

## Corning Subbasin Advisory Board

May 5, 2021, 1:30 – 4:30 pm

### Meeting #13 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/133826541>

Telephone: +1 (312) 757-3121

Meeting Access Code: 133-826-541

## 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 (CSGSA)

- ✓ Brian Mori
- ✓ Grant Carmon
- ✓ Julia Violich

### Agenda Review, Review of Groundrules

Ms. Leimbach welcomed meeting participants to the May 2021 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

Grant Carmon made the motion: *The CSAB approves the CSAB April Meeting Summary*. Brian Mori seconded the motion. Ms. Leimbach opened public comment on the motion.

Public comment on meeting summary

- Tamara Williams (Ms. Williams), Landowner – I want my comments on the GSP sections to be recorded. I expected my comments that I submitted by email to be attached to last month’s CSAB meeting summary and in that way applied to the record.
  - Lisa Porta (Ms. Porta) – All written comments we receive will be attached to the GSP.
  - Ms. Williams – I was hoping that the comments would be put in front of the CSAB before the GSP is completed. My intent was to share them with this larger group.

Ms. Leimbach opened Board discussion on this motion. Hearing no comments from the CSAB members, she called a vote.

Vote:

TCFCWCD

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

CSGSA

- Grant Carmon – Aye
- Julia Violich – Aye
- Brian Mori – Aye

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

### 4. GSA Updates

Mr. Teubert and Ms. Hunter reported to the CSAB on the TCFCWCD and CSGSA, respectively.

TCFCWCD

- In our last meeting, our Board approved the GSP development timeline.
- The Commission is considering a letter to request an extension of the deadline to submit the GSP.
- We are continuing to develop sustainable management criteria for four basins in Tehama County.

CSGSA

- On April 14, the CSGSA continued discussions regarding the activities occurring at the CSAB meetings for GSP development.

Interbasin Coordination

- Montgomery & Associates (M&A) continued interbasin coordination with Tehama County GSPs to the north, regarding modeling and Data Management System (DMS) development.

- M&A continued interbasin coordination with technical teams throughout the Northern Sacramento Valley coordinating on Sustainable Management Criteria (SMC) and Groundwater Dependent Ecosystem (GDEs) for groundwater basins along the Sacramento River.

## 5. Water Quality Sustainable Management Criteria (SMC)

### Review GSP Regulations, Subbasin Conditions, SMC Approaches

Ms. Porta reviewed the GSP regulations on the water quality SMC and Corning Subbasin Groundwater Quality in terms of constituents of concern (COC), beneficial uses, and monitoring locations. She then shared an assessment of water quality monitoring in the basin including the data available on arsenic, nitrate and Total Dissolved Solids (TDS). She made the following points:

- SGMA is primarily concerned with the management of groundwater quantity; however, GSP projects and actions must not degrade current groundwater quality (i.e. not make it worse than 2015).
- There is adequate existing monitoring in the Corning Subbasin to meet the GSA's water quality monitoring needs. The proposed approach is to rely on the existing monitoring network.
- Data shows that arsenic and nitrate have been detected in the Corning Subbasin and may be considered COCs in the Subbasin (as described in the Groundwater Conditions section of the GSP).
- There are not many contaminant plumes in the Corning Subbasin (the maps showing existing contamination sites are provided in the Groundwater Conditions Section of the GSP).
- There are three different metrics that can be used to develop water quality degradation SMC; the GSP team recommends using the metric defined as: Number of Supply Wells that Exceed Concentrations of Applicable COCs.

### CSAB Discussion

The CSAB members asked Ms. Porta clarifying questions about the proposed approach. These are the outcomes of the clarifications, technical team recommendations, and CSAB recommendations.

### Monitoring Network and Assessing Cause

- Assessing Cause of Water Quality Degradation
  - The GSP will note the approach for monitoring water quality but will not include specific evaluation which will have to be developed on a case-by-case basis. Identification and evaluation of an exceedance for water quality and if it is due to GSP implementation is one of the big challenges with SGMA.
  - Each case will need to be analyzed individually. If the GSA has not done a project in the area, it is reasonable to say that the GSA did not cause any of the observed water quality degradation.
  - If GSA does have a project in the area, then the exceedance might require an analysis to evaluate if the GSP implementation caused that exceedance.
  - It will be important to cultivate a relationship and coordinate on data with the entities conducting water quality monitoring.
  - Staff requested distribution of the map of the contaminant plumes. M&A is also planning to include the map of contaminant plumes in the GSP Water Quality section.

- Monitoring Network
  - The GSA can use existing monitoring wells to evaluate water quality. The monitoring network includes supply wells, not observation wells.
  - A significant and unreasonable effect will be triggered when contamination is identified at a supply well in the monitoring network.
  - CSAB raised concern that nitrates could be a localized problem and we should not allow it to define the quality in the surrounding area.
  - The observation wells indicating nitrate detection are not supply wells and will not be used as part of the monitoring wells.
- Reference Water Quality and Monitoring Networks
  - Water Quality in the Corning Subbasin is similar to other nearby subbasins and better than many basins in the state.

#### Setting Sustainable Management Criteria

- Purpose for regulatory standard and consistency with adjacent basins regulatory standards
  - CSAB expressed interest in setting the same regulatory standards as adjacent basins.
  - The proposed approach is not necessarily more strict than adjacent basins.
- Differences between proposed approach for Corning Subbasin and adjacent basins
  - Corning Subbasin is considering looking at constituents of concern including TDS, arsenic and nitrate because they have been identified in the basin and are described in the Groundwater Conditions section of the GSP.
  - In adjacent basins, they are only using TDS as a proxy for all water quality and a different approach to the monitoring network is used.
  - However, this approach used by other basins might not be fully in compliance with GSP regulations.
- Similarities between proposed approach for Corning Subbasin and adjacent basins
  - Approaches use the same Maximum Contaminant Level (MCL) to set MTs
- Monitoring Network Data Availability
  - Irrigated Lands Regulatory Program (IRLP) will be requiring all domestic wells within agricultural lands to report nitrate concentrations starting in 2022. Corning Subbasin does not want to be redundant.
  - Use of existing monitoring networks does not require any additional monitoring.
  - Concern was raised by CSAB that if the GSA is using multiple existing monitoring programs and those programs change, the GSA would need to find another way to meet their monitoring needs.
  - The GSA would need to reassess every so often to adapt the monitoring network, which will need to occur for all monitoring networks for each of the Sustainability Indicators, as the GSP implementation progresses.
  - Other basins are also using existing monitoring networks.
  - Individual Board members expressed concern about the relying on external monitoring networks for the timely and continued availability and access of monitoring data.
  - M&A found that the State Board's 2020 monitoring data for all the wells became available in February and March of 2021. Based on this timeline, the data would be available for your GSA Annual Report due in April. Some wells are monitored more than once per year and that data

may be available at other times. An average or one data point per year per well is adequate to evaluate water quality.

- Scope of Monitoring
  - Individual Board members expressed concern about unnecessarily widening scope on water quality. Arsenic and nitrate are out of the GSA's control. Does this put the burden on the GSA to prove that the GSA management actions and projects did not have a negative impact on water quality?
  - The GSP regulations require the identification of any COCs, and the development of related SMC for monitoring of GSP implementation.
- New Nitrate Datasets
  - CSAB comment: With the new nitrate domestic well monitoring program, there will be a huge dataset available. The likelihood of two monitoring points exceeding the limit on nitrate is high.

#### Additional M&A Technical Input

- There is no right or wrong approach to monitoring. The monitoring network should be the most appropriate one for the basin's needs.
- Given M&A's current water quality assessment, nitrate and arsenic are potentially COCs in the subbasin. The proposed approach is that the GSA evaluate whether the projects are not degrading the water quality in a way that mobilizes arsenic and nitrate. TDS has no relationship to arsenic or nitrates or other potential problems with the other constituents. If we reach an understanding that arsenic and nitrate are not a concern, we could remove them from the GSP Groundwater Conditions section.

#### CSAB Recommendations

Individual Board members suggested the following recommendations:

- This draft statement is really broad brush; we need to get more specific. Recommend adding MCL to the statement.
- Focus water quality SMC on TDS only.
- Eliminate arsenic and nitrate from the GSP; it is unnecessary to include them. We are tasked by SGMA with defining quantity not quality.
- Change the MT to a percentage that can account for a larger dataset moving forward (instead of a number of exceedances).
- Rely on the separate ILRP program monitoring nitrate.
- Dataset to include the supply wells should include those that are being monitored frequently and not just at individual points in time. Want to support integration of more data in the future.

#### Public Comment

- Ms. Williams – I like where things are headed now. I was concerned about getting this Plan involved in too many water quality issues. That is not really part of the primary subbasin objectives. The main thing is to make sure we are looking at potential water quality impacts at the time that we have a project not just based on the status quo but if we were to install a recharge basin. I assume there would be project specific water quality monitoring. I recommend keeping it simple. My question is what happens if we exceed a minimum threshold? Is there a fine? What is the implication?
  - Ms. Porta – It is not the minimum threshold but rather the undesirable results that would trigger action. Each project will need to include their own monitoring program per permitting

requirements and to track if they help reach sustainability. The reason to monitor the supply wells is because those are the ones we are trying to protect.

- Holly Reimers - Is there any monitoring of the current status of the wells in the area that are starting to go dry?
  - Ryan Teubert – Invited reporting in the following manners:
    - Report dry wells locally with him at [rteubert@tcpw.ca.gov](mailto:rteubert@tcpw.ca.gov) or 530-3851462 x3020
    - Submit a dry well reporting form on [tehamacountywater.org](http://tehamacountywater.org). Go to groundwater tab, then groundwater resources button.
  - Brandon Davison, DWR referred stakeholders to the following website for more information:  
<https://mydrywatersupply.water.ca.gov/report/>

## 6. Streamflow Depletion SMC

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

Ms. Porta presented on Interconnected Surface Water and Groundwater Conditions, Groundwater Dependent Ecosystems, general SMC approaches, and draft Significant and Unreasonable Conditions Statements. Highlights include:

- Modeling results helped us identify streams that are interconnected with groundwater, and which reaches are losing or gaining.
  - Sacramento River is fully connected to groundwater and mostly gaining water from groundwater.
  - Thomes Creek is mostly disconnected from groundwater and mostly losing water to groundwater.
  - Stony Creek is likely partially or seasonally connected to groundwater and may gain or lose water depending on water year type and seasons.
  - Ephemeral streams are likely disconnected from groundwater.
- A new shallow groundwater monitoring network near the streams to better characterize streamflow depletion and for GDEs could be helpful.
- Two stream gauges can help us identify changes in flow upstream and downstream of the Subbasin.
- Separating the effects of the Corning Subbasin on the streamflows is very challenging because the major streams in the Subbasin are boundaries with neighboring subbasins.
- GSP Regulations allow for the use of groundwater elevations as a proxy for streamflow depletion SMC, instead of calculating volume or rate of surface water depletion if a correlation can be identified.
- M&A recommends development of Significant and Unreasonable Conditions Statements that are different for each major stream, to reflect unique characteristics and incorporate main information, as discussed at the February CSAB meeting. These statements incorporate CSAB input.

## CSAB Discussion on General Statement on Significant and Unreasonable Conditions on Streamflow Depletion SMC

Individual Board members stated that they supported the approach as outlined by M&A. One Board member recognized and appreciated that M&A had incorporated input from the conversations from February into these draft statements.

### Questions & Clarifications:

- Consider how the GSA will evaluate potential causes of depletion of surface water between pumping or incidental impact. Stony Creek was used as an example.
  - Ms. Porta – Detailed modeling can be used to evaluate the cause of depletion of surface water. The modeling could help distinguish which basin is being affected – Colusa and/or Corning Subbasin; that would require additional coordination and refinement of the modeling tools. Stony Creek is adjudicated but the water rights are upstream from the pumping locations.

### Additional M&A Technical Input

- GDEs
  - The GSA will keep most GDE areas as shown in the NCCAG polygons and that are associated with shallow groundwater levels, categorized as "potential GDEs" in the GSP, to not remove them from the GSP until better data is available (for example, in the Burch Creek area). In response to CSAB member comment, M&A can make a general recommendation that Burch Creek be excluded from GDEs because it is more a case of flood flows supported habitat rather than habitat that the GSA has the authority to protect due to shallow groundwater. M&A can include an assessment of existing information on the Burch Creek Area in the GSP. The window of opportunity is still open for providing that recommendation on Burch Creek to M&A.
  - Suggested setting a framework for streamflow depletion SMC, even if we cannot develop specific quantitative metrics for SMC at this point because of lack of data, instead of completely taking it out as a "data gap". The GSP could include the Groundwater level SMC as an interim starting point (similar to other neighboring subbasins).

### CSAB Recommendations

- Support for the approach outlined for the surface water depletion SMC.
- Recommend developing a broader statement that is even more general than the current set of draft statements for comparison. (See slides 35 and 36)
- Support intent that the statement reflects that Corning Subbasin GSA does not have the ability to significantly impact the streamflow depletion of the Sacramento River, which is controlled primarily by reservoir management and surface water diversions upstream.
- In the Approach to MTs, MOs and URs, include a definition of "near" in the statement. Near should be less than 1 mile in which there is connection to surface water. (See Slide 37: Approach to MTs, MOs, and URs; second bullet)
- Recommend being careful about defining pumping from groundwater versus pumping that depletes surface water. For example, Scott River growers must report groundwater pumping proximal to the river 1 mile away; the pumping is categorized as a diversion from the Sacramento River.
- Recommendations related to GDEs

- Recommend eliminating the word “potential” and replace with “existing” and “current”. Anything could be a potential GDE; we should focus on the GDEs that exist.
- Recommend exploring ways for Burch Creek to be excluded from GDE list because identifying Burch Creek as a GDE is overreaching; it should not be a GDE.
- Recommendations related to Groundwater Levels SMC
  - Suggest being consistent with the groundwater Levels SMC because there is not a lot of data on shallow wells and the influence they have.

#### Public Comment

- Ms. Williams, Landowner – Be cautious about prematurely dismissing GDEs early considering The Nature Conservancy ICON map does not include cause and effect for effects on GDEs.
  - Recommend managing Arundo removal as an invasive species now and not delaying until later.
  - Recommend including the small tributaries as GDEs but not promising any action around them. Be careful not to eliminate those small tributaries commonly associated with groundwater (See Slide 29).
  - Recommend considering that incidental pumping of shallow groundwater around these areas can shorten the viability of natural habitat.
  - Recommend using a different measurement other than percentage for undesirable results for water levels because the monitoring network is sparse and not consistent. (See slide 37).
  - Support the use of groundwater level SMC as a proxy for the groundwater depletion SMC.

## 7. Projects and Management Actions

### Review Initial Options on Potential Projects and Management Actions to Maintain Groundwater Sustainability

Ms. Porta reviewed a list of 12 specific projects, which M&A developed by integrating the CSAB’s input from its last discussion on projects. She presented model results on the project category including projects to maximize available surface water use and conjunctive use.

#### CSAB Discussion

Individual Board members made the following comments and requests:

- Confirmed that the GSP will include projects to deepen wells or build new wells especially for owners of shallow wells will be part of the project portfolio. These types of projects are being pursued in other basins and there may be funding available.
- Request to include the map of water available for recharge from State Board for identification of potential groundwater recharge projects in the GSP section.
- Request to clarify the note in the text in the slide presentation describing the model results.
  - The clarification would include a note that the objective of the projected model simulation is to assess the cumulative effect. The objective is to assess if the change to surface water use over multiple water years resulted in positive benefits to groundwater in a dry year type.
- Request for the GSP to address the need for cooperation between Reclamation and DWR to allow users to do groundwater recharge projects through the canals.

- Request to add a discussion of the cost implication of using surface water versus groundwater in the districts; the districts cannot afford to subsidize the application of surface water for the growers to use surface water over groundwater.

#### Public Comment

- Ms. Williams, Landowner made the following recommendations and comments:
  - Recommend clarifying the term “priority projects” which seems to imply the projects are prioritized. Are the projects prioritized?
    - Ms. Porta - Projects are listed from higher to lower readiness for project implementation.
  - Recommend including a general caveat acknowledging that upcoming changes in California water rights law could affect pricing and availability of water for irrigation and recharge.
  - Appreciates the use of model results.
- Susan Silveira, Landowner
  - Requested clarification of terms used to describe categories for projects and management actions.
    - Ms. Porta: supply augmentation refers to projects such as groundwater recharge that makes more water available to use other than the groundwater that is there. Demand management has to do with reducing the water demand to reduce water use. The projects in this category aim at agricultural water practices to reduce demand.
  - Asked whether NRCS would lead projects related to demand side water management?
    - Ms. Porta – Good point, we can add a recommendation for collaboration with NRCS. The GSA’s role is to bring the pieces together but most of the work is going to be done by multiple entities.
  - How are we going to finance these projects?
    - Ms. Porta – We will address project financing in an upcoming meeting.

## 9. Next Steps

### 2021 CSAB meeting schedule

Ms. Porta reviewed the next steps including:

- Upcoming Groundwater Level SMC Special Meeting on 5/6 at 6pm with in-person and virtual meeting formats.

Action item:

- M&A will add the slide on local and DWR reporting on dry wells to the next presentation to the CSAB.
- M&A will incorporate Board recommendations and suggestions in future drafts.

## 8. Adjourn

Ms. Leimbach thanked Ms. Porta, CSAB members, and the public for participating in this great discussion and adjourned the meeting at 4:15 PM.

## Meeting Participants

### CSAB Members

- Julia Violich, Corning Sub-basin GSA
- Brian Mori, Corning Sub-basin GSA
- Grant Carmon, 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, Private Pumper, Supervisorial District 5 Representative)
- Bob Williams, Tehama County Flood Control and Water Conservation District (Board Member)

### CSAB Alternates

- Ian Turnbull (Alternate), Tehama County Flood Control and Water Conservation District (TAC Member)

### Other Participants

- Brandon Davison, DWR Northern Region
- Erin Smith, DWR Northern Region
- Hal Crain, Tehama County Groundwater Commission, Surface Water Agencies or Districts, Supervisorial District 4 Representative
- Holly Dawley, GCID
- Holly Reimers, Landowner
- Jaime Lely, Landowner
- John McHugh, LSCE
- Kristina Miller, City of Corning and Tehama County Groundwater Commission, City of Corning Representative
- Lisa Hunter, Glenn County Water Resource Coordinator
- Matt Hansen, Landowner
- Michael Ward, Landowner
- Rick Rogers, NMFS
- Ryan Teubert, Tehama County Flood Control and Water Conservation District (Manager)
- Susan Silveira, Landowner
- Tamara Williams, Landowner
- Tania Carlone, Consensus Building Institute
- Todd Hamer, Tehama County Groundwater Commission, Vice Chairperson, Los Molinos Community Services District

### Consultants and Project Team

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