

Atascadero Basin Groundwater Sustainability Plan

Draft Section for Public Comment

Section 10

Groundwater Sustainability Plan Implementation

Released for Comment April 8, 2021

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Thank you for your interest in sustainable groundwater management.



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Draft Atascadero Groundwater Sustainability Plan

Groundwater Sustainability Plan Implementation Section 10

DRAFT

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Prepared for: Atascadero Subbasin Groundwater Sustainability Agency

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10. Groundwater Sustainability Plan Implementation

This section is intended to serve as a conceptual roadmap for the Atascadero Basin Groundwater Sustainability Agency (GSA) to start implementing the Groundwater Sustainability Plan (GSP) over the first five years and discusses implementation effects in accordance with the Sustainable Groundwater Management Act (SGMA) regulations sections 354.8(f)(2) and (3).

The implementation plan provided in this chapter is based on current understanding of Atascadero Basin (Basin) conditions and includes consideration of projects and management actions included in Section 9, as well as other actions that are needed to successfully implement the GSP including the following:

- GSP implementation, administration, and management
- Reporting, including annual reports and 5-year evaluations and updates
- Adaptive management strategies
- Funding
- Evaluation of effects

10.1 GSP Implementation, Administration, and Management

The Basin was actively managed for many years prior to the signing of the Sustainable Groundwater Management Act in 2014 and is currently a very low priority basin based on the 2019 Department of Water Resources (DWR) Basin Prioritization. As a result of the Basin status and ongoing groundwater management activities, implementation of much of the GSP will occur on an as-needed basis to maintain the sustainable groundwater conditions of the Basin.

Several projects and management actions are scheduled to be fully or partially completed within the first five years:

- Identify existing wells for incorporation into the groundwater level monitoring network
- Identify and install new dedicated monitoring wells for incorporation into the groundwater level monitoring network to fill data gaps
- Refine our understanding of the relationship between groundwater levels and Groundwater Dependent Ecosystem (GDE) health, which may include the installation of very shallow monitoring wells near potential GDEs
- Develop a groundwater model for the Basin
- Continue to utilize imports from the Nacimiento Water Project to continue sustainable management of the Basin
- Improve public access to groundwater data

- Implement adaptive management activities if a triggering event occurs, as described in Section 10.3

To meet the requirements of SGMA, implementation of the GSP will require additional effort and coordination among the GSA Forming Parties and Participating Parties in the Basin. As described in Section 2.2, the Atascadero Basin GSA is comprised of four forming parties and six participating parties.

Forming Parties	Participating Parties
<ul style="list-style-type: none">• City of Atascadero• City of Paso Robles• County of San Luis Obispo• Templeton Community Services District	<ul style="list-style-type: none">• Atascadero Mutual Water Company• Atascadero State Hospital• SMR Mutual Water Company• Santa Ysabel Ranch Mutual Water Company• Walnut Hills Mutual Water Company• Garden Farms Water District

The GSP calls for GSAs to routinely provide information to the public about GSP implementation and ongoing sustainable management of the Basin. The GSP calls for a website to be maintained as a communication tool for posting data, reports, and meeting information. The website may also include forms for on-line reporting of information needed by the GSAs (e.g., annual pumping amounts) and an interactive mapping function for viewing Basin features and monitoring information.

10.2 Reporting

Reporting to be performed as part of GSP implementation includes development of annual reports and development of five-year evaluations, which could lead to updates of the GSP.

10.2.1 Annual Reports

Annual reports must be submitted by April 1st of each year following GSP adoption, except years when five-year or periodic assessments are submitted. The GSA will compile information relevant to annual reports and the Basin Point of Contact will coordinate collection of information and submit a single annual report for the Basin to DWR.

Annual reports will be developed to address current needs in the Basin and the requirements of SGMA. Modifications may include additional information and presentation of data over the prior water year (October 1 – September 30). An annual groundwater fact sheet will be developed for dissemination of information to the public.

Annual reports are anticipated to include three key sections: General Information, Basin Conditions, and Implementation Progress.

10.2.1.1 General Information

General information will include an executive summary that highlights the key content of the annual report. As part of the executive summary, this section will include a map of the Basin, a description of the sustainability goal, a description of GSP projects and their progress, as well as an annual update to the GSP implementation schedule. Key required components include:

- Executive Summary
- Map of the Atascadero Basin

10.2.1.2 Basin Conditions

Basin conditions will describe the current groundwater conditions and monitoring results in the Basin. This section will include an evaluation of how conditions have changed over the previous year and will compare groundwater data for the water year to historical groundwater data. Pumping data, effects of project implementation (if applicable), surface water deliveries total water use, and groundwater storage data will be included. Key required components include:

- Groundwater level data from the monitoring network, including contour maps of seasonal high and seasonal low levels maps for the principal aquifers
- Hydrographs of groundwater elevation data at representative monitoring sites
- Groundwater extraction data by water use sector
- Surface water supply availability and use data by water use sector and source
- Total water use data
- Change in groundwater in storage, including maps for the aquifer
- Subsidence rates and associated survey data

10.2.1.3 Implementation Progress

Progress toward successful GSP implementation will be included in the annual report. This section of the annual report will describe the progress made toward achieving interim milestones as well as implementation of projects and management actions. Key required components include:

- GSP implementation progress, including proposed changes to the GSP
- Progress toward maintaining the Basin sustainability goal

Development of annual reports will begin following the end of the water year, September 30, and will include an assessment of the previous water year. The assessment will be submitted to DWR on April 1st of the following calendar year. The 2021 annual report covering water year 2021

will be submitted by the GSA by April 1, 2022. Five annual reports for the Basin will be submitted to DWR between 2022 and 2026, prior to the first five-year assessment to this GSP, which is to be submitted to DWR in January 2027.

10.2.2 Five-Year Evaluation Reports

An evaluation of the GSP and progress toward meeting the approved sustainability goals will occur at least every five years and with every amendment to the GSP. A written five-year evaluation report (or periodic evaluation report) will be prepared and submitted to DWR. The information to be included in the evaluation reports are provided in the sections below.

10.2.2.1 Sustainability Evaluation

A Sustainability Evaluation will contain a description of current groundwater conditions for each applicable sustainability indicator and will include a discussion of overall sustainability in the Basin. Progress toward achieving interim milestones and measurable objectives will be included, along with an evaluation of status relative to minimum thresholds. If any of the adaptive management triggers are found to be met during this evaluation, a plan for implementing adaptive management as described in the GSP will be included.

10.2.2.2 Plan Implementation Progress

A Plan Implementation Progress section will describe the current status of project and management action implementation and whether any adaptive management actions have been implemented since the previous report. An updated project implementation schedule will be included, along with any new projects developed to support the sustainability goal of the GSP and a description of any projects that are no longer included in the GSP. The benefits of projects and management actions that have been implemented will be described and updates on projects and management actions that are underway at the time of the report will be documented.

10.2.2.3 Reconsideration of GSP Elements

As additional monitoring data are collected, land uses and community characteristics change, and GSP projects and management actions are implemented, it may become necessary to reconsider elements of this GSP and revise the GSP as appropriate. GSP elements to be reassessed may include basin setting, management areas, undesirable results, minimum thresholds, and measurable objectives. If appropriate, a revised GSP completed at the end of the five-year assessment period will include revisions informed by the outcomes of the monitoring network and changes in the Basin, including changes to groundwater uses or supplies, and outcomes of project implementation.

10.2.2.4 Monitoring Network Description

A description of the monitoring network will be provided. An assessment of the monitoring network's function will be included, along with an analysis of data collected to date. If data gaps are identified, the GSP will be revised to include a method for addressing these data gaps, along

with an implementation schedule for addressing gaps and a description of how the GSA will incorporate updated data into the GSP.

10.2.2.5 New Information

New information available since the last five-year evaluation or GSP amendment will be described and evaluated. If the new information should warrant a change to the GSP, this will also be included, as described previously in Reconsideration of GSP Elements.

10.2.2.6 Regulations or Ordinances

A summary of the regulations or ordinances related to the GSP that have been implemented by DWR or others since the previous report will be provided. The report will include a discussion of any required updates to the GSP.

10.2.2.7 Legal or Enforcement Actions

Legal or enforcement actions taken by the GSA in relation to the GSP will be summarized, including an explanation of how such actions support sustainability in the Basin.

10.2.2.8 Plan Amendments

A description of amendments to the GSP will be provided in the five-year evaluation report, including adopted amendments, recommended amendments for future updates, and amendments that are underway.

10.2.2.9 Coordination

Ongoing coordination will be required among the GSA Forming Parties and Participating Parties, as well as between the GSA and GSAs in Paso Robles Subbasin. The five-year evaluation report will describe coordination activities between these entities such as meetings, joint projects, or data collection and sharing and groundwater modeling efforts.

10.2.2.10 Reporting to Stakeholders and the Public

Significant outreach activities associated with the GSP assessment and resultant updates will be documented in the five-year evaluation report.

10.3 Adaptive Management Strategies

As part of implementation, adaptive management strategies will be considered for implementation if designated trigger events occur. Triggers for implementation of adaptive management allow for a variety of actions, ranging from coordination and monitoring to management of groundwater extractions and recharge. Triggering events are based on monitoring results and are set in relation to the sustainable management criteria described in Section 8.

10.3.1 Adaptive Management Triggers

The purpose of this adaptive management approach is for the GSA to take necessary action to investigate the cause of observed groundwater level declines below expected levels for the season and annual hydrologic conditions and provide a framework for response to prevent reaching the minimum threshold. Adaptive management will also occur should other sustainability indicators approach minimum thresholds, even though local management levels are not defined for these other indicators. For other indicators, adaptive management is triggered when minimum thresholds are exceeded, even if not in the percentages or timing defined as undesirable results.

10.3.2 Trigger Response

The minimum thresholds established in Section 8 will be used to establish triggers for responses. The GSA will flag the representative monitoring site where the exceedance is observed and bring the flagged monitoring site to the attention of the Executive Committee. The Executive Committee will consider the results of an investigation of the exceedance performed by the GSA to determine if it is a locally driven change in conditions, or representative of a long-term, Basin-wide change in conditions. The Executive Committee will advise the GSA on a recommended course of action which may include working with water managers near the site. The GSA will take the action it determines to be necessary, including corrective action, additional study, or management modification, if any, in the area influencing the monitoring site.

10.3.3 Corrective Actions

Recognizing that the Basin has been operated sustainably, it is not anticipated the significant corrective actions will be needed to maintain ongoing sustainable groundwater management. Some initial corrective actions to better understand or mitigate impacts may include increased monitoring frequency, coordination and information sharing with overlying land use planning agencies or other water management entities to determine the cause of exceedances.

Additional corrective actions to address declining groundwater levels that have not reached the minimum thresholds may include localized actions such as delivering more NWP allocations up to the full allocation amount, implementing demand management measures, or modifying municipal pumping operations to mitigate impacts to private users. In some extreme cases, halting or reducing groundwater pumping in the depths and areas influenced by the representative monitoring site may be considered until conditions recover.

Given the current, historical, and projected sustainable nature of the Basin and given the cost associated with developing detailed response plans, details of these adaptive management actions will be further developed only if conditions suggest a reasonable potential for implementation of such strategies.

The corrective action or information gathering will be deemed successful in returning the Basin to sustainable conditions when monitoring indicates that conditions are above the local management level or minimum threshold, or that the issue was a result of localized conditions.

10.3.4 Public Notice and Outreach

Public notice of exceedances of the local management level or minimum threshold at an individual monitoring site will first be made via a web page or public data portal, to the extent developed at that time. Notice will also be provided as an agenda item at associated Forming Parties' or Participating Parties' board or city council meeting or Executive Committee meeting. Actions taken regarding discussion of the cause or corrective action to be taken to improve conditions will be considered during the GSA Executive Committee meetings. Additionally, any exceedances relative to the minimum thresholds and status compared to the other sustainable management criteria will be reported to DWR in annual reports under this GSP, which will be publicly available following submission to DWR.

10.3.5 Permitting and Regulatory Process

Implementation of this adaptive management strategy itself is not anticipated to require permitting or regulatory approvals. However, actions or projects resulting from a need to improve conditions relative to the local management level or minimum threshold will be subject to the appropriate permitting and regulatory processes, if any, and will be addressed on a case-by-case basis.

10.3.6 Adaptive Management Strategy Benefits

The primary benefit anticipated as a result of this adaptive management strategy is continued sustainable groundwater management and maintaining the sustainability goals established for this GSP. Expected benefits also include continued cooperative management of groundwater conditions among the GSA participants. Benefits will be evaluated based on observed groundwater conditions following implementation of this adaptive management strategy and evaluation of long-term conditions at, or improved relative to, the local management level or minimum threshold. An additional benefit of the adaptive management strategy is avoidance of high-cost, restrictive management efforts unless clearly needed as indicated by data and analysis of the data.

10.3.7 Adaptive Management Responsibilities

Implementation of the adaptive management strategy will be conducted by the GSA. The Forming and Participating Parties will inform the Executive Committee of exceedances of the minimum thresholds and will provide analysis, as needed, to the Executive Committee to identify the cause for the exceedance, whether it is localized or indicative of long-term, regional trends, and the corrective actions, if any, needed to return conditions to those above the local management level. The Executive Committee acts in an advisory role in the effort. The Forming

and Participating Parties will take into consideration the Executive Committee's recommendation when implementing actions.

10.3.8 Status and Timing

This adaptive management strategy will commence as monitoring activities described in this GSP begin for the purpose of assessing conditions relative to the established sustainable management criteria. If exceedances of the local management level or minimum threshold occur, the management process described above will take place and corrective action or additional study will be initiated by the GSA and put in place until conditions are improved. The accrual of benefits is expected to be continuous throughout the GSP implementation timeframe.

10.3.9 Legal Authority

The GSA adopting this GSP is responsible for the sustainable management of groundwater based on the power and authority granted under the California Water Code. As such, the adopting GSA has the authority to take action deemed appropriate within its legal authority to maintain sustainable groundwater conditions within the Basin.

10.3.10 Costs

Costs associated with this adaptive management strategy include staff time, consultant costs, contractor costs, transportation costs for in-person meetings (if necessary), monitoring and data collection, and actions associated with corrective management. Given the nature of adaptive management, including the broad range of actions that could be taken, these costs cannot be estimated at this time. GSA participants are expected to perform the monitoring and data collection tasks associated with GSP implementation and absorb these costs into their ongoing operations budgets.

10.3.11 Technical Justification

Management of sustainability indicators relative to the established sustainable management criteria is crucial to maintain sustainable conditions within the Basin. It is anticipated that Basin conditions will fluctuate around the established measurable objectives and that long-term trends will demonstrate continued sustainable conditions throughout the Basin across sustainability indicators. This adaptive management strategy outlines a uniform procedure for the GSA to follow in the unprecedented event that collected measurements indicate conditions may be approaching local management levels or minimum thresholds, which protect against undesirable results. With a procedure in place to guide the GSA, early detection and correction of unsustainable conditions is likely to occur.

10.3.12 Reducing Uncertainty

This adaptive management strategy addresses subbasin uncertainty by providing a flexible framework to address potential exceedances of local management levels and minimum thresholds should conditions within the Basin change as a result of unforeseen circumstances.

10.4 Funding

Implementation of this GSP is estimated to cost approximately between \$100,000 and \$200,000 per year for the first five years of implementation. The development of the initial groundwater model is estimated to total \$200,000 to \$300,000. Estimates of future annual implementation costs including model updates will be developed during future updates of the GSP. The costs of specific projects and management actions will likely vary year by year based in part on needed adaptive management activities and may potentially add between zero dollars to \$300,000 per year or more. Some of these costs are already being incurred through existing groundwater management efforts by GSA participants in their existing operational budgets.

10.4.1 GSP Development Funds

Development of this GSP was partially funded through a Proposition 1 Sustainable Groundwater Planning Grant from DWR, along with in-kind contributions from the Forming and Participating Parties in the process. The implementation of the GSP, including projects and management actions, will be funded through available grant funding as well as existing revenue streams provided by the Parties.

10.4.2 GSP Implementation Funding Support

As described above, there are substantial costs associated with GSP implementation for the Basin, including costs within the first five years of implementation. Some of these costs are already being incurred through existing groundwater management. While the GSA in the Basin has the powers and authority to impose fees and assessments, other funding sources will be sought by the GSA to reduce the local financial burden. Examples of available other funding sources include various state grant programs through DWR and the State Water Resources Control Board (SWRCB) and federal sources such as the Reclamation grant programs.

San Luis Obispo County, the City of Paso Robles, Templeton Community Services District, and Atascadero Mutual Water Company have been successful in pursuing past grant funding, such as through DWR's Local Groundwater Assistance Fund, Integrated Regional Water Management Program (IRWMP) implementation and planning grant programs, and Sustainable Groundwater Planning Grant programs. The continued availability of state and federal grant funding to implement this GSP will aid in continued sustainable groundwater management of the Basin. The GSA will track and pursue grant opportunities to fund groundwater sustainability activities and local water infrastructure projects. These projects may include supporting the actions described in this section, or other relevant activities. The nature of projects included in grant

applications will depend on the nature of the grant, including allowable projects and projects that are most likely to receive funding.

Implementation of management actions will vary by available funding programs and projects eligible to receive funding. As available outside funding opportunities are identified that fit the needs of the Basin relative to this GSP, the project proponent and the GSA will be notified of the potential to pursue funding. The appropriate entity will then be identified to develop the grant application and associated materials. Grant application materials will be prepared, and proper public notice and outreach will take place to provide opportunity for public comment as specified by the grant program identified. After the grant application is submitted and funding awards have been announced, the successful grant recipient will work with the funding agency to develop a grant agreement to receive funds and maintain funding eligibility. Proper noticing of activities or work products produced with the awarded grant funds will take place according to the grant agreement and funding program guidelines. Details regarding the implementation process for a project will vary by funding program and agreements in place between the funding agency and project proponent. Such activities will take place as funding opportunities are available and as grant agreements are active.

On an as-needed basis, the GSA will track and pursue appropriate funding opportunities through various outside funding sources to implement elements of this GSP. Tracking of outside grant opportunities will be on-going throughout GSP implementation and timing will be highly dependent on available funding programs as well as project status for which funds are being sought. Table 10-1 summarizes potential grant programs or local funding sources that may be used for GSP implementation along with an assessment of the likelihood that the funding source could be obtained to help fund GSP implementation.

Table 10-1. Potential Funding Sources for GSP Implementation

Funding Source	Likelihood
General Funds or Capital Improvement Funds (of Project Proponents)	High – General or capital improvement funds are set aside by agencies to fund general operations and construction of facility improvements. Depends upon agency approval.
Proposition 68 grant programs administered by various state agencies	Medium – Grant programs funded through Proposition 68, which was passed by California voters in June 2018, are expected to be applicable to fund GSP implementation activities. Grant programs are expected to be competitive. Round 3 is expected to be announced in summer 2021.
Integrated Regional Water Management implementation grants administered by DWR	Medium – Proposition 1 Round 2 IRWM Implementation Grants are expected to be announced in late 2021.
WaterSMART Program grants administered by Reclamation	Medium – Programs include Water and Energy Efficiency Grants (WEEG), Drought Response Program grants, Applied Science grants, and more. In 2021, \$42 million was awarded for WEEG projects alone. Examples of funded projects include canal lining/piping, municipal metering, supervisory control, and data acquisition (SCADA) systems, water storage, water recharge, well construction, and more. Funding is typically available annually or twice a year.
Regional Conservation Partnership Program grants administered by USDA Natural Resources Conservation Service	Medium –The 2018 Farm Bill established the Regional Conservation Partnership Program (RCPP) as a standalone program with \$300M available annually. Once a lead agency executes an RCPP agreement producers and landowners can participate in RCPP funding. The announcement for the next round of RCPP Classic funding is expected to be released in summer 2021. Eligibility requirements will be included in funding announcement.
Water & Waste Disposal Loan & Grant Program administered by USDA	Low – Long-term, low-interest loans and grants available for drinking water systems, disposal, and storm water drainage in rural areas (population of 10,000 or less). Applications are accepted year-round.

10.5 GSP Implementation Effects

10.5.1 *Effects on Existing Land Use*

The projected water budget (Section 6) accounts for modest increases in municipal and agricultural water demands that include potential changes in land use but is not likely to limit planned land uses. However, all such regulations will need to be consistent with the applicable statutory constraints, including those described in Water Code Section 10726.4(a)(2) which provides that such regulations shall be consistent with the applicable elements of the city or county general plan, unless there is insufficient sustainable yield in the Basin to serve a land use designated in the city or county general plan and Water Code Section 10726.8(f) which states that nothing contained in SGMA or in a GSP shall be interpreted as superseding the land use authority of cities and counties.

10.5.2 *Effects on Water Supply*

GSP implementation will not significantly alter the existing water supply of the Basin. If entities decide to take their full NWP allocation as outlined in Chapter 9, the Basin's water supply could increase.

10.5.3 *Effects on Local and Regional Economy*

GSP implementation is not expected to impact economic conditions since the Basin is already operated sustainably.