

MINUTES OF THE  
BUTTE COUNTY WATER COMMISSION TECHNICAL ADVISORY  
COMMITTEE

November 10, 2020 1:00 PM  
Online Meeting

1. Introductions and Roll Call

TAC members present: Chair Joe Connell, Mike Crump, Jeff Davids, Todd Greene, Kyle Morgado, Debbie Spangler and Richard Price

TAC members absent: None

2. Approval of minutes for the January 14, 2020 meeting

Motion by Richard Price, second by Kyle Morgado to approve the minutes for January 14, 2020. Motion carried 7-0 with no abstentions.

No public comments were received.

3. Sustainable Groundwater Management Act Updates

a. Vina, Butte and Wyandotte Creek Subbasin updates

Staff provided general updates and meeting schedules for each subbasin.

TAC members inquired about the GSA Boards and Advisory Committee's coordination and ability to work together well and whether the GSPs are on track to meet deadlines. Staff replied that all of the groups are coordinating well and on track to meet SGMA deadlines. No public comments were received.

b. Groundwater Sustainability Plans Basin Setting Work

Staff provided general updates and an overview of the public comments received on the basin setting work and monitoring networks portion of GSPs for each subbasin and the status of the work being done for Groundwater Dependent Ecosystems (GDEs) as provided in the presentation in the TAC meeting packet. A website is available for the compiled comments received here: <https://www.buttecounty.net/waterresourceconservation/Special-Projects/Basin-Setting-Project>

The TAC asked about whether the GDEs in TNCs database were generally isolated from other areas that may be near other types of irrigation or if they were mainly located near waterways. Staff replied that they were found in both isolated areas and areas near riverine systems. GSA managers applied criteria to each polygon to address how close these polygons were to irrigated lands and other standing water to determine groundwater dependence.

The TAC asked about whether or not there would be impacts to GDEs near Highway 149 now that the Miocene Canal is not flowing. Staff discussed that the Miocene canal and the areas likely impacted by the change are mostly located outside of the subbasins; however the TNC database of potential GDES had already considered these areas for inclusion and that these areas may be included in some of the next GDE analysis steps as warranted.

Jim Brobeck addressed the Committee regarding analysis of unirrigated urban forests in the GSPs if they were not included in the TNC database with a suggestion that they should be taken into account some other way in GSP development if not included in GDE analysis. Staff responded that this was a public comment received for the basin setting work and will be part of the conversation moving ahead.

Agenda moved to Item 5a.

5. Update on special projects
  - a. Airborne Electromagnetic Method Project

Todd Greene (TAC member) explained the work he has done regarding the use of AEM data, DWR cross sections and well logs to identify where coarse and fine materials are located underground and the work to identify and break them into zones and where they may or may not be connected i.e. vertical leakage between the lower and upper zones.

Jim Brobeck addressed the Committee asking if and where AEM data shows vertical pressurized connectivity. Todd explained that AEM data does not provide information re: vertical pressure changes, and that it only shows the electrical properties of the materials. Hydrographs are the way to understand pressure differences. Where AEM shows that there may be vertical connectivity, hydrographs may then be used to focus on that question, which is a next step in the Stanford study. Staff explained that towards the western boundary of the basins, there may be areas where there may be more vertical connectivity. The work currently underway by Butte County compiling information about well screening will be useful for this work.

One TAC member requested more background information and education on AEM to be able to read and interpret specific details. Staff responded that an AEM 101 workshop was previously planned but it is still in the long-term plan to take place. The TAC also suggested adding a legend to one of the figures to define the abbreviations for the geology listed in it.

One TAC member asked about the AEM cross sections and if the data would continue through the Chico area similarly if extended. Staff replied that although the cross section do not currently extend to Chico it may look similar, but it is not well understood at the moment and more flights to collect additional data are desired.

Todd Greene left the meeting at 2:04 pm.

Agenda returned to Item 3c.

3. c. Completion of Groundwater Sustainability Plans update

Staff referred the group to the schedules in the TAC meeting packet for each subbasin. Staff also mentioned that an agricultural irrigation water-use study is underway with UC Davis Cooperative Extension and local farmers. No public comments were received.

d. Northern Sacramento Valley Interbasin Coordination

Regional GSAs are meeting to understand the scope of the technical efforts underway for GSP development regarding interbasin flows and stream and groundwater interactions along the subbasin boundaries in Interbasin Coordination meetings. It will help in understanding how these numbers compare amongst different models. Each subbasin sets their own minimum thresholds and measurable objectives for undesirable results and this work will help ensure that those that are set do not negatively impact adjacent basin conditions.

Jim Brobeck addressed the Committee regarding the Interbasin Coordination meeting schedules and ability of the public to participate in them and if a regional groundwater model is being used. Staff responded that staff level meetings are occurring and that each subbasin is using the model of their choice for now, from the three available. One regional model could be used in the long-term if that's something the region wanted to work towards implementing in the future. That would potentially be a decision of GSAs in the region.

4. Review and comment on 2020 monitoring and BMOs

a. Groundwater levels (Spring and Summer data)

Staff provided updates as can be found in the Powerpoint presentations included in the TAC meeting packet. No public comments were received.

One TAC member asked about data in the graphs indicating that water levels are above the ground surface. Staff responded that there are a few artesian wells in the Butte subbasin near the Gray Lodge Wildlife Area.

One TAC member discussed the significant difference between the precipitation amounts noted in the Northern Sierra 8-station Index versus the lower amount of precipitation recorded locally near the valley floor; 13.5" of rain which was 51% of average. Staff and the TAC discussed that while the 8-station index is a good standard measure for comparison purposes between years it does not reflect local conditions accurately because many of the stations recording precipitation, are located at high elevations in the Sierras which may receive more rainfall than the valley floor.

b. Water quality trend monitoring results

Staff provided updates as can be found in the PowerPoint presentations included in the TAC meeting packet. No public comments were received.

TAC members suggested the following edits to the 2020 Groundwater Quality Technical Memo:

- Minor typos
- Dropping the Butte-Valley Pentz well data from the report which only had four years of data in the early years of monitoring and was replaced by another well due to a change in ownership and access issues.

- Color coding pH outliers that fell outside of the objectives with an explanation that there were technical issues with equipment when that is the case
- Adding a period of record to Table 4
- Adding a note regarding minimum number of years included in the historic averages

Agenda moved to Item 5b.

5. b. Northern Sacramento Valley IRWM Prop1 Implementation Grant Program Proposal

Staff gave updates on the topic as can be found in the TAC meeting packet. No public comments were received.

c. Sierra Institute Disadvantage Community Technical Assistance Grant Projects

The Northern Sacramento Valley IRWM obtained a technical assistance grant as part of the Mountain County Funding Area for \$45,000 to address a project in Palermo regarding drinking water issues for residents on domestic well and associated drainage issues. This project will be helpful in pursuing grant funding to implement a larger project to provide Palermo residents water service hookups to South Feather Water and Power Agency water to address drinking water quality concerns. No public comments were received.

6. Departmental updates.

Staff and TAC member Jeff Davids announced a GRA webinar presented by Jeff and Department staff on 11/19/20 regarding his work with students on groundwater and surface water interactions in Big Chico creek and how this topic ties into local SGMA efforts. No public comments were received.

7. TAC members wishing to address items not listed on the agenda.

No TAC or public comments received.

8. Public Comment: Any person wanting to address the Technical Advisory Committee on any item NOT ON TODAY'S AGENDA may do so at this time. The Technical Advisory Committee will not be making decisions or determinations on items brought up during Public Comment.

Staff mentioned that the Water Commission has two new Commissioners, Amy Raymond and Richard Harriman. No public comments were received.

9. Future Meeting topics, dates and locations: January 2021 TBD