

Sierra Valley Technical Advisory Committee Meeting Summary: Aug. 16, 2021

Project Website: www.sierravalleygmd.org/sierra-valley-groundwater-sustainability-plan

Data Portal: <https://sierra-valley.gldata.com>

ACTION ITEMS

ACTION ITEM: LWA will send an email to the Sierra Valley water purveyors to request any pumping data.

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Welcome, Introductions, Agenda Review

The tenth meeting of the Technical Advisory Committee (TAC) for the Sierra Valley (SV) Groundwater Sustainability Plan (GSP) was an in-person meeting, with a zoom webinar option for remote participation. (Note: Go to <https://youtu.be/Hn6Acaw0Onk> for the video recording of the meeting.) The meeting agenda was reviewed, followed by introductions. The topics for this meeting covered:

- Project updates
- Funding for GSP implementation
- Sierra Valley Water Budget

There were 20 participants: 13 TAC members and 7 project team members.

Project Updates

LOOK AHEAD SCHEDULE

The GSP must be submitted to DWR by January 31, 2022. Members of the TAC will receive draft text at the end of **August** for Chapter 3 (Sustainable Management Criteria, or SMC, and monitoring) and Chapter 4 (Projects and Management Actions or PMAs). In **September**, there will be a working sessions on PMAs. Also during September, SMC and PMAs will be further discussed at the TAC and Board meetings. In **October**, Chapter 5 (GSP Implementation) will be addressed at TAC and Board meetings. The Public Review Draft of the GSP will be released in October so that it can be finalized by January.

Discussion: It's important to clarify what the TAC is thinking as a group about in terms of water quality and projects and management actions, as well as the benefits and impacts associated with pumping. Working sessions can also help refine and finalize draft language.

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GDE WORKING SESSION

A working session on GDEs clarified the list of sensitive species located in Sierra Valley and the mapping that will be included in the GSP related to groundwater dependent ecosystems. Additional discussion looked at opportunities for recharge and meadow restoration that could support GDEs and related species. There are also opportunities for upland restoration that could improve retention of soil moisture and repair effects of forest roads.

NOTIFICATION OF PUBLIC HEARING FOR GSP ADOPTION

The Sustainable Groundwater Management Act (SGMA) requires the Groundwater Sustainability Agencies (GSAs) a 90-day Notice to Adopt the GSP. This notification would go on September 20th to the counties of Plumas and Sierra, the City of Loyalton, and to the Tribes with ancestral lands in the Basin. Any jurisdiction requesting consultation on the GSP must submit a request within 30 days of the publication date for the Notice to Adopt. The Sierra Valley Groundwater Management District is looking to adopt the GSP on December 20th, with Plumas County looking to adopt the GSP on December 21st. The draft of the GSP does not need to be complete to issue the Notice to Adopt.

Discussion: Will there be a notice to water purveyors and is any information being requested from domestic groundwater suppliers? Through TAC meetings and email correspondence, the project team has been working with water purveyors to collect and share information. Pumping information can be sent directly to Gus Tolley.

Action Item: LWA will send an email to the Sierra Valley water purveyors to request any pumping data.

GSP Element: Funding GSP Implementation

Ryan Aston, SCI Consulting, gave a high-level of review of possible GSP implementation costs. (Note: This occurs at time 51 minutes in the YouTube video.) This type of analysis is required to part of the GSP itself. Typical categories of expenses for GSP administration and implementation include:

- Operations and maintenance: monitoring, modeling, annual reports
- Grant writing and administration: to support capital projects

Some activities, such as monitoring and data collection, are activities currently conducted and funded by the Sierra Valley Groundwater Management District. Cost estimates for implementation could be an additional \$15,000/year, or perhaps more. Current revenue streams include contributions from Sierra and Plumas counties, meter fees, and parcel fees. If additional revenue was needed, fee increases could be considered for well users and/or parcel owners. Changes to fees for well users require compliance with Prop 26; property charges must be compliance with Prop 218. Estimates were provided on revenue increases that might be considered on a per well basis, a per acre-foot basis, or per acre basis.

Discussion: There should be some estimate developed on the number of domestic wells in the basin. The Departments of Public Health or Environmental Health may have information on domestic wells. It would be helpful to know the full groundwater production in the Basin,

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including domestic well use and municipal supply. It was noted that an estimate for up to 1,000 domestic wells might be between 280-500 acre-feet per year – compared with ag pumping that might be 6,000 – 12,000 acre-feet per year. Note: domestic wells that use less than 3 acre-feet per year are not regulated under SGMA.

Economic models should assess the impacts of any proposed fee increases.

Basin modeling should look at possible impacts to the shallow aquifer for any proposed reductions in ag pumping. E.g, what happens to shallow groundwater if ag tail water levels are reduced?

GSP Element: Water Budget

RECAP (at time 1 hour, 30 mins. in YouTube recording)

Gus Tolley, noted that models provide a representation of hydrogeological conditions and improve the accuracy of water budgets by assessing inputs and outputs. DWR provides a *Handbook for Water Budget Development* to ensure consistency. It is available online at <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Data-and-Tools/Files/Water-Budget-Handbook.pdf>. Water budgets are similar to financial budgets in tracking the difference between deposits (inflows) and withdrawals (outflows); with water budgets, the difference between the two represents the change in groundwater storage (i.e., the amount of groundwater being stored in the aquifer).

Different models track the three different subsystems of the water budget:

- Soil and land surface
- Surface water
- Aquifer

The model of the aquifer tracks inflows (recharge, primarily from precipitation, diversions) and outflows (groundwater pumping, evapo-transpiration). Depending on how wet or dry the year, the groundwater-surface water exchange may be an inflow to the aquifer (increasing the amount of groundwater stored) or an outflow (where groundwater is flowing to surface water). Similarly, the difference between inflows and outflows may increase groundwater storage (during wet years) or it may decrease groundwater storage (during dry years).

Modeling results are compared to available physical measurements. Mountain front recharge is poorly understood. Isotope tracing can help identify recharge surface, but it's not very helpful in understanding the amount of recharge. The annual aquifer water budget (bar chart) combines results from all three models. The model defines 12 layers of the aquifer, each of which has different assumptions regarding inputs to the submodels. The annual water budget can be viewed as monthly water budgets.

The water budget can also be plotted geographically, showing the southwest and northeast areas. The model shows changes in the water budget under “what if” scenarios, where the baseline is shown as zero on the vertical axis. Different conditions or pumping changes can be modeled to see the change in inflows, outflows, and the change in groundwater storage. The

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modeling results can also be converted to groundwater levels associated with each monitoring well. Once the model is calibrated, future climate change scenarios and management scenarios can be run. The sustainable yield can also be determined once the model is calibrated.

The model document will be included in the GSP as an appendix.

DWR Evaluation of GSPs

Judie Talbot provided an overview of the requirements that DWR uses in evaluating GSPs for adequacy and completeness. The evaluation can result in the GSP being approved. If a GSP is not approved, it may be deemed “inadequate” or “incomplete” where the Basin GSAs are given six months to address the identified deficiencies in the GSP.

September TAC Meeting

The September TAC meeting takes place on Tuesday, September 13th, from 5:30 – 8:30 p.m., at Sierra Christian Church in Beckwourth. The agenda will focus on the Project and Management Action worksheet.

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Participants

TAC MEMBERS

X = attendance

	Organization, Name		Organization, Name
X	Agricultural Commissioner, Plumas-Sierra Willo Viera		Sierra County Environmental Health Elizabeth Morgan
X	City of Loyalton Jerry Gerow		Sierra Valley Groundwater Mgmt. District Einen Grandi and Dwight Cerasola (alternate)
	Feather River Land Trust Ken Roby	X	Sierra Valley Resource Conservation District Rick Roberti
X	Feather River Trout Unlimited William Copren	X X	Sierraville Public Utility District Tom Archer and Paul Rose (alternate)
X	Hinds Engineering Greg Hinds		UC Cooperative Extension Tracy Schohr
X	Integrated Environmental Restoration Svcs. Michael Hogan		Upper Feather River IRWM Uma Hinman
	Plumas Audubon Jill Slocum		USFS – Plumas National Forest Joe Hoffman
X	Plumas County Tracey Ferguson	X	USFS – Tahoe National Forest Rachel Hutchinson
X	Sierra Brooks Water System Tom Rowson		

EX-OFFICIO MEMBERS

X	CA Department of Water Resources Debbie Spangler and Pat Vellines (alt.)	X	CA Department of Fish and Wildlife Bridgett Gibbons
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TECHNICAL TEAM & PLANNING COMMITTEE

	Laura Foglia, LWA Project Manager	X	Dwight Smith, McGinley & Associates
X	Betsy Elzufon, LWA	X	John Bliss, SCI Consulting
X	Kristi Jamason, Planning Committee	X	Ryan Aston, SCI Consulting
X	Gus Tolley, DBS&A	X	Judie Talbot, Outreach Facilitator

COMMUNITY MEMBERS (none)