

**Siskiyou County Groundwater Sustainability Agency
Shasta Valley Advisory Committee Meeting
MEETING SUMMARY**

Meeting date/time: January 27, 2020/ 3:00 – 6:00 pm

Location: Zoom Online Platform

Key contacts:

-Matt Parker, County Natural Resources Specialist, mparker@co.siskiyou.ca.us 530.842.8019

-Katie Duncan, Stantec Consulting – Facilitator. katie.duncan@stantec.com 916-418-8245

-Laura Foglia PhD, U.C. Davis Technical Team Lead, lfoglia@ucdavis.edu 530.219.5692

MEETING RECAP

- **Approval of Past Meeting Summary.** The committee provided conditional approval of the November meeting summary for posting on the Siskiyou County SGMA website.
- **Public Comment.** Public comments captured below.
- **District Staff and Other Updates.** Matt Parker provided updates on GSP Development and other SGMA related items, Pat Vellines provided updates from DWR, and there was a brief update from the ad hoc committee.
- **Presentation and Discussion of Shasta Valley Water budget.** The technical team reviewed the preliminary water budget for the Shasta Valley basin and showed water budget results by individual areas within the basin.
- **Presentation and Discussion of Monitoring Network.** The technical team presented on the proposed monitoring network and potential management actions.

SUMMARY OF ACTION ITEMS

<i>Action Item</i>	<i>Responsible Party</i>	<i>Status/Deadline</i>
Advisory Committee to review preliminary water budgets and provide comments to technical team.	Advisory Committee Members	February

Next Meeting: February 24, 2021. Due to current circumstances surrounding covid-19 the meeting will be held online with Zoom technology.

View [Siskiyou County's groundwater website](#) for posted meeting materials.

MEETING SUMMARY

Agenda Review and Approval of Past Meeting Summary

The facilitator welcomed all participants and thanked attendees for their patience with ongoing use of Zoom as alternative meeting platform during the pandemic. She secured consent from committee members to post the November meeting summary on the county's SGMA webpage. No committee members put forward questions or expressed concerns about the agenda at the outset of the meeting.

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Public Comment Period

At the outset, members of the public may comment on items not on the consent agenda. The public is asked to wait until the appropriate item to comment on issues directly related the current meeting agenda. Comments are captured below, responses are provided if applicable.

Comment: The agenda does not adequately inform the public members of what exactly is going to be discussed. I like that there is no required registration prior to the meeting. I am concerned that the public outreach and education provided to inform public of SGMA is not enough and that there will be consequences.

Comment: What are the triggers for management actions to prevent undesirable results? What metrics are being used?

Response: This will be defined through the SMC process.

District Staff and Other Updates

- Matt Parker reviewed key GSP milestones and overall schedule. In the coming months it will be important for the Advisory Committee to come to consensus on a range of important GSP elements.
- Matt Parker provided an update on the County's SGMA Legal Counsel RFQ process. The County received a number of applications and is currently in the processing of vetting and approving their chosen candidate.
- The Shasta Valley Surface Water ad hoc group met on December 15, 2020.
- Pat Vellines provided updates from DWR including information on future SGMA funding for medium-priority basins, future Airborne Electromagnetic (AEM) surveys over the Siskiyou County Basins, and ongoings in other SGMA basins.
- The Shasta RCD provided an update on monthly maintenance and download for upper watershed CIMIS and precipitation data collections as well as shallow monitoring wells.
- Katie Duncan provided an overview of Advisory Committee roles, responsibilities, and processes.

Review and Discussion of Shasta Valley Water Budget and Monitoring Network (Discussion for two agenda items combined below.)

Dr. Laura Foglia opened the presentation by describing how the water budget and monitoring network fit into the GSP structure. The integrated model is used to produce the water budget. The GSP monitoring network will be used to demonstrate sustainability. Project and management actions (PMAs) help the basin meet the defined measurable objectives.

Brad Gooch reviewed the proposed monitoring network. In developing the monitoring network many things must be considered including historical vs new groundwater wells, the quality of historical data, location of wells, and available well construction data. For Shasta Valley, the

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optimal number of monitoring wells in the network is 15-20. Brad went on to show and describe representative monitoring point (RMP) locations and well types.

Comment: The number of wells in the monitoring network is based off of general averages and standards from DWR. We have complex basins, is that enough?

Response: It would be interesting to gain a well in Pluto's Cave basalt and to add wells to address large data gaps.

Pat Vellines (DWR): Submit a TSS application for a well in Pluto's Cave Basalt.

Response: We may come back with a proposal for additional wells. We need to understand the cost-benefit of everything and really consider what is actually required for the monitoring network. What's the minimum and where do we need to do better?

Comment: Something else is needed for monitoring surface water. Different wells? More wells?

Response: If thinking about interconnection, important to have groundwater levels near surface water areas of interest, then you can compare well data to river gage data. Monitoring network can also be other monitoring points like airborne or satellite data and is not restricted to wells. Groundwater quality, level, and storage driven by groundwater wells.

Comment: Can we measure discharge in springs? Add spring discharge measurements.

Response: The surface water SMC will need much more discussion on how to monitor for that. The current map shows the proposed network for groundwater quality and levels.

Comment: Spring discharge is such a huge component for beneficial use for agriculture and environment. Especially important not just from technical perspective but from practical and economic perspective too.

Cab Esposito presented preliminary water budget results for Shasta Valley. Final results are not ready yet as the calibration of the Shasta Groundwater Model is taking a little longer than expected. Certain elements of the water budget are much more refined than others. The water budget is used to quantify sustainable yield. Cab showed and explained the water budget schematic highlighting major components, inputs and other important terms and then walked through the presentation slides.

(Note: There was a comment on the reference conversions shown. The conversion values shown in the slide are confirmed and correct.)

The Water Budget displayed as a stacked bar chart showing magnitude of inflows and outflows was presented for the entire basin by water year type. Individual water budgets for smaller areas within basin boundaries were presented. These smaller areas and water budgets were presented in the following order: Big Springs Irrigation District, Central Area, City of Weed, City of Yreka, Edgewood, Gazelle Area, Grenada Irrigation District, Lake Shastina, Little Shasta Area, Montague Water Conservation District, Northern Area, Pluto's Cave Area, Shasta Water Association, Southern Area.

Comment: There is no entry for domestic use.

Response: Not yet, it is relatively very small.

Comment: What is the definition of groundwater inflows? How is agriculture defined?

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Response: Recharge is everything that percolates down that is not seepage from canals, lakes or streams. Agriculture is any land used for growing crops in Shasta Valley.

Response: Groundwater pumping for agriculture is determined working with David's engineering and looking at soil/water balance from a satellite based approach. Groundwater pumping was intersected with DWR land use maps. Verified by committee previously.

Comment (from chat): It is surprising that groundwater pumping management is such a minor component, does this imply that groundwater pumping management is also a minor issue.

Response: Groundwater pumping has seasonal impacts, and it happens in the driest years and driest months. Groundwater pumping still occurs in wet years and management is still necessary.

Comment: Some net outflow from basin is due to natural conditions, looks as if basin is losing storage every year.

Response: When model is calibrated groundwater to stream terms will change.

Comment: Was the most recent DWR land use data used? Previously DWR had shown big springs as surface water and not groundwater.

Comment: You used jurisdictional boundaries, not physical boundary. Does each district represent separate model within model or averages for the area?

Response: The model was created on 18-acre grid cells and so for each district or area those grid cells are summed/balanced.

Comment: Water budget areas are fragmented. Are we missing something? Is there a feature outside those areas? Would it be more useful to show budget by region that together make up the entire basin?

Response: This can be done, we wanted to show by district for the AC as people are familiar with the resources and operations for these areas.

Comment: Regarding domestic well inclusion, beyond just looking at private wells are wells that provide community water included?

Response: Yreka fed by surface water allocation.

Comment on modeling: The canals into groundwater uses general head boundaries? Only place they are used? Small part of water budget.

Response: Canal leakage (*also referred to as seepage in these notes*) term is not modeled as a river/stream. General head boundary is a way to simulate groundwater and surface water interaction.

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Comment: What is this telling us? Because these are jurisdictional boundaries. How are we using this in a major way. Or would physical areas be telling us more?

Response: Ultimate plan looking at physical boundaries will be more telling.

Comment: Have we overlaid river discharge; we can only do recharge in wet years. Dry years hard for everyone.

Response: The intention is to maximize recharge in wet years

Comment: It is good to see the water budgets monthly to see the difference between the irrigation season vs. winter.

Comment: For Pluto's cave, the main source of outflow is ag pumping. Pluto's cave only contributing to river on very wettest of years. In most years, groundwater pumping is greater than the volume of recharge.

The Advisory Committee was asked to review the presented water budgets and provide comments to the technical team.

Dr. Laura Foglia presented on potential projects and management actions (PMAs). Matt Parker described specific projects on the PMA list. Ideas for additional PMAs will be included on the list.

Comment regarding recharge projects: Is there an estimate by area to identify where recharge is feasible?

Response: Yes

Comment: Recently cannabis pumping has affected residential wells, how is all pumping affecting residential use?

Comment: Has temperature modeling been explored? This is specific to surface water and fisheries and strategically identifying opportunities to and locations in system to exchange water and keep the cold water in the river.

Response: This goes beyond groundwater modeling. There will be assumptions used in how groundwater usage would affect specific areas and reaches in the river.

Comment: What about upland management, juniper removal and reducing ET by tracking land use practices?

Matt Parker provided closing comments and thanked all for participating.

MEETING ATTENDEES

Advisory Committee Members

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Tristan Allen, Montague Water Conservation District
Lisa Faris, Big Springs Irrigation District
Susan Fricke (Vice-Chair), Karuk Tribe
Blair Hart, Private Pumper
Steve Mains, Grenada Irrigation District
Justin Sandahl, Shasta River Water Users Association
John Tannaci (Chair), Residential
Gregg Werner, Environmental/Conservation

Absent Committee Member

Robert Moser, Municipal/City
Pete Scala, Private Pumper
Justin Holmes, Edson Foulke Ditch Company

District Staff

Matt Parker, County of Siskiyou Natural Resources Specialist

Technical Team

Dr. Laura Foglia, UC Davis/Larry Walker Associates
Dr. Thomas Harter, UC Davis
Cab Esposito, UC Davis/Larry Walker Associates
Brad Gooch, UC Davis/Larry Walker Associates

Facilitation Team

Katie Duncan, Stantec

Agency Staff

Janae Scruggs, California Department of Fish and Wildlife
Pat Vellines, Department of Water Resources
Jessica Boyt, Department of Water Resources
Dan Worth, State Water Resources Control Board
Kevin Delano, State Water Resources Control Board
Chris Watt, Regional Water Quality Control Board

Public

Ethan Brown (Shasta RCD)
Leah Easley
John Clements
Dan Wendell
Ginger Sammito
Dave Webb

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Jack Rice
Stan Leake
Ayn Perry
Steve Griset
William Sliker
Konrad Fisher
Theo Whitcomb
Charlene Watkins
Michael Riney
Nick Joslin
Martha Akers
Heather Wood, NRCS
Brandy Caporaso, Shasta RCD