



Public Review Draft

Section 1. Introduction

Santa Margarita Basin Groundwater Sustainability Plan

July 23, 2021

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Acronyms & Abbreviations

AFY.....	acre-feet per year
DMS.....	data management system
DWR.....	California Department of Water Resources
GSA.....	Groundwater Sustainability Agency
GSP.....	Groundwater Sustainability Plan
JPA.....	Joint Powers Agreement
MHA.....	Mount Hermon Association
SGMA.....	Sustainable Groundwater Management Act
SLVWD.....	San Lorenzo Valley Water District
SMC.....	sustainability management criteria
SMGWA.....	Santa Margarita Groundwater Agency
SVWD.....	Scotts Valley Water District

1 INTRODUCTION

1.1 Purpose of the Groundwater Sustainability Plan

In 2014, the State of California enacted the Sustainable Groundwater Management Act (SGMA). This act requires groundwater basins in California that are designated as medium- or high-priority be managed sustainably over at least a 50-year planning and implementation horizon. Satisfying the requirements of the SGMA generally requires 4 basic activities:

1. Forming one or multiple Groundwater Sustainability Agency(s) (GSAs) to fully cover a basin;
2. Developing one or multiple Groundwater Sustainability Plan(s) (GSPs) that fully cover the basin;
3. Implementing the GSP and managing the basin according to the GSP to achieve quantifiable objectives; and
4. Regular reporting of groundwater conditions and progress towards sustainability to the California Department of Water Resources (DWR).

This document fulfills the Groundwater Sustainability Plan (GSP, or Plan) requirement for the Santa Margarita Basin (Basin) categorized as a medium-priority basin. The GSP describes the Basin's physical attributes related to groundwater, surface water, and land use; develops quantifiable management objectives that take into account interests of the Basin's beneficial groundwater uses and users; and identifies a group of projects and management actions that will allow the Basin to achieve sustainability within 20 years of Plan adoption (2042), and to maintain sustainability for an additional 30 years beyond 2042.

The GSP was developed specifically to comply with SGMA's statutory and regulatory requirements. As such, the GSP uses terminology used in these requirements (see Water Code Section 10721 and 23 CCR Section 351) which is oftentimes different from the terminology used in other contexts (e.g. past reports or studies, past analyses, judicial rules or findings). Definitions used in this GSP, including those from SGMA statutes and regulations are included in Appendix 1A for reference.

1.2 Sustainability Goals

The GSP requires that the Santa Margarita Basin Groundwater Agency (SMGWA) establish a sustainability goal that culminates in the absence of undesirable results within 20 years of the applicable statutory deadline. The 20-year deadline to achieve the sustainability goal in the Santa Margarita Basin is January 2042.

Sustainability goals were discussed by the SMGWA Board at Board meetings at several Board meetings. Contributions from Board directors, agency staff, and the public resulted in the following sustainability goals.

The goals of the SMGWA are to:

- Implement the Sustainable Groundwater Management Act (SGMA), which requires the management and use of groundwater in the Basin in a manner that can be maintained during the planning and implementation horizon without causing undesirable results.
- Provide a safe and reliable groundwater supply that meets the current and future needs of beneficial users.
- Support groundwater sustainability measures and projects which enhance a sustainable and reliable groundwater supply in the Basin, utilizing integrated water management principles by:
 - Safeguarding water supply availability for public health and welfare
 - Maintaining and enhancing groundwater availability for municipal, private, and industrial users and uses
 - Maintaining and enhancing groundwater contributions to streamflow, where beneficial users are dependent upon such contributions (fish, frogs, salamanders, dragonflies etc.)
 - Maintaining and enhancing groundwater levels that support groundwater dependent ecosystems
 - Maintaining and enhancing groundwater quality for existing and future beneficial uses
- Provide for operational flexibility within the Basin by supporting a drought reserve that considers future climate change
- Plan and implement projects and activities to achieve sustainability that are cost effective and do not place undue financial hardship on the SMGWA, its member agencies, or basin stakeholders. A cost-benefit analysis, taking into consideration financial, social,

environmental, and adverse consequences, may be conducted to evaluate whether a project or activity results in undue financial hardship.

Measures that the SMGWA member agencies will take to achieve Basin sustainability are focused on increasing Lompico aquifer groundwater levels in the Mount Hermon / south Scotts Valley area. The most immediate action will be to expand conjunctive use of surface water and groundwater using existing infrastructure. It is likely that this measure will be followed by development of infrastructure to gain access to San Lorenzo Valley Water District's (SLVWD) entitlement of 313 acre-feet per year (AFY) of Loch Lomond water for further conjunctive use opportunities. Combining the 2 projects would potentially provide for a long-term average of 540 AFY of in-lieu recharge by SLVWD and Scotts Valley Water District (SVWD) resting their extraction wells during the wet seasons when surface water is available for conjunctive use. Groundwater modeling has demonstrated the combined projects will raise Mount Hermon / south Scotts Valley area Lompico aquifer groundwater levels by 20 to 50 feet and Monterey Formation levels by 20 feet. Additionally, resting SVWD wells extracting from the Butano aquifer may raise Butano aquifer groundwater levels by 20 to 50 feet in the central to northern Scotts Valley areas. The anticipated increases in groundwater levels from 540 AFY of conjunctive use enables the SMGWA to meet its long-term measurable objectives for chronic lowering of groundwater levels, depletion of interconnected surface water, and reduction of groundwater in storage, while having no impact on groundwater quality.

Larger, more costly projects using either treated surface water or purified wastewater imported from outside the Basin, as described in Section 4, will be evaluated during the first 5 years of GSP implementation. The larger projects will provide cooperating agencies additional water supply resiliency and drought protection, beyond the level likely needed for sustainable management of groundwater in the Basin.

1.3 Agency Information

The Santa Margarita Basin GSP has been developed by one exclusive GSA, the Santa Margarita Groundwater Agency (SMGWA).

1.3.1 Organization and Management Structure of the Santa Margarita Groundwater Agency

The SMGWA was formed through a Joint Powers Agreement (JPA) in June 2017 among the SVWD, SLVWD, and the County of Santa Cruz (County). SLVWD uses both local surface water and groundwater resources to supply potable water to their customers, while SVWD relies only on groundwater resources. The County of Santa Cruz regulates land use, issues well permits, oversees small public water systems, and conducts various watershed management efforts in the Basin.

The SMGWA is governed by a Board of Directors comprising 2 representatives from each member agency, 1 representative from the City of Scotts Valley, 1 from the City of Santa Cruz, 1 from Mount Hermon Association (MHA), and 2 private well owner representatives. There are a total of 11 directors.

Each member agency has one alternate to act as a substitute director. One alternate acts as a substitute director for the 2 directors representing private well owners, and 1 alternate for each entity acts as a substitute director for the City of Scotts Valley, City of Santa Cruz and MHA. Alternate directors have no vote, and do not participate in any discussions or deliberations of the Board unless appearing as a substitute for a director due to absence or conflict of interest.

There are no dedicated SMGWA staff. All staffing support and funding for the SMGWA is provided by its 3 member agencies. Although not a member agency, the City of Santa Cruz provides staff support to the SMGWA because it obtains approximately 69% of its water supply from the San Lorenzo River watershed which covers almost the entire groundwater basin.

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1.3.2 Legal Authority of the Santa Margarita Groundwater Agency

Figure 1-1 shows the extent of the Santa Margarita Basin. This GSP covers the entire Basin area for which the SMGWA is the exclusive GSA. No portion of the Basin is covered by a non-exclusive GSA. Therefore, the SMGWA provides the sole legal authority to implement this GSP throughout the entire Plan area and no authority is needed from any other GSA to implement the GSP.

The SMGWA has legal authority to perform duties, exercise powers, and accept responsibility for managing groundwater sustainably within the Santa Margarita Basin. Legal authority comes from the SGMA, the JPA signed by SMGWA member agencies effective on June 1, 2017, and JPA Bylaws. The JPA is included as Appendix 1B. These laws and agreements, taken together, provide the necessary legal authority for the SMGWA Board of Directors to carry out the preparation and implementation of the Basin's GSP.

1.3.3 Santa Margarita Groundwater Agency Guiding Principles

Prior to starting GSP development, the SMGWA Board conducted a joint goal setting process that allowed them to establish a solid foundation for the planning work required during the GSP development. The process was facilitated by Dave Ceppos, a Managing Senior Mediator at California State University Sacramento, College of Continuing Education, Consensus and Collaboration Program. Mr. Ceppos conducted background reviews, conducted a situation assessment presenting the report to the Board at its July 2018 meeting.

The Board formed a Facilitation Committee to work with the facilitator in designing and implementing a joint goal setting process. The Facilitation Committee met several times reviewing the recommendations from the assessment report, preparing guiding principles and determining the appropriate timeline for necessary activities. Collectively they developed a proposed "Santa Margarita Groundwater Agency (SMGWA) Guiding Principles" document (Guiding Principles) that was approved at the November 2018 Board meeting, and then amended at the December 2018 Board meeting. The final Guiding Principles are included as Appendix 1C to this GSP.

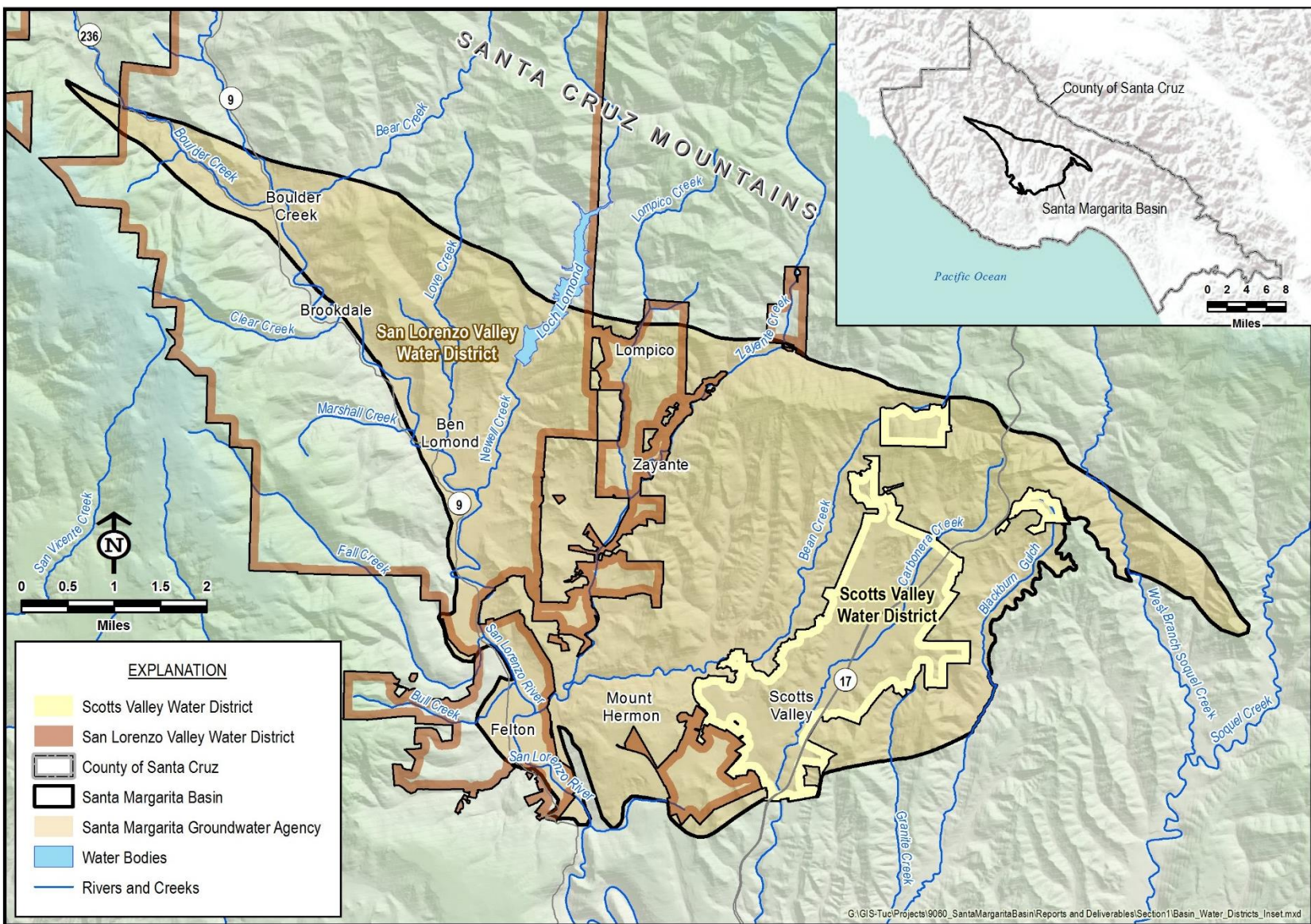


Figure 1-1. Extent of SMGWA GSP Plan Area with Member Agency Boundaries

Development of the Guiding Principles marked a major milestone for the SMGWA. They define a set of mutual core values and commitments that the current Board and future Boards will focus their efforts towards. The Guiding Principles add to the SMGWA's other documents, including the agency's Joint Powers Agreement (Appendix 1B) and Bylaws, that define how the Agency does and will function. As used by other organizations and agencies, Guiding Principles (and similar) are an important and applied tool that guides the work of a governing body. Amongst many uses, the SMGWA Guiding Principles can:

- Be provided to the Basin Beneficial Users as a written description of key interests and a commitment/pledge by the Board as to how it will implement SGMA.
- Be used by all Board members to regularly assess the direction of discussions and potential Board decisions and to ensure that said discussions and decisions are consistent with these Guiding Principles.

1.3.4 Estimated Cost of Implementing the GSP and the Santa Margarita Groundwater Agency's Approach to Meet Costs

Over the next 5 years, the estimated cost to implement the GSP is \$1,967,900. The annualized cost over those 5 years is \$393,580. The estimated budget by GSP implementation activity can be found in Section 5, Table 5-1.

The estimated cost of implementing the GSP is presented by category identified below but also includes maintaining a prudent fiscal reserve and other miscellaneous costs. The budget's major cost categories include:

- Administration and business operations
- GSP management and coordination
- Monitoring and GSP reporting (annual and 5-year reports)
- Maintaining the data management system (DMS)

Monitoring, regulatory reporting, filling data gaps, and maintaining the DMS accounts for roughly half the budget. The remaining budget covers activities associated with supporting SMGWA governance and management.

The GSP implementation budget does not include the cost of evaluating, planning, designing, and constructing a project(s) to achieve groundwater sustainability. As discussed in Sections 4 and 5, individual member and cooperating agencies will cover their respective costs of these activities because the SMGWA will not serve as the lead agency for implementing projects and management actions. Project costs may be shared between multiple agencies if the project

provides greater water supply reliability and resiliency benefit to multiple agencies. Regional collaboration to achieve both basin sustainability and increase regional water supply reliability and resiliency is encouraged by the SMGWA.

Costs associated with new project infrastructure may be funded through a combination of increased operating revenue and outside funding sources. Potential outside funding sources could include IRWM Grant Programs, Sustainable Groundwater Management Grant Program, State Revolving Fund low interest loans, USDA grants and/or low interest loans, or USBR Drought Resiliency and/or Title XVI Recycled Water.

The SMGWA is funded by its member agencies through annual contributions based on a cost sharing agreement. The cost allocation is currently established at 60% to SVWD, 30% to SLVWD, and 10% to the County of Santa Cruz; the cost allocation is subject to change. SMGWA's approach to meeting GSP implementation costs is considered in two phases. In the GSP Implementation Phase 1 (2022 – 2027) funding is anticipated to be obtained from annual contributions from the SMGWA member agencies. Contribution amounts will be assessed based upon the SMGWA's annual budgetary requirements and equitable cost share rationale between the member agencies. The SMGWA will continue to pursue funding opportunities from state and federal sources to support GSP implementation activities.

The approach to meeting the GSP implementation costs after 2027 will be evaluated as GSP implementation proceeds. As authorized under Chapter 8 of the SGMA, a GSA may impose fees, including, but not limited to, permit fees and fees on groundwater extraction or other regulated activity, to fund the costs including groundwater sustainability planning and program activities and administration. The SMGWA will further evaluate the funding mechanisms, the potential application of fees and the fee criteria for non-*de minimis* and *de minimis* users alike.

1.4 GSP Organization

1.4.1 Groundwater Sustainability Plan Organization

The SMGWA's GSP is organized based upon the DWR's GSP Annotated Outline with additional information to address content requirements found in the *Preparation Checklist for GSP Submittal* (DWR, 2016).

The GSP is organized as follows:

Executive Summary

The executive summary presents an overview of the overall GSP, background information on the groundwater conditions in the Basin, an overview the GSP development process, and key information from each of the five GSP sections.

Section 1. Introduction

This first section presents the purpose of the GSP, the Basin's Sustainably Goal, information about the SMGWA, and organization of the GSP.

Section 2. Plan Area and Basin Setting

This section describes the Santa Margarita Groundwater Basin's physical attributes related to groundwater, surface water, and land use. Historical and current Basin groundwater conditions and groundwater management are described together with the Basin's historical and current water budget. In addition to historical and current water budgets, projected water budgets covering the 50-year period planning horizon with and without projects and management actions are included to estimate future conditions of supply, demand, and aquifer response to Plan implementation. This section provides the background information needed to develop the technical aspects of Section 3: Sustainable Management Criteria and Section 4: Projects and Management Actions to Achieve Sustainability Goal.

Section 3. Sustainable Management Criteria

This section presents the Basin's sustainability goal and provides the management criteria, for the Basin's applicable sustainability indicators, by which to measure the Basin's sustainability. This section also describes the monitoring networks used to assess groundwater levels, groundwater quality, and interconnected surface water.

Section 4. Projects and Management Actions

This section provides a description of projects and management actions necessary to achieve the Basin's sustainability goal while being responsive to projected changes in future water demand and climate change. Projects and management actions are specifically developed to address sustainability goals and sustainable management criteria from Section 3.

Section 5. Plan Implementation

This final section of the GSP provides an estimate of GSP implementation costs, its implementation schedule, and outlines of the procedural and substantive requirements for annual and periodic (5-year) GSP evaluations.

1.4.2 Preparation Checklist for GSP Submittal

This GSP must be submitted online to DWR by January 31, 2022. The DWR online submittal process includes an Elements Guide where each statutory requirement in the GSP regulations is linked to the relevant page number and section in this GSP. Access to the checklist and GSP can be found at: <https://sgma.water.ca.gov/portal/gsp/status>.