

Corning Subbasin Advisory Board

August 5, 2020, 1:30 – 3:30 pm

Meeting #4 Meeting Summary

Pursuant to Governor Newsom's Executive Orders N-29-20, this meeting was conducted by teleconference/webinar.

Webinar: <https://global.gotomeeting.com/join/183854109>

Telephone: +1 (646) 749-3112

Meeting Access Code: 183-854-109

1. Welcome and Introductions

At 1:30 p.m., Julie Leimbach (Ms. Leimbach), facilitator for the Corning Subbasin Advisory Board (CSAB), called the meeting to order.

Roll call

Ryan Teubert (Mr. Teubert) and Lisa Hunter (Ms. Hunter) took the roll call for the CSAB Members.

Tehama County Flood Control and Water Conservation District (TCFCWCD)

- ✓ Bob Williams
- ✓ David Lester
- ✓ Steven Gruenwald

Alternate:

- ✓ Ian Turnbull

Corning Sub-basin GSA

- ✓ John Viegas
- ✓ Lisa Hunter
- ✓ Julia Violich

Agenda Review, Review of Groundrules

Ms. Leimbach welcomed meeting participants to the fourth CSAB meeting. She reviewed the agenda and reminded attendees that CSAB meetings are following Brown Act guidelines. She invited members of the public to announce their name and affiliation into the chat box to be included in the meeting summary.

2. Public Comment for Items Not on the Agenda

- There was no public comment at this time.

3. Action Item: Approval of the Meeting Summary

John Viegas (Mr. Viegas) made the motion: *The CSAB approves the CSAB July Meeting Summary.* Julia Violich (Ms. Violich) seconded the motion. Ms. Leimbach opened discussion on this motion. Hearing no comments from board members, CSAB staff, she called a vote.

Roll call vote:

Tehama County Flood Control and Water Conservation District (TCFCWCD)

- Bob Williams – Aye
- David Lester – Aye
- Steven Gruenwald – Aye

Corning Sub-basin GSA

- John Viegas – Aye
- Julia Violich – Aye
- Lisa Hunter – Aye

The Board unanimously approved the motion with a 6-0 vote.

4. Follow Up on Action Items from Meeting #3

Lisa Porta (technical expert) reviewed action items from the July 1st CSAB meeting:

- Review Stony Creek Fan unique hydrogeology and recharge challenges while continuing to gather data and work on model: Review of the reports and hydrogeology is ongoing. The model is being developed and will eventually be included in the GSP.
- Investigate Thomes Creek Irrigation District diversion and revise the Water District Map boundaries: The technical team has received new information and will incorporate changes to the map and text in the GSP.
- Investigate if management areas can be added and the frequency with which they can be changed under SGMA. Specifically, look into whether a new management area or revision to existing management area can be established in the 5-yr GSP Update: The technical team met with Mark Nordberg at DWR and confirmed that there is flexibility in how a management area is included in the GSP. A “preliminary” management area can be included in the GSP with a disclaimer that it may be revised as more data become available or included later in the 5-year update of the GSP.

5. Overview of Sustainable Management Criteria

[Review GSP Requirements and Key Concepts](#)

Ms. Porta then reviewed the GSP requirements and key concepts behind the Sustainable Management Criteria (SMC). Developing SMC is one of the most important aspects of the GSP as it allows the GSAs to define the metrics used to assess progress towards sustainable management of the groundwater resources in the Subbasin. Sustainability is outcome-based and must consider the six sustainability indicators (SI) related to water levels, groundwater storage, subsidence, water quality, groundwater and surface water interaction, and seawater intrusion. SGMA requires the GSAs to show that groundwater is being managed sustainably in 2042 and how to get there. This means that a plan to avoid significant and unreasonable conditions for each applicable SI will be defined by the GSAs with input from stakeholders and included in the GSP.

The following SMC must be defined for each relevant SI:

- Minimum Threshold
- Measurable Objective
- Undesirable Result

The minimum threshold is the value that if exceeded is expected to cause significant and unreasonable conditions to occur in the Subbasin. Measurable objectives are the safety factor and are set above minimum threshold for operational flexibility. These are goals that should be strived for to allow for a buffer for future drought or other changing conditions. Interim milestone goals are set every five years to assess progress towards sustainability. Undesirable results are a combination of minimum threshold exceedances for the Subbasin as a whole.

The DWR recommends metrics to use when establishing each minimum threshold. For example, groundwater levels are the suggested metric for chronic lowering of groundwater levels SI, total volume of water is the metric for reduction in storage SI, and the volume or rate of surface water depletion is the metric for depletion of surface water SI. SMCs will be established at representative monitoring points (RMP); for example, a subset of key wells can be used to establish water level SMC for the Subbasin. RMPs need to meet DWR spatial requirements for monitoring networks.

Discussion (CSAB, Staff, Technical Expert)

Board members discussed the following:

- How is the Reduction of Storage Sustainability Indicator measured?
 - Ms. Porta: Pumping volumes can be directly measured, estimated using the groundwater model and land use data, or a combination of methods. There will be a future CSAB meeting session dedicated to discussion of the reduction in groundwater storage SMC.

Draft Sustainability Goal

Ms. Porta reviewed the requirements for establishing a Subbasin sustainability goal. Each GSP is required to establish a sustainability goal for the Subbasin. There are three parts to the sustainability goal. The first part is a sustainability goal statement (or qualitative description) that defines what sustainability means in the Subbasin. The other two parts identify projects and management actions (if necessary) for the GSAs to implement in order to achieve the sustainability goal, and explain how the projects and management actions will help achieve the sustainability goal. The projects and management actions will be defined at a later stage in GSP development so are not being discussed at this time.

Three example sustainability goal statements were presented for a brainstorming session on a potential statement for the Corning Subbasin:

1. The goal of this GSP is to manage the groundwater resources of the Subbasin for long-term community, financial, and environmental benefits to the Subbasin's residents and businesses.
2. This GSP will ensure long-term viability of water supplies while maintaining the unique cultural, community, and business aspects of the Subbasin.
3. Glenn County WAC Statement: It is the desire of the people of Glenn County that sufficient and affordable water of good quality be available on a sustainable basis to meet the needs of

agricultural, industrial, recreational, environmental, residential, and municipal users within the county, both now and in the future.

Discussion (CSAB, Staff, Technical Expert)

Ms. Porta and Ms. Leimbach asked the staff, board members to discuss the three examples of the sustainability goal statement.

Based on input from the CSAB members, Ms. Leimbach live edited the following sustainability goal statement. The Management Team will fine-tune the statement and present it for a potential action item at the September CSAB meeting.

- It is the desire of the people of **the Corning Subbasin** that sufficient and affordable water of good quality be available on a sustainable basis to meet the **unique** needs of agricultural, **residential, municipal**, industrial, recreational, and environmental, users within the **Corning Subbasin**, both now and in the future. **In cooperation with local, state, and federal water providers, the GSAs will continue to support viability of affordable water supplies based on interaction of surface and groundwater.**

Board members and staff gave the following input on the Sustainability Goal:

- All three of the sample goals are good options.
- Is “good quality” a technical term that can be measured? Can we use “satisfactory” instead?
 - Ms. Porta replied that “good quality” is commonly used with regards to water quality. The discussion on metrics will make this more clear. This can be revised to “of quality that is appropriate to beneficial users” to suggest a level of quality to meet needs.
- “Affordable” and “good quality” are subjective. “Affordability” in this Subbasin cannot be compared with other basins.
 - Ms. Porta reminded board members that the sustainability goal description has three parts, including both qualitative descriptions and quantitative actions. There will be an opportunity to add specificity for how affordability and good quality will be achieved. It would be out of place to add anything too specific to the sustainability goal at this time. The main point is to understand the local goal for overall sustainability in this Subbasin.
- The Glenn County WAC statement is a good foundation and includes topics that are also important to the Corning Subbasin (e.g. agriculture, industry, recreation, environment).
- Water supply in the southern part of the state is not affordable or sufficient, so it should be one of our goals to make sure water continues to be “affordable” as well as “sufficient,” in the Subbasin particularly for agricultural use. Affordability and water quality are also important for drinking water supply.
- The term “manage” in the first sample is an issue because of the complexities of water law and overlaying groundwater rights. “Manage” should be changed and could be replaced with “develop and maintain.”
- The goal should retain the word “unique” and emphasize issues that are important locally.
- The Glenn County WAC statement should not refer specifically to groundwater because the Subbasin relies also on surface water and the GSAs will likely need to cooperate with other water agencies and surface water agencies to achieve sustainability. Our goal should be to achieve sustainability basin-wide with all other water supplies.

- Ms. Hunter pointed out that future collaboration and integration of different types of water supplies was a consideration for Glenn County in developing the WAC statement as well.
- Surface water has not always been available or affordable in recent years. Subbasin will need to communicate with the Bureau of Reclamation to confirm that the water supply will continue to be available at an affordable price. The goal should include a statement about “collaboration with” or “in cooperation with” federal, state, and local water providers.
- The statement should speak to the need to develop all water supplies. We are concentrating on groundwater but we will need to discuss surface water availability and recharge. This will require cooperation with the state and federal government, which we may discuss later. This interaction between surface and groundwater is going to be part of what makes water “affordable and sustainable,” particularly for irrigators.
- “Viability of affordable water supply” should be included in the statement.
- The order of the items listed in the Glenn County WAC statement should be rearranged so that it reads: “agricultural, residential, municipal, industrial, recreational, environmental” to acknowledge that residential users will factor into water level SMC.
- The word “local” should be added to the statement in addition to “federal and state” water providers.
- CSAB members reviewed the general framework and agreed to leave the goal as preliminary to be further reviewed and refined at a future meeting.

Public Comment

- There was no public comment at this time.

Action Item: Make recommendation to GSAs on Preliminary Corning Subbasin

No action was taken at this time.

Sustainable Management Criteria – How this will be developed

Ms. Porta continued her presentation on the Sustainable Management Criteria, to describe how the different pieces will be developed and how it all fits together into the GSP. She also described its role in the life cycle of the GSP over the longer term. We are currently between understanding of the Subbasin and initial design of sustainability criteria. Even though the GSP will be submitted in 2022, the implementation phase will provide opportunities to revise SMC over the next 20 years for achieving sustainability.

Discussion (CSAB, Technical Expert)

Board members discussed the following:

- I need you to help me out with the Minimum Thresholds and monitoring points. Multi-completion wells around the subbasin are screened at various levels. In your discussion, you have described one threshold. This is similar to the multiple aquifers v. single aquifers discussion – what monitoring point are you going to be looking at? Will you look at an average? Averages will be a problem for residential users, who tend to have shallower wells. As a general comment, Allan Fulton developed a graphical method in the region for looking at water wells and the

number of wells affected. That is a good way to visualize what the impact is going to be. I recommend seeing if maybe he has done more with that study or if that approach will help create a visualization with respect to minimum water level thresholds and what kind of effect the different numbers will have.

- Ms. Porta: Thank you for bringing up Allan's study. We will look at that. The Minimum Threshold, as you mentioned, may be different for wells screened at different depths in the aquifer and we will need to discuss whether some areas are more agriculture-dominated and which areas need to be considered for domestic or public supply. The water level SMC is based on what is significant and unreasonable, so for example protecting domestic wells from going dry could be considered.
- I am concerned about adversely impacting agricultural users unnecessarily. You also do not want a bunch of domestic wells failing or else you will have a bunch of people at the Supervisors' meeting. Hope to consider all water uses carefully.
 - Ms. Porta: Yes, this will be iterative until we find the approach that works best for everyone.

Public Comment

There was no public comment at this time.

6. Overview of Monitoring Networks

Overview of GSP Requirements and Sustainability Indicators

Ms. Porta suggested that seawater intrusion be eliminated from the list of applicable SIs for the Subbasin, as the area is not adjacent to bays, inlets, deltas, or the coast.

Discussion (CSAB, Staff, Technical Expert)

Board members and staff discussed the following:

- I support the proposal to remove seawater intrusion from the list of sustainability indicators. I think it is pretty clear we are not impacted by it.
 - I agree and think it would be easier moving forward to make a note that we reviewed it and voted to remove it.
- I know some places have saline water. We are talking about "seawater" and not "saline water" here, is that correct?
 - Ms. Porta: I would go as far as to call it "active seawater intrusion." I want to note that the water on the west side of the subbasin is no longer considered "seawater" and is not an "intrusion." It is poor quality water in the deeper part of the basin and covered under the topic of groundwater quality degradation.
- I support moving seawater intrusion as long as we are sure to add the language needed to meet the requirements of the GSP.

Public Comment

- Jaime Lely: The concern is that there is some salt water in the west side lower formations that makes the water on the west side not usable.
 - Ms. Porta. Yes, this is the part of the water quality network and Sustainable Management Criteria. Right now, the data is limited in this area as there are not many

wells. If there are no wells there, we will need to figure out if that is a data gap and if we need to develop more monitoring in that area.

- Ms. Lely: Thank you for clarifying. Can we get more information from well drillers for some wells that have been drilled on the west side?
 - Ms. Porta: Yes, when a new well is installed there is often documented information on well construction and water quality. We will search for this information and use it as applicable.

Action Item

Mr. Williams made the motion: *The CSAB will make a recommendation to GSAs to remove seawater intrusion from the list of applicable sustainability indicators.* Mr. Viegas seconded this motion. Ms. Leimbach called a vote.

Roll call vote:

Tehama County Flood Control and Water Conservation district (TCFCWCD)

- Bob Williams – Aye
- David Lester – Aye
- Steven Gruenwald – Aye

Corning Sub-basin GSA

- John Viegas – Aye
- Julia Violich – Aye
- Lisa Hunter – Aye

The Board unanimously approved the motion with a 6-0 vote.

Ms. Porta then introduced the initial monitoring networks for the water level, subsidence, and water quality sustainability indicators.

Ms. Violich exited the meeting at 3:08 PM.

Monitoring Networks

Chronic Lowering of Groundwater Levels

Ms. Porta provided an overview of initial monitoring networks for groundwater levels, land subsidence, and water quality available in the Subbasin. Also briefly discussed how the SGMA best management practices were being used to develop monitoring protocols for each network.

Water levels have been monitored in the past by DWR and the counties as part of the CASGEM monitoring program. Glenn and Tehama County selected some of these wells for establishing local management thresholds in the 2000s. The GSP water level network will be submitted to DWR so cannot include confidential well or information. Well depths of available monitoring wells generally match the depths of production wells in the basin. Screen intervals are known for most wells in the CASGEM network. Wells without screen intervals may not be useable for the GSP.

There are data gaps in the water level monitoring network. One is the missing well screen information. There are also spatial data gaps. One new monitoring well will be installed by DWR in Glenn County along the Glenn/Tehama County Boundary and Stony Creek. There are portions of the Subbasin in Tehama County along the Sacramento River, Thomes Creek, and in the western Subbasin that could potentially benefit from additional water level monitoring wells.

Land Subsidence

The existing subsidence monitoring network consists of a spatially adequate network of elevation benchmarks that DWR intends to survey periodically (currently scheduled for every five years). There is also an extensometer being monitored by DWR in the Glenn County portion of the Subbasin, and satellite data that DWR is now making publicly available that should help fill any spatial subsidence data gaps.

Degraded Water Quality

The water quality monitoring network consists of wells monitored for a variety of purposes. There are public supply wells that are routinely sampled for compliance with drinking water regulations. DWR has monitored water quality in some wells in the past but has no planned monitoring at this time. There is one Irrigated Lands Regulatory Program well northeast of Corning that is sampled regularly. Four wells in Glenn County are used to measure water quality parameters using a field meter (temp, pH, conductivity). There is one location with wells monitored for the Waterboard Dairy Program. Numerous wells are sampled by the Department of Pesticide Regulation for pesticide analysis only.

Data gaps in the water quality network will be evaluated during water quality SMC development.

If others are aware of water level or water quality monitoring locations that we have not included in our preliminary networks, then please let us know.

Discussion (CSAB, Staff, Technical Expert)

There was no discussion by CSAB or staff at this time.

Public Comment

Ms. Leimbach invited members of the public to provide public comment for the record.

- Sharla Stockton: I want to comment on the northern area of the Subbasin, northwest of Corning in the “Potential Water Level Data Gaps” map. Lisa Hunter, Ryan Teubert, and I did a cursory analysis and noted that this is a groundwater use area that could benefit from a water level monitoring well. Did you say you do not have perforation intervals for the wells shown in this area?
 - Ms. Porta: That data may be available somewhere, but it is not in the initial data that we downloaded from DWR, so we will take another look at Glenn County specific information
- Ms. Stockton: I wanted to point out that there are shallow wells on the east side of Glenn County. The average perforation is about 98 to 100 feet in that area.
 - Ms. Porta: Want to also point out that the teal color wells have the most recent data, Fall 2019. Some do not have recent data and we need to figure out if these wells are no longer measured. There is more homework to be done to ensure that we include wells that are measured or measurable. We would prefer not to include new well locations that need more work and lack historical measurements to help with developing SMC.

7. Next Steps

Ms. Porta reviewed next steps and agenda items for the next CSAB meeting:

- Groundwater Level Sustainable Management Criteria discussion #1
 - Background on Groundwater Levels SMC
 - Discuss “significant and unreasonable”
 - Proposed approaches for Minimum Thresholds and Measurables Objectives.

8. Adjourn

Ms. Leimbach thanked Ms. Porta, CSAB members, and the public for participating in this great discussion and adjourned the meeting at 3:26 PM.

Meeting Participants

CSAB Members

- Lisa Hunter, Corning Sub-basin GSA
- John Viegas, Corning Sub-basin GSA
- Julia Violich, Corning Sub-basin GSA
- Steve Gruenwald, Tehama County Flood Control and Water Conservation District (Private Citizen)
- David Lester, Tehama County Flood Control and Water Conservation District (Groundwater Commissioner)
- Bob Williams, Tehama County Flood Control and Water Conservation District (Board Member)

Other Participants

- Nichole Bethurem, Tehama County Flood Control and Water Conservation District
- Thad Bettner, GCID
- Brandon Davison, DWR Northern Region
- Holly Dawley, GCID
- Todd Hamer, Tehama County Groundwater Commission
- Sarah Lee
- Jaime Lely, Landowner
- Dana Pressley, Landowner
- Sharla Stockton, Glenn County
- Ryan Teubert, Tehama County Flood Control and Water Conservation District (Manager)
- Ian Turnbull (Alternate), Tehama County Flood Control and Water Conservation District (TAC Member)

Consultants and Project Team

- Peter Dennehy, Montgomery & Associates
- Sharon Hu, Kearns & West
- Julie Leimbach, Kearns & West
- Lisa Porta, Montgomery & Associates