

Sierra Valley

GSP Periodic Evaluations & Plan Amendment

Periodic Evaluation

- A Periodic Evaluation is required as part of the 5 year update (due January 2027)
- If necessary, document implemented and proposed revisions to original GSP in a Plan Amendment (PA).
- General Requirements for PE
 - Evaluate groundwater conditions against original sustainability goals and objectives.
 - Analyze direct impacts of projects on groundwater (GW) management efforts.
 - Review and update monitoring network, identifying and addressing data gaps.
 - Assess significant new information potentially affecting basin sustainability criteria.
 - Verify that coordination agreements and inter-agency communication remain current and effective.
 - Summarize regulatory actions and legal measures supporting sustainability goals.
 - Recommend modifications necessary to maintain or improve GW management strategy.

Periodic Evaluation vs. Plan Amendment

- Periodic Evaluation (PE)
 1. Is implementation meeting sustainability goals?
 2. Compare current GW conditions over the evaluation cycle to SMCs
 3. Demonstrate that progress over the evaluation period will achieve the sustainability goal
 4. Provide an assessment of the monitoring network
 5. Any other topics regarding the GSP that have changed during the evaluation period
- Plan Amendment (PA)
 - Formal revision of the GSP
 - Must follow public noticing requirements, be adopted by the Board, and be submitted to DWR for review
 - Must be accompanied by a PE which must describe why, what, and how adjustments were made in the PA

DWR GSP Recommended Corrective Actions

1. Investigating the basin fill and bedrock units and identifying the appropriate principal aquifer(s)
2. Providing more information about how data from the adjacent Chilcoot Subbasin will be utilized
3. Amending definition of groundwater level undesirable result
4. Amending definition of subsidence undesirable results for land subsidence
5. Rationale for why 2021 water quality results were used instead of 2015
6. Collect additional data and coordinate with stakeholders to better understand impacts of ISW depletion
7. Update monitoring network

Improved aquifer characterization, Chilcoot subbasin

Investigating the basin fill and bedrock units and identifying the appropriate principal aquifer(s)

- Better characterizing aquifers based on information gained from well inventory, recharge related soil borings and AEM/Geophysical data.
- Updating DMS with more information and updating geological model

Providing more information about how data from the adjacent Chilcoot Subbasin will be utilized by the GSA during plan implementation

- Reviewing well data for the Chilcoot subbasin including wells already in the existing monitoring network located in the Chilcoot subbasin
- **Evaluate other hydrologic data collected for the GSP to further characterize the geology and hydrological connection to the Sierra Valley subbasin**

Groundwater Level Undesirable Result

- From GSP - *Operationally, an undesirable result for the groundwater level SMC would occur when more than 10% (4 or more of the 36 wells) of RMPs for groundwater levels in the Subbasin fall below their MT for two consecutive years.*

Amending the definition of undesirable results for the chronic lowering of groundwater levels

- Additional data on groundwater levels will be collected from existing wells along with wells that will be added to the monitoring network
- **Develop an inventory of domestic and agricultural wells to better assess the potential for an undesirable result.**
- Develop impact analysis of basin being at MT on all wells

Subsidence Undesirable Result

- From the GSP - *An undesirable result occurs when subsidence substantially interferes with beneficial uses of groundwater and surface land uses. Specific examples of undesirable results include substantial interference with land use, and significant damage to critical infrastructure, such as building foundations, roadways, railroads, canals, pipes, and water conveyance.*
- Too general - need to make more specific

Amending the definition of undesirable results for land subsidence and establishing sustainable management criteria based on groundwater surface elevation changes

- **Using data from recently installed monuments to measure subsidence in the north eastern area of the basin** where greater subsidence has been identified.
- InSAR monitoring is being used in conjunction with monuments and monitoring wells through out the Basin.
- Use INSAR and monument data to update undesirable result

2021 water quality; ISW depletion

Providing a rationale for why water quality conditions in 2021 were selected

- A comparison of 2015 and 2021 water quality data will be included in the GSP update to better demonstrate which year provides the most representative baseline.
- General climate conditions for the 2 years will also be considered

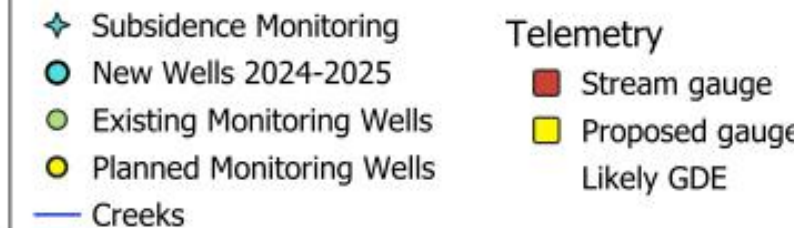
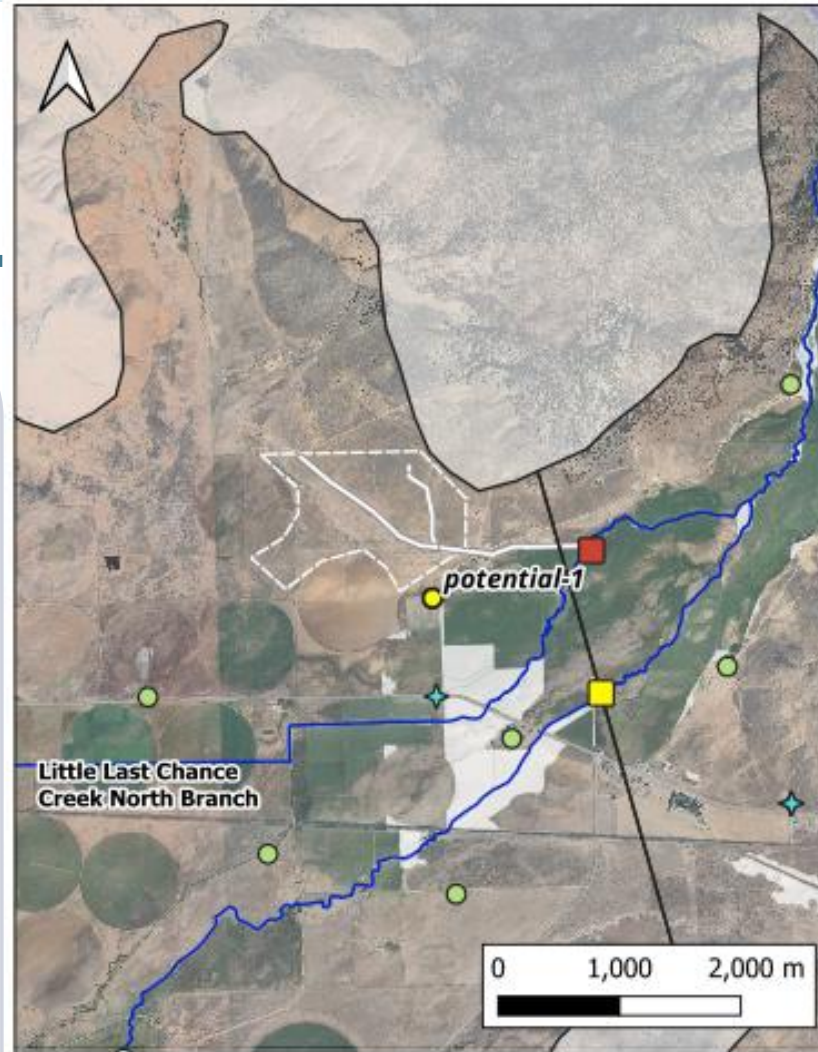
Fill data gaps, collect additional monitoring data, coordinate with resources agencies & interested parties to understand beneficial uses and users that may be impacted by **depletions of interconnected surface water** caused by groundwater pumping,

- Work underway to better characterize ISWs.
- Use data from shallow wells in wetlands area and available from CDFW to update ISW/GDE understanding
- Identify additional monitoring needs

Updates to Monitoring Network

Well inventory is in progress to determine additional wells/locations that may be needed to better characterize the subbasin.

- Monitoring networks for groundwater level, water quality and subsidence are being evaluated and the monitoring network will be modified as needed.



**Sierra Valley Groundwater Subbasin
New and Planned Monitoring**



2025-04-18

Recommended Action

- Prepare and submit Periodic Evaluation by January 2027
- Plan Amendment is not needed based on Recommended Corrective Actions

Periodic Evaluation Elements

- Executive Summary
- New Information Collected
- Groundwater Conditions Relative To Sustainable Management Criteria
- Status of Projects and Management Actions
- Basin Setting Based On New Information or Changes in Water Use
- Monitoring Networks
- GSA Authorities and Enforcement Actions
- Outreach, Engagement, and Coordination with Other Agencies
- Other Information
- Summary of Proposed or Completed Revision to Plan Elements

Plan Amendment

- A Plan Amendment (PA) revises a previously adopted GSP
- Amendments ensures a GSP reflects most current GW management approaches
- The GSA must submit an amended GSP to DWR with a justifying PE
- A public hearing is required before adopting the amended GSP
- A minimum 90-day notice must be provided to cities and counties in the affected area
- Cities or counties can request consultation within 30 days of receiving notice and consultation must be completed within 30 days of receiving notice

FAQs

- Department's periodic review
 - DWR conduct their review with the current GSP, the PE as the written assessment and data provided in the Annual Reports during the period, and will issue a written assessment with a determination of the status of the GSP
 - DWR expects the Periodic Evaluation to discuss progress made toward addressing recommended corrective actions from the determination letter
 - DWR suggests responding to public comments to address and resolve public questions/concerns on GSP implementation activities (not a requirement)
- PE or PE + PA? If PE + PA, what to consider amendment?
 - "The GSA assesses and determines whether the new information or data it provides in the written assessment of its Periodic Evaluation warrants a GSP Amendment."
 - If the GSA decide to submit PA, the accompanied PE should clearly describe the portions of the Plan that were amended (refer to the section in the GSP) and the rationale for the changes; In general, duplication should be avoided between a Plan Amendment and a Periodic Evaluation

FAQs

- PE or PE + PA? If PE + PA, what to consider amendment?
 - Potential workflow of PA consideration:
 - Recommended Corrective Actions from DWR's determination letter
 - Summarize all action items and consider the following questions:
 - How is it being address during the evaluation period?
 - Which Plan elements is it for? (should be discussed in relevant section of the PE)
 - Does it deem significant that warrant a Plan Amendment? (GSA to evaluate)
 - New Information Collected
 - Summarize the significant new information collected during the evaluation cycle and develop a summary table using the template from DWR's guidance (see slide pp. 18)
 - Does the new information significant that leads to a change in such as sustainable management criteria or management actions?
 - Does the change warrant a Plan Amendment? (GSA to evaluate)
 - Note: items being considered in the above two aspects may be overlapped;
 - Note of consideration from DWR (slides pp. 30-31)
 - Examples of consideration from other basins (starting from slide pp. 32)