

CGA/GGA Joint Technical Advisory Committee Meeting

MEETING MINUTES

October 16, 2019 | 1:00 p.m.

Sites Project Office, 122 Old Highway 99, Maxwell, CA 95955

1. Call to Order and Introductions

The meeting was called to order at approximately 1:02 p.m.

In Attendance:

CGA Committee Members: Bill Vanderwaal, Jim Wallace, Darrin Williams, Oscar Serrano

GGA Committee Members: David Kehn, Emil Cavagnolo, Zac Dickens (1:06), Ron Stilwell

Others in Attendance: Lisa Hunter (GGA Staff), Mary Fahey (CGA Staff), Lester Messina, John Woodling

2. * Approval of Minutes from the September 20, 2019 Joint CGA / CGA TAC meeting

Darrin Williams made a motion to approve the minutes from the September 20, 2019 Joint CGA/GGA TAC meeting as presented. Jim Wallace seconded and the motion passed unanimously.

3. Period of Public Comment

None

4. Discussion; Proposition 68 Grant Funding Opportunity

Mary Fahey reported the CGA discussed the grant funding opportunity at their September meeting and formed an ad hoc committee to review. No formal action was taken, but the board was generally supportive. Recognizing the tight deadline for the application, the GGA considered two items at their October 14 board meeting. The first item was to contract with Davids Engineering to prepare a grant application and a second item, a Resolution to serve as the applicant for the Proposition 68 grant application. Davids Engineering estimated about \$18,000 to complete the project. CGA will discuss sharing these costs at their next meeting. Ms. Fahey contacted DWR regarding potential application extensions. DWR indicated that an extension would not be possible. It seems that, if awarded, DWR would amend the current Proposition 1 grant to include the new projects and additional work. The application for the subbasin can request up to \$1 million. Ms. Fahey noted the priority tasks discussed so far include:

1. Cover the \$500,000 for GSP development not covered in the Proposition 1 grant
2. Refined hydrogeological boundary study/investigation
3. Suite of funding mechanism options
4. Groundwater recharge evaluation
5. Groundwater Dependent Ecosystems- more in depth analysis

Lisa Hunter added that CGA and GGA staff and the CGA ad hoc committee have been working very closely together to meet the deadlines if the agencies choose to pursue funding. Ms. Hunter recommended the

TACs review and agree on prioritization of the projects to include in the grant application. Projects should be basin-wide tasks that benefit both GSAs.

The TACs discussed the topics presented. It was clarified that the hydrogeologic basin boundary study tasks would not necessarily need to be directed to the western boundary, but it would likely help increase understanding of the western boundary. Other topics included integrated monitoring network data, and a voluntary groundwater level and pumping measurement cost-share program with landowners.

There was general agreement to move forward with including the priority tasks mentioned above in the grant application in addition to a voluntary well monitoring pilot program to the extent that funding will allow. CGA and GGA staff will work with the CGA ad hoc committee and the consulting team to finalize the application.

5. Closed Session

One item – consideration of employment pursuant to Government Code section 54957.

Prior to adjournment to closed session, a question was asked regarding the timeframe for the boards' decision regarding the GSP development project and at what point the proposals will become public. It was noted the decision will likely take place at the October 30 Joint Board meeting. Proposals will be public after the process has concluded.

6. Report out of closed session any recommendation made by the Joint TAC in closed session.

The Joint TAC reported that during closed session a decision had been made to recommend the Colusa Groundwater Authority and Glenn Groundwater Authority award the Colusa Subbasin Groundwater Sustainability Plan Development project to Davids Engineering, Inc.

7. Member Reports and Comments

Darrin Williams reported he sounded the new monitoring well in the Arbuckle area on October 1. The four completions are measured within eight feet of each other, between 92 and 100 feet below ground surface.

Mary Fahey mentioned the Joint CGA/GGA Board Workshop will be held October 30 at the Sites Project Office in Maxwell. She also mentioned on November 6, the Colusa County Groundwater Commission will meet from 10:00 a.m.-12:00 p.m.

Lisa Hunter noted the Corning Subbasin GSAs will hold a Public Meeting on November 6 in Corning.

8. Next Meeting

To be determined

9. Adjourn

The meeting was adjourned at approximately 2:50 p.m.

Staff Report

To: CGA-GGA Joint TAC

Agenda Item: 4.a. Colusa Subbasin Groundwater Sustainability Plan
Development – Monitoring Network Review

Date: May 8, 2020

Background

Preparation of the Groundwater Sustainability Plan (GSP) for the Colusa Subbasin requires establishment of a monitoring network for data collection to support understanding of the current conditions of the groundwater basin and to monitor the effectiveness of projects implemented to meet sustainability goals for the basin. In the Colusa Subbasin, monitoring must be adequate to evaluate five of the six sustainability indicators under SGMA. The six sustainability indicators are:

1. Chronic lowering of groundwater levels;
2. Reduction in groundwater storage;
3. Seawater intrusion;
4. Degradation of groundwater quality;
5. Land subsidence; and
6. Depletion of interconnected surface waters.

Seawater intrusion is not an applicable indicator in the Colusa Subbasin because of its inland location.

In 2018, the consultant team completed an evaluation of existing county monitoring networks for the counties of Colusa and Glenn under the Proposition 1 Counties with Stressed Basins Grant Program. A report was prepared evaluating the existing monitoring networks covering the Colusa Subbasin as well as portions of neighboring basins within each county in the context of technical adequacy and SGMA compliance. Specifically, existing groundwater level, groundwater quality, land subsidence, and surface water monitoring programs were evaluated using criteria listed in the California Department of Water Resources (DWR) SGMA Groundwater Sustainability Plan (GSP) Regulations and DWR's Best Management Practices (BMPs) for the Sustainable Management of Groundwater.

The networks were evaluated based on the criteria to identify potential data gaps that would limit the sufficiency of the networks to provide representative data for assessing sustainability for the five applicable sustainability indicators.

The existing monitoring networks were deemed adequate for GSP preparation, with some recommendations for modifications and refinements that could be made over time. It is anticipated that these could be addressed during initial GSP development or as part of GSP implementation.

The full 2018 monitoring report is available at the following links:

- [Monitoring Network Main Report](#)
- [Appendix A - Groundwater Contours and Hydrographs](#)
- [Appendix B - Extensometer Measurements](#)
- [Appendix C - Technical and Reporting Standards](#)
- [Appendix D - Well Completion Reports](#)

Schedule

Groundwater conditions, including groundwater levels in the existing networks, are being documented as part of the Basin Setting portion of the GSP, with planned completion of a draft GSP chapter in Fall 2020. Initial efforts have begun to establish Sustainable Management Criteria (SMC), including quantitative Minimum Thresholds and Measurable Objectives tied to individual monitoring sites, with planned completion of a draft GSP chapter in Spring 2021.

Proposed Recommendation

Formal action to make a recommendation that the CGA and GGA boards approve the consultant team to proceed with GSP development using the existing monitoring networks for purposes of initial GSP development, recognizing that SMC may not be developed for each monitoring location, and additional monitoring locations may be added during and GSP development and implementation with TAC and stakeholder input.

Attachments

See links above.

Staff Report

To: CGA-GGA Joint TAC

Agenda Item: 4.c. Colusa Subbasin Groundwater Sustainability Plan
Development – Water Budget Future Scenarios – Approach
and Assumptions

Date: May 8, 2020

Background

Preparation of the Groundwater Sustainability Plan (GSP) for the Colusa Subbasin requires development of water budgets quantifying all inflows to and outflows from the basin, as well as change in storage. Water budgets must be quantified for three separate time frames:

- Historical, based on at least 10 past years
- Current, based on most recent available information
- Projected, based on
 - 50-years historical hydrology
 - Most recent land use and crop coefficient information
 - Projected changes in land use planning, population, and climate
 - Projected surface water supply based on the most recent water supply information

Draft historical water budgets have been developed using DWR's C2VSim Fine Grid integrated hydrologic model for the Central Valley, a tool intended by the state to support GSAs in developing water budgets for their GSPs. The available model has been updated by DWR through water year 2015.

Based on a review of water budget development to date elsewhere in the state and in neighboring basins (Butte, North Yuba, South Yuba, Vina, Wyandotte Creek). The consultant team has prepared the following proposed assumptions and approach for developing projected water budgets for the Colusa Subbasin:

1. Historical hydrology from 1966 to 2015
2. Recent historical land use, mapped to curtailment/noncurtailment years
3. Urban demands based on projected population and per capita use
4. Climate change based on central tendency scenarios developed by DWR for SGMA, centered around 2030 and 2070
5. Water supply based on recent historical use, mapped to curtailment/non-curtailment years

The proposed approach will result in two projected water budget scenarios, corresponding to the 2030 and 2070 climate change scenarios. Preliminary review of the scenario results suggests the following:

- For the 2030 scenario, there is a modest increase in precipitation (~4%) and slight increase in evapotranspiration (~1%) within the subbasin, with a slight increase in Lake Shasta inflows (~2%)
- For the 2070 scenario, there is greater increase in precipitation (~7%) and greater increase in evapotranspiration (~9%) within the subbasin, with a modest increase in Lake Shasta inflows (~4%)

Schedule

Development of historical water budgets and preparation of datasets for projected water budget scenarios are underway with completion of a draft GSP chapter planned in late 2020/early 2021.

Proposed Recommendation

Formal action to recommend that the CGA and GGA boards approve the consultant team to proceed with development of proposed projected water budget scenarios for purposes of initial GSP development, recognizing that further refinements may be made within the proposed general framework with TAC and stakeholder input.

Attachments

See links above.

Staff Report

To: CGA-GGA Joint TAC

Agenda Item: 4.d. Colusa Subbasin Groundwater Sustainability Plan Development – Minimum Thresholds and Measurable Objectives

Date: May 8, 2020

Background

Preparation of the Groundwater Sustainability Plan (GSP) for the Colusa Subbasin requires establishment of Sustainable Management Criteria. In particular, quantitative Minimum Thresholds (MTs) and Measurable Objectives (MOs) must be established for monitoring locations within the GSP monitoring network to evaluate whether Undesirable Results have occurred over time. Examples of MTs and MOs for individual monitoring locations include groundwater elevations, water quality parameters, and measurements of land subsidence. It is anticipated that MTs and MOs for groundwater storage and stream depletions would rely on integrated hydrologic model scenarios, coupled with available monitoring data, as appropriate.

The range and distribution of existing well depths based on well completion reports; water quality thresholds indicating the suitability of groundwater to meet agricultural, drinking water, and other beneficial uses; land subsidence magnitudes likely to result in damage to critical infrastructure; and streamflows required to prevent URs for beneficial uses of surface water will also be relied upon.

Establishment of MTs and MOs will consider the expected impact of Projects and Management Actions (PMAs) evaluated for inclusion in the GSP. For example, desired MOs may guide the schedule for implementation of PMAs.

MTs will be refined through iterative discussions and supporting technical analysis.

Schedule

Development of MTs and MOs is beginning through the compilation of relevant information and review of historical groundwater conditions in the basin and is being informed by information gathered through stakeholder outreach in Fall 2019. Upcoming work includes developing initial analysis of potential MTs and MOs by summer/early fall 2020.

Proposed Recommendation

Formal action to recommend that the CGA and GGA boards approve the consultant team to proceed with initial development of MTs and MOs which will be refined through iterative discussions and supporting technical analysis.

Attachments

None.

CGA/GGA Joint Technical Advisory Committee Meeting, 5/8/2020

Agenda Item 5 Supporting Information: DRAFT Colusa Subbasin GSP Development Timeline

April-August 2020

Date	Meeting Type	Topics	Potential Action Items
4/13/2020	Board Joint	Review GSP Development Timeline and Schedule	Approve General GSP Timeline. Review/Discussion of Items 1-3. Discuss/Identify Approach for GDE Next Steps.
		Review Current and Historical Groundwater Conditions	
		Review Draft Historical and Current Water Budgets	
		Review Model Calibration Status	
		Review Preliminary Groundwater Dependent Ecosystem (GDE) Maps	
May-2020	TAC Joint	Review Existing Monitoring Network	Recommend Monitoring Network (Including New and Planned Sites), Future Water Budget Assumptions, and Technical Approach for Initial SMC Development.
		Discuss Model Development	
		Review Proposed Future Water Budget Assumptions	
		Review Minimum Thresholds (MTs) and Measurable Objectives (MOs) Technical Approach	
May-2020	Board Joint	Discuss Pros and Cons of Management Areas	Approve Monitoring Network and Technical Approach for Initial SMC Development.
		Review Draft Sustainability Goal	
		Review Approach to Establish MTs and MOs	
5/26/2020	CGA Board	Receive Update on April-May GSP Development Activities	Review/Discussion Only
June-2020	Public Workshops	Current and Historical Groundwater Conditions	Review/Discussion Only
		Historical, Current, and Projected Water Budgets	
		Draft Sustainability Goal	
		Draft Significant and Unreasonable Conditions	
June-2020	Board Joint	Consider Establishing Management Areas	Provide Guidance to Develop Draft Management Areas. Approve Draft Sustainability Goal.
		Consider Approval of Draft Sustainability Goal	
June-2020	TAC Joint	Initial Evaluation and Screening of PMAs	Recommend PMAs for Further Evaluation. Recommend GDE Next Steps.
		GDE Identification Update and Discussion	
		Draft Projected Water Budgets	
July-2020	Board Joint	Discuss Management Area Policy Decisions	Provide Direction on Management Area Policies and Draft MTs
		Review Draft MTs and MOs	

Date	Meeting Type	Topics	Potential Action Items and MOs.
		Review Initial Screening and Evaluation of PMAs	Approve Initial Screening and Evaluation of PMAs.
7/28/2020	CGA Board	Receive Update on June-July GSP Development Activities	Review/Discussion Only
August-2020	Board Joint	Review Draft Management Areas	Review/Discussion Only
		Review Funding Options and Evaluation Approaches	
August-2020	TAC Joint	Review Data Management System (DMS) Options	Provide Input/Direction on DMS and PMA Evaluations
		Review Cost-Benefit Analysis of Selected PMAs	

September 2020-December 2021

Date	Meeting Type	Topics	Potential Action Items
September-December 2020	Varies	Updated MTs and MOs	Varies
		Updated Management Areas	
		PMA Model Scenarios	
		Updated PMA Benefit-Cost Analysis	
		DMS Options Evaluation	
		Draft GSP Chapters:	
		Administrative Information, Hydrogeologic Conceptual Model, and Groundwater Conditions	
		Water Budget, Model Documentation	
		Monitoring Networks, Sustainable Management Criteria	
		Refined GSP Monitoring Network	
		Draft Funding Mechanisms and Recommendations	
January-June 2021	Varies	PMA Rankings and Recommendations	Varies
		Updated Funding Mechanisms and Recommendations	
		Draft GSP Chapters:	
		Management Areas, Projects and Management Actions	
July-December 2021	Varies	DMS Long-Term Recommendations	Varies
		Complete Draft GSP	
		GSP Public review and Response to Comments	
		Final GSP Adoption	