Corning Subbasin Advisory Board

March 3, 2020, 1:30 – 4:00 pm Meeting #11 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/421172261

Telephone: +1 (669) 224-3412 Meeting Access Code: 421-172-261

1. Welcome and Introductions

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

Agenda Review, Review of Groundrules

Julie Leimbach welcomed meeting participants to the eleventh 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.

Roll Call

Ryan Teubert and Lisa Hunter took the roll call for the CSAB Members.

Tehama County Flood Control and Water Conservation District

- ✓ Bob Williams
- ✓ David Lester
- ✓ Ian Turnbull (Alternate)

Corning Sub-basin GSA

- ✓ Lisa Hunter
- ✓ Julie Violich
- ✓ John Amaro (Alternate)

2. Public Comment for Items Not on the Agenda

Tim Mesa – Regarding subsidence groundwater effects, I want to speak about the cone of
depression effects on ephemeral streams, groundwater dependent ecosystems, and domestic
water users. I would like to explore the effects of large agricultural wells on domestic users. We
are seeing an expansion of large scale users in the basin and simultaneously seeing a gradual
lowering of water levels. We want to explore localized effects on these changes.

3. Action Item: Approval of the Meeting Summary

Lisa Hunter made the motion: *The CSAB approves the CSAB February Meeting Summary*. Julia Violich seconded the motion. Ms. Leimbach opened discussion on this motion. Hearing no comments from CSAB board members, she called a vote.

Vote:

Tehama County Flood Control and Water Conservation District

- David Lester Aye
- Bob Williams Aye
- Ian Turnbull

 Aye

Corning Sub-basin GSA

- Lisa Hunter Aye
- Julia Violich Aye
- John Amaro Aye

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

4. GSA Updates

Ryan Teubert and Lisa Hunter reported out to the CSAB on the Tehama County GSA (TCGSA) and Corning Subbasin GSA (CSGSA), respectively.

Tehama County GSA (Ryan Teubert)

- TCGSA worked with the Groundwater Commission members to review GSP chapters. They will be providing some comments.
- TCGSA made progress on its technical support services contract. They are working on additional well installation near Thomes Creek, which will be beneficial for both Corning and Red Bluff subbasins.
- TCGSA will be releasing a quarterly newsletter with a section on the Corning subbasin with updates on these meetings and will encourage participation in these meetings.
- TCGSA is conducting outreach to the tribal panel at the end of the month with an update on SGMA.

Corning Sub-basin GSA (Lisa Hunter)

- CSGSA met in January 2021. At that meeting, the GSA received a presentation from The Nature Conservancy and a presentation on the interbasin efforts in Northern Sacramento Valley.
- There were some vacancies on the GSA due to changes in Glenn County Board of Supervisors members. New Glenn County Board members, and CSGSA representatives, Grant Carmon and Tom Arnold are joining this meeting to get acquainted with the work we are doing here.
- We do still have one vacancy on the CSAB and we plan to fill that position at the March 10 CSGSA meeting.
- We have been meeting with the Facilitation Support Services outreach team, CBI, to reach out to people who represent the beneficial users particularly in the agricultural areas, domestic well owners, and hard

- to reach communities. We are thinking of printing fact sheets and distributing through existing networks. There are initial tribal outreach discussions underway.
- The drilling is complete for the technical support services monitoring well north of Stony Creek and west of I-5. She also provided an overview of the well construction information.
- We appreciate all the time that people are investing in the GSP. We are in a critical phase which will
 require a lot of reading and robust discussion and decision making. I encourage everyone to prepare by
 reading the materials prior to the meetings.

Lisa Porta reported out on Interbasin Coordination

- The Project Team is coordinating with Eddy Teasdale on development of the data management system to make it consistent for the GSPs in Tehama County. In addition they are coordinating across subbasin boundaries to ensure consistency within the Northern Sacramento Valley.
- The Project Team is coordinating with counterparts with Colusa Subbasin to coordinate on SMCs south of Stony Creek.
- In addition, the Project team has added the DWR fact sheet on domestic well owners to the Corning Subbasin GSP website.

6. Review Chronic Lowering of Groundwater Levels SMC

Review draft Significant and Unreasonable Conditions statement, Minimum Thresholds and Measurable Objectives, and options for Undesirable Results

The CSAB gave feedback on the draft Chronic Lowering of Groundwater Level SMC.

Significant and Unreasonable Conditions:

- Ian Turnbull I suggest replacing the word "untenable" with "excessive". Otherwise I like the statement.
- John Amaro How are we defining economic hardship? Will there be a certain amount of wells that are affected? Will that be measured?
 - Lisa Porta We will be addressing this in the upcoming presentation with undesirable results.
 This statement of unreasonable conditions is qualitative not quantitative.
- Lisa Hunter I think this draft statement meets the needs for an overarching statement for our subbasin objectives with the suggested changes from Ian Turnbull.

Lisa Porta presented on the Minimum Thresholds and Measurable Objectives, and options for Undesirable Results.

- Proposed Minimum Thresholds:
 - Fall 2018 as a minimum threshold because it represents a time when domestic wells were going dry and CSAB discussed previously that it is important to protect shallow domestic wells from going dry in the future.
- Proposed Measurable Objectives:
 - Spring 2012 as the goal as these levels seemed to be protective of beneficial users in the Subbasin (however, this would not be required to be reached to be compliant with the GSP).
 - These thresholds can be revised over the next 20 years as new data become available and potential projects and management actions are implemented.

Discussion and feedback from CSAB

Understanding the Undesirable Results Requirements

- Lisa Hunter For the thresholds, is that a single measurement in time? Would you have to remain below the minimum threshold for the whole period selected or would a single measurement cause the exceedance?
 - Lisa Porta GSAs will submit an annual report including measured data of the previous water year. The report would include at a minimum spring and fall measurements. We would be looking at an annual measurement of minimum thresholds to identify if you have an undesirable result.
 - Lisa Hunter If you have one measurement that falls below the minimum threshold, that could be considered an exceedance in the report?
 - Lisa Porta Yes, that one exceedance might be fine as an isolated incident. However, if you had
 many wells that exceeded the measurement at one time, then that could create an undesirable
 result. It also depends on how you want to develop your policy decisions on minimum
 thresholds and undesirable results.
- Ian Turnbull If undesirable results happen before 2042, would there be a penalty requiring proactive or coercive projects?
 - Lisa Porta No, before 2042 you do not have to be sustainable, but show progress towards sustainability and meeting goals. We need to figure out how to mitigate with proactive projects such as recharge and management actions such as limiting pumping. The State Board will not penalize the Basin for having undesirable results prior to 2042. The goal is to have no undesirable results after 2042.
- David Lester These plans need to be approved by DWR. What is their view about how far we can go before they say that we have unreasonable groundwater levels?
 - Lisa Porta The GSPs need to be adopted by the GSAs. They are the ones that need to adopt the GSP, and the GSP needs to follow the regulatory requirements. If the GSP does not hit all the regulatory requirements, DWR will evaluate it as not meeting the GSP requirements and may consider it inadequate. It is the local decision that is the most important.
- Ian Turnbull If you have a depression area in groundwater that is seeing some declines but the rest of the subbasin is not, how do you address that? We want to address the issue in the local area but not penalize everyone else in the subbasin.
 - Lisa Porta The GSP is a basin-wide management plan. So we do have to consider the whole. An undesirable result does not necessarily represent a penalty for everyone but there is a recognition that the basin is connected and needs to be dealt with on a basin-wide level. An undesirable result is a flag to indicate an issue that needs to be managed and then the management focus can be on the area that triggered the undesirable result with the exceedances of minimum thresholds.

Comments and Proposals on the Draft Undesirable Results Options (slide 8)

- Ian Turnbull Where did you come up with the 10% in the first undesirable result option?
 - Lisa Porta This is a policy statement on what makes sense for the Subbasin. The question is what are you willing to look at for flexibility and conditions in your subbasin?

The 2018 water level number we decided on for the minimum threshold was evaluated previously and discussed at the October 2020 CSAB meeting. Under the Fall 2018 groundwater level, domestic water users started to feel adverse effects. The 10% rule would mean that shallow domestic well users would feel the adverse effects before declaring an undesirable result before development of projects and actions to remedy the situation.

This is a typical way of approaching the development of undesirable results, since by definition they are a combination of minimum thresholds. We have seen numbers in other GSPs as large as 25% before an exceedance is declared. How far do you go with exceeding water levels that are a problem for users in the basin?

- John Amaro It would be more reasonable to set the Undesirable Result at 15-20% before having some real actions, over 2 years. Then 10% of the basin is not dictating what is happening in the rest of the basin. The second bullet on the slide is closer to what I would propose.
 - o Julie Leimbach Does any CSAB member disagree with John's proposal for 15-20%?
 - None expressed disagreement.

Public comment

- Hal Crain Wouldn't it be more realistic to set undesirable results on a regional basis? For different areas of the subbasin, wouldn't you be able to compartmentalize a problem in a given area that is not significant for the rest of the basin?
 - Lisa Porta You will see the 20% exceedance of Minimum Thresholds show up in certain areas which will compartmentalize any problem in a given area naturally We could consider compartmentalizing certain areas through projects and actions.
 - Hal Crain Where are the hydrographs for Representative Monitoring Point wells available? I suggest that before decisions on Measurable Objectives and Minimum Thresholds that the general public have an opportunity to review the hydrographs.
 - Lisa Porta We will make those hydrographs available.
- Matt Hansen The monitoring wells seem to be in the areas where groundwater is most stable and seems to not be representative of the problem areas (like in the West and by Thomes Creek). I have a problem with the density of the monitoring wells; we need a more comprehensive monitoring network.
 We should not wait for the groundwater problems to affect areas where the groundwater is more stable.
 - Lisa Porta Yes, we do have data gaps in the monitoring network, especially in the Thomes
 Creek area. That area is something we are looking into to add new monitoring wells. As part of the 5-year update, we can include new monitoring wells.
 - The way that we designed the minimum threshold is protective of the shallow well domestic users. We could add a clarification about the dry well domestic minimum problem to the undesirable results statement. However, the Minimum Thresholds were designed to protect shallow domestic well users. Groundwater declines in the north would likely be observed first, indicating a need for corrective action before the groundwater declines affect the shallow domestic wells.
- Brian Mori, agricultural stakeholder Regarding the proposed bullet points regarding the minimum thresholds and undesirable results, it would be helpful to see scenarios developed based on data over the last 20 years. These modeled scenarios should answer how often the undesirable result would have been triggered and require a corrective project?

- Lisa Porta The problem is we don't have the data to analyze the question. At some point we need to make a decision to initialize the 20-year adaptive management process. The past hydrographs would not have triggered the minimum threshold, since it is lower than historical data in many cases.
- Brian Mori, agricultural stakeholder If you set something more restrictive, it's harder to go back the other way.
- Lisa Porta Potential future projects and actions could include restriction on new land use.
 There will be some back and forth between water use and land use approaches to manage groundwater sustainably.
- Todd Turley, landowner I echo the comments made by Brian Mori. It seems unlikely that we will be able to lower the Minimum Thresholds after they have been set. We may be able to raise them.
- Tim Mesa, domestic well owner
 - We should define the term "excessive financial burden". Financial burdens are different for large agricultural users as compared to domestic users.
 - I also advocate for much stricter limits for triggering a limiting condition on groundwater use.
 The domestic shallow well users are the ones that are going to see the groundwater drops before the deep water wells. This year, dozens of neighboring landowners are having wells go dry already.
- Michael Ward, landowner (Thomes Creek area) The definition is too confined and should be revised.
 The language is really based on the situation where the damage is already done. We are not talking about management thresholds.
 - Lisa Porta The financial burden definition is purposefully broad with examples to accommodate all beneficial users. The minimum threshold is supposed to identify the conditions to avoid for all users, not for specific users. We need to develop the projects to manage against the undesirable results.

Possible Action Item

Make recommendation to GSAs on Chronic Lowering of Groundwater Levels SMC including:

- 1. Significant and unreasonable conditions
- 2. Minimum Thresholds
- 3. Measurable Objectives
- 4. Undesirable Results

1. Significant and Unreasonable Conditions Statement

Ian Turnbull made the motion to: Recommend to the GSAs significant and unreasonable conditions as stated:

Chronic lowering of groundwater levels is considered to be locally significant and unreasonable if it results in excessive financial burden or insufficient water supply to meet the needs of beneficial users in the Subbasin. Examples of excessive financial burden are significant and unreasonable costs for replacement of dry wells as well as pump lowering and additional energy costs for accessing groundwater at greater depths.

David Lester seconded the motion. There was no further discussion.

Vote:

Tehama County Flood Control and Water Conservation District

- David Lester Aye
- Bob Williams Aye
- Ian Turnbull- Aye

Corning Sub-basin GSA

- Lisa Hunter Aye
- Julia Violich Absent
- John Amaro Aye

2. <u>Minimum Threshold at each representative monitoring point to reflect what locally is significant and unreasonable</u>

David Lester made the motion to: Recommend to the GSA that the Minimum Threshold at each representative monitoring point to reflect what locally is significant and unreasonable be the Fall 2018 minimum groundwater level at each Representative Monitoring Point

Bob Williams seconded the motion. There was no further discussion.

Vote:

Tehama County Flood Control and Water Conservation District

- David Lester Aye
- Bob Williams Aye
- Ian Turnbull

 Aye

Corning Sub-basin GSA

- Lisa Hunter Aye
- Julia Violich Absent
- John Amaro Aye

3. Measurable Objective at each representative monitoring point to reflect a goal to achieve

David Lester made a motion to: Recommend to the GSAs that Measurable objectives be Spring 2012 maximum groundwater level at each Representative Monitoring Point.

Bob Williams seconded the motion. There was no further discussion.

Vote:

Tehama County Flood Control and Water Conservation District

David Lester – Aye

- Bob Williams Aye
- Ian Turnbull- Aye

Corning Sub-basin GSA

- Lisa Hunter Aye
- Julia Violich Absent
- John Amaro Aye

4. Undesirable Results, as a combination of minimum thresholds

The CSAB discussed the Undesirable Results:

- Ryan Teubert How many Representative Monitoring Points 62? Is it possible to add wells if Tehama County gets the multi-completion well put in north of Thomes Creek? Could we utilize the additional well?
 - Lisa Porta That is tricky. We would need to check with DWR to see if we can use a well as a
 proxy on the other side of the basin. The nice thing about the 20% rule is that it will include all
 the Representative Monitoring Points as the network is updated.
- Lisa Hunter- Is it possible to add the dry or critically dry water year type as part of the statement to be clear about when the exceedance counts?
- Ian Turnbull I would like to see more examples, representing what John Amaro is proposing. I would like to tie in dry and critically dry years for undesirable result statement.

John Amaro made the motion to: Recommend to the GSA that an undesirable result occurs when more than 20% of groundwater elevations measured at Representative Monitoring Point wells drop below the associated minimum threshold during two consecutive years. If the water year type is dry or critically dry then levels below the minimum threshold are not undesirable as long as groundwater management allows for recovery in average or better years.

[Note: there are 62 wells in the Representative Monitoring Point network, so this would result in 13 wells exceeding Minimum Thresholds 2 years in a row]

lan Turnbull seconded the motion. There was no further discussion.

Vote:

Tehama County Flood Control and Water Conservation District

- David Lester Aye
- Bob Williams Aye
- Ian Turnbull

 Aye

Corning Sub-basin GSA

- Lisa Hunter Aye
- Julia Violich Absent
- John Amaro Aye

Additional Comments

- Ryan Teubert We want to note that we have a data gap in our monitoring network for representative
 monitoring wells. We also don't have a good understanding of all the wells within the Subbasin, as far as
 well construction and location.
 - Lisa Porta We need to have a monitoring well network and the project is to fill the data gap.

7. Introduction to Subsidence data and SMC

Review draft Significant and Unreasonable Conditions statement, Minimum Thresholds and Measurable Objectives, and options for Undesirable Results

Lisa Porta proposed the following draft description for what is significant and unreasonable for groundwater subsidence.

Any inelastic land subsidence that impacts infrastructure and is caused by lowering of groundwater levels occurring in the subbasin is significant and unreasonable.

The group made the following comments on the draft statement

- Lisa Hunter All of those dots on the map indicating subsidence are close to the Stony Creek and the Stony Creek fan. How could that relationship impact the subsidence analysis. The obvious aspect is that when the streamflows decrease, it impacts the water levels.
 - Lisa Porta It is probably more related to a situation that if there is less surface water available, then folks pump more and that makes groundwater levels decrease causing decline in areas that experience soil compaction. I haven't looked at it closely enough to say more.
- Bob Williams and Lisa Hunter suggested dropping the word "any" which makes for a gray area and is open for interpretation

Discussion and feedback from CSAB

- David Lester confirmed that this could be changed in 5 years with changes in SMCs based on the data.
- John Amaro and Lisa Porta discussed the way to tell the difference between elastic and inelastic subsidence in monitoring.
- Ian Turnbull and Lisa Porta clarified the margin of error for subsidence on the InSAR data and the monuments.
- Ryan Teubert Is there any risk to basing it on InSAR? Is there a chance that DWR would discontinue funding for the InSAR data?
 - Lisa Porta I have heard from DWR that they are going to invest in the InSAR data. The monuments might get obsolete, especially in areas with no to low subsidence.

Minimum Thresholds and Undesirable Results for Subsidence

• Ryan Teubert - are there any examples in other basins where some subsidence is allowed; for example no more than 0.3 inches of subsidence over a 5 year period', or 'up to 0.3 inches per year but not more than 0.8 inches over a 5-year period'.

- Ryan Teubert and Lisa Hunter Agreed on proposing a min. threshold that would allow subsidence to occur but that would not impact infrastructure.
 - Lisa Porta Yes, there are examples. The rationale for the proposal we made is that subsidence
 is not a huge risk. However, if you are more comfortable adding some subsidence and capping it,
 we can provide examples of that type of minimum threshold.
- Lisa Hunter Supports moving forward with Ryan's suggestion.
 - We may want to consider something higher. 0.1 is in the realm of elastic subsidence. Suggest that number being higher in the next example.
- Lisa Porta I would like to invite the Board members to propose wording and examples on subsidence undesirable results.

Lisa Porta asked if CSAB has experienced impacts due to subsidence in the Corning Subbasin. CSAB did not respond.

Public Comment

- Tim Mesa There only seems to be an issue around Black Butte. Are you only looking at monitoring data around that area?
 - Lisa Porta We are looking at the whole basin.
- Tim Mesa and Lisa Porta Clarifications on evaluating subsidence to account for the margin of error on the measurements.
- Ryan Teubert and Lisa Porta Clarified that the gray areas on the map on the slide are depicting no data.

Possible Action Item: Make recommendation to GSAs on Land Subsidence SMC

The CSAB did not take action on this item on March 3.

8. Review Streamflow Depletion SMC Options

The Board skipped the review of streamflow depletion of SMC options due to time constraints. Lisa Porta invited comments from the Board on possible action items before the next CSAB meeting so she can revise the proposals before the next CSAB meeting.

9. Next Steps

Review updated overall timeline and schedule for 2021 CSAB meetings

Lisa Porta reviewed the timeline of CSAB meetings, proposed topics, and GSP Section Reviews.

Review proposed GSP Completion and Adoption Timeline

David Lester made the first motion as follows: Recommend to the GSAs to agree to the full GSP completion and adoption schedule as presented. [shown at the end of the meeting notes below].

Ian Turnbull seconded the motion.

The Board discussed:

• Lisa Hunter – Proposed having the public meeting in October instead of November so it is within the public review period rather than trying to capture more public comments after the public review period has ended.

David Lester amended his first motion as: *Recommend to the GSAs agree to the full adoption schedule amended* so that the public meeting will be held in October at a date TBD. Ian Turnbull withdrew the original second and seconded the amended motion.

See below for full GSP Completion and Adoption Timeline.

Vote:

Tehama County Flood Control and Water Conservation District

- David Lester Aye
- Bob Williams Aye
- Ian Turnbull- Aye

Corning Sub-basin GSA

- Lisa Hunter Aye
- Julia Violich Absent
- John Amaro Aye

Based on the change of the public meeting date, the CSAB discussed moving their November meeting back 1 week. Bob Williams made the motion as follows: *Recommend to move the November 3rd CSAB meeting to November 10th*.

David Lester seconded the motion.

Vote:

Tehama County Flood Control and Water Conservation District

- David Lester Aye
- Bob Williams Aye
- Ian Turnbull- Aye

Corning Sub-basin GSA

- Lisa Hunter Aye
- Julia Violich Absent
- John Amaro Aye

<u>Proposed GSP Completion and Adoption Timeline (as amended by the CSAB, and recommended to the GSAs)</u>

- August 5, 2021: 90-day notice to Cities and Counties, prior to public hearing
 - Link to website with current draft sections (note: GSP does not need to be complete to post the notice)
- September 10, 2021: Public Release of Complete Draft GSP
 - At August GSA meetings, authorize the CSAB to release the Public Draft GSP
 - o At Sept. 1 CSAB meeting, recommend release of draft GSP for public review
 - Post full draft for 45-day public review (note: public review timeframe does not need to correspond to 90-day noticing)
- October 22, 2021: Draft GSP Public Review Ends
 - o TBD: Schedule a public meeting in October to hear public comments on draft GSP
- November 2021: incorporate public comments and finalize GSP
 - O November 10th: reschedule the CSAB meeting to this date to review public comments incorporation and for CSAB to vote on recommendation to adopt
 - Note: CSAB voted to move the regularly scheduled November 3 meeting to November 10th to allow for more time to review and incorporate comments prior to recommendation to adopt.
- December 2021: hold GSA Board public hearings for GSP adoption
 - Tehama GSA GW Commission meets Dec 8 to consider adoption and could make a recommendation to the Tehama GSA Board which meets Dec 20 and could adopt GSP at that meeting
 - CSGSA needs to schedule a special meeting for early December. Last scheduled meeting date is 11/10/21
- January 2022: submit final adopted GSP to DWR

Public Comment

- Tim Mesa Confirmed that Oct. 22 is the last date to submit public comments in writing. And wanted to know how to provide comments.
 - Lisa Porta Oct. 22 is the end of the public comment period. GSAs will provide more direction in September on how to submit comments.
 - Ryan Teubert If you have signed up for the interested parties list for Tehama GSA, you will receive notifications.

10. Action Items

- 1. CSAB review potential action items and send alternative proposals to Lisa Porta before the next CSAB meeting
- 2. CSAB provide revisions to the subsidence min. threshold and undesirable results to Lisa Porta before the next CSAB meeting.
- 3. Lisa Porta provide examples of subsidence min. threshold from other GSPs that prevent damage to structures.
- 4. Lisa Porta Make hydrographs for Representative Monitoring Points wells available to the public.

11. Adjourn

Julie Leimbach thanked Lisa Porta, CSAB members, and the public for participating in this great discussion and adjourned the meeting at 4:03 pm.

Meeting Participants

CSAB Members

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

CSAB Alternates

- John Amaro, Corning Sub-basin GSA Alternate
- Ian Turnbull, Tehama County Flood Control and Water Conservation District Alternate

Other Participants

- Brandon Davison, DWR
- Brian Mori, agricultural stakeholder
- Eddy Teasdale, LSCE
- Grant Carmon, Glenn County Supervisor
- Hal Crain

- Holly Dawley, GCID
- Jim Simon, Tehama County Flood Control and Water Conservation District
- Kristina Miller, City of Corning, Tehama County GSA
- Martha Slack
- Mary Fahey, Colusa Groundwater Authority
- Matt Hansen, Landowner
- Michael Ward, Landowner Thomes Creek Area
- Nichole Betherum, Tehama County Flood Control and Water Conservation District
- Ryan Teubert, Tehama County Flood Control and Water Conservation District
- Susan Silveira
- Tania Carlone, CBI
- Timothy Mesa, Landowner
- Todd Hamer, Tehama County GSA
- Todd Turley, Landowner (Deseret Farms of California)
- Tom Arnold, Glenn County Supervisor

Consultants and Project Team

- Lisa Porta, Montgomery & Associates
- Julie Leimbach, Kearns & West