



CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY SPECIAL STANDING ADVISORY COMMITTEE MEETING

Committee Members

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

Jake Furstenfeld
Jean Gaillard
Joe Haslett

Roberta Jaffe
Vacant
Vacant

AGENDA

AUGUST 11, 2021

Agenda for a meeting of the Cuyama Basin Groundwater Sustainability Agency Standing Advisory Committee to be held on Wednesday, August 11, 2021, at 5:00 PM. Due to the COVID-19 pandemic safety protocols (i.e. 6-foot spacing requirement) this meeting will be in-person for Committee Members and Staff *only* and will meet at the Cuyama Valley Family Resource Center, 4689 CA-166, New Cuyama, CA 93254. Members of the public may participate in this meeting via video at <https://global.gotomeeting.com/join/203153453> and/or telephonically at (646) 749-3122, code: 203-153-453#.

The order in which agenda items are discussed may be changed to accommodate scheduling or other needs of the Committee, the public or meeting participants. Public comments should be emailed to Taylor Blakslee at tblakslee@hgcpm.com by close of business on Tuesday, August 10, 2021, to assist in facilitating this meeting, but they may also be provided at the meeting.

1. Call to Order
2. Roll Call
3. Pledge of Allegiance
4. CBGSA Staffing Update
5. Update on SAC Membership
6. Approval of Minutes
7. Groundwater Sustainability Plan
 - a. Direction on DWR's GSP Consultation Letter Dated June 3, 2021
 - b. Direction on Small Pumpers Policy
 - c. Direction on Adaptive Management
 - d. Approval of Monitoring Network Consultant Contract for FY 21-22
 - e. Review of Model Update Process
 - f. Update on Coordination with Counties and Well Permitting Process
 - g. Update on Groundwater Sustainability Plan Activities
 - h. Update on Monitoring Network Implementation
 - i. Update on Monthly Groundwater Conditions Report
8. Groundwater Sustainability Agency
 - a. Report of the Executive Director
 - b. Board of Directors Agenda Review

c. Report of the General Counsel

9. Items for Upcoming Sessions

10. Committee Forum

a. Update on Cannabis Industry Activities

11. Public Comment for Items Not on the Agenda

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

12. Correspondence

13. Adjourn

Cuyama Basin Groundwater Sustainability Agency Standing Advisory Committee Meeting

April 29, 2021

Draft Meetings Minutes

PRESENT:

Kelly, Brenton – Chair
DeBranch, Brad – Vice Chair
Furstenfeld, Jake
Haslett, Joe
Jaffe, Roberta
Beck, Jim – Executive Director
Dominguez, Alex – Legal Counsel

Jean Gaillard

ABSENT:

Draucker, Louise

1. Call to Order

Cuyama Basin Groundwater Sustainability Agency (CBGSA) Standing Advisory Committee (SAC) Chair Brenton Kelly called the meeting to order at 5:03 p.m. and Hallmark Group Project Manager Taylor Blakslee provided direction on the meeting protocols in facilitating a remote-only meeting.

2. Roll Call

Hallmark Group Project Manager Taylor Blakslee called roll of the Committee (shown above).

3. Pledge of Allegiance

Chair Kelly led the pledge of allegiance.

4. Update on SAC Membership

Chair Kelly reported that there still remain vacancies for representatives of the Hispanic community and the SAC continues to search for candidates willing to serve.

a. Appoint a SAC Member

Chair Kelly introduced Cuyama resident and local farmer Jean Gaillard who applied to be a Committee Member on the SAC. Mr. Gaillard thanked the SAC for the opportunity to serve said he is looking forward to participating in this important process for the Valley.

MOTION

Committee Member DeBranch made a motion to appoint Jean Gaillard to the Standing Advisory Committee. Committee Member Furstenfeld seconded the motion, a roll call vote was made, and the motion passed.

AYES: DeBranch, Haslett, Furstenfeld, Jaffe, Kelly
 NOES: None
 ABSTAIN: None
 ABSENT: Draucker

5. Approval of Minutes

Chair Kelly opened the floor for comments on the January 7, 2021, CBGSA SAC meeting minutes and no changes were suggested.

MOTION

Committee Member Jaffee made a motion to adopt the February 25, 2021, CBGSA SAC meeting minutes. The motion was seconded by Committee Member DeBranch, a roll call vote was made, and the motion passed.

AYES: DeBranch, Furstenfeld, Haslett, Jaffe, Kelly
 NOES: None
 ABSTAIN: None
 ABSENT: Draucker

6. Groundwater Sustainability Plan

a. Update on Groundwater Sustainability Plan Activities

Woodard & Curran's Technical Project Manager Brian Van Lienden provided an update on the Groundwater Sustainability Plan (GSP) activities and the overall project schedule which are included in the SAC packet.

b. Approval of Meter Guidance and Reporting Instructions

Mr. Van Lienden provided an update on the meter guidance and reporting documentation.

Committee Member Jaffe asked if the data will be used for more than just invoicing and Executive Director Jim Beck said yes, in addition to informing water use for invoicing, the data will be used to calibrate future model updates and for water management tracking in management area.

Committee Member DeBranch asked staff roughly how many wells there are and how are we tracking those wells. Mr. Blakslee replied that staff requested well data from the four counties and while Ventura and San Luis Obispo have reported they have comprehensive records, Santa Barbara County reported that their data is only available from roughly 1980. Therefore, staff will use the county data but will send the meter requirement notice to all parcel owners in the basin.

Chair Kelly shared concerns he has heard from stakeholders on the economic burden of installing meters on multiple wells and asked what the enforcement/compliance strategy was. He also asked if staff had concerns with meter technology related to accuracy.

Mr. Beck replied that evapotranspiration was another option, but there was a lot of initial stakeholder concern with this approach. He said the Board wrestled with this but ultimately determined meters is the most accurate and equitable long-term solution.

Mr. Gaillard asked if there are unpermitted wells and how will we track these. Mr. Beck said there may be, but we expect landowners to report these, if they don't, we hope to use OpenET to track

possible wells and may need to consider more time-intensive options, but we have not currently budgeted for those options.

Jim Menzies said wells that have falling water will record air as water use and this is an issue with meters and requested the SAC and Board develop a workable solution to this. Mr. Beck said we were trying to provide as broad direction as possible and did not want to delve into an engineering-level guidance. He suggested Chair Kelly document this issue and bring this up at the Board meeting where they may direct staff to develop a solution for this.

Mr. Blakslee asked the SAC if an online reporting option would be valuable. Brad asked if we thought there was a cost savings in the future using this method. Mr. Beck said automating this data will save money in the future. However, if only half the landowners supply the information online it likely wouldn't save money. Mr. Beck recommended submitting the data manually for the first year. Chair Kelly suggested adding a survey for online reporting in the forms that will be mailed to all parcel owners.

MOTION

Committee Member DeBranch made a motion to recommend the Board approve the meter guidance and installation documents. The motion was seconded by Committee Member Jaffe, a roll call vote was made, and the motion passed.

AYES:	DeBranch, Furstenfeld, Jaffe, Kelly
NOES:	Haslett
ABSTAIN:	None
ABSENT:	Draucker

Committee Member Haslet commented that he does not agree with requiring meters on all wells. He said it is too much of an absolute and does not agree with this approach.

c. Update on Monitoring Network Implementation

Mr. Van Lienden provided an update on monitoring network implementation activities which is summarized in the SAC packet. He reported that all 10 transducers have been installed.

d. Update on Monthly Groundwater Conditions Report

Mr. Van Lienden provided an update on the groundwater level monitoring network and levels for January through March 2021 which are included in the SAC packet.

Chair Kelly noted that the pie chart did not add up to the current number of wells. Mr. Van Lienden said staff will check this and update the presentation.

Committee Member Jaffe said she is concerned with the report on wells below the minimum threshold and said we need to have more clarity and discussion on adaptive management options. She asked if there are plans for adaptive management. Mr. Beck replied that her concerns are valid and adaptive management options will depend on regional effects of pumping. He noted the first pumping restrictions are set to begin in 2023 and the model needs to be updated and commented that he does not think adaptive management can be accelerated ahead of the pumping reductions. He said staff will continue monitoring levels and develop potential adaptive management options if required, but staff did have plans to meet with an adaptive management ad hoc to discuss this further.

Brenton requested that the hydrographs are shown with a smaller scale to see changes more clearly.

e. Update on Annual Groundwater Quality Report

Mr. Van Lienden presented the annual water quality report which is included in the SAC packet.

Chair Kelly commented that Opti well No. 88 does not have a threshold set and staff replied they would update that.

Committee Member Jaffe asked how the CBGSA is handling the State Water Resources Control Board comment letter. Mr. Beck replied that staff will consider these comments during DWR's review of the GSP.

Mr. Beck said the water quality data creates more questions than answers and demonstrates the need to develop more data before making decisions on such a narrow data set.

Mr. Van Lienden reported that staff is working with P&P to identify additional wells to add to the water quality network and is investigating potential causes of increases to TDS measurements from historic values.

7. Groundwater Sustainability Agency

a. Report of the Executive Director

Mr. Beck reported on upcoming grant funding opportunities and Mr. Blakslee reported that staff anticipates \$60 million to be made available as a joint planning and implementation grant in the fall. Mr. Van Lienden noted that those funds are contingent on the Legislature passing the budget and Ms. Carlisle asked if it would be helpful to write support letters. Mr. Beck said this is always helpful and thanked Ms. Carlisle.

b. Board of Directors Agenda Review

Mr. Beck provided an overview of the May 5, 2021, CBGSA Board of Directors meeting agenda which is provided in the SAC packet.

c. Report of the General Counsel

Nothing to report.

8. Items for Upcoming Sessions

Nothing to report.

9. Committee Forum

Nothing to report.

a. Update on Cannabis Industry Activities

Committee Member Jaffe reported on the Santa Barbara/Stakeholder cannabis process to review 700 acres of permits for cannabis projects in the Cuyama Valley. She said it is not known how much water will be used but projections estimate cannabis use at 3.3 acre-feet per acre. She said the Cuyama Valley Cannabis Advisory Committee (CVCAC) is made up of community members and cannabis growers and both she and Mr. Gaillard are on the Committee.

She said the growers are working with the CVCAC to make their projects work, but she is concerned the additional water consumption will negatively affect the basin’s efforts to achieve sustainability.

She reported that some growers are using voluntary offsets (paying another grower in the Valley to fallow land). She said the community is concerned with this approach but willing to consider it; however, the community strictly believes offsets must be in the Central basin. She said the good news is communication is continuing, but it is very challenging to imagine additional water being pumped out of the basin. She commented that she wished the CBGSA was representative in these discussions.

10. Public Comment for Items Not on the Agenda

Nothing to report.

11. Correspondence

Nothing to report.

12. Adjourn

Chair Kelly adjourned the meeting at 7:07 p.m.

Minutes approved by the Standing Advisory Committee of the Cuyama Basin Groundwater Sustainability Agency the 11th day of August 2021.

STANDING ADVISORY COMMITTEE OF THE
CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

Chair: _____

ATTEST:

Vice Chair: _____



TO: Standing Advisory Committee
Agenda Item No. 7a

FROM: Jim Beck / Brian Van Lienden

DATE: August 11, 2021

SUBJECT: Direction on DWR's GSP Consultation Letter Dated June 3, 2021

Issue

Discussion of DWR's GSP consultation letter dated June 3, 2021

Recommended Motion

Approve the staff recommendation as outlined in agenda item no. 7a.

Discussion

On June 3, 2021, the California Department of Water Resources (DWR) provided the Cuyama Basin Groundwater Sustainability Agency (CBGSA) with a consultation letter on the CBGSA's Groundwater Sustainability Plan. While DWR has until January 31, 2022, to provide its official determination on the CBGSA's GSP, DWR provided an informal review of the GSP and recommended four corrective actions.

On July 9, 2021, staff met with DWR staff including Steven Springhorn, Craig Altare, Tim Ross, Anita Regmi, Jack Tung and Melissa Kranz-Sparks to gain clarity on the corrective actions proposed by DWR.

Staff developed potential options to address DWR's corrective actions and, on July 23, 2021, reviewed these options with technical staff from the public agencies in Cuyama. This presentation of potential options is provided as Attachment 1 for Committee consideration. The Cuyama Basin Water District provided specific comments which are included as Attachment 2, and the original DWR letter is provided as Attachment 3.

Cuyama Basin Groundwater Sustainability Agency

Direction on DWR GSP Comment Letter

August 11, 2021



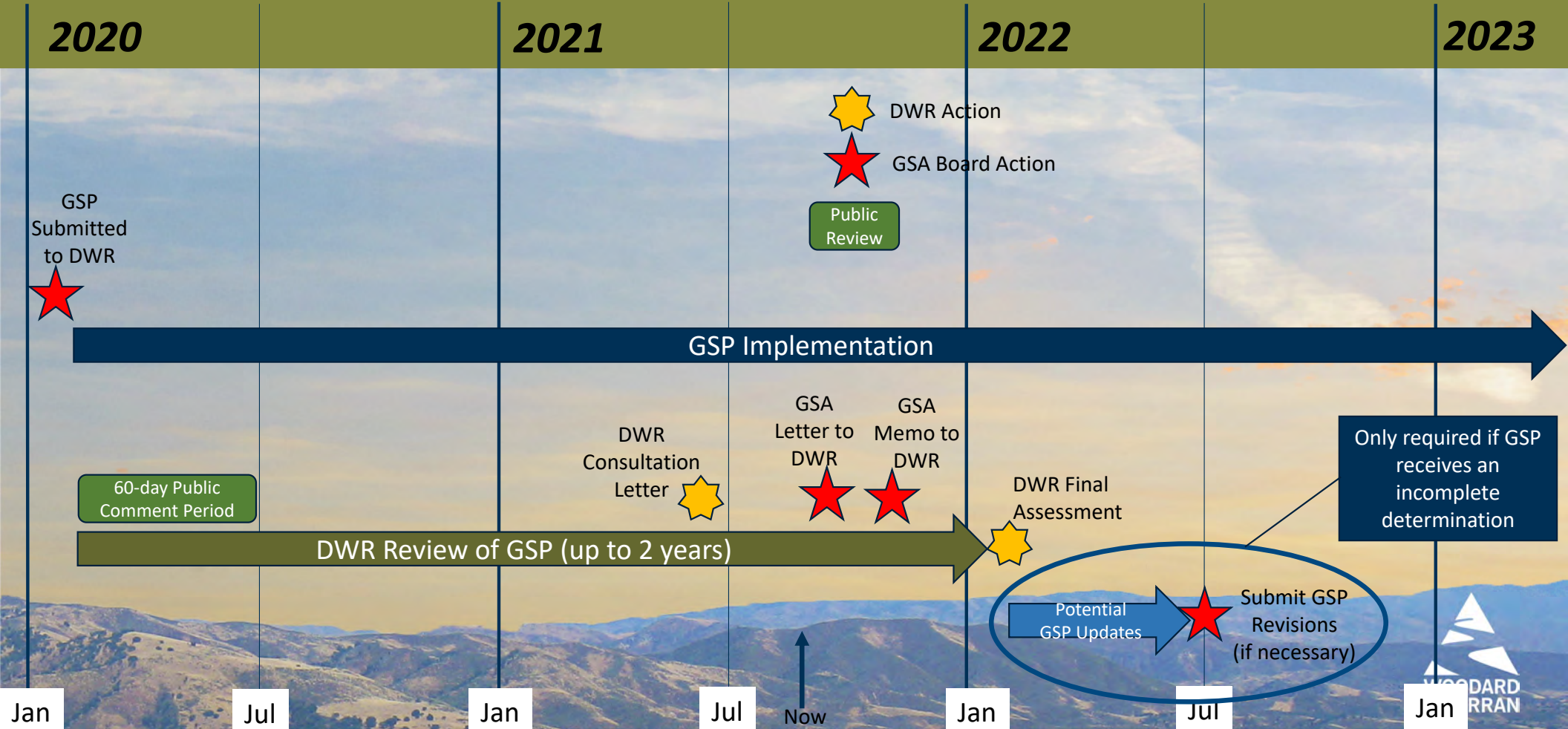
Background

- 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

Summary of DWR Consultation Letter and Recommended Response

- The CBGSA can receive an Approved determination in January 2022 if we can provide a CBGSA-approved document to DWR that addresses these deficiencies in time for DWR to review it (i.e. ~November 2021)
 - If not, we will receive an Incomplete determination in January, and we'd then have 180 days from January 31, 2022 to address the deficiencies to gain Approval
- **Staff Recommendation:**
 - Send a letter to DWR in September outlining the CBGSA plan to respond
 - Perform additional technical analyses and review at a virtual joint Special SAC/Board meeting in mid-late October
 - Develop a memorandum to be approved by the Board at the November 2021 Board meeting and submitted to DWR

GSP Review and Determination Process



Summary of DWR Consultation Letter and Recommended Response

- 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

Potential Corrective Action 1:

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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:

Provide justification for, and effects associated with, the sustainable management criteria

■ Staff Observations:

- In the near-term, a technical analysis of minimum thresholds in relation to domestic well depths and GDE locations can be performed to address DWR's comments
 - The analysis of production well depths currently underway for the adaptive management process can provide some of the information requested by DWR in their letter
 - The analysis can consider well depths, perforations and the distribution of well age in the basin, as far as this data is available
 - In addition, a modeling analysis can be performed in the Northwestern region to help understand the effects of pumping drawdowns on nearby domestic wells and GDEs
- The above information can inform potential revisions to minimum thresholds and a more detailed narrative on potential undesirable results, including potential economic impacts, and their relationship to sustainability criteria in the GSP

■ Staff Recommendation:

- Perform the technical analysis described above to assess the impacts of minimum thresholds on domestic and public wells and GDEs
- The memorandum should describe the technical analysis; include revisions to minimum thresholds (if needed) and a more detailed narrative on potential undesirable results; and describe a plan for more detailed analysis in the future

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

Potential Corrective Action 2:

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

- **Staff Observations:**

- The basin has limited historical data and limited existing monitoring resources to characterize surface water flows and groundwater - surface water interconnection
- The GSA is pursuing improvements to monitoring with new USGS flow gages and new piezometers to improve the availability of information

- **Staff Recommendation:**

- Perform a high-level assessment, considering both proximity to the river and perforation depth, to identify a subset of existing groundwater level monitoring wells to be used for ISW monitoring
- The memorandum should include a revised ISW monitoring network based on the results of the assessment and a description of how ISW monitoring will be improved once additional monitoring resources are available

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 SMCs 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

Potential Corrective Action 3: Further address degraded water quality

- **Staff Observations:**
 - DWR was clear that they would like the GSA to monitor and develop sustainability criteria for arsenic and nitrates
 - Appropriate management actions to address water quality, if any, can only be determined once the appropriate data has been collected and analyzed
- **Staff Recommendation:**
 - The GSA should develop nitrate and arsenic sustainability criteria at each water quality monitoring well where historical data exists
 - 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 sustainability criteria (including MT and MO) for arsenic and nitrates in addition to TDS and include an updated undesirable results narrative for water quality

Potential Corrective Action 4:

20

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

■ Staff Observations:

- This action can be addressed with additional narrative regarding the circumstances when pumping reductions would be required in these regions
- The analysis performed for potential corrective action 1 could also inform whether pumping reductions are needed in these regions
- The GSP modeling analysis quantified pumping reductions required for long-term sustainability in the Ventucopa region; in the near-term, additional modeling could be performed to try to estimate maximum sustainable pumping in the Northwestern region

■ Staff Recommendation:

- Develop a plan with quantified metrics of the timing of pumping limits for the Ventucopa and Northwestern regions (if warranted by conditions)
 - In Ventucopa, pumping limits would be based on existing modeling data, with updates in the future based on additional groundwater level and streamflow data that is collected. It is anticipated that these would occur no earlier than 2028.
 - In the Northwestern region, the plan would be informed by the analyses performed for corrective action 1; this would be re-evaluated as the model is updated in the future with additional data
- The memorandum should include a narrative that describes the criteria and the plan for potential pumping reductions in the Northwestern and Ventucopa regions



August 5, 2021

Cuyama Basin Groundwater Sustainability Agency
 Attn: Jim Beck, Executive Director
 4900 California Avenue, Tower B, Second Floor
 Bakersfield, California, 93309

Subject: Cuyama Basin Water District Response to DWR Comments on the Cuyama GSP

Dear Mr. Beck:

On 31 January 2020, the Cuyama Basin Groundwater Sustainability Agency (Cuyama GSA) submitted the final Groundwater Sustainability Plan (GSP) for the Cuyama Valley Basin (Basin) to DWR for review. On 3 June 2021, DWR responded with a letter identifying deficiencies "which may preclude the Department's approval", and suggesting ways to address their concerns. On 9 July 2021 DWR met with GSA staff to clarify and discuss their comments.

The Cuyama Basin Water District (District) has reviewed the DWR letter of 3 June 2021 (DWR Letter) and suggests the Cuyama GSA include the following elements in its response to DWR's letter:

- 1) Reinforce and explain the technical rationale for sustainable management criteria (SMCs) in each of the threshold regions of the Basin, including measurable objectives (MOs), minimum thresholds (MTs), and undesirable results (URs). Include expanded discussion of how beneficial uses and users were considered.
- 2) Reiterate that the Cuyama Basin GSP was written to achieve the MOs and avoid URs over the long term. Point out that MTs are not objectives, and even DWR's published best management practices (BMP) guidance shows¹ that MTs may be exceeded in the short or medium term, as long as progress is made toward achieving MOs by 2040.
- 3) Underscore that economic impact is necessarily a consideration of sustainability², and summarize the results of two economic analyses^{3,4} that showed a potential direct impact of approximately \$76 million, and indirect impacts of over \$200 million if groundwater pumping allocations are reduced as proposed (i.e., fallowing as much as 80% of Cuyama Basin cropland).

¹ Draft Best Management Practices for the Sustainable Management of Groundwater, Sustainable Management Criteria BMP. Available at https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents/Files/BMP-6-Sustainable-Management-Criteria-DRAFT_ay_19.pdf

² CWC Div 1, Ch 1, §113

³ *Direct Economic Impact Analysis of the Cuyama Groundwater Basin Groundwater Sustainability Plan Demand Management Program*. Report prepared for Cuyama Basin GSA by ERA Economics LLC, 19 Dec 2019, 26 pp.

⁴ *Cuyama Groundwater Basin Groundwater Sustainability Plan Economic Impact Analysis*. Report prepared for Cuyama Basin GSA by ERA Economics LLC, 25 Jan 2021, 47 pp.

- 4) Review and select, as necessary and appropriate, a focused subset of representative wells to monitor areas with interconnected groundwater and surface water. These should be relatively shallow-screened, and as close as possible to surface water streams, where available. Provide clear details of the selection rationale.
- 5) Ensure that all reasonably available water level and water-quality data have been incorporated into the GSP and considered in the process. Review the DWR comments regarding water quality data and ensure that the data they cite truly are located within the Cuyama Basin and are appropriate to use.
- 6) Explain that SGMA is a blunt instrument for regulation of water quality, particularly in the Cuyama Basin, where pumping allocation cutbacks are the only practically available tool for enforcing sustainability. Summarize other regulatory programs active in Cuyama Basin that are focused on water quality monitoring and may provide more practical strategies to address longstanding water quality issues⁵. Point out that per SGMA, a GSA is not required to address undesirable results that occurred before 2015⁶.

Additionally, pursuant to the Delegation and Management Agreement, the District and the Cuyama GSA have been engaged in discussions regarding the potential delegation to the District of certain groundwater management and enforcement actions within the District's boundaries. The District's Board has determined that it would be premature to develop measures to implement the GSP that DWR has advised is in need of revision. Further, the District is aware of the development of policies pertaining to the cultivation of cannabis in the Cuyama Basin. We do not know to what extent these policies take the SGMA into consideration. In light of the uncertainty concerning groundwater management resulting from both of these issues, the District is disinclined to pursue delegation at this time and looks forward to revisiting delegation after these issues are resolved.

Thank you,



Matt Klinchuch, PE
Cuyama Basin Water District
Manager
1800 30th Street, Suite 280
Bakersfield, CA 93301
Office: (661) 616-5900

⁵ For example, the Central Coast Water Board Irrigated Lands Program (ILP):
https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/

⁶ CWC Div 6, Part 2.74, Ch 6, §10727.2(b)(4)



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

¹ Water Code § 10720 *et seq.*

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

³ 23 CCR § 355.2(e)(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 sgmps@water.ca.gov.

Thank you,

A handwritten signature in black ink, appearing to read "Craig Altare". The signature is fluid and cursive, with the first name "Craig" being more prominent than the last name "Altare".

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

⁵ Best Management Practices for the Sustainable Management of Groundwater: Sustainable Management Criteria (DRAFT). California Department of Water Resources, November 2017, https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents/Files/BMP-6-Sustainable-Management-Criteria-DRAFT_ay_19.pdf.

⁶ Water Code § 10721(v).

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.

⁹ 23 CCR § 354.28, Best Management Practices for the Sustainable Management of Groundwater: Sustainable Management Criteria (DRAFT). California Department of Water Resources, November 2017, https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents/Files/BMP-6-Sustainable-Management-Criteria-DRAFT_ay_19.pdf.

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

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

¹⁸ GeoTracker Application. California State Water Resources Control Board, <https://geotracker.waterboards.ca.gov/map/#>; select "Public Water Wells" under the "Other Sites" option and navigate to the area of interest.

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 water, especially since 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, <https://sgma.water.ca.gov/portal/service/gspdocument/download/4021>.

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.



TO: Standing Advisory Committee
Agenda Item No. 7b

FROM: Jim Beck / Joe Hughes

DATE: August 11, 2021

SUBJECT: Direction on Small Pumpers Policy

Issue

Discussion on the reporting requirements for small pumpers in the Cuyama Basin.

Recommended Motion

Authorize water users using 25 acre-feet or less per year to report annual water use using current evapotranspiration forms with a gross conversion factor for the purpose of groundwater management and invoicing.

Discussion

On November 4, 2020, the Cuyama Basin Groundwater Sustainability Agency (CBGSA) Board of Directors voted to require meters for all non-de minimis water users in the Cuyama Basin by December 31, 2021.

During discussion of the meter guidance and reporting documents at the May 5, 2021, Board meeting, the Board approved the meter guidance and reporting documents, but determined that water users using 25 acre-feet or less per year would not be required to install a meter but reporting and payment for those users would be determined at a subsequent Board meeting.

On June 1, 2021, the Meter ad hoc met to discuss the meter use reporting methodology which included using the existing water use forms for (1) Irrigated, and (2) Municipal and Industrial water use with a factor to convert water use to a gross value. Since metered use is a gross methodology the conversion factor for the small pumper forms is needed to be consistent with a gross methodology.

A conversion factor for Board consideration is to increase water use reported via the attached forms by 52 percent which is based on the variance between metered and evapotranspiration data received collected during reporting for 2019 water use.

The revised Irrigated and Municipal and Industrial forms are provided as Attachments 1 and 2, respectively, for Committee consideration.



FORM I – IRRIGATOR

WATER USE ESTIMATE WORKSHEET – 2021

This form is only for water users using 25 acre-feet or less per year.

Landowner/Entity Name _____

Contact Information _____

Local Well Name(s) _____

State Well No(s). *(if available)* _____

Instructions:

1. For 2021, input crop name(s) in column A, the associated acres in column B, and the corresponding crop factors from the attached Exhibit I in column C.
2. Multiply acres (column B) by the crop factor (column C) and input result in column D.
3. Total the acre-feet from column D in row 2.
4. Multiple the total acre-feet from column D, row 2 by the gross conversion factor in column D, row 3 and enter result in column D, row 4.

	A	B		C		D
	Crop Name	Acres		Crop Factor		Water Use (acre-feet)
1			X		=	
			X		=	
			X		=	
			X		=	
			X		=	
			X		=	
			X		=	
2	Total Acre-feet [net] (sum column D)					
3	Gross Conversion Factor					x 1.52
4	Total Acre-feet [gross]					

Exhibit I – Crop Factors

Source Information

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

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



Avg Annual Reference ET by Zone (inches/yr)

Zone	Total
1	33.0"
2	39.0"
3	46.3"
4	45.5"
5	43.9"
6	49.7"
7	43.4"
8	49.4"
9	55.1"
10	49.1"
11	53.0"
12	53.3"
13	54.3"
14	57.0"
15	57.0"
16	62.5"
17	66.5"
18	71.3"

Crop Factors

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

¹Value determined by local expertise in the Cuyama Valley.

²Value based on ____.

³Value based on ____.



FORM M – MUNICIPAL & INDUSTRIAL

WATER USE ESTIMATE WORKSHEET – 2021

This form is only for water users using 25 acre-feet or less per year.

Landowner/Entity Name _____
 Contact Information _____
 Local Well Name(s) _____
 State Well No(s). (if available) _____

Instructions:

1. Calculate water use by inputting units used for municipal & industrial water use in column B (see Exhibit M below to calculate units) for the appropriate corresponding water use categories found in column A.
2. Multiply units used (column B) by the water consumption factor in column C and input result in column D.
3. Total the gallons from column D and convert to acre-feet on row 13.
4. Multiple the acre-feet by the gross conversion factor in row 14, column D and input result in row 15, column D.

	A	B	C	D
	Type of Use	Units Used	Water Consumption Factor (Gal)	Water Use (Gal)
1	Chicken Ranches	X	3,532	=
2	Livestock Drinking Water No. of cows, bulls and horses No. of stockers No. of sheep and goats	X	5,520 2,760 1,100	=
3	Hotels No. of rooms	X	46,000	=
4	Office Buildings; including Churches No. of offices	X	38,600	=
5	Restaurants Seating capacity	X	11,400	=
6	Service Stations No. of stations	X	350,000	=
7	Stores Sq ft of building	X	50	=
8	Trailer Court Avg no. of people	X	36,800	=
9	Elementary Schools No. of students x No. of school days	X	80	=
10	Junior & Senior High Schools, Colleges and Churches No. of students x No. of school days	X	160	=

11	Watered Land; non-ag No. of acres		X		5	=	
12	Total Gallons (sum column D and/or E)						
13	Convert to Acre-feet (Row 12/325,850)						
14	Gross Conversion Factor						x 1.52
15	Total Acre-feet [gross]						

Exhibit M – Unit(s) Calculations

Unit Calculation

	Type of Use	Units Used
1	Chicken Ranches	Avg number of units of 100 chickens on hand for the reporting period.
2	Livestock Drinking Water	Average number of livestock on hand for the reporting period (drinking water only). Amounts derived from NDSU Extension Service report from July 2015 entitled "Livestock Water Requirements."
3	Hotels	Total number of rooms.
4	Office Buildings; including Churches	Total number of offices in building, or offices served.
5	Restaurants	Total number of seats including seats at the counter, chairs, stools, benches and patio seating.
6	Service Stations	Number of stations served.
7	Stores	Square feet of any store, supermarket or shop. Calculation includes employee, customer and maintenance water use.
8	Trailer Court	Average number of people in the trailer court.
9	Elementary Schools	Total number of students, faculty, custodians, and maintenance staff multiplied by the number of school days. If there was non-ag watered land input amount in row 11.
10	Junior & Senior High Schools and Churches	Total number of students, faculty, custodians, and maintenance staff multiplied by the number of school days. If there was non-ag watered land input amount in row 11. For churches, figure total hours and divide by 8 to determine number of "school days."
11	Watered Land; non-ag	All lands, ornamental plants, shrubs, etc., watered but not qualifying for agricultural rate.



TO: Standing Advisory Committee
Agenda Item No. 7c

FROM: Jim Beck / Joe Hughes

DATE: August 11, 2021

SUBJECT: Direction on Adaptive Management

Issue

Discussion on adaptive management for groundwater level wells in the Cuyama basin.

Recommended Motion

Adopt the Adaptive Management Ad hoc recommendation as outlined in agenda item No. 7c.

Discussion

On June 28, 2021, the Cuyama Basin Groundwater Sustainability Agency Adaptive Management ad hoc met with staff to review wells that were below their minimum threshold or within 10 percent of the minimum threshold. Attachment 1 describes options considered by the ad hoc and its recommendation to the CBGSA Board of Directors.

Cuyama Basin Groundwater Sustainability Agency

Direction on Adaptive Management

August 11, 2021



Adaptive Management Background

- Adaptive Management Included in the GSP (section 7.6):
 - Adaptive management triggers are thresholds that, if reached, initiate the process for considering implementation of adaptive management actions or projects. For CBGSA, the trigger for adaptive management and CBGSA's next steps would be as follows:
 - If the Basin is within the Margin of Operational Flexibility, but trending toward Undesirable Results, and within 10 percent of the Minimum Threshold: CBGSA will investigate the cause and determine appropriate actions.
- Groundwater levels monitoring report is showing some representative monitoring wells falling below minimum thresholds
- Adaptive Management Ad-hoc committee met on June 28 to discuss options for addressing issues identified to date

Direction on Adaptive Management

- Options discussed by ad-Hoc committee:
 - Restrict pumping in individual wells
 - Adjust thresholds (may require plan amendment)
 - Accelerate glidepath
 - Do nothing for near-term
- Staff and ad-hoc committee recommendation:
 - No changes to thresholds or glide path for now
 - Continue to perform monitoring of groundwater levels
 - Perform an analysis of nearby production wells to determine if any are in danger of going dry



TO: Standing Advisory Committee
Agenda Item No. 7d

FROM: Taylor Blakslee

DATE: August 11, 2021

SUBJECT: Approval of Monitoring Network Consultant Contract for FY 21-22

Issue

Consider approval of a monitoring network consultant contract for FY 21-22

Recommended Motion

Approve monitoring network consultant contracts for measuring groundwater levels and water quality for Fiscal Year 2021-2022 as outlined in agenda item no. 7d.

Discussion

Provided as Attachment 1 for Committee consideration of approval are consultant contracts from Provost & Pritchard for measuring groundwater level and water quality data in the Cuyama Basin for the Fiscal Year 2021-2022. Groundwater levels will be collected quarterly, as previously directed by the Cuyama Basin Groundwater Sustainability Agency Board, and water quality will be collected annually.

These contracts are within the budgeted amount approved by the Board on May 5, 2021.



130 N. Garden Street
 Visalia, CA 93291-6362
 Tel: (559) 636-1166
 Fax: (559) 636-1177
www.ppeng.com

July 30, 2021

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

Subject: CBGSA – Groundwater Level Monitoring (WY 2022)

Dear Mr. Blakslee:

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

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

Project Understanding

The Cuyama Basin Groundwater Sustainability Agency (**CBGSA**) developed a Groundwater Sustainability Plan (**GSP**) as required by SGMA. One of the measures outlined in the GSP is to establish a groundwater level monitoring network. The original network was monitored monthly from August 2020 to January 2021. Beginning in February 2021, 55 wells from the original network were selected to continue monthly monitoring.

For the 2022 water year, the CBGSA would like to continue monitoring groundwater levels quarterly. The 2022 network will include 59 wells at 44 locations. Manual measurements will be required for 37 of the wells and 22 wells are equipped with transducers which will require data collection from data loggers.

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

Scope of Services

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

Phase LVL: Groundwater Level Monitoring

1. Project Administration and Management
 - a. Provide consistent and available communications with CBGSA.
 - a. Track project deliverables, budget, and schedule.
2. Coordinate with Well Owners and Obtain Access Agreements for Newly Added 2022 Wells
 - a. Contact well owners not already participating in the levels monitoring network to determine viability of each well and willingness of landowner to participate in the monitoring network, acquire general well and land access information, and email monitoring agreement for landowner review.
 - b. Complete well information sheets for newly added wells.
3. Quarterly Groundwater Level Measurements for up to 59 Wells at 44 Locations and Quarterly Water Quality Measurements for up to 10 Transducer Equipped Wells
 - a. Groundwater levels in excel format reporting groundwater surface elevation, reference point elevation, and depth to groundwater with measurement reference on a quarterly basis.
 - b. Groundwater quality measurements in excel format reporting electroconductivity and water temperature on a quarterly basis for a preselected list of transducer-equipped wells
4. Technical Memo
 - a. Brief memo to the CBGSA documenting work performed at the conclusion of the 12-month reporting period.

Deliverables:

- Signed Access and Monitoring Agreement from landowners that require them.
- Brief technical memo summarizing work performed.
- Excel workbook including date, time, location, groundwater level, water quality metrics for qualifying wells and pertinent notes for each measurement.
- Individual well dossier sheets for each well with measurements and pertinent notes for any newly added wells.

Professional Fees

Provost & Pritchard Consulting Group will perform the services on a time and materials basis, in accordance with our Standard Fee Schedule in effect at the time services are rendered. For budgeting purposes, our preliminary estimate is that our fees will be **\$36,000**. Reimbursable expenses and professional fees are included in the estimate. These fees will be invoiced monthly as they are accrued, and our total fees, including reimbursable expenses, will not exceed our estimate without additional authorization.

Schedule

Provost & Pritchard is prepared to begin immediately upon authorization to proceed. Once we receive an executed copy of this Proposal along with the Consultant Services Agreement, and are authorized to proceed, we will work with the CBGSA to develop a mutually agreed upon schedule.

Assumptions

- Survey by a CA State licensed surveyor is additional work and not included in the scope or fee estimate.
- Landowners are assumed to be amenable to monitoring and prompt in their communication. Landowners that require more than three (3) communication attempts to sign land access permissions and schedule a sample date are additional work and outside of the scope and fee estimate.
- Landowners are not required to be on premises for level measurements. Expecting field staff to communicate and meet discrete measurement appointments to allow landowner supervision is additional work, reduces the number of wells that can be measured within a day, and outside the scope of work and the fee estimate.
- Monitoring agreement and land access agreement language will be developed by the CBGSA and council.
- The CBGSA will provide the informational well template and the accompanying well completion reports (or equivalent) for prospective wells. Inquiries to Kern County Department of Public Health for missing well completion reports are time-consuming and expensive and not included in this scope of work or fee estimate.
- Wells are in sufficient condition to be measured and modifications are not necessary.
- There will be no more than five (5) newly added wells for which landowner introductions and, site information forms, and/or access agreement are necessary.

Additional Services

The following services are not included in this proposal. However, these and others can be provided at additional cost, either directly by Provost & Pritchard Consulting Group or through subconsultants, upon request.

- Data management system.
- Expansion of the CBGSA's monitoring network if the original wells are not sufficient.
- Licensed survey of ground surface elevation and well reference point elevation.

Terms and Conditions

If this proposal is acceptable, please sign and return. The work will be completed under the Professional Services Agreement (No. 20052) signed with Hallmark Group and dated May 6, 2020. If a new agreement is required, we will work with Hallmark Group to develop one. These documents will serve as our Notice to Proceed. This proposal is valid for 60 days from the date above.

Respectfully,

Provost & Pritchard Consulting Group



Timothy J. Jeffcoach, RCE 90275
Project Manager



Donald Ikemiya, RCE 56630
Vice President

Terms and Conditions Accepted

By: Cuyama Basin Groundwater Sustainability Agency

Signature

Printed Name

Title

Date

August 10, 2021

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

Subject: CBGSA – Groundwater Quality Monitoring (WY 2022)

Dear Mr. Blakslee:

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

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

Project Understanding

The Cuyama Basin Groundwater Sustainability Agency (**CBGSA**) developed a Groundwater Sustainability Plan (**GSP**) as required by SGMA. The CBGSA is looking for a consultant to:

- Work to grow the existing groundwater quality monitoring network from approximately 32 wells to 64 wells,
- Carry out field measurement of salinity indicators, electrical conductivity (**EC**) and total dissolved solids (**TDS**), in the groundwater quality monitoring network, and
- Collect information from 10 transducers.
- *Optional Task:* Collect grab samples, using appropriate well casing purge methods, of groundwater for delivery to a water quality laboratory and analysis of EC, TDS, Nitrate (**NO₃**), and Arsenic.

Scope of Services

Provost & Pritchard will use information from the first round of sampling and communicate with the CBGSA to prepare for the work and ensure all requirements will be met. Our scope of work for this proposal will be completed in one phase, described below. The scope of work only includes tasks and services requested by the CBGSA.

Phase QLT: Groundwater Quality Monitoring

1. Project Administration and Management
 - a. Provide consistent and available communications with CBGSA.
 - b. Track project deliverables, budget, and schedule.
2. Obtain Landowner Agreements
 - a. Discover missing contact information.
 - b. Request access from landowners/managers to sample wells.
 - c. Provide Access and Monitoring Agreements upon request and follow up.
3. Water Quality Measurements
 - a. Review any new wells for suitability.
 - b. Coordinate water quality testing with well owners.
 - c. Arrange an agreement with a water quality laboratory, and coordinate laboratory analyses.
 - i. Currently, BSK (Bakersfield) is assumed to be the selected lab.
 - d. Measure salinity as EC and TDS at each well. Measurement will be taken with a Horiba multimeter according to Standard Operating Procedures, including meter calibration, well purging, and applicable site condition notes.
 - e. Collect salinity as EC and TDS data at each well equipped with a transducer.
4. Data Management and Reporting
 - a. Compile water quality data and complete data quality assurance and control measures.
 - b. Develop technical memo documenting work performed.
 - c. Complete Excel workbook with EC and TDS results.
 - d. Complete dossier sheets for each well.

Deliverables:

- Signed Access and Monitoring Agreement from landowners that require them.
- Brief technical memo summarizing work performed.
- Excel workbook including date, time, location, EC, TDS, and pertinent notes for each measurement.
- Individual well dossier sheets for each well with measurements and pertinent notes.
- All analyses documents provided by the lab.

Professional Fees

Provost & Pritchard Consulting Group will perform the services on a time and materials basis, in accordance with our Standard Fee Schedule in effect at the time services are rendered. For budgeting purposes, our preliminary estimate is that our fees will be **\$32,000** without the

optional task of laboratory analysis. Including the optional task results in a total fee estimate of **\$37,000**. Reimbursable expenses and professional fees are included in the estimate. These fees will be invoiced monthly as they are accrued, and our total fees, including reimbursable expenses, will not exceed our estimate without additional authorization.

Schedule

Provost & Pritchard is prepared to begin immediately upon authorization to proceed. Once we receive an executed copy of this Proposal along with the Consultant Services Agreement, and are authorized to proceed, we will work with the CBGSA to develop a mutually agreed upon schedule.

Assumptions

- If any of the proposed wells are not suitable for sampling, then upon CBGSA's prior approval, other wells can be added for additional scope and fee. Wells without pumps will be sampled with passive sampling equipment, if possible.
- Landowners are assumed to be amenable to sampling and prompt in their communication. Landowners that require more than three (3) communication attempts to sign land access permissions and schedule a sample date are additional work and outside of the scope and fee estimate.
- Landowners are not required to be on premises for well sampling if the well will be running. Expecting field staff to communicate and meet discrete sampling appointments to allow landowner supervision is additional work, reduces the number of wells that can be sampled within a day, and outside the scope of work and the fee estimate.
- Surveying (establishing elevations) will not be required for wells which are not included in the Groundwater Level Monitoring Network.
- Data is to be reported to Woodard & Curran via Excel spreadsheet.
- Wells are in sufficient condition to be sampled and modifications are not necessary.
- Well Completion Reports will not be needed at this time.
- Without Well Complete Reports, a volume of three well casings cannot be calculated. Therefore, a standard purge time and/or volume will be acceptable, which will be based on purge requirements for similar water quality networks.
- Provost & Pritchard will not turn pumps on or off. The landowner or authorized manager will need to be present if a well will not otherwise be running.
- Landowners will provide guidance regarding discharge locations for purged water.

Additional Services

The following services are not included in this proposal. However, these and others can be provided at additional cost, either directly by Provost & Pritchard Consulting Group or through subconsultants, upon request.

- Collect grab samples from each well and deliver samples to the laboratory.

- Data management system.
- Additional groundwater quality measurement and analysis (nitrate, TCP, DBCP, general minerals, perchlorate, etc.) including laboratory delivery.
- Elevation or other licensed surveying.

Terms and Conditions

If this proposal is acceptable, please sign and return. The work will be completed under the Professional Services Agreement (No. 20052) signed with Hallmark Group and dated May 6, 2020. If a new agreement is required, we will work with Hallmark Group to develop one. These documents will serve as our Notice to Proceed. This proposal is valid for 60 days from the date above.

Respectfully,

Provost & Pritchard Consulting Group



Timothy J. Jeffcoach, RCE 90275
Project Manager



Donald Ikemiya, RCE 56630
Vice President

Terms and Conditions Accepted

By: Cuyama Basin Groundwater Sustainability Agency

Signature

Printed Name

Title

Date



TO: Standing Advisory Committee
Agenda Item No. 7e

FROM: Brian Van Lienden, Woodard & Curran

DATE: August 11, 2021

SUBJECT: Review of Model Update Process

Issue

Review of Model Update Process.

Recommended Motion

None – information only.

Discussion

On March 3, 2021, the Cuyama Basin Groundwater Sustainability Agency (CBGSA) Board of Directors approved a technical memo, that was developed with technical forum input, outlining a plan to update the numerical model for the Cuyama Basin. On May 5, 2021, the CBGSA Board approved the model update and Woodard & Curran has begun to perform that work. Provided as Attachment 1 is an overview on the model update process and expected timelines for various model components.

Cuyama Basin Groundwater Sustainability Agency

Review of Model Update Process

August 11, 2021



Cuyama Basin Model Update Tasks Included in FY 2021-22 Budget

55

- Perform modeling analysis for Annual Report
- Perform aquifer testing at 4 well sites
 - Select locations and obtain agreements with local landowners
 - Perform aquifer tests
 - Data analysis and reporting
- Model Refinement
 - Update model data to incorporate additional data and to extend to 2020
 - Perform model-recalibration
 - Develop updated historical and projected water budget estimates
 - Evaluation of range of uncertainty of re-calibrated model
 - Update Crop ET estimates

Model Refinement and Application Schedule





TO: Standing Advisory Committee
Agenda Item No. 7g

FROM: Brian Van Lienden, Woodard & Curran

DATE: August 11, 2021

SUBJECT: Update on Groundwater Sustainability Plan Activities

Issue

Update on Groundwater Sustainability Plan Activities.

Recommended Motion

None – information only.

Discussion

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

Cuyama Basin Groundwater Sustainability Agency

Groundwater Sustainability Plan Update

August 11, 2021



May-July Accomplishments

- ✓ Developed plan for response to DWR comment letter
- ✓ Performed field validation/data collection for groundwater levels and quality monitoring
- ✓ Completed installation of DWR TSS wells in Cuyama Basin
- ✓ Worked with DWR to develop plan for AEM survey
- ✓ Continued development of edition 8 of CBGSA newsletter



TO: Standing Advisory Committee
Agenda Item No. 7h

FROM: Brian Van Lienden, Woodard & Curran

DATE: August 11, 2021

SUBJECT: Update on Monitoring Network Implementation

Issue

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

August 11, 2021








Groundwater Levels Monitoring Network Status Update – DWR TSS and Category 1

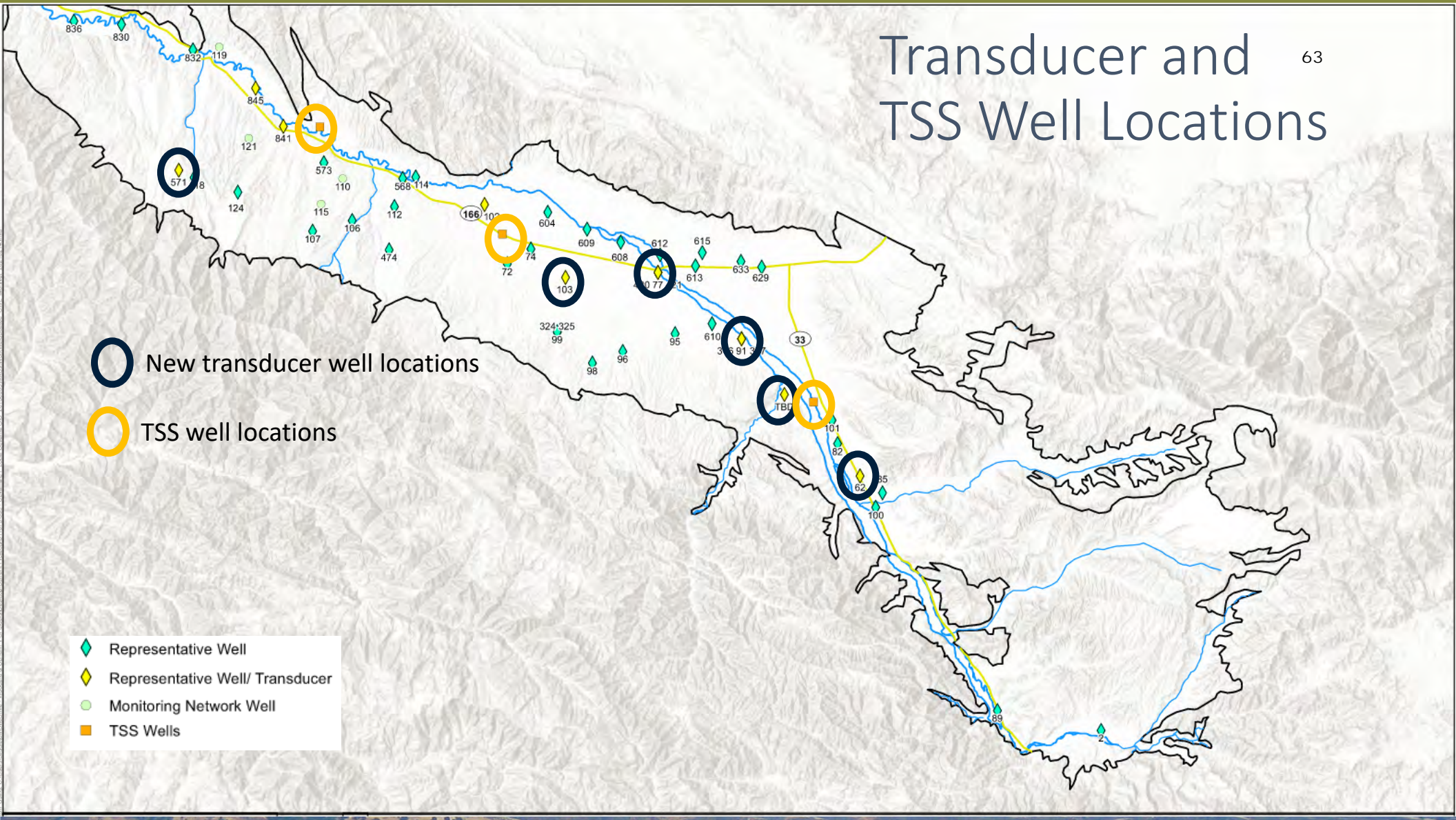
62

- Installation of new wells by DWR Technical Support Services
 - Installation of the TSS wells at all three locations is being finalized
 - Three screened zones were installed at each well
 - DWR will be acquiring transducers to be installed at each location
- Installation of transducers with DWR Category 1 grant funding
 - All 10 transducers have now been installed

Transducer and TSS Well Locations

-  New transducer well locations
-  TSS well locations

-  Representative Well
-  Representative Well/ Transducer
-  Monitoring Network Well
-  TSS Wells



Stream Gage Implementation – FY 2020-21

- 2 new streamflow gages will be installed by USGS using Category 1 grant funding from DWR:
 - Upstream of Ventucopa
 - Spanish Ranch
- Gage installation at both locations anticipated by end of September





TO: Standing Advisory Committee
Agenda Item No. 7i

FROM: Brian Van Lienden, Woodard & Curran

DATE: August 11, 2021

SUBJECT: Update on Monthly Groundwater Conditions Report

Issue

Update on Monthly Groundwater Conditions Report for June 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 June 2021 Groundwater Conditions Report is provided as Attachment 2.

Cuyama Basin Groundwater Sustainability Agency

Monthly Groundwater Conditions Report

August 11, 2021



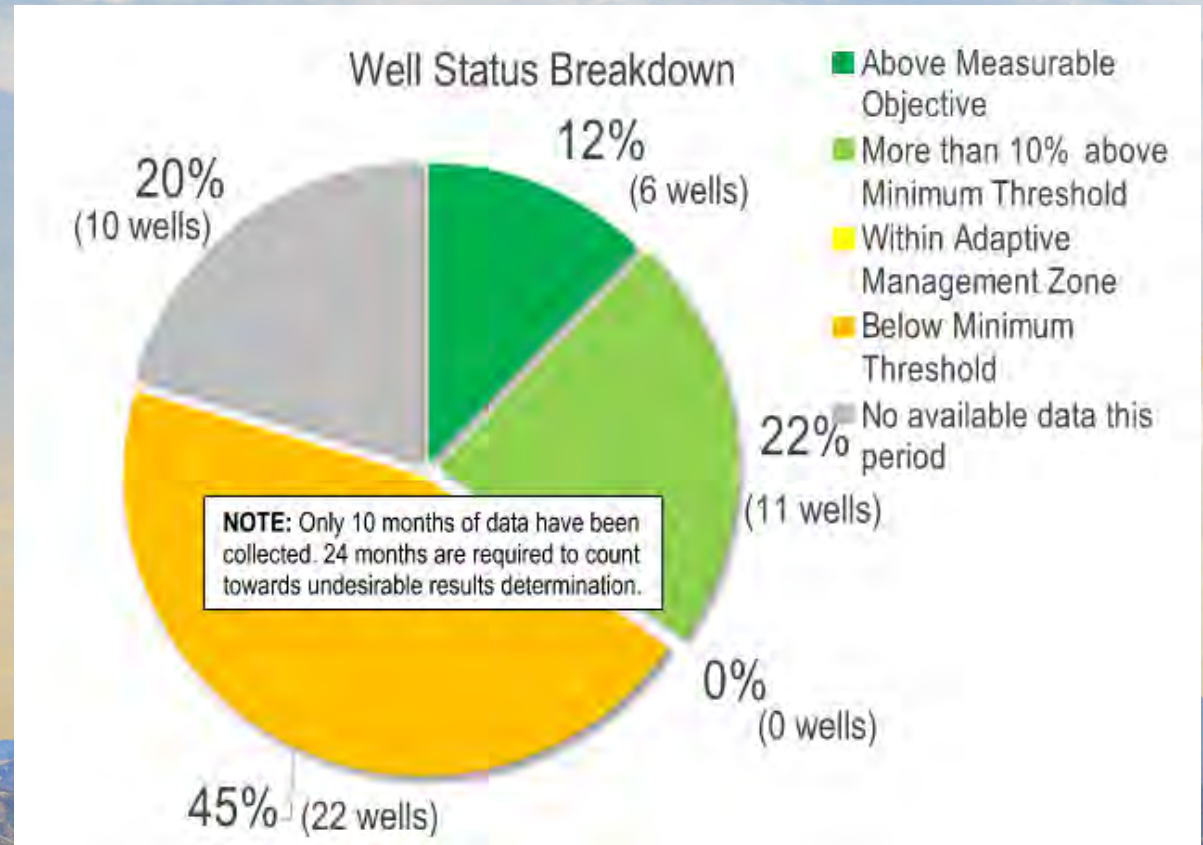
Groundwater Levels Monitoring Network – Summary of Current Conditions

67

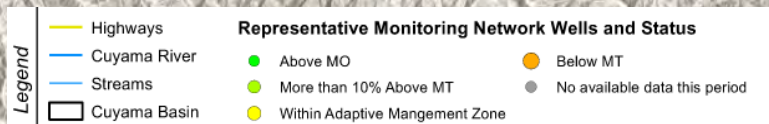
- Monitoring data from Jan-Mar for representative wells is included in Board packet monitoring summary report
- 43 of 53 representative monitoring wells have levels data in March
- 22 wells were below the minimum threshold in June as compared to 18 in May

Summary of Groundwater Well Levels as Compared To Sustainability Criteria

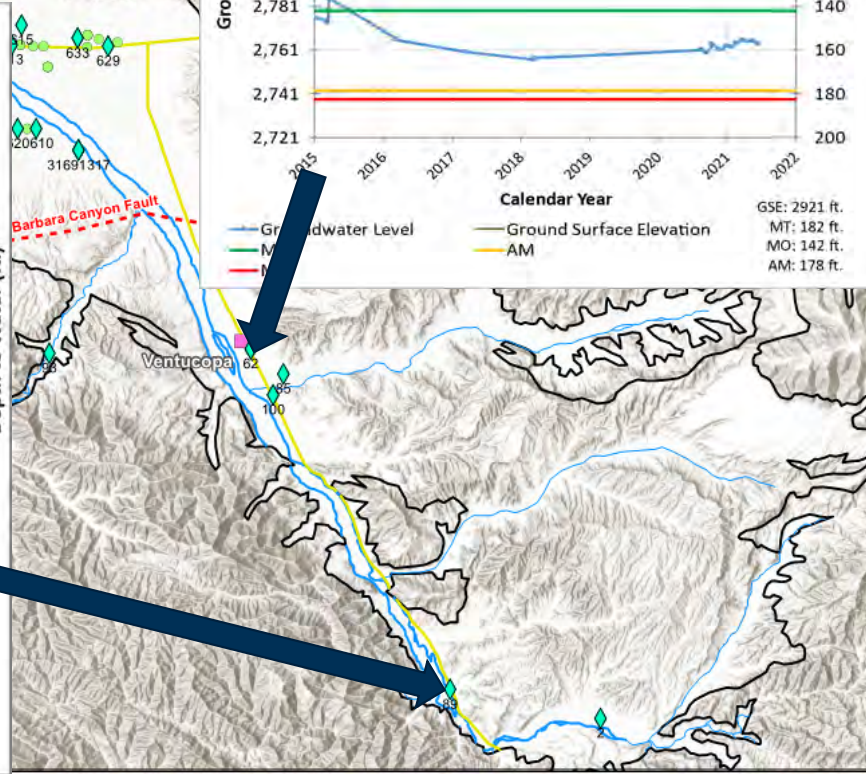
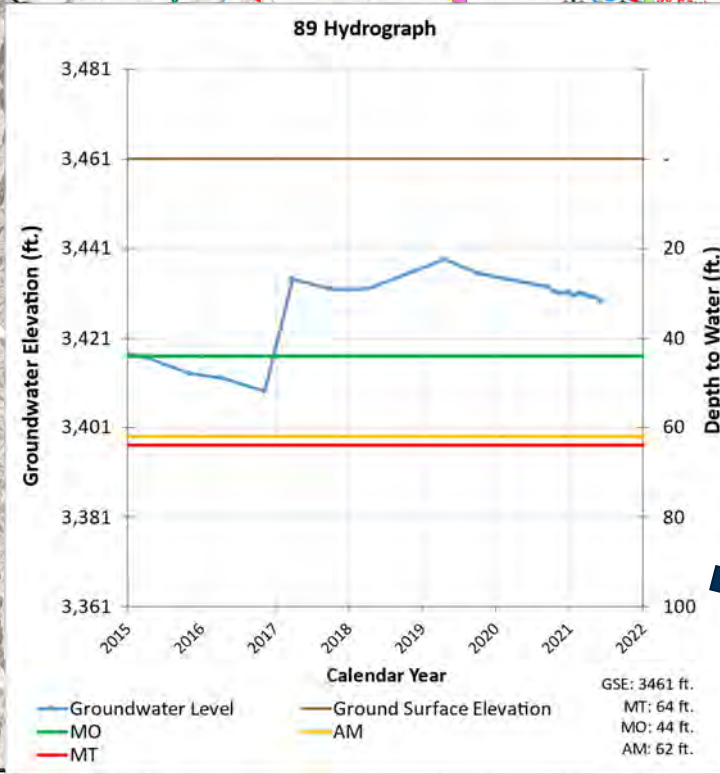
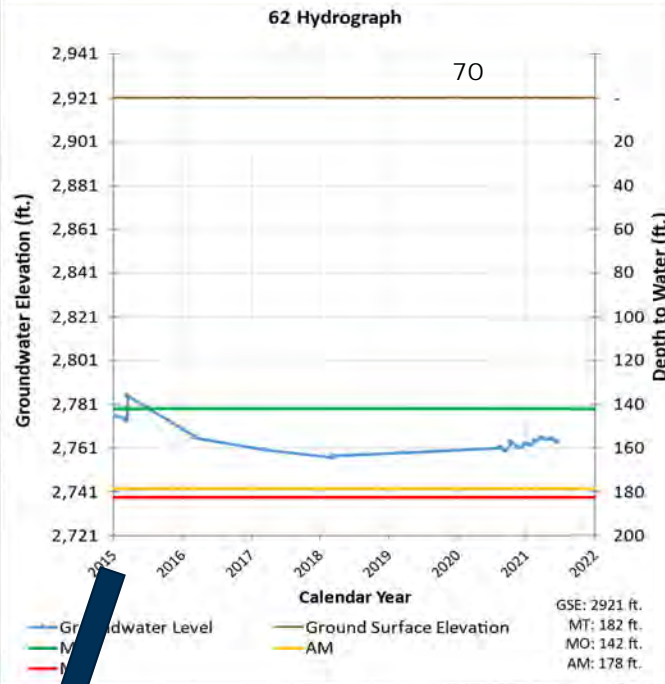
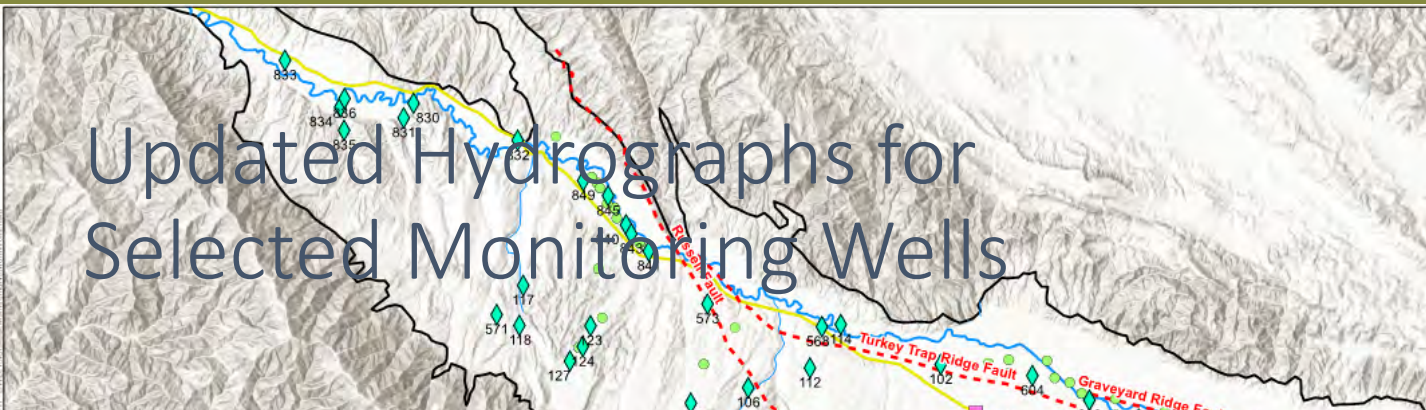
- 22 wells are currently below minimum threshold (MT)
 - 8 of these were already below MT at time of GSP adoption
- Adaptive management ad-hoc has been formed to discuss potential responses



Current Status of Representative Monitoring Wells



Updated Hydrographs for Selected Monitoring Wells

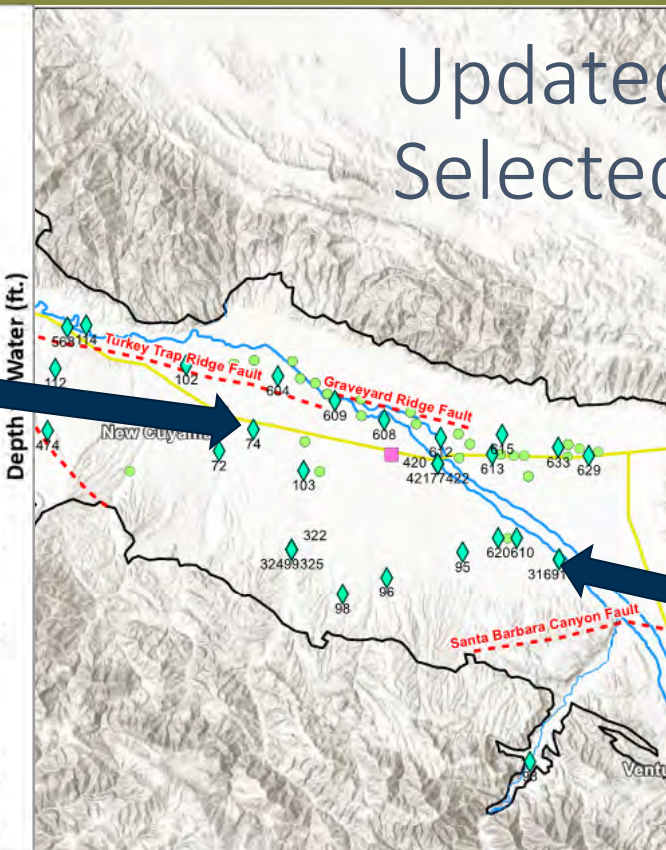
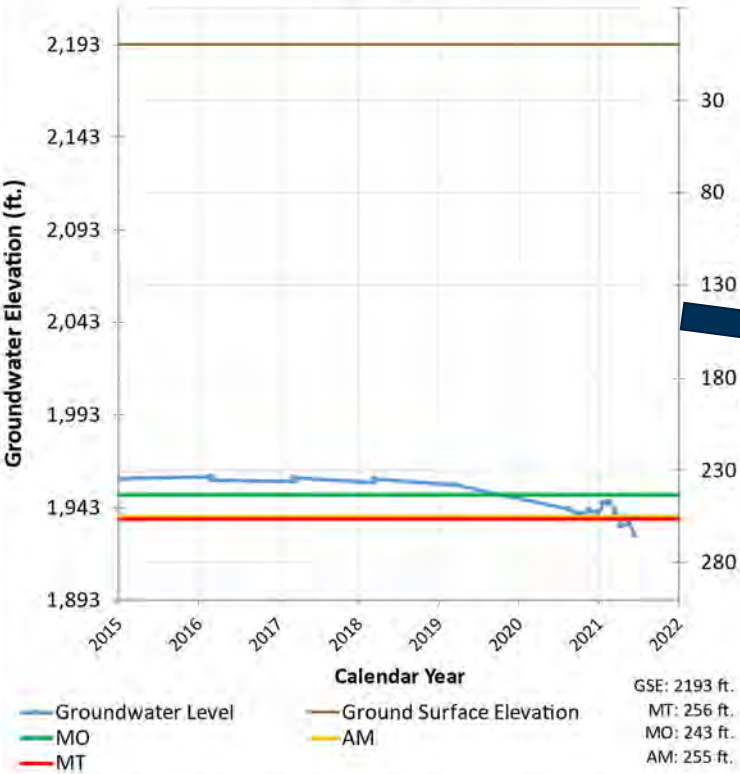


GSE: 2921 ft.
 MT: 182 ft.
 MO: 142 ft.
 AM: 178 ft.

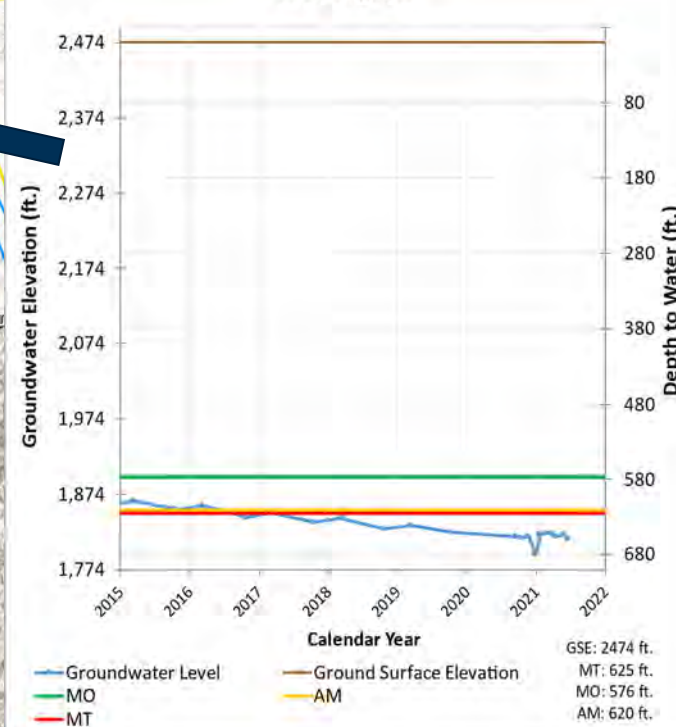
GSE: 3461 ft.
 MT: 64 ft.
 MO: 44 ft.
 AM: 62 ft.

Updated Hydrographs for Selected Monitoring Wells

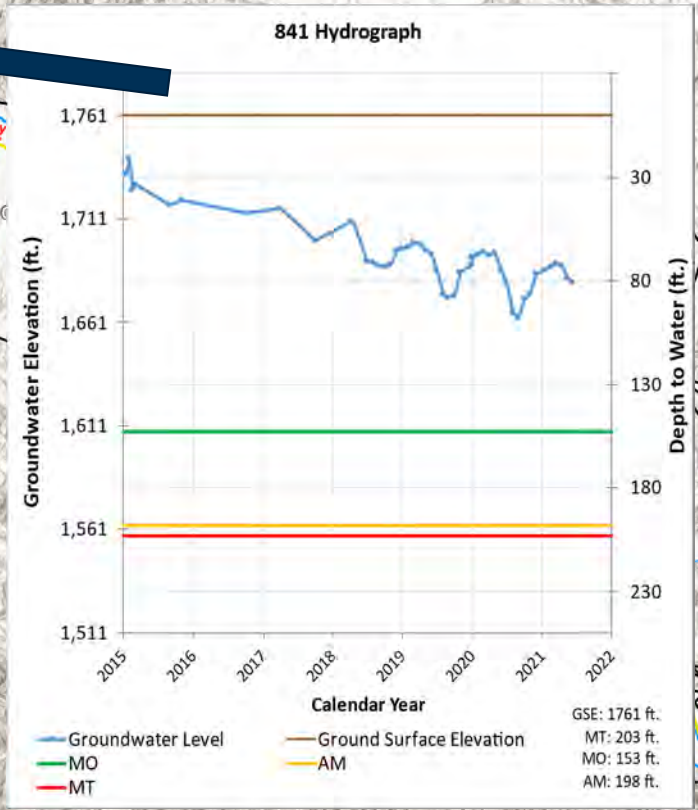
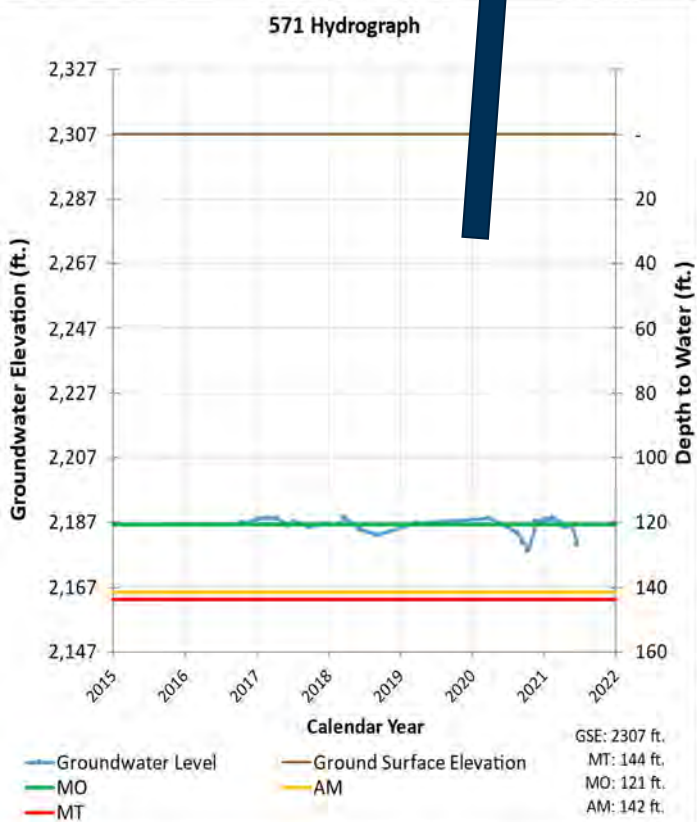
74 Hydrograph



91 Hydrograph



Updated Hydrographs for Selected Monitoring Wells





GROUNDWATER
CONDITIONS
REPORT –
CUYAMA VALLEY
GROUNDWATER
BASIN

June 2021

801 T Street
Sacramento, CA.
916.999.8700

woodardcurran.com

COMMITMENT & INTEGRITY DRIVE RESULTS

Cuyama Basin
Groundwater
Sustainability Agency

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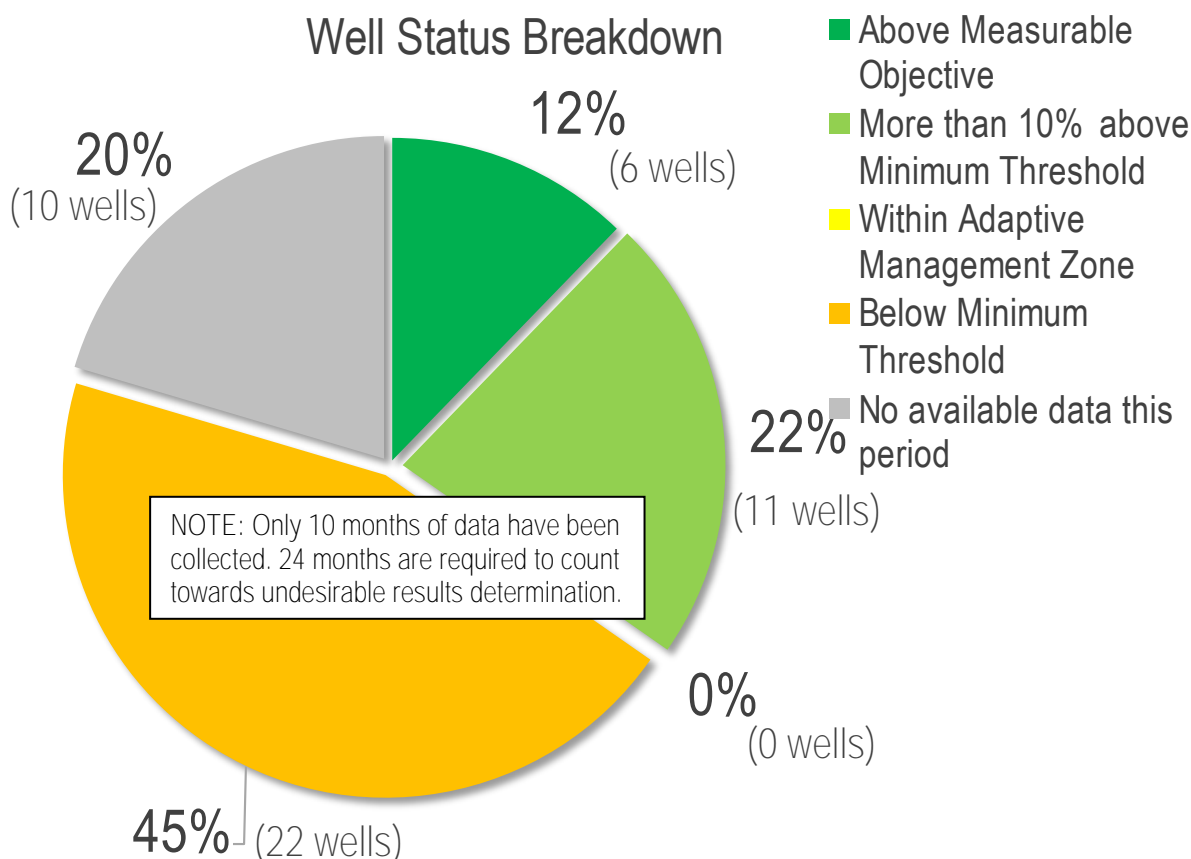
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1. INTRODUCTION

This report is intended to provide an update on the current groundwater level conditions in the Cuyama Valley Groundwater Basin. This work is completed by the Cuyama Basin Groundwater Sustainability Agency (CBGSA), in compliance with the Sustainable Groundwater Management Act.

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 be incorporated into the Cuyama DMS, which may be accessed at <https://opti.woodardcurran.com/cuyama/login.php>.

Table 1: Recent Groundwater Levels for Representative Monitoring Network

Well	Region	Apr-21	May-21	Jun-21	Last Year		Annual Elevation Change
		GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	Month/Year	
72	Central	2022	2009	1816			
74	Central	1933	1935	1927			
77	Central	1813	1799	1783			
91	Central	1818	1821	1815			
95	Central	1855	1852	1850			
96	Central	2272	2272	2272			
98	Central	-	-	-			
99	Central	2224	2203	2196			
102	Central	1711	1773	1764			
103	Central	1992	1974	1970			
112	Central	2054	2054	2054			
114	Central	1878	1879	-			
316	Central	1820	1820	1817			
317	Central	1820	1820	1817			
322	Central	2223	2202	2193			
324	Central	2221	2207	2199			
325	Central	2223	2214	2204			
420	Central	1803	1787	1775			
421	Central	1804	1794	1784			
474	Central	2202	2202	2203			

Well	Region	Apr-21	May-21	Jun-21	Last Year		Annual Elevation Change
		GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	Month/Year	
568	Central	1869	1868	1867			
604	Central	1663	1651	1643			
608	Central	1783	1772	-			
609	Central	1784	-	1738			
610	Central	1822	1819	1816			
612	Central	1806	1799	1796			
613	Central	1819	1815	1812			
615	Central	1818	1816	1817			
629	Central	1816	-	-			
633	Central	1794	-	-			
62	Eastern	2765	2765	2764			
85	Eastern	2847	2847	2848			
100	Eastern	2854	2854	2854			
101	Eastern	2634	2618	2614			
841	Northwestern	1688	1682	1680			
845	Northwestern	1650	1647	1645			
2	Southeastern	-	-	-			
89	Southeastern	3431	3430	3429			
106	Western	2185	2183	2183			
107	Western	2395	2394	2395			
117	Western	-	-	-			

Well	Region	Apr-21	May-21	Jun-21	Last Year		Annual Elevation Change
		GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	GWL (ft. msl)	Month/Year	
118	Western	2213	2212	2211			
124	Western	-	-	-			
571	Western	2185	2186	2180			
573	Western	2013	2014	-			
830	Far-West Northwestern	1513	1513	1513			
832	Far-West Northwestern	1592	1592	1592			
833	Far-West Northwestern	1425	-	-			
836	Far-West Northwestern	1450	1449	1449			

Note: Previous year values and annual elevation changes will be reported after the CBGSA monitoring program has completed a full year of monitoring.

Table 2: Well Status Related to Thresholds

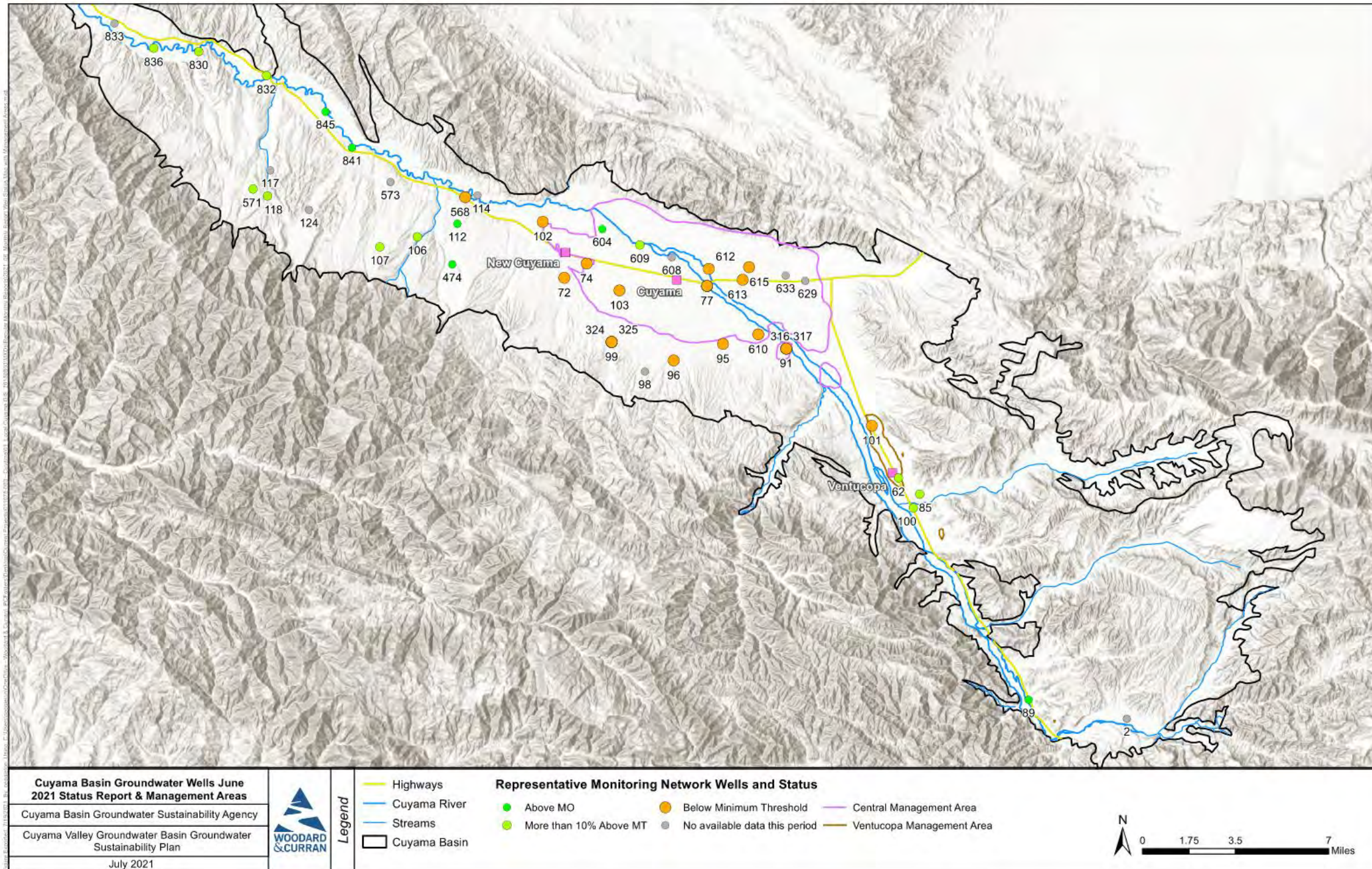
Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Well Depth	Status	GSA Action Required?
		GWL (DTW)	Month/Year						
72	Central	355	6/16/2021	169	165	124	790	Below Minimum Threshold (1 month)	No
74	Central	266	6/16/2021	256	255	243		Below Minimum Threshold (3 months)	No
77	Central	503	6/17/2021	450	445	400	980	Below Minimum Threshold (10 months)	No
91	Central	659	6/17/2021	625	620	576	980	Below Minimum Threshold (10 months)	No
95	Central	599	6/16/2021	573	570	538	805	Below Minimum Threshold (11 months)	No
96	Central	334	6/16/2021	333	332	325	500	Below Minimum Threshold (7 months)	No
98	Central	-	N/A	450	449	439	750	No available data this period	No
99	Central	317	6/16/2021	311	310	300	750	Below Minimum Threshold (1 month)	No
102	Central	282	6/16/2021	235	231	197		Below Minimum Threshold (6 months)	No
103	Central	319	6/17/2021	290	285	235	1030	Below Minimum Threshold (3 months)	No
112	Central	85	6/17/2021	87	87	85	441	Above Measurable Objective	No
114	Central	-	N/A	47	47	45	58	No available data this period	No
316	Central	657	6/17/2021	623	618	574	830	Below Minimum Threshold (10 months)	No
317	Central	657	6/18/2021	623	618	573	700	Below Minimum Threshold (10 months)	No
322	Central	320	6/16/2021	307	306	298	850	Below Minimum Threshold (2 months)	No
324	Central	314	6/16/2021	311	310	299	560	Below Minimum Threshold (1 month)	No
325	Central	309	6/16/2021	300	299	292	380	Below Minimum Threshold (1 month)	No
420	Central	511	6/17/2021	450	445	400	780	Below Minimum Threshold (10 months)	No
421	Central	502	6/18/2021	446	441	398	620	Below Minimum Threshold (10 months)	No
474	Central	166	6/17/2021	188	186	169	213	Above Measurable Objective	No

Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Well Depth	Status	GSA Action Required?
		GWL (DTW)	Month/Year						
568	Central	38	6/17/2021	37	37	36	188	Below Minimum Threshold (1 month)	No
604	Central	482	6/16/2021	526	522	487	924	Above Measurable Objective	No
608	Central	-	6/16/2021	436	433	407	745	No available data this period	No
609	Central	429	6/16/2021	458	454	421	970	More than 10% above Minimum Threshold	No
610	Central	626	6/16/2021	621	618	591	780	Below Minimum Threshold (2 months)	No
612	Central	470	6/16/2021	463	461	440	1070	Below Minimum Threshold (2 months)	No
613	Central	518	6/16/2021	503	500	475	830	Below Minimum Threshold (8 months)	No
615	Central	510	6/16/2021	500	497	468	865	Below Minimum Threshold (7 months)	No
629	Central	-	6/16/2021	559	556	527	1000	No available data this period	No
633	Central	-	6/16/2021	547	542	493	1000	No available data this period	No
62	Eastern	157	6/17/2021	182	178	142	212	More than 10% above Minimum Threshold	No
85	Eastern	199	6/16/2021	233	225	147	233	More than 10% above Minimum Threshold	No
100	Eastern	150	6/16/2021	181	175	125	284	More than 10% above Minimum Threshold	No
101	Eastern	127	6/17/2021	111	108	81	200	Below Minimum Threshold (2 months)	No
841	Northwestern	81	6/16/2021	203	198	153	600	Above Measurable Objective	No
845	Northwestern	67	6/16/2021	203	198	153	380	Above Measurable Objective	No
2	Southeastern	-	N/A	72	70	55	73	No available data this period	No
89	Southeastern	32	6/16/2021	64	62	44	125	Above Measurable Objective	No
106	Western	144	6/17/2021	154	153	141	228	More than 10% above Minimum Threshold	No
107	Western	87	6/17/2021	91	89	72	200	More than 10% above Minimum Threshold	No

Well	Region	Current Month		Minimum Threshold	Within 10% Minimum Threshold	Measurable Objective	Well Depth	Status	GSA Action Required?
		GWL (DTW)	Month/Year						
117	Western	-	N/A	160	159	151	212	No available data this period	No
118	Western	59	6/17/2021	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
571	Western	127	6/17/2021	144	142	121	280	More than 10% above Minimum Threshold	No
573	Western	-	N/A	118	113	68	404	No available data this period	No
830	Far-West Northwestern	58	6/17/2021	59	59	56	77	More than 10% above Minimum Threshold	No
832	Far-West Northwestern	38	6/17/2021	45	44	30	132	More than 10% above Minimum Threshold	No
833	Far-West Northwestern	-	N/A	96	89	24	504	No available data this period	No
836	Far-West Northwestern	37	6/17/2021	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



4. HYDROGRAPHS

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

Figure 2: Southeast Region – Well 89

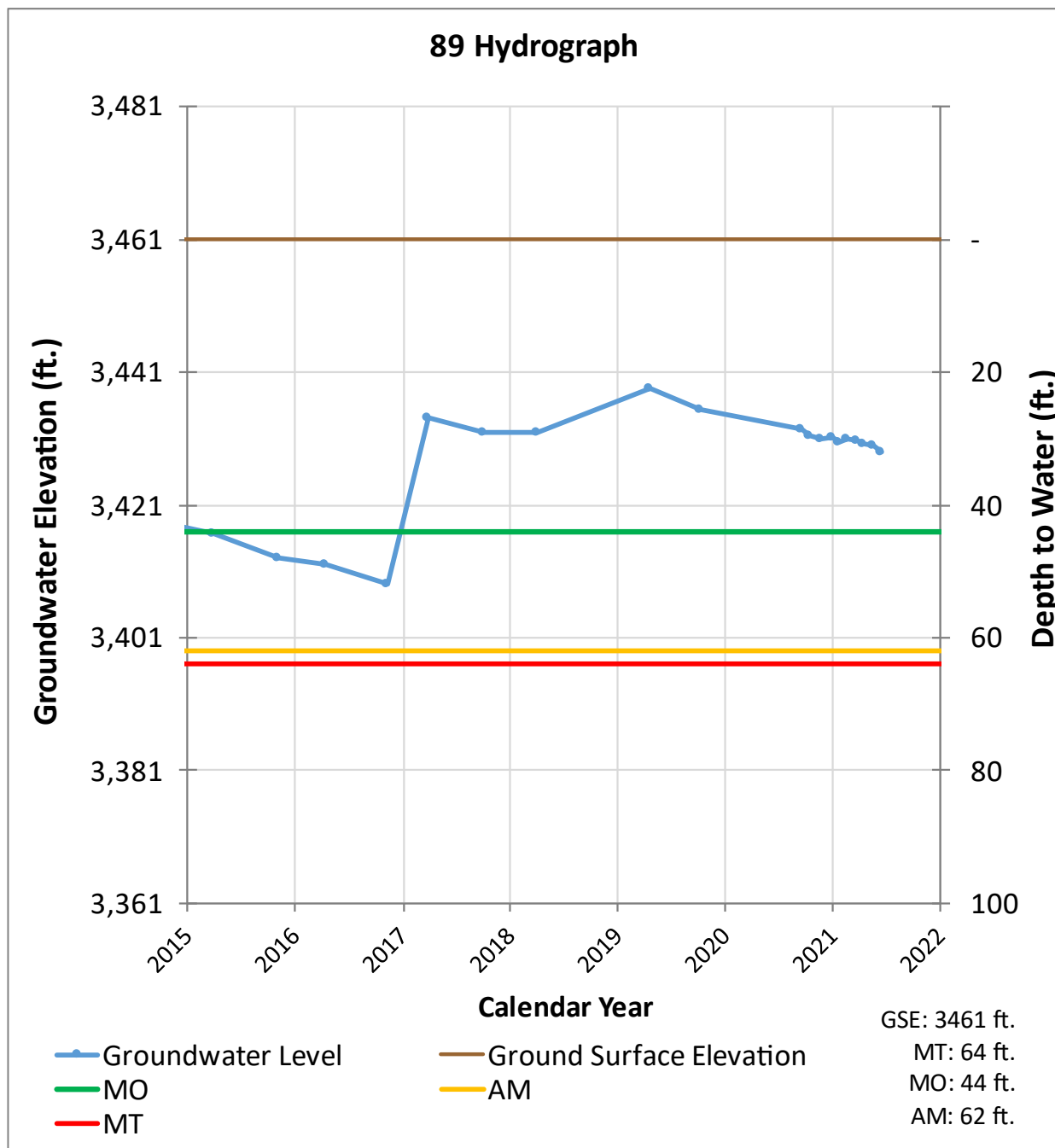


Figure 3: Eastern Region – Well 62

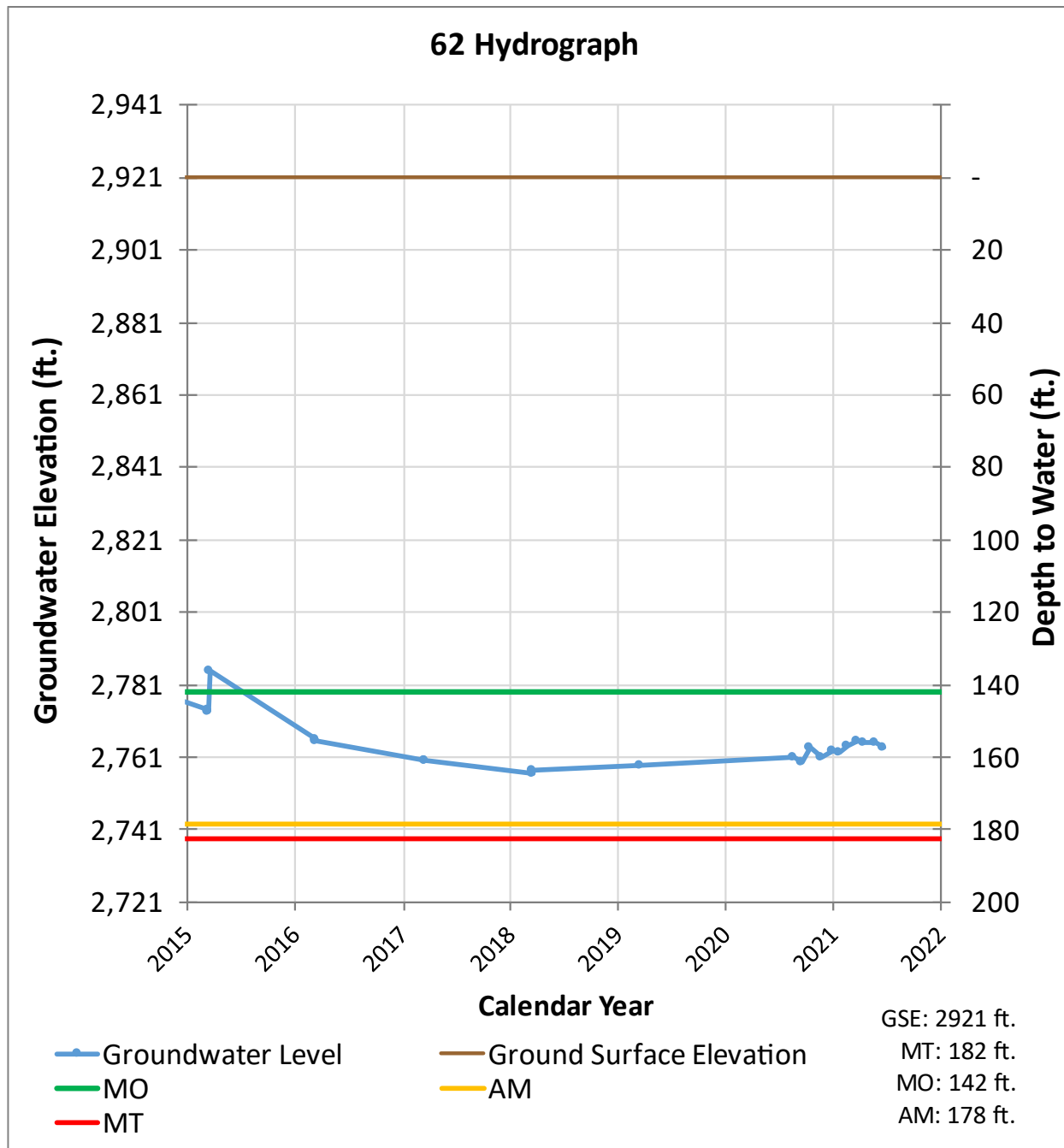


Figure 4: Central Region – Well 91

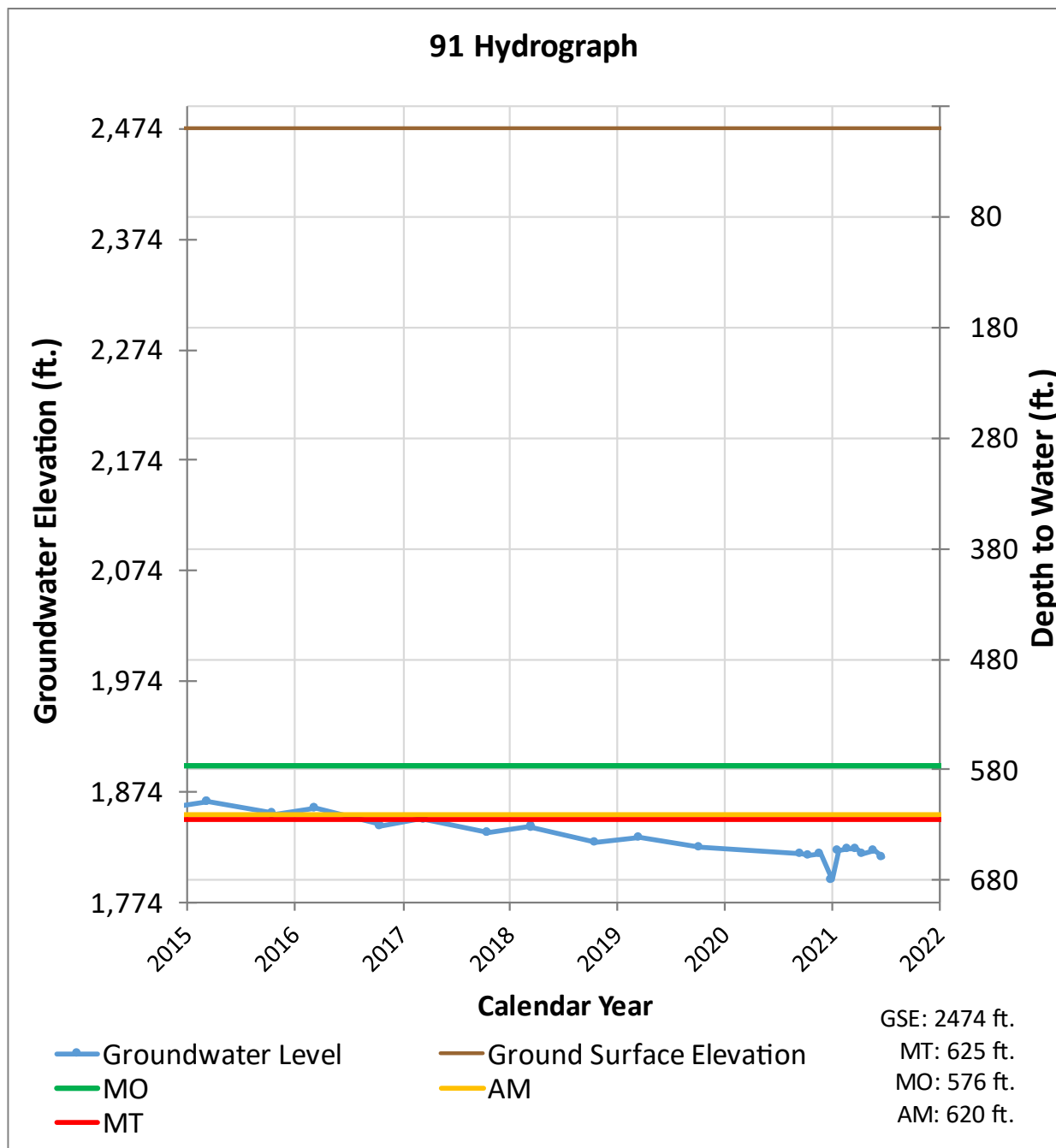


Figure 5: Central Region – Well 74

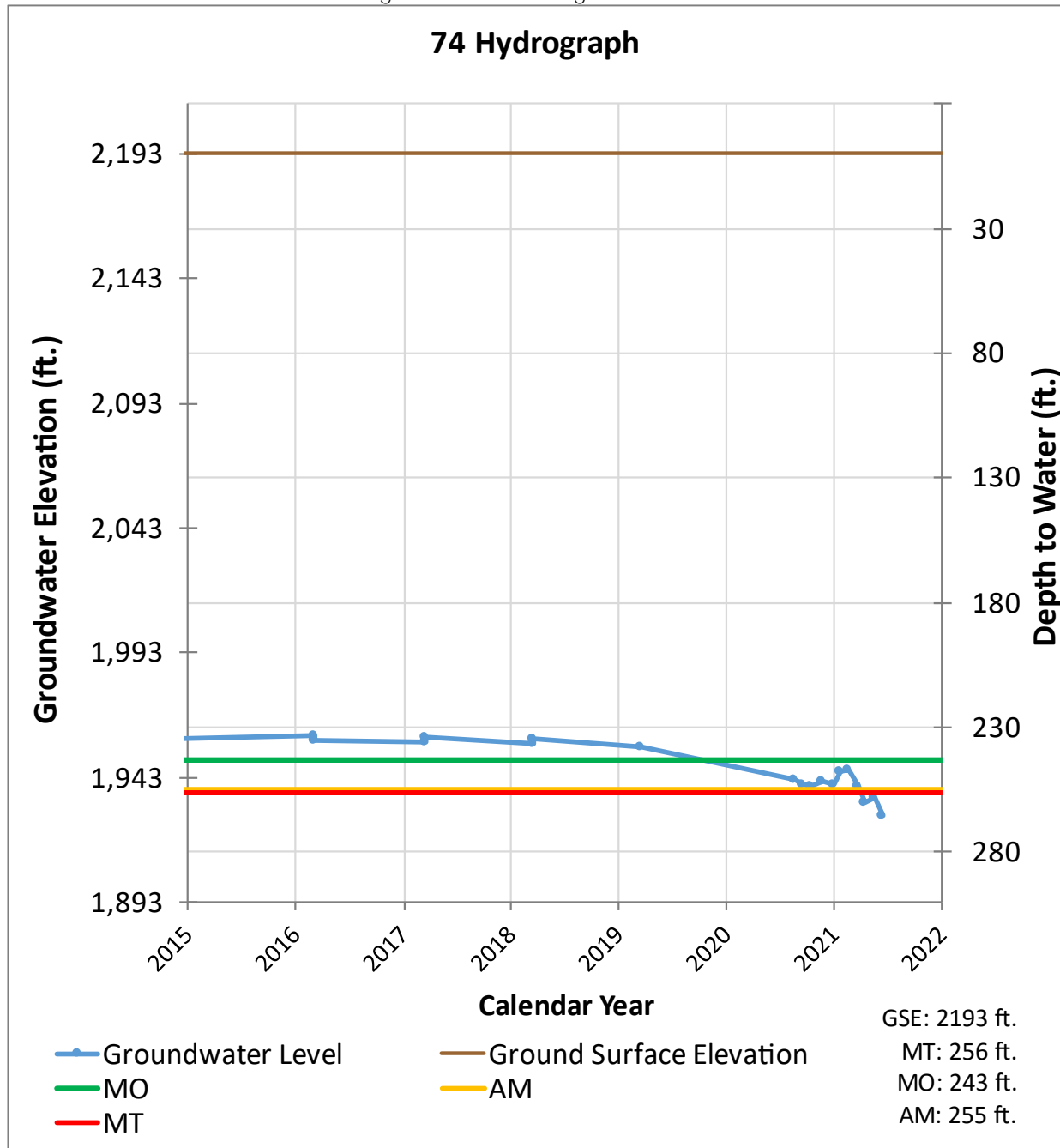


Figure 6: Western Region – Well 571

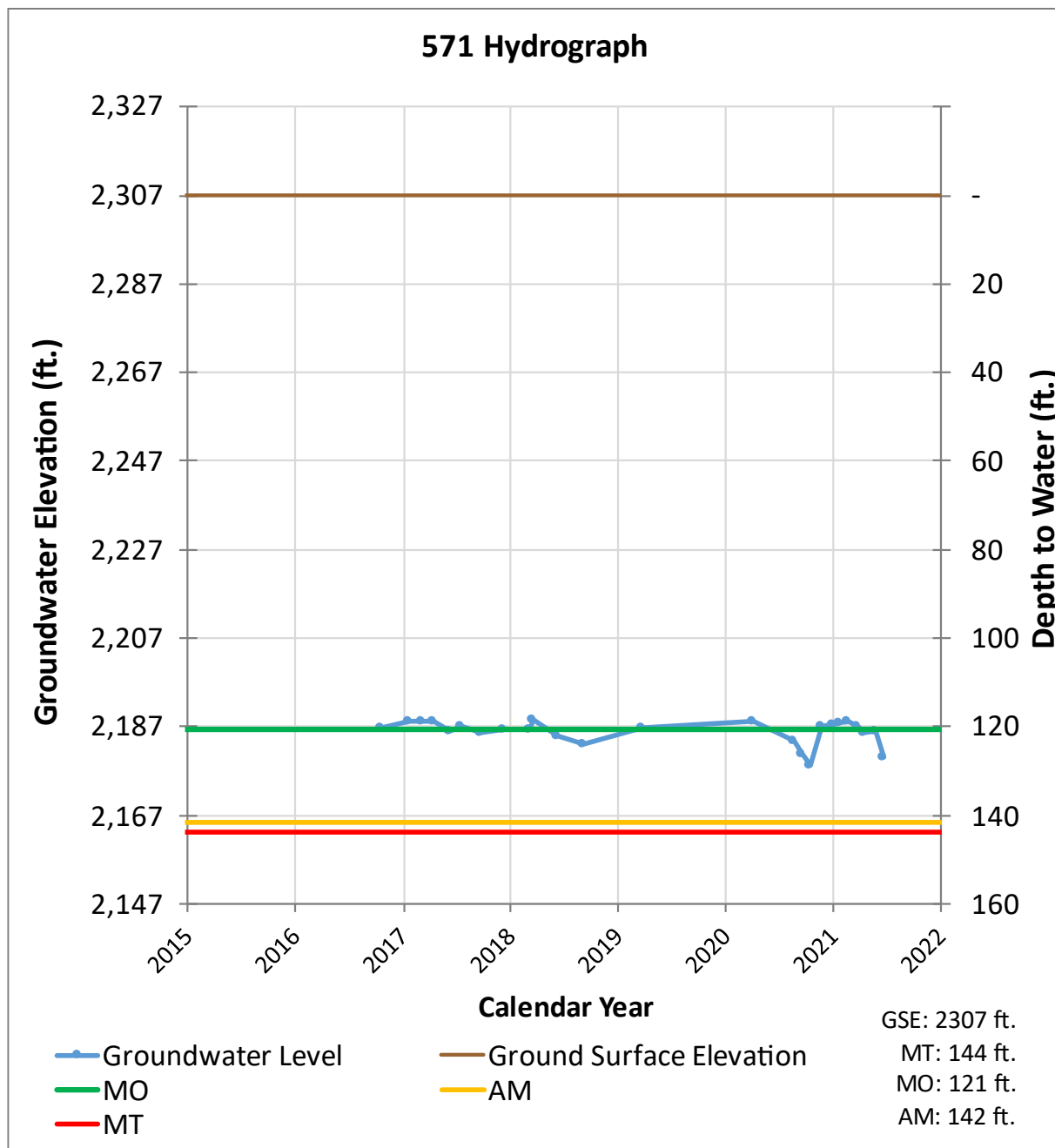
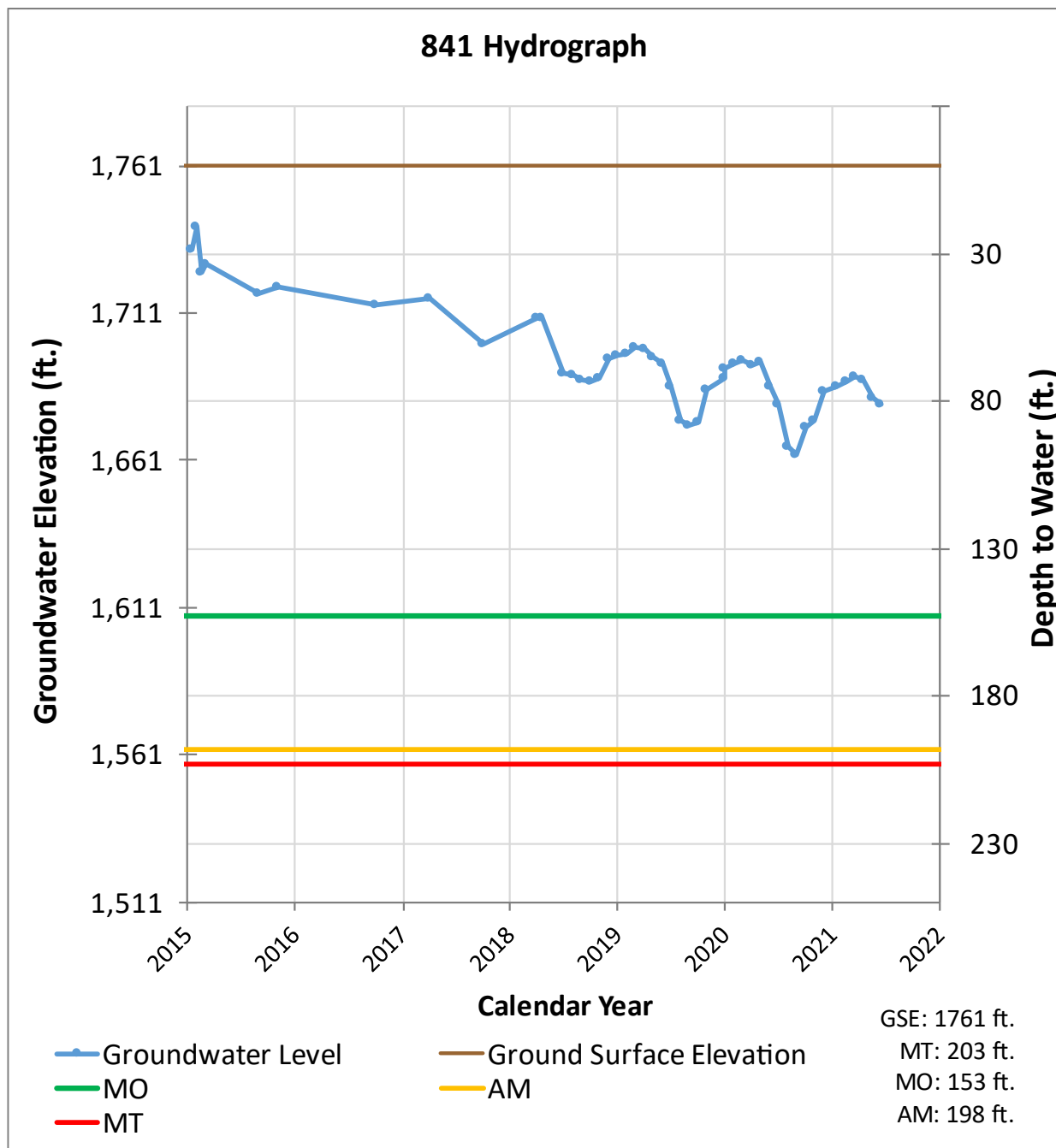


Figure 7: Northwestern Region – Well 841



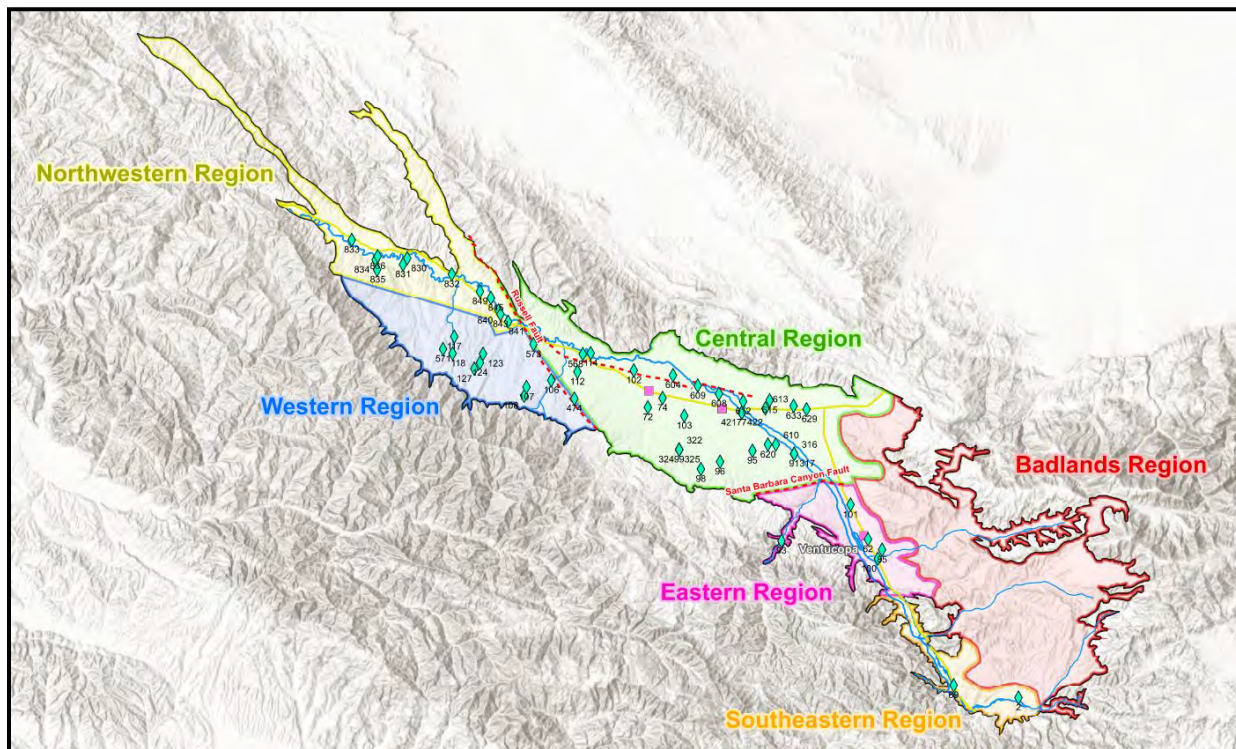


Figure 8: Threshold Regions in the Cuyama Groundwater Basin

5. MONITORING NETWORK UPDATES

As shown in the Summary Statistics Section, there are 10 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:
 - Wells 2, 117, 124
- Measurement was not possible at the time when the field technician went to take measurements:
 - Wells 98, 114, 573, 608, 629, 633, 833



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CUYAMA BASIN GROUNDWATER SUSTAINABILITY AGENCY

SPECIAL BOARD OF DIRECTORS MEETING

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

AUGUST 18, 2021

Agenda for a meeting of the Cuyama Basin Groundwater Sustainability Agency Board of Directors to be held on Wednesday, August 18, 2021, at 4:00 PM. Due to the COVID-19 pandemic safety protocols (i.e. 6-foot spacing requirement) this meeting will be in-person for Committee Members and Staff **only** and will meet at the Cuyama Valley Family Resource Center, 4689 CA-166, New Cuyama, CA 93254. Members of the public may participate in this meeting via video at <https://global.gotomeeting.com/join/203153453> and/or telephonically at (646) 749-3122, code: 203-153-453#.

The order in which agenda items are discussed may be changed to accommodate scheduling or other needs of the Committee, the public or meeting participants. Public comments should be emailed to Taylor Blakslee at tblakslee@hgcpm.com by close of business on Tuesday, August 17, 2021, to assist in facilitating this remote meeting, but may still be provided at the meeting.

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

CONSENT AGENDA

5. Approval of Minutes – May 5, 2021
6. Approval of Payment of Bills for April, May and June 2021
7. Approval of Financial Report for April, May and June 2021

ACTION ITEMS

8. Direction on DWR's GSP Consultation Letter Dated June 3, 2021
9. Direction on Management Area Implementation Policy
10. Direction on Small Pumpers Policy
11. Direction on Adaptive Management
12. Approval of Monitoring Network Consultant Contract for FY 21-22

REPORT ITEMS

13. Administrative Updates
 - a) Report of the Executive Director
 - b) CBGSA Staffing Update
 - c) Report of the General Counsel
 - d) Update on FY 21-22 Groundwater Extraction Fee Collections
 - e) Update on Coordination with Counties and Well Permitting Process
14. Technical Updates
 - a) Review of Model Update Process
 - b) Update on Groundwater Sustainability Plan Activities
 - c) Update on Monitoring Network Implementation
 - d) Update on Monthly Groundwater Conditions Report
15. Report of the Ad Hoc Committee
16. Directors' Forum
17. Public Comment for Items Not on the Agenda
18. Correspondence
19. Adjourn

Cannabis Guidelines for Cuyama Basin

- In February 2021 Santa Barbara County's First District Supervisor's office (in collaboration with the 5th District) appointed the Cuyama Valley Cannabis Advisory Committee (CVCAC).
- The purpose of the committee was to develop voluntary guidelines for growing cannabis crops in the Cuyama Basin that would not further deplete the overdrafted groundwater basin.
- The committee includes 5 volunteer community representatives and 4 cannabis growers representing 500+ acres.
- On July 7, 2021 the CVCAC unanimously approved Guidelines. These Guidelines were presented to the SBC Board of Supervisors on July 13th.

CVCAC Goals

- Identify commitments for cannabis cultivation projects in the Cuyama valley to assure the community that:
 - Adverse impacts will be avoided to the maximum extent possible;
 - Robust data-gathering, sharing and analysis will occur;
 - The specific water needs for cannabis cultivation in the Cuyama Valley will be established;
 - Adaptive management to reduce project impacts and/or water use will be employed, including offsets; and
 - Adequate services and infrastructure will be available to meet the community's needs and demands created by cannabis in the Cuyama Valley;
- Resulted in the development of **voluntary Guidelines for Proposed Cuyama Cannabis Operations that work in collaboration with the GSP.**

Overview of Guidelines

- Applicants for SBC cannabis permits in the Cuyama Valley will **have the option** of incorporating the Guidelines into their permit.
- Cannabis growers are **responsible for remediating** and/or compensating impacts they cause to other wells.
- Cannabis growers' **operations may be revised in the future** as appropriate to address impact.
- Cannabis projects that voluntarily agree to be bound by and comply with the Guidelines, **will not be appealed** by the CVCAC or its individual members.
- Community Subcommittee will support projects that agree to the Guidelines.
- Guidelines are **binding for the life of the entitlement**.
- Portions of the Guidelines that are not adopted into a SBC Land Use Entitlement Project Description shall be **independently enforceable** – a legally enforceable and binding agreement between signatories.

Core Concepts of the Guidelines

- Participating cannabis growers will provide the Community Subcommittee with a **project description, hydrological evaluation, and other publicly-submitted technical documents.**
- Growers will meet with the Community Subcommittee to describe project, answer questions, and provide further information.
- **Project information** shall be posted in public places (e.g., Post Office, Community Center) to better inform the community of proposed projects.
- Growers will demonstrate an **adequate, sustainable supply of groundwater** via a certified hydrogeologist report (focus is on the 2000 foot radius of the Project well).
- Cannabis projects **cannot substantially interfere** with the availability of water from or performance of an existing third-party well.
- Cannabis growers **must also abide by** any applicable pumping restrictions or management actions implemented by the GSA.

Monitoring & Reporting

- Participating cannabis growers are required to maintain adequate water data collection systems, conduct water recordkeeping and report water information to the CVCAC and the GSA for the life of the project:
 - Well level monitoring
 - Consumption monitoring
 - Water duty monitoring
 - Well non-interference monitoring
- Goal is to identify **how much water** is required to grow cannabis in the valley and **to avoid interfering** with neighboring wells.

Offsets (Mitigation for New Pumping)

- Cuyama cannabis growers will offset **100% of water use** over historical use.
- **Enforceable and measurable** reductions of documented, historic groundwater extractions at a separate farm within the **same Threshold Region** may be used as offsets.
 - When a grower has demonstrated the inability to identify a reasonably available and sufficient Offset Source in the same Threshold Region and meets specified criteria, they may temporarily rely on an Offset Source from a farm located outside of the Project's Threshold Region.
- Offset Source credits are subject to depreciation based on the GSA's management actions (e.g., the GSP's "glide path").
- Offset requirements are part of the LUP's project description and so the **County has enforcement and compliance jurisdiction**.
- **Example:** Cannabis farmer will pay alfalfa farmer to cease irrigating a portion of their farm to "offset" new cannabis water use.
- **Water offsets will not be required for projects located on historically irrigated land**, if the project extracts an amount of water equal to or less than the historical water usage.

Funding, Oversight and Enforcement

- Program will be funded by grower contributions.
- CVCAC will establish an independent **Technical Advisory Committee (TAC)** made up of water experts to review complaints related to well interference and compliance with the Guidelines.
- CVCAC will appoint a person to administer this program, perform administrative tasks, maintain relevant data and documents, serve as a point of contact for the CVCAC, support the TAC, retain and manage technical consultants (**Project Coordinator**).
- If cannabis grower interferes with a neighboring well, they must prepare and implement a **remediation and corrective action plan**.
- Violations of the Guidelines will be reported to Santa Barbara County and GSA.
- If no corrective actions are taken, CVCAC and grower will **mediate dispute**. If mediation is unsuccessful or either party disagrees with the outcome, then either party has the right to file an action in Santa Barbara Superior Court to enforce the terms of the Guidelines.

Slide 7

BHFS1

Brownstein, 7/10/2021

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August 5, 2021

Cuyama Basin Groundwater Sustainability Agency
 Attn: Jim Beck, Executive Director
 4900 California Avenue, Tower B, Second Floor
 Bakersfield, California, 93309

Subject: Cuyama Basin Water District Response to DWR Comments on the Cuyama GSP

Dear Mr. Beck:

On 31 January 2020, the Cuyama Basin Groundwater Sustainability Agency (Cuyama GSA) submitted the final Groundwater Sustainability Plan (GSP) for the Cuyama Valley Basin (Basin) to DWR for review. On 3 June 2021, DWR responded with a letter identifying deficiencies "which may preclude the Department's approval", and suggesting ways to address their concerns. On 9 July 2021 DWR met with GSA staff to clarify and discuss their comments.

The Cuyama Basin Water District (District) has reviewed the DWR letter of 3 June 2021 (DWR Letter) and suggests the Cuyama GSA include the following elements in its response to DWR's letter:

- 1) Reinforce and explain the technical rationale for sustainable management criteria (SMCs) in each of the threshold regions of the Basin, including measurable objectives (MOs), minimum thresholds (MTs), and undesirable results (URs). Include expanded discussion of how beneficial uses and users were considered.
- 2) Reiterate that the Cuyama Basin GSP was written to achieve the MOs and avoid URs over the long term. Point out that MTs are not objectives, and even DWR's published best management practices (BMP) guidance shows¹ that MTs may be exceeded in the short or medium term, as long as progress is made toward achieving MOs by 2040.
- 3) Underscore that economic impact is necessarily a consideration of sustainability², and summarize the results of two economic analyses^{3,4} that showed a potential direct impact of approximately \$76 million, and indirect impacts of over \$200 million if groundwater pumping allocations are reduced as proposed (i.e., fallowing as much as 80% of Cuyama Basin cropland).

¹ Draft Best Management Practices for the Sustainable Management of Groundwater, Sustainable Management Criteria BMP. Available at https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents/Files/BMP-6-Sustainable-Management-Criteria-DRAFT_ay_19.pdf

² CWC Div 1, Ch 1, §113

³ *Direct Economic Impact Analysis of the Cuyama Groundwater Basin Groundwater Sustainability Plan Demand Management Program*. Report prepared for Cuyama Basin GSA by ERA Economics LLC, 19 Dec 2019, 26 pp.

⁴ *Cuyama Groundwater Basin Groundwater Sustainability Plan Economic Impact Analysis*. Report prepared for Cuyama Basin GSA by ERA Economics LLC, 25 Jan 2021, 47 pp.

- 4) Review and select, as necessary and appropriate, a focused subset of representative wells to monitor areas with interconnected groundwater and surface water. These should be relatively shallow-screened, and as close as possible to surface water streams, where available. Provide clear details of the selection rationale.
- 5) Ensure that all reasonably available water level and water-quality data have been incorporated into the GSP and considered in the process. Review the DWR comments regarding water quality data and ensure that the data they cite truly are located within the Cuyama Basin and are appropriate to use.
- 6) Explain that SGMA is a blunt instrument for regulation of water quality, particularly in the Cuyama Basin, where pumping allocation cutbacks are the only practically available tool for enforcing sustainability. Summarize other regulatory programs active in Cuyama Basin that are focused on water quality monitoring and may provide more practical strategies to address longstanding water quality issues⁵. Point out that per SGMA, a GSA is not required to address undesirable results that occurred before 2015⁶.

Additionally, pursuant to the Delegation and Management Agreement, the District and the Cuyama GSA have been engaged in discussions regarding the potential delegation to the District of certain groundwater management and enforcement actions within the District's boundaries. The District's Board has determined that it would be premature to develop measures to implement the GSP that DWR has advised is in need of revision. Further, the District is aware of the development of policies pertaining to the cultivation of cannabis in the Cuyama Basin. We do not know to what extent these policies take the SGMA into consideration. In light of the uncertainty concerning groundwater management resulting from both of these issues, the District is disinclined to pursue delegation at this time and looks forward to revisiting delegation after these issues are resolved.

Thank you,



Matt Klinchuch, PE
Cuyama Basin Water District
Manager
1800 30th Street, Suite 280
Bakersfield, CA 93301
Office: (661) 616-5900

⁵ For example, the Central Coast Water Board Irrigated Lands Program (ILP):

https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/

⁶ CWC Div 6, Part 2.74, Ch 6, §10727.2(b)(4)