant			100.05		
	ghart, Desiree		1.00	136.00	136.00	
Hug			26.00		6,426.50	
Huç	l otais					A 1AA = 4
Ηυς	Labor Total					6,426.50

COMMITMENT & INTEGRITY DRIVE RESULTS



Remit to: PO Box 55008 Boston, MA 02205-5008 T 800.426.4262 T 207.774.2112 F 207.774.6635 ⁸⁸ INVOICE

TD BANK Electronic Transfer: 1:211274450 1: 2427662596"

Project 0111078.01 CUYAMA GSP Invoice 19502 trofessional Personnel Hours Rate Amount 19502 Planner 1 5.50 171.00 940.50 940.50 Planner 3 .25 224.00 56.00 940.50 Project Manager 2 .25 1.839.50 1.839.50 1.839.50 Van Lindon, Brian 3.00 281.00 843.00 1.839.50 Labor Total 1.839.50 1.839.50 1.839.50 Project Manager 2 1.839.50 1.839.50 1.839.50 Professional Personnel 1.839.50 1.820.00 1.620.00 Total brian 5.00 324.00 1.620.00 1.620.00 Totals 5.00 324.00 1.620.00 1.620.00 Labor Total 1.620.00 1.620.00 1.620.00 1.620.00 Total brian 1.4.50 281.00 4.074.50 4.074.50 Labor Total 1.4.50 281.00 4.074.50 4.074.50 Total bris Ph				■Z11Z/443U	L42/002090		
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Planner 3 Martine, Lindsay Project Manager 2 Van Lienden, Brian 25 224.00 56.00 Totals 8.75 1,839.50 Labor Total 1,839.50 Labor Total 1,839.50 Project Manager 2 1,839.50 Labor Total 1,839.50 Labor Total 1,839.50 Professional Personnel Hours Rate Senior Technical Practice Leader 5.00 324.00 1,620.00 Totals 5.00 324.00 1,620.00 Labor Total 5.00 324.00 1,620.00 Labor Total 5.00 1,620.00 1,620.00 Totals 5.00 1,620.00 1,620.00 Labor Total 1,620.00 1,620.00 1,620.00 Labor Total 1,620.00 1,620.00 1,620.00 Project Manager 2 1,50 281.00 4,074.50 Van Lienden, Brian 14.50 281.00 4,074.50 Labor Total 4,074.50 4,074.50 Project Manager 2 2.00 171.00 342.00 Project Manager 2 2.00 171.0	Meyer,	Nolan		5.50	171.00	940.50	
Martien, Lindsay .25 224.00 56.00 Project Mianager 2 3.00 281.00 843.00 Totals 8.75 1,839.50 Labor Total 1,839.50 Labor Total 1,839.50 Totals Phase \$1,839.51 Olspan="2">Olspan="2"Olspa	Planner 3						
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Van Lienden, Brian 3.00 281.00 843.00 Totals 8.75 1,839.50 Labor Total 1,839.50 Total this Phase \$1,839.50 "hase 037 FY 20/21 Develop Strategy for Update/Refinement of Cuyama Basin GW Model Professional Personnel Hours Rate Amount Senior Technical Practice Leader 5.00 324.00 1,620.00 Totals 5.00 324.00 1,620.00 Labor Total 5.00 324.00 1,620.00 Labor Total 5.00 1,620.00 1,620.00 Labor Total 5.00 1,620.00 1,620.00 Hase 038 FY 21/22 STAKEHOLDER/BOARD ENGAGEMENT 1,620.00 Project Manager 2 Hours Rate Amount Van Lienden, Brian 14.50 4,074.50 4,074.50 Totals 14.50 4,074.50 4,074.50 Hase 040 FY 21/22 SUPPORT FOR DWR TECHNICAL SUPP Frofessional Personnel Engineer 1 Barrera Lopez, Nery 2.00	Project Mar	nager 2					
Iddas 8.75 1,839.50 1,839.50 Labor Total Total this Phase \$1,839.50 These 037 FY 20/21 Develop Strategy for Update/Refinement of Cuyama Basin GW Model Phase 037 FY 20/21 Develop Strategy for Update/Refinement of Cuyama Basin GW Model Professional Personnel Hours Rate Amount Senior Technical Practice Leader 5.00 324.00 1,620.00 Totals 5.00 324.00 1,620.00 Labor Total 5.00 1,620.00 1,620.00 Labor Total 5.00 324.00 1,620.00 1,620.00 Labor Total 5.00 324.00 1,620.00 1,620.00 Project Manager 2 Van Lienden, Brian 14.50 281.00 4,074.50 Van Lienden, Brian 14.50 281.00 4,074.50 4,074.50 Project Manager 2 Van Lienden, Brian 14.50 200 4,074.50 Project Manager 2 Van Lienden, Brian 1.50 281.00 4,074.50 Professional Personnel Hours	Van Lie	enden, Brian		3.00	281.00	843.00	
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Cuyama Basin Groundwater Sustainability Plan Development

Subject:	July 2021 Progress Report
Prepared for:	Jim Beck, Executive Director, Cuyama Basin Groundwater Sustainability Agency (CBGSA)
Prepared by:	Micah Eggleton, Woodard & Curran
Reviewed by:	Brian Van Lienden, Woodard & Curran
Date:	October 5, 2021
Project No.:	0011078.01

This progress report summarizes the work performed and project status for the period of June 26, 2021 through July 30, 2021 on the Cuyama Basin Groundwater Sustainability Plan Development project. The work associated with this invoice was performed in accordance with our Consulting Services Agreement dated December 6, 2017, and with Task Order 5, issued by the CBGSA on June 6, 2018, Task Order 6, issued by the CBGSA on August 7, 2019, Task Order 7, issued by the CBGSA on December 4, 2019, and Task order 8, issued by the CBGSA on June 25, 2020. Task Order 8 was amended and Task Order 9 was issued by the CBGSA on May 5, 2021.

The progress report contains the following sections:

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

1 Work Performed

A summary of work performed on the project during the current reporting period is provided in Tables 1, 2, 3 and 4 below. Table 1 shows work performed under Task Orders 2 and 4, which include tasks identified in the Category 2 grant from the California Department of Water Resources (DWR). Table 2 shows work performed under Task Orders 3 and 5, which includes tasks identified in the Category 1 grant from DWR. Table 3 shows work performed under Task Order 7. Table 5 shows work under Task Order 8.

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 1: Initiate Work Plan for GSP and Stakeholder Engagement Strategy Development	 Task 1 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 1 is completed; no further work is anticipated
Task 2: Data Management System, Data Collection and Analysis, and Plan Review	 Task 2 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 2 is completed; no further work is anticipated
Task 3: Description of the Plan Area, Hydrogeologic Conceptual Model, and Groundwater Conditions	 Task 3 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 3 is completed; no further work is anticipated
Task 4: Basin Model and Water Budget	 Task 4 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 4 is completed; no further work is anticipated
Task 5: Establish Basin Sustainability Criteria	 Task 5 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 5 is completed; no further work is anticipated
Task 6. Monitoring Networks	 Task 6 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 6 is completed; no further work is anticipated
Task 7: Projects and Actions for Sustainability Goals	 Task 7 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 7 is completed; no further work is anticipated
Task 8. GSP Implementation	Task 8 is completed; no work was undertaken on this task during this reporting period	100%	Task 8 is completed; no further work is anticipated

Tabla 1. Summan	v of Tack (Dalivarable	a Status for Catagor	2 Tacks	Tack Orders 2 and 4	١
Table 1: Summary	y of Task/Deliverable	es Status for Category	y z Tasks (Task Orders Z and 4	•

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 9. GSP Development	 Task 9 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 9 is completed; no further work is anticipated
Task 10: Education, Outreach and Communication	 Task 10 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 10 is completed; no further work is anticipated
Task 11: Project Management	 Task 11 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 11 is completed; no further work is anticipated

Table 2: Summary of Task/Deliverables Status for Category 1 Tasks (Task Orders 3 and 5)

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 12: Groundwater Monitoring Well Network Expansion	• The final transducers were installed and the reporting to DWR was completed as part of the latest grant invoice.	100%	 Task 12 is completed; no further work is anticipated
Task 13: Evapotranspiration Evaluation for Cuyama Basin Region	 Task 13 is completed. No work was performed on Task 13 during this period. 	100%	 Task 13 is completed; no further work is anticipated
Task 14: Surface Water Monitoring Program	 Worked with USGS to prepare documentation and agreements for gage installation Integration of monitoring enhancements into Data Management System 	80%	 Continued USGS coordination activities This task is expected to be completed during Q1 of FY 2021-22.
Task 15: Category 1 Project Management	 Ongoing project management and grant administration activities 	99%	Ongoing project management and grant administration activities

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 16: Finalize GSP Development	• Task 16 is completed; no work was undertaken on this task during this reporting period	100%	 Task 16 is completed; no further work is anticipated
Task 17: Stakeholder & Board Engagement	 Task 17 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 17 is completed; no further work is anticipated.
Task 18: Outreach Support	Task 18 is completed; no work was undertaken on this task during this reporting period	100%	Task 18 is completed; no further work is anticipated.
Task 19: Support for DWR Technical Support Services	 Task 19 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 19 is completed; no further work is anticipated.
Task 20: Prepare SGM Planning Grant Application	 Task 20 is completed; no work was undertaken on this task during this reporting period 	100%	 Task 20 is completed; no further work is anticipated
Task 21: Development of a CBGSA Fee Structure	• Task 21 is completed; no work was undertaken on this task during this reporting period	100%	Task 21 is completed; no further work is anticipated

Table 4: Summary of Task/Deliverables Status for Task Order 7

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 22: Stakeholder & Board Engagement	• Task 22 is completed. No work was performed on Task 22 during this period.	100%	 Task 22 is completed; no further work is anticipated.
Task 23: Outreach Support	• Task 23 is completed. No work was performed on Task 23 during this period.	100%	 Task 23 is completed; no further work is anticipated.

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 24: Support for DWR Technical Support Services	 Task 24 is completed. No work was performed on Task 24 during this period. 	100%	 Task 24 is completed; no further work is anticipated.
Task 25: Cuyama Basin GSP Implementation Support	 Task 25 is completed. No work was performed on Task 25 during this period. 	100%	 Task 25 is completed; no further work is anticipated.
Task 26: Development of Management Area Policies and Guidelines	 Task 26 is completed. No work was performed on Task 26 during this period. 	100%	 Task 26 is completed; no further work is anticipated.
Task 27: Support for Determining a Funding Mechanism for FY 20-21	 Task 27 is completed. No work was performed on Task 27 during this period. 	100%	 Task 27 is completed; no further work is anticipated.

Table 5: Summary of Task/Deliverables Status for Task Order 8

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 28: FY21 Stakeholder & Board Engagement	 Preparation for upcoming adhoc calls Prepare CBGSA Newsletter 	90%	Finalized the CBGSA newsletter
Task 29: FY21 Outreach Support	 Ongoing stakeholder outreach activities related to GSP implementation 	100%	 Task 29 is completed; no further work is anticipated
Task 30: FY21 Support for DWR Technical Support Services	 Coordination and technical input with DWR related to TSS well installation 	100%	 Task 30 is completed; no further work is anticipated

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 31: FY21 Cuyama Basin GSP Implementation Support	 Monitoring implementation support and development of monitoring reporting documentation DMS updates and data integration 	100%	 Task 31 is completed; no further work is anticipated
	Review and discussion related to DWR comment letter		
Task 32: FY21 Development of Management Area Administration	 No work was performed on Task 32 during this period 	100%	 Task 36 is completed; no further work is anticipated
Task 33: FY21 Support for Determining a Funding Mechanism	 No work was performed on Task 33 during this period 	100%	 Task 36 is completed; no further work is anticipated
Task 34: FY21 DWR Grant Agreement Administration	 Ongoing grant agreement administration Grant scheduling 	95%	 Continued grant agreement administration Task 34 will be completed once the final grant invoice is submitted in Q2 of FY 2021-22
Task 35: FY21 Preparation of Grant Application	 No work was performed on Task 35 during this period 	100%	Task 35 is completed; no further work is anticipated
Task 36: FY21 Indirect and Induced Economic Impacts Analysis	 No work was performed on Task 36 during this period 	100%	 Task 36 is completed; no further work is anticipated

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 37: FY21	 Planning activities related to 		Task 37 is completed; no
Develop	model update tasks		further work is anticipated
Strategy for			
Update/		100%	
Refinement of			
Cuyama Basin			
GW Model			

Table 6: Summary of Task/Deliverables Status for Task Order 9

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 38: FY22 Stakeholder & Board Engagement	 Participation in adaptive management ad-hoc call Prepare materials for August SAC and Board meetings 	5%	 Participation in future ad-hoc calls Preparation for and participation in future CBGSA Board and SAC meetings
Task 39: FY22 Outreach Support	Ongoing stakeholder outreach activities related to GSP implementation	7%	 Ongoing stakeholder outreach activities related to GSP implementation
Task 40: FY22 Support for DWR Technical Support Services	 Coordination and technical input with DWR related to TSS well installation Provide support to DWR on AEM survey 	5%	 Continued support for TSS well installation Continued support for AEM survey
Task 41: FY22 Cuyama Basin GSP Implementation Support	 Monitoring implementation support and development of monitoring reporting documentation DMS updates and data integration Review and discussion related to DWR comment letter 	5%	Continued monitoring implementation, DMS, DWR comment response and metering support
Task 42: FY22 Cuyama Basin Model Refinement	 No work was performed on Task 42 during this period 	0%	 Perform data extension through WY 2020

Task	Work Completed During the Reporting Period	Percent Complete	Work Scheduled for Next Period
Task 43: FY22 Perform Aquifer Testing	 No work was performed on Task 43 during this period 	0%	 Identify locations for aquifer testing andmonitoring
Task 44: FY22 Preparation of Grant Applications	 No work was performed on Task 44 during this period 	0%	 Begin work on grant applications as directed by the CBGSA Board

2 Budget Status

Table 6 shows the percent spent for each task under Task Order 1. 100% of the available Task Order 1 budget has been expended (\$321,135.00 out of \$321,135).

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
1	\$ 35,768.00	\$ 35,755.53	\$-	\$ 35,755.53	\$ 12.47	100%
2	\$ 61,413.00	\$ 61,413.00	\$-	\$ 61,413.00	\$-	100%
3	\$ 45,766.00	\$ 45,766.00	\$-	\$ 45,766.00	\$-	100%
4	\$ 110,724.00	\$ 110,724.00	\$-	\$ 110,724.00	\$-	100%
5	\$-	\$-	\$-	\$-	\$-	n/a
6	\$-	\$-	\$-	\$-	\$-	n/a
7	\$ 12,120.00	\$ 12,120.00	\$-	\$ 12,120.00	\$-	100%
8	\$-	\$-	\$-	\$-	\$-	n/a
9	\$-	\$-	\$-	\$-	\$-	n/a
10	\$ 45,420.00	\$ 45,432.47	\$-	\$ 45,432.47	\$ (12.47)	100%
11	\$ 9,924.00	\$ 9,924.00	\$-	\$ 9,924.00	\$-	100%
Total	\$ 321,135.00	\$ 321,135.00	\$ -	\$ 321,135.00	\$ -	100%

Table 6: Budget Status for Task Order 1

Table 7 shows the percent spent for each task under Task Order 2. 100% of the available Task Order 2 budget has been expended (\$399,469.00 out of \$399,469).

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
1	\$-	\$-	\$-	\$-	\$-	n/a
2	\$ 48,457.00	\$ 48,458.00	\$-	\$ 48,458.00	\$ (1.00)	100%
3	\$ 24,182.00	\$ 24,182.00	\$-	\$ 24,182.00	\$-	100%
4	\$ 103,880.00	\$ 103,880.00	\$-	\$ 103,880.00	\$-	100%
5	\$ 60,676.00	\$ 60,676.00	\$ -	\$ 60,676.00	\$-	100%
6	\$ 65,256.00	\$ 65,255.00	\$ ·	\$ 65,255.00	\$ 1.00	100%
7	\$ 36,402.00	\$ 36,402.00	\$-	\$ 36,402.00	\$-	100%
8	\$-	\$-	\$-	\$-	\$-	n/a
9	\$-	\$-	\$-	\$-	\$-	n/a
10	\$ 45,420.00	\$ 45,420.00	\$-	\$ 45,420.00	\$ -	100%
11	\$ 15,196.00	\$ 15,196.00	\$-	\$ 15,196.00	\$ -	100%
Total	\$ 399,469.00	\$ 399,469.00	\$-	\$ 399,469.00	\$ -	100%

Table 7: Budget Status for Task Order 2

Table 8 shows the percent spent for each task under Task Order 3. 100% of the available Task Order 3 budget has been expended (\$188,238.00 out of \$188,238).

Task	T	otal Budget	Spent Previously	Spent t	his Period	Total Spen Date	t to	Budge Remain	et ing	% Spent to Date
12	\$	53,244.00	\$ 53,244.00	\$	-	\$ 53,244.	.00	\$	-	100%
13	\$	69,706.00	\$ 69,706.00	\$	-	\$ 69,706.	.00	\$	-	100%
14	\$	53,342.00	\$ 53,342.00	\$	-	\$ 53,342.	.00	\$	-	100%
15	\$	11,946.00	\$ 11,946.00	\$	-	\$ 11,946.	.00	\$	-	100%
Total	\$	188,238.00	\$ 188,238.00	\$	-	\$ 188,238.	00	\$	-	100%

Table 8: Budget Status for Task Order 3

Table 9 shows the percent spent for each task under Task Order 4. 100% of the available Task Order 4 budget has been expended (\$764,394.14 out of \$764,396).

Task	T	otal Budget	P	Spent reviously	Aı Invo N	mount iced This Ionth	Т	otal Spent to Date] Re	Budget maining	% Spent to Date
1	\$	-	\$	-	\$	-	\$	-	\$	-	n/a
2	\$	24,780.00	\$	24,793.50	\$	-	\$	24,793.50	\$	(13.50)	100%
3	\$	26,912.00	\$	26,894.00	\$	-	\$	26,894.00	\$	18.00	100%
4	\$	280,196.00	\$	280,190.26	\$	-	\$	280,190.26	\$	5.74	100%
5	\$	47,698.00	\$	47,641.88	\$	-	\$	47,641.88	\$	56.12	100%
6	\$	-	\$	-	\$	-	\$	-	\$	-	n/a
7	\$	117,010.00	\$	117,009.20	\$	-	\$	117,009.20	\$	0.80	100%
8	\$	69,780.00	\$	69,831.25	\$	-	\$	69,831.25	\$	(51.25)	100%
9	\$	91,132.00	\$	91,567.49	\$	-	\$	91,567.49	\$	(435.49)	100%
10	\$	70,236.00	\$	69,766.10	\$	-	\$	69,766.10	\$	469.90	100%
11	\$	36,652.00	\$	36,700.46	\$	-	\$	36,700.46	\$	(48.46)	100%
Total	\$	764,396.00	\$	764,394.14	\$	-	\$	764,394.14	\$	1.86	100%

Table 9:	Budget	Status	for	Task	Order	4
						-

Table 10 shows the percent spent for each task under Task Order 5 as of July 30, 2021. 85% of the available Task Order 5 budget has been expended (\$393,056.69 out of \$459,886).

Table 10: Budget Status for Task Order 5

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
12	\$196,208.00	\$195,786.23	\$0.00	\$195,786.23	\$421.77	100%
13	\$24,950.00	\$24,933.01	\$0.00	\$24,933.01	\$16.99	100%
14	\$204,906.00	\$132,924.90	\$6,508.00	\$139,432.90	\$65,473.10	68%
15	\$33,822.00	\$32,904.55	\$0.00	\$32,904.55	\$917.45	97%
Total	\$459,886.00	\$386,548.69	\$6,508.00	\$393,056.69	\$66,829.31	85%

Table 11 shows the percent spent for each task under Task Order 6. 96% of the available Task Order 6 budget has been expended (\$344,372.37 out of \$357,405). Work on Task Order 6 is completed.

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
16	\$195,658.00	\$195,630.29	\$0.00	\$195,630.29	\$27.71	100%
17	\$57,406.00	\$57,379.17	\$0.00	\$57,379.17	\$26.83	100%
18	\$12,901.00	\$12,929.91	\$0.00	\$12,929.91	(\$28.91)	100%
19	\$18,848.00	\$18,835.50	\$0.00	\$18,835.50	\$12.50	100%
20	\$40,032.00	\$40,007.00	\$0.00	\$40,007.00	\$25.00	100%
21	\$32,560.00	\$19,590.50	\$0.00	\$19,590.50	\$12,969.50	60%
Total	\$357,405.00	\$344,372.37	\$0.00	\$344,372.37	\$13,032.63	96%

Table 11: Budget Status for Task Order 6

Table 12 shows the percent spent for each task under Task Order 7. 59% of the available Task Order 7 budget has been expended (\$160,318.09 out of \$273,655.00). Work on Task Order 7 is completed.

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
22	\$29,262.00	\$8,736.00	\$0.00	\$8,736.00	\$20,526.00	30%
23	\$12,901.00	\$7,571.88	\$0.00	\$7,571.88	\$5,329.12	59%
24	\$18,848.00	\$15,301.46	\$0.00	\$15,301.46	\$3,546.54	81%
25	\$160,028.00	\$120,728.75	\$0.00	\$120,728.75	\$39,299.25	75%
26	\$49,608.00	\$4,977.00	\$0.00	\$4,977.00	\$44,631.00	10%
27	\$3,008.00	\$3,003.00	\$0.00	\$3,003.00	\$5.00	100%
Total	\$273,655.00	\$160,318.09	\$0.00	\$160,318.09	\$113,336.91	59%

Table 12: Budget Status for Task Order 7

Table 13 shows the percent spent for each task under Task Order 8 as of July 30, 2021. Note that the budget for Task 31 has been amended. 65% of the available Task Order 8 budget has been expended (\$447,304.06 out of \$683,291.00).

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
28	\$90,052.00	\$46,511.72	\$562.00	\$47,073.72	\$42,978.28	52%
29	\$18,057.00	\$13,531.79	\$1,533.13	\$15,064.92	\$2,992.08	83%
30	\$32,192.00	\$8,276.00	\$1,192.00	\$9,468.00	\$22,724.00	29%
31	\$273,926.00	\$164,043.00	\$6,426.50	\$170,469.50	\$103,456.50	62%
32	\$22,584.00	\$0.00	\$0.00	\$0.00	\$22,584.00	0%
33	\$25,076.00	\$0.00	\$0.00	\$0.00	\$25,076.00	0%
34	\$50,020.00	\$43,807.04	\$1,839.50	\$45,646.54	\$4,373.46	91%
35	\$40,400.00	\$40,294.75	\$0.00	\$40,294.75	\$105.25	100%
36	\$90,000.00	\$89,982.13	\$0.00	\$89,982.13	\$17.87	100%
37	\$40,984.00	\$27,684.50	\$1,620.00	\$29,304.50	\$11,679.50	72%
Total	\$683,291.00	\$434,130.93	\$13,173.13	\$447,304.06	\$235,986.94	65%

Table 13: Budget Status for Task Order 8

Table 14 shows the percent spent for each task under Task Order 9 as of July 30, 2021. Note that the budget for Task 31 has been amended. 2% of the available Task Order 9 budget has been expended (\$13,313.75 out of \$674,308.00).

Task	Total Budget	Spent Previously	Spent this Period	Total Spent to Date	Budget Remaining	% Spent to Date
38	\$108,084.00	\$0.00	\$4,074.50	\$4,074.50	\$104,009.50	4%
39	\$15,089.00	\$0.00	\$0.00	\$0.00	\$15,089.00	0%
40	\$16,520.00	\$0.00	\$763.50	\$763.50	\$15,756.50	5%
41	\$173,683.00	\$0.00	\$8,475.75	\$8,475.75	\$165,207.25	5%
42	\$179,120.00	\$0.00	\$0.00	\$0.00	\$179,120.00	0%
43	\$101,556.00	\$0.00	\$0.00	\$0.00	\$101,556.00	0%
44	\$80,256.00	\$0.00	\$0.00	\$0.00	\$80,256.00	0%
Total	\$674,308.00	\$0.00	\$13,313.75	\$13,313.75	\$660,994.25	2%

3 Schedule Status

The project is on schedule. Work authorized under Task Orders 1, 2, 3, 4, 6, and 7 are complete.

4 Outstanding Issues to be Coordinated

None

DANIELLS PHILLIPS VAUGHAN & BOCK

CPAs & Advisors 300 New Stine Road Bakersfield, CA 93309 (661) 834-7411 Federal Tax ID. No. 95-2972229

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

Invoice No. 121849 Date 09/30/2021 Client No. 02114

-- FINANCIAL REPORTING SERVICES --

Progress billing for work to date in connection with audit for the year ended June 30, 2021;

\$ 3,000.00

Make all checks payable to **DANIELLS PHILLIPS VAUGHAN & BOCK** Pay by card online at **https://www.dpvb.com/online-payment/**

All Accounts are due and payable upon receipt of invoice. A finance charge of 1% (12% apr) will be charged on past due accounts. Thank you.

DANIELLS PHILLIPS VAUGHAN & BOCK

CPAs & Advisors 300 New Stine Road Bakersfield, CA 93309 (661) 834-7411 Federal Tax ID. No. 95-2972229

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

Invoice No. 121682 Date 08/31/2021 Client No. 02114

-- FINANCIAL REPORTING SERVICES --

Progress billing for work to date in connection with audit for the year ended June 30, 2021;

\$ 3,500.00

Make all checks payable to **DANIELLS PHILLIPS VAUGHAN & BOCK** Pay by card online at **https://www.dpvb.com/online-payment/**

All Accounts are due and payable upon receipt of invoice. A finance charge of 1% (12% apr) will be charged on past due accounts. Thank you.



TO:	Board of Directors Agenda Item No. 8
FROM:	Taylor Blakslee, Hallmark Group
DATE:	November 3, 2021
SUBJECT:	Approval of Financial Reports for July, August and September 2021

<u>Issue</u>

Approval of Financial Reports for July, August and September 2021.

Recommended Motion

Approve financial reports for July, August and September 2021.

Discussion

The Cuyama Basin Groundwater Sustainability Agency's financial reports for July, August and September 2021 are 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
- 2021/2022 Operating Budget



Cuyama Basin GSA

Financial Statements September 2021

CUYAMA BASIN GSA

Statement of Financial Position

As of September 30, 2021

	Sep 30, 21	Sep 30, 20	\$ Change	% Change
ASSETS Current Assets Checking/Savings	1 547 084	758 6/1	780 3/3	104%
Chase - General Checking	1,047,004	7 30,04 1	709,040	
Total Checking/Savings	1,547,984	758,641	789,343	104%
Accounts Receivable Accounts Receivable	172,179	835,576	-663,396	-79%
Total Accounts Receivable	172,179	835,576	-663,396	-79%
Other Current Assets Grant Retention Receivable	264,812	236,456	28,356	12%
Total Other Current Assets	264,812	236,456	28,356	12%
Total Current Assets	1,984,976	1,830,673	154,302	8%
TOTAL ASSETS	1,984,976	1,830,673	154,302	8%
LIABILITIES & EQUITY Liabilities Current Liabilities Accounts Payable		400 504	04.070	740/
Accounts Payable	228,540	133,561	94,979	/1%
Total Accounts Payable	228,540	133,561	94,979	71%
Total Current Liabilities	228,540	133,561	94,979	71%
Total Liabilities	228,540	133,561	94,979	71%
Equity Unrestricted Net Assets Net Income	1,883,324 -126,888	636,105 1,061,007	1,247,219 -1,187,895	196% -112%
Total Equity	1,756,436	1,697,112	59,324	4%
TOTAL LIABILITIES & EQUITY	1,984,976	1,830,673	154,302	8%

CUYAMA BASIN GSA Receipts and Disbursements As of September 30, 2021

Туре	Date	Num	Name	Debit	Credit
Chase - Gener	al Checking				
Payment	07/01/2021	317673	Groundwater Extraction Fees:Bolthouse Farms	322,421.58	
Payment	07/01/2021	317673	Groundwater Extraction Fees:Bolthouse Farms - Perkins Ranch	10,296.00	
Payment	07/01/2021	0701 1B7031R020586	Groundwater Extraction Fees:Brodiaea, Inc	29,544.06	
Payment	07/14/2021	489415	Groundwater Extraction Fees: E & B Natural Resources Mgmt Corp	873.99	
Payment	07/14/2021	1273	Groundwater Extraction Fees:Cuyama Mutual Water Co.	191.10	
Payment	07/14/2021	44792	Groundwater Extraction Fees:Santa Barbara Highlands Vineyard	46,046.83	
Payment	07/14/2021	047977	Groundwater Extraction Fees:Feinstein Investments	5,566.47	
Payment	07/14/2021	50506	Groundwater Extraction Fees:Cuyama Dairy Farm	21,799.80	
Payment	07/14/2021	20334	Groundwater Extraction Fees: Apache Canyon Ranch, Inc	12,427.35	
Payment	07/14/2021	2726	Groundwater Extraction Fees:Harrington Farms	2,565.00	
Payment	07/14/2021	2785	Groundwater Extraction Fees:Harrington Farms	2,700.00	
Check	07/16/2021	1081	Groundwater Extraction Fees:Cuyama Dairy Farm	,	294.81
Bill Pmt	07/16/2021	1082	Minuteman Press		1,936.60
Bill Pmt	08/25/2021	1083	HGCPM, Inc.		81,211.02
Bill Pmt	08/25/2021	1084	Klein, DeNatale, Goldner		13,213,62
Bill Pmt	08/25/2021	1085	Woodard & Curran Inc		87,602.63
Pavment	08/30/2021	04-616441	Department of Water Resources	57.067.73	,
Payment	09/24/2021	04-629078	Department of Water Resources	11,504.47	
Total Chase - 0	General Check	ing		523,004.38	184,258.68
OTAL				523,004.38	184,258.68

CUYAMA BASIN GSA A/R Aging Summary As of September 30, 2021

	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL
Department of Water Resources	84,084	0	0	0	0	84,084
Groundwater Extraction Fees						
Brodiaea, Inc	0	0	0	2,954	0	2,954
Cuyama Orchards, Inc	1,458	3,813	0	387	79,484	85,141
Total Groundwater Extraction Fees	1,458	3,813	0	3,341	79,484	88,096
TOTAL	85,542	3,813	0	3,341	79,484	172,179

CUYAMA BASIN GSA A/P Aging Summary As of September 30, 2021

	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL
Daniells Phillips Vaughan & Bock	6,500	0	0	0	0	6,500
HGCPM, Inc.	60,456	0	23,331	0	0	83,787
Klein, DeNatale, Goldner	9,503	0	1,771	0	0	11,274
Woodard & Curran Inc	93,984	0	32,995	0	0	126,979
TOTAL	170,443	0	58,097	0	0	228,540
CUYAMA BASIN GSA

Statement of Operations with Budget Variance July through September 2021

	Jul - Sep 21	Budget	\$ Over Budget	% of Budget
Ordinary Income/Expense				
Income				
Direct Public Funds	00.400	54.400	10.000	1000/
Grants GWE Lato Foos	93,426	51,100	42,326	183%
				100%
Total Direct Public Funds	101,651	51,100	50,551	199%
Total Income	101,651	51,100	50,551	199%
Cost of Goods Sold				
Program Expenses				
Technical Consulting				
Basin Model Refinement	2,322	48,726	-46,404	5%
GSP Implementation - W&C	67,720	43,419	24,301	156%
Monitoring Network - P&P	20,116	63,100	-42,984	32%
Aquifer Testing	0	25,389	-25,389	0%
Stakeholder Engagement	11,819	23,073	-11,254	51%
Grant Proposals	0	20,064	-20.064	0%
Technical Support for DWR	2 799	4 127	-1.329	68%
Outreach	4 131	3 774	357	109%
Technical Support CAT 1	34 604	0,774	25 462	376%
Creat Administration	2 405	9,232	25,402	570%
Grant Administration		0,000	-2,505	
Total Technical Consulting	147,095	246,904	-99,809	60%
Total Program Expenses	147,095	246,904	-99,809	60%
Total COGS	147,095	246,904	-99,809	60%
Gross Profit	-45,444	-195,804	150,360	23%
Expense				
General and Administrative				
MA Implementation - Prop 218	0	30,000	-30 000	0%
GSA Executive Director	0	50,000	-50,000	070
CSA POD Mostingo	21 420	20.226	1 202	106%
GSA BOD meetings	21,430	20,230	1,202	100%
Consult Mgmt and GSP Devel	18,594	14,820	3,774	125%
Financial Information Coor	11,038	9,186	1,852	120%
Funding Process (GWE Fee)	2,538	3,808	-1,271	67%
CBGSA Outreach	2,450	2,407	43	102%
Support for DWR/Public Comments	6,081	1,397	4,684	435%
Travel and Direct Costs	1,534	1,513	21	101%
Total GSA Executive Director	63,671	53,367	10,304	119%
Other Administrative				
Legal	11,274	15,000	-3,727	75%
Auditing/Accounting Fees	6,500	9,000	-2,500	72%
Contingency	0	4,998	-4,998	0%
Total Other Administrative	17,774	28,998	-11,225	61%
Total General and Administrative	81,445	112,365	-30,920	72%
Total Expense	81,445	112,365	-30,920	72%
Net Ordinary Income	-126,888	-308,169	181,281	41%
Net Income	-126 888	-308 169	181 281	41%
		200,100		

CUYAMA BASIN GSA 2021/2022 Annual Operating Budget July 2021 through June 2022

	Jul '21 - Jun 22
Ordinary Income/Expense	
Income Direct Public Funds	
Groundwater Extraction Fees Grants	1,000,000 344,391
Total Direct Public Funds	1,344,391
Total Income	1,344,391
Cost of Goods Sold	
Program Expenses	
Rasin Model Refinement	194 912
GSP Implementation - W&C	173.683
Monitoring Network - P&P	131,600
Aquifer Testing	101,556
Stakeholder Engagement	92,292
Grant Proposals	80,256
Technical Support for DWR	16,520
Outreach	15,089
Grant Administration	9,232 6,000
Total Technical Consulting	821,140
Total Program Expenses	821,140
Total COGS	821,140
Gross Profit	523,251
Expense	
General and Administrative	
MA Implementation - Prop 218	60,000
GSA Executive Director	
GSA BOD Meetings	80,950
Consult Mgmt and GSP Devel	59,288
Financial Information Coor	36,738
Funding Process (GWE Fee)	10,230
Support for DWR/Public Comments	5,600
Travel and Direct Costs	3,754
Total GSA Executive Director	211,193
Other Administrative	
Legal	60.000
Directors & Officers Insurance	12,000
Auditing/Accounting Fees	9,000
Other Admin Expense	200
Contingency	20,000
Total Other Administrative	101,200
Total General and Administrative	372,393
Total Expense	372,393
Net Ordinary Income	150,858
Net Income	150,858



Cuyama Basin GSA

Financial Statements August 2021

CUYAMA BASIN GSA

Statement of Financial Position As of August 31, 2021

	Aug 31, 21	Aug 31, 20	\$ Change	% Change
ASSETS Current Assets Checking/Savings				
Chase - General Checking	1,536,479	197,552	1,338,927	678%
Total Checking/Savings	1,536,479	197,552	1,338,927	678%
Accounts Receivable Accounts Receivable	98,871	1,335,682	-1,236,811	-93%
Total Accounts Receivable	98,871	1,335,682	-1,236,811	-93%
Other Current Assets Grant Retention Receivable	255,470	221,654	33,816	15%
Total Other Current Assets	255,470	221,654	33,816	15%
Total Current Assets	1,890,820	1,754,888	135,932	8%
TOTAL ASSETS	1,890,820	1,754,888	135,932	8%
LIABILITIES & EQUITY Liabilities Current Liabilities Accounts Payable				
Accounts Payable	151,856	130,503	21,353	16%
Total Accounts Payable	151,856	130,503	21,353	16%
Total Current Liabilities	151,856	130,503	21,353	16%
Total Liabilities	151,856	130,503	21,353	16%
Equity Unrestricted Net Assets Net Income	1,883,324 -144,360	636,105 988,280	1,247,219 -1,132,640	196% -115%
Total Equity	1,738,964	1,624,385	114,579	7%
TOTAL LIABILITIES & EQUITY	1,890,820	1,754,888	135,932	8%

CUYAMA BASIN GSA Receipts and Disbursements As of August 31, 2021

Туре	Date	Num Name			Credit
Chase - Gener	al Checking				
Payment	07/01/2021	317673	Groundwater Extraction Fees:Bolthouse Farms	322,421.58	
Payment	07/01/2021	317673	Groundwater Extraction Fees:Bolthouse Farms - Perkins Ranch	10,296.00	
Payment	07/01/2021	0701 1B7031R020586	Groundwater Extraction Fees:Brodiaea, Inc	29,544.06	
Payment	07/14/2021	489415	Groundwater Extraction Fees: E & B Natural Resources Mgmt Corp	873.99	
Payment	07/14/2021	1273	Groundwater Extraction Fees:Cuyama Mutual Water Co.	191.10	
Payment	07/14/2021	44792	Groundwater Extraction Fees:Santa Barbara Highlands Vineyard	46,046.83	
Payment	07/14/2021	047977	Groundwater Extraction Fees:Feinstein Investments	5,566.47	
Payment	07/14/2021	50506	Groundwater Extraction Fees:Cuyama Dairy Farm	21,799.80	
Payment	07/14/2021	20334	Groundwater Extraction Fees: Apache Canyon Ranch, Inc	12,427.35	
Payment	07/14/2021	2726	Groundwater Extraction Fees:Harrington Farms	2,565.00	
Payment	07/14/2021	2785	Groundwater Extraction Fees:Harrington Farms	2,700.00	
Check	07/16/2021	1081	Groundwater Extraction Fees:Cuyama Dairy Farm	,	294.81
Bill Pmt	07/16/2021	1082	Minuteman Press		1,936.60
Bill Pmt	08/25/2021	1083	HGCPM, Inc.		81,211.02
Bill Pmt	08/25/2021	1084	Klein, DeNatale, Goldner		13,213.62
Bill Pmt	08/25/2021	1085	Woodard & Curran Inc		87,602.63
Payment	08/30/2021	04-616441	Department of Water Resources	57,067.73	·
Total Chase - C	General Check	ing		511,499.91	184,258.68
TOTAL				511,499.91	184,258.68

CUYAMA BASIN GSA A/R Aging Summary As of August 31, 2021

	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL
Department of Water Resources	0	0	0	11,504	0	11,504
Brodiaea, Inc Cuyama Orchards, Inc	0 4,542	0 0	2,954 387	0 34,647	0 44,837	2,954 84,412
Total Groundwater Extraction Fees	4,542	0	3,341	34,647	44,837	87,367
TOTAL	4,542	0	3,341	46,151	44,837	98,871

CUYAMA BASIN GSA A/P Aging Summary As of August 31, 2021

	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL
Daniells Phillips Vaughan & Bock	3,500	0	0	0	0	3,500
HGCPM, Inc.	32,953	23,331	0	0	0	56,284
Klein, DeNatale, Goldner	7,786	1,771	0	0	0	9,557
Woodard & Curran Inc	49,521	32,995	0	0	0	82,516
TOTAL	93,759	58,097	0	0	0	151,856

CUYAMA BASIN GSA

Statement of Operations with Budget Variance July through August 2021

	Jul - Aug 21	Budget	\$ Over Budget	% of Budget
Ordinary Income/Expense				
Income				
Direct Public Funds GWE Late Fees	7,496	0	7,496	100%
Total Direct Public Funds	7,496	0	7,496	100%
Total Income	7,496	0	7,496	100%
Cost of Goods Sold				
Program Expenses				
Technical Consulting				
Basin Model Refinement	1.620	32,484	-30.864	5%
GSP Implementation - W&C	40.924	28,946	11,978	141%
Monitoring Network - P&P	8.472	10,500	-2.028	81%
Aquifer Testing	0	16,926	-16.926	0%
Stakeholder Engagement	11.819	15.382	-3.563	77%
Grant Proposals	0	13,376	-13,376	0%
Technical Support for DWR	1.956	2,750	-795	71%
Outreach	4,092	2,516	1,576	163%
Technical Support - CAT 1	19,460	10,000	9,460	195%
Grant Administration	2,646	0	2,646	100%
Total Technical Consulting	90,988	132,880	-41,892	68%
Total Program Expenses	90,988	132,880	-41,892	68%
Total COGS	90,988	132,880	-41,892	68%
Gross Profit	-83,492	-132,880	49,388	63%
Fynense				
General and Administrative				
MA Implementation - Prop 218	0	20.000	-20 000	0%
GSA Executive Director	Ŭ	20,000	20,000	0,0
GSA BOD Meetings	20.694	13,490	7.204	153%
Consult Mgmt and GSP Devel	13.388	9.880	3,508	136%
Financial Information Coor	5.256	6,124	-868	86%
Funding Process (GWE Fee)	2.538	2.538	-1	100%
CBGSA Outreach	2,013	1,605	408	125%
Support for DWR/Public Comments	3,544	930	2,614	381%
Travel and Direct Costs	380	496	-116	77%
Total GSA Executive Director	47,811	35,063	12,748	136%
Other Administrative				
Legal	9,557	10,000	-444	96%
Auditing/Accounting Fees	3,500	9,000	-5,500	39%
Contingency	0	3,332	-3,332	0%
Total Other Administrative	13,057	22,332	-9,276	58%
Total General and Administrative	60,868	77,395	-16,527	79%
Total Expense	60,868	77,395	-16,527	79%
Net Ordinary Income	-144,360	-210,275	65,915	69%
Net Income	-144,360	-210,275	65,915	69%

CUYAMA BASIN GSA 2021/2022 Annual Operating Budget July 2021 through June 2022

	Jul '21 - Jun 22
Ordinary Income/Expense	
Income Direct Public Funds	
Groundwater Extraction Fees Grants	1,000,000 344,391
Total Direct Public Funds	1,344,391
Total Income	1,344,391
Cost of Goods Sold	
Program Expenses Technical Consulting	
Basin Model Refinement	194,912
GSP Implementation - W&C	173,683
Monitoring Network - P&P	131,600
Aquifer Testing	101,556
Stakeholder Engagement	92,292
Grant Proposals	80,256
Technical Support for DWR	16,520
Outreach	15,089
Technical Support - CAT 1	9,232
Grant Administration	6,000
Total Technical Consulting	821,140
Total Program Expenses	821,140
Total COGS	821,140
Gross Profit	523,251
Expense	
General and Administrative	
MA Implementation - Prop 218	60,000
GSA Executive Director	
GSA BOD Meetings	80,950
Consult Mgmt and GSP Devel	59,288
Financial Information Coor	36,738
Funding Process (GWE Fee)	15,238
CBGSA Outreach	9,625
Support for DWR/Public Comments	5,600
Travel and Direct Costs	3,754
Total GSA Executive Director	211,193
Other Administrative	
Legal	60,000
Directors & Officers Insurance	12,000
Auditing/Accounting Fees	9,000
Other Admin Expense	200
Contingency	20,000
Total Other Administrative	101,200
Total General and Administrative	372,393
Total Expense	372,393
Net Ordinary Income	150,858
Net Income	150,858



Cuyama Basin GSA

Financial Statements July 2021

CUYAMA BASIN GSA

Statement of Financial Position

As of July 31, 2021

	Jul 31, 21	Jul 31, 20	\$ Change	% Change
ASSETS Current Assets Checking/Savings				
Chase - General Checking	1,661,439	263,641	1,397,798	530%
Total Checking/Savings	1,661,439	263,641	1,397,798	530%
Accounts Receivable Accounts Receivable	155,210	258,894	-103,684	-40%
Total Accounts Receivable	155,210	258,894	-103,684	-40%
Other Current Assets Grant Retention Receivable	255,470	221,654	33,816	15%
Total Other Current Assets	255,470	221,654	33,816	15%
Total Current Assets	2,072,118	744,189	1,327,929	178%
TOTAL ASSETS	2,072,118	744,189	1,327,929	178%
LIABILITIES & EQUITY Liabilities Current Liabilities Accounts Pavable				
Accounts Payable	240,124	132,444	107,680	81%
Total Accounts Payable	240,124	132,444	107,680	81%
Total Current Liabilities	240,124	132,444	107,680	81%
Total Liabilities	240,124	132,444	107,680	81%
Equity Unrestricted Net Assets Net Income	1,883,324 -51,330	636,105 -24,361	1,247,219 -26,969	196% -111%
Total Equity	1,831,994	611,745	1,220,249	200%
TOTAL LIABILITIES & EQUITY	2,072,118	744,189	1,327,929	178%

CUYAMA BASIN GSA Receipts and Disbursements As of July 31, 2021

Туре	Date	Num	Num Name		Credit
Chase - Gene	ral Checking				
Payment	07/01/2021	317673	Groundwater Extraction Fees:Bolthouse Farms	322,421.58	
Payment	07/01/2021	317673	Groundwater Extraction Fees:Bolthouse Farms - Perkins Ranch	10,296.00	
Payment	07/01/2021	0701 1B7031R020586	Groundwater Extraction Fees:Brodiaea, Inc	29,544.06	
Payment	07/14/2021	489415	Groundwater Extraction Fees E & B Natural Resources Mgmt C	873.99	
Payment	07/14/2021	1273	Groundwater Extraction Fees:Cuyama Mutual Water Co.	191.10	
Payment	07/14/2021	44792	Groundwater Extraction Fees Santa Barbara Highlands Vineyard	46,046.83	
Payment	07/14/2021	047977	Groundwater Extraction Fees: Feinstein Investments	5,566.47	
Payment	07/14/2021	50506	Groundwater Extraction Fees:Cuyama Dairy Farm	21,799.80	
Payment	07/14/2021	20334	Groundwater Extraction Fees: Apache Canyon Ranch, Inc	12,427.35	
Payment	07/14/2021	2726	Groundwater Extraction Fees Harrington Farms	2,565.00	
Payment	07/14/2021	2785	Groundwater Extraction Fees:Harrington Farms	2,700.00	
Check	07/16/2021	1081	Groundwater Extraction Fees:Cuyama Dairy Farm		294.81
Bill Pmt	07/16/2021	1082	Minuteman Press		1,936.60
Total Chase -	General Check	ing		454,432.18	2,231.41
OTAL				454,432.18	2,231.41

TOTAL

CUYAMA BASIN GSA A/R Aging Summary As of July 31, 2021

	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL
Department of Water Resources	0	0	11,504	0	57,068	68,572
Groundwater Extraction Fees						
Brodiaea, Inc	2,954	0	0	0	0	2,954
Cuyama Orchards, Inc	4,199	0	34,647	387	44,451	83,683
Total Groundwater Extraction Fees	7,154	0	34,647	387	44,451	86,637
TOTAL	7,154	0	46,151	387	101,518	155,210

CUYAMA BASIN GSA A/P Aging Summary As of July 31, 2021

	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL
HGCPM, Inc.	23,331	24,642	23,696	32,873	0	104,542
Klein, DeNatale, Goldner	1,771	2,299	5,533	5,383	0	14,985
Woodard & Curran Inc	32,995	21,429	26,193	39,981	0	120,598
TOTAL	58,097	48,370	55,421	78,236	0	240,124

CUYAMA BASIN GSA

Statement of Operations with Budget Variance

	Jul 21	Budget	\$ Over Budget	% of Budget
Ordinary Income/Expense				
Income				
GWE Late Fees	6,767	0	6,767	100%
Total Direct Public Funds	6,767	0	6,767	100%
Total Income	6,767	0	6,767	100%
Cost of Goods Sold				
Program Expenses				
Technical Consulting				
Basin Model Refinement	1,620	16,242	-14,622	10%
GSP Implementation - W&C	14,902	14,473	429	103%
Monitoring Network - P&P	5,341	0	5,341	100%
Aquiter Testing Stakeholder Engagement	4 637	0,403	-0,403	0%
Grant Proposals	4,037	6 688	-5,055	00%
Technical Support for DWR	1 956	1 375	-0,000	142%
Outreach	1,530	1,373	275	122%
Technical Support - CAT 1	6 508	5 000	1 508	130%
Grant Administration	1,840	0	1,840	100%
Total Technical Consulting	38,336	61,190	-22,854	63%
Total Program Expenses	38,336	61,190	-22,854	63%
Total COGS	38,336	61,190	-22,854	63%
Gross Profit	-31,569	-61,190	29,621	52%
Expense				
General and Administrative				
MA Implementation - Prop 218 GSA Executive Director	0	10,000	-10,000	0%
GSA BOD Meetings	2,538	6,745	-4,208	38%
Consult Mgmt and GSP Devel	6,956	4,940	2,016	141%
Financial Information Coor	2,256	3,062	-806	74%
Funding Process (GWE Fee)	2,538	1,269	1,269	200%
CBGSA Outreach	1,356	803	553	169%
Support for DWR/Public Comments	2,144	465	1,679	461%
I ravel and Direct Costs	202	248	-46	82%
Total GSA Executive Director	17,990	17,532	458	103%
Other Administrative				
Legal	1,771	5,000	-3,229	35%
Contingency	0	1,666	-1,666	0%
Total Other Administrative	1,771	6,666	-4,895	27%
Total General and Administrative	19,761	34,198	-14,437	58%
Total Expense	19,761	34,198	-14,437	58%
Net Ordinary Income	-51,330	-95,388	44,058	54%
Net Income	-51,330	-95,388	44,058	54%

CUYAMA BASIN GSA 2021/2022 Annual Operating Budget July 2021 through June 2022

	Jul '21 - Jun 22
Ordinary Income/Expense	
Income Direct Public Funds	
Groundwater Extraction Fees Grants	1,000,000 344,391
Total Direct Public Funds	1,344,391
Total Income	1,344,391
Cost of Goods Sold	
Program Expenses	
Basin Model Refinement	194 912
GSP Implementation - W&C	173.683
Monitoring Network - P&P	131,600
Aquifer Testing	101,556
Stakeholder Engagement	92,292
Grant Proposals	80,256
Technical Support for DWR	16,520
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Grant Administration	9,232 6,000
Total Technical Consulting	821,140
Total Program Expenses	821,140
Total COGS	821,140
Gross Profit	523,251
Expense	
General and Administrative	
MA Implementation - Prop 218	60,000
GSA Executive Director	
GSA BOD Meetings	80,950
Consult Mgmt and GSP Devel	59,288
Financial Information Coor	36,738
Funding Process (GWE Fee)	15,238
CBGSA Outreach	9,625
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Other Administrative	
Legal	60,000
Directors & Officers Insurance	12,000
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Contingency	20,000
Total Other Administrative	101,200
Total General and Administrative	372,393
Total Expense	372,393
Net Ordinary Income	150,858
Net Income	150.858



TO:	Board of Directors Agenda Item No. 9
FROM:	Jim Beck / Brian Van Lienden
DATE:	November 3, 2021
SUBJECT:	Review of Memorandum in Response to DWR's GSP Consultation Letter Dated June 3, 2021

<u>Issue</u>

Review of the memorandum responding to DWR's GSP consultation letter dated June 3, 2021.

Recommended Motion

None—for discussion and review.

Discussion

In response to the California Department of Water Resources' (DWR) consultation letter dated June 3, 2021, the Cuyama Basin Groundwater Sustainability Agency (CBGSA) staff developed a technical memorandum responding to DWR's potential corrective actions.

An overview of the analysis is provided as Attachment 1, the complete technical memorandum is provided as Attachment 2 and DWR's June 3rd consultation letter is provided as Attachment 3. The technical memorandum was reviewed by the CBGSA DWR Coordination Ad hoc.

Agenda item 10 is a resolution enacting the technical memorandum and authorizing submission to DWR. DWR staff informed the CBGSA that they will not have the staff time to adequately review this additional technical analysis ahead of their official determination on the CBGSA's Groundwater Sustainability Plan due January 28, 2022. However, they will consider this information during the 180-day period that will start January 29, 2022.

Attachment 1

Cuyama Basin Groundwater Sustainability Agency

Review of Memorandum in Response to DWR's Consultation Letter Jim Beck / Brian Van Lienden

November 3, 2021



Background

- SGMA guidelines require that DWR review submitted GSPs and provide a determination, reflecting one of three options:
 - Approved
 - Incomplete: DWR would identify deficiencies that required corrective action
 - These would then need to be addressed within 180 days
 - Inadequate: DWR would disapprove the plan
- DWR's determination must be made within 2 years of GSP submittal (by Jan 2022 for the Cuyama GSP)



Timeline

- June 3, 2021: DWR provided the Cuyama Basin GSA with a letter intended to initiate consultation between DWR and the CBGSA in advance of a GSP determination
- July 9, 2021: DWR and CBGSA representatives had a call to discuss the letter and what the CBGSA could do to respond to it
- July 23, 2021: CBGSA staff met with technical representatives of public agencies to review and receive feedback on proposed CBGSA response to DWR letter
- August 27, 2021: The CBGSA provided a response letter to DWR describing intended responses to each DWR potential corrective action
 - September 10, 2021: CBGSA ad-hoc committee members and staff met with DWR staff to discuss the DWR letter and CBGSA proposed response



GSP Review and Determination Process



Summary of DWR Consultation Letter and Draft ¹³⁰ CBGSA Tech Memo

- DWR's letter included four potential corrective actions:
 - 1. Provide justification for, and effects associated with, the sustainable management criteria
 - 2. Use of groundwater levels as a proxy for depletion of interconnected surface water
 - 3. Further address degraded water quality
 - 4. Provide explanation for how overdraft will be mitigated in the Basin
 - The draft CBGSA memo provides the following for each corrective action:
 - Summary of DWR review and opinion
 - Review of information provided in the Cuyama Basin GSP
 - Supplemental GSP information in response to DWR comment letter



Potential Corrective Action 1: 131 Provide justification for, and effects associated with, the sustainable management criteria

DWR Direction:

- Provide more detailed information regarding rationale for undesirable results and minimum thresholds
- Provide an explanation for why the 30% of wells over 2 years criterion for undesirable results is consistent with avoiding significant and unreasonable effects
- Evaluate and disclose the anticipated effects of the GSP's minimum thresholds and undesirable results on:
 - Domestic wells, public water supply wells, and agricultural wells.
 - Environmental users of groundwater (especially GDEs)



Potential Corrective Action 1: 132 Provide justification for, and effects associated with, the sustainable management criteria

- CBGSA response memo includes the following:
 - Additional details on the rationale for undesirable results statements and on the basis for the criteria of 30% of wells below MTs over 2 years
 - Additional technical analyses:
 - Assessment of production wells against minimum thresholds
 - Cuyama Basin numerical model assessment of Northwestern region



Potential Corrective Action 1: 133 Provide justification for, and effects associated with, the sustainable management criteria

Assessment of production wells against minimum thresholds

(refined approach)

Total Number

of Production

Wells

16

Threshold

Region

Northwestern

Western Central Eastern Southeastern Whole Basin



_	1.4			1474
	40	0	0	0%
	89	0	0	0%
	39	2	5	13%
	66	1	1	2%
	250	4	8	3%
-			UNUSA DECIMANDA	AN INCOME
and the second s		and and	Well Inventory Analysis Production and Domestic Wells	Coyama Bu
and the second second			Cuyama Basin Groundwater Sustainability Agency	Répresentation de la Répresent

vama Valley Groundwater Basin Groundwat Sustainability Plan

Risk to Go Dry if

GWLs reach MTs

At Risk of Going Dry Caribral Rootic Not At Risk of Going Dry Filtered from analy

overage throughout the Cuyama Basin. The extrapolated MTs were then compared to he screen depths of domestic and production wells (if screen depth data was unavailable tal well depth was used). Note: Some

Potential Corrective Action 1: 134 Provide justification for, and effects associated with, the sustainable management criteria

- Rationales for wells filtered from analysis:
- Already dry in 2015
- Destroyed or noncompliant
- Topographically or hydrologically removed from monitoring network wells



Potential Corrective Action 1: 135 Provide justification for, and effects associated with, the sustainable management criteria

Cuyama Basin numerical model assessment of Northwestern region

- No active domestic wells affected
- 1 GDE location with minor change in groundwater level (<5 feet)
 - Small increase in stream depletion



Potential Corrective Action 1: ¹³⁶ Provide justification for, and effects associated with, the sustainable management criteria

- Correction Action 1 conclusions based on the analysis:
 - The sustainability criteria are protective of production wells (including domestic wells) in the Basin
 - Only 8 wells (3% of all wells in the basin) are at risk of going dry
 - The CBGSA will strive to prevent domestic wells in the basin from going dry through the Adaptive Management approach included in the GSP (Section 7.6)
 - A numerical modeling analysis of proposed minimum thresholds at Wells 841 and 845 show that these thresholds would have no negative impact on local domestic wells and only minimal impact at a single GDE location. Stream depletions could potentially increase by a small amount



Potential Corrective Action 2: Use of groundwater levels as a proxy for depletion of interconnected surface water

DWR Direction:

- Provide a demonstration, with supporting evidence, for why using the basinwide groundwater level minimum thresholds is a reasonable proxy for thresholds for depletions of interconnected surface water
- CBGSA response includes development of a monitoring network specifically for interconnected surface water



Potential Corrective Action 2: Use of groundwater levels as a proxy for depletion of interconnected surface water

Potential Stream Connectivity based on Modeling Results

 Central basin portion of Cuyama River was already disconnected in 2015



Potential Corrective Action 2: Use of groundwater levels as a proxy for depletion of interconnected surface water

October 202

Streams

Proposed Interconnected Surface Water representative monitoring network:

12 wells are included
mostly shallower
wells that cover the
connected portion of
the Cuyama River



Potential Corrective Action 3: Further address degraded water quality

- DWR Direction:
 - The GSA should reasonably and thoroughly address nitrate and arsenic in the GSP, considering:
 - Under the groundwater conditions section, utilize additional data that is available
 - Either provide Sustainable Management Criteria for arsenic and nitrate or provide a thorough, evidence-based description for why groundwater management is unlikely to cause significant and unreasonable degradation of groundwater
 - Revise its groundwater quality network to include nitrates and arsenic
- CBGSA response includes the following additional information:
 - Updated groundwater conditions information for nitrates and arsenic
 - Why groundwater management is unlikely to affect nitrate and arsenic concentrations in the Cuyama Basin
 - The CBGSA's approach for monitoring nitrates and arsenic



Potential Corrective Action 3: Further address degraded water quality

Update to Groundwater Sustainability Plan Groundwater Conditions section on <u>nitrates</u>:

Average nitrate concentrations from 2010-2020



Potential Corrective Action 3: Further address degraded water quality

Update to Groundwater Sustainability Plan Groundwater Conditions section on <u>arsenic</u>:

Average arsenic concentrations from 2010-2020



Potential Corrective Action 4: 143 Provide explanation for how overdraft will be mitigated in the Basin

- DWR Direction:
 - Explain the rationale for not implementing pumping reductions in the Ventucopa and Northwestern region and explain the timeline and criteria needed to determine whether further pumping allocations are needed



Potential Corrective Action 4: Provide explanation for how overdraft will be mitigated in the Basin

- Additional information is provided for the Ventucopa and Northwestern regions providing more information on the basis for previous management decisions in these regions
 - Development of Ventucopa portion of numerical model posed significant challenges related to data availability and relatively small water budget estimates
 - CBGSA notes in the GSP that this will be re-evaluated in 2-5 years
 - Information developed for the Northwestern region does not predict a future overdraft in that region
 - Note: the Cleath-Harris document referenced in section 5.3.2 is posted on the CBGSA website






TECHNICAL MEMORANDUM

TO:Craig Altare, California Department of Water ResourcesPREPARED BY:Woodard & Curran on Behalf of the Cuyama Valley Groundwater Basin Groundwater Sustainability
AgencyDATE:October 21, 2021RE:Cuyama Basin GSA Response to DWR's June 3, 2021, Consultation Letter

1. INTRODUCTION

The Cuyama Valley Groundwater Basin Groundwater Sustainability Agency (CBGSA) received a Consultation Initiation Letter (Letter) on June 3, 2021 (Attachment 1), from the California Department of Water Resources (DWR). The Letter was intended to provide the CBGSA with a preview of potential corrective actions that could be included in the official review letter of the Groundwater Sustainability Plan (GSP) from DWR. Receiving this Letter also allows the CBGSA additional time to address potential corrective actions before the official review is released, which triggers a 180-day correction period to update and address any deficiencies in the GSP.

During the August 18, 2021, Board Meeting, the CBGSA laid out a framework for responding to the Letter and provided that framework in a letter addressed to Mr. Craig Altare (Groundwater Sustainability Plan Review Section Chief), dated August 27, 2021 (Attachment 2).

This memorandum includes the analysis and work outlined in the framework provided to Mr. Altare. This memorandum is intended to supplement the Cuyama Basin GSP that was submitted in January 2020 and fill potential gaps identified in the Letter provided by DWR. Future updates to the GSP will include the information and analysis, or an updated version of the information and analysis, provided in this memorandum.

This technical memorandum provides a thorough response to each potential corrective action in the sections below.

2. POTENTIAL CORRECTIVE ACTION 1: PROVIDE JUSTIFICATION FOR, AND EFFECTS ASSOCIATED WITH, THE SUSTAINABLE MANAGEMENT CRITERIA

DWR requests additional information regarding the justification for the sustainable management criteria included in the GSP and the effects of those criteria on beneficial users in the Basin. DWR identified two issues that should be addressed as part of this corrective action:

- 1. Providing a more detailed description of the criterion used to identify undesirable results (URs)
- 2. Providing additional information regarding how the groundwater level minimum thresholds (MTs) are consistent with avoiding undesirable results, with a particular emphasis on the MTs in the Northwestern Region.

The following subsections address each of these issues by providing:

- A summary of this Potential Corrective Action in the Letter
- A brief review of information, justification, and data provided in the GSP
- A discussion with supplemental information, justification, and data as needed to support the GSP.

2.1 Defining the Criterion Used to Identify Undesirable Results

2.1.1 Initial Review and Opinion Provided by DWR

In the Letter, DWR states that UR statements do not, "identifying the specific significant and unreasonable effects that would constitute undesirable results... [and] does not provide an explanation for the specific significant and unreasonable condition(s) that the GSA intends to avoid in the Basin through implementation of the GSP." Although the GSP includes subsections in Section 3: Undesirable Results, titled *Identification of Undesirable Results*, the Letter states there is no, "explanation for why the criterion is consistent with avoiding significant and unreasonable effects that constitute undesirable results."

2.1.2 Review of Information and Data Provided in Submitted GSP

The Cuyama GSP provides a description of URs and Identification of URs for each of the applicable sustainability indicators in Section 3. For example, UR subsections for groundwater levels are as follows:

"Description of Undesirable Results

The Undesirable Result for the chronic lowering of groundwater levels is a result that causes significant and unreasonable reduction in the long-term viability of domestic, agricultural, municipal, or environmental uses over the planning and implementation horizon of this *GSP*.

Identification of Undesirable Results

Quantifiable Criterion 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.

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Cause Potential Effects

Potential Causes of Undesirable Results

Potential causes of Undesirable Results for the chronic lowering of groundwater levels are groundwater pumping that exceeds the average sustainable yield in the Basin, and changes in precipitation in the Cuyama Watershed in the future.

Potential Effects of Undesirable Results

If groundwater levels were to reach Undesirable Results levels, the Undesirable Results could cause potential de-watering of existing groundwater infrastructure, starting with the shallowest wells, could potentially adversely affect groundwater dependent ecosystems, and could potentially cause changes in irrigation practices, crops grown, and adverse effects to property values. Additionally, reaching Undesirable Results for groundwater levels could adversely affect domestic and municipal uses, including uses in disadvantaged **communities, which rely on groundwater in the Basin.**"

Each applicable sustainability indicator has been provided the same level of discussion in the GSP. The following are the *Identification of Undesirable Results* statements for each of the applicable sustainability indicators.

- Chronic Lower of Groundwater Levels 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.
- **Reduction of Groundwater Storage** 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.
- Degraded Water Quality This result is considered to occur during GSP implementation when 30 percent of the representative monitoring points (i.e., 20 of 64 sites) exceed the minimum threshold for a constituent for two consecutive years.
- Land Subsidence This result is detected to occur during GSP implementation when 30 percent of representative subsidence monitoring sites (i.e., 1 of 2 sites) exceed the minimum threshold for subsidence over two years.
- **Depletions of Interconnected Surface Water** 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.

It should be noted that as planned in the GSP Implementation, some monitoring networks have been modified for efficiency, access agreement obstructions, and to minimize burden on the GSA and its operating budget. These adjustments are ongoing and the CBGSA has continued to utilize the same percent criteria as above in its management of the Basin.

2.1.3 Supplemental GSP Information in Response to DWR Letter

A review of SGMA regulations, Section 354.26 (Undesirable Results) provides three descriptive characteristics about URs (subsections (b) (1-3)).

- 1. The cause of the UR.
- 2. A quantifiable criterion used to describe when a UR occurs.
- 3. **Potential effects** on beneficial uses and users, on land uses and property interests, and other potential effects that may occur from URs.

The information provided in the Section 3 of the GSP satisfies these regulations by providing the text, explanations, and quantitative descriptions and justifications for URs. Each of these three descriptive characteristics are labeled in the excerpt from Section 3 of the GSP provided above in Subsection 2.1.2 using the left-hand bubble callout labels. Furthermore, the GSP provided a quantifiable criterion (ratio of wells) to describe the conditions it would expect to see the potential effects as described.

To address the concerns raised in the DWR Letter, the following additional information is provided regarding the rationale for the criteria used in the GSP (i.e. "30% of exceedances over 24 consecutive months") to define the point at which Basin conditions cause *significant and unreasonable* effects to occur.

The term "significant and unreasonable" is not defined by SGMA regulations. Instead, the conditions leading to this classification are determined by the GSA, beneficial users, and other interested parties in each basin. In the Cuyama Basin, the identification of undesirable results were developed through an extensive stakeholder-driven process that included:

- Careful consideration of input from local stakeholders and landowners
- A conceptualization of the hydrogeological conceptual model
- An assessment of current and historical conditions and best available data
- Local knowledge and professional opinion

The CBGSA recognizes the lack of reliable historical data and acknowledges the limitations and uncertainties it causes (see *Data Gaps* and *Plan to Fill Data Gap* subsections of *Section 4 – Monitoring Networks* and *Section 8 – Implementation Plan* for addressing those limitations). However, the re-assessment of thresholds and UR statements will be a likely component of future GSP updates. These future revisions will utilize the detailed and reliable data collected by the GSA during the first five years of GSP implementation.

The 30 percent of wells exceeding their MT for 24 consecutive months criteria included in the GSP allows the CBGSA the flexibility to identify the cause of MT exceedances and to develop a plan for response (per the Adaptive Management approach described in Section 7.6 of the GSP). Potential causes of MT exceedances could include:

- Prolonged drought
- New pumping nearby the representative well
- Unreliable and non-representative data used to calculate the MT

Mimimum threshold exceedances in multiple wells is considered more indicative of a basin-scale decline in groundwater levels and potential adverse imapcts on groundwater infrastructure, as apposed to a more localized groundwater level declines, which could be assocaited with nearby pumping. Furthermore, groundwater levels in areas of the basin change in response to climatic conditions and therfore, sustained exceedances of mimimum thresholds are considered to be more signicant than short-term exceedances. Setting the *Identification of Undesirable Results* criteria at 30 percent or more of wells exceeding their MT is intended to reflect undesirable results at the basin scale, and using 24 consecutive months allows the GSA time to address issues, perform investigations, and implement projects and management actions as needed.

2.2 Additional Information on Groundwater Level Minimum Thresholds

2.2.1 Initial Review and Opinion Provided by DWR

The second part of this potential corrective action seeks additional information to explain how each threshold region's groundwater level MTs are consistent with avoiding undesirable results, "particularly... in the Northwestern threshold region." For every threshold region, DWR requests that the GSA evaluate and provide the potential effects that MTs and URs would have on:

- Well infrastructure including domestic, community, public, and agricultural wells
- Environmental uses and users of groundwater

2.2.2 Review of Information and Data Provided in Submitted GSP

The CBGSA developed six specific Threshold Regions for the development of thresholds for chronic lowering of groundwater levels. The six threshold regions were defined to allow areas with similar conditions to be grouped together for calculating MOs, MTs, and IMs. These threshold regions are shown in Figure 2-1, and a detailed description of each threshold region is provided in *GSP Section 5.2 – Chronic Lower of Groundwater Levels*. Table 2-12-1 provides a summary of the approach used to establish the MT for chronic lowering of groundwater levels for each threshold region.



Figure 2-1. Cuyama Basin Threshold Regions

Threshold Pegion	MT Calculation Approach	lustification
	The MT for this region was found by	Monitoring in this threshold region indicates lovels are stable, with some declines in the
Northwestern	determining the region's total average	area where new agriculture is established. Due to these hydrologic conditions, the MT
	saturated thickness for the primary storage	area where hew agriculture is established. Due to these figurologic conditions, the will was set to protect the water levels from declining significantly, while allowing bonoficial
	area and calculating 15 percent of that	land surface uses (including demostic and agricultural uses) and using the storage
	donth. This value was then set as the MT	canacity of this rogion
		Monitoring in this threshold region indicates groundwater levels are stable, and levels
		varied significantly depending on where representative wells were in the region. The
	The MT was calculated by taking the	most common use of groundwater in this region is for domestic use. Due to these
	difference between the total well depth and	hydrologic conditions, the MT was set to protect the water levels from declining
	the value closest to mid-February, 2018,	significantly, while allowing beneficial land surface uses of the groundwater and
Western	and calculating 15 percent of that depth.	protection of current well infrastructure.
	That value was then subtracted from the	Values from mid-February, 2018, are used because data collected during this time
	mid-February, 2018 measurement to	represent a full basin condition. This calculation allows users in this region to use their
	calculate the MT.	groundwater supply without increasing the risk of running a well beyond acceptable
		limits, and this methodology is responsive to the variety of conditions and well depths in
		this region.
	WI was calculated by finding the maximum	
	and minimum groundwater levels for each	Monitoring in this threshold region indicates a dealing in groundwater levels, indicating
	20 percent of the historical range. This	monitoring in this threshold region indicates a decline in groundwater levels, indicating an extraction rate that exceeds reshards rates. The MT for this region is set to allow
Central	20 percent was then added to the depth to	all extraction rate that exceeds recharge rates. The Wir for this region is set to allow
	water measurement closest to but not	current beneficial uses of groundwater while reducing extraction rates over the
	before lanuary 1 2015 and no later than	operational flexibility for future drought conditions
	April 30 2015	operational nexionity for future drought conditions.
Eastern	The MT was calculated by taking the total	Monitoring in this threshold region indicates a downward trend in groundwater levels.
	historical range of recorded groundwater	However, much of this downward trend is due to hydrologic variability and may be
	levels and used 35 percent of the range	recovered in the future. Therefore, MTs have been set to allow for greater flexibility as
	This 35 percent was then added below the	compared to other regions. The MT for wells in this region intends to protect domestic,
	value closest to January 1, 2015 (as	private, public and environmental uses of the groundwater by allowing for managed
	described above).	extraction in areas that have beneficial uses and protecting those with at risk
	, ,	Initastructure.

Table 2-1. Summary of MT Calculations for Chronic Lowering of Groundwater Levels for Each Threshold Region

Threshold Region	MT Calculation Approach	Justification
Southeastern	MT was calculated by subtracting five years of groundwater storage from the MO. MO was calculated by finding the measurement taken closest to (but not before) January 1, 2015 and not after April 30, 2015.	Per SGMA Regulations, the CBGSA is not required to improve conditions prior to those seen when SGMA was enacted on January 1, 2015. Historical data also shows that groundwater levels are static except during drought conditions (experienced from 2013 to 2018) indicating this area of the Basin is generally at capacity. Because URs were not experienced during this last drought, setting MTs at five years of drought storage will provide the CBGSA a threshold that is protective of domestic, private, public, and
Badlands	None	This threshold region has no groundwater use or active wells. As a result, no MO, MT, or IM was calculated.

2.2.3 Supplemental GSP Information in Response to DWR Letter

The groundwater levels minimum thresholds included in the GSP were developed with the intention of avoiding the undesirable results of excessive drawdowns in the basin while minimizing the number of domestic wells that go dry and the potential impacts on GDEs in the basin. Following receipt of DWR's letter, two technical analyses were performed to provide additional information related to the effects of the GSPs groundwater levels minimum thresholds and undesirable results definitions on well infrastructure (i.e., domestic, public and other production wells) and on environmental uses of groundwater (i.e., GDEs).

The results of these analyses demonstrate that the minimum thresholds included in the GSP achieve the goals of avoiding undesirable results in the basin. In particular, the following conclusions can be made:

- The sustainability criteria are protective of production wells (including domestic wells) in the Basin. Only 5 wells (2% of all wells in the basin) are at risk of going dry if minimum thresholds are reached throughout the basin (i.e., at all representative wells). The CBGSA will strive to prevent domestic wells in the basin from going dry through the Adaptive Management approach included in the GSP (Section 7.6), which call for an investigation of potential issues if groundwater levels approach minimum thresholds. Therefore, the potential for a small number of domestic wells to be at risk is not considered to be a significant and unreasonable result.
- A numerical modeling analysis of proposed minimum thresholds at Wells 841 and 845 show that these thresholds would have no negative impact on local domestic wells and only minimal impact at a single GDE location. Stream depletions could potentially increase by a small amount.

The results of these technical analyses demonstrate that the minimum thresholds included in the GSP are protective against significant and unreasonable results for production wells and GDEs in the basin. The approach and results of each technical analysis are described below.

Assessment of Minimum Thresholds as Compared to Domestic and Production Well Screen Intervals

An assessment was performed of the minimum threshold levels included in the GSP as compared to the well screen intervals of production wells throughout the basin to try to determine how many production wells may be at risk of going dry if the groundwater levels were to fall to minimum threshold levels at monitoring well locations throughout the basin. The assessment was performed using well location and construction information provided by the counties that overlie the basin, including Santa Barbara, San Luis Obispo, Ventura, and Kern. To accomplish this, the CBGSA collected all available well data from public sources and the four Counties in tabular formats. In the northwestern region, well completion reports were also individually collected, processed, and included in the analysis.

Wells were processed in GIS by utilizing their screen interval, and where screen interval information was unavailable, their well depths, to compare those values with minimum thresholds at monitoring wells located throughout for the Basin. Some basic filtering criteria were applied to the analysis to remove wells from consideration, including those that are destroyed or non-compliant in the county datasets, wells that are far away from active groundwater management and monitoring (e.g. the Badlands region), and those that were already dry as of January 1, 2015.

The results of the analysis are shown in Table 2-2 and Figure 2-2. Out of a total of 250 production wells that were evaluated, a total of eight (4% of the total) are at risk of going dry if minimum thresholds are reached. Four of these eight wells are domestic wells. As noted above, the CBGSA will strive to use adaptive management to prevent these domestic wells from going dry.

			· · · · · · · · · · · · · · · · · · ·	
Threshold	Total Number	Domestic Wells at	Total Production Wells	Percentage of Wells at
Region	of Production	Risk to Go Dry if	at Risk to Go Dry if	Risk of Going Dry
	Wells	GWLs reach MTs	GWLs reach MTs	
Northwestern	16	1	2	13%
Western	40	0	0	0%
Central	89	0	0	0%
Eastern	39	1	5	13%
Southeastern	66	2	1	2%
Whole Basin	250	4	8	3%

Table 2-2. Domestic and Production Wells and MT Summary Statistics



Figure 2-2. Well Status Based on Minimum Threshold Analysis

Modeling Analysis of Northwestern Threshold Groundwater Levels Minimum Thresholds

Concern was presented in DWR's Letter about whether the thresholds established in the northwestern threshold region at Opti wells 841 and 845 are protective of nearby beneficial users of water. Specifically, concern was raised that if groundwater levels were to reach MTs in representative wells what impact may occur to nearby domestic wells and GDEs. To address this, the Cuyama Basin Water Resources Model (CBWRM) was used to simulate groundwater level conditions by artificially dropping groundwater levels near Opti Wells 841 and 845 to the set MTs. This was done by assigning specified head boundary conditions at the MT levels for the model nodes near these well locations. The simulation was run for 10 years over the historical period between water years (WY) 2011 to 2020 during which the specified head boundary conditions at the MT levels were continuously active.

Figure 2-3 shows the modeled change in groundwater elevations resulting from setting groundwater levels at the minimum thresholds at wells 841 and 845. Areas shaded in red or tan color on the figure had reduced groundwater elevations as compared to the baseline condition. Areas shaded in lime green were unaffected by the change in groundwater elevations at the well 841 and 845 locations. As shown in the figure, there are no active domestic wells within the area affected by the lowered groundwater elevations at wells 841 and 845. The only GDE which may be affected is the GDE located at the confluence of Cottonwood Creek and the Cuyama River, which has an expected impact of less than 5 feet. However, even with this difference the estimated depth to water at this GDE location would be shallower than 30 feet. Potential impacts on this GDE location will be monitored at nearby Opti well 832.

As noted above, the other potential beneficial use that may be affected comes from Cuyama River inflows into Lake Twitchell. The model simulation also showed an increase in stream depletion in the affected portion of the aquifer of about 1,200 acre-feet per year. This represents about 12 percent (out of 10,200 afy) of the modeled streamflow in the Cuyama River at this location during the WY 2011-2020 model simulation period. However, the actual change in inflows into Lake Twitchell would be less than 1,200 afy because of stream depletions that would occur between Cottonwood Creek and Lake Twitchell. For comparison, during the same period the USGS gage on the Cuyama River just upstream of Lake Twitchell (11136800) recorded an average annual flow of 7,900 afy, only a portion of which comes from the Cuyama Basin. Given the lack of data regarding the hydrology and stream seepage between Cottonwood Creek and Lake Twitchell, it is uncertain how much of an impact this would have on the flows that ultimately are stored in Lake Twitchell.



Figure 2-3. Change in Groundwater Levels in Northwestern Region from CBWRM Test Simulation

3. POTENTIAL CORRECTIVE ACTION 2: USE OF GROUNDWATER LEVELS AS A PROXY FOR DEPLETION OF INTERCONNECTED SURFACE WATER

3.1 Initial Review and Opinion Provided by DWR

As described in the Letter, DWR requests supporting evidence to justify the CBGSA's use of the basin-wide groundwater level minimum thresholds as a reasonable proxy for thresholds for depletions of interconnected surface water (ISW). It is the understanding of the CBGSA that the primary objection to the CBGSA's approach was the utilization of the entire groundwater level representative network as a one-for-one proxy for interconnected surface waters. This is because not all groundwater representative monitoring sites are necessarily appropriate for monitoring for depletion of interconnected surface waters.

3.2 Review of Information and Data Provided in Submitted GSP

As stated in the SGMA regulations, as well as mentioned in the Letter, utilizing a sustainability indicator as a proxy for another is allowed if supported by adequate evidence. The submitted GSP provides justification for using groundwater levels thresholds as a proxy for interconnected surface waters in Sections 3.2.6 and 5.7 with supporting descriptions of surface water and groundwater interactions in Sections 2.1.9 and 2.2.8.

As described in Sections. 2.1.9, the primary surface water body in the Basin is the Cuyama River. Flows in the Cuyama River are perennial, with most dry seasons seeing little to no flow. There are also four main contributing streams and other more minor contributing streams. The Cuyama River and all of the contributing streams are dry during most of the year, with flows occurring only during precipitation events during the winter months. Nearly all precipitation in the Basin and contributing watersheds percolate into the primary aquifer. The Cuyama River and four primary contributing streams were modeled, with the estimates of gaining and losing quantities provided in Table 2-2 of the GSP.

As noted in the plan, there is limited data available pertaining to the shallow aquifer system or to the quantity and timing of streamflows in the Basin. To help address this deficiency, the CBGSA recently installed new streamflow gages on the Cuyama River. In addition, in Section 2.2.9 the GSP recommended the installation of piezometers in the vicinity of the streambed to provide additional shallow aquifer groundwater level measurements.

3.3 Updates to GSP in Response to DWR Letter

The CBGSA agrees that additional evidence and/or description may be warranted for justifying the use of groundwater levels as a proxy for interconnected surface waters. Specifically, the CBGSA feels that identifying a subset of groundwater level representative monitoring wells for use in ISW monitoring, and providing a rationale for their selection, adequately addresses concerns provided in the Letter.

3.3.1 Summary of Potential Undesirable Results for Interconnected Surface Waters

Depletions of ISW are related to chronic lowering of groundwater levels via changes in the hydraulic gradient. Therefore, declines in groundwater elevations in portions of the river system that are hydrologically connected to the river system can lead to increased depletions of surface water. As shown in Figure 3-1, an analysis of the results of the historical simulation of the Cuyama Basin Water Resources Model (CBWRM) reveals that many portions of the stream system in the basin were already disconnected as of 2015 and therefore ISW flows in these stream reaches would not be affected by changes in groundwater levels. The primary areas of concern for ISW are on stretches of the Cuyama River upstream of Ventucopa and downstream of the Russell Fault.

Because the Cuyama River does not flow during most days of the year and the river is not subject to environmental flow regulations, the primary beneficial uses of Cuyama River streamflows are GDEs and water users who utilize water

that may flow into Lake Twitchell downstream of the basin boundary. Lowering groundwater levels could result in reduced streamflows for beneficial use by these users. Therefore, the intent of the ISW monitoring network and sustainability criteria is to ensure that long-term groundwater level declines do not occur in the vicinity of the connected stretches of the Cuyama River.



Figure 3-1. Potential Stream Interconnectivity using Historical Modeled Groundwater Levels in January 2015

3.3.2 Approach for ISW Monitoring and Sustainability Criteria

To develop an ISW monitoring network, a subset of wells from the groundwater levels representative monitoring network has been used to create a depletion of interconnected surface water representative monitoring network. Wells not included in the groundwater levels monitoring network were also considered; but no additional wells were identified that would be suitable for ISW monitoring. After consulting DWRs BMPs for Monitoring Networks and Identification of Data Gaps, the following criteria were used to select wells to be included in the interconnected surface water representative network:

- 1. They are within 1.5-miles of the Cuyama River and/or 1-mile of one of the four major contributing streams to the Cuyama River, including Aliso Creek, Santa Barbara Creek, Quantal Canyon Creek, and Cuyama Creek,
- 2. They have screen intervals within 100 feet below ground surface (bgs). In some cases, wells without screen interval information but with well depths greater than 100 feet bgs were included, under the assumption that the screen interval was less than 100 feet bgs. In many of these wells, recent groundwater depth to water measurements were 40 feet bgs or less.

DWR BMP *Monitoring Networks and Identification of Data Gaps*, provides the following guidance for well selection: "Identify and quantify both timing and volume of groundwater pumping within approximately 3 miles of the stream or as appropriate for the flow regime." However, the CBGSA has chosen to use a 1.5-mile buffer around the Cuyama River and a 1-mile buffer around the major contributing streams because the Basin's unique and dynamic geological and topographical conditions require a narrower window so that the ISW monitoring network wells would cover just the portion of Valley in the vicinity of the River system (and not extend into the foothill areas with significant topographical changes).

In addition, depletions of interconnected surface waters occur at the interaction of surface and groundwater, which is in the shallow portion of the aquifer. In general, wells with completions or depths within 100 ft bgs are preferable to provide more useful information about this near surface interaction. Common practice is to also only include wells that are in areas of interconnectivity or areas where interconnectivity conditions are close to those that define interconnectivity (for example, areas with groundwater levels between 30 to 50-feet below ground surface). Due to the limited number of available wells in the Cuyama Basin with screen intervals (or where screen interval data is not available, well depth) of less than 100 ft bgs, the proposed ISW network includes only five wells. Additional monitoring locations will need to be identified to fill data gaps in the ISW network as discussed below.

The resulting ISW monitoring network is shown in Table 3-1 and Figure 3-2 below. The monitoring network includes 12 wells, nine of which are representative wells for which minimum thresholds and measurable objective have been defined. Minimum thresholds at the representative well locations are protective of GDE locations in the upper and lower portions of the river, with minimum thresholds less than 30 feet from the bottom of the river channel in the vicinity of four wells (89, 114, 830 and 832). Note that well 906 is part of a new multi-completion well that was constructed in the summer of 2021 under DWR's Technical Support Services; while will 906 is a representative well, sustainability criteria will not be developed for this well until a history of groundwater level measurements has been established. While the three non-representative wells in the central basin are too deep for direct monitoring of ISW flows, they are included to allow the GSA to monitor potential groundwater level increases that could result in reconnection between the river and aquifer in the central basin going forward.

Opti ID	Threshold Region	Well Depth (feet bgs)	Screen Interval	Minimum Threshold (feet bgs)	Measurable Objective (feet bgs)
Representative Wells					
2	Southeastern	73	Unknown	72	55
89	Southeastern	125	Unknown	64	44
114	Central	58	Unknown	47	45
568	Central	188	Unknown	37	36
830	Northwestern	77	Unknown	59	56
832	Northwestern	132	Unknown	45	30
833	Northwestern	504	Unknown	96	24
836	Northwestern	325	Unknown	79	36
906	Northwestern	Unknown	50-70	TBD	TBD
Other Monitoring Network Wells					
101	Central	200	Unknown	n/a	n/a
102	Central	Unknown	Unknown	n/a	n/a
421	Central	620	Unknown	n/a	n/a

Table 3-1. Interconnected Surface Water Monitoring Network

The proposed network includes data gaps which will need to be filled in the future:

- Due to the shortage of shallow monitoring wells available to include in the network, additional shallow aquifer measurement devices will be needed. As noted above, the CBGSA has called for the installation of piezometers in the vicinity of the streambed.
- A spatial data gap exists along the Cuyama River in between Well 89 and Ventucopa. Note that significant stretches of the Cuyama River (particularly in the Central Basin) were already disconnected from the groundwater aquifer in 2015 (as discussed in Section 2.2.8 of the GSP).





4. POTENTIAL CORRECTIVE ACTION 3: FURTHER ADDRESS DEGRADED WATER QUALITY

4.1 Initial Review and Opinion Provided by DWR

DWR's Letter expressed two main concerns about the water quality analysis and constituent thresholds used in the GSP. First, the GSP acknowledges that nitrate and arsenic have been historical constituents of concern, but due to regulatory limitations, did not set thresholds for these two constituents. Second, based on feedback provided in a public comment, there was concern that some public data was not included in the water quality analysis conducted for the Basin. DWR believes that the GSA may have approached the management strategies differently (through setting thresholds for these constituents) if this data had been utilized. DWR recommended the following to address the concerns raised in the letter:

- Groundwater conditions information related to water quality should be updated to include all available data, in particular as recommended by the Regional Water Quality Control Board, so as to reflect the best available information regarding water quality.
- The GSA should either develop sustainable management criteria for arsenic and nitrate or provide a thorough, evidence-based description for why groundwater management is unlikely to cause significant and unreasonable degradation of groundwater.
- The GSA should appropriately revise its monitoring network based on the above updates. At a minimum, the GSA should include monitoring for arsenic and nitrates as they have been identified as constituents of concern in the basin.

4.2 Review of Information and Data Provided in Submitted GSP

As discussed in Section 4.3.3 of the GSP, water quality data for the Basin was collected from the Irrigated Lands Program (ILP), Groundwater Ambient Monitoring and Assessment (GAMA) Program, United States Geological Survey (USGS), Cuyama Community Services District (CCSD), Ventura County Water Protection District, and private landowners. Staff performed detailed analysis to ensure that wells included in multiple datasets were paired correctly at to the best of their ability, remove duplicate measurements and data.

The GSP includes a monitoring network (Section 4.8) and sustainability criteria (Section 5.5) for management of TDS in the basin.

The GSP discussion noted that the CBGSA does not have the ability or authority to perform actions to address nitrate or arsenic levels in the Basin. Nitrate concentrations are directly related to fertilizer application on agricultural crops, and SGMA regulations do not provide GSAs the regulatory authority to manage fertilizer application. This regulatory authority is, however, held by the SWRCB through the ILP. Additionally, arsenic is naturally occurring, and has only been measured in limited regions of the basins.

4.3 Updates to GSP in Response to DWR Letter

The following sections provided updated information in response to the three actions recommended by DWR.

4.3.1 Updates to Groundwater Conditions Descriptions

Additional data collection efforts were performed for nitrate and arsenic measurements, including collecting updated data from publicly available data portals such as GAMA, CEDEN, GeoTracker, and the National Water Quality

Monitoring Council that were previously accessed during GSP development. In addition to accessing the public portals for each program, staff coordinated with RWQCB staff to ensure that all publicly available data was collected. It was confirmed by RWQCB staff that all available data for the ILP program were included in the online GAMA data portal download. Some of these public portals have overlapping data that, where possible, were removed, to develop a comprehensive data set for the Basin.

Summary statistics for nitrate (as N) and arsenic measurements taken from 2010-2020 are shown in Table 4-1. For nitrates, 41 of the 102 wells with measurements during this period recorded a measurement exceeding the MCL of 10 mg/L. For arsenic, 5 of the 23 wells with measurement recorded a measurement exceeding the MCL of 10 μ g/L. Figures 4.1 and 4.2 show the locations of wells with monitoring measurements for nitrates and arsenic during the 2010-2020 period and the average concentrations measured in each well. In each case, the wells with average values exceeding the MCLs correspond with the wells tabulated in Table 4-1. A review of the data for wells with measurements both before and after 2015 showed little change with no wells showing degradation of nitrate or arsenic such that a well that was below the MCL before 2015 was above the MCL afterwards.

	Nitrate (as N)	Arsenic
Number of monitoring wells	102	23
Number of wells with recorded MCL exceedances from 2010-2020	41	5

Table 4-1. Summary Statistics for Nitrate (as N) and Arsenic

As shown in Figures 4-1 and 4-2, most wells with nitrate and arsenic concentrations exceeding MCLs are located in the central threshold region. The locations of high arsenic concentrations are focused to the south of the town of New Cuyama near the existing Cuyama Community Services District (CCSD) well. This is a known issue for the CCSD that will be mitigated by the construction of a replacement well for the district, which was included as a project in the GSP (see section 7.4.4).



Figure 4-1. Average Well Measurements of Nitrate (as N) from 2010 through 2020



Figure 4-2. Average Well Measurements of Arsenic from 2010 through 2020

4.3.2 Why Groundwater Management is Unlikely to Affect Nitrate and Arsenic Concentrations

As discussed in the submitted GSP, nitrates are the result of fertilizer application on agricultural land. The CBGSA does not have the regulatory authority granted through SGMA to regulate the application of fertilizer. This regulatory authority is held by the SWRCB through the Irrigated Lands Regulatory Program (ILP). The CBGSA can encourage agricultural users in the Basin to use best management practices when using fertilizers but cannot limit their use. Because the CBGSA has no mechanism to directly control nitrate concentrations, it is believed that setting thresholds for nitrates is not appropriate. However, it should be noted that GSP implementation will likely have an indirect effect on nitrates in the central basin due to the pumping allocations that were included in the GSP. This will likely reduce the application of fertilizers in the central part of the basin as agricultural production in the Basin is reduced over time.

Similarly, because arsenic is naturally occurring, the CBGSA does not believe the establishment of thresholds for arsenic is appropriate. As shown in Figure 4-2, wells with high arsenic concentrations are located in a relatively small area of the basin south of New Cuyama. A review of production well data provided by the counties (discussed in Section 2) indicates that there are no active private domestic wells located in this part of the basin. The only operational public well that that is located in this part of the basin serves the Cuyama Community Services District (CCSD). As noted above, the CCSD is currently pursuing the drilling of a new production well, which was included as a project in the GSP. Once this well is completed, it is not believed that any domestic water users will be using a well that accesses groundwater with known high arsenic concentrations.

4.3.3 Monitoring Approach for Nitrates and Arsenic

The CBGSA intends to leverage and make use of existing monitoring programs for nitrates and arsenic, in particular ILP for nitrates and USGS for arsenic. The wells in the basin where recent monitoring data is available for these constituents are shown in Figures 4-1 and 4-2. To supplement the understanding of nitrate and arsenic concentrations in the basin, the GSP intends to perform an additional measurement of nitrate and arsenic at each water quality well identified in the GSP (GSP Figure 4-20) during calendar year 2022. This will provide a baseline constituent level in all groundwater quality representative monitoring network locations that can be utilized for future basin planning. Additional measurements may be considered by the GSA in the future in anticipation of future five-year updates.

5. POTENTIAL CORRECTIVE ACTION 4: PROVIDE EXPLANATION FOR HOW OVERDRAFT WILL BE MITIGATED IN THE BASIN

5.1 Initial Review and Opinion Provided by DWR

This potential corrective action is related to the lack discussion of how overdraft will be mitigated in the entire basin. In particular, DWR requests additional information for why the GSP does not include pumping reductions in the Ventucopa management area (where the Cuyama Basin Water Resources Model (CBWRM) predicts long-term groundwater level declines) and why projects and management actions are not included to prevent groundwater level declines in the northwest region.

5.2 Review of Information and Data Provided in Submitted GSP

The Water budget section of the GSP (section 2.3) includes a sustainability analysis that estimates that basin-wide groundwater pumping (currently estimated at about 60-64 taf per year) would need to be reduced by somewhere between 55% and 67% (depending on whether climate change and/or water supply projects are included).

The GSP defined management areas in central basin and in the Ventucopa region because those were the two regions in which the model predicted long-term overdraft (Section 7.1). The modeling results did not predict overdraft or groundwater declines in any other portion of the basin, including the northwest region. The Projects and Management Actions section includes an action to implement pumping allocations in the Central Basin management area to address projected overdraft in that portion of the basin. However, as described in the Executive Summary, pumping reductions were not recommended in the Ventucopa management area because of the need to "perform additional monitoring, incorporate new monitoring wells, and further evaluate groundwater conditions" before the need for pumping reductions can be determined.

The CBWRM model documentation (Appendix 2-C) estimated the range of uncertainty of basinwide model results and included recommendations for future model updates, including additional hydrogeological characterization, improved streamflow data collection, an assessment of groundwater pumping levels and incorporating future collected data into model calibration – each of which is relevant to the model's representation of the Ventucopa region.

5.3 Updates to GSP in Response to DWR Letter

The following sections provide additional information regarding the Ventucopa management area and the northwestern region.

5.3.1 Ventucopa Management Area

As noted in the Executive Summary of the GSP, the GSA intends to re-evaluate the need for pumping reductions in the Ventucopa region after further evaluating groundwater conditions over a two-to-five-year period following submission of the GSP. At the time that the GSP was submitted, the CBGSA felt that it was 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 basin, cropping patterns in this portion of the basin was not provided by local landowners but was 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 on ensuring that groundwater levels matched historical trends at the boundary of the central basin and Ventucopa region.

Table 5-1 shows the average annual groundwater budget in the Eastern threshold region for the 50-year current and projected simulation (without climate change) included in the GSP. While the historical simulation showed a small surplus in the region, the future projected simulation showed a deficit of about 700 acre-feet per year (AFY), which corresponded to the groundwater level declines shown in Figure 7-1 of the GSP. This quantity is small compared to an overall basin groundwater storage deficit of 25,000 AFY, and it is approximately 10% of the total groundwater inflow in this region. This can be well within the range of uncertainties in any of the water budget compontents, and the range of overdraft can be +/- 10%. In light of the uncertainties, and lack of sufficient data on the water budget compontents to verify the model projected water budget, the CBGSA determined that implementing a management action in the region at this early stage may be too premature. Instead, the CBGSA is determined to compile and analyze additional data and informaiton 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 determination of possible management actions to address any possible projected overdraft conditions.

	Current and Projected Simulation (2018-2067)
Inflows	
Deep percolation	4,100
Stream seepage	1,300
Subsurface inflow	700
Total Inflows	6,100
Outflows	
Groundwater pumping	6,800
Total Outflows	6,800
Change in Storage	-700

Table 5-1. Eastern Region Groundwater Budget Summary (Acre-feet per year)

5.3.2 Northwestern Region

In regard to the northwestern region, management actions were not included in the GSP for this region because the available information did not indicate a projected overdraft in that region. The following information was considered during development of the 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, 2018¹, previously described in Section 2. This document identified minimum thresholds for this area that would be protective of groundwater pumping capacity for production wells in this area. CHG estimated that the minimum thresholds proposed for the region would result in a fifteen percent reduction in the saturated thickness screened by the production wells, which would correspond in very general terms to a similar reduction in transmissivity and pumping capacity of the production wells.

The technical analyses described in Section 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 (per section 7.6 of the GSP). Therefore, the available evidence indicates that management actions are not required in this region at this time.

¹ Posted at the Cuyama Basin GSA website here: <u>https://cuyamabasin.org/assets/pdf/Cleath-Harris-Sustainability-Thresholds-for-Northwestern-Region.pdf</u>

Attachment 1



CALIFORNIA DEPARTMENT OF WATER RESOURCES SUSTAINABLE GROUNDWATER MANAGEMENT OFFICE

901 P Street, Room 313-B | Sacramento, CA 95814 | P.O. Box 942836 | Sacramento, CA 94236-0001

June 3, 2021

Mr. Taylor Blakslee Cuyama Basin GSA Project Coordinator 4900 California Avenue, Tower B, 2nd Floor Bakersfield, CA. 93309

RE: Cuyama Valley - 2020 Groundwater Sustainability Plan

Dear Taylor Blakslee,

The Cuyama Basin Groundwater Sustainability Agency (GSA) submitted the Cuyama Valley Groundwater Basin (Basin) Groundwater Sustainability Plan (GSP) to the Department of Water Resources (Department) for evaluation and assessment as required by the Sustainable Groundwater Management Act (SGMA).¹ This letter is intended to initiate consultation between the Department and the GSA in advance of issuance of a determination described under the GSP Regulations.²

Department staff recognize the significant effort that went into development of the first GSP for the Basin and believe the aggressive approach toward demand management is a significant step toward achieving groundwater sustainability for the Basin.

Department staff have completed an initial review of the GSP and have identified deficiencies which may preclude the Department's approval.³ Consistent with the GSP Regulations, Department staff are considering corrective actions⁴ that the GSA should review to determine whether and how the deficiencies can be addressed. The deficiencies and corrective actions are generally related to the need to define sustainable management criteria in the manner required by SGMA and the GSP Regulations, further address water quality, and better explain how overdraft will be mitigated.

The Department has the authority to determine the GSP is incomplete and, if it does so, the deficiencies precluding approval will need to be addressed within a period of time not to exceed 180 days from the determination, which would be issued no later than January 28, 2022. Prior to making that determination, and after you review the contents of this letter, Department staff will contact you to discuss the deficiencies and consult

³ 23 CCR § 355.2(e)(2).

¹ Water Code § 10720 et seq.

² 23 CCR Division 2, Chapter 1.5, Subchapter 2.

⁴ 23 CCR § 355.2(e)(2)(B).

with you regarding the amount of time needed by the GSA to address the potential corrective actions detailed in Attachment 1.

If you have any questions, please don't hesitate to contact the Sustainable Groundwater Management Office staff by emailing <u>sqmps@water.ca.gov</u>.

Thank you,

Alta

Craig Altare, P.G. Supervising Engineering Geologist Groundwater Sustainability Plan Review Section Chief

Attachment:

1. Potential Corrective Actions

Potential Corrective Actions

Department staff have identified deficiencies in the GSP which may preclude the Department's approval. Consistent with the GSP Regulations, Department staff are considering corrective actions that the GSA should review to determine how the deficiencies can be addressed. The deficiencies and corrective actions are explained below, including an explanation of the general regulatory background, the specific deficiency identified in the GSP, and the specific actions to address the deficiency. The specific actions identified are potential corrective actions until a final determination is made by the Department.

Potential Corrective Action 1. Provide justification for, and effects associated with, the sustainable management criteria

The first potential corrective action relates to the GSP's lack of justification for the established sustainable management criteria and the effects of those criteria on the interests of beneficial uses and users in the Basin.

Background

The Department's GSP Regulations collect several required elements of a GSP under the heading of "Sustainable Management Criteria," including undesirable results along with the sustainability goal, minimum thresholds, and measurable objectives. Except for the sustainability goal, the components of sustainable management criteria must be quantified so that progress towards sustainability can be monitored and evaluated consistently and objectively.

A GSA relies on, among other factors, local experience, public outreach and involvement, and information about the basin it has described in its basin setting—the hydrogeologic conceptual model, the description of current and historical groundwater conditions, and the water budget—to develop criteria for defining undesirable results and setting minimum thresholds and measurable objectives.⁵

SGMA defines sustainable groundwater management as the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results.⁶ The avoidance of undesirable results is thus explicitly part of sustainable groundwater management as established by SGMA and critical to the success of a GSP. Accordingly, managing a basin solely to eliminate overdraft within 20 years does not necessarily mean that GSAs in the basin have done

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Documents/Files/BMP-6-Sustainable-Management-Criteria-DRAFT_ay_19.pdf. <sup>6</sup> Water Code § 10721(v).
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⁵ Best Management Practices for the Sustainable Management of Groundwater: Sustainable Management Criteria (DRAFT). California Department of Water Resources, November 2017, <a href="https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-

all that is required to achieve sustainable groundwater management. To achieve sustainable groundwater management under SGMA, the basin must experience no undesirable results by the end of the 20-year GSP implementation period and be able to demonstrate an ability to maintain those defined sustainable conditions over the 50-year planning and implementation horizon.

The definition of undesirable results is thus critical to the establishment of an objective method to define and measure sustainability for a basin. As an initial matter, SGMA provides a qualitative definition of undesirable results as "one or more" of six specific "effects caused by groundwater conditions occurring throughout the basin."⁷

It is up to GSAs to define in their GSPs the specific significant and unreasonable effects that would constitute undesirable results and to define the groundwater conditions that would produce those results in their basins.⁸ The GSA's definition needs to include a description of the processes and criteria relied upon to define undesirable results and must describe the effect of undesirable results on the beneficial uses and users of groundwater. From this definition, the GSA establishes minimum thresholds, which are quantitative values that represent groundwater conditions at representative monitoring sites that, when exceeded individually or in combination with minimum thresholds at other monitoring sites, may cause the basin to experience undesirable results.⁹

SGMA leaves the task of establishing undesirable results and setting thresholds largely to the discretion of the GSA, subject to review by the Department. In its review, the Department requires a thorough and reasonable analysis of the groundwater conditions the GSA is trying to avoid, and the GSA's stated rationale for setting objective and quantitative sustainable management criteria to prevent those conditions from occurring. If a Plan does not meet this requirement, the Department is unable to evaluate the likelihood of the Plan in achieving its sustainability goal. This does not necessarily mean that the GSP or its objectives are inherently unreasonable; however, it is unclear which conditions the GSA seeks to avoid, making it difficult for the Department to monitor whether the GSA will be successful in that effort when implementing its GSP.

GSP-Specific Deficiency

Based on its initial review, Department staff are concerned that although the GSP appears to realistically quantify the water budget and identify the extent of overdraft in the Basin, and while the GSP proposes projects and management actions that appear likely to eventually eliminate overdraft in portions of the Basin, the GSP has not defined

⁷ Water Code § 10721(x).

⁸ 23 CCR § 354.26.

⁹23 CCR § 354.28, Best Management Practices for the Sustainable Management of Groundwater: Sustainable Management Criteria (DRAFT). California Department of Water Resources, November 2017, <u>https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-</u> <u>Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-</u> <u>Documents/Files/BMP-6-Sustainable-Management-Criteria-DRAFT av 19.pdf.</u>

sustainable management criteria in the manner required by SGMA and the GSP Regulations.

Undesirable Results

The GSP provides quantitative values for the minimum thresholds and includes a combination of those minimum threshold exceedances that the GSA considers causing an undesirable result. However, the GSP does not discuss, or appear to address, the critical first step of identifying the specific significant and unreasonable effects that would constitute undesirable results. The GSP provides general statements about undesirable results (e.g., "The Undesirable Result for the chronic lowering of groundwater levels is a result that causes significant and unreasonable reduction in the long-term viability of domestic, agricultural, municipal, or environmental uses over the planning and implementation horizon of this GSP."¹⁰) and generic descriptions of the effects of undesirable results (e.g., "...the Undesirable Results could cause potential de-watering of existing groundwater infrastructure, starting with the shallowest wells..."¹¹), but does not provide an explanation for the specific significant and unreasonable condition(s) that the GSA intends to avoid in the Basin through implementation of the GSP (e.g., a level of impact to well infrastructure or to environmental uses).

The GSP states undesirable results for chronic lowering of groundwater levels would occur when groundwater level minimum thresholds are exceeded in 30 percent of monitoring wells for two consecutive years. (The same 30 percent for two consecutive years criterion is used for reduction in storage, degradation of groundwater quality, land subsidence, and depletion of interconnected surface water.) However, the GSP does not provide any explanation for why the criterion is consistent with avoiding significant and unreasonable effects that constitute undesirable results.

Minimum Thresholds.

The GSP lacks explanation of the justification for setting its minimum thresholds and also lacks explanation of the anticipated effects of groundwater conditions at those thresholds on the interests of the beneficial uses and users of groundwater in nearly all threshold regions. The GSP describes that each threshold region has its own formula to determine the quantitative minimum threshold (e.g., in the Central threshold region it is determined by subtracting 20 percent of the historical range in groundwater levels from the groundwater level observed in early 2015). While it is acceptable to set minimum thresholds differently in portions of a basin, all minimum thresholds must, by the definition of that term in the GSP Regulations, relate to the conditions that could cause undesirable results.

This lack of information is particularly notable in the Northwestern threshold region. The GSP states that the intention of the sustainable management criteria for the Northwestern

¹⁰ Cuyama Basin GSP, Section 3.2.1, p. 260.

¹¹ *Ibid*.

region is to "…protect the water levels from declining significantly, while allowing beneficial land surface uses (including domestic and agricultural uses) and using the storage capacity of this region."¹² However, the Northwestern region is the only region in the Basin where the sustainable management criteria indicate a plan to substantially lower groundwater levels, relative to conditions at the time of GSP preparation (i.e., the minimum thresholds for groundwater levels are up to 140 to 160 feet lower¹³), in an area with the highest concentration of potential GDEs¹⁴ in Cuyama Valley and with interconnected surface water, which is evidenced by a gaining reach of the river.¹⁵ The GSP did not quantify the expected depletions of surface water over time or assess or disclose the anticipated effects of the established minimum thresholds on beneficial uses and users of groundwater, which, based on Department staff's review, appear to include nearby domestic users, potential GDEs, and users of the interconnected surface water.

The absence of this information and related discussion precludes meaningful disclosure to, and participation by, interested parties and residents in the Basin. In addition, without this discussion it is difficult for Department staff to determine whether it is appropriate or reasonable for the GSA to conclude that undesirable results in the Basin would not occur unless nearly a third of representative monitoring points exceed their minimum thresholds for two consecutive years.

Addressing the Deficiency

The GSA must provide more detailed information, as required in the GSP Regulations, regarding undesirable results and minimum thresholds for all applicable threshold regions.¹⁶ The GSA should describe the anticipated effects of the established minimum thresholds and undesirable results on the interests of beneficial uses and users and how the GSA determined that those thresholds would avoid undesirable results in the Basin. Department staff suggest that the following issues be considered and addressed:

1. The GSA should describe the specific undesirable results they aim to avoid through implementing the GSP. For example, if the long-term viability of domestic, agricultural, municipal, or environmental uses is a concern with respect to lowering of groundwater levels, then the GSA should describe the specific effects on those users that the GSA considers significant and unreasonable and define groundwater conditions that would lead to those effects. Clarify how the criteria defining when undesirable results occur in the Basin (i.e., 30 percent exceedance of minimum thresholds for two consecutive years) was established, the rationale

¹² Cuyama Basin GSP, Section 5.2.2, p. 352.

¹³ Cuyama Basin GSP, Chapter 5 Appendix A, p. 1505-1509.

¹⁴ Cuyama Basin GSP, Section 2.2.9, p. 227, Figures 2-63 and 2-64, p. 230-231, Chapter 2-Appendix D, p. 1258-1279.

¹⁵ Cuyama Basin GSP, Section 2.2.8, p. 222, Figure 2-61, p. 223.

¹⁶ 23 CCR §§ 354.26, 354.28.

behind the approach, and why it is consistent with avoiding the significant and unreasonable effects identified by the GSA.

- 2. The GSA should either explain how the existing minimum threshold groundwater levels are consistent with avoiding undesirable results or they should establish minimum thresholds at the representative monitoring wells that account for the specific undesirable results the GSA aims to avoid. For each threshold region, the GSA should evaluate and disclose the anticipated effects of the GSP's minimum thresholds and undesirable results on:
 - a. Well infrastructure, including domestic wells, community and public water supply wells, and agricultural wells. The GSA may utilize the Department's well completion report dataset¹⁷ or other similar data to estimate the number and kinds of wells expected to be impacted at the minimum thresholds identified in the GSP. Public water system well locations and water quality data can currently be obtained using the State Water Resource Control Board's (State Water Board) Geotracker website.¹⁸ Administrative contact information for public water systems and well locations and contacts for state small water systems and domestic wells can be obtained by contacting the State Water Board's Needs Analysis staff.¹⁹ The State Water Board is currently developing a database to allow for more streamlined access to this data in the future.

If the GSA identifies potential impacts to drinking water wells, including de minimis users and disadvantaged communities, those impacts should be described in the GSP. By the first five-year update, the GSA should inventory and better define the location of active wells in the Basin. The GSA should document known impacts to drinking water users caused by groundwater management, should they occur, in annual reports and subsequent periodic updates.

b. Environmental uses and users of groundwater. If data are not available to support evaluation of the effects of established minimum thresholds on environmental uses and users, the GSA should clarify the strategy, mechanism, and timeline for acquiring that data and incorporating that data into management of the Basin.²⁰

<u>https://geotracker.waterboards.ca.gov/map/#;</u> select "Public Water Wells" under the "Other Sites" option and navigate to the area of interest.

¹⁷ Well Completion Report Map Application. California Department of Water Resources, <u>https://www.arcgis.com/apps/webappviewer/index.html?id=181078580a214c0986e2da28f8623b37</u>.

¹⁸ GeoTracker Application. California State Water Resources Control Board, https://geotracker.waterboards.ca.gov/map/#: select "Public Water Wells" upo

¹⁹ DDW-SAFER-NAU@Waterboards.ca.gov.

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

Potential Corrective Action 2. Use of groundwater levels as a proxy for depletion of interconnected surface water

The second potential corrective action relates to the GSP's lack of explanation and justification for the use of groundwater levels as a proxy for depletions of interconnected surface water.

Background

The GSP Regulations allow for a GSP to establish representative groundwater level thresholds that serve as minimum thresholds for other sustainability indicators if the GSA can demonstrate the representative groundwater level value is a reasonable proxy, supported by adequate evidence.

GSP-Specific Deficiency

The GSP lacks a demonstration, with supporting evidence, of the reasonableness of using groundwater level thresholds as a proxy for depletion of interconnected surface water. The GSP states that "[b]y setting minimum thresholds on shallow groundwater wells near surface water, the [GSA] can to (*sic*) monitor and manage [the hydraulic gradient between surface water and groundwater], and in turn, manage potential changes in depletions of interconnected surface [water]."²¹ However, in defining the groundwater level proxies for depletion of interconnected surface water, the GSA appears to have used all the groundwater level thresholds it defined for chronic lowering of groundwater levels regardless of depth of the well or proximity to surface water. It is not obvious to Department staff why managing the Basin to the complete set of chronic lowering of groundwater level thresholds is sufficient to avoid undesirable results for depletion of interconnected surface many of those groundwater level thresholds represent conditions that are lower than current conditions.

Addressing the Deficiency

The GSA should provide a demonstration, with supporting evidence, for why using the basinwide groundwater level minimum thresholds is a reasonable proxy for thresholds for depletion of interconnected surface water.

Potential Corrective Action 3. Further address degraded water quality

The third potential corrective action relates to the GSP's apparent lack of consideration of the best available information and data regarding water quality, and the resultant effects on the GSP's description of water quality conditions, water quality sustainable management criteria, and monitoring for certain water quality constituents.

²¹ Cuyama Basin GSP, Section 3.2.6, p. 263.
Background

SGMA and the GSP Regulations do not require a GSP to address undesirable results associated with degraded water quality that occurred before, and have not been corrected by, January 1, 2015. However, management of a basin pursuant to an adopted GSP should not result in further water quality degradation that is significant and unreasonable, either due to routine groundwater use or as a result of implementing projects or management actions called for in the GSP.²² SGMA provides GSAs with legal authority to regulate and affect pumping and groundwater levels, which have the potential to affect the concentration or migration of water quality constituents and result in degradation of water quality. Additionally, the GSP Regulations state that GSAs should consider local, state, and federal water quality standards when establishing sustainable management criteria,²³ and SGMA provides GSAs with the authority to manage and control polluted water and use authorities under existing laws to implement its GSP.²⁴ Thus, establishing sustainable management criteria and performing routine monitoring of water quality constituents known to affect beneficial uses and users is within the purview of a GSA.

GSP-Specific Deficiency

Department staff believe the GSA's decision to not set sustainable management criteria for arsenic and nitrates may not be reasonable because the findings were not supported by the best available information.²⁵ The GSP focused on total dissolved solids (TDS), nitrates, and arsenic as a result of public comments received during GSP development.²⁶ The GSP includes sustainable management criteria for TDS but, despite acknowledging that nitrate and arsenic have exceeded maximum contaminant levels (MCL) prescribed by the State Water Board, the GSP did not establish sustainable management criteria for those constituents. Furthermore, the GSA does not intend to perform routine monitoring for nitrates and arsenic on the basis that they determined there is no "causal nexus" between the GSA's authority to implement projects and management actions and concentrations of arsenic or nitrate.²⁷

In its justification for the lack of sustainable management criteria for nitrates and arsenic, the GSP explains that there were relatively few detections of those constituents above drinking water regulatory limits—two nitrate samples and three arsenic samples.²⁸ Regarding arsenic, the GSP states that the three arsenic detections above the MCL came

²² Water Code § 10721(x)(4); 23 CCR § 354.28(c)(4).

^{23 23} CCR § 354.28(c)(4).

²⁴ Water Code §§ 10726.2(e), 10726.8(a).

²⁵ While there is no definition of best available information, the GSP Regulations define best available science as the use of sufficient and credible information and data, specific to the decision being made and the time frame available for making that decision, that is consistent with scientific and engineering professional standards of practice.

²⁶ Cuyama Basin GSP, Section 2.2.7, p. 208.

²⁷ Cuyama Basin GSP, Section 4.8, p. 321.

²⁸ Cuyama Basin GSP, Section 5.5, p. 360-361.

from an inactive well and from groundwater deeper than 700 feet below ground surface, which the GSP states is below the range of pumping depths for drinking water.²⁹ In other words, the GSP states that arsenic was not detected above MCL in active wells shallower than 700 feet.³⁰ However, credible public comments submitted to the Department raised concerns about this claim and the data the GSA may or may not have considered, the GSA's interpretation of that data, and the decision of the GSA to not monitor or develop management criteria for those constituents. For example, a comment submitted to the Department indicates the State Water Board's Groundwater Ambient Monitoring and Assessment (GAMA) Program's Groundwater Information System contains records of arsenic concentrations exceeding the MCL in drinking water wells screened as shallow as 340 feet below ground surface.³¹ Department staff confirmed that this claim appears to be true.

Regarding nitrates, a public comment submitted to the Department indicates that potentially 13 of 109 nitrate samples (12 percent) have exceeded the MCL in the past ten years,³² which conflicts with the GSP's statement that only two samples during 2011 to 2018 exceeded the MCL.

Addressing the Deficiency

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

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

²⁹ Cuyama Basin GSP, Section 2.2.7 and Section 4.8, p. 209 and 321.

³⁰ Cuyama Basin GSP, Section 2.2.7, p. 209.

 ³¹ Central Coast Water Board Comments on Final Cuyama Valley Groundwater Sustainability Plan.
 Central Coast Regional Water Quality Control Board Comment Letter Submitted to the Department, 15
 May 2020, <u>https://sgma.water.ca.gov/portal/service/gspdocument/download/4021</u>.
 ³² Ibid.

groundwater management is not likely to cause significant and unreasonable degradation of groundwater by increasing concentrations of those constituents.

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

Potential Corrective Action 4. Provide explanation for how overdraft will be mitigated in the basin

The fourth potential corrective action is related to the lack of a complete discussion of how overdraft will be mitigated in the entire basin through implementation of the GSP.

Background

GSP Regulations require that a GSP include a description of projects and management actions that the GSA has determined will achieve the sustainability goal for the basin, the timeline of implementation, and the sustainability indicators that are expected to benefit, including the circumstances in which they would be implemented.³³ For basins in overdraft, the description shall include a quantification of demand reduction or other methods for mitigating the overdraft.³⁴

GSP-Specific Deficiency

The GSP identifies two management areas, Central Basin and Ventucopa, as the primary pumping areas in the Cuyama Valley that have the highest water demand. Groundwater levels in the Central Basin management area decline by a modeled 2 to 7.7 feet per year, whereas the Ventucopa management area decline by 2 to 3 feet per year.³⁵

To meet the sustainability goal of the Basin, the GSA explains in detail throughout the GSP that a pumping reduction of 50 to 67 percent will be required.³⁶ Pumping reductions would begin in 2023 and become progressively larger each successive year, with full implementation of the total pumping reduction in 2038.³⁷

³³ 23 CCR § 354.44.

³⁴ 23 CCR § 354.44(b)(2).

³⁵ Cuyama Basin GSP, Figure 7-1, p. 387.

³⁶ Cuyama Basin GSP, Executive Summary and Table 2-7, p. 26 and 254.

³⁷ Cuyama Basin GSP, Figures ES-15 and 8-1, p. 32 and 419-420.

However, the GSP only intends to implement those pumping reductions in the Central Basin management area and does not explain why pumping reductions will not be implemented in the Ventucopa management area. The GSP executive summary states that "[p]umping reductions are not currently recommended for the Ventucopa Area" and instead recommends "to perform additional monitoring, incorporate new monitoring wells, and further evaluate groundwater conditions in the area over the next two to five years" and that "[o]nce additional data are obtained and evaluated, the need for any reductions in pumping will be determined."³⁸ These cited details from the executive summary are the extent of the GSP's description of the plans for possible demand management in the Ventucopa management area.³⁹ Lack of detail for this area is concerning because it appears to Department staff as though the GSA's defined minimum thresholds, which should represent a point in the Basin that, if exceeded, may cause undesirable results⁴⁰, in the Ventucopa management area could be exceeded in as soon as two years if two feet per year of groundwater level decline continues.⁴¹ It is also concerning because the GSP explains that "[d]omestic water users in [the Ventucopa and Central Basin management areas] are experiencing water supply challenges, and in the 2012-2016 drought experienced well failures."42

In addition to the Ventucopa Area, the GSP also does not discuss why projects and management actions were not considered in the Northwestern threshold region, where, as noted above in Potential Corrective Action 1, it appears that overdraft will occur for some time and the allowable groundwater-level decline is over 100 feet.

Addressing the Deficiency

The GSA should explain the rationale for not implementing pumping reductions in the overdrafted Ventucopa management area or any other portion of the Basin where overdraft is expected to continue, and explain the timeline and criteria that may be used to determine whether future pumping reduction allocations are needed.⁴³ If the criteria to implement pumping reductions are related to the effects on beneficial uses and users, as mentioned in Potential Corrective Action 1, the GSP should clarify what those effects are that would necessitate pumping reductions.

³⁸ Cuyama Basin GSP, Executive Summary, p. 32.

³⁹ Cuyama Basin GSP, Executive Summary and Section 7.3.2, p. 32 and 410.

⁴⁰ 23 CCR § 354.28(a).

⁴¹ Maps in the GSP appear to indicate two representative monitoring wells are located in the Ventucopa Management Area, OPTI wells 62 and 101. The minimum threshold at OPTI Well 62 is 182 feet below ground surface and the water level as of December 2020 was 158.4 feet below ground surface; at two feet per year the minimum threshold will be exceeded in approximately 12 years. The minimum threshold at OPTI Well 101 is 111 feet below ground surface and the water level as of December 2020 was 108.6 feet below ground surface; at two feet per year the minimum threshold could be exceeded in approximately 2 years.

⁴² Cuyama Basin GSP, Section 7.2.4, p. 405.

⁴³ 23 CCR §§ 355.4(b)(3), 355.4(b)(4), 355.4(b)(5), 355.4(b)(6).

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

Attachment 2



Directors:	August 27, 2021			
Derek Yurosek <i>Chair</i>				
Lynn Compton Vice Chair	Craig Altare, P.G. Supervising Engineering Geologist Groundwater Sustainability Plan Review Section Chief California Department of Water Resources			
Byron Albano	901 P Street, Room 313-B Sacramento, CA 95814			
Cory Bantilan	Re: Cuvama Basin GSA Response to DWR's June 3, 2021, Consultation Letter			
Paul Chounet				
Zack Scrivner	Dear Mr. Altare:			
Glenn Shephard	The Cuyama Basin Groundwater Sustainability Agency (CBGSA) appreciates the			
Lorena Stoller	2021 (Letter) (Attachment 1), and the advanced time to address deficiencies DWR			
Matt Vickery	identified in the CBGSA's Groundwater Sustainability Plan (GSP). The CBGSA Board of Directors' (Board) intends to address the four Potential Corrective Actions			
Das Williams	identified by DWR in a satisfactory way prior to DWR's final determination of GSP status in January 2022.			
Jane Wooster				
Chaffe	At the August 18, 2021, Board meeting, the Board discussed various options to address the four Potential Corrective Actions provided in DWR's Letter. Following extensive public discussion and review, the Board approved specific responses to			
Staff:	those Potential Corrective Actions, as detailed below.			
James M. Beck				
Executive Director	In implementing the Board's direction, the CBGSA will:			
Joe Hughes	 Perform additional technical analyses and develop draft technical content responsive to DWP's comments that will be reviewed and considered at a 			
Legal Counsel	Special Standing Advisory Committee and Board meeting in mid-to-late October 2021.			
	 Develop a memorandum and Board resolution describing the CBGSA's responsive actions that will be reviewed and considered by the Board at its November 2021 meeting for submittal to DWR. 			
	Potential Corrective Action No. 1 Provide justification for, and effects associated with, the sustainable management			

criteria. The CBGSA will perform a technical analysis of minimum thresholds in relation to

production well depths and Groundwater Dependent Ecosystems (GDE) locations, including investigation of individual wells. Using available data, the analysis will consider well depths, perforations, and the distribution of well age in the Cuyama

August 27, 2021 Cuyama Basin GSA Response to DWR's June 3, 2021, Consultation Letter Page 2 of 3

groundwater basin (Basin). In addition, a modeling analysis will be performed in the Northwestern region of the Basin to evaluate the effects of pumping drawdown in that area on nearby domestic wells and GDEs. Finally, a more detailed investigation will be performed on GDEs in the Northwestern threshold region by a biologist and hydrogeologist.

The results of these analyses will be used to develop a more detailed narrative on potential undesirable results, discussion of how beneficial uses and users were considered, potential economic impacts (from the direct and indirect economic analyses performed by ERA), and their relationship to sustainability criteria in the GSP. This will be included in the memorandum to be provided to DWR.

Potential Corrective Action No. 2

Use of groundwater levels as a proxy for depletion of interconnected surface water.

The CBGSA will identify a subset of existing groundwater level monitoring wells to be used for Interconnected Surface Water (ISW) monitoring. Further, the CBGSA will develop appropriate undesirable results criteria for ISW. Wells for the ISW monitoring network will be selected by considering both proximity to the river and perforation depth. While the Basin currently has limited historical data and limited existing monitoring resources to characterize surface water flows and groundwater, the CBGSA is pursuing improvements to monitoring with new USGS flow gauges and new piezometers that can improve understanding of ISW in the Basin going forward.

The memorandum to be provided to DWR will describe the revised ISW monitoring network and how ISW monitoring will be improved once additional monitoring resources are available.

Potential Corrective Action No. 3

Further address degraded water quality.

The CBGSA will review all available existing water quality data to develop an evidence-based description of why groundwater management is unlikely to cause significant and unreasonable degradation of groundwater. It will also identify existing agencies that serve as primary regulators of water quality in the Basin. CBGSA intends for those agencies to continue serving that regulatory role in the Basin, specifically related to arsenic and nitrates. Finally, the CBGSA will take a measurement for nitrates and arsenic in each water quality monitoring well in 2022 to establish a baseline understanding of nitrate and arsenic.

These actions will be described in the memorandum to be provided to DWR.

Potential Corrective Action No. 4

Provide explanation for how overdraft will be mitigated in the basin.

DWR commented that the "lack of detail for [the Ventucopa Area] is concerning because it appears to Department staff as though the GSA's defined minimum thresholds, which should represent a point in the Basin that, if exceeded, may cause undesirable results, in the Ventucopa management area could be exceeded in as soon as two years if two feet per year of groundwater level decline continues." In response, the CBGSA will provide more detail on its management decisions for the Ventucopa Area by August 27, 2021 Cuyama Basin GSA Response to DWR's June 3, 2021, Consultation Letter Page 3 of 3

describing model deficiencies in the context of operational knowledge and local expertise for that region. This will be included in the memorandum to be provided to DWR.

For the Northwestern Region threshold region, DWR commented that "the GSP also does not discuss why projects and management actions were not considered in the Northwestern threshold region, where, as noted above in Potential Corrective Action 1, it appears that overdraft will occur for some time and the allowable groundwater-level decline is over 100 feet." In response, the CBGSA will utilize the analyses to be performed under Potential Corrective Action No. 1, as well as other available information, to provide a rationale for the CBGSA's decisions for management actions in that region. This will be included in the memorandum to be provided to DWR.

DWR / CBGSA Coordination

CBGSA staff and an ad hoc committee of the Board would like to meet with DWR staff to discuss the CBGSA's approach to addressing the Potential Corrective Actions. CBGSA staff will contact DWR soon to coordinate this meeting.

The CBGSA appreciates the opportunity to address these issues and believes DWR's concerns can be addressed resulting in a successfully approved GSP in January 2022.

Please feel free to contact Taylor Blakslee at (661) 477-3385, or <u>tblakslee@hgcpm.com</u> if you have any questions.

Sincerely,

Derek Yurosek Board Chairman Cuyama Basin Groundwater Sustainability Agency



TO:	Board of Directors Agenda Item No. 10
FROM:	Jim Beck / Brian Van Lienden
DATE:	November 3, 2021
SUBJECT:	Adopt Resolution No. 21-113 Enacting Corrective Actions in Response to DWR's Consultation Letter Dated June 3, 2021

<u>Issue</u>

Resolution enacting corrective actions in response to DWR's consultation letter dated June 3, 2021.

Recommended Motion

Adopt Resolution No. 21-113 enacting corrective actions in response to DWR's consultation letter dated June 3, 2021.

Discussion

Resolution No. 21-113 enacts corrective actions in response to the California Department of Water Resources' (DWR) consultation letter dated June 3, 2021, and authorizes submittal to DWR.

The proposed corrective actions are presented under agenda item No. 9 and are included as an exhibit to the draft resolution which is provided as Attachment 1 for consideration of approval.

DWR staff informed the CBGSA that they will not have the staff time to adequately review this additional technical analysis ahead of their official determination on the CBGSA's Groundwater Sustainability Plan due January 28, 2022. However, they will consider this information during the 180-day period that will start January 29, 2022.

Attachment 1

RESOLUTION NO. 2021-113

A RESOLUTION OF THE BOARD OF DIRECTORS OF CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY ENACTING CORRECTIVE ACTIONS IN RESPONSE TO THE CALIFORNIA DEPARTMENT OF WATER RESOURCES' CONSULTATION LETTER DATED JUNE 3, 2021

WHEREAS, the Sustainable Groundwater Management Act (SGMA) requires that a Groundwater Sustainability Agency overlying a high-priority groundwater basin adopt a Groundwater Sustainability Plan (GSP) by January 31, 2020; and

WHEREAS, on December 9, 2019, the Board of Directors of the Cuyama Basin Groundwater Sustainability Agency (CBGSA) adopted a GSP in accordance with SGMA; and

WHEREAS, on January 28, 2020, CBGSA submitted its adopted GSP to the California Department of Water Resources (DWR) for review; and

WHEREAS, on June 3, 2021, in advance of an official determination regarding CBGSA's GSP, DWR provided CBGSA with a consultation letter containing an informal review of and four potential corrective actions to CBGSA's GSP (Consultation Letter), a copy of which is attached as **Exhibit A** and incorporated herein by reference; and

WHEREAS, in response, CBGSA developed a technical memorandum addressing the four potential corrective actions contained in DWR's Consultation Letter (Technical Memorandum), a copy of which is attached as **Exhibit B** and incorporated herein by reference.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Cuyama Basin Groundwater Sustainability Agency as follows:

- 1. The foregoing is true and correct.
- 2. The Technical Memorandum is approved and adopted.
- 3. The CBGSA Executive Director, or his designee, is authorized to submit the Technical Memorandum to DWR.

PASSED, APPROVED, AND ADOPTED this 3rd day of November 2021.

ATTEST:

James M. Beck Executive Director





TECHNICAL MEMORANDUM

TO: Craig Altare, California Department of Water Resources PREPARED BY: Woodard & Curran on Behalf of the Cuyama Valley Groundwater Basin Groundwater Sustainability Agency DATE: October 21, 2021 RE: Cuyama Basin GSA Response to DWR's June 3, 2021, Consultation Letter

1. INTRODUCTION

The Cuyama Valley Groundwater Basin Groundwater Sustainability Agency (CBGSA) received a Consultation Initiation Letter (Letter) on June 3, 2021 (Attachment 1), from the California Department of Water Resources (DWR). The Letter was intended to provide the CBGSA with a preview of potential corrective actions that could be included in the official review letter of the Groundwater Sustainability Plan (GSP) from DWR. Receiving this Letter also allows the CBGSA additional time to address potential corrective actions before the official review is released, which triggers a 180-day correction period to update and address any deficiencies in the GSP.

During the August 18, 2021, Board Meeting, the CBGSA laid out a framework for responding to the Letter and provided that framework in a letter addressed to Mr. Craig Altare (Groundwater Sustainability Plan Review Section Chief), dated August 27, 2021 (Attachment 2).

This memorandum includes the analysis and work outlined in the framework provided to Mr. Altare. This memorandum is intended to supplement the Cuyama Basin GSP that was submitted in January 2020 and fill potential gaps identified in the Letter provided by DWR. Future updates to the GSP will include the information and analysis, or an updated version of the information and analysis, provided in this memorandum.

This technical memorandum provides a thorough response to each potential corrective action in the sections below.

2. POTENTIAL CORRECTIVE ACTION 1: PROVIDE JUSTIFICATION FOR, AND EFFECTS ASSOCIATED WITH, THE SUSTAINABLE MANAGEMENT CRITERIA

DWR requests additional information regarding the justification for the sustainable management criteria included in the GSP and the effects of those criteria on beneficial users in the Basin. DWR identified two issues that should be addressed as part of this corrective action:

- 1. Providing a more detailed description of the criterion used to identify undesirable results (URs)
- 2. Providing additional information regarding how the groundwater level minimum thresholds (MTs) are consistent with avoiding undesirable results, with a particular emphasis on the MTs in the Northwestern Region.

The following subsections address each of these issues by providing:

- A summary of this Potential Corrective Action in the Letter
- A brief review of information, justification, and data provided in the GSP
- A discussion with supplemental information, justification, and data as needed to support the GSP.

2.1 Defining the Criterion Used to Identify Undesirable Results

2.1.1 Initial Review and Opinion Provided by DWR

In the Letter, DWR states that UR statements do not, "identifying the specific significant and unreasonable effects that would constitute undesirable results... [and] does not provide an explanation for the specific significant and unreasonable condition(s) that the GSA intends to avoid in the Basin through implementation of the GSP." Although the GSP includes subsections in Section 3: Undesirable Results, titled *Identification of Undesirable Results*, the Letter states there is no, "explanation for why the criterion is consistent with avoiding significant and unreasonable effects that constitute undesirable results."

2.1.2 Review of Information and Data Provided in Submitted GSP

The Cuyama GSP provides a description of URs and Identification of URs for each of the applicable sustainability indicators in Section 3. For example, UR subsections for groundwater levels are as follows:

"Description of Undesirable Results

The Undesirable Result for the chronic lowering of groundwater levels is a result that causes significant and unreasonable reduction in the long-term viability of domestic, agricultural, municipal, or environmental uses over the planning and implementation horizon of this *GSP*.

Identification of Undesirable Results

Quantifiable Criterion 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.

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Cause

Potential Causes of Undesirable Results

Potential causes of Undesirable Results for the chronic lowering of groundwater levels are groundwater pumping that exceeds the average sustainable yield in the Basin, and changes in precipitation in the Cuyama Watershed in the future.

Potential Effects of Undesirable Results

If groundwater levels were to reach Undesirable Results levels, the Undesirable Results could cause potential de-watering of existing groundwater infrastructure, starting with the shallowest wells, could potentially adversely affect groundwater dependent ecosystems, and could potentially cause changes in irrigation practices, crops grown, and adverse effects to property values. Additionally, reaching Undesirable Results for groundwater levels could adversely affect domestic and municipal uses, including uses in disadvantaged **communities, which rely on groundwater in the Basin.**"

Each applicable sustainability indicator has been provided the same level of discussion in the GSP. The following are the *Identification of Undesirable Results* statements for each of the applicable sustainability indicators.

- Chronic Lower of Groundwater Levels 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.
- Reduction of Groundwater Storage 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.
- Degraded Water Quality This result is considered to occur during GSP implementation when 30 percent of the representative monitoring points (i.e., 20 of 64 sites) exceed the minimum threshold for a constituent for two consecutive years.
- Land Subsidence This result is detected to occur during GSP implementation when 30 percent of representative subsidence monitoring sites (i.e., 1 of 2 sites) exceed the minimum threshold for subsidence over two years.
- Depletions of Interconnected Surface Water 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.

It should be noted that as planned in the GSP Implementation, some monitoring networks have been modified for efficiency, access agreement obstructions, and to minimize burden on the GSA and its operating budget. These adjustments are ongoing and the CBGSA has continued to utilize the same percent criteria as above in its management of the Basin.

2.1.3 Supplemental GSP Information in Response to DWR Letter

A review of SGMA regulations, Section 354.26 (Undesirable Results) provides three descriptive characteristics about URs (subsections (b) (1-3)).

- 1. The cause of the UR.
- 2. A quantifiable criterion used to describe when a UR occurs.
- 3. **Potential effects** on beneficial uses and users, on land uses and property interests, and other potential effects that may occur from URs.

The information provided in the Section 3 of the GSP satisfies these regulations by providing the text, explanations, and quantitative descriptions and justifications for URs. Each of these three descriptive characteristics are labeled in the excerpt from Section 3 of the GSP provided above in Subsection 2.1.2 using the left-hand bubble callout labels. Furthermore, the GSP provided a quantifiable criterion (ratio of wells) to describe the conditions it would expect to see the potential effects as described.

To address the concerns raised in the DWR Letter, the following additional information is provided regarding the rationale for the criteria used in the GSP (i.e. "30% of exceedances over 24 consecutive months") to define the point at which Basin conditions cause *significant and unreasonable* effects to occur.

The term "significant and unreasonable" is not defined by SGMA regulations. Instead, the conditions leading to this classification are determined by the GSA, beneficial users, and other interested parties in each basin. In the Cuyama Basin, the identification of undesirable results were developed through an extensive stakeholder-driven process that included:

- Careful consideration of input from local stakeholders and landowners
- A conceptualization of the hydrogeological conceptual model
- An assessment of current and historical conditions and best available data
- Local knowledge and professional opinion

The CBGSA recognizes the lack of reliable historical data and acknowledges the limitations and uncertainties it causes (see *Data Gaps* and *Plan to Fill Data Gap* subsections of *Section 4 – Monitoring Networks* and *Section 8 – Implementation Plan* for addressing those limitations). However, the re-assessment of thresholds and UR statements will be a likely component of future GSP updates. These future revisions will utilize the detailed and reliable data collected by the GSA during the first five years of GSP implementation.

The 30 percent of wells exceeding their MT for 24 consecutive months criteria included in the GSP allows the CBGSA the flexibility to identify the cause of MT exceedances and to develop a plan for response (per the Adaptive Management approach described in Section 7.6 of the GSP). Potential causes of MT exceedances could include:

- Prolonged drought
- New pumping nearby the representative well
- Unreliable and non-representative data used to calculate the MT

Mimimum threshold exceedances in multiple wells is considered more indicative of a basin-scale decline in groundwater levels and potential adverse imapcts on groundwater infrastructure, as apposed to a more localized groundwater level declines, which could be assocaited with nearby pumping. Furthermore, groundwater levels in areas of the basin change in response to climatic conditions and therfore, sustained exceedances of mimimum thresholds are considered to be more signicant than short-term exceedances. Setting the *Identification of Undesirable Results* criteria at 30 percent or more of wells exceeding their MT is intended to reflect undesirable results at the basin scale, and using 24 consecutive months allows the GSA time to address issues, perform investigations, and implement projects and management actions as needed.

2.2 Additional Information on Groundwater Level Minimum Thresholds

2.2.1 Initial Review and Opinion Provided by DWR

The second part of this potential corrective action seeks additional information to explain how each threshold region's groundwater level MTs are consistent with avoiding undesirable results, "particularly... in the Northwestern threshold region." For every threshold region, DWR requests that the GSA evaluate and provide the potential effects that MTs and URs would have on:

- Well infrastructure including domestic, community, public, and agricultural wells
- Environmental uses and users of groundwater

2.2.2 Review of Information and Data Provided in Submitted GSP

The CBGSA developed six specific Threshold Regions for the development of thresholds for chronic lowering of groundwater levels. The six threshold regions were defined to allow areas with similar conditions to be grouped together for calculating MOs, MTs, and IMs. These threshold regions are shown in Figure 2-1, and a detailed description of each threshold region is provided in *GSP Section 5.2 – Chronic Lower of Groundwater Levels*. Table 2-12-1 provides a summary of the approach used to establish the MT for chronic lowering of groundwater levels for each threshold region.



Figure 2-1. Cuyama Basin Threshold Regions

Threshold Perion MT Calculation Approach				
	The MT for this region was found by	Monitoring in this threshold region indicates lovels are stable, with some declines in the		
Northwestern	determining the region's total average	area where new agriculture is established. Due to these hydrologic conditions, the MT		
	saturated thickness for the primary storage	was set to protect the water levels from declining significantly, while allowing beneficial		
	area and calculating 15 percent of that	land surface uses (including domestic and agricultural uses) and using the storage		
	denth. This value was then set as the MT	canacity of this region		
Western	The MT was calculated by taking the difference between the total well depth and the value closest to mid-February, 2018, and calculating 15 percent of that depth. That value was then subtracted from the mid-February, 2018 measurement to calculate the MT.	Monitoring in this threshold region indicates groundwater levels are stable, and levels varied significantly depending on where representative wells were in the region. The most common use of groundwater in this region is for domestic use. Due to these hydrologic conditions, the MT was set to protect the water levels from declining significantly, while allowing beneficial land surface uses of the groundwater and protection of current well infrastructure. Values from mid-February, 2018, are used because data collected during this time represent a full basin condition. This calculation allows users in this region to use their groundwater supply without increasing the risk of running a well beyond acceptable limits, and this methodology is responsive to the variety of conditions and well depths in this region.		
Central	MT was calculated by finding the maximum and minimum groundwater levels for each representative well and calculating 20 percent of the historical range. This 20 percent was then added to the depth to water measurement closest to, but not before, January 1, 2015, and no later than April 30, 2015.	Monitoring in this threshold region indicates a decline in groundwater levels, indicating an extraction rate that exceeds recharge rates. The MT for this region is set to allow current beneficial uses of groundwater while reducing extraction rates over the planning horizon to meet sustainable yield. The MO is intended to allow sufficient operational flexibility for future drought conditions.		
Eastern	The MT was calculated by taking the total historical range of recorded groundwater levels and used 35 percent of the range. This 35 percent was then added below the value closest to January 1, 2015 (as described above).	Monitoring in this threshold region indicates a downward trend in groundwater levels. However, much of this downward trend is due to hydrologic variability and may be recovered in the future. Therefore, MTs have been set to allow for greater flexibility as compared to other regions. The MT for wells in this region intends to protect domestic, private, public and environmental uses of the groundwater by allowing for managed extraction in areas that have beneficial uses and protecting those with at risk infrastructure.		

Table 2-1. Summary of MT Calculations for Chronic Lowering of Groundwater Levels for Each Threshold Region

Threshold Region	MT Calculation Approach	Justification
Southeastern	MT was calculated by subtracting five years of groundwater storage from the MO. MO was calculated by finding the measurement taken closest to (but not before) January 1, 2015 and not after April 30, 2015.	Per SGMA Regulations, the CBGSA is not required to improve conditions prior to those seen when SGMA was enacted on January 1, 2015. Historical data also shows that groundwater levels are static except during drought conditions (experienced from 2013 to 2018) indicating this area of the Basin is generally at capacity. Because URs were not experienced during this last drought, setting MTs at five years of drought storage will provide the CBGSA a threshold that is protective of domestic, private, public, and environmental uses while providing operational flexibility during drought conditions.
Badlands	None	This threshold region has no groundwater use or active wells. As a result, no MO, MT, or IM was calculated.

2.2.3 Supplemental GSP Information in Response to DWR Letter

The groundwater levels minimum thresholds included in the GSP were developed with the intention of avoiding the undesirable results of excessive drawdowns in the basin while minimizing the number of domestic wells that go dry and the potential impacts on GDEs in the basin. Following receipt of DWR's letter, two technical analyses were performed to provide additional information related to the effects of the GSPs groundwater levels minimum thresholds and undesirable results definitions on well infrastructure (i.e., domestic, public and other production wells) and on environmental uses of groundwater (i.e., GDEs).

The results of these analyses demonstrate that the minimum thresholds included in the GSP achieve the goals of avoiding undesirable results in the basin. In particular, the following conclusions can be made:

- The sustainability criteria are protective of production wells (including domestic wells) in the Basin. Only 5 wells (2% of all wells in the basin) are at risk of going dry if minimum thresholds are reached throughout the basin (i.e., at all representative wells). The CBGSA will strive to prevent domestic wells in the basin from going dry through the Adaptive Management approach included in the GSP (Section 7.6), which call for an investigation of potential issues if groundwater levels approach minimum thresholds. Therefore, the potential for a small number of domestic wells to be at risk is not considered to be a significant and unreasonable result.
- A numerical modeling analysis of proposed minimum thresholds at Wells 841 and 845 show that these thresholds would have no negative impact on local domestic wells and only minimal impact at a single GDE location. Stream depletions could potentially increase by a small amount.

The results of these technical analyses demonstrate that the minimum thresholds included in the GSP are protective against significant and unreasonable results for production wells and GDEs in the basin. The approach and results of each technical analysis are described below.

Assessment of Minimum Thresholds as Compared to Domestic and Production Well Screen Intervals

An assessment was performed of the minimum threshold levels included in the GSP as compared to the well screen intervals of production wells throughout the basin to try to determine how many production wells may be at risk of going dry if the groundwater levels were to fall to minimum threshold levels at monitoring well locations throughout the basin. The assessment was performed using well location and construction information provided by the counties that overlie the basin, including Santa Barbara, San Luis Obispo, Ventura, and Kern. To accomplish this, the CBGSA collected all available well data from public sources and the four Counties in tabular formats. In the northwestern region, well completion reports were also individually collected, processed, and included in the analysis.

Wells were processed in GIS by utilizing their screen interval, and where screen interval information was unavailable, their well depths, to compare those values with minimum thresholds at monitoring wells located throughout for the Basin. Some basic filtering criteria were applied to the analysis to remove wells from consideration, including those that are destroyed or non-compliant in the county datasets, wells that are far away from active groundwater management and monitoring (e.g. the Badlands region), and those that were already dry as of January 1, 2015.

The results of the analysis are shown in Table 2-2 and Figure 2-2. Out of a total of 250 production wells that were evaluated, a total of eight (4% of the total) are at risk of going dry if minimum thresholds are reached. Four of these eight wells are domestic wells. As noted above, the CBGSA will strive to use adaptive management to prevent these domestic wells from going dry.

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Threshold	Total Number	Domestic Wells at	Total Production Wells	Percentage of Wells at	
Region	of Production	Risk to Go Dry if	at Risk to Go Dry if	Risk of Going Dry	
	Wells	GWLs reach MTs	GWLs reach MTs		
Northwestern	16	1	2	13%	
Western	40	0	0	0%	
Central	89	0	0	0%	
Eastern	39	1	5	13%	
Southeastern	66	2	1	2%	
Whole Basin	250	4	8	3%	

Table 2-2. Domestic and Production Wells and MT Summary Statistics



parties for any legal decisions. Any reliance upon the map or data contained herein shall be at the users' sole risk.

Figure 2-2. Well Status Based on Minimum Threshold Analysis

Modeling Analysis of Northwestern Threshold Groundwater Levels Minimum Thresholds

Concern was presented in DWR's Letter about whether the thresholds established in the northwestern threshold region at Opti wells 841 and 845 are protective of nearby beneficial users of water. Specifically, concern was raised that if groundwater levels were to reach MTs in representative wells what impact may occur to nearby domestic wells and GDEs. To address this, the Cuyama Basin Water Resources Model (CBWRM) was used to simulate groundwater level conditions by artificially dropping groundwater levels near Opti Wells 841 and 845 to the set MTs. This was done by assigning specified head boundary conditions at the MT levels for the model nodes near these well locations. The simulation was run for 10 years over the historical period between water years (WY) 2011 to 2020 during which the specified head boundary conditions at the MT levels were continuously active.

Figure 2-3 shows the modeled change in groundwater elevations resulting from setting groundwater levels at the minimum thresholds at wells 841 and 845. Areas shaded in red or tan color on the figure had reduced groundwater elevations as compared to the baseline condition. Areas shaded in lime green were unaffected by the change in groundwater elevations at the well 841 and 845 locations. As shown in the figure, there are no active domestic wells within the area affected by the lowered groundwater elevations at wells 841 and 845. The only GDE which may be affected is the GDE located at the confluence of Cottonwood Creek and the Cuyama River, which has an expected impact of less than 5 feet. However, even with this difference the estimated depth to water at this GDE location would be shallower than 30 feet. Potential impacts on this GDE location will be monitored at nearby Opti well 832.

As noted above, the other potential beneficial use that may be affected comes from Cuyama River inflows into Lake Twitchell. The model simulation also showed an increase in stream depletion in the affected portion of the aquifer of about 1,200 acre-feet per year. This represents about 12 percent (out of 10,200 afy) of the modeled streamflow in the Cuyama River at this location during the WY 2011-2020 model simulation period. However, the actual change in inflows into Lake Twitchell would be less than 1,200 afy because of stream depletions that would occur between Cottonwood Creek and Lake Twitchell. For comparison, during the same period the USGS gage on the Cuyama River just upstream of Lake Twitchell (11136800) recorded an average annual flow of 7,900 afy, only a portion of which comes from the Cuyama Basin. Given the lack of data regarding the hydrology and stream seepage between Cottonwood Creek and Lake Twitchell, it is uncertain how much of an impact this would have on the flows that ultimately are stored in Lake Twitchell.



Figure 2-3. Change in Groundwater Levels in Northwestern Region from CBWRM Test Simulation

3. POTENTIAL CORRECTIVE ACTION 2: USE OF GROUNDWATER LEVELS AS A PROXY FOR DEPLETION OF INTERCONNECTED SURFACE WATER

3.1 Initial Review and Opinion Provided by DWR

As described in the Letter, DWR requests supporting evidence to justify the CBGSA's use of the basin-wide groundwater level minimum thresholds as a reasonable proxy for thresholds for depletions of interconnected surface water (ISW). It is the understanding of the CBGSA that the primary objection to the CBGSA's approach was the utilization of the entire groundwater level representative network as a one-for-one proxy for interconnected surface waters. This is because not all groundwater representative monitoring sites are necessarily appropriate for monitoring for depletion of interconnected surface waters.

3.2 Review of Information and Data Provided in Submitted GSP

As stated in the SGMA regulations, as well as mentioned in the Letter, utilizing a sustainability indicator as a proxy for another is allowed if supported by adequate evidence. The submitted GSP provides justification for using groundwater levels thresholds as a proxy for interconnected surface waters in Sections 3.2.6 and 5.7 with supporting descriptions of surface water and groundwater interactions in Sections 2.1.9 and 2.2.8.

As described in Sections. 2.1.9, the primary surface water body in the Basin is the Cuyama River. Flows in the Cuyama River are perennial, with most dry seasons seeing little to no flow. There are also four main contributing streams and other more minor contributing streams. The Cuyama River and all of the contributing streams are dry during most of the year, with flows occurring only during precipitation events during the winter months. Nearly all precipitation in the Basin and contributing watersheds percolate into the primary aquifer. The Cuyama River and four primary contributing streams were modeled, with the estimates of gaining and losing quantities provided in Table 2-2 of the GSP.

As noted in the plan, there is limited data available pertaining to the shallow aquifer system or to the quantity and timing of streamflows in the Basin. To help address this deficiency, the CBGSA recently installed new streamflow gages on the Cuyama River. In addition, in Section 2.2.9 the GSP recommended the installation of piezometers in the vicinity of the streambed to provide additional shallow aquifer groundwater level measurements.

3.3 Updates to GSP in Response to DWR Letter

The CBGSA agrees that additional evidence and/or description may be warranted for justifying the use of groundwater levels as a proxy for interconnected surface waters. Specifically, the CBGSA feels that identifying a subset of groundwater level representative monitoring wells for use in ISW monitoring, and providing a rationale for their selection, adequately addresses concerns provided in the Letter.

3.3.1 Summary of Potential Undesirable Results for Interconnected Surface Waters

Depletions of ISW are related to chronic lowering of groundwater levels via changes in the hydraulic gradient. Therefore, declines in groundwater elevations in portions of the river system that are hydrologically connected to the river system can lead to increased depletions of surface water. As shown in Figure 3-1, an analysis of the results of the historical simulation of the Cuyama Basin Water Resources Model (CBWRM) reveals that many portions of the stream system in the basin were already disconnected as of 2015 and therefore ISW flows in these stream reaches would not be affected by changes in groundwater levels. The primary areas of concern for ISW are on stretches of the Cuyama River upstream of Ventucopa and downstream of the Russell Fault.

Because the Cuyama River does not flow during most days of the year and the river is not subject to environmental flow regulations, the primary beneficial uses of Cuyama River streamflows are GDEs and water users who utilize water

that may flow into Lake Twitchell downstream of the basin boundary. Lowering groundwater levels could result in reduced streamflows for beneficial use by these users. Therefore, the intent of the ISW monitoring network and sustainability criteria is to ensure that long-term groundwater level declines do not occur in the vicinity of the connected stretches of the Cuyama River.

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Figure 3-1. Potential Stream Interconnectivity using Historical Modeled Groundwater Levels in January 2015

3.3.2 Approach for ISW Monitoring and Sustainability Criteria

To develop an ISW monitoring network, a subset of wells from the groundwater levels representative monitoring network has been used to create a depletion of interconnected surface water representative monitoring network. Wells not included in the groundwater levels monitoring network were also considered; but no additional wells were identified that would be suitable for ISW monitoring. After consulting DWRs BMPs for Monitoring Networks and Identification of Data Gaps, the following criteria were used to select wells to be included in the interconnected surface water representative network:

- 1. They are within 1.5-miles of the Cuyama River and/or 1-mile of one of the four major contributing streams to the Cuyama River, including Aliso Creek, Santa Barbara Creek, Quantal Canyon Creek, and Cuyama Creek,
- 2. They have screen intervals within 100 feet below ground surface (bgs). In some cases, wells without screen interval information but with well depths greater than 100 feet bgs were included, under the assumption that the screen interval was less than 100 feet bgs. In many of these wells, recent groundwater depth to water measurements were 40 feet bgs or less.

DWR BMP *Monitoring Networks and Identification of Data Gaps*, provides the following guidance for well selection: "Identify and quantify both timing and volume of groundwater pumping within approximately 3 miles of the stream or as appropriate for the flow regime." However, the CBGSA has chosen to use a 1.5-mile buffer around the Cuyama River and a 1-mile buffer around the major contributing streams because the Basin's unique and dynamic geological and topographical conditions require a narrower window so that the ISW monitoring network wells would cover just the portion of Valley in the vicinity of the River system (and not extend into the foothill areas with significant topographical changes).

In addition, depletions of interconnected surface waters occur at the interaction of surface and groundwater, which is in the shallow portion of the aquifer. In general, wells with completions or depths within 100 ft bgs are preferable to provide more useful information about this near surface interaction. Common practice is to also only include wells that are in areas of interconnectivity or areas where interconnectivity conditions are close to those that define interconnectivity (for example, areas with groundwater levels between 30 to 50-feet below ground surface). Due to the limited number of available wells in the Cuyama Basin with screen intervals (or where screen interval data is not available, well depth) of less than 100 ft bgs, the proposed ISW network includes only five wells. Additional monitoring locations will need to be identified to fill data gaps in the ISW network as discussed below.

The resulting ISW monitoring network is shown in Table 3-1 and Figure 3-2 below. The monitoring network includes 12 wells, nine of which are representative wells for which minimum thresholds and measurable objective have been defined. Minimum thresholds at the representative well locations are protective of GDE locations in the upper and lower portions of the river, with minimum thresholds less than 30 feet from the bottom of the river channel in the vicinity of four wells (89, 114, 830 and 832). Note that well 906 is part of a new multi-completion well that was constructed in the summer of 2021 under DWR's Technical Support Services; while will 906 is a representative well, sustainability criteria will not be developed for this well until a history of groundwater level measurements has been established. While the three non-representative wells in the central basin are too deep for direct monitoring of ISW flows, they are included to allow the GSA to monitor potential groundwater level increases that could result in reconnection between the river and aquifer in the central basin going forward.

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Opti ID	Threshold Region	Well Depth (feet bgs)	Screen Interval	Minimum Threshold (feet bgs)	Measurable Objective (feet bgs)
Representative Wells					
2	Southeastern	73	Unknown	72	55
89	Southeastern	125	Unknown	64	44
114	Central	58	Unknown	47	45
568	Central	188	Unknown	37	36
830	Northwestern	77	Unknown	59	56
832	Northwestern	132	Unknown	45	30
833	Northwestern	504	Unknown	96	24
836	Northwestern	325	Unknown	79	36
906	Northwestern	Unknown	50-70	TBD	TBD
Other Monitoring Network Wells					
101	Central	200	Unknown	n/a	n/a
102	Central	Unknown	Unknown	n/a	n/a
421	Central	620	Unknown	n/a	n/a

Table 3-1. Interconnected Surface Water Monitoring Network

The proposed network includes data gaps which will need to be filled in the future:

- Due to the shortage of shallow monitoring wells available to include in the network, additional shallow aquifer measurement devices will be needed. As noted above, the CBGSA has called for the installation of piezometers in the vicinity of the streambed.
- A spatial data gap exists along the Cuyama River in between Well 89 and Ventucopa. Note that significant stretches of the Cuyama River (particularly in the Central Basin) were already disconnected from the groundwater aquifer in 2015 (as discussed in Section 2.2.8 of the GSP).





4. POTENTIAL CORRECTIVE ACTION 3: FURTHER ADDRESS DEGRADED WATER QUALITY

4.1 Initial Review and Opinion Provided by DWR

DWR's Letter expressed two main concerns about the water quality analysis and constituent thresholds used in the GSP. First, the GSP acknowledges that nitrate and arsenic have been historical constituents of concern, but due to regulatory limitations, did not set thresholds for these two constituents. Second, based on feedback provided in a public comment, there was concern that some public data was not included in the water quality analysis conducted for the Basin. DWR believes that the GSA may have approached the management strategies differently (through setting thresholds for these constituents) if this data had been utilized. DWR recommended the following to address the concerns raised in the letter:

- Groundwater conditions information related to water quality should be updated to include all available data, in particular as recommended by the Regional Water Quality Control Board, so as to reflect the best available information regarding water quality.
- The GSA should either develop sustainable management criteria for arsenic and nitrate or provide a thorough, evidence-based description for why groundwater management is unlikely to cause significant and unreasonable degradation of groundwater.
- The GSA should appropriately revise its monitoring network based on the above updates. At a minimum, the GSA should include monitoring for arsenic and nitrates as they have been identified as constituents of concern in the basin.

4.2 Review of Information and Data Provided in Submitted GSP

As discussed in Section 4.3.3 of the GSP, water quality data for the Basin was collected from the Irrigated Lands Program (ILP), Groundwater Ambient Monitoring and Assessment (GAMA) Program, United States Geological Survey (USGS), Cuyama Community Services District (CCSD), Ventura County Water Protection District, and private landowners. Staff performed detailed analysis to ensure that wells included in multiple datasets were paired correctly at to the best of their ability, remove duplicate measurements and data.

The GSP includes a monitoring network (Section 4.8) and sustainability criteria (Section 5.5) for management of TDS in the basin.

The GSP discussion noted that the CBGSA does not have the ability or authority to perform actions to address nitrate or arsenic levels in the Basin. Nitrate concentrations are directly related to fertilizer application on agricultural crops, and SGMA regulations do not provide GSAs the regulatory authority to manage fertilizer application. This regulatory authority is, however, held by the SWRCB through the ILP. Additionally, arsenic is naturally occurring, and has only been measured in limited regions of the basins.

4.3 Updates to GSP in Response to DWR Letter

The following sections provided updated information in response to the three actions recommended by DWR.

4.3.1 Updates to Groundwater Conditions Descriptions

Additional data collection efforts were performed for nitrate and arsenic measurements, including collecting updated data from publicly available data portals such as GAMA, CEDEN, GeoTracker, and the National Water Quality

Monitoring Council that were previously accessed during GSP development. In addition to accessing the public portals for each program, staff coordinated with RWQCB staff to ensure that all publicly available data was collected. It was confirmed by RWQCB staff that all available data for the ILP program were included in the online GAMA data portal download. Some of these public portals have overlapping data that, where possible, were removed, to develop a comprehensive data set for the Basin.

Summary statistics for nitrate (as N) and arsenic measurements taken from 2010-2020 are shown in Table 4-1. For nitrates, 41 of the 102 wells with measurements during this period recorded a measurement exceeding the MCL of 10 mg/L. For arsenic, 5 of the 23 wells with measurement recorded a measurement exceeding the MCL of 10 μ g/L. Figures 4.1 and 4.2 show the locations of wells with monitoring measurements for nitrates and arsenic during the 2010-2020 period and the average concentrations measured in each well. In each case, the wells with average values exceeding the MCLs correspond with the wells tabulated in Table 4-1. A review of the data for wells with measurements both before and after 2015 showed little change with no wells showing degradation of nitrate or arsenic such that a well that was below the MCL before 2015 was above the MCL afterwards.

	Nitrate (as N)	Arsenic
Number of monitoring wells	102	23
Number of wells with recorded MCL exceedances from 2010-2020	41	5

Table 4-1. Summary Statistics for Nitrate (as N) and Arsenic

As shown in Figures 4-1 and 4-2, most wells with nitrate and arsenic concentrations exceeding MCLs are located in the central threshold region. The locations of high arsenic concentrations are focused to the south of the town of New Cuyama near the existing Cuyama Community Services District (CCSD) well. This is a known issue for the CCSD that will be mitigated by the construction of a replacement well for the district, which was included as a project in the GSP (see section 7.4.4).



Figure 4-1. Average Well Measurements of Nitrate (as N) from 2010 through 2020

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Figure 4-2. Average Well Measurements of Arsenic from 2010 through 2020

4.3.2 Why Groundwater Management is Unlikely to Affect Nitrate and Arsenic Concentrations

As discussed in the submitted GSP, nitrates are the result of fertilizer application on agricultural land. The CBGSA does not have the regulatory authority granted through SGMA to regulate the application of fertilizer. This regulatory authority is held by the SWRCB through the Irrigated Lands Regulatory Program (ILP). The CBGSA can encourage agricultural users in the Basin to use best management practices when using fertilizers but cannot limit their use. Because the CBGSA has no mechanism to directly control nitrate concentrations, it is believed that setting thresholds for nitrates is not appropriate. However, it should be noted that GSP implementation will likely have an indirect effect on nitrates in the central basin due to the pumping allocations that were included in the GSP. This will likely reduce the application of fertilizers in the central part of the basin as agricultural production in the Basin is reduced over time.

Similarly, because arsenic is naturally occurring, the CBGSA does not believe the establishment of thresholds for arsenic is appropriate. As shown in Figure 4-2, wells with high arsenic concentrations are located in a relatively small area of the basin south of New Cuyama. A review of production well data provided by the counties (discussed in Section 2) indicates that there are no active private domestic wells located in this part of the basin. The only operational public well that that is located in this part of the basin serves the Cuyama Community Services District (CCSD). As noted above, the CCSD is currently pursuing the drilling of a new production well, which was included as a project in the GSP. Once this well is completed, it is not believed that any domestic water users will be using a well that accesses groundwater with known high arsenic concentrations.

4.3.3 Monitoring Approach for Nitrates and Arsenic

The CBGSA intends to leverage and make use of existing monitoring programs for nitrates and arsenic, in particular ILP for nitrates and USGS for arsenic. The wells in the basin where recent monitoring data is available for these constituents are shown in Figures 4-1 and 4-2. To supplement the understanding of nitrate and arsenic concentrations in the basin, the GSP intends to perform an additional measurement of nitrate and arsenic at each water quality well identified in the GSP (GSP Figure 4-20) during calendar year 2022. This will provide a baseline constituent level in all groundwater quality representative monitoring network locations that can be utilized for future basin planning. Additional measurements may be considered by the GSA in the future in anticipation of future five-year updates.

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5. POTENTIAL CORRECTIVE ACTION 4: PROVIDE EXPLANATION FOR HOW OVERDRAFT WILL BE MITIGATED IN THE BASIN

5.1 Initial Review and Opinion Provided by DWR

This potential corrective action is related to the lack discussion of how overdraft will be mitigated in the entire basin. In particular, DWR requests additional information for why the GSP does not include pumping reductions in the Ventucopa management area (where the Cuyama Basin Water Resources Model (CBWRM) predicts long-term groundwater level declines) and why projects and management actions are not included to prevent groundwater level declines in the northwest region.

5.2 Review of Information and Data Provided in Submitted GSP

The Water budget section of the GSP (section 2.3) includes a sustainability analysis that estimates that basin-wide groundwater pumping (currently estimated at about 60-64 taf per year) would need to be reduced by somewhere between 55% and 67% (depending on whether climate change and/or water supply projects are included).

The GSP defined management areas in central basin and in the Ventucopa region because those were the two regions in which the model predicted long-term overdraft (Section 7.1). The modeling results did not predict overdraft or groundwater declines in any other portion of the basin, including the northwest region. The Projects and Management Actions section includes an action to implement pumping allocations in the Central Basin management area to address projected overdraft in that portion of the basin. However, as described in the Executive Summary, pumping reductions were not recommended in the Ventucopa management area because of the need to "perform additional monitoring, incorporate new monitoring wells, and further evaluate groundwater conditions" before the need for pumping reductions can be determined.

The CBWRM model documentation (Appendix 2-C) estimated the range of uncertainty of basinwide model results and included recommendations for future model updates, including additional hydrogeological characterization, improved streamflow data collection, an assessment of groundwater pumping levels and incorporating future collected data into model calibration – each of which is relevant to the model's representation of the Ventucopa region.

5.3 Updates to GSP in Response to DWR Letter

The following sections provide additional information regarding the Ventucopa management area and the northwestern region.

5.3.1 Ventucopa Management Area

As noted in the Executive Summary of the GSP, the GSA intends to re-evaluate the need for pumping reductions in the Ventucopa region after further evaluating groundwater conditions over a two-to-five-year period following submission of the GSP. At the time that the GSP was submitted, the CBGSA felt that it was 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 basin, cropping patterns in this portion of the basin was not provided by local landowners but was 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 on ensuring that groundwater levels matched historical trends at the boundary of the central basin and Ventucopa region.

Table 5-1 shows the average annual groundwater budget in the Eastern threshold region for the 50-year current and projected simulation (without climate change) included in the GSP. While the historical simulation showed a small surplus in the region, the future projected simulation showed a deficit of about 700 acre-feet per year (AFY), which corresponded to the groundwater level declines shown in Figure 7-1 of the GSP. This quantity is small compared to an overall basin groundwater storage deficit of 25,000 AFY, and it is approximately 10% of the total groundwater inflow in this region. This can be well within the range of uncertainties in any of the water budget compontents, and the range of overdraft can be +/- 10%. In light of the uncertainties, and lack of sufficient data on the water budget compontents to verify the model projected water budget, the CBGSA determined that implementing a management action in the region at this early stage may be too premature. Instead, the CBGSA is determined to compile and analyze additional data and informaiton 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 determination of possible management actions to address any possible projected overdraft conditions.

	Current and Projected Simulation (2018-2067)
Inflows	
Deep percolation	4,100
Stream seepage	1,300
Subsurface inflow	700
Total Inflows	6,100
Outflows	
Groundwater pumping	6,800
Total Outflows	6,800
Change in Storage	-700

Table 5-1. Eastern Region Groundwater Budget Summary (Acre-feet per year)

5.3.2 Northwestern Region

In regard to the northwestern region, management actions were not included in the GSP for this region because the available information did not indicate a projected overdraft in that region. The following information was considered during development of the 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, 2018¹, previously described in Section 2. This document identified minimum thresholds for this area that would be protective of groundwater pumping capacity for production wells in this area. CHG estimated that the minimum thresholds proposed for the region would result in a fifteen percent reduction in the saturated thickness screened by the production wells, which would correspond in very general terms to a similar reduction in transmissivity and pumping capacity of the production wells.

The technical analyses described in Section 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 (per section 7.6 of the GSP). Therefore, the available evidence indicates that management actions are not required in this region at this time.

¹ Posted at the Cuyama Basin GSA website here: <u>https://cuyamabasin.org/assets/pdf/Cleath-Harris-Sustainability-Thresholds-for-Northwestern-Region.pdf</u>

Attachment 1



CALIFORNIA DEPARTMENT OF WATER RESOURCES SUSTAINABLE GROUNDWATER MANAGEMENT OFFICE

901 P Street, Room 313-B | Sacramento, CA 95814 | P.O. Box 942836 | Sacramento, CA 94236-0001

June 3, 2021

Mr. Taylor Blakslee Cuyama Basin GSA Project Coordinator 4900 California Avenue, Tower B, 2nd Floor Bakersfield, CA. 93309

RE: Cuyama Valley - 2020 Groundwater Sustainability Plan

Dear Taylor Blakslee,

The Cuyama Basin Groundwater Sustainability Agency (GSA) submitted the Cuyama Valley Groundwater Basin (Basin) Groundwater Sustainability Plan (GSP) to the Department of Water Resources (Department) for evaluation and assessment as required by the Sustainable Groundwater Management Act (SGMA).¹ This letter is intended to initiate consultation between the Department and the GSA in advance of issuance of a determination described under the GSP Regulations.²

Department staff recognize the significant effort that went into development of the first GSP for the Basin and believe the aggressive approach toward demand management is a significant step toward achieving groundwater sustainability for the Basin.

Department staff have completed an initial review of the GSP and have identified deficiencies which may preclude the Department's approval.³ Consistent with the GSP Regulations, Department staff are considering corrective actions⁴ that the GSA should review to determine whether and how the deficiencies can be addressed. The deficiencies and corrective actions are generally related to the need to define sustainable management criteria in the manner required by SGMA and the GSP Regulations, further address water quality, and better explain how overdraft will be mitigated.

The Department has the authority to determine the GSP is incomplete and, if it does so, the deficiencies precluding approval will need to be addressed within a period of time not to exceed 180 days from the determination, which would be issued no later than January 28, 2022. Prior to making that determination, and after you review the contents of this letter, Department staff will contact you to discuss the deficiencies and consult

³ 23 CCR § 355.2(e)(2).

¹ Water Code § 10720 et seq.

² 23 CCR Division 2, Chapter 1.5, Subchapter 2.

⁴ 23 CCR § 355.2(e)(2)(B).

with you regarding the amount of time needed by the GSA to address the potential corrective actions detailed in Attachment 1.

If you have any questions, please don't hesitate to contact the Sustainable Groundwater Management Office staff by emailing <u>sqmps@water.ca.gov</u>.

Thank you,

Alta

Craig Altare, P.G. Supervising Engineering Geologist Groundwater Sustainability Plan Review Section Chief

Attachment:

1. Potential Corrective Actions

Potential Corrective Actions

Department staff have identified deficiencies in the GSP which may preclude the Department's approval. Consistent with the GSP Regulations, Department staff are considering corrective actions that the GSA should review to determine how the deficiencies can be addressed. The deficiencies and corrective actions are explained below, including an explanation of the general regulatory background, the specific deficiency identified in the GSP, and the specific actions to address the deficiency. The specific actions identified are potential corrective actions until a final determination is made by the Department.

Potential Corrective Action 1. Provide justification for, and effects associated with, the sustainable management criteria

The first potential corrective action relates to the GSP's lack of justification for the established sustainable management criteria and the effects of those criteria on the interests of beneficial uses and users in the Basin.

Background

The Department's GSP Regulations collect several required elements of a GSP under the heading of "Sustainable Management Criteria," including undesirable results along with the sustainability goal, minimum thresholds, and measurable objectives. Except for the sustainability goal, the components of sustainable management criteria must be quantified so that progress towards sustainability can be monitored and evaluated consistently and objectively.

A GSA relies on, among other factors, local experience, public outreach and involvement, and information about the basin it has described in its basin setting—the hydrogeologic conceptual model, the description of current and historical groundwater conditions, and the water budget—to develop criteria for defining undesirable results and setting minimum thresholds and measurable objectives.⁵

SGMA defines sustainable groundwater management as the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results.⁶ The avoidance of undesirable results is thus explicitly part of sustainable groundwater management as established by SGMA and critical to the success of a GSP. Accordingly, managing a basin solely to eliminate overdraft within 20 years does not necessarily mean that GSAs in the basin have done

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Documents/Files/BMP-6-Sustainable-Management-Criteria-DRAFT_ay_19.pdf. <sup>6</sup> Water Code § 10721(v).
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⁵ Best Management Practices for the Sustainable Management of Groundwater: Sustainable Management Criteria (DRAFT). California Department of Water Resources, November 2017, <u>https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-</u>

all that is required to achieve sustainable groundwater management. To achieve sustainable groundwater management under SGMA, the basin must experience no undesirable results by the end of the 20-year GSP implementation period and be able to demonstrate an ability to maintain those defined sustainable conditions over the 50-year planning and implementation horizon.

The definition of undesirable results is thus critical to the establishment of an objective method to define and measure sustainability for a basin. As an initial matter, SGMA provides a qualitative definition of undesirable results as "one or more" of six specific "effects caused by groundwater conditions occurring throughout the basin."⁷

It is up to GSAs to define in their GSPs the specific significant and unreasonable effects that would constitute undesirable results and to define the groundwater conditions that would produce those results in their basins.⁸ The GSA's definition needs to include a description of the processes and criteria relied upon to define undesirable results and must describe the effect of undesirable results on the beneficial uses and users of groundwater. From this definition, the GSA establishes minimum thresholds, which are quantitative values that represent groundwater conditions at representative monitoring sites that, when exceeded individually or in combination with minimum thresholds at other monitoring sites, may cause the basin to experience undesirable results.⁹

SGMA leaves the task of establishing undesirable results and setting thresholds largely to the discretion of the GSA, subject to review by the Department. In its review, the Department requires a thorough and reasonable analysis of the groundwater conditions the GSA is trying to avoid, and the GSA's stated rationale for setting objective and quantitative sustainable management criteria to prevent those conditions from occurring. If a Plan does not meet this requirement, the Department is unable to evaluate the likelihood of the Plan in achieving its sustainability goal. This does not necessarily mean that the GSP or its objectives are inherently unreasonable; however, it is unclear which conditions the GSA seeks to avoid, making it difficult for the Department to monitor whether the GSA will be successful in that effort when implementing its GSP.

GSP-Specific Deficiency

Based on its initial review, Department staff are concerned that although the GSP appears to realistically quantify the water budget and identify the extent of overdraft in the Basin, and while the GSP proposes projects and management actions that appear likely to eventually eliminate overdraft in portions of the Basin, the GSP has not defined

⁷ Water Code § 10721(x).

⁸ 23 CCR § 354.26.

⁹23 CCR § 354.28, Best Management Practices for the Sustainable Management of Groundwater: Sustainable Management Criteria (DRAFT). California Department of Water Resources, November 2017, <u>https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-</u> <u>Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-</u> <u>Documents/Files/BMP-6-Sustainable-Management-Criteria-DRAFT av 19.pdf.</u>

sustainable management criteria in the manner required by SGMA and the GSP Regulations.

Undesirable Results

The GSP provides quantitative values for the minimum thresholds and includes a combination of those minimum threshold exceedances that the GSA considers causing an undesirable result. However, the GSP does not discuss, or appear to address, the critical first step of identifying the specific significant and unreasonable effects that would constitute undesirable results. The GSP provides general statements about undesirable results (e.g., "The Undesirable Result for the chronic lowering of groundwater levels is a result that causes significant and unreasonable reduction in the long-term viability of domestic, agricultural, municipal, or environmental uses over the planning and implementation horizon of this GSP."¹⁰) and generic descriptions of the effects of undesirable results (e.g., "...the Undesirable Results could cause potential de-watering of existing groundwater infrastructure, starting with the shallowest wells..."¹¹), but does not provide an explanation for the specific significant and unreasonable condition(s) that the GSA intends to avoid in the Basin through implementation of the GSP (e.g., a level of impact to well infrastructure or to environmental uses).

The GSP states undesirable results for chronic lowering of groundwater levels would occur when groundwater level minimum thresholds are exceeded in 30 percent of monitoring wells for two consecutive years. (The same 30 percent for two consecutive years criterion is used for reduction in storage, degradation of groundwater quality, land subsidence, and depletion of interconnected surface water.) However, the GSP does not provide any explanation for why the criterion is consistent with avoiding significant and unreasonable effects that constitute undesirable results.

Minimum Thresholds.

The GSP lacks explanation of the justification for setting its minimum thresholds and also lacks explanation of the anticipated effects of groundwater conditions at those thresholds on the interests of the beneficial uses and users of groundwater in nearly all threshold regions. The GSP describes that each threshold region has its own formula to determine the quantitative minimum threshold (e.g., in the Central threshold region it is determined by subtracting 20 percent of the historical range in groundwater levels from the groundwater level observed in early 2015). While it is acceptable to set minimum thresholds differently in portions of a basin, all minimum thresholds must, by the definition of that term in the GSP Regulations, relate to the conditions that could cause undesirable results.

This lack of information is particularly notable in the Northwestern threshold region. The GSP states that the intention of the sustainable management criteria for the Northwestern

¹⁰ Cuyama Basin GSP, Section 3.2.1, p. 260.

¹¹ *Ibid*.

region is to "...protect the water levels from declining significantly, while allowing beneficial land surface uses (including domestic and agricultural uses) and using the storage capacity of this region."¹² However, the Northwestern region is the only region in the Basin where the sustainable management criteria indicate a plan to substantially lower groundwater levels, relative to conditions at the time of GSP preparation (i.e., the minimum thresholds for groundwater levels are up to 140 to 160 feet lower¹³), in an area with the highest concentration of potential GDEs¹⁴ in Cuyama Valley and with interconnected surface water, which is evidenced by a gaining reach of the river.¹⁵ The GSP did not quantify the expected depletions of surface water over time or assess or disclose the anticipated effects of the established minimum thresholds on beneficial uses and users of groundwater, which, based on Department staff's review, appear to include nearby domestic users, potential GDEs, and users of the interconnected surface water.

The absence of this information and related discussion precludes meaningful disclosure to, and participation by, interested parties and residents in the Basin. In addition, without this discussion it is difficult for Department staff to determine whether it is appropriate or reasonable for the GSA to conclude that undesirable results in the Basin would not occur unless nearly a third of representative monitoring points exceed their minimum thresholds for two consecutive years.

Addressing the Deficiency

The GSA must provide more detailed information, as required in the GSP Regulations, regarding undesirable results and minimum thresholds for all applicable threshold regions.¹⁶ The GSA should describe the anticipated effects of the established minimum thresholds and undesirable results on the interests of beneficial uses and users and how the GSA determined that those thresholds would avoid undesirable results in the Basin. Department staff suggest that the following issues be considered and addressed:

1. The GSA should describe the specific undesirable results they aim to avoid through implementing the GSP. For example, if the long-term viability of domestic, agricultural, municipal, or environmental uses is a concern with respect to lowering of groundwater levels, then the GSA should describe the specific effects on those users that the GSA considers significant and unreasonable and define groundwater conditions that would lead to those effects. Clarify how the criteria defining when undesirable results occur in the Basin (i.e., 30 percent exceedance of minimum thresholds for two consecutive years) was established, the rationale

¹² Cuyama Basin GSP, Section 5.2.2, p. 352.

¹³ Cuyama Basin GSP, Chapter 5 Appendix A, p. 1505-1509.

¹⁴ Cuyama Basin GSP, Section 2.2.9, p. 227, Figures 2-63 and 2-64, p. 230-231, Chapter 2-Appendix D, p. 1258-1279.

¹⁵ Cuyama Basin GSP, Section 2.2.8, p. 222, Figure 2-61, p. 223.

¹⁶ 23 CCR §§ 354.26, 354.28.

behind the approach, and why it is consistent with avoiding the significant and unreasonable effects identified by the GSA.

- 2. The GSA should either explain how the existing minimum threshold groundwater levels are consistent with avoiding undesirable results or they should establish minimum thresholds at the representative monitoring wells that account for the specific undesirable results the GSA aims to avoid. For each threshold region, the GSA should evaluate and disclose the anticipated effects of the GSP's minimum thresholds and undesirable results on:
 - a. Well infrastructure, including domestic wells, community and public water supply wells, and agricultural wells. The GSA may utilize the Department's well completion report dataset¹⁷ or other similar data to estimate the number and kinds of wells expected to be impacted at the minimum thresholds identified in the GSP. Public water system well locations and water quality data can currently be obtained using the State Water Resource Control Board's (State Water Board) Geotracker website.¹⁸ Administrative contact information for public water systems and well locations and contacts for state small water systems and domestic wells can be obtained by contacting the State Water Board's Needs Analysis staff.¹⁹ The State Water Board is currently developing a database to allow for more streamlined access to this data in the future.

If the GSA identifies potential impacts to drinking water wells, including de minimis users and disadvantaged communities, those impacts should be described in the GSP. By the first five-year update, the GSA should inventory and better define the location of active wells in the Basin. The GSA should document known impacts to drinking water users caused by groundwater management, should they occur, in annual reports and subsequent periodic updates.

b. Environmental uses and users of groundwater. If data are not available to support evaluation of the effects of established minimum thresholds on environmental uses and users, the GSA should clarify the strategy, mechanism, and timeline for acquiring that data and incorporating that data into management of the Basin.²⁰

<u>https://geotracker.waterboards.ca.gov/map/#;</u> select "Public Water Wells" under the "Other Sites" option and navigate to the area of interest.

¹⁷ Well Completion Report Map Application. California Department of Water Resources, <u>https://www.arcgis.com/apps/webappviewer/index.html?id=181078580a214c0986e2da28f8623b37</u>.

¹⁸ GeoTracker Application. California State Water Resources Control Board, https://geotracker.waterboards.ca.gov/map/#: select "Public Water Wells" upo

¹⁹ DDW-SAFER-NAU@Waterboards.ca.gov.

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

Potential Corrective Action 2. Use of groundwater levels as a proxy for depletion of interconnected surface water

The second potential corrective action relates to the GSP's lack of explanation and justification for the use of groundwater levels as a proxy for depletions of interconnected surface water.

Background

The GSP Regulations allow for a GSP to establish representative groundwater level thresholds that serve as minimum thresholds for other sustainability indicators if the GSA can demonstrate the representative groundwater level value is a reasonable proxy, supported by adequate evidence.

GSP-Specific Deficiency

The GSP lacks a demonstration, with supporting evidence, of the reasonableness of using groundwater level thresholds as a proxy for depletion of interconnected surface water. The GSP states that "[b]y setting minimum thresholds on shallow groundwater wells near surface water, the [GSA] can to (*sic*) monitor and manage [the hydraulic gradient between surface water and groundwater], and in turn, manage potential changes in depletions of interconnected surface [water]."²¹ However, in defining the groundwater level proxies for depletion of interconnected surface water, the GSA appears to have used all the groundwater level thresholds it defined for chronic lowering of groundwater levels regardless of depth of the well or proximity to surface water. It is not obvious to Department staff why managing the Basin to the complete set of chronic lowering of groundwater level thresholds is sufficient to avoid undesirable results for depletion of interconnected surface many of those groundwater level thresholds represent conditions that are lower than current conditions.

Addressing the Deficiency

The GSA should provide a demonstration, with supporting evidence, for why using the basinwide groundwater level minimum thresholds is a reasonable proxy for thresholds for depletion of interconnected surface water.

Potential Corrective Action 3. Further address degraded water quality

The third potential corrective action relates to the GSP's apparent lack of consideration of the best available information and data regarding water quality, and the resultant effects on the GSP's description of water quality conditions, water quality sustainable management criteria, and monitoring for certain water quality constituents.

²¹ Cuyama Basin GSP, Section 3.2.6, p. 263.

Background

SGMA and the GSP Regulations do not require a GSP to address undesirable results associated with degraded water quality that occurred before, and have not been corrected by, January 1, 2015. However, management of a basin pursuant to an adopted GSP should not result in further water quality degradation that is significant and unreasonable, either due to routine groundwater use or as a result of implementing projects or management actions called for in the GSP.²² SGMA provides GSAs with legal authority to regulate and affect pumping and groundwater levels, which have the potential to affect the concentration or migration of water quality constituents and result in degradation of water quality. Additionally, the GSP Regulations state that GSAs should consider local, state, and federal water quality standards when establishing sustainable management criteria,²³ and SGMA provides GSAs with the authority to manage and control polluted water and use authorities under existing laws to implement its GSP.²⁴ Thus, establishing sustainable management criteria and performing routine monitoring of water quality constituents known to affect beneficial uses and users is within the purview of a GSA.

GSP-Specific Deficiency

Department staff believe the GSA's decision to not set sustainable management criteria for arsenic and nitrates may not be reasonable because the findings were not supported by the best available information.²⁵ The GSP focused on total dissolved solids (TDS), nitrates, and arsenic as a result of public comments received during GSP development.²⁶ The GSP includes sustainable management criteria for TDS but, despite acknowledging that nitrate and arsenic have exceeded maximum contaminant levels (MCL) prescribed by the State Water Board, the GSP did not establish sustainable management criteria for those constituents. Furthermore, the GSA does not intend to perform routine monitoring for nitrates and arsenic on the basis that they determined there is no "causal nexus" between the GSA's authority to implement projects and management actions and concentrations of arsenic or nitrate.²⁷

In its justification for the lack of sustainable management criteria for nitrates and arsenic, the GSP explains that there were relatively few detections of those constituents above drinking water regulatory limits—two nitrate samples and three arsenic samples.²⁸ Regarding arsenic, the GSP states that the three arsenic detections above the MCL came

²² Water Code § 10721(x)(4); 23 CCR § 354.28(c)(4).

^{23 23} CCR § 354.28(c)(4).

²⁴ Water Code §§ 10726.2(e), 10726.8(a).

²⁵ While there is no definition of best available information, the GSP Regulations define best available science as the use of sufficient and credible information and data, specific to the decision being made and the time frame available for making that decision, that is consistent with scientific and engineering professional standards of practice.

²⁶ Cuyama Basin GSP, Section 2.2.7, p. 208.

²⁷ Cuyama Basin GSP, Section 4.8, p. 321.

²⁸ Cuyama Basin GSP, Section 5.5, p. 360-361.

from an inactive well and from groundwater deeper than 700 feet below ground surface, which the GSP states is below the range of pumping depths for drinking water.²⁹ In other words, the GSP states that arsenic was not detected above MCL in active wells shallower than 700 feet.³⁰ However, credible public comments submitted to the Department raised concerns about this claim and the data the GSA may or may not have considered, the GSA's interpretation of that data, and the decision of the GSA to not monitor or develop management criteria for those constituents. For example, a comment submitted to the Department indicates the State Water Board's Groundwater Ambient Monitoring and Assessment (GAMA) Program's Groundwater Information System contains records of arsenic concentrations exceeding the MCL in drinking water wells screened as shallow as 340 feet below ground surface.³¹ Department staff confirmed that this claim appears to be true.

Regarding nitrates, a public comment submitted to the Department indicates that potentially 13 of 109 nitrate samples (12 percent) have exceeded the MCL in the past ten years,³² which conflicts with the GSP's statement that only two samples during 2011 to 2018 exceeded the MCL.

Addressing the Deficiency

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

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

²⁹ Cuyama Basin GSP, Section 2.2.7 and Section 4.8, p. 209 and 321.

³⁰ Cuyama Basin GSP, Section 2.2.7, p. 209.

 ³¹ Central Coast Water Board Comments on Final Cuyama Valley Groundwater Sustainability Plan.
 Central Coast Regional Water Quality Control Board Comment Letter Submitted to the Department, 15
 May 2020, <u>https://sgma.water.ca.gov/portal/service/gspdocument/download/4021</u>.
 ³² Ibid.

groundwater management is not likely to cause significant and unreasonable degradation of groundwater by increasing concentrations of those constituents.

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

Potential Corrective Action 4. Provide explanation for how overdraft will be mitigated in the basin

The fourth potential corrective action is related to the lack of a complete discussion of how overdraft will be mitigated in the entire basin through implementation of the GSP.

Background

GSP Regulations require that a GSP include a description of projects and management actions that the GSA has determined will achieve the sustainability goal for the basin, the timeline of implementation, and the sustainability indicators that are expected to benefit, including the circumstances in which they would be implemented.³³ For basins in overdraft, the description shall include a quantification of demand reduction or other methods for mitigating the overdraft.³⁴

GSP-Specific Deficiency

The GSP identifies two management areas, Central Basin and Ventucopa, as the primary pumping areas in the Cuyama Valley that have the highest water demand. Groundwater levels in the Central Basin management area decline by a modeled 2 to 7.7 feet per year, whereas the Ventucopa management area decline by 2 to 3 feet per year.³⁵

To meet the sustainability goal of the Basin, the GSA explains in detail throughout the GSP that a pumping reduction of 50 to 67 percent will be required.³⁶ Pumping reductions would begin in 2023 and become progressively larger each successive year, with full implementation of the total pumping reduction in 2038.³⁷

³³ 23 CCR § 354.44.

³⁴ 23 CCR § 354.44(b)(2).

³⁵ Cuyama Basin GSP, Figure 7-1, p. 387.

³⁶ Cuyama Basin GSP, Executive Summary and Table 2-7, p. 26 and 254.

³⁷ Cuyama Basin GSP, Figures ES-15 and 8-1, p. 32 and 419-420.

However, the GSP only intends to implement those pumping reductions in the Central Basin management area and does not explain why pumping reductions will not be implemented in the Ventucopa management area. The GSP executive summary states that "[p]umping reductions are not currently recommended for the Ventucopa Area" and instead recommends "to perform additional monitoring, incorporate new monitoring wells, and further evaluate groundwater conditions in the area over the next two to five years" and that "[o]nce additional data are obtained and evaluated, the need for any reductions in pumping will be determined."³⁸ These cited details from the executive summary are the extent of the GSP's description of the plans for possible demand management in the Ventucopa management area.³⁹ Lack of detail for this area is concerning because it appears to Department staff as though the GSA's defined minimum thresholds, which should represent a point in the Basin that, if exceeded, may cause undesirable results⁴⁰, in the Ventucopa management area could be exceeded in as soon as two years if two feet per year of groundwater level decline continues.⁴¹ It is also concerning because the GSP explains that "[d]omestic water users in [the Ventucopa and Central Basin management areas] are experiencing water supply challenges, and in the 2012-2016 drought experienced well failures."42

In addition to the Ventucopa Area, the GSP also does not discuss why projects and management actions were not considered in the Northwestern threshold region, where, as noted above in Potential Corrective Action 1, it appears that overdraft will occur for some time and the allowable groundwater-level decline is over 100 feet.

Addressing the Deficiency

The GSA should explain the rationale for not implementing pumping reductions in the overdrafted Ventucopa management area or any other portion of the Basin where overdraft is expected to continue, and explain the timeline and criteria that may be used to determine whether future pumping reduction allocations are needed.⁴³ If the criteria to implement pumping reductions are related to the effects on beneficial uses and users, as mentioned in Potential Corrective Action 1, the GSP should clarify what those effects are that would necessitate pumping reductions.

³⁸ Cuyama Basin GSP, Executive Summary, p. 32.

³⁹ Cuyama Basin GSP, Executive Summary and Section 7.3.2, p. 32 and 410.

⁴⁰ 23 CCR § 354.28(a).

⁴¹ Maps in the GSP appear to indicate two representative monitoring wells are located in the Ventucopa Management Area, OPTI wells 62 and 101. The minimum threshold at OPTI Well 62 is 182 feet below ground surface and the water level as of December 2020 was 158.4 feet below ground surface; at two feet per year the minimum threshold will be exceeded in approximately 12 years. The minimum threshold at OPTI Well 101 is 111 feet below ground surface and the water level as of December 2020 was 108.6 feet below ground surface; at two feet per year the minimum threshold could be exceeded in approximately 2 years.

⁴² Cuyama Basin GSP, Section 7.2.4, p. 405.

⁴³ 23 CCR §§ 355.4(b)(3), 355.4(b)(4), 355.4(b)(5), 355.4(b)(6).

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

Attachment 2



Directors:	August 27, 2021
Derek Yurosek <i>Chair</i>	
Lynn Compton Vice Chair	Craig Altare, P.G. Supervising Engineering Geologist Groundwater Sustainability Plan Review Section Chief California Department of Water Resources
Byron Albano	901 P Street, Room 313-B Sacramento, CA 95814
Cory Bantilan	Re: Cuvama Basin GSA Response to DWR's lune 3, 2021. Consultation Letter
Paul Chounet	Re. Cuyania basin GSA Response to DWR's June 5, 2021, Consultation Letter
Zack Scrivner	Dear Mr. Altare:
Glenn Shephard	The Cuyama Basin Groundwater Sustainability Agency (CBGSA) appreciates the
Lorena Stoller	california Department of Water Resources (DWR) Consultation Letter dated June 3, 2021 (Letter) (Attachment 1), and the advanced time to address deficiencies DWR identified in the CBGSA's Groundwater Sustainability Plan (GSP). The CBGSA Board of Directors' (Board) intends to address the four Potential Corrective Actions identified by DWR in a satisfactory way prior to DWR's final determination of GSP
Matt Vickery	
Das Williams	
Jane Wooster	
Staff:	At the August 18, 2021, Board meeting, the Board discussed various options to address the four Potential Corrective Actions provided in DWR's Letter. Following extensive public discussion and review, the Board approved specific responses to those Potential Corrective Actions, as detailed below.
James M. Beck	
Executive Director	In implementing the Board's direction, the CBGSA will: Perform additional technical analyses and develop draft technical content
Joe Hughes	 Perform additional technical analyses and develop draft technical content responsive to DWR's comments that will be reviewed and considered at a
Legal Counsel	Special Standing Advisory Committee and Board meeting in mid-to-late October 2021.
	 Develop a memorandum and Board resolution describing the CBGSA's responsive actions that will be reviewed and considered by the Board at its November 2021 meeting for submittal to DWR.
	Potential Corrective Action No. 1

Provide justification for, and effects associated with, the sustainable management criteria.

The CBGSA will perform a technical analysis of minimum thresholds in relation to production well depths and Groundwater Dependent Ecosystems (GDE) locations, including investigation of individual wells. Using available data, the analysis will consider well depths, perforations, and the distribution of well age in the Cuyama

August 27, 2021 Cuyama Basin GSA Response to DWR's June 3, 2021, Consultation Letter Page 2 of 3

groundwater basin (Basin). In addition, a modeling analysis will be performed in the Northwestern region of the Basin to evaluate the effects of pumping drawdown in that area on nearby domestic wells and GDEs. Finally, a more detailed investigation will be performed on GDEs in the Northwestern threshold region by a biologist and hydrogeologist.

The results of these analyses will be used to develop a more detailed narrative on potential undesirable results, discussion of how beneficial uses and users were considered, potential economic impacts (from the direct and indirect economic analyses performed by ERA), and their relationship to sustainability criteria in the GSP. This will be included in the memorandum to be provided to DWR.

Potential Corrective Action No. 2

Use of groundwater levels as a proxy for depletion of interconnected surface water.

The CBGSA will identify a subset of existing groundwater level monitoring wells to be used for Interconnected Surface Water (ISW) monitoring. Further, the CBGSA will develop appropriate undesirable results criteria for ISW. Wells for the ISW monitoring network will be selected by considering both proximity to the river and perforation depth. While the Basin currently has limited historical data and limited existing monitoring resources to characterize surface water flows and groundwater, the CBGSA is pursuing improvements to monitoring with new USGS flow gauges and new piezometers that can improve understanding of ISW in the Basin going forward.

The memorandum to be provided to DWR will describe the revised ISW monitoring network and how ISW monitoring will be improved once additional monitoring resources are available.

Potential Corrective Action No. 3

Further address degraded water quality.

The CBGSA will review all available existing water quality data to develop an evidence-based description of why groundwater management is unlikely to cause significant and unreasonable degradation of groundwater. It will also identify existing agencies that serve as primary regulators of water quality in the Basin. CBGSA intends for those agencies to continue serving that regulatory role in the Basin, specifically related to arsenic and nitrates. Finally, the CBGSA will take a measurement for nitrates and arsenic in each water quality monitoring well in 2022 to establish a baseline understanding of nitrate and arsenic.

These actions will be described in the memorandum to be provided to DWR.

Potential Corrective Action No. 4

Provide explanation for how overdraft will be mitigated in the basin.

DWR commented that the "lack of detail for [the Ventucopa Area] is concerning because it appears to Department staff as though the GSA's defined minimum thresholds, which should represent a point in the Basin that, if exceeded, may cause undesirable results, in the Ventucopa management area could be exceeded in as soon as two years if two feet per year of groundwater level decline continues." In response, the CBGSA will provide more detail on its management decisions for the Ventucopa Area by August 27, 2021 Cuyama Basin GSA Response to DWR's June 3, 2021, Consultation Letter Page 3 of 3

describing model deficiencies in the context of operational knowledge and local expertise for that region. This will be included in the memorandum to be provided to DWR.

For the Northwestern Region threshold region, DWR commented that "the GSP also does not discuss why projects and management actions were not considered in the Northwestern threshold region, where, as noted above in Potential Corrective Action 1, it appears that overdraft will occur for some time and the allowable groundwater-level decline is over 100 feet." In response, the CBGSA will utilize the analyses to be performed under Potential Corrective Action No. 1, as well as other available information, to provide a rationale for the CBGSA's decisions for management actions in that region. This will be included in the memorandum to be provided to DWR.

DWR / CBGSA Coordination

CBGSA staff and an ad hoc committee of the Board would like to meet with DWR staff to discuss the CBGSA's approach to addressing the Potential Corrective Actions. CBGSA staff will contact DWR soon to coordinate this meeting.

The CBGSA appreciates the opportunity to address these issues and believes DWR's concerns can be addressed resulting in a successfully approved GSP in January 2022.

Please feel free to contact Taylor Blakslee at (661) 477-3385, or <u>tblakslee@hgcpm.com</u> if you have any questions.

Sincerely,

Derek Yurosek Board Chairman Cuyama Basin Groundwater Sustainability Agency



TO:	Board of Directors Agenda Item No. 11
FROM:	Brian Van Lienden, Woodard & Curran
DATE:	November 3, 2021
SUBJECT:	Direction on Aquifer Test Program

<u>Issue</u>

Direction on the aquifer test program.

Recommended Motion

No formal motion; seeking direction on the aquifer test program.

Discussion

On May 5, 2021, the CBGSA Board approved an update to the numerical model and Woodard & Curran has begun to perform that work. A specific component of the model update are aquifer tests. Staff is looking for feedback on the location of these tests and an overview of the program is provided as Attachment 1.

Attachment 1

Cuyama Basin Groundwater Sustainability Agency

Direction on Aquifer Testing Program Brian Van Lienden

November 3, 2021



Aquifer Testing Program: Purpose and Process

- Controlled pumping of production wells for a defined duration at a defined pumping rate
- Monitoring of water level responses (drawdown and recovery) in the pumping well and other nearby wells used for water level monitoring
- Resulting data are analyzed to provided estimates of aquifer properties
 - Transmissivity and hydraulic conductivity
 - Storage properties
- Revised estimates of aquifer propertied will be used to refine model calibration and address existing data gaps outlined in the GSP



Aquifer Testing and Model Refinement and Schedule



Direction on Aquifer Testing Program

- Staff is requesting Board direction to perform aquifer testing at 4 well sites by completing the following activities.
- Work with an ad-hoc committee to select well locations and obtain landowner agreements (Nov-Jan)

 - Identify all existing wells in target areas for aquifer testing
 Perform a screening of available wells in each target well
 Identity potential pumping wells and develop a ranking
 Request access for the optimal test pumping well and observation well
- Perform aguifer tests and data reporting (Jan-Mar)

 - Establish preliminary estimates of pumping rates and duration for testing
 Coordinate with the well owner regarding pumping and discharge of pumped water
 Equip wells with transducers, place barro meter

 - Perform step test in wells
 Run constant rate test

 - Perform final reporting of aquifer test results



Direction on Aquifer Testing Program

- Preliminary well test target areas are shown in red circles to the right
- These may be refined per discussion with the ad-hoc committee





TO:	Board of Directors Agenda Item No. 12
FROM:	Taylor Blakslee / Brian Van Lienden
DATE:	November 3, 2021
SUBJECT:	Authorize Work to Pursue DWR Grant Opportunity

<u>Issue</u>

Direction on DWR grant opportunity.

Recommended Motion

Authorize staff to pursue the upcoming DWR grant and develop a list of potential projects with an ad hoc of the Board for consideration in January 2022.

Discussion

An overview of the recent SGMA-related grant from the California Department of Water Resources is provided as Attachment 1.



Cuyama Basin Groundwater Sustainability Agency

12. Authorize Work to Pursue DWR Grant Opportunity Taylor Blakslee / Brian Van Lienden

November 3, 2021

Background

- May 2021 revised budget earmarked \$60M for critically overdraft (COD) basins and \$300M for SGMA projects and planning activities
- DWR planned on allocating \$10M to every COD basin in a noncompetitive basis using \$60M earmark and \$140M from the \$300M
- However, the budget approved in mid-September 2021 only allocated \$114M for awards for SGMA implementation and is a competitive grant process
- Also, \$57M was allocated to San Joaquin Valley GSAs for flood plain management and recharge projects
 - A grant draft Guidelines and PSP was released on October 14, 2021

Available Funds

- Proposed Round 1 funding allocates \$152M to critically overdraft basins (\$7.6M each)
 - Of the \$7.6M, a minimum of \$3.7M must be used for:
 - Geophysical investigation(s) of groundwater basins to identify recharge potential (e.g., Aerial Electromagnetic Surveys);
 - Early implementation of existing regional flood management plans that incorporate groundwater recharge (e.g., basin recharge using floodwater); or
 - Projects that would complement efforts of a local GSP, that provide for floodplain expansion to benefit groundwater recharge or habitat (e.g., basin recharge using peak flows from a river, creek, or stream).

Process

- Scoring (simple 9-question form)
- Eligible projects
 - Implementation projects
 - Planning efforts/studies
 - Ongoing implementation costs
 - Annual report(s)
 - 5-year update
 - Annual monitoring (levels, water quality, stream gauges, piezometers)
 - Annual CBGSA administrative costs
- Review Committee requirement (competitive)

Timeline

Oct 14, 2021:

- PSP Release / Public Comment Period (45 days)
- Nov 16, 2021: PSP Workshop
- Nov 30, 2021: Support/Comment Letter Due
- Early Dec 2021*: Final PSP
- Jan 31, 2022*: Application Deadline
- Feb 2022*: DWR Consultation with GSAs
- Apr/May 2022*: Award

* Dependent upon comment letters received during public comment period

HALLMAR

Authorization to Pursue Grant Opportunity

- CBGSA budgeted \$80,000 for two grant opportunities
- The upcoming Round 1 grant implementation and planning grant can offer financial support to the Cuyama Basin
- Potential Board Options:
 - 1. Direct staff to pursue this grant opportunity and develop proposed projects with an ad hoc for full Board review in January 2022
 - 2. Do not pursue this opportunity



TO:	Board of Directors Agenda Item No. 13
FROM:	Taylor Blakslee / Brian Van Lienden
DATE:	November 3, 2021
SUBJECT:	Approval of Comment Letter on DWR Grant Proposal Solicitation Package

Issue

Grant support letter.

Recommended Motion

Approve support letter with request for modification to the upcoming grant proposal from the California Department of Water Resources.

Discussion

The California Department of Water Resources (DWR) released a draft grant proposal solicitation package on October 13, 2021, for public review that proposes to allocate up to \$7.6 million to each critically overdraft basin.

DWR is proposing to administer this grant using several cost-saving measures that have not been done with these types of grants previously. Therefore, DWR requested letters of support by November 29, 2021, and a draft letter of support is provided as Attachment 1

The draft letter includes support for:

- Allowing the competitive requirement to be satisfied internally within a basin (by a review committee/ad hoc).
- A simpler scoring methodology.
- Management under the Prop 68 program which will not require a change to the water code and cause a 1-2-year delay.
- DWR added clarifying language that basins "in the process of adjudication" would be eligible for funding.
- DWR also added language that allows basins to receive funding that are in probationary status.

Additionally, we are requesting the following change:

• Request DWR remove the limitation on the \$3.7M earmarked for flood plain/flood water capture projects and allow the money to be used for SGMA planning/implementation efforts.



Directors:	November 3, 2021
Derek Yurosek <i>Chair</i>	
Lynn Compton Vice Chair	Kelley List, P.G. SGM Grant Program Programmatic Project Manager California Department of Water Resources
Byron Albano	901 P Street Sacramento. CA 95814
Cory Bantilan	Dev Support of SCM Downed 1 Grant Dropport Calinitation Deckare and Decwart
Paul Chounet	for Adjustments
Zack Scrivner	Dear Ms. List:
Glenn Shephard	The Converse Desig Created out on Contained ility Agency (CDCCA) has reviewed the
Lorena Stoller	The Cuyama Basin Groundwater Sustainability Agency (CBGSA) has reviewed the Sustainable Groundwater Management Grant Program Draft SGMA Implementation Guidelines and Proposal Solicitation Package and <u>supports</u> the proposed California Department of Water Resources' (DWRs) inpovative and effective management of
Matt Vickery	
Das Williams	Round 1 grant funds.
Jane Wooster	The CBGSA is a critically overdraft (COD) basin in a severally disadvantaged community and is supportive of the following specific proposed DWR grant management actions:
Staff:	 Grant competitive requirement satisfied by intra-basin process: Ensures the CRCSA is able to secure funds needed to continue with planning and
James M. Beck <i>Executive Director</i>	the CBGSA is able to secure funds needed to continue with planning and implementation efforts and affords each basin an equal amount of funds in the quickest way possible.
Joe Hughes <i>Legal Counsel</i>	 Simpler scoring methodology: Will reduce application costs and provide an economic benefit to Cuyama basin stakeholders. This will also reduce the amount of time taken to complete the solicitation process and award grant funding while still ensuring DWR is still properly managing State funding. Management under the Prop 68 program: By using the Office of Administrative Law exemption afforded by Prop 68, DWR can bypass changing the Government Code and ensure funds are distributed quickly and efficiently Language Clarifying Grant Funds are Available for Basins "In the Process of Adjudication": this is critical for the Cuyama basin as an adjudication was recently filed and this clarification ensures the CBGSA has the financial support to continue implementation of its Groundwater Sustainability Plan (GSP)
	 Language Clarifying Grant Funds are Available for Basins in Probationary

Status: While the CBGSA does not anticipate entering probationary status, it supports this clarifying language to provide basins that enter probationary status with the financial tools to work towards an Adequate determination of their GSP.
November 3, 2021 CBGSA Support of SGM Round 1 Grant Proposal Solicitation Package and Request for Adjustments Page 2 of 2

Request for Proposal Change

The CBGSA understands that under the draft PSP, \$7.6 million is recommended for each COD basin with \$3.7 million restricted to floodplain/stormwater storage/recharge projects. However, it will be difficult for the CBGSA to justify this level of spending on these types of projects because the Cuyama Basin is an isolated basin and Cuyama River flows an average of six days a year through the basin; storm flows are highly turbid and silting is major concern with respect to recharge projects; and there are concerns about downstream water rights relating to the use of Cuyama River flows. Therefore, the CBGSA requests the flood plain/stormwater capture restriction be lifted on the \$3.7 million earmarked funds for those basins not located within the San Joaquin Valley and that DWR instead give each basin the flexibility to allocate the full \$7.6 million to support GSP implementation and planning efforts in ways that are most beneficial to each basin.

The CBGSA appreciates the opportunity to apply for grant funding to support GSP planning and implementation efforts in our basin as well as the opportunity to comment on the draft PSP.

Please feel free to contact Taylor Blakslee at (661) 477-3385, or <u>tblakslee@hgcpm.com</u> if you have any questions.

Sincerely,

Derek Yurosek Board President Cuyama Basin Groundwater Sustainability Agency



TO:	Board of Directors Agenda Item No. 14
FROM:	Taylor Blakslee / Jim Beck, Hallmark Group
DATE:	November 3, 2021
SUBJECT:	Authorize a Change Order for the Hallmark Group

<u>Issue</u>

Consider authorizing a change order for Hallmark Group.

Recommended Motion

Authorize Amendment 1 to Task Order 7 for Hallmark Group in the amount of \$28,000 through June 30, 2022.

Discussion

Hallmark Group is seeking authorization for Amendment 1 to Task Order 7 covering two cost categories: (1) out of scope activities related to adjudication impacts, and (2) higher than expected activity related to responses to the California Department of Water Resources draft comments.

Additional efforts for activities related to the adjudication (announced on August 18, 2021) are shown in the table below with projected expenses through the end of the current fiscal year.

Regarding responses to DWR comments, Hallmark Group budgeted \$5,600. The table below shows the current period overage and projected expenses through the end of the current fiscal year. Efforts are due substantially to multiple ad hoc meetings, review of technical studies, and coordination with DWR and stakeholders.

	Expense Category	Current Overage	Projected Expenses	Total
1)	Adjudication Discussions	\$3,800.00	\$6,200.00	\$10,000.00
2)	Response to DWR Comments	\$6,100.00	\$11,900.00	\$18,000.00
	AMENDMENT 1 TOTAL:			\$28,000.00

AMENDMENT 1

TASK ORDER CB-HG-007

CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY EXECUTIVE DIRECTOR

Contractor:		The Hallmark Group
Request for Services:		Executive Director
Agreement Number:		CB-HG-007-Amd. 1
Amount:		\$28,000.00
Term:		July 1, 2021 – June 30, 2022
Check One:	✓	Task Order Initiation Task Order Amendment/Modification Task Order Notice to Proceed Task Order Close-out

DESCRIPTION OF TASK ORDER AMENDMENT

Task Order No. 7, Amendment 1 accounts for two categories of costs: (1) out of scope activities related to adjudication impacts, and (2) higher than expected activity related to the response to the California Department of Water Resources' draft comments. This task order totals \$28,000.00 and accounts for current cost overages and anticipated cost expenditures through June 30, 2022.

CONTACT PERSONS

CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY	HALLMARK GROUP
Representative: Derek Yurosek	Representative: Charles R. Gardner Jr.
P.O. Box 20157	500 Capitol Mall, Suite 2350
Bakersfield, CA 93390	Sacramento, CA 95814
Phone: (661) 323-4005	Phone: (916) 923-1500
Email: dyurosek@bolthouseproperties.com	Email: cgardner@hgcpm.com

Contractor and the Cuyama Basin Groundwater Sustainability Agency agree that these services will be performed in accordance with the terms and conditions of Standard Agreement Number 201709-CB-001.

CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY	HALLMARK GROUP
Derek Yurosek Board Chairman	Charles R. Gardner Jr. President
Date	Date



TO:	Board of Directors Agenda Item No. 15
FROM:	Taylor Blakslee, Hallmark Group
DATE:	November 3, 2021
SUBJECT:	Approval of 2022 Meeting Schedule

<u>Issue</u>

Setting the 2022 Cuyama Basin Groundwater Sustainability Agency Board of Directors and Standing Advisory Committee meetings schedule.

Recommended Motion

Approve the 2022 Groundwater Sustainability Agency Board of Directors and Standing Advisory Committee meetings schedule provided in Agenda Item No. 15.

Discussion

The proposed Cuyama Basin Groundwater Sustainability Agency (CBGSA) Board of Directors and Standing Advisory Committee (SAC) meeting calendar for 2022 is provided as Attachment 1 for consideration of approval.

Cuyama Basin Groundwater Sustainability Agency Draft 2022 Meeting Calendar

SAC

Sun

Mon

BOD

Holiday

February Tue | Wed | Thu

Fri

Sat

January							
Sun Mon Tue Wed Thu Fri Sat							
						1	
2	3	4	5	6	7	8	
9	10	11	12	13	14	15	
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September								
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			April			
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			June			
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26	27	28	29	30		

August						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

		C	Octobe	r		
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

		D	ecemb	er		
Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31



TO:	Board of Directors Agenda Item No. 16a
FROM:	Jim Beck, Executive Director
DATE:	November 3, 2021
SUBJECT:	Report of the Executive Director

<u>Issue</u>

Report of the Executive Director.

Recommended Motion

None – information only.

Discussion

Progress and next steps for the Hallmark Group are provided as Attachment 1 for July through September 2021. An overview of consultant budget-to-actuals is provided as Attachment 2.

Cuyama Basin Groundwater Sustainability Agency Progress & Next Steps

November 3, 2021

Cuyama Basin Groundwater Sustainability Agency Near-Term Schedule



A REPORT OF A PROPERTY OF

Jul-Sep 2021 Accomplishments & Next Steps

Accomplishments

- ✓ Ongoing administration of the CBGSA
- Prepared and facilitated a SAC meeting on August 11, 2021, and a Board meeting on August 18, 2021
- Updated insurance documents
- \checkmark Filed conflict of interest code with the FPPC
- ✓ Facilitated technical review meeting regarding DWR comments
- \checkmark Coordinated with DWR on TSS installation and AEM
- ✓ Met with Santa Barbara County regarding well permits process
- \checkmark Coordinated with DPVB on audit
- ✓ Conducted media interview on GSP submittal
- ✓ Attended Santa Barbara County Emergency Office drought meeting
- \checkmark Assisted in submission of unpaid fees to county tax roll
- \checkmark Discussed potential adjudication impacts with DWR staff
- ✓ Drafted response letter to DWR regarding corrective actions

Next Steps

- Continue discussions on MA issues.
- Coordinate CBGSA response to DWR on proposed corrective actions.
- Assist with Prop 1 grant closeout.
- Manage meter implementation process.



Cuyama Basin Groundwater Sustainability Agency Financial Report

November 3, 2021

CBGSA OUTSTANDING INVOICES

Task	Invoiced Through	Cumulative Total
Legal Counsel (Klein)	09/30/2021	\$11,274
Executive Director (HG)	09/30/2021	\$63,671
Technical Consultant (W&C)	09/30/2021	\$126,979
Monitoring/Data Collection and GW Quality Monitoring (P&P)	09/30/2021	\$20,116
Daniells Phillips Vaughan & Bock	09/30/2021	\$6,500
TOTAL		\$228,540



Hallmark Group – Budget-to-Actuals

Task Order No. 7



Legal Counsel – Budget-to-Actuals



Woodard & Curran – Budget-to-Actuals

Task Order No. 9



Budget — Actual

Provost & Pritchard – Budget-to-Actuals



CBGSA FY 21-22 – Budget-to-Actuals



CBGSA FY 20-21 – Budget-to-Actuals



CBGSA FY 19-20 – Budget-to-Actuals





TO:	Board of Directors Agenda Item No. 16d
FROM:	Taylor Blakslee, Hallmark Group
DATE:	November 3, 2021
SUBJECT:	Update on Additional Grant Opportunities

<u>Issue</u>

Additional Grant Opportunities.

Recommended Motion

No formal motion; seeking direction on CBGSA level of effort in facilitating grant applications for individuals in the basin.

Discussion

An overview of current, drought-related grant opportunities is provided as Attachment 1.

Attachment 1

Cuyama Basin Groundwater Sustainability Agency

16d. Update on Additional Grant Opportunities Taylor Blakslee

November 3, 2021

WOOL

Background

- Several drought-related grant opportunities currently exist
- \$500M funded by the Budget Act of 2021 and AB 148
- Eligible applicants include public agencies, non-profits, etc. in counties experiencing severe drought conditions (<u>Governors'</u> <u>drought proclamation</u>)
- Funding is meant to
 - Address immediate impacts on human health and safety, including providing or improving availability of food, water, or shelter
 - Address immediate impacts on fish and wildlife resources
 - Provide water to persons or communities that lose or are threatened with
 - the loss or contamination of water supplies

Current Drought Funding Programs Small Community Drought Relief Program

- Open Date: Aug 2021
- Close Date: Dec 2023 (or until funds are exhausted)
- Estimated total funding: \$192M
- Eligible project types

- Hauled water
- Installation of temporary community water tanks
- Bottled water
- Water vending machines
- Emergency water interties
- New wells or rehabilitation of existing wells
- Construction or installation of permanent connection to adjacent water systems
- Recycled water projects that support immediate relief to potable water supplies

Current Drought Funding Programs 2021 Urban and Multi-Benefit Drought Relief Program

- Open Date: October 2021
- Close Date: Likely multi-year
- Estimated total funding: \$192M
- \$50M set aside for severally disadvantaged communities
- Eligible project types

- Hauled water
- Installation of temporary community water tanks
- Bottled water
- Water vending machines
- Emergency water interties
- New wells or rehabilitation of existing wells
- Construction or installation of permanent connection to adjacent water systems
- Recycled water projects that support immediate relief to potable water supplies
- Fish and wildlife rescue, protection, relocation
- Drought resiliency planning

Board Feedback

- The CBGSA budgeted \$80,000 for preparation and submittal of two grant applications (one is currently recommended for preparation)
- The CBGSA <u>may</u> be able to process additional applications based on remaining budget of at least \$40,000
- Potential CBGSA options:
 - 1. Develop a process for identifying landowner-initiated projects
 - 2. Direct requests to other eligible public agencies
 - Further discussion can be held at the January 2022 Board meeting if directed by the Board



TO:	Board of Directors Agenda Item No. 17a
FROM:	Brian Van Lienden, Woodard & Curran
DATE:	November 3, 2021
SUBJECT:	Update on Groundwater Sustainability Plan Activities

<u>Issue</u>

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.

Attachment 1

Cuyama Basin Groundwater Sustainability Agency

Update on Groundwater Sustainability Plan Activities Brian Van Lienden

November 3, 2021





August-October Accomplishments

- Developed memorandum with CBGSA response to DWR comment letter on GSP
- Performed field validation/data collection for groundwater levels and quality monitoring
- Worked with DWR to complete installation of monitoring wells under Technical Support Services Program
- Added a well issues reporting form and a Cuyama Basin management area interactive map to the Cuyama Basin website Finalized and distributed edition 8 of CBGSA newsletter





TO:	Board of Directors Agenda Item No. 17b
FROM:	Brian Van Lienden, Woodard & Curran
DATE:	November 3, 2021
SUBJECT:	Update on Monitoring Network Implementation

<u>Issue</u>

Update on Monitoring Network Implementation.

Recommended Motion

None – information only.

Discussion

An update regarding the monitoring network implementation is provided as Attachment 1.



Cuyama Basin Groundwater Sustainability Agency

Update on Monitoring Network Implementation Brian Van Lienden

November 3, 2021



Groundwater Levels and Quality Monitoring Network Status Updates

- **DWR Technical Support Services wells**
 - Installation of the TSS wells at all three locations was completed in August 2021
 - Three screened zones were installed at each well
 - DWR will be acquiring transducers to be installed at each location
- The survey of ground surface elevations for monitoring wells was completed in October 2021; we are now beginning work to update groundwater elevation data in the database to reflect this change
- Provost & Pritchard attempted to obtain agreements for additional water quality wells in October 2021, but only a few new wells were added to the network



Stream Gage Implementation – FY 2020-21

USGS completed installation of 2 new streamflow gages in September using Category 1 grant funding from DWR:

- Upstream of Ventucopa
- Spanish Ranch





TO:	Board of Directors Agenda Item No. 17c
FROM:	Brian Van Lienden, Woodard & Curran
DATE:	November 3, 2021
SUBJECT:	Update on Monthly Groundwater Conditions Report

<u>Issue</u>

Update on Monthly Groundwater Conditions Report for July 2021.

Recommended Motion

None – information only.

Discussion

An update regarding the groundwater levels monitoring network and select hydrographs is provided as Attachment 1. The detailed July 2021 Groundwater Conditions Report is provided as Attachment 2.

Cuyama Basin Groundwater Sustainability Agency

17c. Update on Monthly Groundwater Conditions Report Brian Van Lienden

November 3, 2021

Link to October Report



Groundwater Levels Monitoring Network – Summary of Current Conditions

- Monitoring data from June, July and October for representative wells is included in the October 2021 Groundwater Conditions report
- 46 of 49 representative monitoring wells have levels data in at least one out of the previous 6 months
- 23 wells were below the minimum threshold based on latest measurement in June-October



Summary of Groundwater Well Levels as Compared To Sustainability Criteria

- 23 wells are currently below minimum threshold (MT)
 - 8 of these were already below MT at time of GSP adoption
 - Adaptive management
 ad-hoc committee has
 been formed to discuss
 potential options








Updated Hydrographs for Selected Monitoring Wells





GROUNDWATER CONDITIONS REPORT -CUYAMA VALLEY GROUNDWATER BASIN

October 2021

801 T Street Sacramento, CA. 916.999.8700

woodardcurran.com COMMITMENT & INTEGRITY DRIVE RESULTS Cuyama Basin Groundwater Sustainability Agency



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1. INTRODUCTION

This report is intended to provide an update on the current groundwater level conditions in the Cuyama Valley Groundwater Basin. This work is completed by the Cuyama Basin Groundwater Sustainability Agency (CBGSA), in compliance with the Sustainable Groundwater Management Act.

2. SUMMARY STATISTICS



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).

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 <u>https://opti.woodardcurran.com/cuyama/login.php</u>.



		Jun-21	Jul-21	Oct-21	Las	st Year	Annual
Well	Region	GWL	GWL	GWL	GWL	Month/	Elevation
		(ft. msl)	(ft. msl)	(ft. msl)	(ft. msl)	Year	Change (ft)
72	Central	1816	1999	1994	-	-	
74	Central	1927	1943	1941	1939	Oct-20	2
77	Central	1783	1776	1787	1793	Oct-20	-6
91	Central	1815	1811	1809	1816	Oct-20	-7
95	Central	1850	1848	1845	1852	Oct-20	-7
96	Central	2272	2272	2273	2271	Oct-20	2
98	Central	-	-	-	-	-	
99	Central	2196	2155	2154	2161	Oct-20	-7
102	Central	1764	1711	1668	-	-	
103	Central	1970	1976	1962	1960	Oct-20	2
112	Central	2054	2054	2054	2055	Oct-20	-1
114	Central	-	1879	1879	1880	Oct-20	-1
316	Central	1817	1813	1809	1811	Oct-20	-2
317	Central	1817	1813	1809	1811	Oct-20	-2
322	Central	2193	2146	2144	2158	Oct-20	-14
324	Central	2199	2169	2165	2174	Oct-20	-9
325	Central	2204	2204	2199	2197	Oct-20	2
420	Central	1775	1763	1775	1792	Oct-20	-17
421	Central	1784	1776	1779	1796	Oct-20	-17
474	Central	2203	2204	2205	2197	Oct-20	8

Table 1: Recent Groundwater Levels for Representative Monitoring Network



		Jun-21	Jul-21	Oct-21	Las	st Year	Annual
Well	Region	GWL	GWL	GWL	GWL	Month/	Elevation
		(ft. msl)	(ft. msl)	(ft. msl)	(ft. msl)	Year	Change (ft)
568	Central	1867	1867	1866	1867	Oct-20	-1
604	Central	1643	-	1644	1641	Oct-20	3
608	Central	-	-	1762	1809	Oct-20	-47
609	Central	1738	-	-	1791	Oct-20	
610	Central	1816	1813	1811	1813	Oct-20	-2
612	Central	1796	1811	-	1808	Oct-20	
613	Central	1812	1809	1806	-	-	
615	Central	1817	1817	1814	1818	Oct-20	-4
629	Central	-	-	1801	1882	Oct-20	-81
633	Central	-	-	1785	-	-	
62	Eastern	2764	2763	2761	2764	Oct-20	-3
85	Eastern	2848	2847	2847	2844	Oct-20	3
100	Eastern	2854	2852	2851	2852	Oct-20	-1
101	Eastern	2614	2617	2631	-	-	
841	Northwestern	1680	1667	1663	1672	Oct-20	-9
845	Northwestern	1645	1640	1642	1643	Oct-20	-1
2	Southeastern	-	-	-	3695	Oct-20	
89	Southeastern	3429	3428	3426	3432	Oct-20	-6
106	Western	2183	2184	2183	2184	Oct-20	-1
107	Western	2395	2393	2392	2399	Oct-20	-7
117	Western	-	1946	-	-	-	



		Jun-21	Jul-21	Oct-21	Las	st Year	Annual
Well	Region	GWL	GWL	GWL	GWL	Month/	Elevation
		(ft. msl)	(ft. msl)	(ft. msl)	(ft. msl)	Year	Change (ft)
118	Western	2211	2217	2211	2215	Oct-20	-4
124	Western	-	-	-	-	-	
571	Western	2180	2183	2183	2178	Oct-20	5
573	Western	-	2013	2013	2014	Oct-20	-1
830	Far-West Northwestern	1513	-	1511	-	-	
832	Far-West Northwestern	1592	1592	1591	1593	Oct-20	-2
833	Far-West Northwestern	-	1429	1431	1405	Oct-20	26
836	Far-West Northwestern	1449	1448	1448	-	-	



			-						
		Curre	ent Month		Within 10%				GSA
Well	Region	GWL	Month/	Minimum	Minimum	Measurable	Well	Status	Action
		(DTW)	Year	Threshold	Threshold	Objective	Depth		Required?
72	Central	178	10/14/2021	169	165	124	790	Below Minimum Threshold (5 months)	No
74	Central	252	10/14/2021	256	255	243		More than 10% above Minimum Threshold	No
77	Central	498	10/14/2021	450	445	400	980	Below Minimum Threshold (14 months)	No
91	Central	665	10/14/2021	625	620	576	980	Below Minimum Threshold (14 months)	No
95	Central	604	10/14/2021	573	570	538	805	Below Minimum Threshold (15 months)	No
96	Central	334	10/14/2021	333	332	325	500	Below Minimum Threshold (11 months)	No
98	Central	-	N/A	450	449	439	750	No available data this period (No available data in past 6 months)	No
99	Central	359	10/14/2021	311	310	300	750	Below Minimum Threshold (5 months)	No
102	Central	378	10/14/2021	235	231	197		Below Minimum Threshold (10 months)	No
103	Central	327	10/14/2021	290	285	235	1030	Below Minimum Threshold (7 months)	No
112	Central	85	10/13/2021	87	87	85	441	Above Measurable Objective	No
114	Central	47	10/13/2021	47	47	45	58	More than 10% above Minimum Threshold	No
316	Central	665	10/14/2021	623	618	574	830	Below Minimum Threshold (14 months)	No
317	Central	665	10/14/2021	623	618	573	700	Below Minimum Threshold (14 months)	No
322	Central	369	10/14/2021	307	306	298	850	Below Minimum Threshold (6 months)	No
324	Central	348	10/14/2021	311	310	299	560	Below Minimum Threshold (5 months)	No
325	Central	314	10/14/2021	300	299	292	380	Below Minimum Threshold (5 months)	No
420	Central	511	10/14/2021	450	445	400	780	Below Minimum Threshold (14 months)	No
421	Central	507	10/14/2021	446	441	398	620	Below Minimum Threshold (14 months)	No

Table 2: Well Status Related to Thresholds



		Curre	ent Month		Within 10%				GSA
Well	Region	GWL	Month/	Minimum	Minimum	Measurable	Well	Status	Action
		(DTW)	Year	Threshold	Threshold	Objective	Depth		Required?
474	Central	163	10/13/2021	188	186	169	213	Above Measurable Objective	No
568	Central	39	10/13/2021	37	37	36	188	Below Minimum Threshold (5 months)	No
604	Central	480	10/14/2021	526	522	487	924	Above Measurable Objective	No
608	Central	462	10/14/2021	436	433	407	745	Below Minimum Threshold (6 months)	No
609	Central	-	10/14/2021	458	454	421	970	No available data this period (>10% above MT in Jun 2021)	No
610	Central	631	10/14/2021	621	618	591	780	Below Minimum Threshold (6 months)	No
612	Central	-	10/14/2021	463	461	440	1070	No available data this period (>10% above MT in Jul 2021)	No
613	Central	524	10/14/2021	503	500	475	830	Below Minimum Threshold (12 months)	No
615	Central	514	10/14/2021	500	497	468	865	Below Minimum Threshold (11 months)	No
629	Central	578	10/14/2021	559	556	527	1000	Below Minimum Threshold (7 months)	No
633	Central	579	10/14/2021	547	542	493	1000	Below Minimum Threshold (7 months)	No
62	Eastern	160	10/14/2021	182	178	142	212	More than 10% above Minimum Threshold	No
85	Eastern	200	10/14/2021	233	225	147	233	More than 10% above Minimum Threshold	No
100	Eastern	152	10/14/2021	181	175	125	284	More than 10% above Minimum Threshold	No
101	Eastern	110	10/14/2021	111	108	81	200	Within Adaptive Management Zone	No
841	Northwestern	98	10/14/2021	203	198	153	600	Above Measurable Objective	No
845	Northwestern	70	10/14/2021	203	198	153	380	Above Measurable Objective	No
2	Southeastern	-	N/A	72	70	55	73	No available data this period (No available data in past 6 months)	No
89	Southeastern	35	10/14/2021	64	62	44	125	Above Measurable Objective	No



		Curre	ent Month		Within 10%				GSA
Well	Region	GWL (DTW)	Month/ Year	Minimum Threshold	Minimum Threshold	Measurable Objective	Well Depth	Status	Action Required?
106	Western	143	10/13/2021	154	153	141	228	More than 10% above Minimum Threshold	No
107	Western	91	10/13/2021	91	89	72	200	Within Adaptive Management Zone	No
117	Western	-	10/13/2021	160	159	151	212	No available data this period (>10% above MT in Jul 2021)	No
118	Western	59	10/13/2021	124	117	57	500	More than 10% above Minimum Threshold	No
124	Western	-	N/A	73	71	57	161	No available data this period (No available data in past 6 months)	No
571	Western	124	10/13/2021	144	142	121	280	More than 10% above Minimum Threshold	No
573	Western	71	10/13/2021	118	113	68	404	More than 10% above Minimum Threshold	No
830	Far-West Northwestern	60	10/13/2021	59	59	56	77	Below Minimum Threshold (4 months)	No
832	Far-West Northwestern	39	10/13/2021	45	44	30	132	More than 10% above Minimum Threshold	No
833	Far-West Northwestern	26	10/13/2021	96	89	24	504	More than 10% above Minimum Threshold	No
836	Far-West Northwestern	38	10/13/2021	79	75	36	325	More than 10% above Minimum Threshold	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



Waadad&Quran, Inc.



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 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 the Summary Statistics Section, there are 9 wells without current measurements. These "no measurement codes" can have different causes as described below.

- Access agreements have not yet been established with the landowner, access has not been granted yet, or no access at time of measurement:
 - o Wells 2, 98, 124
- Measurement was not possible at the time when the field technician went to take measurements:
 - o Wells 609, 612
- Water level was taken but data was not saved:
 - o Well 117



WOODARDCUITAN.COM

Agenda Item No. 21

Taylor Blakslee

From:	K. P. March <kmarch@bkylawfirm.com></kmarch@bkylawfirm.com>
Sent:	Friday, October 29, 2021 11:02 AM
То:	Taylor Blakslee
Subject:	Taylor Blakslee from KPMarch Esq, managing member of Walking U Ranch LLC: Please give the GSA Board, at the 11/3/21 meeting, my below email, as my public comment of Walking U Ranch LLC

102921

Taylor Blakslee from KPMarch Esq, managing member of Walking U Ranch LLC:

Please give this email to the Cuyama Valley GSA Board, as my "public comment", for the 11/3/21 meeting. Following is my public comment: The GSA Board is displaying <u>blatant bias</u> in favor of the Vineyard owned by Harvard (located a bit west of our Ranch, in the Northwestern region of the Cuyama Valley), by failing to do what I (and one of your own Board members, Robbie Jaffe) requested at last night's (10/28/21) GSA meeting.

Here is my request on behalf of Walking U Ranch LLC, to the GSA Board: I again request the following:

(1) ADD to the proposed GSA Response to be sent to DWP, at discussion of Northwestern region (see p.58 of the materials for the 10/28/21 GSA meeting) that Cleath-Harris (hydrologists whose data the Board is relying on for saying that inflow and outflow are in <u>balance</u> in the Northwestern region of the Cuyama Valley (where the recently planted 500,000 vine vineyard owned by Harvard University is located) <u>is being paid by Harvard</u> (through Grapevine Capital, finance managers for Harvard's vineyard), which makes Cleath-Harris' report <u>BIASED and SUSPECT</u>;

and

(2) ADD to the proposed GSA Response to DWR, at same discussion of Northwestern region, that, in <u>contrast</u> to the Cleath-Harris report's conclusion that "inflow and outflow are in balance" in the Northwestern region, so no action is necessary, that data collected by Santa Barbara County has determined there is NO RECHARGING of the water in the Northwestern area where Harvard's vineyard is located; and say the Santa Barbara County data is government data, which is presumed to be UNBIASED; and say that the Santa Barbara County data throws serious doubt on GSA relying on the Cleath-Harris report. Also state that the fallacy of relying on the Cleath-Harris report is additionally shown by GSA's own data, which reports that water levels are dropping in the Northwestern region. Water levels dropping shows that inflow does NOT equal outflow (caused by Harvard irrigating its 500,000 grape vines) in the Northwestern region.

If the Board does NOT put this essential information into its RESPONSE to DWR, I'm an attorney and I will send this information (and this email) myself, directly to DWR, and my having to do so, because GSA has failed to put this essential information into GSA's RESPONSE will demonstrate that GSA's RESPONSE is **biased and should not be relied on by DWR**.

Last night, the Board only said it would put a part of (1)—that Cleath-Harris is paid by the vineyard owner-- into the Response, not (2), though I asked for (2) to be put into the report.

If I have to write DWR, because the GSA does not put (1) and (2), as stated above, into the GSA Response to DWR, I'll also use that opportunity to tell DWR what I said last night, which is that GSA's proposed GSP doing ZERO reduction in pumping from now to November 2023 (2 full years), and then only doing a 5% reduction in pumping (and only in the Central part of the Valley, where well water levels in the Central part of the Valley have fallen 150 to 200 feet, in the last

couple of years) is **totally inadequate**, and will only make the inflow/outflow imbalance worse, not better, and therefore DWR should NOT approve the present GSP.

<u>Please REPLY to confirm receipt Taylor, and confirm that you will provide this email to the GSA Board, before the</u> <u>11/3/21 upcoming GSA board meeting</u>.

KPMarch

Kathleen P. March, Esq. Walking U Ranch LLC and The Bankruptcy Law Firm, PC 10524 W. Pico Blvd, Suite 212 Los Angeles, CA 90064 Phone: 310-559-9224 Fax: 310-559-9133 E-mail: <u>kmarch@BKYLAWFIRM.com</u> Website: <u>www.BKYLAWFIRM.com</u> "Have a former bankruptcy judge for your personal bankruptcy attorney"

From: Taylor Blakslee [mailto:TBlakslee@hgcpm.com]
Sent: Thursday, October 28, 2021 9:42 PM
To: undisclosed-recipients:
Subject: Cuyama Board Packet - Wed, Nov 3, 2021 at 4 p.m.

Hello Cuyama Stakeholders,

Please find attached the packet for next Wednesday's (November 3, 2021) Board meeting at 4 p.m.

This will be a *remote-only* meeting and participation can be achieved via the below options:

- Computer (live view of presentation materials) <u>https://global.gotomeeting.com/join/203153453</u>
- Telephonically (646) 749-3122, 203153453#

Thank you,

Taylor Blakslee Project Coordinator (661) 477-3385



Persistence | Proficiency | Performance

To send me a file click here.

Corporate (916) 923-1500 <u>www.hgcpm.com</u>

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Taylor Blakslee

From:	K. P. March <kmarch@bkylawfirm.com></kmarch@bkylawfirm.com>
Sent:	Monday, November 1, 2021 10:38 AM
То:	Taylor Blakslee
Subject:	Taylor Blakslee from KPMarch Esq, managing member of Walking U Ranch LLC: Thanks for confirming receipt of my below email, and thanks for confirming that you will distribute my email to GSA Board. Please email me DWR contact data: mailing address, phon

110121

To Taylor Blakslee, administrator for GSA board; from KPMarch, Esq. of Walking U Ranch LLC

Taylor:

Thanks for confirming receipt of my below email, and thanks for confirming that you will distribute my email to GSA Board.

The GSA board should put in what I wrote.

But if the GSA Board does NOT do this, I will send my email to DWR directly, and will say, in my cover letter sending my email to DWR, that GSA board REFUSED to put this very important information into Board's Response (refused at the 10/28/21 meeting and refused again when I sent my email, after the 10/28/21 meeting); and GSA Board's refusal to add the information, which my 10/29/21 email asks the GSA Board to add, will be clear demonstration of GSA Board's bias, and of GSA Board intentionally trying to hide GSA's bias and intentionally trying to hide the truth.

GSA may be going to tell DWR a flat-out lie (lie that inflow and outflow are in balance in the Northwestern Region of Cuyama Valley) but Harvard's 500,000 grapevines are just east of Walking U Ranch LLC, and I am not willing to pretend that the water Harvard's 500,000 grapevines are being irrigated with, and the inflow/recharge are in balance, when that is obviously FALSE, as there is no inflow and no recharge, and Santa Barbara County government data shows there is NO recharge.

Please give GSA board this email too. Thx.

Please REPLY to tell me what is the correct mailing address, phone and email for DWR, so that I will have the correct contact data, in case I need to send DWR my10/29/21 email, and this email, directly, with my law firm's cover letter. Thx.

KPMarch

Kathleen P. March, Esq. Walking U Ranch LLC and The Bankruptcy Law Firm, PC 10524 W. Pico Blvd, Suite 212 Los Angeles, CA 90064 Phone: 310-559-9224 Fax: 310-559-9133 E-mail: <u>kmarch@BKYLAWFIRM.com</u> Website: <u>www.BKYLAWFIRM.com</u> "Have a former bankruptcy judge for your personal bankruptcy attorney" From: Taylor Blakslee [mailto:TBlakslee@hgcpm.com]
Sent: Monday, November 1, 2021 10:01 AM
To: K. P. March <kmarch@bkylawfirm.com>
Subject: RE: Taylor Blakslee from KPMarch Esq, managing member of Walking U Ranch LLC: Please give the GSA Board, at the 11/3/21 meeting, my below email, as my public comment of Walking U Ranch LLC

Kathleen,

I am confirming that I received your email and distributed to the CBGSA Directors.

Thank you,

Taylor Blakslee | Project Coordinator | (661) 477-3385

Taylor Blakslee

From:	K. P. March <kmarch@bkylawfirm.com></kmarch@bkylawfirm.com>
Sent:	Monday, November 1, 2021 7:38 PM
То:	Taylor Blakslee
Subject:	Taylor Blakslee from KPMarch Esq, of Walking U Ranch LLC: How to access the Santa Barbara County data that there is NO recharging (aka no inflow) in the Northwestern Region of the Cuyama Valley, where Harvard has planted 500,000 grapevines.

110121

Taylor Blakslee of Cuyama Basin GSA from KPMarch, Esq of Walking U Ranch LLC

Taylor:

At the 10/28/21 GSA meeting, one of your lady board members (I think it might have been Robbie joffe, but I'm not sure) was the person who said, in that meeting, that the County of Santa Barbara's data showed <u>no recharging</u> in the Northwestern region of the Cuyama Valley. It would be easiest if you checked your notes of the 10/28/21 meeting, and then asked that Board member to tell you how to access Santa Barbara County's data on that point. Sounded to me that she had that data.

Actually, since Cuyama Basin GSA is a quasi government entity, probably easiest for you, Taylor, to contact Santa Barbara County and ask them how Cuyama GSA can access that data. Ask them to send your GSA that recharge/no recharge data. Please do that.

But if neither or those approaches work, then my junior attorneys and I will figure out whom to contact, in Santa Barbara County government, to get that Recharge/no recharge data from Santa Barbara County.

It is very surprising to me that Cuyama Basin GSA would be proposing to send DWR a RESPONSE that reports that <u>inflow</u> <u>equals outflow in the Northwestern region of the Cuyama Valley</u> (where Harvard University has planted those 500,000 grape vines), <u>so nothing needs to be done to "balance" inflow and outflow in the Northwestern region of the Cuyama</u> <u>Valley</u>, <u>without GSA obtaining and analyzing Santa Barabara County's data on whether or not there is recharging (aka</u> <u>"inflow") in the Northwestern region of the Cuyama Valley</u>. According to your lady board member, Santa Barbara County's data reports there is NO recharging in that area. Since the Cuyama Basin GSA has NOT considered Santa Barbara County's data, the GSA's RESPONSE to DWR is fatally flawed. <u>You need to fix it</u>.

Please provide this email to your board for the Board's upcoming 11/4?5?/21 meeting. <u>**REPLY to confirm you will do**</u> <u>**this**</u>. Thx.

KPMarch, Esq., managing member of Walking U Ranch LLC

Kathleen P. March, Esq. Walking U Ranch LLC and The Bankruptcy Law Firm, PC 10524 W. Pico Blvd, Suite 212 Los Angeles, CA 90064 Phone: 310-559-9224 Fax: 310-559-9133 E-mail: <u>kmarch@BKYLAWFIRM.com</u> Website: <u>www.BKYLAWFIRM.com</u> "Have a former bankruptcy judge for your personal bankruptcy attorney" From: Taylor Blakslee [mailto:TBlakslee@hgcpm.com]
Sent: Monday, November 1, 2021 5:37 PM
To: K. P. March <kmarch@bkylawfirm.com>
Subject: RE: Taylor Blakslee from KPMarch Esq, managing member of Walking U Ranch LLC: Thanks for confirming receipt of my below email, and thanks for confirming that you will distribute my email to GSA Board. Please email me DWR contact data: mailing address, p

Kathleen,

I received a Director request for the data you reference in your first email: "data collected by Santa Barbara County has determined there is NO RECHARGING of the water in the Northwestern area where Harvard's vineyard is located;"

Can you please provide me with this data so I can forward to my Director/the Board?

Thank you,

Taylor Blakslee | Project Coordinator | (661) 477-3385