

Joint Colusa Groundwater Authority and Glenn Groundwater Authority Board of Directors Meeting

April 13, 2020 | 1:00 p.m.

This meeting was held remotely via Zoom

MINUTES

In Attendance:

Colusa Groundwater Authority:

Director Members Present:	Alternate/2 nd Alternate Directors	Agency Representing:
X Denise Carter	Gary Evans	County of Colusa
Tom Reische	Dave Markss	City of Colusa
Alfred Sellers, Jr.	Sajit Singh	City of Williams
X Blake Vann	X Thad Bettner	Glenn Colusa Irrigation District
Knute Myers	X Shelly Murphy	Colusa County Water District
X Jim Campbell	Lance Boyd	Princeton-Codora-Glenn Irrigation District
Zach Dennis	X Dan Ruiz	Westside Water District
X Jim Campbell	Lance Boyd	Provident Irrigation District
X Hilary Reinhard	X Bill Vanderwaal	Reclamation District 108
Charles Marsh	Derrick Strain	Reclamation District 479
Jim Wallace	Lynell Pollock	Colusa Drain Mutual Water Company
X Darrin Williams		Private Pumper
Jeff Moresco		Private Pumper
Chris Dobson	Dan Ruiz	Maxwell Irrigation District
Jim Campell	Lance Boyd	Princeton-Codora-Glenn Irrigation District

Glenn Groundwater Authority:

Director Members Present:	Alternate/2 nd Alternate Directors	Agency Representing:
X John Viegas	Vince Minto	County of Glenn
X Bruce Roundy	Pete Carr	City of Orland
	Ed Vonasek (2 nd)	City of Orland
X Gary Hansen	X Evan Markey	City of Willows
George Nerli	X Leslie Nerli	Glide Water District
X John Amaro	X Thad Bettner	Glenn-Colusa Irrigation District
X Charles Schonauer	X Emil Cavagnolo	Orland-Artois Water District
	X Andrea Jones (2 nd)	Orland-Artois Water District
X Randy Hansen	Wade Danley	Kanawha Water District
	Michael Alves	Kanawha Water District
X Mark Lohse	Seth Fiack	Monroeville Water District
X Gary Enos	Lance Boyd	Princeton-Codora-Glenn Irrigation District/ Provident Irrigation District

Others in Attendance: Mary Fahey, CGA; Sharla Stockton, Glenn County; Valerie Kincaid, GGA Counsel; Alan Doud, CGA Counsel; Dave Ceppos, Consensus and Collaboration Program; Ken Loy, West Yost Associates; Byron Clark, Davids Engineering, Inc.; Reza Namvar, Woodard and Curran; Caitlin Hoffman, Lisa Porta, Montgomery and

Associates; Pat Vellines, DWR; Stacy Ann Silva; Lester Messina; Jim Jones; Anamarie Marsh; Brandon Davison, DWR; Christina Buck, Butte County; Briana Seapy, CDFA

1. Call to Order and Determination of a Quorum

Dave Ceppos began the meeting with an introduction to using Zoom and he described how the meeting would proceed. He said that in a conversation with Denise Carter, Chair of the Colusa Groundwater Authority and John Amaro, Chair of the Glenn Groundwater Authority it was determined that Ms. Carter would act as Chair for this meeting. Mr. Ceppos then turned the meeting over to Ms. Carter. Ms. Carter called the meeting to order and asked Mary Fahey to do the roll call for the Colusa Groundwater Authority (CGA) Board members. Ms. Fahey proceeded with roll call for the CGA members, and determined that a quorum was present. Ms. Carter asked Sharla Stockton to do roll call for the Glenn Groundwater Authority (GGA) and a quorum was confirmed.

2. Period Of Public Comment

Ms. Carter opened the floor to public comment on items not on the agenda. There was no public comment.

3. Presentation: Colusa Subbasin Groundwater Sustainability Plan Development Update

Mr. Ceppos facilitated the presentation and introduced Byron Clark from Davids Engineering, Inc. Mr. Clark explained that he and his team would be presenting information about Groundwater Sustainability Plan (GSP) development in the Colusa Subbasin, the schedule for developing the GSP, and areas where the Consultant team needs input from the Boards.

a. Draft GSP Development Timeline Overview (Byron Clark)

Mr. Clark reminded the group that the deadline for GSP completion is January 31, 2022. The current schedule calls for developing a full draft GSP by mid-year 2021 to allow time for refinements and adoption of the Plan. Mr. Clark provided an overview of past work that has been completed in the basin that can be incorporated into the GSP, including work done under the Counties with Stressed Basins grants in Colusa and Glenn Counties. He described current work on the Basin Setting portion of the GSP and provided an overview of upcoming work. The GSP will be developed in four phases –

Phase 1: knowledge building - draft Basin Setting; Draft Sustainability Goal, evaluation of existing monitoring network, starting to develop list of projects and management actions

Phase 2: Initial GSP development – refine basin setting, draft Sustainable Management Criteria (SMC), draft GSP monitoring network, initial evaluation of Projects and Management actions

Phase 3: GSP refinements – Data Management System (DMS) options, initial draft chapters, updated SMC, Projects and Management actions cost-benefit analysis, draft management areas if applicable, draft funding options evaluation

Phase 4: Final GSP Preparation and adoption - updated management areas if applicable, funding recommendations, complete draft GSP, GSP adoption

Mr. Clark presented a draft schedule for completion of each draft section of the GSP. He then paused for questions. There were no questions.

b. Groundwater Conditions Update (Ken Loy)

Mr. Clark introduced Ken Loy from West Yost Associates. Mr. Loy described the groundwater conditions that must be addressed in the GSP:

- Groundwater elevations and groundwater in storage - Mr. Loy presented an overview of the current groundwater level monitoring network and presented groundwater level data over different time periods.
- Groundwater quality - Mr. Loy said that quality in the basin is generally good. He described existing monitoring programs that can be utilized by the GSAs to monitor groundwater quality.
- Interconnected surface water - Mr. Loy presented maps showing areas where interconnected groundwater and surface water may need to be addressed.
- Land Subsidence - Mr. Loy presented a map with the latest subsidence information showing that there are some isolated areas in the basin that will require discussion.

Mr. Loy mentioned that groundwater elevation information can be presented in two ways – hydrographs and contour maps. Hydrographs are simple to update as opposed to contour maps which are very time consuming to update. He said the consultant team recommends spring 2020 as the latest date to produce contour maps in order to meet the GSP deadlines. He asked if there was any feedback on this from the Board members. Discussion was held. No decision was made. During discussion, it was determined that there will be more focused discussions regarding water quality with Board members and stakeholders as Sustainable Management Criteria are being developed.

Valerie Kincaid, GGA Counsel, stated that if Seawater Intrusion is recommended to not be addressed in the GSP, this should be presented to the Boards with technical information as backup so the Boards can respond to the recommendation. Mr. Clark said this could be developed during the Sustainable Management Criteria development. They would then develop appropriate language in the applicable draft chapter of the GSP.

c. Draft Historical Water Budget and Discussion of Future Water Budget Assumptions (Byron Clark)

Mr. Clark presented a basic water budget overview. He stated that the Consultant team is utilizing DWR's C2VSimFG Beta2 model. It is a model that simulates the entire Central Valley on a monthly time step. The Consultants have been refining the model to reflect local conditions. They are using a time period of 1990-2015. The tool extends up to 2015 which they think is adequate for GSP development in the Colusa Subbasin. The tool goes back several decades and they focused on the 1990-2015 time period because it includes drought years and wet periods and covers a variety of conditions over time.

Mr. Clark described the 38 subareas they have developed in the Colusa Subbasin and explained that this structure will help with their ability to report out water budgets to support intrabasin discussions. Mr. Clark went on to provide information about the primary water budget drivers which include: land use, precipitation, evapotranspiration, surface water supplies, groundwater pumping, percolation, surface water/groundwater interaction and interbasin flows. He then went through a series of charts which showed preliminary results from the work completed so far.

Mr. Clark paused to take questions.

Darrin Williams asked why they are not including the last five years in the water budget. Mr. Clark explained that the C2VSim model only goes up to 2015 at this time. It is a significant undertaking to update the model for additional years. Although it does not extend to the recent drought and recovery period, the historical period covers varying conditions. The GSP can still be compliant with the regulations if the historical period doesn't go past 2015.

Ms. Carter said she had the same concerns as Mr. Williams, but looking at the historical data it appears that we are well covered. Mr. Clark agreed. He said by going back to the early 1990s it gives a good historical perspective that covers varying conditions. Ms. Carter asked if we are being consistent with what other GSAs are doing. Mr. Clark said that it is a mixed bag – GSAs are doing things differently.

Mr. Williams asked how we have confidence in this model that the input data and assumptions are accurate. Mr. Clark explained that the workflow begins with the best available science and data for the inputs. They then vet the model by comparing the outputs with actual data, looking at Agricultural Water Management Plans and other local data in order to get the water budgets right. The next phase is to calibrate the aquifer system so the simulated water levels match the monitoring network data. Mr. Williams said he is still perplexed with how the models work. There are a lot of assumptions being made. He is not sure we have good enough data going in at this time. Mr. Ceppos said that this could be a topic for a future discussion or workshop to take a deeper dive into the model. Mr. Clark agreed that a more focused discussion at a future meeting on the model would be helpful. Leslie Nerli agreed that she needs more clarification on how the data is derived from the model.

Mr. Clark asked how the Boards would like to proceed – at another joint Board meeting, at a TAC meeting, or develop a special committee/work group. Discussion was held and it was agreed to move forward with a joint TAC meeting which is publically noticed.

ACTION ITEM: Schedule a joint TAC meeting to include an agenda item to go into detail about model development.

Mr. Ceppos called a ten minute break at 3:13 p.m. The meeting resumed at 3:23 p.m.

Mr. Clark began the discussion about Projected Water Budget assumptions. The following approaches are recommended by the Consultant team, but they would like feedback from the Boards:

- The proposed approach is to continue to use the model to determine the historic hydrology. They will utilize data from 50 years of hydrology from 1966-2015. They would integrate climate change scenarios into the projected water budgets.
- Land Use: The Consultant team is proposing to utilize DWR Land Use surveys for the years 2014 (curtailment year) and 2016 (non-curtailment year). The requirement in the regulations is to use the most recent land use data. Question for the Boards is whether to consider future crop shifting and potential future crop expansion.
- Urban Water Demands: There is not a lot of Urban demand in the basin. The Consultants can utilize Urban Water Management Plans and County General Plans to derive data.
- Climate Change: There are four scenarios available from DWR. The Consultants are recommending utilizing 2030 and 2070 central tendency scenarios, but they would like feedback from the Boards.
- Surface Water Supplies: Surface water supplies in the basin are largely tied to Lake Shasta inflows. The Consultants recommend using recent historical supplies for curtailment (Shasta Critical) and non-curtailment (“Normal”) years for surface water suppliers to develop the projected water budgets.

Mr. Clark paused for questions or comments. There were none.

d. Model Calibration Status (Reza Namvar)

Mr. Clark introduced Reza Namvar to describe the process of calibrating the model. Mr. Namvar explained some history and details about development and function of the C2VSim model. The model will be used for historical and

future water budgets and can also be used for development and analysis of potential Sustainable Management Criteria and Projects and Management Actions. He described the efforts to calibrate the model utilizing monitoring well data and provided information on the current status and work that still needs to be done.

Mr. Namvar paused for questions or comments. Christina Buck (Butte County Water and Resource Conservation) asked if the calibration would occur over the next year and if it would feed into updating the water budget? Mr. Clark said yes, the water budgets are currently in draft form, and as the groundwater parameters are calibrated, the water budgets will be updated.

e. Preliminary Mapping of Groundwater Dependent Ecosystems (GDE) and Next Steps (Ken Loy)

Mr. Loy presented information about, and a definition of, Groundwater Dependent Ecosystems (GDE). He referred to the *Natural Communities Commonly Associated with Groundwater* data set developed by DWR, the California Department of Fish and Wildlife, and the Nature Conservancy as a resource for information.

Mr. Loy presented the proposed approach to delineate GDEs in the Colusa Subbasin. He mentioned that there is a task to address this included in the Proposition 68 grant work plan. They propose to start with the *Natural Communities* data set mentioned above and compile additional supporting local data, including actual depth to groundwater, availability of surface water, adjacent land uses, soil surveys, etc. They will also engage with stakeholders to solicit local knowledge to further refine the data.

Mr. Loy paused for questions or comments. Mr. Clark mentioned that there are examples of approaches to address GDEs from other GSPs that they can review and build upon. Chuck Schonauer mentioned that Stony Creek contains solid Arundo that is an invasive species that can have a negative impact on the groundwater system. Arundo is considered a GDE in the *Natural Communities* data set. Mr. Ceppos called on Briana Seapy, CA Department of Fish and Wildlife, for input regarding how Arundo should be addressed in the GSP. Ms. Seapy said that SGMA asks for identification of GDEs and how to address them. It is a local decision how they will be addressed in the GSP. Bruce Roundy mentioned that the Glenn County RCD has studied the Arundo issue and there is good information there. Ms. Kincaid said that localized data is very important. The current mapping is very broad. Step one is identifying them. Protecting them or not is a policy decision. Ms. Buck stated that a lot of the GDEs are along the Sacramento River so the Butte Subbasin and Colusa Subbasin will be working together closely in these areas.

f. In-Depth Review GSP Development Timeline (Byron Clark)

Mr. Clark presented a draft timeline with potential topics to be covered over the next several months. Mr. Ceppos and Mr. Clark said that there will be more meetings and longer meetings needed to develop the GSP and make the necessary decisions. Ms. Nerli agreed that meetings need to be ramped up in order to get this work done.

4. Member Reports and Comments

None

5. Adjourn

The meeting was adjourned by Ms. Carter at approximately 4:35 PM.

6. Next Meeting

The next meeting was not scheduled.