



Solano Subbasin GSA Collaborative Meeting

February 20, 2025 | 1:00 - 3:00 p.m. | Via Zoom

Participants

x	Solano Subbasin GSA Chris Lee Maritza Flores Alex Rabidoux	x	Solano Irrigation District GSA Cary Keaten Paul Fuchslin	x	Sacramento County GSA Chris Hunley Austin Miller Kerry Schmitz
x	Northern Delta GSA Erik Ringelberg Chris Thomas	x	City of Vacaville GSA Justen Cole Tim Hawkins		
x	Solano Subbasin GSA TAC Kelly Huff Chris Rose Ed King Lisa Shipley Misty Kaltreider "Dick" Chun Tzou	x	Luhdorff & Scalmanini Engineering Vicki Kretsinger Grabert Nick Watterson Faithe Lovelace	x	Ag Innovations Jenn Fox Guadalupe Garcia Jessie Holtz

AGENDA

1. GSA Updates
2. GSP Implementation
 - a. Annual Report Preview
 - b. Projects and Management Actions
 - c. Updates on Well Permitting, State Activities, Funding
3. Stakeholder Engagement
4. Forecast next Collaborative meeting (March 20) topics

MEETING NOTES

Groundwater Sustainability Agency (GSA) Updates

- Northern Delta GSA - held a January Board meeting. The cost share for SGMA work has been submitted, and the check should be received soon.
- Solano Subbasin GSA - congratulated Solano RCD and Dixon RCD on the successful groundwater workshop held on January 30.
- Sacramento County GSA - is updating its collaborative agreement to reflect the vacation of exclusive GSA status by 5 reclamation districts. The county is preparing to notify the



State of updates to the GSA area and will start a 45-day public notice period for other agencies to express interest.

Sacramento County GSA also shared news about a recharge project. As background, following the 2023 floods, the California Governor allowed floodwater diversion for groundwater recharge. Water Code Section 1242.1 allows flood flows to be diverted for recharge, and a recent executive order removed the need for a formal plan, allowing quicker action. Rancho Murieta Community Services District and a local landowner collaborated with county officials to divert 111 acre-feet of water from the Cosumnes River for recharge. This was important work that demonstrated the potential for future recharge efforts.

- City of Vacaville GSA - is currently choosing a consultant for three new wells to replace existing wells. They have reached out to several consultants for a proposed recycled water study.
- Solano Irrigation District - had no updates at this time.

Groundwater Sustainability Plan Implementation

Annual Report Preview

LSCE gave a presentation on the Solano Subbasin: Preliminary 2024 Annual Report Preview. The annual report for the Solano Subbasin, due on April 1, covers the 2024 water year and includes groundwater conditions and implementation efforts. The group reviewed the requirements for the *Water Year 2024 - Annual Report*. Some data in the presentation is still preliminary. Participants were encouraged to provide feedback to ensure accuracy and completeness in the final report.

Ag Innovations shared that the report benefits from Solano Subbasin's long-standing practice of broader water condition reporting and LSCE's work with GSAs on hydrology and data collection. This presentation provides an opportunity for stakeholders, especially newcomers, to review the annual report preview, raise concerns, and ask questions before finalization. Regular Solano Collaborative meetings are valuable in ensuring GSAs understand and contribute to the reporting process. Some notes from the conversation:

- For water year 2024, precipitation was near average, but the number of hot days was notably high, likely increasing water demand.
- Groundwater monitoring showed five wells below the minimum threshold, consistent with 2023, though overall conditions remain stable.
- Efforts to expand the monitoring network, replace lost wells, and address data gaps are ongoing.
- In the basal Tehama zone, changes in groundwater levels and storage were minimal, which is a positive sign.
- Subsidence monitoring is ongoing through GPS stations and remote sensing, showing minor seasonal fluctuations but no significant long-term land surface decline. The changes observed in 2024 are minimal (less than a quarter of an inch), indicating no severe compaction issues like those seen in other regions.



- Nitrate concentrations are important in water quality monitoring. New data from the Irrigated Lands Regulatory Program has provided a more comprehensive view. Some anomalies are still under review, but the issue remains a priority, particularly for drinking water sources.

A final draft report will be shared with GSA leads around March 1, and LSCE hopes to collect and incorporate all comments by March 14. The team also encouraged GSA staff to share any new or ongoing groundwater management and outreach efforts for inclusion on the report.

Projects and Management Actions

The presentation also included some information on Projects and Management Actions.

- Efforts are underway to expand and automate the groundwater monitoring network, refine hydrologic models, and improve water-use estimations. Additionally, ongoing projects aim to enhance groundwater recharge, mitigate flooding, and explore innovative water management solutions.
- A cover crop study with a local grower evaluates the benefits of specific agricultural practices for soil and water conservation, with preliminary findings expected soon.

Discussion followed the presentation.

GSA Collaborative Member Question: How many acres are on the field with the groundwater study? How are they terminating the cover crop? What will be planted in the coming year?

- **LSCE Response:** There are only flumes gaging three furrows on each side, about half of a larger field. The vegetation included planted hay and volunteer crops. Sunflowers are being planted in the coming year.

GSA Collaborative Member Question: Regarding the groundwater level hydrographs, can you share more about the Northwest focus area? A second question on nitrates: there are more measurements because of the Irrigated Lands Program, right? So, from last year's to this year's report, are there more wells that are at, or below, the exceedance threshold?

- **LSCE Response:** Yes, the Northwest quadrant is the area of greatest focus. To the second question, once wells exceed the threshold, they are not sampled again, which makes direct year-to-year comparisons difficult and potentially biased. Groundwater quality changes typically occur over longer periods, not rapidly from year to year, so large changes in quality are not expected unless there's an unusual event. Some wells showed significant variability, like a shift from non-detectable nitrate levels to exceedances of the drinking water standard, which is still under investigation. The focus should be on tracking wells over multiple years rather than making judgments based on a single year's data.

Dixon RCD shared more about recharge discussions from the January 30 Dixon/Solano RCD Water Quality Coalition Groundwater Workshop. Presentations from the Workshop are available at dixonrcd.org/event-videos-presentations. Participants shared groundwater recharge ideas, such as expanding the irrigation district's service area and using an old rail line along Highway 505 for recharge. A key focus is exploring recharge projects in the Tremont 1 and 2 watersheds, where willing landowners and available space could help offset flooding and development



issues in Tremont 3. Another promising idea is agency-supported maintenance of existing structures, with landowners open to assistance or reimbursement for upkeep to enhance recharge efforts.

LSCE added that, initially, there was resistance to flooding agricultural fields for groundwater recharge due to concerns about soil conditions and future yields. However, recent discussions show more openness to alternative approaches, such as utilizing tailwater return systems and cover cropping.

Sacramento County GSA added that some landowners are willing to use hay fields and irrigated pastures for recharge, as these areas have fewer row crops. One local Community Services District (CSD) is exploring golf courses as potential recharge sites, though water quality management remains a key consideration.

The Solano RCD is collaborating on agricultural water efficiency efforts and project sites. They identified about six sites featuring detention basins and vegetated swales. Outreach at small events and agricultural water forums continues to bolster engagement.

The LSCE team is gathering local stories and activities to include in the annual report, highlighting groundwater management efforts. They encourage GSA staff to contribute specific examples, like SID's work in Quail Canyon, to showcase local initiatives. While the report covers groundwater conditions for the water year, other activities from the past few years can still be included. Submissions are welcome until April 1 to ensure these efforts are documented.

Stakeholder Engagement

The GSA Collaborative members were asked for perspectives on a single umbrella GSA. There have been previous discussions about ways to simplify governance, and the group periodically checks in to gauge interest in this concept. Two GSA staff leads noted the continued need for independence.

Ag Innovations polled attendees about another proposed GSA Workshop. It would be similar to last year's gathering, allowing GSAs to connect, gain a high-level understanding of subbasin conditions, and share perspectives. The group looked at a possible agenda for the workshop and discussed dates. Meeting participants suggested that Thursday, April 24, was the date with the fewest known conflicts. GSA staff were asked to share the details with board members and to get in touch with Ag Innovations about any meeting topic ideas and logistic details. Solano Irrigation District and Solano Subbasin GSAs volunteered to host in their Vacaville office.

A Virtual Town Hall is being planned for this Spring to engage the public and discuss on-the-ground groundwater management activities. The meeting will be open to a broad audience, with past events drawing 80–100 participants. Monday, May 19, was proposed, and the group was asked about any scheduling conflicts and ideas for outreach events.



Forecast Upcoming Meeting Discussions

The next meeting on March 20 will include a discussion about groundwater sustainability planning. Collaborative members are encouraged to reach out to jenn@aginnovations.org or jessie@aginnovations.org with any questions or ideas.