

Corning Subbasin Advisory Board

October 7, 2020, 1:30 – 3:30 pm

Meeting #6 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/292845117>

Telephone: +1 (872) 240-3212

Meeting Access Code: 292-845-117

1. Welcome and Introductions

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

Roll call

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

Tehama County Flood Control and Water Conservation District (TCFCWCD)

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

Alternate:

- ✓ Ian Turnbull

Corning Sub-basin GSA

- ✓ Lisa Hunter
- ✓ John Viegas
- ✓ Julie Violich

Agenda Review, Review of Groundrules

Julie Leimbach welcomed meeting participants to the sixth 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

- Matt Hansen – Thank you to Ryan Teubert for the tailgate presentation. It was informative and provided clear information. I wanted to make a comment on the GSP and the way that Thomes Creek forms a boundary between two subbasins and two authorities. Maybe there could be a

boundary adjustment in the Plans? I can foresee problems with management of water by different GSAs on the different sides of the creek.

3. Action Item: Approval of the Meeting Summary

Bob Williams made the motion: *The CSAB approves the CSAB September Meeting Summary*. David Lester seconded the motion. Ms. Leimbach opened discussion on this motion. Hearing no comments from CSAB board members, she called a vote.

Roll call vote:

Tehama County Flood Control and Water Conservation District (TCFCWCD)

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

Corning Sub-basin GSA

- Lisa Hunter – Aye
- John Viegas – Aye
- Julia Violich – 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 and Corning Sub-basin GSA, respectively.

Tehama County GSA

- The Tehama County Board of Supervisors approved removal of seawater intrusion from consideration of sustainability indicators for the GSP.
- At a Groundwater Commission meeting, we approved the groundwater sustainability goal description. They recommended in the second sentence after “support”, to add “of the public”. Ryan read the proposed revised statement. The GSA will be taking the recommendation to the Tehama County Board of Supervisors in November 2020.
- Tehama County GSA is conducting outreach.
 - October 6, Ryan Teubert conducted an event at Thomes Creek.
 - Thursday, October 8, Tehama County GSA will host an outreach GSP webinar event to give an overview of GSA and GSP development including information on the Corning Subbasin.

Corning Sub-basin GSA

- In July, the GSA approved the recommendation to use C2VSIM FG groundwater model for development of the GSP.
- In September, the GSA approved removal of the seawater intrusion from the list of applicable sustainability indicators for the GSP and approved the CSAB proposed Sustainability Goal as written.
- In November, the GSA will consider approval of the proposed revised sustainability goal.

- The GSA is preparing a well permit application for a new monitoring well to be installed with DWR Technical Support Services (TSS) funds. Hopefully, the well will be installed before the end of the year.
- A DWR Facilitation Support Services (FSS) grant application was approved by DWR for the Corning Subbasin. The grant will fund Consensus Building Institute (CBI) to lead additional tribal outreach, focused meetings and workshops (in-person or virtual), interbasin coordination and support for developing outreach materials.

5. Status Update on GSP Technical Work and GSP Sections Development

6-months Progress Check-in

Lisa Porta reviewed the technical work and the GSP Sections development (See slide 3).

Expectations for GSP Sections Review

She reviewed the GSP Section review process and described that the intent of the schedule is to condense periods of receiving comments on GSP sections. Solicitation of feedback is for comments on content rather than on grammar; please focus on subject matter.

The schedule for GSP section reviews includes roughly 2 sections per month through December 2020 and then again in March, May, and July 2021 (See slide 5).

Discussion and Feedback from CSAB

- There were no comments at this time.

6. Chronic Lowering of Groundwater Levels SMC – Discussion #2

This presentation is a continued discussion from CSAB meeting #5. The purpose of this discussion is to develop initial Sustainable Management Criteria (SMC) to identify necessary projects and management actions and then conduct the modeling analysis. The GSAs have 20 years to fine-tune the SMC, including measurable objectives and minimum thresholds. The GSA may consider implementing projects and management actions to prevent unsustainable conditions from occurring in the Subbasin.

Lisa Porta recapped the steps to develop the groundwater level SMCs, which she will go through in today's presentation and discussion (see slide 8).

1. Review Significant and Unreasonable Conditions Statement

Lisa Porta requested feedback from the CSAB on the three options for significant and unreasonable statements:

- Julia Violich –
 - The first option is hard to comprehend. I don't like using the term "in wells" as it is too narrow. Prefer to use "in the Subbasin" as it is more encompassing.
 - The third option is ambiguous about the financial burden. I prefer the second option as it is more specific about what the burden would entail.

- David Lester – Tehama County GSA prefers the second option. The option needs to address the financial burden which is driven by the insufficient water supply. Noted that farming is not profitable if the farmers can't afford the cost of water.
- Ryan Teubert – Recommend only considering costs and users for domestic wells that are not overly shallow or old. Don't want to manage the basin to a few unsustainable wells. When we are talking about an average cost for well replacement, it can be quite expensive.

Lisa Porta said they will use this input in the draft groundwater level subsections for the Sustainable Management Criteria GSP Section and then the CSAB will have an opportunity to review the draft section.

2. Setting Minimum Thresholds (MTs)

Lisa Porta described that it is helpful to start with a subset of wells and use those key wells to look at potential unsustainable practices, such as chronic lowering of water levels causing domestic wells to go dry. We initially focused on the shallowest wells for protection of shallow domestic well users, but we can use a representative approach for setting SMC for the deeper wells too.

The technical team reviewed Allan Fulton's approach to analyzing impacts of declining water levels on other well users. This method was developed in conjunction with the Glenn County Water Advisory Committee during the 2014 timeframe. The technical team took a similar approach to review potential minimum thresholds and measurable objectives for water levels in the Subbasin. Lisa Porta described the following approach:

- Selected key wells previously used in County groundwater management plans.
- Identified locations of 15 key wells in the shallow portion of the aquifer screened by most domestic wells
- Identified locations of domestic wells in the basin, excluding wells older than 30 years old and added a 25 foot safety factor to the depth to account for pump installation, screen interval, and drawdown.
- Reviewed potential statistical methods for establishing MTs
- Shared how potential methods looked for a few well hydrographs and how those potential MTs compared to domestic well depths. (see slides 21-26)
 - Comparison of results from different methods for minimum thresholds
 - Of the minimum threshold options considered, the most protective of domestic water wells would be using the minimum water levels from 2012.
 - The linear trend of fall minimum water level observations results in greater than 20% of domestic wells in most locations running dry by 2042.
- DWR reported locations of dry wells in the subbasin starting in 2014 (see slide 26).
 - The locations for dry wells reflect the areas that the analysis forecast for domestic wells going dry.

Lisa Porta summarized the options for Minimum Thresholds (see slide 27).

- Annual minimum groundwater levels are close to levels we are estimating could lead to 10-20% of wells in a given area going dry.
- Recommend setting minimum thresholds at no lower than recent minimum levels to minimize impacts to domestic users.
- Likely need to implement projects and management actions to stabilize or increase groundwater levels.
 - Greater use of surface water instead of groundwater could help water levels recover.

CSAB Staff and Board Comments

- Ryan Teubert – Does slide 15 from the BMO analysis show wells being totally dry or seasonally dry?
 - Lisa Porta – The Glenn County BMO analysis shows a linear trend of fall water levels. The levels fluctuate so at some times of the year in the fall water levels may dip below bottoms of the wells but at other times in the spring they probably have water.
- Ian Turnbull – There was a severe drought in the 70's, I would suggest you take the data analysis back to include the end of that drought. There are many small communities out here that have wells older than 1990. You are not going to get a feel for the kind of effect on domestic users and older agricultural wells by excluding older data.
 - Lisa Porta – Do you think if we use the older data, would the percent of dry wells be looking better or grimmer.
 - Ian Turnbull – Grimmer. But either way, including that dataset would enable us to make a better decision.
 - Lisa Porta – In the 70's groundwater levels were a lot higher than they are today. The groundwater would have to rise 40-50 feet to meet the 70's groundwater levels. There may not be enough projects to get back up to that groundwater level.
 - Ian Turnbull – I think that the more information we have, the better and more reliable.

3. Set Measurable Objectives

Lisa Porta continued her presentation on Chronic Lowering of Groundwater Levels with step 3: Set Measurable Objectives.

Provide Input on Proposed Approaches for Setting Minimum Thresholds and Measurable Objectives

Julie Leimbach read some potential questions to solicit feedback on the MT and MO levels and approach.

- Are current water levels protective of beneficial users in the Subbasin?
- Do we need to stop groundwater levels from declining at today's levels?
- What is a good goal for what levels to return to in the future if we could implement appropriate projects and management actions?

Staff Comments

- Ryan Teubert – We had talked at the staff level about evaluating the 10% of shallow domestic wells and identifying their locations. If they are really old, it might be better to replace those old wells rather than base our minimum thresholds on them.
 - Lisa Porta – The presentation is showing the same set of key wells and analyzing them. The story here is what are the water levels now and do we think that water levels are dropping too much or do we need to recover them above today's levels? At this stage, we are not going to identify every well and its construction. We are looking at the general conditions in the basin and consider whether we want the levels to stay the same or rise above today's levels to be more protective of all beneficial users. Identifying aging and unreliable wells could be part of a future project or management action to consider.

CSAB Comments

- David Lester – Just to manage to maintain the groundwater levels, we are going to have to have some major projects and management actions.
 - Lisa Porta – If 2012 levels seem like they are the most protective, they also might be unattainable. Would you like to set the MT for groundwater lower and more attainable. There may be some projects that are not too drastic. A project could be to identify the depth and location of shallow wells and identify what could be done for mitigation.
- Ryan Teubert – Concerned that if we set a level too high that even with a reasonable list of projects and management actions we will not be able to to maintain that groundwater level.
 - Lisa Porta – The measurable objective could be the groundwater level in fall 2012.
 - Ryan Teubert – is that going to pass muster?
 - Lisa Porta – I would like to show undesirable results to show you how that plays out and we can close out the process for establishing water level SMC. She summarized that it is alright for minimum thresholds to exceed a percentage of wells each year, or over multiple years, without being considered “unsustainable”.
- Board members – Discussed and suggested that maintaining the groundwater level at the current level would be a reasonable level to start out rather than setting an unachievable objective.

4. Determine Undesirable Results Statement

Lisa Porta continued her presentation with examples of Undesirable Results that refer to representative monitoring points. The GSA can include policy caveats that qualify the Undesirable Results to allow flexibility (see slide 36).

- Ryan Teubert – How many RMP wells are there going to be? Is it the 15 key wells? Want to make sure that there is a sufficient number of wells so that having 2 wells exceed the minimum threshold isn't going to be an undesirable result.
- Lisa Porta: There are currently 99 CASGEM wells monitored in the Subbasin and we are adding a few additional wells and removing redundant wells so that the GSA will likely end up with 50 – 70 wells where SMC could be established. The Subbasin may have many wells exceeding minimum thresholds in near term, just need to make sure that these problem areas are addressed with projects and management actions and that water levels are above minimum thresholds by 2042.

Discussion and Feedback from Staff, CSAB, and Public

Staff

- Ryan Teubert – We are obviously going to have to set the thresholds and objectives soon. But want to make sure we can adjust them 5 years down the road.
- Lisa Porta - Yes SGMA allows you to revisit these through 2042.

CSAB

- David Lester - That is encouraging we can revisit and possibly change in the future. We need to make sure we are going to have time to do the projects we need to do.

Public Comment

- Jake Sahl, The Nature Conservancy

- How will Groundwater Dependent Ecosystems (GDEs) factor into your thinking about setting minimum thresholds?
 - Lisa Porta - This will be a topic at a future meeting. This is the water level sustainable management criteria. We will be looking at the GDE criteria soon. We need to finish the groundwater model update to help develop these.
- Matt Hansen, Member of the Public – Pointed out that there is concern about domestic wells going dry in the Rancho Tehama in the area of Thomes Creek in Tehama County. A lot of wells in this community were installed at the same time. It seems likely that many wells may fail at once if groundwater levels continue to decline. For example, my groundwater sits at 150 feet and my domestic well pump is set at 240 feet. Static groundwater level drops to 200 feet when I turn on my pump. If the static water level goes below 200 feet my pump will likely fail. Recommend that more research is done in western Tehama County in the Rancho Tehama, Thomes Creek area. There is currently little water level monitoring in this area by DWR. Would like to see this area as a candidate for a new water level monitoring location and potentially a multi-completion well so that these thresholds could be set with some more confidence. Recommend planning project and management mitigation measures now. We know that groundwater level is falling. We didn't have a lot of agricultural pumping in the 70's and the land use was entirely different. Mr. Lester's point is well taken.
 - Lisa Porta – I thought I heard from the Board that they don't want to go below the current groundwater levels. You describe a water level monitoring data gap that will be included in the GSP.
- Ryan Teubert – DWR did get through the first round of applications for adding groundwater level monitoring wells. DWR has identified Corning and Red Bluff Subbasins as potential locations for multi-completion wells.
 - Matt Hansen – Appreciate what Ryan said about the potential locations for new multi-completion wells.
- Lisa Porta – In answer to Matt Hansen's earlier comment about the GSA boundaries and Thomes Creek, though DWR has identified two different subbasins on either side of Thomes Creek, the same GSA is managing both the subbasins. There is also interbasin coordination between GSAs. We will not be able to modify this boundary at this point, but we can make sure that MTs and MOs are similar on both sides of the Creek.

7. Start Discussion on Potential Projects and Management Actions

Geographic distribution of potential projects and general thoughts on Management Actions

Lisa Porta reviewed potential project ideas (see slide 36). Projects and management actions were referenced in various published groundwater and agricultural management plans, scientific studies, public presentations, etc. Ideas in the past for the Subbasin include groundwater recharge using unused surface water allocation, retrofits to use surface water for drip irrigation, flood control/gw recharge projects, levee setback/restoration projects that increase groundwater recharge, urban water efficiency, and deepening of domestic wells.

Discussion and feedback from Staff, CSAB, and Public

- Ryan Teubert – Recommends reviewing the groundwater recharge report. There may be some areas that were identified for groundwater recharge using surface water. Winter flood flows could be put into the Corning Canal to recharge shallow groundwater basins.

- Lisa Porta – that is kind of encompassed in project idea #3 and is tied to flood control and groundwater recharge.
- David Lester – Recommends picking up winter water flowing from the east side into the Corning Canal and conveying it down the westside. The USBR does not allow for easy transfer of water in this portion of the valley. If we can't utilize the available surface water for recharge water then what good is it? The City of Corning wastewater treatment plant discharges 1,000 gallons/minute of water to the Sacramento River. It is clean and treated water. There are 40 acres of parks that could be irrigated with this treated water rather than pumping groundwater. Besides financing there are a lot of bureaucratic restrictions in this area that impede projects.
 - Lisa Porta – I think that getting these projects published in the GSP will help put pressure on USBR, DWR, Counties, Cities to implement projects and management actions that allows the subbasin to be sustainable. Lots of other subbasins have these same issues. GSPs may create the pressure needed to get the issues to be addressed. City of Corning urban water use efficiency is on our list, but good to get these specific ideas.
 - This wastewater treatment idea is related to the urban water efficiency ideas encompassed by project idea #5.
- Ryan Teubert - If these projects are identified in the GSP, that allows the GSAs to push on DWR.
- Ian Turnbull - Recommends reviewing the 2010 Brown & Caldwell study on recharge in the south Subbasin using surface water recharge. They found it was prohibitively expensive due to bureaucratic charges rather than cost to recharge water. This backs up what David Lester is saying. In addition, when you get in the southern part of the subbasin around the Stony Creek fan, the results showed that you could recharge but the water flowed right back into the Sacramento River.
- John Viegas - I concur with David Lester and Ian Turnbull. I am familiar with the Orland Water Users' ongoing negotiations with USBR. How do we get the federal government involved to support us to get the water we need for sustainable groundwater management?

Public Comment

- There was no public comment at this time.

7. Next Steps

Action Items

Lisa Porta reviewed action items for the next CSAB meeting: November 4, 2020. Next month will give an update on model revisions. Will return to water budgets and future water use projections with climate change assumptions.

8. Adjourn

Julie Leimbach thanked Lisa Porta, CSAB members, and the public for participating in this great discussion and adjourned the meeting at 3:30 PM.

Meeting Participants

CSAB Members

- Lisa Hunter, Corning Sub-basin GSA
- Julia Violich, Corning Sub-basin GSA

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

Other Participants

- Allan Fulton, Member of the Public
- Brandon Davison, DWR Northern Region
- Bridget Gibbons, CDFW
- Byron Clark, Davids Engineering (and member of Corning Subbasin GSP consultant team)
- Holly Dawley, GCID
- Jaime Lely, Landowner
- Jenna Ganoung, USDA
- Jake Sahl, The Nature Conservancy
- Ryan Teubert, Tehama County Flood Control and Water Conservation District (Manager)
- Leros Lane, Member of the public
- Matt Brady, SVF Nuts
- Matt Hansen, Private Pumper, Thomes Creek
- Michael Ward, Member of the public
- Nichole Betherum, Tehama County Flood Control and Water Conservation District
- Tia Branton, Tehama County Environmental Health
- Todd Turley, Landowner, Grower Deseret Farms
- Will Halligan, LSCE GSP Consultant for Tehama County FCD

Consultants and Project Team

- Julie Leimbach, Kearns & West
- Rafael Silberblatt, Kearns & West
- Lisa Porta, Montgomery & Associates
- Pete Dennehy, Montgomery & Associates