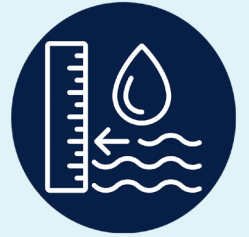




Welcome!

Groundwater Level Strawman Public Discussion



Agenda

Tuesday, July 14, 2026

4:30 PM Welcome – Dillon McGregor, GSA Program Manager

4:35 PM Presentation and Overview of Groundwater Level Sustainability Indicator – Christina Buck, PhD

Asst. Director Butte County Department of Water and Resource Conservation

5:00 PM Moderated Question/Answer & Discussion

Moderator – Kamie Loeser, Director Butte County
Department of Water and Resource Conservation

Today

- Provide brief background/context
- Overview of the Groundwater Level Sustainability Indicator Strawman
- Address questions and hear from you!

What is a Strawman Proposal?

An initial draft created to jump-start discussion and identify potential weaknesses or areas for improvement, serving as a starting point for collaborative refinement.

Attachment A



Groundwater Level Strawman Proposal for Discussion

The following strawman proposal is intended to frame and support discussion and solicit stakeholder input. A 'strawman' proposal is meant to kickstart discussion, identify weaknesses, and generate additional ideas and this is one proposed approach for the 2027 Periodic Evaluation and any associated GSP amendments. It is a starting point and is not written as final GSP or Periodic Evaluation language. The details of this strawman proposal can be explored using this linked dashboard:

Link: [2027 RMS Dashboard](#)

A similar dashboard was originally created by the Agricultural Groundwater Users of Butte County (AGUBC). The Dashboard has been revised and adapted by the Larry Walker Associates team to reflect the strawman proposal described below. It is very useful for exploring the data and visualizing the network and graphs of groundwater level data.

Proposed Groundwater Level Strawman Approach Overview

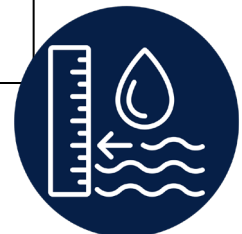
The strawman proposal is intended to respond to the California Department of Water Resources (DWR) Recommended Corrective Action (RCA) 3 while maintaining continuity with the adopted and DWR-approved 2022 GSP and introducing additional consideration of groundwater dependent ecosystems. It has the following main components:

- Change the Groundwater Level RMS network from 17 wells to 29 wells (keeping 11, removing six, and adding 18) to make the network more representative of conditions relative to beneficial users (domestic wells, and shallow groundwater relevant to potential groundwater dependent ecosystems).
- Consistent with the 2022 GSP approach, assign representative areas to RMS wells using three management areas (North, Chico, South).
- Carry forward adopted 2022 GSP Minimum Threshold (MT), Measurable Objective (MO), and 2027 Interim Milestone (IM) values for RMS wells retained from the 2022 network.
- Assign MT, MO, and 2027 IM values to new RMS wells using a method developed to align the resulting values with the general range and intent of the SMC levels established in the 2022 GSP.
- Quantify domestic well sensitivity at the MT by polygon, management area, and Subbasin total, including results with and without a ground-surface-elevation adjustment.

level (LML) of 10-20 feet
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9



Groundwater vs. Water Underground

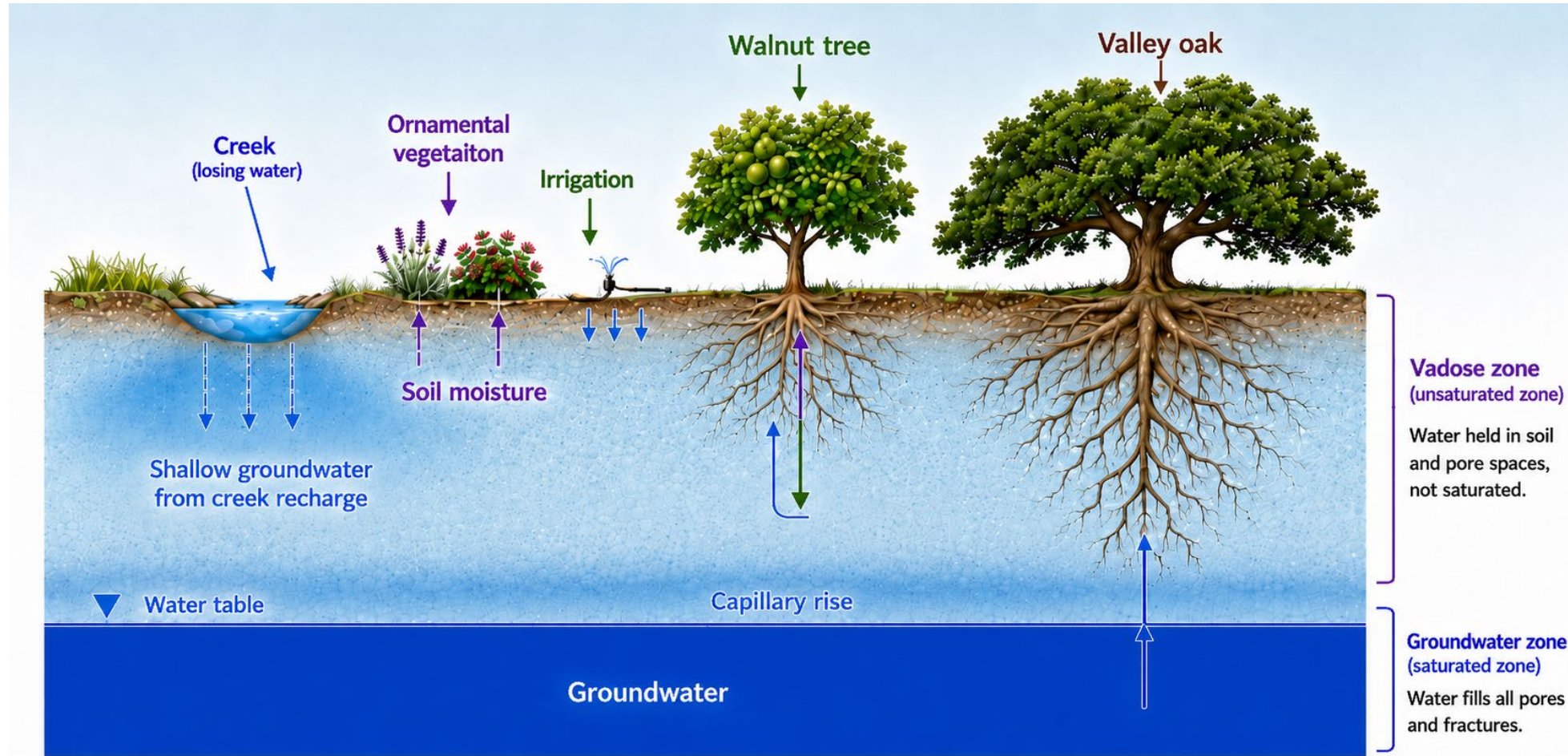
Not all water below land surface is “groundwater”

SGMA Definition:

“Groundwater” means water beneath the surface of the earth within the zone below the water table in which the soil is completely saturated with water, but does not include water that flows in known and definite channels.

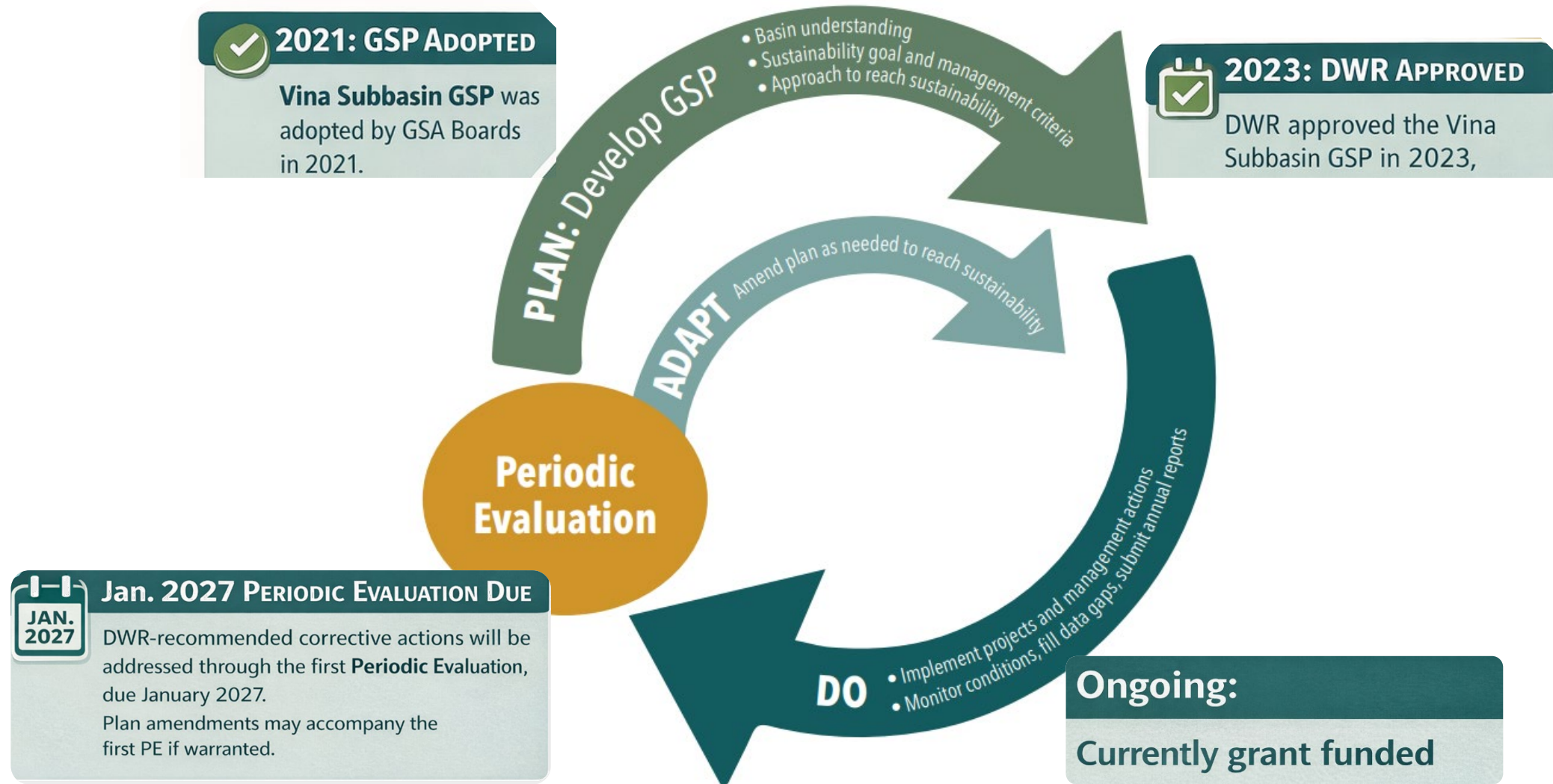
USGS definition:

Groundwater is water that exists underground in saturated zones beneath the land surface. The upper surface of the saturated zone is called the water table.



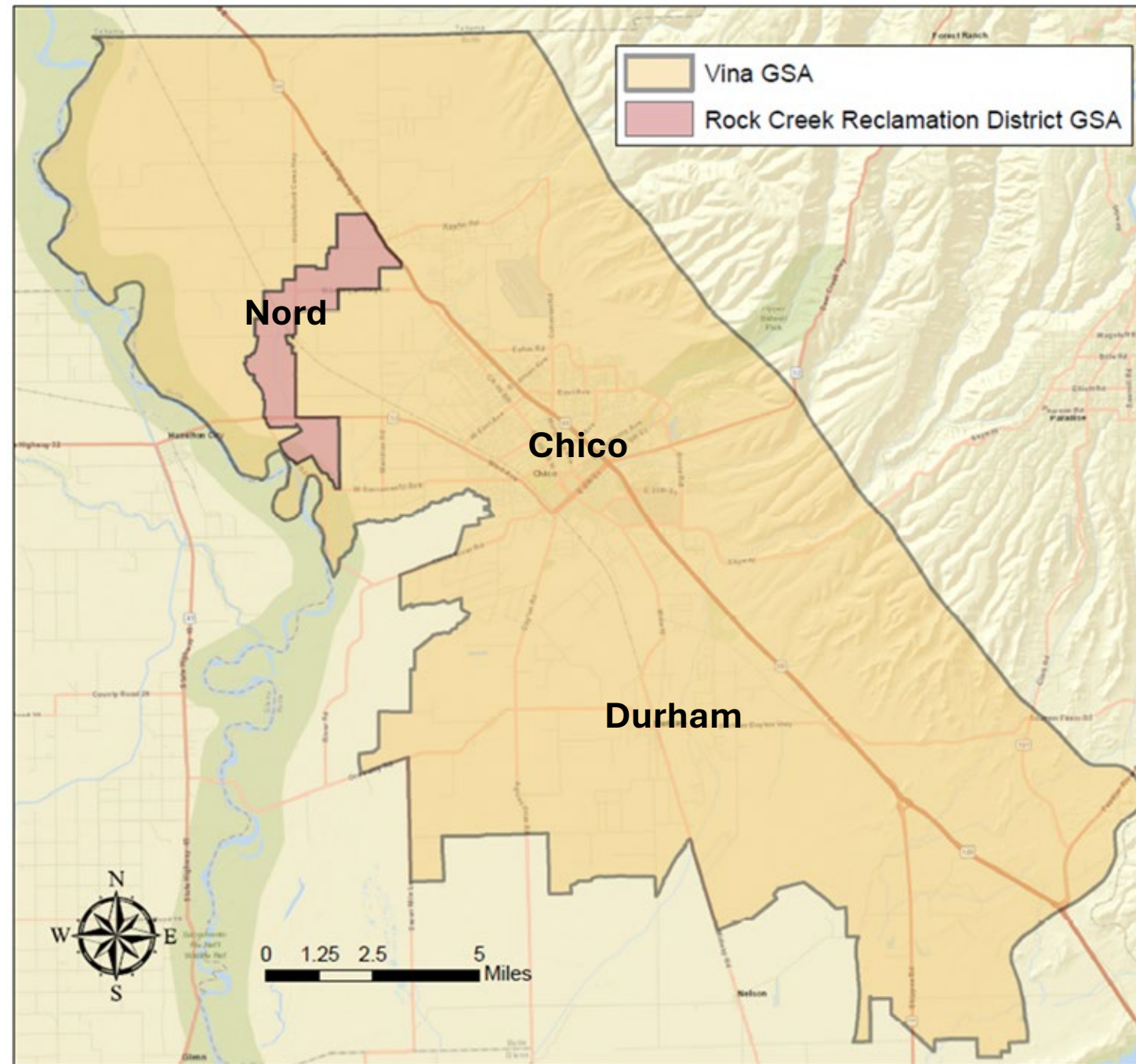
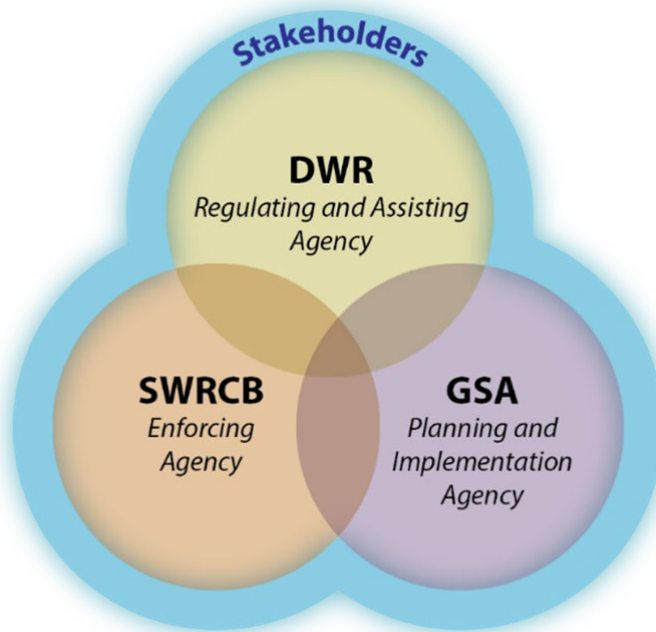
Plants can use different water sources underground.
Soil moisture and shallow water are not the same as deeper groundwater.

Groundwater Sustainability Plan Implementation



Vina Subbasin

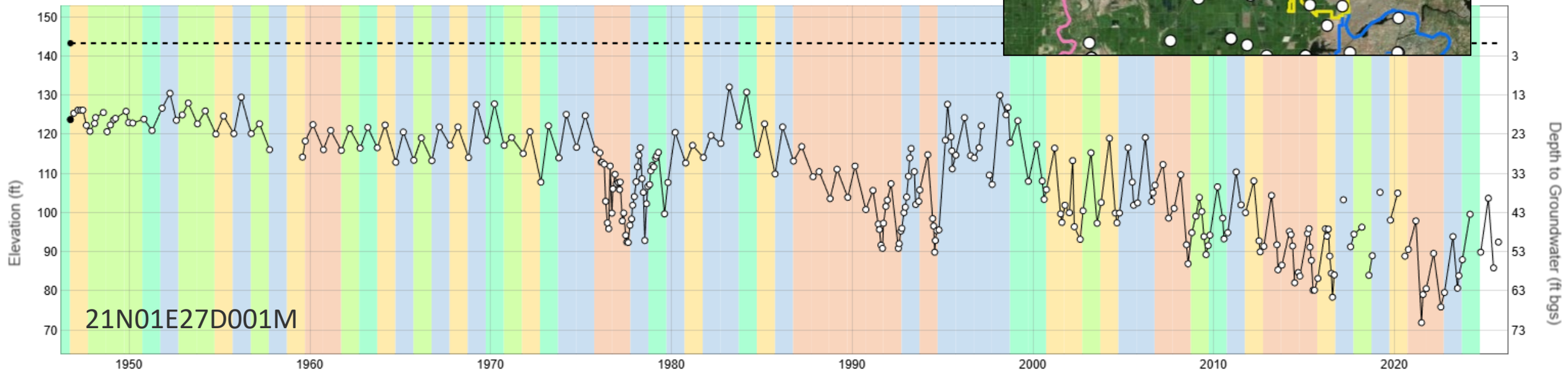
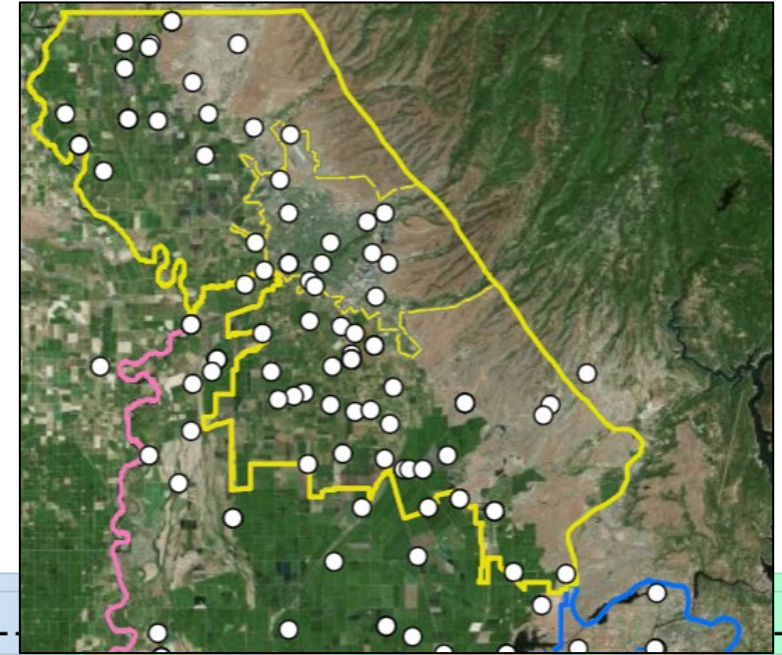
Two Agencies Responsible for
Groundwater Management:



Historical Context: Monitoring and Conditions

Groundwater levels respond to wet and dry cycles and long-term pumping/recharge patterns

- Vina has a long record of groundwater level monitoring by County and DWR staff
- Groundwater levels generally decline during dry periods and rise during wet periods, but not uniformly everywhere.
- Reached new historical lows in 2022 in some monitoring wells
- Groundwater levels have come up since then



Approach to Groundwater Sustainability

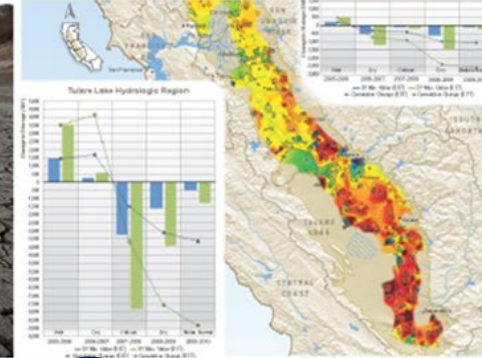


Managing Groundwater under SGMA: What do we need to pay attention to?

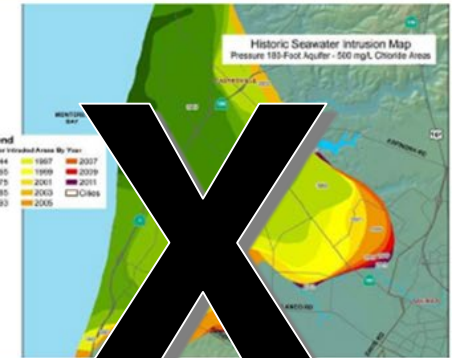
Today



Lowering of GW Levels

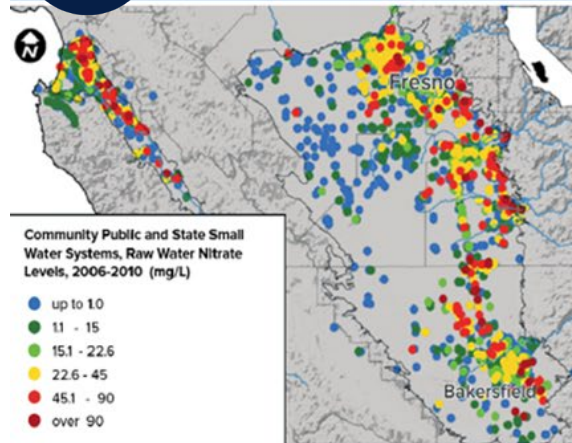


Reduction
of GW Storage

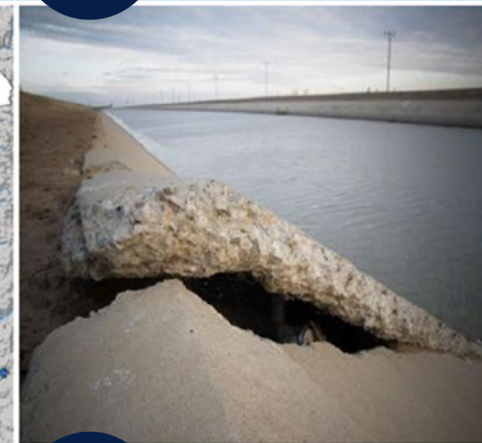


Seawater Intrusion

“Sustainability
Indicators”



Water Quality Degradation

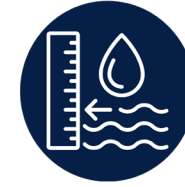


Land Subsidence



Depletion of
Interconnected Streams

Department of Water Resources Expectations: Recommended Corrective Action(RCA) #3



DWR approved the 2022 Vina GSP and identified Recommended Corrective Action 3 for groundwater levels. DWR directed the GSAs to:

1. Revise the undesirable result language related to dry years, or explain how dry-year declines will be offset by recovery during other years;
2. Quantify potential impacts of the proposed MTs on domestic wells and evaluate effects on public and small water systems, environmental users, and other beneficial uses and users; and
3. Evaluate how groundwater level MTs may affect other sustainability indicators, including groundwater storage and interconnected surface water.

GWL Strawman Overview

There are essentially two key choices for the GSA Boards to consider:

1. Revise the RMS monitoring network?

This directly influences the assessment of impacts on beneficial users, as requested in the Recommended Corrective Actions (RCA).

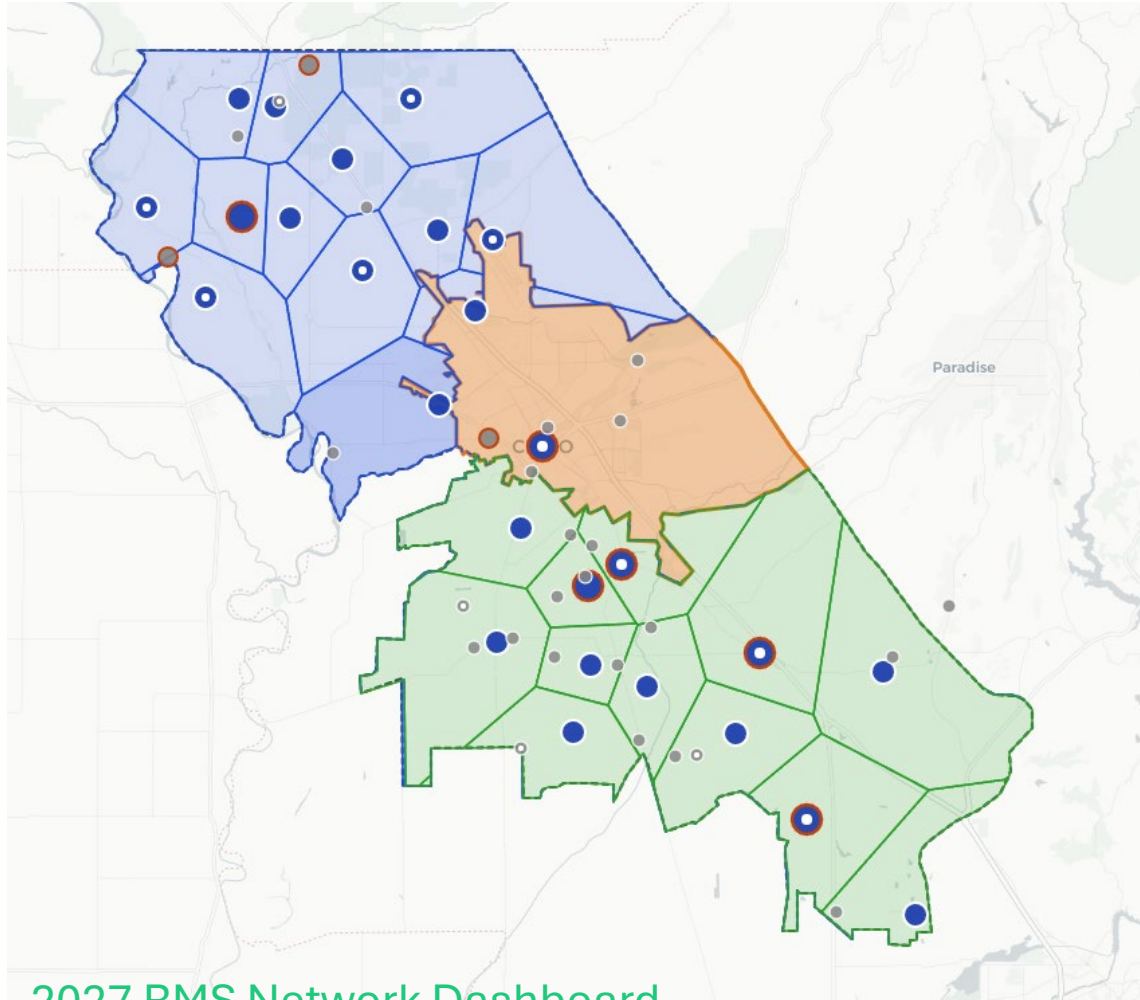
- 1) Replace at least two RMS wells in the Vina South Management Area (due to frequent questionable measurements and/or location outside of the subbasin) and,
- 2) Improve representativeness of the network based on new information available since the adoption of the 2022 GSP.

2. Make changes to the Sustainable Management Criteria (MT etc.)?

Goes beyond the scope of the RCA, but may be considered in light of new information and some stakeholder concerns

Strawman Component 1: RMS Network Updates

Targeted refinement to improve representation of Representative Monitoring Site (RMS) network



[2027 RMS Network Dashboard](#)

17

2022 RMS wells

29

proposed RMS wells

11

retained

6

removed

18

added

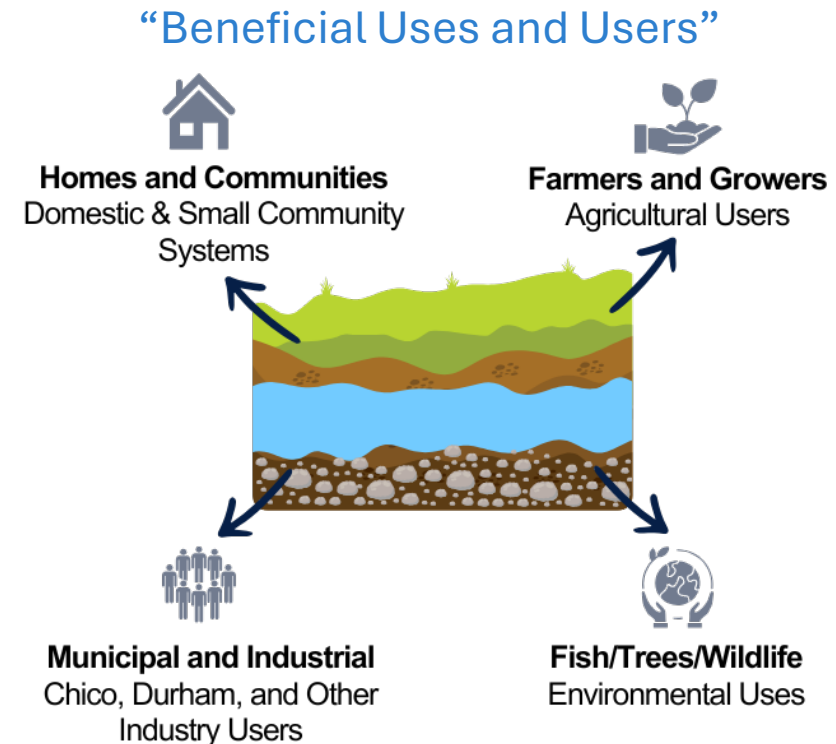
- Remove or replace wells with questionable data, missing data, or boundary/location limitations.
- Designate additional wells as RMS to improve spatial coverage and alignment with beneficial-user considerations (domestic wells and shallow groundwater).
- Maintain the 2022 GSP approach: Continue using management areas and representative polygons for SMC evaluation.

Beneficial Users and Purpose of Monitoring: Why RMS Wells Matter

RMS wells are the compliance sites used to evaluate Sustainable Management Criteria (SMC)

- RMS wells should be reliable, representative, and useful for evaluating conditions that matter to beneficial users.
- They are not intended to capture every localized condition in the Subbasin.
- The monitoring network directly affects how impacts to beneficial uses and users are evaluated (i.e. assignment of Minimum Thresholds etc.)

What are we trying to protect?



Strawman Component 2: SMC Continuity + Local Management Levels (LMLs)

An early-warning concept for GDE-sensitive areas without revising basin-wide MTs

- Sustainable Management Criteria (SMC)
 - Carry forward MT, MO, and 2027 IM values for retained 2022 GSP RMS wells
 - Assign SMC to new RMS wells using a comparable method tied to the SMC adopted in the 2022 GSP
- Consider non-regulatory LMLs 10–20 feet below the Measurable Objective in GDE-sensitive areas to trigger evaluation and adaptive management.
- LMLs assigned only to RMS wells monitoring the shallow zone and located in GDE identified areas (based on findings of recent GDE assessment)

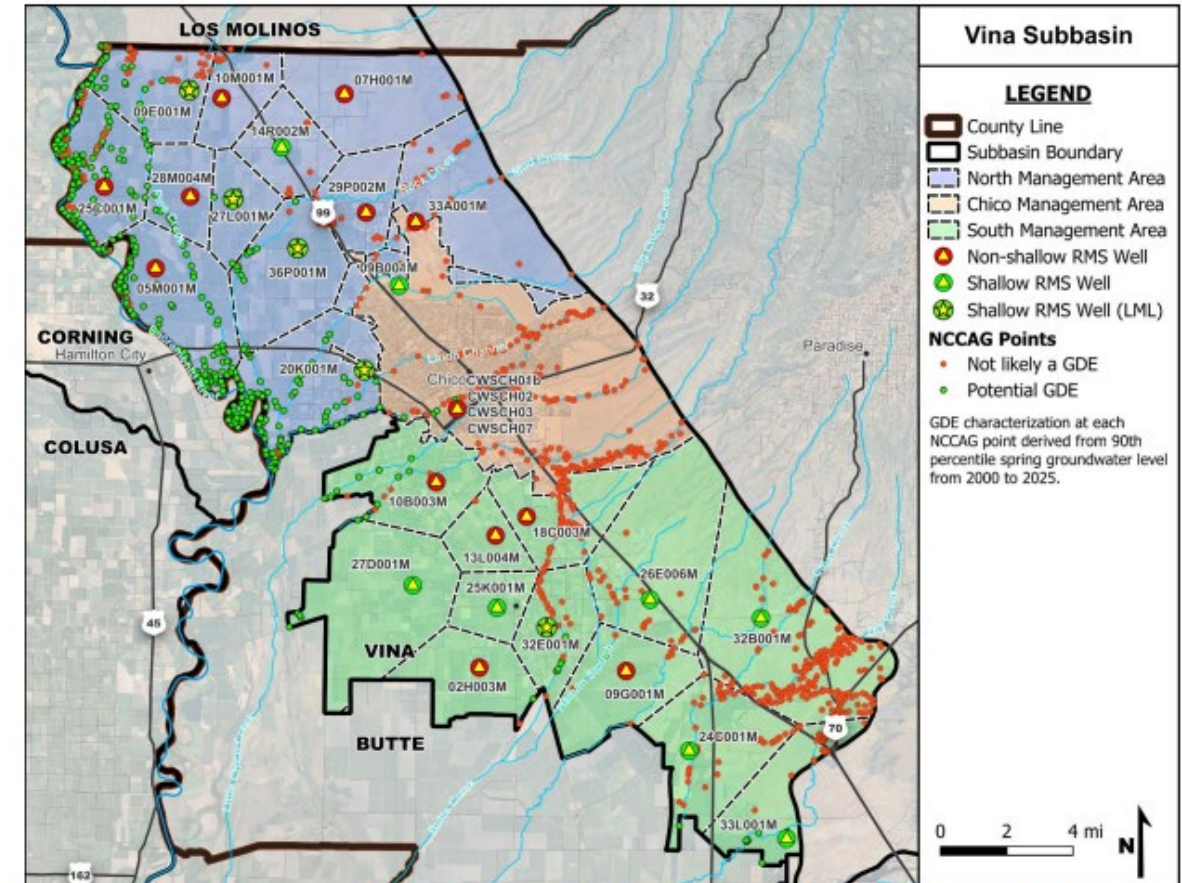


Figure 2. Vina Groundwater Level RMS Monitoring Network showing RMS zones, wells identified as shallow RMS wells, and RMS wells assigned an LML.

The LML would not define an undesirable result; it would flag the need to investigate and consider appropriate response actions.

Initial Feedback to Date

- Broad support for the expanded 2027 RMS network
- Divergent views on Minimum Thresholds (MTs)
 - Environmental representatives and domestic well users support raising MTs — noting current MTs are set below historic lows and lower than adjacent subbasins
 - Domestic well users want higher MTs and consideration to protect pre-1980 wells and prefer a “working well” definition over a year-based cut-off
 - Some participants favor Wyandotte Creek subbasin’s approach and the historical low approach as models for setting MTs
 - Agricultural representatives note MOs are what the GSAs are managing to and caution against unintended consequences of raising MTs such that an undesirable result could be triggered without observed significant and unreasonable impacts
 - Desire for a stronger regulatory hook — LMLs alone seen as insufficient without consequences attached
 - Question raised: what will the Vina Subbasin realistically look like when groundwater levels reach 2022 GSP MTs?
 - Broad agreement that there would be significant and unreasonable impacts at the 2022 GSP MT levels

Anticipated Next Steps

- Based on feedback, the strawman will be revised and options will be brought to the Vina Stakeholder Advisory Committee (SHAC) for their consideration and recommendation to the Vina GSA Board

Meeting Date: Wednesday, July 22, 2026

- Vina and RCRD GSA Boards to consider options and make decision regarding Groundwater Level Sustainable Management Criteria and monitoring network for inclusion in Periodic Evaluation and/or Plan Amendments

Meeting Date: Wednesday, August 12, 2026

Back Up Slides

Minimum thresholds and Measureable Objectives

