

Corning Subbasin Advisory Board

July 1, 2020, 1:30 – 3:30 pm

Meeting #3 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/374316397>

Telephone: +1 (646) 749-3112

Meeting Access Code: 374-316-397

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
- ✓ Ian Turnbull (Alternate)

Corning Sub-basin GSA

- ✓ John Viegas
- ✓ Lisa Hunter

Agenda Review, Review of Groundrules

Ms. Leimbach welcomed meeting participants to the third CSAB meeting.

Ms. Leimbach informed participants that during each workshop session, CSAB members and staff may ask clarifying questions and discuss issues with the presenter. She reviewed the groundrules and stated that public comment will be taken at the end of each agenda item. She noted that alternate board members speak during public comment unless serving as board members. She added that only verbal public comments will be included in the meeting summary, and the webinar chat box should only be used for more informal conversation and technical assistance.

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 June Meeting Summary*. Bob Williams (Mr. Williams) seconded the motion. Ms. Leimbach opened discussion and hearing no discussion, called a vote.

Roll call vote:

Tehama County Flood Control and Water Conservation district (TCFCWCD)

- Bob Williams – Aye
- David Lester – Aye
- Ian Turnbull (Alternate) – Aye

Corning Sub-basin GSA

- John Viegas – Aye
- Lisa Hunter – Aye

The Board unanimously approved the motion with a 5-0 vote.

4. CSAB Governance

Ms. Leimbach stated that the CSAB may choose to elect a chairperson, who would lead CSAB meetings and potentially plan board meetings and provide feedback to the CSAB management team. Ryan Teubert (Mr. Teubert) stated that another option is to proceed without a chairperson and continue to have one of the consultant team members lead board meetings.

CSAB Discussion

Present Board members all commented that the CSAB does not need a chairperson at this time. Hearing no further discussion from the Board, Ms. Leimbach opened the floor for public comment.

Public Comment

There was no public comment at this time.

5. Workshop Session: Current and Historical Draft Water Budgets

Ms. Porta (technical expert) reviewed action items from the June 3rd CSAB meeting, followed by an introduction to water budgets and management areas.

Plan Area: Action Items and Clarifications

Ms. Porta said the water source map is still being updated. She reviewed the recent updates to the Water Districts Map and highlighted the following changes:

- Capay Rancho Water District has been removed from the map.
- Monroeville Water District joined the Corning Sub-basin GSA and has been added to the map.

Hydrogeologic Conceptual Model: Clarifications on Principal Aquifer Designation

Ms. Porta reviewed the hydrogeologic conceptual model (HCM) and highlighted the following:

- The principal aquifer designation helps to identify how the vertical part of the basin is managed. The technical team recommends designating one Principal Aquifer for the Corning Subbasin GSP, recognizing that water flows freely between vertical geologic units.

- The Yuba Subbasins GSP and the Eastern San Joaquin Subbasin GSP have designated one principal aquifer, which has interactions between geologic units similar to the patterns found in the Corning Subbasin.
- The Merced Subbasin GSP is an example where multiple principal aquifers have been identified based on the separations created by the confining Corcoran Clay layer.

Workshop Session Discussion (CSAB, Staff, Technical Expert)

Board members discussed the following:

- The model will show inflows and outflows in multiple water production zones by using different parameters based on the geology of different production zones. Water will flow freely between these zones (there are no vertical flow restrictions between them).
- There is concern about localized shallow restrictions to flow in the Stony Creek aquifer unit. There is flow between some units, but it is not completely unrestricted.
- Technical expert mentioned that we have to remember that it [flow restriction] is localized, and not a subbasin-wide occurrence, and thus water still will be able to flow through different vertical units.

C2VSim Model Revisions

Ms. Porta reviewed the Board decision in June to use the C2VSim-FG model, version 1. She reviewed model features and revisions of the Beta version that will be transferred to the new modeling platform once it is released by the end of July:

- The C2VSim-FG modeling platform covers the entire Central Valley. The technical team has split up the northern part of the Sacramento Valley so that the model extent will cover only the area in and around the Corning Subbasin (between approximately Maxwell all the way to the Redding Basin). This allows the model to run faster and the technical team can focus on revisions closer to the area of interest. This model is referred to as the “NorthSac Submodel”.
- Initial refinements include surface water delivery areas and delivery volumes, groundwater pumping depths within the Corning Subbasin, detailed historical urban water usage for the City of Corning and Hamilton City, a simulated lake feature to replace the boundary condition representing Black Butte Lake, adding all available observation wells, and other adjustments to hydrogeologic model parameters to align with historical observations.
- The simulated boundary conditions map includes canals leakage as potential recharge areas.
- The diversions and deliveries map shows how the model simulates processes for surface water use in the Subbasin.
- This model includes two diversion points on the Sacramento River for project water (Corning Canal and Tehama-Colusa Canal, and Glenn-Colusa Canal) and riparian water rights diversions on the Sacramento River, Thomes Creek, and Stony Creek).

Ongoing modeling tasks include comparing model input data to compiled local information, identifying and implementing model revisions, documenting model changes, running the model to check outputs and recalibrate, and developing draft historical and current water budgets for review.

Workshop Session Discussion (CSAB, Staff, Technical Expert)

CSAB board members and staff discussed the following:

- “Thomes” is pronounced “Thomas” and the diversions and deliveries map (formerly titled Well as Water Districts Map) needs to be updated for Thomes Creek Irrigation District boundaries; Bob Williams will provide the revised boundary to the technical team.
- The mapped diversion point on Thomes Creek represents all riparian diverters in a single time series, not just one diversion point. This map represents the combined riparian diversions on Thomas Creek, which is not necessarily associated with the Thomes Creek Irrigation District ditch.
- The technical team will follow up on the Thomes Creek Water District boundaries and update the model as appropriate.
- The NorthSac Submodel southern boundaries cut the Colusa Subbasin in half; this will not matter as long as there is enough of a buffer south of the southern border (Stony Creek). We are able to compare these simulated changes with the Colusa Subbasin modeled water budget.

Water Budgets in GSPs

Ms. Porta introduced the guidelines for water budgets as laid out by the GSP Regulations and the SGMA Water Budget Best Management Practices document, highlighting that the GSP water budget will include:

- Three subbasin-wide water budgets for historical conditions, current conditions, and projected conditions.
- Interactions between surface water and groundwater systems.
- Difference between inflows and outflows, which could vary seasonally, change over time, or vary in different areas of the basin.

Workshop Session Discussion (CSAB, Staff, Technical Expert)

There were no questions or comments from the Board at this time.

Corning Subbasin Draft Water Budgets

Ms. Porta described the Corning Subbasin Draft Water Budgets, highlighting the following:

- The presented initial water budget graphs are draft, and will be refined as the model is revised with more accurate local data and calibration is verified.
- The information presented is for conceptual purposes and to start understanding how the model simulates hydrologic processes in the Subbasin and if they generally follow observations.
- Based on the preliminary draft historical water budget results, the Corning Subbasin is not currently in overdraft. The draft historical groundwater budget shows that the budget has historically been fairly balanced. However, groundwater reserves have been depleting over the last 15 years or so, as observed in decreasing groundwater levels in some parts of the Subbasin.
- Pumping increases in dry years and is not as prominent in wet years due to stream recharge and availability of surface water supply.
- The draft land surface budget graph shows that agricultural groundwater pumping has increased over the last few years due to the drought.

The projected future water budget is what the GSP uses to evaluate and define the sustainable yield of the Subbasin.

Workshop Session Discussion (CSAB, Staff, Technical Expert)

CSAB Board members and staff discussed the following:

- Quantities for inflows and outflows estimations are based on the model by applying precipitation, stream flows from gauges, and agricultural wells spread over the areas where crops exist. Crop demands are used to calculate how much pumping is required.
- SGMA requires that water budgets be developed for the entire Subbasin. However, we are able to use the model to estimate water budgets for smaller subareas within the model. The more regional the model, the less accurate the data, so we do not recommend going into too much detail using this regional model, to reduce data uncertainty for subarea water budgets. Therefore, the draft historical water budget will not show very detailed differences within the basin. However, at a larger scale, we are thinking about ways to compare overall water budgets for the portions of the Subbasin within Glenn and Tehama Counties.
- Inclusion of data in the model beyond 2015 is not likely to be possible in the timeframe for the first GSP but could be incorporated in the future (during 5-year GSP Update).

6. Workshop Session: Overview of Management Areas

Ms. Porta provided an introduction to management areas including pros and cons. The designation of management areas may introduce an additional layer of unnecessary and costly work if not deemed useful for the purpose of developing the GSP. She described that, for the most part, GSAs can manage distinct objectives in different parts of the basin without designating formal management areas. Ms. Porta recommended that the CSAB review the need for formal management areas during the development of sustainable management criteria, which will be a topic for the CSAB in a future meeting.

Workshop Session Discussion (CSAB, Staff, Technical Expert)

Board members and staff expressed the following interests:

- Interest in meeting sustainability goals for the east and west side.
- Interest in managing the “west side” of the basin differently from the valley floor (“east side”) to reflect their economic and hydrologic differences.
- Interest in flexibility in management structure and timing that supports distinct management approaches for the west and east sides of the basin, appropriate to their distinct hydrology.
- Interest in updating the management areas, as needed to adapt as data comes available and distinct management needs arise.
- Interest in identifying whether we need management areas to focus on a ‘problem area’ and develop specific projects and actions such groundwater recharge projects.

Areas of potential investigation:

- Investigate SGMA requirements for establishment and changes to a management area at or before the five-year GSP update.
- Define the potential management boundary between east and west side. Use the model to help delineate the east and west sides of the basin based on hydrology. Consider if there is adequate data to delineate this boundary.

Options for distinct management of east and west sides of the Corning Subbasin:

- Use monitoring networks as a basis for defining locations of distinct groundwater management instead of defining a formal management area. Use the radius around representative monitoring points to define areas for application of distinct management actions and measurable impacts.
- If appropriate under SGMA, define a management area for the west side, in the 5-year update or some future time, as needed and if permitted by DWR.

Public Comment

- Jaime Lely (Ms. Lely) introduced herself as a west side landowner and stated that she hopes there will not be extra management on the “west side”. She noted that the “west side” landowners have limited ability to support the fees and limited quality and quantity of water. She added that the valley (“east side”) has the resources to support the “west side” and asked if the funding and fees issues can be addressed in the future without designating a management area.
 - Ms. Porta: Fees can be set up in different ways and do not have to depend on designated management areas. There will be opportunities to set up a robust structure for management in the future.

7. Next Steps

Ms. Leimbach reviewed the following action items:

1. M&A – Review Stony Creek Fan unique hydrogeology and recharge challenges while continuing to gather data and work on model.
2. M&A – Investigate Thomes Creek Irrigation District diversion and revise the Water District Map boundaries and diversions as appropriate, with input to be provided by Bob Williams.
3. M&A - 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.

Mr. Teubert stated that CSAB staff are considering when to convene in-person meetings in the future. He noted that CSAB meetings will remain virtual for the time being.

8. Adjourn

Ms. Leimbach noted that the end of the agenda has a schedule of topics and objectives, which will be updated for each future meeting. Hearing no further comments from Board members, staff, or the public, she adjourned the meeting at 3:27 p.m.

Meeting Participants

CSAB Members

- Lisa Hunter, Corning Sub-basin GSA
- John Viegas, 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)
- Ian Turnbull (Alternate), Tehama County Flood Control and Water Conservation District (TAC Member)

Other Participants

- Nichole Bethurem, Tehama County Flood Control and Water Conservation District
- Thad Bettner, GCID
- Bernadette Boyle, LSCE
- Christina Buck, Butte County
- Brandon Davison, DWR Northern Region
- Todd Hamer, Tehama County Groundwater Commission
- Jaime Lely, Landowner
- Dana Pressley, Landowner
- Jeffrey Rabo
- Sharla Stockton, Glenn County
- Eddy Teasdale, LSCE
- Ryan Teubert, Tehama County Flood Control and Water Conservation District (Manager)
- Todd Turley, Landowner

Consultants and Project Team

- Julie Leimbach, Kearns & West
- Lisa Porta, Montgomery & Associates
- Aly Scurlock, Kearns & West
- Patrick Wickham, Montgomery & Associates
- Charles Brush, Hydrolytics LLC (part of Montgomery & Associates Team)
- Byron Clark, Davids Engineering (part of Montgomery & Associates Team)