Cosumnes Subbasin SGMA Working Group Meeting
Meeting #32
Meeting held August 21, 2019
Prepared by the Consensus Building Institute and the Water Forum

MEETING-IN-BREIF

At the Cosumnes Subbasin Working Group's thirty-second meeting, groundwater sustainability agencies and the planning team discussed coordination with the North American, South American and Eastern San Joaquin Subbasins. Sacramento County requested that GSA representatives send them comments regarding the Eastern San Joaquin draft Groundwater Sustainability Plan. The EKI technical consulting team presented its preliminary hydrogeologic conceptual model and requested data from GSAs. The Working Group recessed mid-meeting to host a special Geophysical Study workshop. After reconvening, the group discussed development of a Proposition 68 grant proposal and directed EKI to prepare a grant application to fund the six discussed tasks. The group also requested that Omochumne-Hartnell Water District work with SAFCA to develop a written agreement regarding funds contributed by SAFCA for EKI's contract to develop the Prop. 68 grant application. The next Working Group meeting will be held 9:00 am to 12:00 pm on September 18, 2019.

ACTION ITEMS

Who	What
Eastern San Joaquin coordination:	
GSAs	Send any comments on the ESJ draft Groundwater Sustainability Plan to Linda Dorn by August 22, 2019.
Basin Setting:	
GSAs	Share data with EKI to assist in data refinement and verification. Outstanding data needs listed by GSA below: **All GSAs:** Review land use and irrigation data sent in email by Kat Perkins **Amador:** - Monthly JVID water use data prior to 2018 - Ione water use data - Confirmation on absence of basin recharge data from Dry Creek **City of Galt:** - The fate of plant effluent and monthly discharge volumes from WWTP. **Clay Irrigation District:** - Map or estimation of residential area and estimated outdoor water use - Information on Folsom-South Canal delivery history - Identify typical irrigation methods for irrigated land use areas

	Galt Irrigation District: - Request release data from SMUD (GIS and SMUD entered into a water contract for the release water which flowed from Hadsellville Creek into Laguna Creek. GIS needs to request data from SMUD to satisfy Folsom-South Canal delivery history data request). **Omochumne-Hartnell Water District:** - Information of quantity and location of use for diversions from Cosumnes River, Inquiring with SWRCB about diversion data prior to 2009 - Map or estimate of rural residential areas with average/ typical area and outdoor water use - Identify typical irrigation methods for irrigated land use areas in OHWD **Sloughhouse RCD:** - Information on quantity and location of use for diversions from Dry Creek - Details on the use and fate of reported Rancho Murrieta diversions from Cosumnes River - Map or estimate of rural residential area with average/ typical area and outdoor water use - Identify typical irrigation methods for irrigated land use areas in SRCD
EKI	Present draft Groundwater Conditions at the September Working Group meeting.
Proposition 68 grant application development:	
EKI	Move forward with developing a Prop 68 grant application and, as possible, present a draft application at the September Working Group meeting.
Water Forum	Follow up with SAFCA, OHWD and EKI to finalize contract for Prop. 68 proposal development.
Water Forum	Convene work team to develop approach to Prop. 68 contract administration; reach out to former ad hoc committee members and all Working Group members to provide an opportunity for new members to be involved.

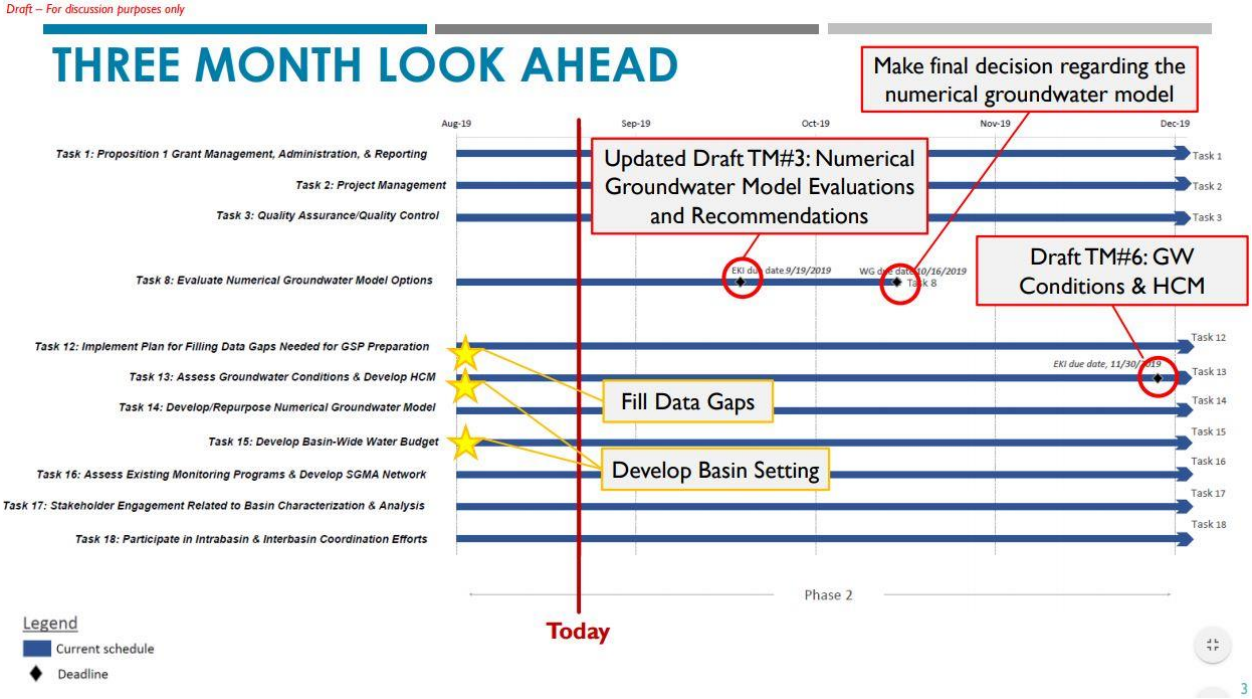
DISCUSSION – KEY THEMES

Below is a summary of key themes discussed at the meeting. This summary is not intended to be a meeting transcript. Rather, it focuses on the main points covered during the group's discussions and any action items.

UPDATES

GROUNDWATER SUSTAINABILITY PLAN UPDATES

Three-month look-ahead



Upcoming deadlines:

Task 8: Evaluate Numerical Groundwater Model options

- EKI: Conduct the evaluation of numerical groundwater model options and prepare associated work products (Update Draft TM #3 – Numerical Groundwater Model Evaluations and Recommendations – due 9/18/2019).
- Working Group: Make final decision regarding the numerical groundwater model by 10/16/2019.

Task 13: Assess Groundwater Conditions & Develop HCM

- EKI: Develop the Groundwater Conditions Assessment and Hydrogeologic Conceptual model and associated interim work products (Draft TM #6 – Groundwater Conditions and Hydrogeologic Conceptual Model – due 11/30/2019).
- Working Group: Review and provide feedback on TM #6 by 12/18/2019.

Groundwater modeling coordination with CoSANA

EKI reported that it has reviewed the CoSANA (Cosumnes, South American, North American) model mesh design and provided feedback. CoSANA modelers are in the process of implementing EKI's recommendations. EKI and CoSANA modelers are developing a site to share materials. Next month, EKI will make a recommendation as to whether the Working Group should continue coordinating with CoSANA.

Eastern San Joaquin updates

EKI reported that Eastern San Joaquin Groundwater Authority (ESJ) held a meeting last month. ESJ's ad hoc committee recommends moving forward with the Prop. 68 grant application. ESJ's September agenda includes discussion of comments received on the Groundwater Sustainability Plan (GSP) and adoption of procedures and implementation of their GSP. EKI is finalizing comments on the ESJ GSP. Sacramento County is also compiling comments.

Action item: GSAs are to send any comments on ESJ's draft Groundwater Sustainability Plan to Linda Dorn, Sacramento County, by August 22, 2019.

Technical Support Services (TSS) grant

Omochumne-Hartnell Water District (OHWD) reported that the Department of Water Resources (DWR) is reviewing OHWD's TSS application.

South American Subasin updates

Tom Gohring, Water Forum, reported that some of the entities involved in South American negotiations have produced a draft document outlining points of agreement between Sacramento Central Groundwater Authority (SCGA), Omochumne-Hartnell Water District (OHWD) and Sacramento County. The points of agreement were presented at board meetings for SCGA and OHWD. These entities plan to have conversations with other groundwater managers including Sloughhouse Resource Conservation District (SRCD) and North Delta GSAs. The points of agreement will be put into a memorandum of understanding MOU once finalized. A SRCD representative commented that SRCD has initiated conversations with OHWD.

Financial

Linda Dorn, Sacramento County, reported that she is collecting information to submit the last quarter reimbursement to DWR.

Classroom recording

Kat Perkins, Water Forum, announced that the recording of the Groundwater Modeling Classroom is now posted on YouTube (youtu.be/N65PQcUWA0U). A link to the video can also be found on the meeting page of the Cosumnes Working Group website (cosumnes.waterforum.org/meetings).

BASIN SETTING

EKI covered the basin setting in Slides 8-31 of EKI Technical Presentation #10.

John Fio and Anona Dutton, EKI, introduced the topic by explaining that their goal is to inform the working group about the hydrogeologic conceptual model (HCM).

The California Sustainable Groundwater Management Act (SGMA) requires inclusion of the hydrogeologic conceptual model (HCM) in the Basin Setting portion of the GSP. EKI delineated the required HCM components, all of which it has completed:

HCM CHECK LIST (17 OF 17)

Check List/Status	Required HCM Component
☑	Regional geologic and structural setting
☑	Lateral basin boundaries
☑	Definable bottom of the basin
☑	Principal aquifers and aquitards • Formation Names • Physical properties of aquifers and aquitards (i.g. vertical and lateral extent, hydraulic conductivity, storativity)
☑	Structural properties of the basin
☑	General water quality (i.g. stiff diagrams, piper plots)
☑	Identification of the primary use or uses of each aquifer (i.g. domestic, irrigation, municipal water supply)
☑	Scaled cross-sections
☑	Basin maps (i.g. topography, surficial geology, soil characteristics, etc.)

<u>Discussion – Basin Setting:</u>

- A SRCD representative commented that groundwater studies commissioned by Rancho Murrieta confirm EKI's findings regarding aquifer properties. He offered to forward these studies to EKI.
- An Amador Water Authority representative asked if there were opportunities to get data from open pit mines around the Ione area, operated by US Mine Corporation. EKI responded that there is likely data, which may or may not change model results, and requested any such data.
- A City of Galt representative commented that the City of Galt sees a difference in water from the Mehrten formation and Laguna formation, but that this difference is related to arsenic content and not ions. Other components of water quality will be a topic of discussion at the September Working Group meeting.

<u>Next steps – Basin Setting:</u>

- EKI will present draft groundwater conditions at the September Working Group meeting.
- GSAs will share data with EKI to assist in data refinement and verification. Below are outstanding data needs, listed by GSA:

  <u>All GSAs:</u> review land use and irrigation data sent in email by Kat Perkins

  Amador:
  - Monthly JVID water use data prior to 2018
  - Ione water use data
  - Confirmation on absence of basin recharge data from Dry Creek

City of Galt:

- The fate of plant effluent and monthly discharge volumes from WWTP.

Clay Irrigation District:

- Map or estimation of residential area and estimated outdoor water use
- Information on Folsom-South Canal delivery history
- Identify typical irrigation methods for irrigated land use areas

Galt Irrigation District:

- Request release data from SMUD (GIS and SMUD entered into a water contract for the release water which flowed from Hadsellville Creek into Laguna Creek. GIS needs to request data from SMUD to satisfy Folsom-South Canal delivery history data request).

Omochumne-Hartnell Water District:

- Information of quantity and location of use for diversions from Cosumnes River, Inquiring with SWRCB about diversion data prior to 2009
- Map or estimate of rural residential areas with average/ typical area and outdoor water use
- Identify typical irrigation methods for irrigated land use areas in OHWD

Sloughhouse RCD:

- Information on quantity and location of use for diversions from Dry Creek
- Details on the use and fate of reported Rancho Murrieta diversions from Cosumnes River
- Map or estimate of rural residential area with average/ typical area and outdoor water use
- Identify typical irrigation methods for irrigated land use areas in SRCD

GEOPHYSICAL WORKSHOP

A recording of the workshop and workshop materials are posted on the Cosumnes Subbasin meetings page (link).

PROPOSITION 68 – GRANT APPLICATION DEVELOPMENT

Tom Gohring, Water Forum, and Bennett Brooks, CBI presented on Prop. 68 grant preparation in slides 1-5 of CBI's Prop 68 presentation.

Gary Bardini, Planning Director of the Sacramento Area Flood Control Agency (SAFCA), was present at the meeting and spoke to the SAFCA cost-match commitment. Bardini brought an action summary of the July 18,2019 SAFCA board meeting showing that the board approved a resolution "authorizing the Executive Director to Cooperate with the Cosumnes Subbasin Working Group in Preparing a Proposition 68 Grant Application to Secure Supplemental State Funding for Completion of the Cosumnes Subbasin Groundwater Sustainability Plan and to Contribute up to $25,000 to the Cost of Preparing the Grant Application." Bardini reiterated that the $25,000 would be made as a donation and not a loan.

Discussion – Preparation of Proposition 68 Grant Application:

- An SRCD representative asked if SAFCA could provide additional funds if proposal development costs exceeded $25,000. Bardini responded that SAFCA would have flexibility to exceed the $25,000 figure. Either the SAFCA board or the Executive Director could authorize the increase depending on the amount of additional funds needed.
- Anona Dutton, EKI, cautioned that total grant application costs could exceed $25,000 since that estimate was provided before the firm knew the extent of the scope of work required to develop the proposal. One GSA representatives encouraged EKI to be as efficient as possible and not overspend on an effort to secure grant funds.

Anona Dutton and John Fio, EKI, reviewed the potential Prop. 68 scope of work developed previously by the Working Group in its EKI's Prop. 68 Presentation. Up to $1 million is available for the Cosumnes Subbasin, which must meet a 25% cost share match requirement. The grant application deadline has been delayed by one month.

EKI reminded the group of the importance of filling gaps related to interconnected groundwater and surface waters, and highlighted the opportunity to proactively fill these data gaps using Proposition 68 funds. EKI provided a summary of the six proposed tasks:

PROP 68 - PROPOSED TASKS (DETAILED)

Task/Project	Outcome	Benefit	Relative Cost
1. GDEs Identification/Verification • Surface Water Workgroup: GSAs, EDF, TNC, etc. • Aerial photo analysis • Field verification	Field verified distribution and composition of GDEs that considers input from stakeholders from within and outside the Basin	• Confirm shallow groundwater areas • Map areas of ecological interest • Identify GW monitoring needs • Improved HCM and GC reliability • More reliable management objectives and thresholds.	$50,000 - $100,000
2. Geophysical studies • Map additional transects, adjacent to rivers, creeks and Folsom South Canal Service area • Validate using borehole information from DMS	Areal and depth distribution of water bearing zones	• Increase HCM reliability by better characterization of water-bearing and non-water bearing zones • Improved quantification of interconnected surface water and groundwater • Inform selection of new well sites	$75,000- $200,000
3. Install monitoring wells • Key Distances and depths from the Cosumnes River	Measured relationships between well extractions, water table changes, changes in surface water depletions, and changes in groundwater storage.	• Potential SGMA compliant monitoring wells • Reliable use of groundwater levels as proxy for depletion of interconnected surface water • Enhanced accuracy of the HCM, GC and WB • High quality data for sustainability indicators (Lowering GW Levels, Degraded Quality, etc.)	$200,000
4. Isotopic Recharge Study • Analyze select surface water samples • Analyze select well water samples • Analyze rainfall samples	Characterize spatial distribution of recharge primarily from river and creeks, rainfall infiltration, and possibly return flows from applied well water	• Delineate recharge areas and primary recharge sources • Improved understanding of surface water and groundwater interactions and fate of intentional recharge • Enhance the HCM and WB	$75,000- $100,000
5. Install and monitor meters on agricultural and residential water wells (agricultural and domestic use)	Measured groundwater extractions	• Basin specific estimate of agricultural-residential water use. • Improved WB reliability and estimated SW depletions	$50,000 – $100,000
6. Model Refinements • Utilize new geohydrologic and water budget data to refine model • Improve reliability of simulated interconnected surface water and groundwater	Improved modeling capabilities through: • Aquifer properties informed by geophysical data • Improved water table characterization and measured relationships between SW and GW conditions. • Calibration targets based on wells near river • Refined recharge representation • Greater WB reliability	Increased model reliability for evaluating: • Pumping impacts on Cosumnes River flows • Movement and fate of intentional recharge • Effectiveness of conjunctive use projects (e.g. Flood-MAR)	$100,000 - $300,000
			Total $550,000-$1,000,000

EKI requested Working Group direction regarding which tasks to propose in the Prop. 68 grant application.

Discussion – Development of Proposition 68 Grant Application:

- The group briefly discussed the need for a workshop focused on groundwater-surface water interactions.

- Gohring stated that the Water Forum can provide a $125,000 match in the form of in-kind contributions. Gary Bardini, SAFCA, stated that SAFCA can provide the other half of the required 25% cost share, $125,000, as well as cash-flow assistance.
- The group discussed what would happen if DWR refused to reimburse an invoice. Gary Bardini confirmed that in that situation, SAFCA (and not any GSAs) would carry the financial loss.
- An SRCD representative asked for more information about the need for and potential location of monitoring wells, which would be the most expensive proposed task. Fio responded that having paired wells looking at different depths near the Cosumnes River, on the Cosumnes Subbasin side of the river, would help fill a data gap. Wells owned by OHWD on the other side of the river would influence the location of these new wells. The SRCD representative encouraged EKI to use Prop. 68 to better characterize groundwater use in the Herald area. No other GSAs voiced support for this preference.
- A Sacramento County representative asked about the opportunity to complete additional monitoring wells as part of the TSS grant. Dutton responded that TSS funds are limited and the Cosumnes Subbasin has already installed three wells, making it less likely that the basin could apply for wells through TSS unless DWR added additional funds.
- A Clay Water District representative asked for more information regarding metering. A technical consultant to Sacramento County responded that metering would supply data on actual pumping by residential users and installation of meters would be a voluntary activity for residents.
- A DWR staff member present at the meeting added to the discussion about flexibility in moving grant funds from one category to another, saying that DWR usually writes in some flexibility to use funds for a related task within a category.
- An SRCD representative requested that EKI allocate time to discuss the Prop. 68 grant with individual GSAs.
- GSA representatives expressed support for EKI to move forward with the development of a Prop. 68 grant application to include a mix of the six proposed tasks discussed at the meeting.

Next steps – Development of Proposition 68 Grant Application:

- **EKI will develop a Proposition 68 grant application** and, if possible, will strive to present a draft at the September 2019 Working Group meeting.
- **OHWD will serve as administer for the contract with EKI** to produce a grant application, using up to $25,000 in SAFCA funding.
- **OHWD and SAFCA** will work together to draft an agreement.
- **A small committee will discuss which entity should serve as Prop. 68 grant administer**, should DWR fund the proposal. Water Forum will send an email to all GSA representatives, providing an opportunity for new participants to be involved in the discussion in addition to past committee participants.

NEXT MEETING

The Working Group and TAC will next meet in person from 9:00 am to noon on Wednesday, September 18, 2019 at the Galt Police Department Community Room, 455 Industrial Drive, Galt, CA.

MEETING PARTICIPANTS

Darrel Evenson, Amador County Groundwater Management Authority
Gary Thomas, Amador County Groundwater Management Authority
Herb Garms, Sloughhouse Resource Conservation District
Austin Miller, Sloughhouse Resource Conservation District
Jay Schneider, Sloughhouse Resource Conservation District
Barbara Washburn, Sloughhouse Resource Conservation District
Mike Wackman, Omochumne-Hartnell Water District
Mark Stretars, Omochumne-Hartnell Water District
Mark Clarkson, City of Galt
Michael Selling, City of Galt
Sue Wohle, Clay Water District
Rick Wohle, Clay Water District
Kerry Schmitz, Sacramento County
Rodney Fricke, Sacramento County
Linda Dorn, Sacramento County
Anona Dutton, EKI
John Fio, EKI
Bennett Brooks, CBI
Julia Golomb, CBI
Tom Gohring, Water Forum
John Lowrie, Water Forum
Katherine Perkins, Water Forum

Additionally, members of the public, SAFCA and DWR attended the meeting.

GLOSSARY

Below is a list of commonly used terms:

CBI	Consensus Building Institute - The organization that facilitates SGMA implementation in the Cosumnes Subbasin
CoSANA	A groundwater model being developed by Woodard & Curran which covers the Cosumnes, South American and North American subbasins.
DWR	California Department of Water Resources
EKI	The firm that currently serves as independent technical consultant for the Cosumnes Subbasin
Galt ID	Galt Irrigation District (link) - One of the seven GSAs in the Cosumnes Subbasin

GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
OHWD	Omochumne-Hartnell Water District (link) - One of the seven GSAs in the Cosumnes Subbasin
QAQC	Quality Assurance and Quality Control Plan (link)
RFP	Request for Proposal
RFQ	Request for Qualification
Prop. 1	Proposition 1
SGMA	California Sustainable Groundwater Management Act (link)
SRCD	Sloughhouse Resource Conservation District - One of the seven GSAs in the Cosumnes Subbasin
SSCWA	Southeast Sacramento County Agricultural Water Authority (link)
TAC	Cosumnes Subbasin Technical Advisory Committee – An advisory body, with representatives from each of the seven GSAs, that develops recommendations for approval by the Working Group.
WF	Sacramento Water Forum (link)

For questions regarding this meeting summary, please contact Tom Gohring at the Water Forum or Julia Golomb at the Consensus Building Institute.

Visit cosumnes.waterforum.org for the latest meeting information and materials.