Solano Subbasin GSA Collaborative Meeting Summary

March 20, 2025 | 1:00 - 2:30 p.m. | Via Zoom

Participants

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

AGENDA

1. GSA Updates
2. GSP Implementation
    a. Projects and Management Actions
    b. Updates on Well Permitting, State Activities, Funding
3. Stakeholder Engagement
4. Forecast next Collaborative meeting (April 17) topics

MEETING NOTES

Groundwater Sustainability Agency (GSA) Updates

- Northern Delta GSA: Reviewing draft annual report
- Solano Subbasin GSA: Applying to extend Department of Water Resources grant for another year
- Sacramento County GSA: Working with Reclamation Districts that are withdrawing; preparing for the April 8 Board meeting.
- Solano Irrigation District: Introduced Kyle Esquer, who will be taking a more active role in the GSA Collaborative
- City of Vacaville GSA: Not present

Groundwater Sustainability Plan (GSP) Implementation

Projects and Management Actions (PMAs)

The Sustainable Groundwater Management Act (SGMA) Annual Report was slightly delayed due to the late release of USDA data. LSCE thanked GSA staff for reviewing the annual report and mentioned a few areas that may need to be reviewed. Staff were encouraged to ensure that groundwater-related activities are captured, both in the narrative and the accompanying table, and to reach out if anyone notices any omissions or areas needing refinement. Staff have worked with Ag Innovations and RCDs to gather as much relevant information as possible. The report - and data - will be submitted by April 1.

Total water use was estimated to be about 650,000 acres for the previous year, which includes all the surface water accounted for, including reported deliveries of surface water, and estimates of groundwater pumping. The group discussed Delta water use and referenced a Public Policy Institute of California report on Climate-Smart Conservation. The group was reminded of LSCE's presentation last month, which showed the effects of increasing summer temperatures on water use.

Ag Innovations previewed that this might be a topic at the Virtual Town Hall and/or GSA Workshop, which will be further discussed in the stakeholder engagement agenda item. LSCE shared a monitoring reminder. DWR has requested that data on the SGMA Monitoring network modules be uploaded by July 1. GSA Collaborative members were encouraged once again to review the annual report.

Groundwater Management Presentation

The Subbasin's grant from the Department of Water Resources (DWR) Component 3, Task 3 relates to groundwater management and future policy. Key areas identified in the grant include land use trends, development policies, groundwater recharge and management, the Northwest focus area, and climate resilience strategies. Additional considerations include evaluating

financial incentives, addressing grower concerns regarding water retention on agricultural lands, and assessing the costs and risks associated with recharge initiatives like Flood-MAR. The Northwest focus area remains a priority, and cost analyses for recharge and related programs will be reviewed.

In this conversation, the group was encouraged to think big about Project and Management Action (PMA) strategies for incentivizing recharge. Participants were encouraged to contribute ideas. ERA Economics shared that there is a range of project scales - from smaller projects that are recharge-focused or flood-MAR-focused, to larger projects, like Kern banking.

Discussion:
A participant mentioned the Harvest Water Program example, a roughly $600 million initiative under the Water Storage Investment Program. It recently received additional funding and leverages a long-term water supply from treated recycled wastewater and is a primary Project and Management Action (PMA) for the South American Subbasin.

Another analog is the Hartnell program, which utilizes surface water supplies for recharge. Surface water supplies are episodic, and securing long-term permits remains a challenge, but it utilizes federal project water and existing canal infrastructure. Utilizing irrigation networks and other surface water drains could present viable alternatives for water management in the Solano Subbasin. More was shared in the chat:

- In addition to the Sac Sewer (formerly Regional San) Harvest Water Project, the Sacramento Regional Water Authority (RWA) is leading the Sacramento Regional Water Bank effort: Sacramento Regional Water Bank – A Sustainable Storage and Recovery Program.
- Sac Sewer's Harvest Water Project roughly 50,000 acre footprint: Harvest Water - Sacramento Area Sewer District

The Harvest Water Program operates as an indirect recharge project by supplying treated wastewater to local farmers for irrigation, reducing overall groundwater demand. Direct recharge methods are significantly more expensive and complex, requiring a reliable water source and substantial investment. The lower part of Sacramento County features a broad, deep groundwater depression, making large-scale direct recharge infrastructure impractical. While some municipalities, like Elk Grove, pursue targeted injection projects, these require specific conditions and funding. The Harvest Water approach relies on passive recharge through precipitation and irrigation substitution, covering roughly 50,000 acres. However, farmers still supplement with groundwater due to water availability and agronomic demand. So a lot of factors are at play, including crop values, water supply, and demand fluctuations.

The group discussed costs for projects. The Sacramento Sewer Project's $1.2 billion wastewater treatment facility and extensive infrastructure contribute to its expense. Smaller-scale projects have estimated life-cycle costs ranging from $220 to over $300 per acre-foot, with funding sourced from grants, local fees, and landowner contributions.

Considerations for project feasibility such as return on investment (ROI), recharge potential, and multi-benefit aspects, such as flood control and recapture, modeling. Legislative developments,

including a proposed bill requiring cities and counties to justify flood protection programs, may add regulatory complexity. There is also a proposed bill that could require consideration of groundwater sustainability plans in general plan revisions. Multi-benefit approaches and strategic planning in PMA implementation are important.

The Resource Conservation Districts (RCDs) shared interest in groundwater recharge projects, goals for incentivizing recharge, and ways to approach multi-benefits. For example, growers direct stormwater to old tailwater return systems that are no longer being used for irrigation, but they do it because it helps the larger area and their own operations to keep it in a non-cropped area.

ERA Economics shared several incentive strategy examples, including recharge-credited systems, reduced fees, applications, allocation, and offering credit through a system, regulations, market approaches, and technical assistance. Grant funding plays a role in supporting such projects, but its unpredictability makes long-term planning challenging. Land repurposing incentives were discussed, particularly those focused on converting irrigated farmland to lower-intensity or lower-water-use purposes. With $200 million available from Proposition 4, regions with established program frameworks may have greater success securing funding. The following four case studies about incentivizing recharge for groundwater sustainability were presented.

- Madera County GSA Recharge Credits
- Napa Valley Subbasin
- Madera County Department of Conservation Multibenefit Land Repurposing (MLRP)
- Pajaro Valley Recharge Net Metering (ReNeM)

Madera County GSA Recharge Credits

Madera County implemented a recharge credit system layered over an allocation and market-style approach. Since the county is fully groundwater-dependent, they planned significant demand reductions and recharge efforts. Their program provides credits for newly stored surface water, with baseline crediting at 75%, increasing to 90% based on recharge suitability. To participate, users must be metered and report water usage. The program also leveraged grant funding to support projects, allocating benefits based on proportional costs. They received Prop 64 funding for two phases of recharge projects, so some of those are moving forward.

An allocation policy for the Solano Subbasin in general is a potential way to move forward but is challenging to implement. SID has an allocation policy in place and has surface water supply. Challenges include a fixed surface water supply and limited groundwater use, making large-scale changes difficult. Discussion centered on potential groundwork for future recharge incentives, such as optimizing infrastructure for floodwater use and in-lieu recharge (substituting surface water for groundwater use). What would be possible in really wet years, and what might help set up the Subbasin to take advantage at that point? - was a key question discussed by the group.

Napa Valley Subbasin

ERA Economics described the Napa Subbasin, focusing on demand management and recharge incentives, particularly for vineyards. Napa's approach includes financial incentives, reduced fees, and technical assistance. They assess recharge potential by calculating life-cycle costs per acre-foot of water saved or recharged, helping prioritize the most cost-effective strategies.

The Napa Valley sub-basin is implementing a multi-phase approach to groundwater management, which could serve as a model for other areas. The strategy includes:

1. Education & Outreach – Raising awareness among local agricultural groups and the public about groundwater conservation strategies.
2. Voluntary Adoption – Developing financial incentives to encourage the adoption of water-saving practices and recharge efforts.
3. Voluntary Certification – Define minimum criteria (practices for a certification program's members to receive a financial incentive.

Overall, the discussion highlighted the importance of proactive planning, identifying funding sources, and structuring incentive programs to encourage landowners to participate. While a lot of these programs focus on agriculture, domestic uses are an evolving discussion.

Madera County Department of Conservation MLRP

ERA Economics discussed MLRP in Madera County, which provides financial incentives for landowners to support groundwater recharge and conservation efforts. The program includes: financial incentives for developing recharge basins, compensation for forgone agricultural production, and payments for environmental and community co-benefits. The program has a ranking and selection process to determine funding. Challenges include allocating credits for recharge projects funded by state grants and the importance of fair allocation of benefits.The program aims to support recharge projects by covering costs and providing incentives, encouraging proactive and innovative approaches.

A participant asked if the Subbasin would be competitive for the $200 million grant program, given that past funding has primarily gone to critically overdrafted Subbasins? Should we expect that trend to continue, or is there a chance for funding to go to less severely impacted subbasins?

ERA Economics shared that while there is significant interest and need in critically overdrafted areas, other regions also align well with the program's goals. While not all areas face falling water levels, they can still provide public benefits that the program targets. LSCE shared that being prepared with strong project ideas and engaging early could improve competitiveness. Additionally, DWR is exploring ways to distribute funding more regionally and is open to input on how to structure allocations.

Solano GSA shared that multi-benefit projects should be considered. Competitiveness may vary depending on the project type and the specific funding category pursued. A regional project, particularly in collaboration with adjacent subbasins such as Yolo County, could offer a broader impact and stronger positioning for funding.

Pajaro Valley (PV) Water's Recharge Net Metering Program (ReNeM)

The Pajaro Valley ReNeM program provides rebates for groundwater recharge efforts, offering landowners financial credits based on infiltration contributions. It was triggered by groundwater overdraft, Groundwater Sustainability Plan implementation, and a pilot study collaboration across multiple agencies. The program focuses on net infiltration, calculated as infiltration minus the pre-project baseline, with third-party verification of net recharge. To encourage participation, it offers an incentive of approximately 50% credit on the groundwater pumping fee, ensuring fairness and equity. The initial target for the program is 1,000 acre-feet per year.

Sacramento County GSA shared an update on flood diversions in the South American Subbasin. They collaborated with Rancho Murieta CSD to implement flood diversions under Water Code Section 42.1 and the Governor's Executive Orders, which authorize such actions. While a formal flood diversion plan was initially discussed in October, time constraints prevented its completion before the wet season. However, the Executive Order allowed them to proceed without a finalized plan, enabling a trial run with Rancho Murieta this year. The group can revisit the topic in the next meeting.

Stakeholder Engagement

Ag Innovations reminded the group about the Groundwater Workshop on April 24 from 5-6:30 in the SCWA/SID office in Vacaville. A calendar invitation was sent to GSA Collaborative attendees, and GSA staff were encouraged to forward the invitation. RSVPs to the workshop should be submitted by April 16 to jessie@aginnovations.org.

Ag Innovations also reminded the group about this year's Virtual Town Hall, which will be held on Monday, May 19, from 5:30-7:00 pm. GSA Collaborative members were encouraged to think of potential panelists for the Virtual Town Hall and to promote it to their constituents. Newsletters will be sent in advance of the meeting, and participants are encouraged to share any other information that would be helpful for the public. The meeting will be simulcast in Spanish with surveys and information available in both English and Spanish.

Forecast Upcoming Meeting Discussions

The group discussed meeting frequency. GSA Collaborative decided to move meetings to be held quarterly. The group will meet in April to plan for the Virtual Town Hall. Following that meeting, quarterly meetings will occur in June, August, and November to avoid conflicts with the December holidays. The annual February meeting will continue as a preview of the annual report. Members agreed to keep meetings on the third Thursday in these months. Additional GSA Collaborative meetings may be called as described in the Solano Collaborative Memorandum of Understanding (July 2022).