



CGA/GGA Joint Board Meeting Packet

June 12, 2026

Staff Report

To: CGA-GGA Joint Board

Agenda Item: 3. Groundwater Demand Management Program Development

- a. Receive update from staff, consultant team, and ad hoc committee members.
- b. Receive update on Groundwater Demand Management Documentation Outline.
- c. Receive update on Water Accounting System development.

Date: June 12, 2026

Background

The CGA and GGA Groundwater Demand Management Ad Hoc Committees have been meeting jointly, generally with consultant support, to discuss and prepare recommendations to the GSAs on the development of a Groundwater Demand Management Program.

The ad hoc committees met June 4, 2026. During this meeting, the ad hoc committees prepared three recommendations (see slide 13 of draft presentation), reviewed an outline to document the Groundwater Demand Management Program, and continued discussion on the water accounting system, including draft water accounting statements. Staff, the consultant team, and ad hoc committee members will provide an update.

Ad Hoc Committee Members

CGA: Lewis Bair, Halbert Charter, Jeff Moresco, Jim Wallace

GGA: John Amaro (or Jeff Sutton), Mark Lohse (or Seth Fiack), Chuck Schonauer (or Justin Dahl)

Recommendation

1. Receive update from staff, consultant team, and ad hoc committee members.
2. Provide direction to staff, consulting team, legal counsel, and or committees as needed.

Attachments

- Draft Presentation

Colusa Subbasin Joint Board GSP Implementation Updates

June 12, 2026



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Outline

- Item 3 - Groundwater Demand Management Program Development
- Item 4 - GSP Recommended Corrective Action for Interconnected Surface Water
- Item 5 - Task Order Review and Outreach Discussion
- Item 6 - GSP Recommended Corrective Action for Land Subsidence
- Item 8 - Review Meeting Schedule and Next Steps

Item 3 - Groundwater Demand Management (GDM) Program Development

Colusa Subbasin Joint Board GSP Updates

Slide 3

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June 12, 2026

GDM Program Development - General Updates

- Joint CGA/GGA GDM Ad Hoc Committee Meetings held monthly from January through June 2026 and scheduled through end of 2026
- Draft pilot GDM program documentation outline
- Draft GDM triggers and actions matrix
- Growing list of GDM Ad Hoc recommendations to the Joint Boards
- Ongoing water accounting system data assembly
- Draft water accounting statements

Colusa Subbasin Joint Board GSP Updates

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June 12, 2026

GDM Program Development - Draft GDM Pilot Program Documentation Outline

- Introduction
- GDM Triggers and Monitoring Approaches
 - Groundwater Levels at RMS Wells
 - Subsidence from InSAR
- GDM Implementation Trigger Thresholds and Actions
 - Action 0
 - Trigger and Action 1
 - Trigger and Action 2
 - Trigger and Action 3
- Public Outreach and Engagement
- Program Implementation and Management (including funding)



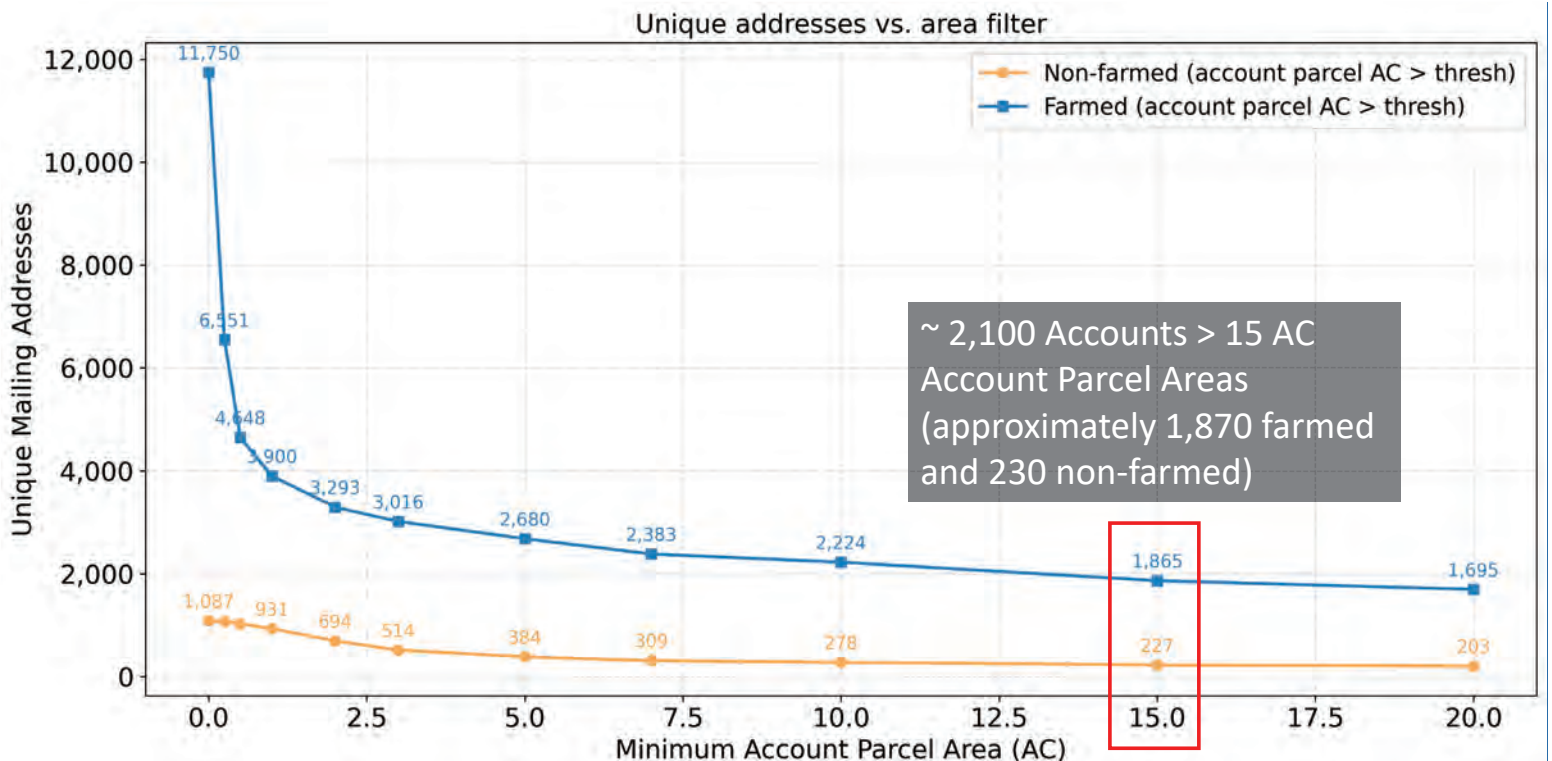
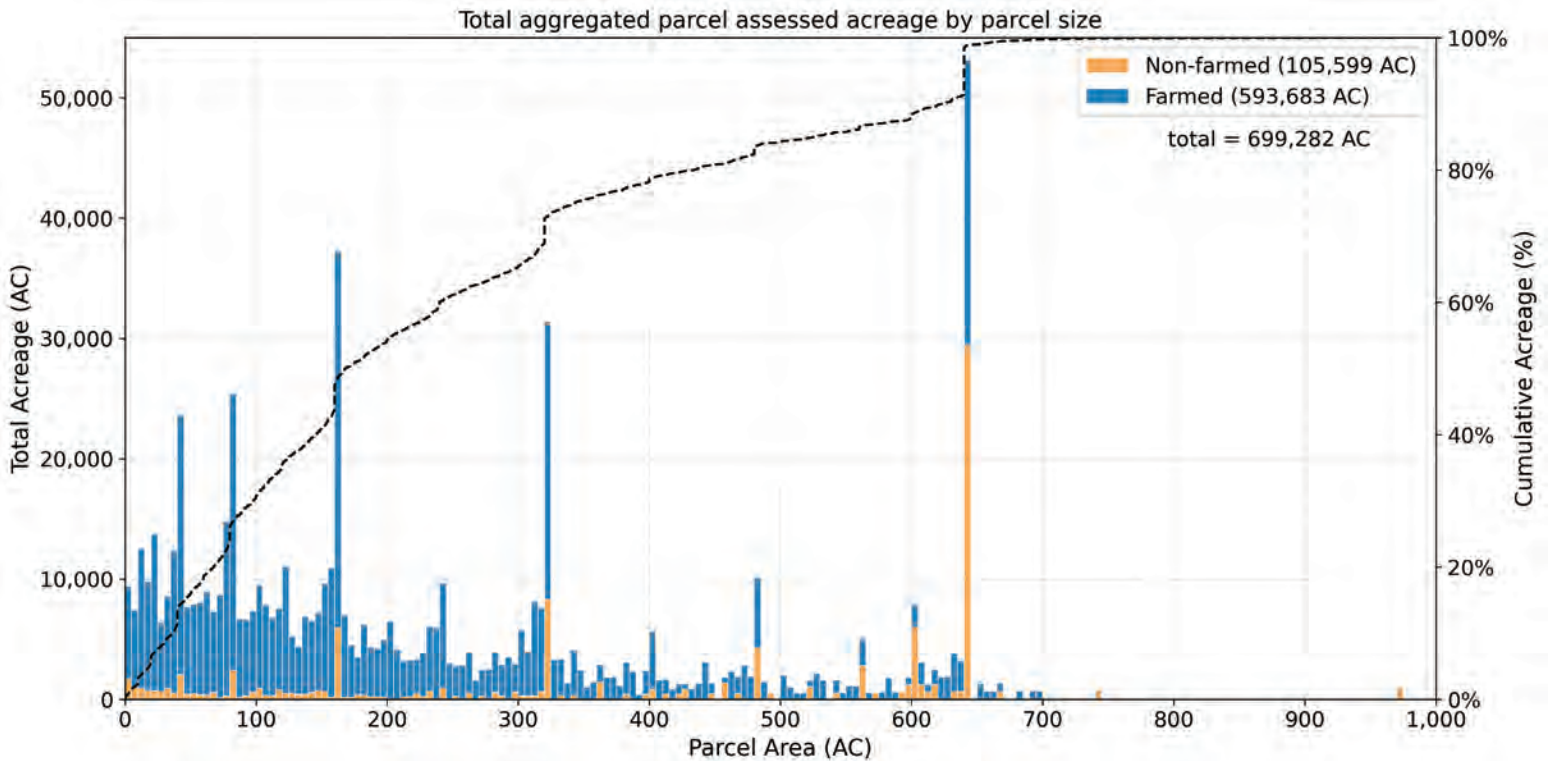
Sustainability Indicators	GDM Action 0	Trigger 1 (Yellow Light)	GDM Action 1	Trigger 2 (Orange Light)	GDM Action 2	Trigger 3 (Red Light)	GDM Action 3	SWRCB
Groundwater Levels / Storage	Water Accounting System (WAS)	<p>Some primary questions for trigger thresholds and actions:</p> <ol style="list-style-type: none"> <u>Where to set trigger thresholds?</u> <u>What actions should be taken?</u> <u>How should these actions be funded?</u> <u>Where should the actions be focused?</u> 			Undesirable result(s) in the Subbasin	Most robust Adaptive mandatory measures to mitigate overdraft	State (SWRCB) Intervention	
Subsidence	And Support voluntary PMA implementor efforts while maximizing State/Federal investments							
GDM Outreach and Education								



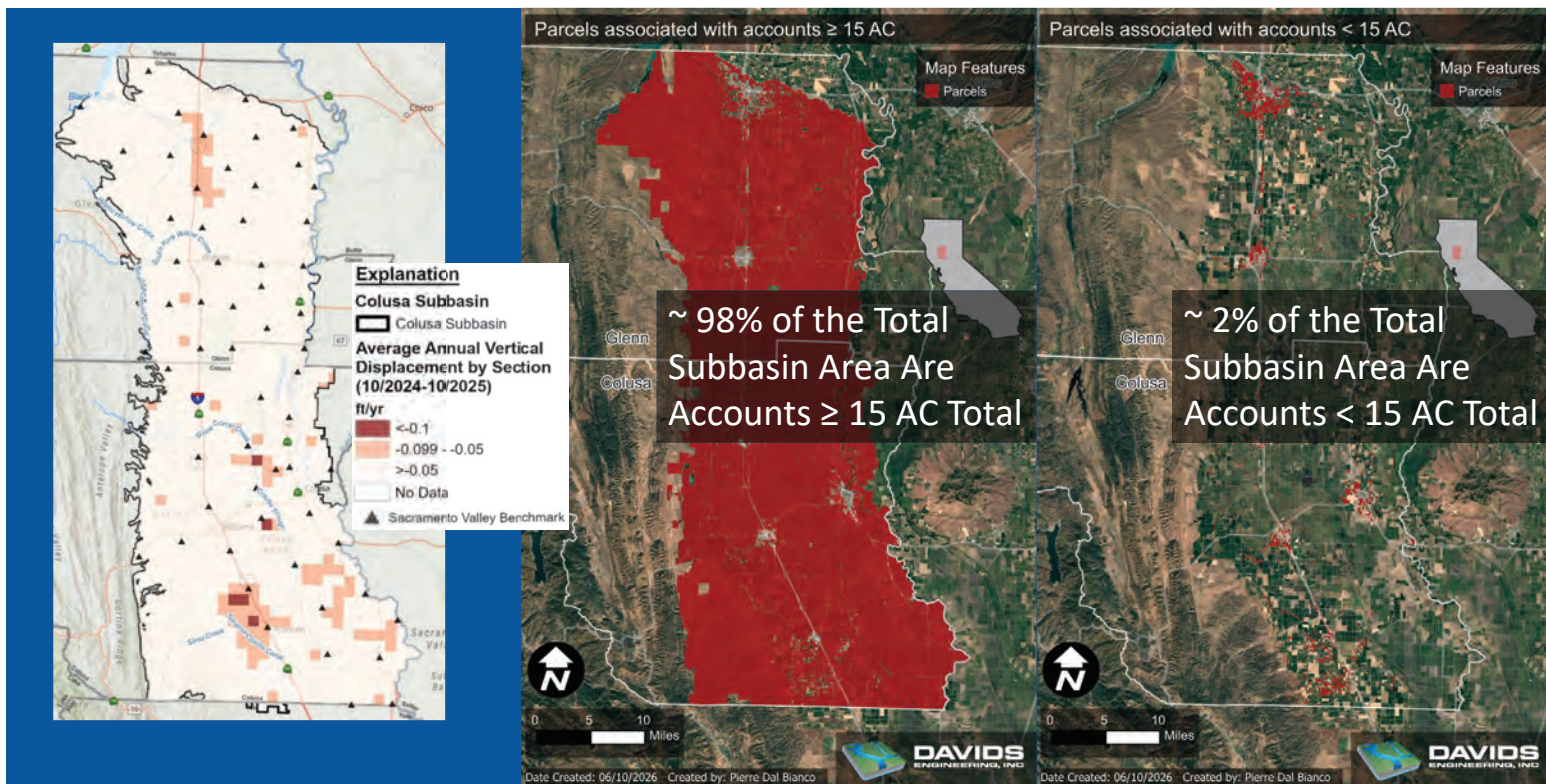
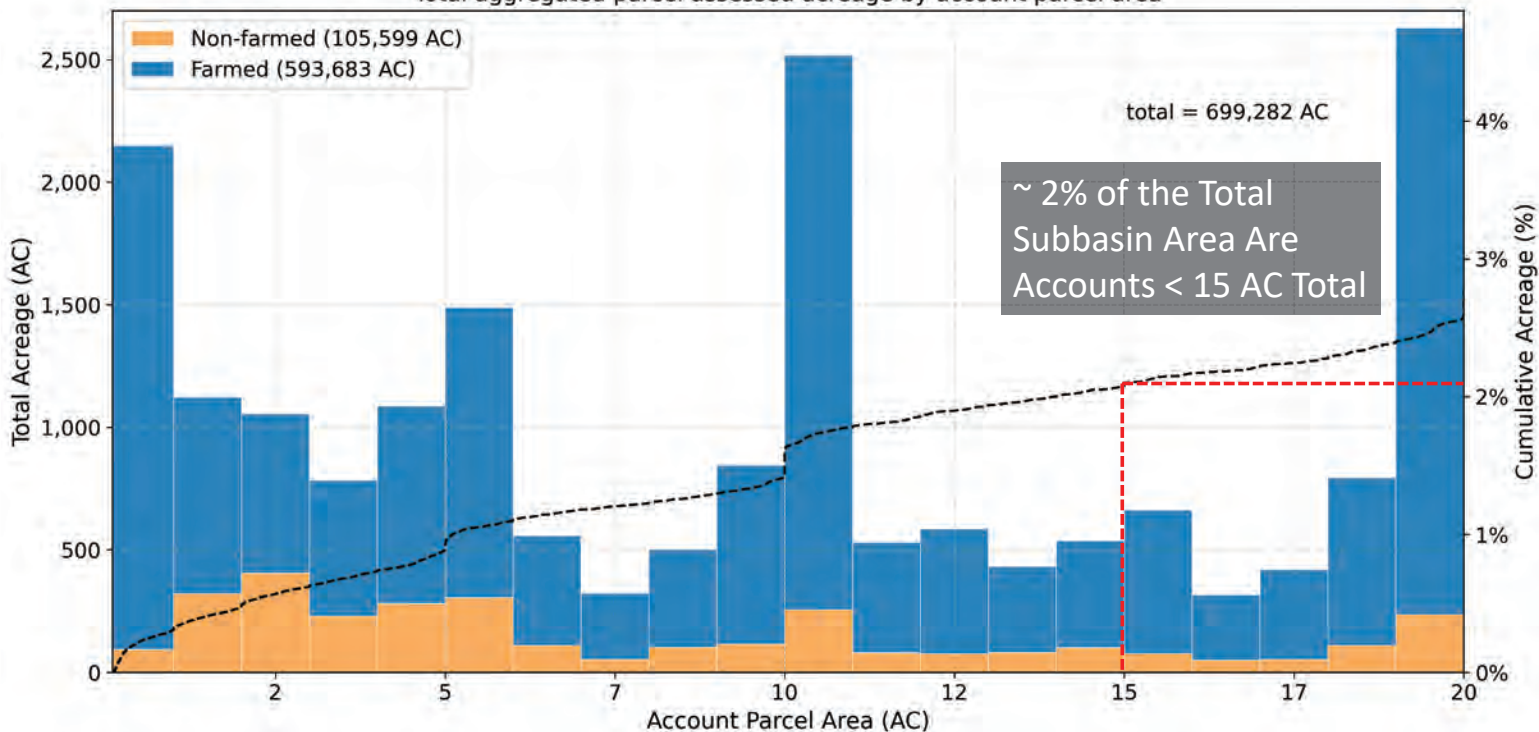
Sustainability Indicator	GDM Action 0	Trigger 1 (Yellow Light)	GDM Action 1	Trigger 2 (Orange Light)	GDM Action 2	Trigger 3 (Red Light)	GDM Action 3	SWRCB Intervention
Groundwater Levels/Storage	Implement Water Accounting System (WAS)	Any RMS wells fall below their MT for two consecutive fall minimum measurements.	Implement flat ETAGW or NGWI fee (\$ / AF).	More than 6 % of RMS wells fall below their MT for two consecutive fall minimum measurements.	In addition to GDM Action 1, implement tiered pricing structure. Use fees for GDM program administration and to support PMA implementors with a focus on yellow light areas.	Undesirable result (i.e., more than 12.5 % of RMS wells fall below their MT for two consecutive fall minimum measurements).	In addition to GDM Actions 1 and 2, implement groundwater allocation of sustainable yield, with policies for transitional water, carryover, penalties, water markets, etc.	Administrative Fees: - \$300 / Well / YR - \$20 / AF of Groundwater Extracted (Probationary Subbasin)
	Coordinate and support voluntary PMA implementor efforts		ETAGW fees collected from the entire subbasin.					
Subsidence	Maximize State and Federal funds for voluntary PMA Implementation	Cumulative subsidence since 2024 is > 0.5 FT or annual subsidence is > 0.06 FT / YR.	Use fees for GDM program administration and to support PMA implementors with a focus on yellow light areas.	Cumulative subsidence since 2024 is > 1.0 FT or annual subsidence is > 0.08 FT / YR.		Undesirable result (i.e., cumulative subsidence since 2024 is > 2.0 FT or annual subsidence is > 0.1 FT / YR).		Enforcement: - Likely includes extraction limits - Likely includes large penalties - Other unknown SWRCB actions
Prop 26 (WAT § 10730)		Prop 218 (WAT § 10730.2)						
GDM Outreach and Education								

GDM Program Development - Water Accounting System Updates

- Developed comprehensive parcel geometry and attribute dataset
- Performed initial cleaning of parcel mailing addresses
- Analyzed distribution of parcel sizes and resulting unique mailing addresses
- Assembled precipitation (P), evapotranspiration (ET), and land use data
- Developed initial draft of monthly spatial applied surface water (ASW) data
- Developed draft methods for computing pixel (i.e., ~0.25 AC) and parcel-scale Net Groundwater Impact (NGWI)
- Developed draft Water Accounting Statements



Total aggregated parcel assessed acreage by account parcel area

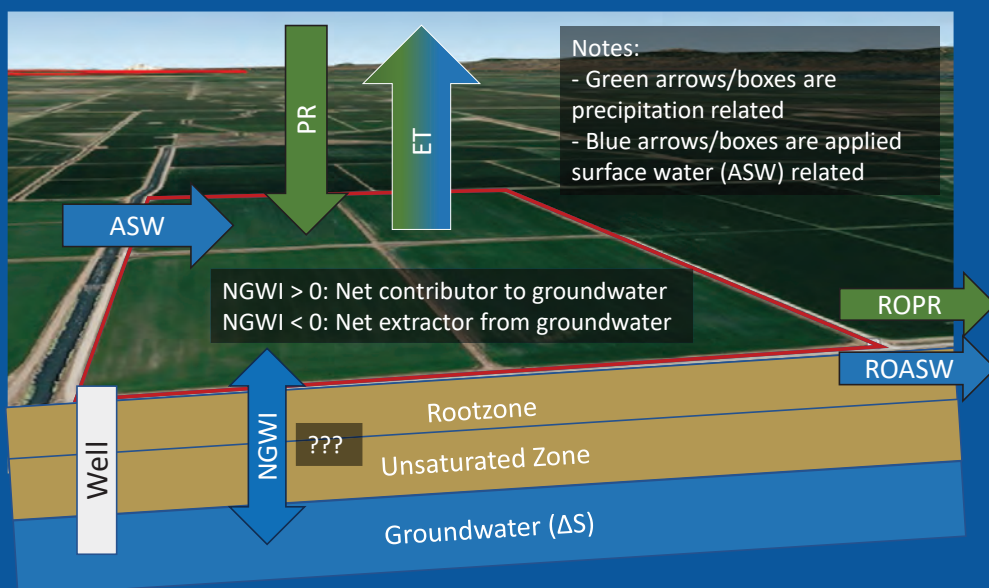


GDM Program Development - Draft GDM Ad Hoc Recommendations

- Recommendation 13: All parcels 1 AC or greater will be tracked within the Water Accounting System (WAS).
- Recommendation 14: Initial WAS accounts will be created based on aggregations of parcels with common ownership (initially based on common mailing address).
- Recommendation 15: Water year 2025 water accounting statements will be sent out to WAS accounts with combined parcel areas of 15 AC or greater.

WAS - Net Groundwater Impacts (NGWI)

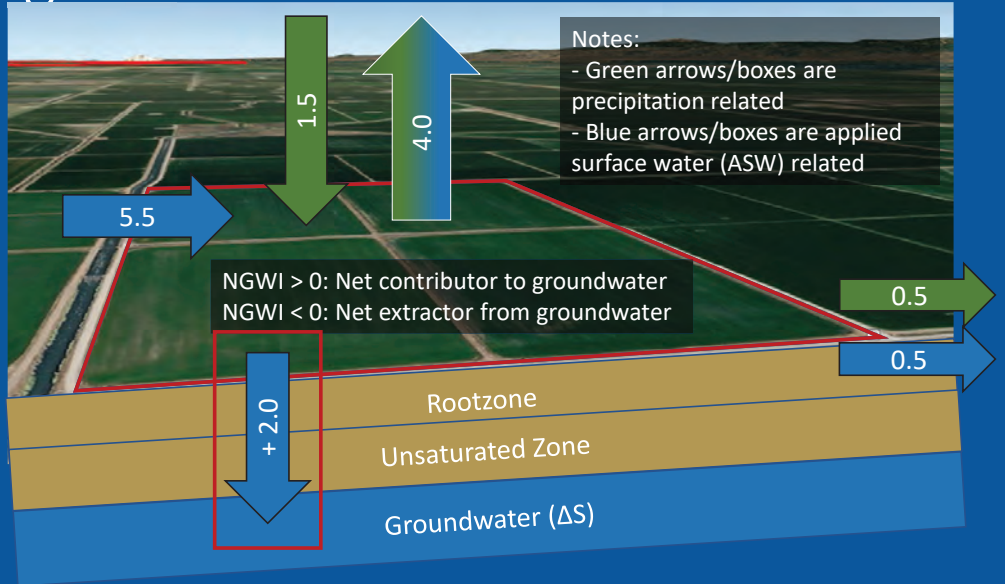
- NGWI
- = Water Inflows - Water Outflows
- = $PR + ASW - (ET + ROPR + ROASW)$



Notes:
ASW: Applied Surface Water
ET: Evapotranspiration
PR: Precipitation
ROASW: Runoff from Applied Surface Water
ROPR: Runoff from Precipitation

WAS - Net Groundwater Impacts (NGWI) - Surface Water Irrigated

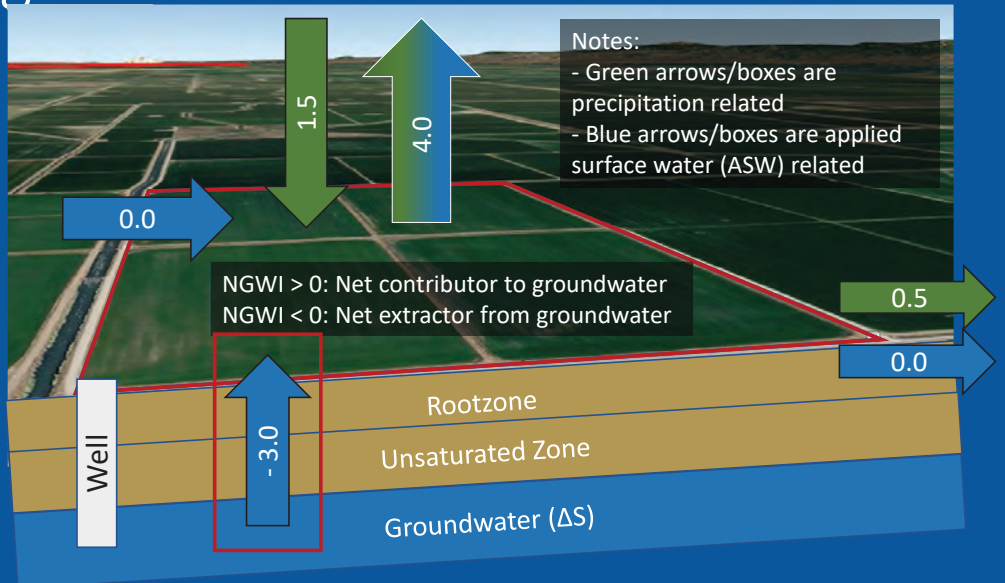
- NGWI
- = Water Inflows - Water Outflows
- = PR + ASW - (ET + ROPR + ROASW)



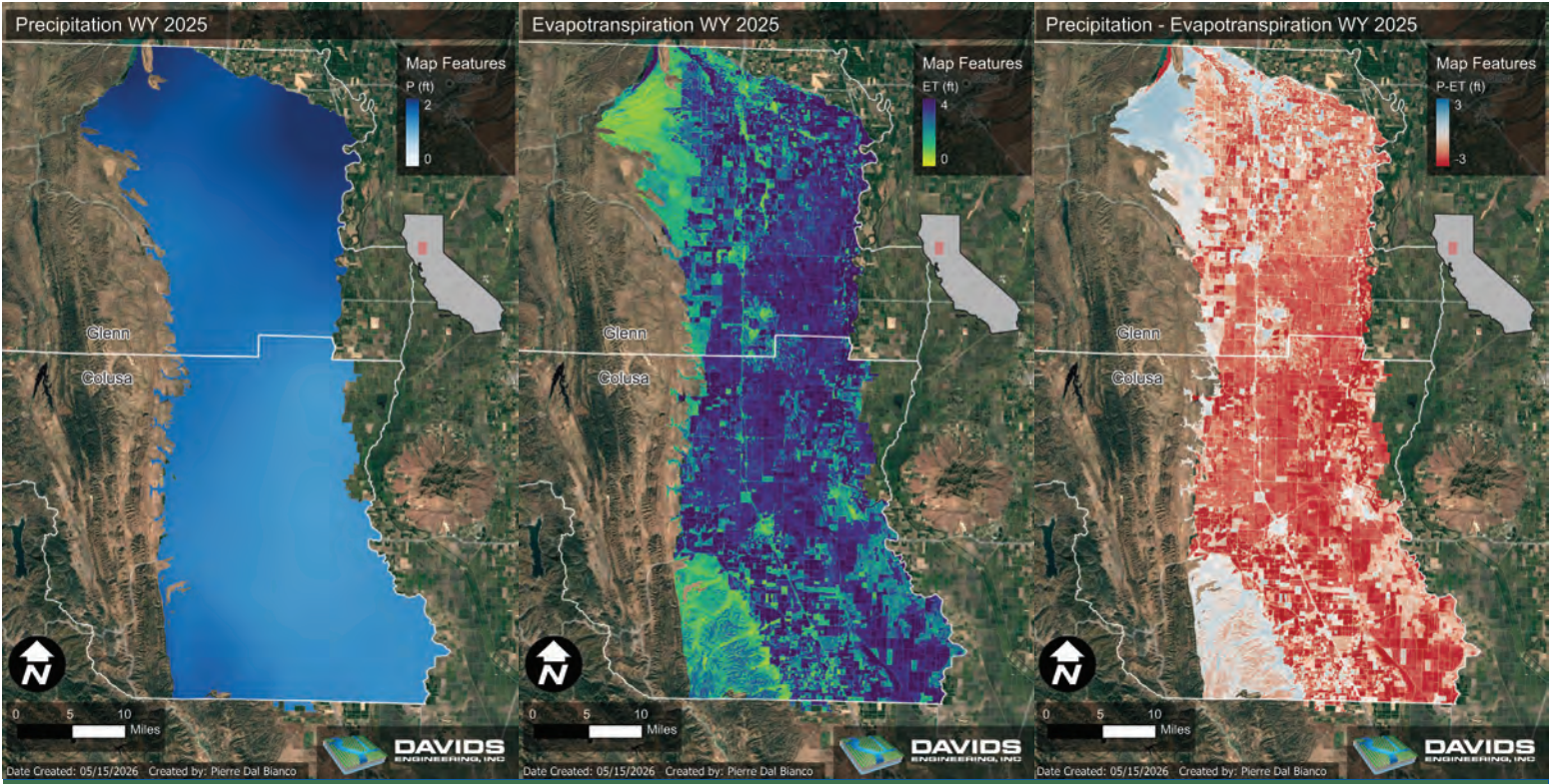
Notes (values shown are in FT):
 ASW: Applied Surface Water
 ET: Evapotranspiration
 PR: Precipitation
 ROASW: Runoff from Applied Surface Water
 ROPR: Runoff from Precipitation

WAS - Net Groundwater Impacts (NGWI) - Groundwater Irrigated

- NGWI
- = Water Inflows - Water Outflows
- = PR + ASW - (ET + ROPR + ROASW)



Notes (values shown are in FT):
 ASW: Applied Surface Water
 ET: Evapotranspiration
 PR: Precipitation
 ROASW: Runoff from Applied Surface Water
 ROPR: Runoff from Precipitation



Colusa Subbasin Joint Board GSP Updates

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GDM Program Development - Draft Water Accounting Statements

- Draft report review (live)

Colusa Subbasin Joint Board GSP Updates

Slide 18

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June 12, 2026

Item 4 - GSP Recommended Corrective Action for Interconnected Surface Waters (ISW)

Proposed Approaches to Address ISW-Related Recommended Corrective Actions

- DWR asks GSAs to estimate the timing, quantity, and location of ISW
 - Existing GSP analyzes major waterways (Sacramento R, Stony Ck, Colusa Basin Drain)
 - *Discuss why other waterways not analyzed for ISW (e.g., ephemeral streams)*
 - *Discuss recent Stony Creek measurements related to ISW (Corning grant work)*
- DWR recommends other actions to re-evaluate sustainable management criteria (SMC) and monitoring, fill data gaps, and coordinate regionally
 - *Discuss North Sacramento River Corridor Interbasin Coordination efforts*
 - *Discuss Northern Sacramento Valley ISW workplan (proposed, NCWA-led)*
 - *Collect new data*
 - *Update regional models*
 - *Provide guidance for policy decisions*

Item 5 - Task Order Review and Outreach Discussion

DE Task Order Review and Discussion

Note: 1173 = CGA; 1178 = GGA

GSP Imp Support Remaining:
~\$30K + \$25K *
(* recently added)

Outreach Support:
~\$44K Remaining
(currently paused)

Periodic
Evaluation
and Plan
Amendment
(1178.07)

Colusa
Subbasin GSP
WY 2025
Annual
Report
(1173.03.04)

Colusa
Subbasin GSP
Imp. Support
(1173.05.03)

Groundwater
Demand
Management
Program
Development

Colusa
Subbasin
Water
Accounting
System Phase
I (1178.08.01)

~\$268K Remaining

~\$4K Remaining

~\$99K Remaining

~\$19K Remaining

DE Task Order 1173.05.03

Colusa Subbasin GSP Implementation Support

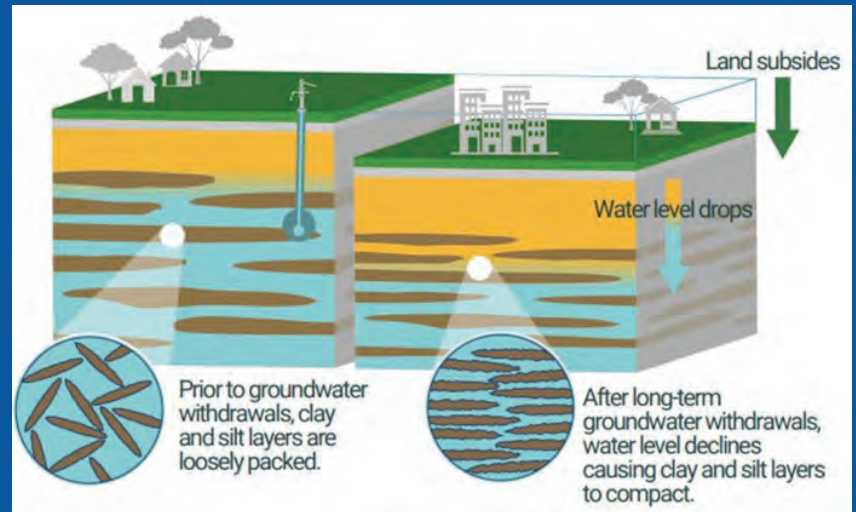
- Discuss purpose and status of outreach task
- Discuss GSAs' vision for the potential outreach approach through Dec. 31, 2026

Item	Contract Amount (\$)	Spent to Date (\$) (6/10/2026)	Remaining (\$)
Task 2 Support GSP Implementation Outreach Efforts	45,500	11,900	33,600
Task 4 Produce Video Content to Support Outreach Efforts	10,000	-	10,000
Total	55,500	11,900	43,600

Item 6 - GSP Recommended Corrective Action for Land Subsidence

DWR's Land Subsidence BMP and Critical Head

- DWR Land Subsidence BMP
 - Released 01/21/2026
 - DWR-Colusa meeting 04/27/2026
- DWR gave recommended corrective actions related to critical head in the Colusa GSP determination letter
- Critical head is the groundwater level below which permanent compaction (i.e., subsidence) begins



Colusa Subbasin Joint Board GSP Updates

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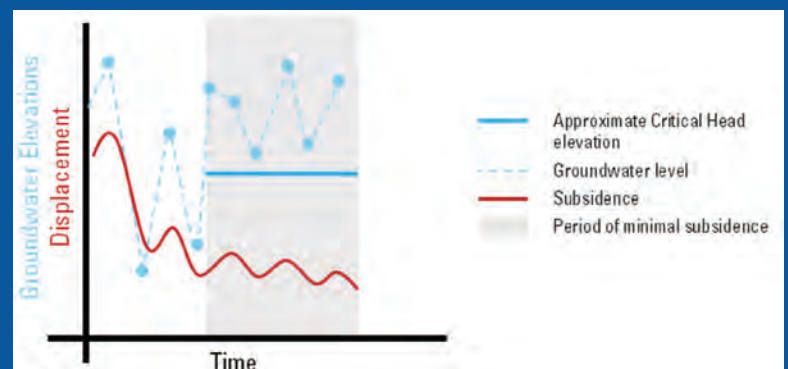


June 12, 2026

Source: <https://water.ca.gov/Programs/Groundwater-Management/Subsidence>

Critical Head Quantification

- DWR wants the GSAs to quantify critical head
- Subsidence BMP gives three methods to quantify critical head:
 - Trend-based
 - Empirical
 - Modeling
- Recommend quantifying critical head through trend-based and/or empirical approach



Colusa Subbasin Joint Board GSP Updates

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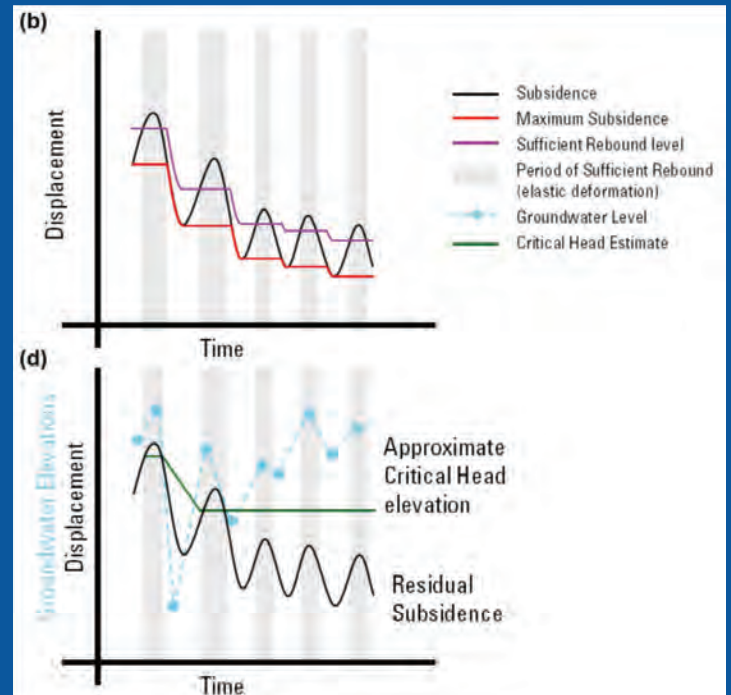


June 12, 2026

Source: <https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents>

Critical Head Quantification

- DWR wants the GSAs to quantify critical head
- Subsidence BMP gives three methods to quantify critical head:
 - Trend-based
 - Empirical
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- Recommend quantifying critical head through trend-based and/or empirical approach



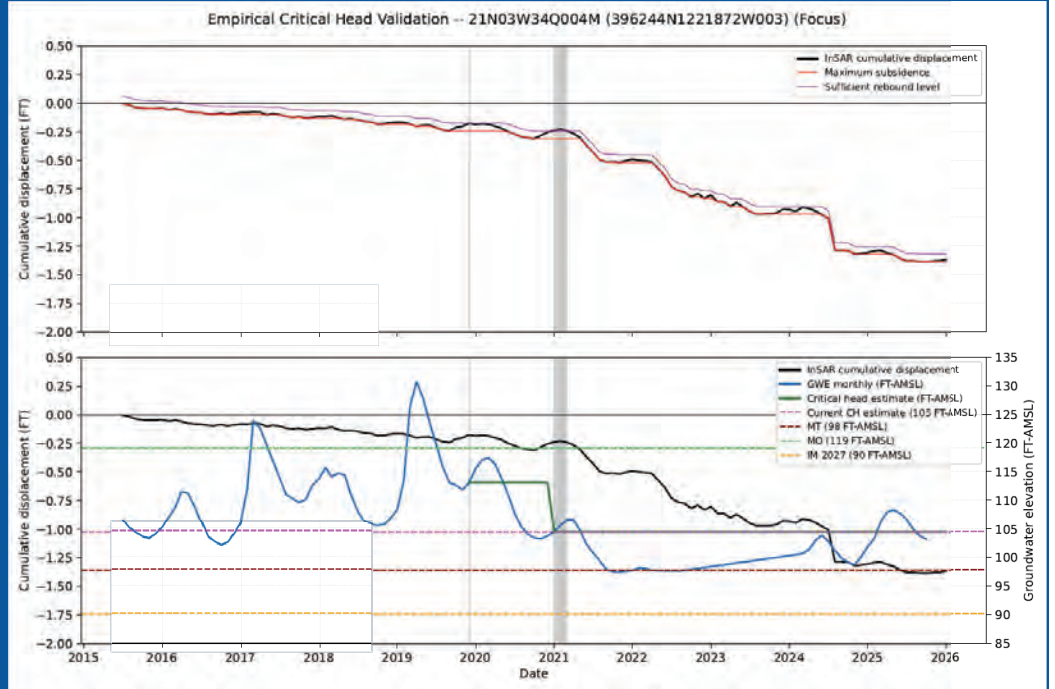
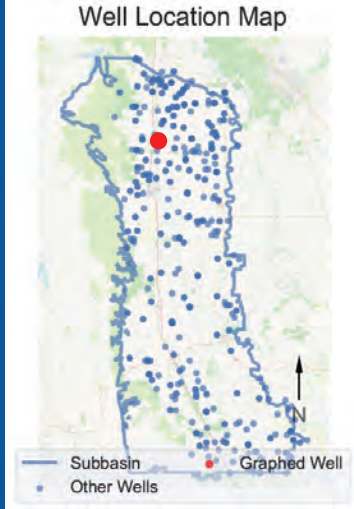
Proposed Approach to Address Critical Head-Related Recommended Corrective Action

- Analyze critical head with the trend-based and/or empirical approach
- Compare resulting critical head values with existing GWL SMCs
- Review results at upcoming Joint Board Meetings (July/August)
- Next steps:
 - Reporting critical head comparisons with GWL SMCs (MTs, MOs)
 - Consider revising GWL SMCs if below the critical head
- *Approach generally consistent with Yolo Subbasin approach*

DRAFT Critical Head Results for Colusa Subbasin

Empirical Approach

21N03W34Q004M
(Focus RMS in GGA)



Colusa Subbasin Joint Board GSP Updates

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June 12, 2026

Item 8 - Review Meeting Schedule and Next Steps

Colusa Subbasin Joint Board GSP Updates

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June 12, 2026

Review Meeting Schedule and Next Steps

- Joint Board Meetings
 - Alternating Willows and Colusa
 - Date:
 - Willows: 3rd Friday of the month (starting July 17)
 - Colusa: 2nd Friday of the month typically (starting August 14)
 - Time: 13:30 to 15:30
- GDM Ad Hoc Meetings
 - Held monthly
 - Scheduled through end of 2026

Questions and Discussion

Staff Report

To: CGA-GGA Joint Board

Agenda Item: 4. GSP Recommended Corrective Action for Interconnected Surface Waters

- a. Receive update from staff and consultant team and provide feedback on proposed approach to address DWR's GSP Recommended Corrective Action for Interconnected Surface Waters.
- b. Receive update and provide direction on North Sacramento River Corridor Interbasin Coordination efforts related to the Regional Interconnected Surface Water Workplan.

Date: June 12, 2026

Background

In April 2024, the Glenn Groundwater Authority (GGA) and Colusa Groundwater Authority (CGA) submitted a Revised Colusa Subbasin Groundwater Sustainability Plan (GSP) to address deficiencies identified by the Department of Water Resources. The 2024 GSP was approved by DWR in February 2025. The approval included a Recommended Corrective Action related to Interconnected surface waters as follows:

RECOMMENDED CORRECTIVE ACTION 8

Department staff understand that estimating the location, quantity, and timing of stream depletion due to ongoing, Subbasin-wide pumping is a complex task and that developing suitable tools may take additional time; however, it is critical for the Department's ongoing and future evaluations of whether GSP implementation is on track to achieve sustainable groundwater management. The Department plans to provide guidance on methods and approaches to evaluate the rate, timing, and volume of depletions of interconnected surface water and support for establishing specific sustainable management criteria in the near future. This guidance is intended to assist GSAs to sustainably manage depletions of interconnected surface water. In addition, the GSAs should work to address the following items by the first periodic evaluation:

- a) Revise sustainable management criteria to meet GSP regulatory requirements. Establish sustainable management criteria that considers the location, quantity, and timing of depletions of interconnected surface water. Do not use groundwater levels as a proxy for depletions of interconnected surface water without demonstrating that the

representative value is a reasonable proxy as supported by adequate evidence. b) Consider utilizing the interconnected surface water guidance, as appropriate, when issued by the Department to establish quantifiable minimum thresholds, measurable objectives, and management actions.

c) Continue to fill data gaps, collect additional monitoring data, and implement the current strategy to manage depletions of interconnected surface water and define segments of interconnectivity and timing.

d) Prioritize collaborating and coordinating with local, state, and federal regulatory agencies as well as interested parties to better understand the full suite of beneficial uses and users that may be impacted by pumping induced surface water depletion within the GSAs' jurisdictional area.

Staff, the consultant team, Counsel, and Board members will share updates and hold discussion relating to the proposed approaches to address this Recommended Corrective Action, engagement with DWR, and other related topics.

North Sacramento River Corridor Inter-Basin Coordination

Building on past efforts for inter-basin coordination, seven subbasins in the North Sacramento River Corridor have begun to meet with goals to enhance regional planning efforts, streamline when possible, share data for inter-basin analysis, and coordinate on projects when appropriate. GSA Coordination Meetings have been occurring since September 2025. A public webinar is being held June 16, 2026 from 5:30-7:00 pm. Registration is required (https://cbi-org.zoom.us/meeting/register/mp5Thyt_SpmKTBcAo12jIQ#/registration). Please see attached flyer for more information.

Materials relating to this effort can be found at: <https://www.buttecounty.net/2221/North-Sacramento-River-Corridor-Inter-Ba>

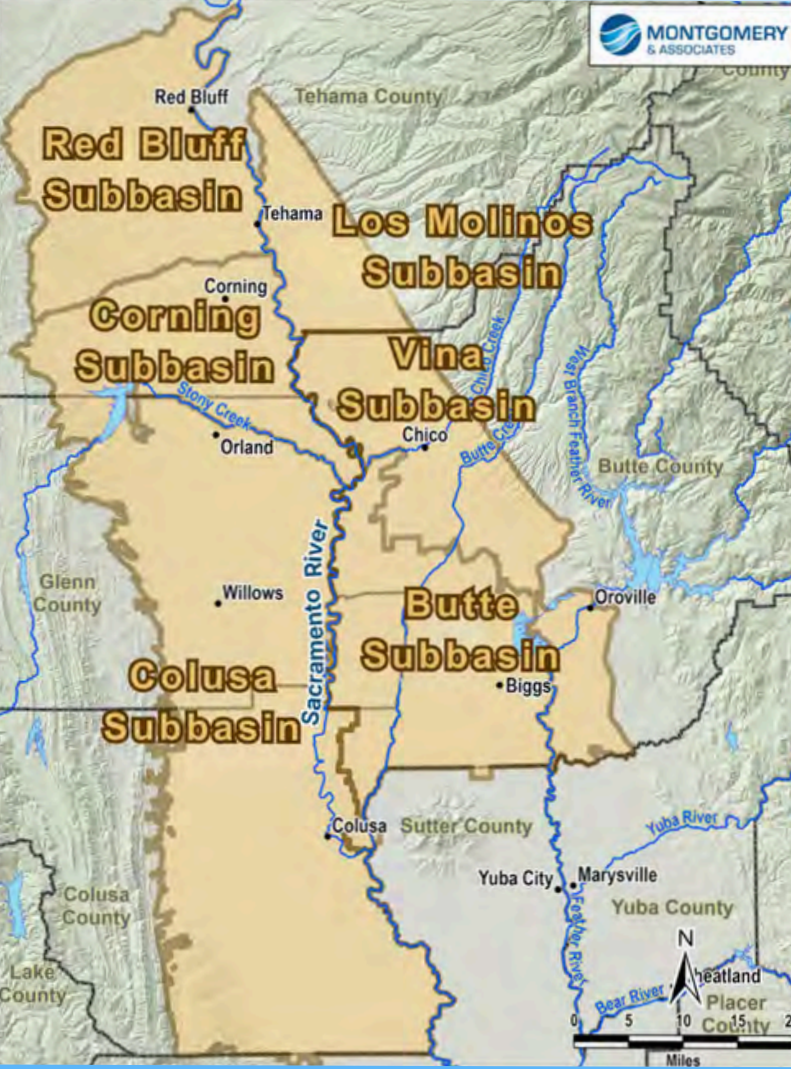
Staff and the consulting team will provide an update on these efforts including the Regional Interconnected Surface Water Workplan.

Recommendation

1. Hold discussion and provide direction to staff, consulting team, legal counsel, and or committees as needed.

Attachments

- North Sacramento River Corridor Interbasin Coordination webinar flyer
- See draft Presentation attached to Item 3



YOU'RE INVITED

NORTH SACRAMENTO RIVER CORRIDOR GROUNDWATER SUBBASINS INTERBASIN COORDINATION WEBINAR
JUNE 16, 2026 • 5:30-7:00P

Agenda Topics

- ✓ **Regional Coordination Framework**
Learn about the Framework's 5-Year Implementation Update that will guide interbasin coordination in this corridor through 2032
- ✓ **Regional Coordination Priorities**
Overview of priority activities underway or forthcoming (e.g., interconnected surface waters technical work)
- ✓ **Public Q&A and Staying Involved**
Opportunities for questions and ways to stay connected with local agencies

About This Webinar

Join us for a continuing discussion following the first webinar in January 2026 about groundwater sustainability coordination across the North Sacramento River Corridor.

June 16, 2026
5:30 - 7:00 PM



[CLICK HERE TO REGISTER](#)

or scan the QR code

[Click Here to Learn More](#)

Staff Report

To: CGA-GGA Joint Board

Agenda Item: 5. Review and provide direction on Davids Engineering, Inc. Task Order 1173.05.03 Colusa Subbasin GSP Implementation Support, Task 2 Support GSP Implementation Outreach Efforts and Task 4 Produce Video Content to Support Outreach Efforts

Date: June 12, 2026

Background

Davids Engineering, Inc. Task Order 1173.05.03 Colusa Subbasin GSP Implementation Support

In April 2024, the Glenn Groundwater Authority (GGA) and Colusa Groundwater Authority (CGA) submitted a Revised Colusa Subbasin Groundwater Sustainability Plan (GSP) to address deficiencies identified by the Department of Water Resources. The Revised GSP includes commitments for the GGA and the CGA to develop and implement a Well Mitigation Program and a Demand Management Program for the Colusa Subbasin. These commitments are described in the GSP and in agreements between the GGA and CGA that are included as attachments to the GSP. GGA and CGA staff proposed holding a series of Joint Board workshops focusing on various aspects of developing these programs and supporting policy discussion, including hearing examples from relevant speakers and hearing public input.

In late 2024, the CGA requested a task order proposal from Davids Engineering to 1) support these workshops, since that consultant developed the GSP revisions and program components and also led discussions at previous GSP Joint Board workshops, and 2) assist in preparing new budgets for GSP planning and program implementation for use in fee development (specific to CGA). The Task Order was approved by the CGA at their October 22, 2024 meeting. The GGA approved contributing a 50 percent cost-share of the Task Order, excluding the CGA specific task relating to fee development at their December 10, 2024 meeting.

On June 13, 2025, at staff's request, the GSAs considered an additional task order to continue this support through December 2025 and include additional outreach support. The task order proposal included the following tasks:

1. Provide On-Call GSP Implementation Support (up to 10 workshops)
2. Support GSP Implementation Outreach Efforts
3. Provide Miscellaneous On-Call Support
4. (Optional) Produce Video Content to Support Outreach Efforts

Ultimately, the GSAs considered action at their respective GSA meetings. On June 24, 2025, the CGA approved the task order, including optional Task 4, in an amount not to exceed \$146,000. The GGA agreed to share the cost of this task order in an amount not to exceed \$73,000 (50 percent of the total cost) at their July 14, 2025 meeting.

At the September 19, 2025 joint meeting, the GSAs held discussion and ultimately agreed to put the outreach tasks on hold to allow the CGA to better define its budget.

At the December 19, 2025 joint meeting, staff recommended extending the agreement through June 30, 2026 (time extension only) with the understanding that the GSAs may need to consider an additional task order depending on additional scoping needs. With general agreement between the GSAs, the CGA approved the Task Order Amendment.

At the May 15, 2026 joint meeting, the GSAs discussed this task order including a potential time extension through December 31, 2026, additional funding in the amount of \$25,000 to support the work, and vision for the paused outreach task. It was noted that the GSP implementation support has been particularly helpful in preparing for ad hoc and joint board meetings, guiding and finalizing the Pilot Domestic Well Mitigation Program, and supporting Groundwater Demand Management Program discussions.

The GSAs directed staff and the consultant team to review the original task order relating to outreach, status of the task, and bring back to the GSAs for consideration. The CGA approved the time extension and increase in funding at their May 26, 2026 meeting and the GGA concurred with the time extension and increase in funding at their June 9, 2026 meeting.

Staff and the consultant team will report back on the purpose and status of the original task order as it related to outreach and seek input on the GSAs vision for the outreach task.

Recommendation

1. Review and provide direction on Davids Engineering, Inc. Task Order 1173.05.03 Colusa Subbasin GSP Implementation Support, Task 2 Support GSP Implementation Outreach Efforts and Task 4 Produce Video Content to Support Outreach Efforts.

Attachments

- See draft Presentation attached to Item 3

Staff Report

To: CGA-GGA Joint Board

Agenda Item: 6. Receive update from staff and consultant team and provide feedback on proposed approach to address DWR's GSP Recommended Corrective Action for Land Subsidence.

Date: June 12, 2026

Background

In April 2024, the Glenn Groundwater Authority (GGA) and Colusa Groundwater Authority (CGA) submitted a Revised Colusa Subbasin Groundwater Sustainability Plan (GSP) to address deficiencies identified by the Department of Water Resources. The 2024 GSP was approved by DWR in February 2025. The approval included a Recommended Corrective Action related to Land Subsidence as follows:

RECOMMENDED CORRECTIVE ACTION 3

The GSAs should address the following recommended corrective actions for the sustainable management criteria for subsidence by the next periodic evaluation:

- a) GSP Regulations require GSAs to describe potential effects on land uses and property interests that may occur from undesirable results. The GSAs should provide clear and detailed information showing and describing the infrastructure it has considered while establishing the undesirable result. Department staff recommend providing this information with maps and tables that identify specific infrastructure the GSAs have considered. Staff also recommend the GSAs collect formal correspondence from the agencies they contacted indicating the infrastructure's susceptibility or lack of susceptibility to subsidence. The GSAs should provide an explanation of how the Agencies have determined and considered land uses and property interests.
- b) Identify the spatial extent and rate with the spatial extent and cumulative limit of subsidence that represents an undesirable result in a manner that considers the beneficial uses and users, including the functional impacts to infrastructure.
- c) Identify the spatial extent and rate with the spatial extent and cumulative limit of subsidence that represents the minimum threshold in a manner that considers the beneficial uses and users and shows how the Agencies' rationale has considered those uses and interests, including the functional impacts to infrastructure.
- d) Redefine undesirable results conditions so that they occur with subsidence that substantially interferes with surface land uses and may lead to undesirable results, and manages the Subbasin to minimize or avoid subsidence.

e) Redefine conditions for Yellow- and Red-Light Triggers to take action so that the actions feasibly may prevent reaching an undesirable result condition, so that the GSAs may manage the Subbasin to minimize or avoid subsidence.

Staff, the consultant team, Counsel, and Board members will share updates and hold discussion relating to land subsidence in the Colusa Subbasin, approaches to address the Recommended Corrective Action, engagement with DWR, and other related topics.

Recommendation

1. Hold discussion and provide direction to staff, consulting team, legal counsel, and or committees as needed.

Attachments

- See draft Presentation attached to Item 3