

Sierra Valley Technical Advisory Committee Meeting Summary: November 2, 2020

Welcome, Introductions, Agenda Review

The first meeting of the Technical Advisory Committee (TAC) for the Sierra Valley (SV) Groundwater Sustainability Plan (GSP) was convened by the Sierra Valley Groundwater Management District and Plumas County – who serve as the Groundwater Sustainability Agencies (GSAs) responsible for developing the Groundwater Sustainability Plan. Tracey Ferguson, Plumas County Planning Director, welcomed TAC members and meeting participants. As a co-sponsor of the TAC, Plumas County is looking forward to this effort.

The meeting agenda was reviewed, followed by introductions of those in the room and those on the phone. A recording of this meeting is posted online at: <https://youtu.be/ngRHQY4D4ZU>.

Overview

Laura Foglia, Project Manager for Larry Walker Associates, explained that the Groundwater Sustainability Plan (GSP) needs to be submitted to DWR by January 2022. This requires that a draft of the GSP be prepared by late summer 2021 to allow for reviews and public comment. There is much work to be done to deliver a GSP to the Department of Water Resources (DWR) by January of 2022. A draft timeline will be introduced at the next TAC meeting, outlining the work and key tasks through 2021.

The organization and team effort for this effort involves four aspects:

- Groundwater Sustainability Agencies (GSAs): Sierra Valley Groundwater Management District and Plumas County – who have authority and responsibility for the final GSP
- Technical Team: Led by Larry Walker Associates – who collect and develop the content and information needed for the plan, as well as write the GSP
- Planning Committee: Composed of representatives of the GSAs, technical team and planning partners – who connect the technical team with resources, coordinate the content and logistics for meetings, and help plan overall approach to completing the GSP
- Technical Advisory Committee (TAC): Composed of representatives for different groundwater users and uses in Sierra Valley Basin – who will provide ideas, advice and recommendations to the GSAs on all aspects of the GSPs.

COMMUNITY INVOLVEMENT

Judie Talbot, outreach facilitator, referenced the handout on “Roles and Commitments.” This document provides some background information and a description of the entire effort. This is posted online at: www.sierravalleygmd.org/files/a41e82fb3/GSP+PreDraft+Roles+and+Commitments+10-29-20.pdf. The initial thinking is that there may be eight (8) meetings of the TAC. Meetings might be held as frequently as once-per-month

SGMA legislation requires that GSPs consider groundwater users, groundwater uses and those who can implement the GSP. In Sierra Valley, those who implement the Plan are already represented by the

Sierra Valley Technical Advisory Committee Meeting Summary: November 2, 2020

groundwater uses and users identified in the [2019 Community and Engagement Plan](#) – and who serve on the Technical Advisory Committee. In addition to the TAC meetings, there will be community outreach involving public workshops and other communication options and approaches. Information from TAC members and the broader community is vital to making the GSP effective for the Sierra Valley Basin. This input contributes to more fully informed policies and actions, with the potential to address multiple objectives while resulting in fewer unintended consequences.

Additional information about the formal partnership between Plumas County and Sierra Valley Groundwater Management District is found in the Memorandum of Understanding (MOU) addressing the development of the GSP. See: <https://www.sierravalleygmd.org/gsp-documents>. Plumas County is taking the lead on reaching out to Native American Tribes to inform them of the GSP effort and options for being involved or providing input.

SUSTAINABLE GROUNDWATER MANAGEMENT ACT (SGMA)

SGMA was enacted on January 1, 2015, during a historic drought, to plan and manage groundwater so that it is available into the future. The legislation was designed to provide local control of groundwater resources, with State oversight. Critically overdrafted basins, such as those in the Central Valley, were required to submit their GSPs by January of 2020. These are online at the DWR website at: <https://sgma.water.ca.gov/portal/gsp/all>. The public has access to the GSP portal, with additional information on GSP reports and monitoring, by clicking on <https://sgma.water.ca.gov/portal/#gsp>.

High-priority and medium-priority basins are required to submit their GSPs by January 2022. The Sierra Valley Basin Sub-basin (which we generally refer to as the Sierra Valley Basin for convenience) is designated as a medium-priority basin. Sustainable groundwater management needs to be achieved over a twenty-year period, i.e. by 2042.

SGMA established six Sustainability Indicators to track undesirable results for groundwater conditions. Five of these sustainability indicators are relevant to the Sierra Valley Basin:

- Degraded Groundwater Quality
- Land Subsidence
- Surface Water Depletion (related to groundwater use)
- Lowering Groundwater Levels
- Reduction of Groundwater Storage (the amount of groundwater in storage)

The last Sustainability Indicator, Seawater Intrusion, is not applicable in the Sierra Valley Basin.

GROUNDWATER SUSTAINABILITY PLANS (GSPs)

Ultimately, GSPs must be acceptable to DWR and local stakeholders to be effectively implemented. This is the reason for strong community involvement. Similarly, the tools and models developed in creating the GSP must be helpful to GSAs into the future. GSPs are updated every 5 years, which supports adaptive management and the ability to respond to changing conditions and the results of management actions.

Sierra Valley Technical Advisory Committee Meeting Summary: November 2, 2020

GSPs integrate information on hydrology with stakeholder input to describe groundwater supply and demand, as well as generate options for managing groundwater supply and demand. GSPs should help the GSAs address local challenges and enhance local opportunities for resource management.

Preliminary Data Collection Efforts

The technical team has been reviewing data already collected by SVGMD, Hinds Engineering, Bachand and Associates and DWR. When looking at the data relating to the five Sustainability Indicators, it is important to hear from local interests if there is missing information. The data accessed to date includes:

- Total number of wells drilled in the basin (for which there are records)
- Crop maps (2014, 2016)
- Geology maps and faults
- Groundwater-Dependent Ecosystems
- Surface water features

Other information is being sought on: operations and flows from Frenchman Lake and Lake Davis, preliminary vegetation mapping from California Department of Fish and Wildlife, and more specific data on annual pumping in the Sierra Valley Basin.

A data management system is being developed and will be available to the GSAs as a private viewing webpage.

Assessing Sustainability

Groundwater Sustainability Plans (GSPs) have five elements:

1. Introduction (administrative information)
2. Plan Area and Basin Setting (local conditions)
3. Sustainable Management Criteria (measurements for groundwater conditions)
4. Projects and Management Actions (future efforts)
5. Plan Implementation

Several concepts and tools are used to assess groundwater sustainability:

Sustainable Measurement Criteria: represent the locally defined items being monitored to track groundwater conditions for each of the Sustainability Indicators.

Minimum Thresholds: represent where locally defined **undesirable conditions** occur, which are significant and unreasonable; it's a line that we don't want to cross

Measurable Objectives: are the goals that you are looking to achieve when sustainable management has been achieved

Triggers: while SGMA does not require triggers to be identified, they serve an important function by indicating when conditions have deteriorated (or failed to improve) – but have not yet

Sierra Valley Technical Advisory Committee Meeting Summary: November 2, 2020

reached undesirable conditions; this provides a warning signal with a margin of “operational flexibility” to make changes and maintain compliance

Sustainability prevents locally defined unreasonable, undesirable results. Again, value can be revisited during the five-year updates of the GSP, using an adaptive management approach, since it can be challenging to relate measurements to impacts in advance.

SUSTAINABILITY GOAL

Each GSA needs to provide a sustainability goal in its GSP. This goal should ensure that no undesirable results occur. It's a brief sentence that provides a big-picture description of what people want the basin to look like.

TAC meeting participants to think about the community and natural conditions that they want to see continued well into the future and, conversely, what would people not want to see. Lastly, what might others want to see maintained in the future? While a complete list of comments is provided at the end of these meeting notes, several responses mentioned the following:

MAINTAIN

- Viable agriculture in the valley, at or a bit above current levels
- Maintain the quiet, rural nature of the basin
- Maintain and enhance presence of wildlife
- Support wetlands for migratory and local birds

PREVENT

- Degradation of water quality
- Drying out of wetlands, streams and braided channels
- Domestic well users having to drill deeper wells
- Development including industrial farming, airport expansion and housing developments

Sierra Valley Basin Boundaries and Setting

Tracey Ferguson referenced the map of the boundaries for the Sierra Valley Basin. She highlighted the boundaries of the Sierra Valley Groundwater Management District, which overlays most of the Basin. A small portion of the basin extends beyond the District's boundary in Plumas County and is part of Plumas National Forest. Joe Hoffman, the hydrologist for Plumas National Forest, is a member of the TAC. Also, Plumas County has responsibility for outreach to Tribes with interests in that area. The outreach is important to ensure that all perspectives are considered.

On the map, the orange area represents the District boundary and the green area represents the basin boundaries. The portion outside the District but in Plumas County is roughly west of the A-23 bridge and extends to Rocky Point. That area is a Wild and Scenic River corridor area, also referred to as the Ramelli grazing allotment which has water rights out of the Grizzly Creek. There are Tribal and cultural interests here with the Maidu, Washoe and Paiute Tribes. Plumas National Forest will write the content for the GSP section on the basin setting for this area, with Tribal engagement in that process.

Sierra Valley Technical Advisory Committee Meeting Summary: November 2, 2020

Also, the Chilcoot sub-basin is located adjacent to and east of Sierra Valley sub-basin.

Laura Foglia noted that the model being developed looks beyond Sierra Valley Basin boundaries, using a larger footprint to calculate the precipitation, inflows and water budget for the Sierra Valley Basin. This expanded area may also contain areas of groundwater recharge for Sierra Valley. Understanding recharge dynamics is important, since different areas may be more or less effective for managed recharge – which is expensive. Isotope data can help identify water sources and groundwater flow.

GSP Content: Water Quality

Water quality is one of the Sustainability Indicators for SGMA. This area of focus will be used as an example to illustrate the consideration of numeric measures and how GSP requirements can be applied. Key examples of concerns or goals related to water quality include:

- Drinking water quality
- Possible impacts to groundwater from man-made or naturally occurring constituents
- Possible contributions to a Wild & Scenic River (surface water quality)

It may be that current records for the basin may have gaps in terms of length of monitoring history, the constituents being monitored for, and the areal extent of monitoring. Identifying the data gaps will be an important outcome on its own.

Greg Hinds remarked that some groundwater constituents might have implications for its usability on agricultural fields. For example, boron. In one area, there is a report that alfalfa needs to be replaced more frequently. While this constituent is naturally occurring, the goal would be to make sure that the constituent doesn't spread further. It would be helpful to find locations that could be added to the monitoring network to help track this.

There was a question as to where funding would come from to support additional monitoring. Funding might be available through implementation grants. It will be vital to determine the beneficial locations for additional monitoring to identify trends. For water quality, some jurisdictions have three-dimensional modeling. The public supply wells tend to have greater depth, the basin would benefit from additional monitoring of shallower domestic wells. Wells at different levels have different water quality.

The technical team will be developing a hydrologic conceptual model to describe groundwater basin conditions. This builds on the work by Greg Hinds and others. The model will describe the different levels of the aquifer – such as a shallow and deep aquifer – and the levels that are used. These levels could be associated with different sustainable management criteria and management actions. This must include attention to domestic wells as beneficial users of groundwater.

Discussion

- The GSP also describes groundwater and surface water interactions. This would consider the network of data for the connections between groundwater and surface water systems.
- There was a comment that perhaps the monitoring network for groundwater quality did not need to be particularly extensive, since the prioritization process did not flag impacts to groundwater quality as a big issue.

Sierra Valley Technical Advisory Committee Meeting Summary: November 2, 2020

- There is a need to monitor criteria for each sustainability indicator – to evaluate trends and prevent existing conditions from deteriorating. Defining a good monitoring network for groundwater quality would be a good deliverable for the GSP process. Also, the basin would benefit from a better time-series on groundwater quality.
- The state is asking for proof that septic systems do not affect water quality.
- There is monitoring of the surface water that leaves the Basin through the Irrigated Lands Program.

Meeting participants were encouraged to bring in, or identify, data. This would supplement that data that has already been collected from sources such as the Groundwater Ambient Monitoring and Assessment (GAMA) program. The technical team has selected data sets from wells sampled at least three times since 1980. This data selection process is underway for many different constituents. These constituents are candidates to become Sustainable Management Criteria.

In the area of water quality, monitoring will be a primary objective for the GSP and GSAs. If exceedances are found, there are state agencies and programs that address standards and compliance – such as the Water Boards and the Irrigated Lands Regulatory Program. It was noted that there are primary and secondary standards for drinking water.

- It was mentioned that users would not want to unintentionally degrade groundwater quality by pumping from one side of a fault that could result in movement of lower-quality water to the other side.

ACTION ITEM: LWA will check to ensure they have the ILRP data.

Next Steps

This is the type of meaningful discussion for the TAC: considering monitoring challenges, what information is currently available and what information is still needed. TAC members indicated that they will continue to participate in the process.

NEXT TAC MEETING DATE: DECEMBER 7, 2020 from 1:00 – 4:00 P.M.

- The TAC will meet again on Monday, December 7th from 1:00 – 4:00 p.m.
- The meeting location will be determined and announced in a later email.

CLOSING REMARKS AND ADJOURN

Tracey Ferguson closed the meeting by extending her appreciation for everyone's time and dedication to the effort, which is an important element of local control.

Sierra Valley Technical Advisory Committee Meeting Summary: November 2, 2020

Participants

TAC MEMBERS

X = in-room V = virtual

	Organization, Name		Organization, Name
X	City of Loyalton Brooks Mitchell	X	Sierra County Environmental Health Elizabeth Morgan
V	Feather River Land Trust Ken Roby		Sierra County Public Works Tim Beals
V	Feather River Trout Unlimited William Copren		Sierra Valley Groundwater Mgmt. District Dave Goicoechea
X	Hinds Engineering Greg Hinds	X	Sierra Valley Resource Conservation District Rick Roberti
X	Integrated Environmental Restoration Svcs. Michael Hogan	X	Sierraville Public Utility District Tom Archer and Paul Rose (alternate)
V	Plumas Audubon Jill Slocum	X	UC Cooperative Extension Tracy Schohr
X	Plumas County Tracey Ferguson and Tim Gibson (alternate)	V	Upper Feather River IRWM Uma Hinman
	Plumas County Environmental Health Rob Robinette	X	USFS – Plumas National Forest Joe Hoffman
X	Sierra Brooks Water System Tom Rowson		

EX-OFFICIO MEMBERS

V	CA Department of Water Resources Debbie Spangler	V	CA Department of Fish and Wildlife Bridgett Gibbons
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TECHNICAL TEAM & PLANNING COMMITTEE

- | | | | |
|---|--|---|------------------------------------|
| X | Laura Foglia, LWA Project Manager | X | Judie Talbot, Outreach Facilitator |
| V | Betsy Elzufon, LWA Asst. Project Mgr. (admin) | X | Jenny Gant, SV GMD Board Clerk |
| V | Cab Esposito, LWA Asst. Project Mgr. (techn'l) | X | Kristi Jamason, Planning Committee |
| V | Mitchell Mysliwiec, LWA Assoc. Engineer | | |

COMMUNITY MEMBERS

- | | | | |
|---|---|---|--|
| X | Einen Grandi, Local Rancher & SV GMD
Chair | X | Jim Swann, Local Resident and Civil
Engineer (ret.) |
| | | X | Katie Tanner, Local Resident |

Sierra Valley Technical Advisory Committee Meeting Summary: November 2, 2020

Vision for Sustainability – What to Keep, What to Prevent

KEEP	PREVENT
Ability of property owners to drill domestic well with sufficient water quantity for domestic needs	Groundwater pumping allocation reductions due to overdrafting
Healthy plant and vegetation communities	Congestion (roads or buildings)
Habitat protections (for animals and plants)	Housing developments
Open space (e.g., Feather River Land Trust)	Industrial farms
Access for birding, walking, nature hikes	Monocrops
Dark skies	Becoming a bedroom community for Reno
Quiet environment	Wells going dry
Wetlands	Movement of water contaminants
Birds, plants and animals	Drying of wet meadows, streams, braided channels
Good water quality	Drinking water quality degradation
Viable agriculture economy	Competition
Pastoral setting	Depletion
Resilience	Contention
Maintain the balance between commercial and natural systems (e.g., agricultural and ecosystem needs)	Neighbors needing to deepen wells due to other neighbors use
Maintain a rural environment with opportunity for <u>planned</u> growth to maintain communities	Sale of agricultural lands that leads to unlimited growth
Synergy	

It was noted that others might want to see more development of Sierra Valley: golf courses, second homes, a larger airport, cannabis farms, warehouses, etc. – all of which have implications for water use and quality of life.