

Siskiyou County Sustainable Groundwater Management
Shasta Valley Advisory Committee Meeting
Meeting Summary

September 29, 2022, 3:00 – 6:00 p.m.

Held in-person at Montague Community Hall and virtually via Zoom

Meeting Recap:

1. **Approval of Past Meeting Summary:** Advisory Committee approved the minutes from the most recent meeting held in October 2021.
2. **Announcements and Updates:** included an update from Matt Parker on Groundwater Sustainability Agency (GSA) activities and an update from Pat Vellines on news from California Department of Water Resources (DWR). Also included time for comments from the public on non-agenda items (there were none) and updates from Committee Members on basin conditions.
3. **Technical Team Presentation:** included overview of the Annual Report submitted in April 2022, and an overview of the DWR implementation grant requirements. The team also reviewed the determined components that will be included in the grant proposal.
4. **Discussion of DWR Implementation Grant Proposal:** Advisory Committee selected projects and management actions from Groundwater Sustainability Plan (GSP) Chapter 4 to include in the DWR implementation grant proposal.
5. **Reflection on Next Steps:** Members of the Advisory Committee were identified to help scope the projects and management actions to include in the DWR implementation grant proposal and follow-up discussions with the technical team were scheduled to take place in early October.

Next Steps for the DWR Implementation Grant Proposal:

Members of the Advisory Committee are meeting with Larry Walker and Associates (LWA) and GSA staff in early October to develop the high-level scope for the projects that will be included in the DWR implementation grant proposal. Following the October meetings, the technical consultants will draft project descriptions to include in the implementation grant proposal. The projects selected for inclusion in the grant include:

- Groundwater surface water connectivity study (monitoring Interconnected Surface Water)
 - Advisory Committee Members Scoping: Tristan Allen, Gregg Werner, Grant Johnson, Steve Mains
- Aquifer characterization analysis
 - Advisory Committee Members Scoping: Blair Hart (Laura from LWA is following up directly)
- Ranch and farm assessment (irrigation efficiency) and voluntary land repurposing program development
 - Advisory Committee Members Scoping: Blair Hart, John Tannaci, Steve Mains, and Giuliano from UC Cooperative Extension
- Recharge feasibility study + pilot projects
 - Advisory Committee Members Scoping: Steve Mains, Justin Holmes, Lisa Faris, Justin Sandahl
- Upland watershed management (juniper removal)
 - Advisory Committee Members Scoping: Grant Johnson, Tristan Allen; potential participation from Natural Resources Conservation Service (NRCS)
- Conservation outreach + education
 - LWA following up with Stantec directly
- Well inventory program + analysis of residential well failures (Multi-Basin)
 - Advisory Committee Members Scoping: Gregg Werner, Justin Sandahl, and other basin representatives

Other Action Items:

- Larry Walker and Associates will follow up with members of the Advisory Committee as noted throughout the minutes.
- Blair will send findings from the study that was already conducted on his property to LWA so they can prioritize their irrigation efficiency questions accordingly.

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Attachments, Links:

- PowerPoint Presentation Slides (attached)
- DWR updates and Northern Regional Office Flyer (attached)
- Fall Newsletter (attached)
- Annual Report: <https://sgma.water.ca.gov/portal/gspar/submitted>
- DWR implementation grant [proposal solicitation package with scoring criteria](#)

Attendees: see last page

MEETING SUMMARY:

1. Call to Order, Introductions, Agenda Review, and Hybrid Meeting Structure

Facilitators Emily Finnegan and Marisa Perez-Reyes convened the meeting and conducted a roll call of Advisory Committee Members participating in person and online, establishing quorum. Emily reviewed the meeting agenda.

2. Approval of Past Meeting Summary

John Tannaci motioned to accept the previous meeting minutes and Tristan Allen seconded. No members abstained. The October 2021 Meeting Summary was approved and will be posted to the [Siskiyou County Siskiyou County Sustainable Groundwater Management Act \(SGMA\) Website](#).

3. Public Comment Period

Members of the public were invited to provide comments unrelated to meeting agenda items. No public comments were shared.

4. District Staff Updates

Matt Parker shared the Groundwater Sustainability Agency (GSA) updates:

- The Shasta Valley Groundwater Sustainability Plan (GSP) was submitted to the California Department of Water Resources (DWR) by the January 31, 2022 deadline. DWR is now reviewing the Plan and has until January 2024 to determine if the Plan is adequate, incomplete, or inadequate. The District will provide any updates on the progress of DWR's review, but feedback from DWR is not anticipated until mid- to late-2023 at the earliest. The GSP may be viewed on DWR's SGMA portal: <https://sgma.water.ca.gov/portal/gsp/preview/90>
- Matt provided an update on Executive Order N-7-22 and how this impacts the County's well permitting process. GSA staff is working with the Siskiyou County Environmental Health Department regarding the County's well permitting and application process to comply with the Executive Order and will bring information to the Board of Supervisors at an upcoming meeting. Matt offered to distribute a notice in advance.
 - John Tannaci asked how members of the Advisory Committee can provide comments on the proposed process. Matt replied that the publicly noticed Board Meeting would be the appropriate place for members of the public to provide comments and learn more.
- The Stantec Facilitation team is assisting in the development of a "Multi-Basin Management Strategy Document" that will serve as a guide for the GSA to manage the three GSPs. The GSA is gathering input through interviews and a stakeholder survey. A link to fill out the survey will be made available soon.
- The GSA is working to explore and develop opportunities with the community and local entities to improve monitoring and data collection under the current drought conditions that will aid the GSA in improving groundwater reliability for all beneficial users.
 - Giuliano from UC Cooperative Extension goes out monthly to measure wells. They are looking to expand their monitoring capacity and invited participation from irrigators and members of the community who use domestic wells.

5. Announcements from DWR and Other Agencies

Pat provided updates from DWR on the following. See attached flyer for full details.

- SGMA Implementation Grant Program
- California Groundwater Projects Tool

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- Streamlined permitting process for groundwater recharge projects – CEQA exemption for groundwater recharge projects. If you are interested in learning more, talk to DWR's Tim Godwin: timothy.godwin@water.ca.gov or call 916-873-4599
- Airborne Electromagnetic (AEM) surveying information is now available on the California Natural Resources Agency Open Data Portal: <https://data.cnra.ca.gov/dataset/aem>.

Laura will follow up with Pat on TEM data.

6. Committee Member Updates

Blair Hart shared that he had wells of varying depths go dry this year that have never gone dry. Justin Sandahl and Tristan echoed that the effects of the drought are being felt by many. John noted that in his neighborhood, people are pumping until they can't.

Greg asked for clarification about the curtailments. Leah shared that no one has been curtailed right now. She attributes this to a lot of users turning off their water early. It was noted that the curtailments are only affecting appropriative rights, not riparian.

7. Presentation from Technical Team

Laura Foglia, Larry Walker and Associates (LWA), shared updates on the Annual Report that was submitted in April 2022 and provided an overview of hydrological conditions and modeling in the basin. See attached PowerPoint slides.

- Blair shared that he has observed changes in well depth correlated to whether he has the pump shut on or off. He asked Laura if there was an explanation for his observation. Laura reiterated that Shasta Valley is unique. There are many elements of hydrology in this basin that are not yet understood. The team is aware of this and DWR knows.
- Blair asked for follow-up information on how to access a specific set of data from two years ago when they took DWR staff tracking around. Laura shared that the data is in an Appendix of the GSP. They will combine this with AEM geophysical data. Laura will follow up with Blair and Pat to coordinate sharing this data.
- Blair suggested that they may find that this year's observations are an aberration because they didn't irrigate this year. Laura agreed this was a good point and they should discuss how that will be reflected differently in this year's Annual Report.
- Committee members expressed a desire to quantify the impacts of groundwater recharge. There are many things that impact total volume. During the County Fish and Game meeting last week, it was discussed that the local landscape had changed drastically due to all of the juniper encroachment. Committee members noted the importance of looking at the whole landscape. Laura agreed and noted that they have been up front in the Annual Report with all the data that is unknown. They will need to be thinking about how they'll recalculate their water budgets based on new information and the remaining data gaps.
- Angelina Cook (public member) asked about the data collected at the sites, sharing concern that they're only monitoring groundwater elevation and temperature, not constituents. LWA shared that the model has been extended from 2018 through 2022. They were able to collect isotope data to improve the flow model. Blair asked if the isotope data included information about the land elevation where that water hit the land? Angelina asked if there was an effort to correlate data from wells located near rivers with the streamflows. Laura confirmed that yes, there are multiple coordinated well and river monitoring spots.

8. Discussion: DWR Implementation Grant Proposal

Laura shared information about the DWR implementation grant and the timeline for submitting the application. LWA is targeting the end of October to have the proposal finished because DWR has offered to take a first pass at reviewing and provide preliminary comments ahead of the final submission at the end of November.

Laura shared information about the scoring criteria for the proposal, noting that the application score is averaged. A single weak component can hurt the overall proposal, so they are going to prioritize projects that are detailed and well thought-out. The GSA will have four years (until June 2027) to implement the grant once they receive it. The funding reward is anticipated to be announced in summer 2023.

Determined Components

The GSA has already decided to include certain high-priority items in the grant proposal. Determined components include:

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- GSP management and administration
- Fee study and economic analysis continuation
- Stakeholder outreach
- GSP updates, including incorporation of model updates to address data gaps, managing data, responses to the DWR GSP determination, annual reports, and the 2027 GSP update (5 year update).

Components for Discussion

Well Inventory Program, Analysis of Residential Well Failures

- Matt clarified that they aren't sure what the well inventory program would look like yet. These funds would be used to support a publicly engaged process to develop the program, in coordination with the Butte and Scott Valley basins and the County Environmental Health Department.
- Greg and Tristan highlighted the importance of having an accurate inventory program in place.
- Dave Webb added in the chat: Most functioning wells will have an agricultural power drop, PP&L (the local energy company) could really help to identify wells a lot if they were asked properly, even if limited to a count of ag drops with no location or name identified. Blair clearly spoke about a well that isn't dry, but which no longer has full pumping capacity. No one seems to be tracking that, but it matters.
 - Pat confirmed that unless the well is completely dry, they don't report it as such. There isn't a way yet to capture if it's pulling sand, or needing to be lowered, etc.
- John suggested connecting resources on well management criteria, guidance, or regulations with users in the basin. Tristan shared that people are concerned about the consequences for pumpers in the event of curtailments. Laura clarified that water usage monitoring is not on the table at this time. Shallow domestic wells would also be included in the inventory program, not just ag wells.
- Angelina asked how the County would cover costs associated with processing applications.
- Tehama County and Shasta County have resources to support drilling deeper, providing bottled water, or hauling water in the form of low interest loans. They could be case studies to look at as examples.
- Later, the Committee discussed the need for establishing a better understanding of where wells are failing and what factors may be contributing to the problem. They suggested that this could be a subtask of the well inventory program and proposed geographically locating the dry wells and incorporating them in the model.
 - Pat added additional information about dry well solutions.
 - Justin raised the unintended consequence of property values suffering because of dry wells. Some are afraid their homes will be condemned.
 - There was a suggestion for the effort to be conducted by a third-party and it should include direct outreach to well owners.

Irrigation Efficiency Projects, Property Assessments

Concerns about Irrigation Efficiency:

- John Tannaci shared concerns regarding irrigation efficiency projects, which have historically been good for private operations but have not benefitted the basin as a whole. Tristan echoed that increases in efficiency frequently don't translate to more water in the river. Laura confirmed that that's why a study would be done to understand the benefits of irrigation efficiency projects.
- Conrad Fisher (public member) suggested the GSA focus on projects and management actions (PMA) that are known to benefit the ecosystem rather than conducting new studies. Laura added that the Shasta Valley Basin's growers are already using fairly efficient irrigation practices.
- Steve Mains emphasized that irrigation efficiencies aren't limited to water savings, but also cost savings due to reduced energy use, and shared an example from his time with the Riverside Corona Resource Conservation District.
- Circling back to the concern about conservation projects resulting in water back in the river, there are legal ways to demand that those sources are conserved. There are factors that would need to be worked out, though.

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Interest in Property Assessments:

- The group discussed previously conducted property assessments. Blair shared that the assessment for his property cost \$650,000. Laura requested Blair share findings from the assessment conducted for his property, so they can leverage the information learned to avoid duplicative efforts.

Incentives for drought tolerant crop changes or voluntary reduction in irrigated acreage:

- Angelina asked about the alternative lower ET crop project. John Tannaci is interested in exploring this topic further.
- UC Extension is already doing this (Laura Snow, Big Valley Modoc may be a good person to plug into this discussion)

Groundwater/ Surface Water Connectivity Study

- Tristan suggested that a groundwater surface water connectivity study be conducted. He mentioned removal of fish passage projects and demand management of land. Blair is enthusiastic about bringing the groundwater levels back up using all tools available.
- Gregg later asked whether new areas of key surface water interaction would be studied under the network upgrades.
- Grant Johnson added that root wad information is desired as part of this effort.

Additional Topics

- **Aquifer Characterization Analysis:** John Tannaci asked if the aquifer characterization analysis tier 2 PMA is included in monitoring upgrades. Laura replied that this is a separate idea. The group discussed conducting pumping tests.
 - Dave Webb suggested pulling in Michael Ward, retired DWR staff member, who did the groundwater data needs assessment for Shasta between 2004 and 2008. mward5577@outlook.com Dave offered to connect with him.
- **Juniper Removal, Upland Management:** The group briefly discussed Cal Fish and Game fish passage projects.
- **Recharge Feasibility Study and Pilot:** Laura reflected on the possibility for recharge, noting that at this juncture there isn't enough known yet about the specific potential locations. They may possibly start with a pilot project or feasibility study to investigate benefits further.
 - Steve shared a few examples of low-tech recharge technologies (beaver analogs and rock diversion dams). There was a study conducted along the coast by The Nature Conservancy.
- **Outreach and Engagement:** Angelina asked for further details about outreach and engagement activities that are planned.

9. Reflection on Next Steps

The Advisory Committee deliberated on next steps and identified some action items. Members will meet with LWA during the week of October 3 to develop more detail for the technical consultants to write project descriptions to include in the implementation grant proposal. The projects selected for inclusion in the grant include:

- Groundwater surface water connectivity study (monitoring Interconnected Surface Waters)
 - Tristan Allen, Gregg Werner, Grant Johnson, Steve Mains
- Aquifer characterization analysis
 - Blair Hart (Laura is following up directly)
- Ranch and farm assessment (irrigation efficiency) and voluntary land repurposing program development
 - Blair Hart, John Tannaci, Steve Mains, and Giuliano from UC Cooperative Extension
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- Grant Johnson, Tristan Allen; potential participation from Natural Resources Conservation Service (NRCS)
- Conservation outreach + education
 - LWA following up with Stantec directly
- Well inventory program + analysis of residential well failures (County-wide)
 - Gregg Werner, Justin Sandahl, and other basin representatives

10. Meeting Adjourned

The meeting adjourned by 6:00 p.m. as is the group practice.

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Meeting Participants

*= virtual

Advisory Committee Members Present:

John Tannaci
Justin Sandahl
*Grant Johnson
Blair Hart
Tristan Allen
Gregg Werner
Steve Mains (joined at 4:30)

Advisory Committee Members Absent:

Justin Holmes
Lisa Faris
Robert Moser

Agency Staff and Members of the Public:

Pat Vellines, DWR
Nancy Ogren
Angelina Cook
Conrad Fisher
Brandon Criss
Josh Spooner
*Amy Campbell, The Nature Conservancy
*Denise Smith
*Dave Webb, Friends of the Shasta River
*Leah Grassman, Deputy Watermaster
*Donald Moore
*Chris Watt, Regional Water Board
*Michael Kobseff
*Eli Scott
*Don Meamber

Project Team:

Matt Parker, GSA staff
Marisa Perez-Reyes, Stantec
Emily Finnegan, Stantec
Laura Foglia, Larry Walker and Associates
Kelsey McNeill, Larry Walker and Associates
Bill Rice, Larry Walker and Associates