



Kaweah Sub-basin Management Team Meeting Summary

April 18, 2018, 9-11:30 am

Tulare County Board of Supervisor's Conference Room, Visalia, CA

The following is a summary of Kaweah Sub-basin Management Team discussions and next steps.

Meeting Summary:

Item 1. Roll Call, Introductions, and Meeting Logistics.

Management Team Members and alternates present:

Leslie Caviglia, Mid-Kaweah GSA
Aaron Fukuda, Mid-Kaweah GSA
Trisha Whitfield, Mid-Kaweah GSA
Terry Peltzer, East Kaweah GSA
Tom Weddle, East Kaweah GSA
Mike Hagman, East Kaweah GSA
Don Mills, Greater Kaweah GSA
Mark Larsen, Greater Kaweah GSA
Denise England, County of Tulare/Greater Kaweah GSA

Management Team Members Absent: Randy Groom, Paul Hendrix, and Joe Carlini

GSA Consultants:

Stephanie Lucero, California State University of Sacramento
Mathew Klinchuch, Provost and Pritchard
Larry Rodriguez, GEI, Inc
Michelle Ricker, GEI, Inc.

Item 2. Introductions

Mark Larsen, Greater Kaweah GSA called the meeting to order and reviewed GSA representatives. Mr. Larsen reviewed the Agenda and outlined methods the process for Public Comment.

- After each agenda item the convener or facilitator will ask if there are any public comments relating to an agenda item after hearing from Team members. The public may address the Management Team on any item relevant to the Kaweah Sub -Basin coordination effort. The facilitator/convener shall manage time for public comment as needed to meet agenda timeframes. Public comment discussions are incorporated into this summary as elements of discussions.



Item 3. GSA Updates

Each of the GSAs provided an overview of their individual GSA activities including pertinent updates on Groundwater Sustainability Plan (GSP) development and Public Outreach and Engagement. All three GSAs are coordinating with the GSP consultant, GEI, Inc., who is working on the coordinated components of the Groundwater Sustainability Plans (GSPs). Each of the GSAs described ongoing individual GSP activities and planning for development of their respective Outreach and Engagement Plans.

Item 3a. Greater Kaweah GSA (GKGSA)

Greater Kaweah GSA provided data to GEI for the Greater Kaweah GSA boundaries and updating the Water Resources Investigation (WRI). The Greater Kaweah GSA Outreach and Engagement Plan is still under development. Greater Kaweah is also in the process of hiring a GSA manager. The application closes April 2018.

Item 3b. East Kaweah GSA (EKGSA)

Mike Hagman provided an overview of EKGSA activities. He shared that their leadership positions are set for the GSA and their advisory committee is working on the Outreach and engagement plan during their weekly meetings. The East Kaweah GSA is collecting data from 1986 to 1996 period to complete data for their GSP.

Item 3c. Mid-Kaweah GSA (MKGSA)

Aaron Fukuda provided an update on MKGSA activities for Paul Hedrix. MKGSA is working on grant administration for the Prop 1 grant. Their advisory committee reviewed materials for the SkyTEM proposal and started discussions on water budgeting and breakdown down options. They are engaging GEI to look at water budgets and alternatives.

More details on individual GSA activities are available on the individual GSA websites:

- <http://www.ekgsa.org/>
- <https://www.midkaweah.com/>
- <http://greaterkaweahgsa.org/>

Item 4. Coordination Agreement elements

Item 4a. SkyTEM Project and Mid-Kaweah GSA's Cost Share Proposal

Larry Rodriguez summarized the current status of the SkyTEM proposal. SkyTEM will do some subsurface imaging of the Sub-basin. The current proposal is to engage SkyTEM to do imaging throughout the Sub-basin for use in the 2025 update of the Sub-basin GSPs. The information will not be available for the 2020 version of the GSPs. There is a cost share opportunity from DWR. The Sub-basin Technical Advisory Committee (TAC) reviewed the proposal and then submitted it for review by each of the GSA boards. All GSAs agreed that this proposal is worthwhile, the remaining question was how to cost-share the SkyTEM Sub-basin contribution. The cost share was based on individual GSA needs as well as potential flight lines. GSA flight lines recognize that some GSAs may



want more data in some GSAs than others. Therefore, the flight line costs are not fixed and costs may change. Each individual GSA is taking this up individually to determine what they want and need.

Mark Larson clarified that the SkyTEM partner, Stanford University, has not finalized the flights, so there is currently only an estimate. Currently that estimate is \$1000/km of flight lines. Each of the GSAs approved this estimate and to move forward with a signed contract once DWR confirmed cost share contributions. The GEI contribution to this effort will likely come out of the existing GSP costs for Basin Setting. GEI shall provide additional information as needed.

Action Item: GEI to work with Rosemary from Stanford University to confirm flight lines to better gauge overall cost estimate.

Action Item: GEI will work with DWR to execute the SkyTEM contract.

Item 4b. Davids Engineering ET Analysis for the Sub-basin

Larry Rodriguez reminded the Management Team of David's Engineering and Evapotranspiration (ET) analysis work done previously for Kaweah Delta. GEI Recommended utilizing the same approach for the rest of the Sub-basin. This required expanding David Engineering previous work for spatially and temporally to match the SGMA Sub-basin and the 1981 to 2015 or 2016 time frame. David's Engineering estimated \$62,000 to do that expansion work. The work will be encompassed in the existing budget. Each GSA reviewed the concept of using David's Engineering and can proceed without future discussion or decision. It was acknowledged that the topic should be revisited if the cost increases or the scope needs to change.

Kaweah Sub-basin shall use the David's Engineering ET methodology for basin setting expanding spatial and temporal parameters of previous work done.

MKGSA does not require additional Board approval, but will update the board on the basin-setting efforts and use of this methodology.

Action Item: GSA managers shall work with GEI to execute necessary task order.

Groundwater Modeling Task Order and Direction to Send to GSA Boards for Approval.

Larry Rodriguez updated the Management Team on modeling and data already completed, clarifying that the model was expanded spatially and temporally to include the 2016 time frame and those Sub-basin areas not already in the WRI (e.g. EKGSA areas) The requested task order is to review and update the existing model, and conduct a sample run to determine any data gaps and calibration points needed from the spatial and temporal expansions. The task order total is in line with the original Prop 1 proposals. There was some discussion on whether the modelling and calibration needs to be on an individual GSA or Sub-basin level. GEI also clarified that the model is based on historical conditions and existing efforts and actions. Furthermore Scenarios



were run for potential new actions for comparative purposes. These were done to ensure the model is working. GSAs discussed that this task order and concept were consistent with the previously approved Prop 1 grant proposal. As long as budgeted amounts are consistent no further board action is necessary.

Action Items: Larry R will circulate the task order for GSA staff approval. GSA staff will follow-up with task order for signature on a staff level and update boards that task orders signed consistent with approved budgets no board action necessary.

Mark Larsen clarified that this task order does not involve any additional scenario runs or simulations of projects that may be contemplated by the individual GSAs. He reminded attendees that scenario runs on the model are expensive and recommended coordination of collective model runs to ensure efficiency and clear data on how individual GSA activities affect the entire Sub-basin. He recommended that these discussions may be best started at the Kaweah Sub-basin TAC level. Those are expenses that have not been reviewed yet.

Larry Rodriguez recommended that as the Sub-basin approaches the 2020 time frame, to consider looking at a collection of projects that need to be analyzed at the Sub-basin level. Larger GSA projects requiring more resolution are more appropriate for modeling, not all individual GSA projects will need to be run through the model. Larry Dobson also commented that the model should not require more than four simulations.

Public comment: When you run a simulations how intensive and time consuming are the model runs.

Answer: Larry R. they can be done in a week's time. The question is whether analysis and determining whether it performs as expected and does the baseline and results data make sense.

Items 4. Discussion of Water Accounting Framework, Baseline Period, and Data Management Systems

Larry Rodriguez reported that the Subbasin TAC met a few times to review the elements of water accounting, data collection, baseline periods and data management systems. On a technical level, the Subbasin TAC and GEI are analyzing the boundaries of the analysis and the effect of different allocation methods. Eventually recommendations can be developed for the Management Team to review regarding water budget, how it will be divided within the GSAs, regions, or management areas among the GSAs.

GEI is working on the basin setting for the Sub-basin as a whole. This basin setting will describe the entire Sub-basin that will be 80% of what each of the GSAs will need to include in their individual GSPs. The remaining 20% will come from the GSAs as they define their sustainability indicators. The current work is the foundation for each of the GSAs as they prepare their GSPs.

There is a variety of data being collected from existing sources this is being coordinated with Matt Klinchuch for EKGSA. GEI is also working with all GSAs to develop a data management system for housing the data as it is collected (including modeling data needed). This data



management system is solely for SGMA compliance. If additional data management is desired or needed, this can be integrated into a different system to keep the SGMA required data management and reporting separate.

[Item 4d-f. Water Accounting Framework, Baseline Period, Data Management System](#)

Management Team members discussed considerations for water accounting and data management. One Management Team members asked whether census data was being analyzed or if there was accounting from each GSA. Members also identified the need for the coordination committee to address (at a future date) how to treat difference areas for seepage and recharge in the Sub-basin. The members discussed the need to review and analyze any pre-existing agreements on seepage and whether they may override any methodology for seepage and recharge agreed to by the Sub-basin GSAs. Management Team members discussed that different GSAs may have different allocation approaches, as long as they are not in conflict, this will require coordination of methodologies for accounting among the GSAs.

The Management Team acknowledged that they were not ready to discuss Water Accounting, but acknowledged that this discussion should not wait until a full water budget in order to meet the SGMA compliance deadlines. The Management Team and GEI recommended doing simple scenarios and then get a full water budget integration of discussions. These can be done in parallel.

The Management Team recommended identifying where and when discussions and needed to occur in the GSPs development work plan.

Management members requested clarity on what information the GSP consultants needed regarding water allocation and water budgeting and whether delays would impact the contract for GSP development.

GEI confirmed that they can estimate the water budget as of today and expand through the period of record. They will get an estimate of seepage from each facility at which point the gross water accounting for the Subbasin will be done. The remaining issue from a GSP work plan perspective is confirming the water allocation method among the GSAs within the Subbasin before January 2019.

GEI acknowledged that in additional to technical components of the water allocation methodology there are policy and legal issues to consider before the methodologies can be implemented into a modeling scenario. Larry R recommended that discussions of the methodology used for water allocation begin in September 2018 at the latest.

Follow-up: Management Team shall schedule a Water Budget and Allocation discussion for the September Management Team meeting.

Consultants were requested to include updates on water budget and allocation discussions at Management Team meetings leading up to September. GSAs will continue internal discussions on these issues at their Board meetings to prepare for discussions among the Management



Team. Management Team members acknowledged that these internal deliberations will include confirming legal analysis from individual GSA legal counsel on any legal issues or conflicting agreements.

Item 5. Kaweah Sub-basin GSA Coordination

Item 5a. Discussion of Initiation of Kaweah Sub-basin Website

Mark Larsen shared discussions from GKGSA stakeholders regarding the need for better coordination of Sub-basin meetings and individual GSA GSP development activities. Specifically, Mark identified uncertainty from stakeholders regarding which meetings to attend based on the number of notifications received from individual GSAs on the same meetings. Mr. Larsen proposed consideration of a single listserv and calendar for the subbasin that clarifies whether meetings are on the Sub-basin or individual GSA level.

The Management Team and the Public discussed different options to streamline communication with stakeholders. Members of the public acknowledged the value of having a single point of contact for communication and administration of GSP development. They also advised to clarify either through consistent nomenclature or glossary of different groups and governance bodies. The public discussed the need for a Sub-basin level calendar.

The Management Team members discussed the need to maintain the individual GSA outreach and engagement plans without duplicating those efforts. Management Team members stressed the following considerations:

1. Ensuring any engagement activities are cost efficient.
2. Maintaining the integrity of individual GSA communication and Engagement Plans.

Members discussed the confusion navigating multiple calendars, websites and listserv emails. One recommendation was to create a flow chart (if feasible) demonstrating how each of the GSAs relate to each other and their different meetings relating to each GSA's individual and Sub-basin level meetings.

The Management Team members Consultants and Management Team identified a set of follow-up activities for discussion at the May Management Team meeting:

3. Develop a proposal or cost estimate for coordinated Sub-basin website.
4. Identify methods to cost-effectively notice stakeholders of individual GSA and Sub-basin level activities
5. Identify cost-effective methods for developing Sub-basin level calendar.
6. Update any existing diagrams to demonstrate relationship between GSAs and their committees.

Item 5b. Plan Manager

Mark Larsen discussed how SGMA regulations require a single Sub-basin point of contact. This should be an employee or authorized representative appointed through coordination agreement or other agreement. The Sub-basin manager serves as a point of contact between



the GSAs and the Department of Water Resources (DWR).

The Management Team referenced previous discussions and desire to have Paul Hendrix serve in this capacity. Mid-Kaweah representatives stressed the need to clarify roles and responsibilities for this role. Management Team members also discussed the value in clearly defining the limitations of authority and processes for speaking to DWR on behalf of the Sub-basin GSAs.

Follow-up– the Sub-basin manager should be identified in the Sub-basin coordination agreement. As part of coordination agreement development, the GSAs shall specify roles and responsibilities for that role. The Management Team suggested Paul Hendrix for this role, but deferred decision until roles and responsibilities are developed and agreed to in the Sub-basin coordination agreement.

Management Team Work Plan

Stephanie Lucero shared graphic demonstrating general milestones for meeting and discussions for GSP development.

The Management Team discussed whether there were any necessary updates to the work plan. No action was needed for discussion. Consultants will evaluate work plan to confirm when ongoing discussions regarding coordination of communication and water allocation should occur in the overall project work plan.

Item 7. Next Steps & Future Activities

Mark Larsen reviewed action items and follow-up activities discussed during the meeting (see above). The Management Team then updated standing agenda items to include in the May agenda. These were summarized as follows:

1. Confirm meeting minutes from January 30 and April 18.
2. Updates from each GSA.
3. Report out on Subbasin TAC activities if relevant.
4. Discuss and review updated coordinated outreach approach and proposal.
5. Discuss any Work Plan or scheduling updates.
6. Status report on GEI Projects and task orders.

Mr. Larsen asked if the public had any additional comments or items for discussion.

Public commented on groundwater recharge and identified potential ways to utilize irrigation district reported losses to reduce the overall cost to customers and report the groundwater loss for use as additional data for GSP development. Public comment referenced the need to incentivize less groundwater pumping and recommended conducting pilot studies with select growers to develop creative options. Management Team identified these discussions as best for one on one discussion to further develop concepts and as appropriate take these discussions to



the Sub-basin TAC. Members of the public were asked to contact Mark Larsen to discuss proposals in greater detail.

Meeting Adjourned by 11:30am.