

Corning Subbasin Advisory Board

February 3, 2021, 1:30 – 3:30 pm

Meeting #10 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/166919421>

Telephone: +1 (571) 317-3122

Meeting Access Code: 166-919-421

1. Welcome and Introductions

At 1:30 p.m., Rafael Silberblatt, 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)

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

Alternate:

- ✓ Ian Turnbull

Corning Sub-basin GSA

- ✓ Lisa Hunter
- ✓ Julia Violich

Alternate:

- ✓ John Amaro

Agenda Review, Review of Groundrules

Rafael Silberblatt welcomed meeting participants to the tenth CSAB meeting. He reviewed the agenda and reminded attendees that CSAB meetings follow Brown Act guidelines. He 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

- Michael Ward - Are you considering delineating areas for Stony Creek and Thomes Creek since these areas aren't representative of the basin as a whole? These two creeks have been identified as part of the Chinook Recovery Plan, are you considering making them distinct management areas?
 - Lisa Hunter - We have yet to begin addressing management areas and so have not considered designating these creeks as distinct management areas.
- Matt Hansen - It would be helpful to have a common set of guidelines related to the management areas.
 - Lisa Porta - We'll be discussing management areas at a future meeting.

3. Action Item: Approval of the Meeting Summary

Rafael noted the following correction to be made to the Draft Meeting Summary for Meeting #9:

- Re: Agenda Item 5, Tamara Williams' comment, 2nd bullet (top of pg. 5) - change the word "build" to "drill" so that the sentence reads "Concerned that someone could *drill* a much deeper well..."

Bob Williams made the motion: *The CSAB approves the CSAB January Meeting Summary incorporating the noted edit.* John Amaro seconded the motion. Mr. Silberblatt opened discussion on this motion. Hearing no comments from CSAB board members, he called a vote.

Roll call vote:

Tehama County Flood Control and Water Conservation District (TCFCWCD)

- David Lester – Aye
- Bob Williams – Aye
- Steven Gruenwald - 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 to the CSAB on the TCFCWCD and Corning Sub-basin GSA (CSGSA) activities, respectively.

Tehama County GSA (Ryan Teubert)

- TCFCWCD continues to make progress on GSP sections for other subbasins
- Basin Settings will be shared after the meeting on February 24
- Hydrogeologic Conceptual Model should be available for the March 24 meeting

- The groundwater model should be calibrated by the end of February
- There will be a public outreach event in April that will cover Chapter Two

Corning Sub-basin GSA (Lisa Hunter)

- CSGSA met January 13, and received presentations from The Nature Conservancy (TNC) and Department of Water Resources (DWR) regarding multi-benefit recharge pilot projects as well as an update regarding interbasin coordination efforts.
- There are vacancies on the Glenn County membership to the GSA that we hope to have filled by the next meeting (which should in turn help to fill the CSAB vacancy)
- The Outreach team met to develop approaches to outreach and engagement
- The DWR Technical Support Services (TSS) team will be mobilizing and drilling a new monitoring well this week

Interbasin Coordination (Lisa Porta)

- Coordination is underway with other Subbasin technical teams to the east focused on modeling and GSP updates
- Coordination with GSP teams to the south is focused on subsidence issues
- Coordination with GSP teams to the north is focused on SMCs projects and management actions, and GDEs along Thomes Creek
- There is an upcoming regional interbasin coordination meeting early March

5. Review Status and Path Forward on GSP Development

Lisa Porta provided an overview of GSP work completed to date and on the horizon. She also provided a reminder regarding what falls under the purview of a GSP, sustainability goals and indicators, some findings related to groundwater concerns or protection needs and trends in water level decline.

Rafael opened comments to the CSAB and the public. There were no questions or comments.

6. Introduction to Streamflow Depletion data and SMC

Lisa Porta provided a description of basin conditions, GSP requirements, challenges and items to consider related to interconnected surface water and groundwater.

The main points were:

- Sacramento River is always connected, Stony Creek is seasonally connected, Thomes Creek is probably disconnected in spring and fall in most of the stream reach in Subbasin, except for near Sacramento River.
- Thomes Creek is a free-flowing Creek originating in the Coastal Range with flows strongly dependent on precipitation, and goes dry often east of Henleyville (doesn't always reach the Sacramento River).
- Sacramento River is managed differently. Dammed at Shasta and many riparian diversions and main CVP diversions at Red Bluff and Hamilton City. Water releases are managed for environmental flows for

habitat. There is not as much pumping along the Sacramento River in the Subbasin as there is in other parts.

- Stony Creek is dammed at Black Butte Lake and managed by the US Army Corps of Engineers (USACE) for flood flows and by USBR under Orland Project with the Orland Unit Water Users Association (OUWUA). The Creek is fully adjudicated and managed by a Watermaster for water rights. The Creek sometimes goes dry in summer near the Sacramento River. Invasive arundo is a major problem on the creek as it uses lots of water and is established along much of the creek.
- General approach to identifying potential GDEs: Identify areas where surface water and groundwater are connected, review maps of GDE vegetation indicator species, and perform initial screening based on 30 foot depth to groundwater.
- We need to identify what is potentially considered significant and unreasonable in terms of streamflow depletion in the Subbasin.

Rafael opened comments to the CSAB and the public. Comments were received throughout the technical presentation.

- Bob Williams - How far away from a stream do we go to determine if the pumping of groundwater is impacting stream flows? Take Thomes Creek for example, it may be hard to gauge cause and effect depending on where pumping is occurring and impacts are being seen. If there is no water in Thomas Creek in the entire Subbasin, then would you consider that groundwater pumping had an impact on Thomes Creek?
 - Lisa Porta - Different streams have different attributes related to groundwater pumping so they would need to be treated differently.
- Bob Williams - This is the way Thomes Creek looks now, it was a very different channel prior to 1964. I have argued in the past about Thomes Creek being labeled as an impaired stream due to gravel. Flows in the creek vary considerably and it's not clear if that's a result of groundwater usage or drought conditions. The stream has been dry in the summer many years.
 - Lisa Porta - Is it currently in-worse than 2015 conditions? Is this change unreasonable?
 - Bob Williams - Not sure how to answer that question. Historically there were diversions but my understanding is they haven't been in place for several years. Much of the area on the south side was irrigated with surface water diversion but now it's being irrigated with groundwater.
 - Lisa Porta - It sounds like it's possible that riparian diverters aren't able to access water anymore and needed to pump groundwater instead.
 - Bob Williams - There is a similar situation with Corning Canal when USBR contracts were cut during the 2015 drought. Irrigators were forced to drill holes in the ground and stopped using surface water.
 - John Amaro - In regards to Stony Creek, it doesn't seem like the creek supports salmon.
 - Steve Gruenwald - I have never seen fish in Stony Creek. Where is it connected? Return water from the canal disappears within a half mile. It's not a year-round stream unless there are regulated releases.
 - Ian Turnbull - In regards to GDE habitat in the creek, seeing as arundo is an invasive species, would its eradication be a potential project?

- Lisa Porta - Yes, the Salinas river basin has a similar problem that they're working on as a project. This could be a good candidate project since the arundo is currently taking water from beneficial users.
- Ryan Teubert - Salmon might be in creeks in the spring; Elder Creek is considered resting habitat for salmon so that may explain its distinction as habitat. How are subsurface flows in a stream channel classified in terms of connectedness and surface water versus groundwater?
 - Lisa Porta - That is a difficult question that professionals have been trying to define and study for years; it's a gray area.
- John McHugh - What date/season was used for the 30 foot depth to water data (for potential GDEs determination)?
 - Lisa Porta - Spring 2018, we could also check 2015 and a wetter year to see if it changes significantly.
- Erin Smith - It's important to recognize that losing reaches can still be connected.
- Erin Smith - How many surface water gauges are along these creeks, proposed/future?
 - Lisa Porta - There is one gauge on Thomes Creek at Paskenta (plus a second gauge that's not in operation). Stony Creek has several gauges related to inflows and outflows from Black Butte Lake. The Sacramento River has two gauges (Vina and Hamilton City). Considering the size of the subbasin, we have a good number of surface water data. There may be a data gap on Thomes creek.
 - Ryan Teubert - State agencies are developing a plan to identify significant gaps in California's stream gauging network. A webinar will be held on February 4th. The work is being done by DWR and the State Water Resources Control Board.
- Tamara Williams - We need to be careful about assuming that deep wells imply a lack of shallow Groundwater-Surface water interconnection.
- Steve Gruenwald - We need to be careful about defining GDEs in areas that either never existed or couldn't exist without applied irrigation water. Some of those areas have deep groundwater that could not support groundwater dependent vegetation.
 - Lisa Porta - Potential GDE areas are mapped primarily in the Sacramento river flood plain
 - Steve Gruenwald - what explains the difference between the two GDE maps?
 - Lisa Porta - The map you refer to is of indicator species, and we used the 30 foot depth to groundwater contour to limit areas of potential GDEs further.
- Thad Bettner - As a long-time diverter from the Sacramento River, we're concerned about groundwater pumping that diverts water that would otherwise hit the stream. We're not seeing the same stream flows because of groundwater pumping. Want to make sure that pumping in the Corning Subbasin is not depleting surface water further and preventing GCID from maintaining water supplies. Regulations in Delta and other downstream portions of Sacramento River need to be considered in planning on the upstream reaches of Sacramento River and its tributaries. In some years we are not seeing the same amount of streamflow that we used to see, probably due to groundwater pumping.
 - Lisa Porta - Your diversion is in the Corning Subbasin but the potential impacts on the Sacramento River may be coming from other subbasins as well (upstream and adjacent). This is the challenge in the Sacramento Valley, there's so much interconnection. The goal is to manage water conjunctively by season.

- Lisa Porta - It sounds like there are concerns about the impact of groundwater on surface water diversions on the Sacramento river, what about the other two streams?
 - Ryan Teubert - We have started having discussions with USBR staff regarding Corning Subbasin water use. I'm not sure if they have a clear understanding of curtailment impacts in drought years and the shift to groundwater pumping due to those curtailments. More conversations will be forthcoming.
 - Lisa Porta - The question becomes, in an effort to conserve surface water are we negatively impacting groundwater and thereby impacting surface water as well, it's a circular problem and both resources need to be managed conjunctively.
- Lisa Porta - Would like some feedback from CSAB on the significant and unreasonable conditions statement.
 - Ian Turnbull - The statement needs to recognize that invasive species aren't a beneficial user. The arundo is more widespread than mapped. Also, we need to recognize that the Corning Subbasin GSAs don't have authority over neighboring basins and their potential effects on streamflows, nor can they make decisions regarding stream diversions.
- David Lester - Where vegetation has been identified that could possibly be GDE's (especially towards the west), that vegetation could actually be using water from irrigation runoff as opposed to being a real GDE. Burch Creek has a lot of vegetation that's invasive, there are likely some groundwater losses there because of that vegetation.
 - Lisa Porta - Other GSPs have tried to create buffers around vegetation areas that are likely receiving water from irrigation runoff. We would welcome additional insights into areas where that might be the case.
 - Ryan Teubert - One potential project could be to groundtruth those areas marked as potential GDE's. Also, by calling GDEs "potential GDEs", this provides some flexibility to add or remove areas from the list as more information is collected
 - Lisa Porta - Correct, that could become an implementation project. Areas that aren't clearly groundwater dependent could be further evaluated. Initial groundwater elevation MTs are set at 2018 minimum levels, so this objective is geared toward maintaining current potential GDE conditions near the stream.
- Tamara Williams - While the water levels in aquifers that are pumped may be less 30 feet below groundwater surface, pumping could be contributing to dewatering of minor shallow/perched zones that support GDEs.
 - Lisa Porta - that's geographically, context dependent.
- Matt Hansen - Is it possible to reconnect some creeks? Solution for SJ Valley GSAs has been reduction in groundwater pumping. Could we include this in the GSP requirements for new production wells?
 - Lisa Porta - That's something we can look at as a project or management action. We do need to consider whether disconnected groundwater in Thomes Creek is significant and unreasonable. If you want to recharge groundwater then it is going to come from surface water supplies and we may not have those available. You can't do the project if there isn't water for the project.
- Michael Ward - I don't think it's a reconnecting question, as I don't see a shallow water connection to vegetation. I don't want to discount riparian vegetation that is probably being fed by shallow perched water by the creek. Shallow domestic water supplies are tapping the shallowest groundwater close to the creek.

- Del Reimers, Landowner - Historically, Stony Creek didn't reach the Sacramento River year-round before Black Butte Dam was built. There weren't any trees to impair the view in the 1930's. Agriculture isn't the enemy, it's the friend. Irrigation provides a lot of recharge in this area. We're losing oak trees not from lack of groundwater but from drought. The ag community has offered to collaborate on the removal of invasive species.

7. Introduction to Subsidence data and SMC

Lisa Porta pushed this agenda item to a future CSAB meeting.

8. Next Steps

Lisa Porta provided an update on GSP related efforts and an overview of upcoming CSAB meetings and topics.

- The discussion regarding projects and actions will start in April
- We are aiming to share the draft GSP by Q3 for review. We will provide a more detailed schedule for review and adoption at the March CSAB meeting.

Rafael opened comments to the CSAB and the public.

- Tamara Williams - Is there any update regarding outreach to domestic users?
 - Ryan Teubert - We are looking into different options with CBI
- Ryan Teubert - I think we may need to increase the length of upcoming meetings given the abundance of topics we need to cover.
- Todd Turley - Can we make sure that we revisit water budgets in relation to projects. I agree that we should make these meetings longer.
 - Lisa Porta - We will revisit water budgets in April.

9. Adjourn

Rafael Silberblatt thanked Lisa Porta, CSAB members, and the public for their participation 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 Amaro, Corning Sub-basin GSA alternate
- David Lester, Tehama County Flood Control and Water Conservation District
- Steven Gruenwald, Tehama County Flood Control and Water Conservation District
- Bob Williams, Tehama County Flood Control and Water Conservation District

- Ian Turnbull, Tehama County Flood Control and Water Conservation District Alternate

Other Participants

- Bridget Gibbons, CDFW
- Del Reimers, Landowner
- Erin Smith, DWR Northern Region
- George Pendell, Stony Creek Watermaster
- Holly Dawley, GCID (Corning Sub-basin GSA Staff)
- Jaime Lely, Landowner
- Jim Simon, TCFCWCD
- John McHugh, LSCE
- Kristina Miller, City of Corning/Tehama County GSA
- Matt Hansen, Landowner
- Michael Ward, Landowner
- Nichole Bethurem, TCFCWCD
- Ryan Teubert, TCFCWCD
- Tamara Williams, Landowner
- Tania Carlone, CBI
- Thad Bettner, GCID
- Tim Mesa, Landowner
- Todd Hamer, Tehama County GSA
- Todd Turley, Landowner

Consultants and Project Team

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