5 Plan Implementation

This section describes in general how the GSAs will implement the Sierra Valley Subbasin Groundwater Sustainability Plan (GSP). The SVGMD will be coordinating with other agencies, organizations, and landowners in the region to effectively manage the groundwater basin. As described in prior sections, a variety of projects and management actions (PMAs) that support groundwater levels, groundwater storage, and interconnected surface waters (ISWs) are currently being, have previously been, or are proposed to be implemented. Existing and planned PMAs will contribute to the attainment of the subbasin's groundwater sustainability goal over the planning horizon of this GSP. These PMAs, as described in Chapter 4, enable the continued use of groundwater, and protect all groundwater uses and users into the future.

In this section, the GSP implementation plan for the SV Subbasin is defined. Elements of this plan include:

1. Management and Administration
    a. GSA management, administration, legal, and day-to-day operations.
    b. Reporting, including preparation of annual reports and five-year evaluations and updates.
2. Implementation
    a. Implementation of the GSP monitoring program activities described in Chapter 3.
    b. Technical support, including model updates, data collection, and other technical analysis.
    c. Projects and Management Actions (PMAs) as described in Chapter 4.
3. Outreach and Education
    a. Coordination activities with stakeholders and entities in the subbasin.
    b. Ongoing education and outreach activities to stakeholders.

Cost estimates and funding methods for GSP implementation are also presented in this section.

5.1 Description of GSP Implementation Elements

The following tasks and functions will be required for implementation of this GSP:

5.1.1 Management and Administration

5.1.1.1 GSAs management, administration, legal and day-to-day operations

GSA functions associated with the management and administration of the GSP implementation activities are covered under this category, which includes the administrative, technical, and finance staff support and related expenses, office supplies and materials, insurance, and grant writing to support funding for specific projects and/or management actions. GSA staff, supplemented by contractors, as-needed, will provide work products, administrative support, staff leadership, and management for the GSAs to provide work products, administrative support, staff leadership, and management for the subbasin`.

As GSP implementation begins in February 2022, staffing support and ongoing administrative and management needs will be further evaluated so that the budget can be refined as

necessary. Staffing needs will be reevaluated annually during the early years of GSP implementation to gain a better understanding of the support required and associated costs.

GSA administration activities include meeting coordination with other organizations on projects or studies, email, and website updates to inform stakeholders about ongoing activities within the Basin, administration of projects implemented by the GSAs, and general oversight and coordination. Other oversight and administrative activities will occur on an as-needed basis. The GSAs are responsible for and authorized to take, appropriate action to achieve sustainable management of groundwater within the basin based on the authority granted under Section 6 of the California Water Code. On an as-needed basis, the GSAs may seek legal services to assist in the interpretation of legal requirements and provide legal advice during GSP implementation.

GSP implementation costs include GSAs administration, management actions, monitoring protocols, data management, sustaining a sufficient fiscal reserve, and other potential costs for the twenty-year implementation horizon. The estimated annual cost of ongoing activities, as well as the estimated cost of activities anticipated to be conducted within the next five years, are classified as major categories. For each category, an estimated five-year total cost and an associated annualized cost is provided below and in Appendix 5-1.

5.1.1.2 Reporting, including preparation of annual reports and five-year evaluations and updates

As part of GSP implementation starting in 2022, the GSAs must prepare and submit annual reports and five-year assessments for the GSP to the Department of Water Resources (DWR). Annual reports will be submitted to DWR by April 1st of each year and an initial five-year GSP assessment and update will be due to DWR by April 2027. Requirements for each of these reports are explained below.

5.1.1.3 Annual Reporting

Per Water Code Sections 10727.2, 10728, and 10733.2, SGMA regulations require the GSAs to submit an annual report on the implementation of the GSP to the DWR. Annual reports will cover the preceding water year, October 1 through September 30. The report will be submitted to DWR no later than April 1st of the year following the covered water year. A template for annual reporting is provided as Appendix 5-2. Annual reports will be completed in a format consistent with Section 356.2 of the SGMA regulations and will include three key sections:

5.1.1.3.1 General Information

General information will include a map of the SV Subbasin and an executive summary that includes a summary of the sustainability goal, ongoing PMAs in the subbasin, newly implemented PMAs, and their progress, as well as a current/updated implementation schedule.

5.1.1.3.2 Basin Conditions

This section will describe the current groundwater conditions and monitoring results, used to evaluate how groundwater conditions have changed in the SV Subbasin during the previous year. SGMA regulations require the following key components to be included in this section:

- Groundwater elevation data from monitoring wells, including (1) groundwater elevation contour maps for the principal aquifers in the subbasin depicting seasonal high and low groundwater conditions, and (2) hydrographs of historical-to-current-reporting-year data showing groundwater elevations and water year type.
- Groundwater extractions during the preceding water year summarized by water use sector (i.e., agricultural, domestic, municipal, etc.), including a map showing the general

location and volume of groundwater extractions, as well as the method of measurement (direct or estimate) and accuracy of measurements.

- Surface water supply for managed groundwater recharge, off-stream storage, or in-lieu use, including the annual volume and sources for the preceding water year.
- Total water uses by water use sector and water source type (i.e., groundwater, surface water), including the method of measurement (direct or estimate) and accuracy of measurements.
- Maps of changes in groundwater storage for the principal aquifer and a graph depicting historical-to-current-reporting-year water year type, groundwater use, annual change in groundwater in storage, and the cumulative change in groundwater storage for the subbasin.

This information may change over time to incorporate potentially revised GSA priorities and to reflect new basin conditions and applicable SGMA requirements.

5.1.1.3.3 Plan Implementation Progress

The progress made toward achieving interim milestones and implementation of PMAs will be explained in more detail in this section, along with a summary of plan implementation progress and sustainability progress.

5.1.1.4 Periodic Evaluations every Five Years

Per Water Code Sections 10727.2, 10728, 10728.2, 10733.2, and 10733.8, SGMA regulations require the GSAs to provide a written assessment of GSP implementation and progress toward meeting the sustainability goal at least every five years. A similar evaluation must also be submitted whenever the GSP is amended. The five-year assessment reports will be completed in a format consistent with Section 356.4 of the SGMA regulations and include the following elements:

5.1.1.4.1 Sustainability Evaluation

The overall basin sustainability and current groundwater conditions for each applicable sustainability indicator will be described, including progress toward achieving interim milestones and measurable objectives, and an evaluation of groundwater elevations at each of the representative monitoring points (RMPs) in relation to minimum thresholds.

5.1.1.4.2 Plan Implementation Progress

This section will describe the current implementation status of PMAs, along with the effect on groundwater conditions resulting from their implementation, if applicable.

5.1.1.4.3 Reconsideration of GSP Elements

Elements of the GSP may require revision due to one or more of the following: collection of additional monitoring data during GSP implementation; implementation of PMAs; significant changes in groundwater uses or supplies and/or land uses. Such new information may require revision to the following GSP elements: basin setting, water budgets, monitoring network, sustainable management criteria (SMC), or PMAs.

5.1.1.4.4 Monitoring Network Description

This section will provide an assessment of the monitoring network's function, an analysis of data collected to date, a discussion of data gaps and the need to address them, and identification of areas within the subbasin that are not monitored in a manner commensurate with the requirements of Sections 352.4 and 354.34(c) of the SGMA regulations.

5.1.1.4.5 Consideration of New Information for Basin Setting and SMC

New information made available after GSP adoption will be described and evaluated. If new information would warrant a change to the GSP, including a re-evaluation of the basin setting and SMC, then corresponding revised descriptions will be included in the five-year GSP update.

5.1.1.4.6 Regulations or Ordinances

If DWR adopts new regulations that impact GSP implementation, the update will also identify and address those requirements that may necessitate updates to the GSP.

5.1.1.4.7 Legal or Enforcement Actions

Any enforcement or legal actions taken by the GSAs to contribute to attainment of the sustainability goal for the subbasin will be summarized.

5.1.1.4.8 Plan Amendments

Each five-year assessment report will include a description of amendments to the GSP, including adopted amendments, amendments that are underway during development of the report, and recommended amendments for future adoption.

5.1.1.4.9 Coordination

A summary of coordination that has occurred between the subbasin, different agencies in the subbasin, or agencies with jurisdiction over land use and well construction will be incorporated in the five-year assessment report. The five-year assessment will also include any other information deemed appropriate by the GSAs to support DWR in its periodic review of GSP implementation, as required by Water Code Section 10733.

5.1.2 Implementation

5.1.2.1 Implementation of the monitoring program activities described in Chapter 3

This section covers the functions associated with monitoring activities, including logistics and coordination with third-party entities performing monitoring in the GSP Monitoring Network and any related monitoring data management. The GSP Monitoring Networks for groundwater level, interconnected surface waters, and groundwater quality, including the agencies performing that monitoring, are detailed in Chapter 3.

To address data gaps that are identified during GSP implementation, improvements to or expansion of the GSP Monitoring Network may be necessary. In that event, additional monitoring wells, monitoring well instrumentation; sampling and in-situ measurements; sample analysis; and associated data management and analysis may be required in the future. Costs for those facilities and activities are not addressed in this section.

Monitoring and data-related activities include:

- Groundwater Elevation Monitoring
- Groundwater Quality Monitoring
- Streamflow Monitoring
- Subsidence Monitoring, based on data provided by DWR and via monuments
- Monitoring data management (including data management system (DMS) maintenance), data validation (QA/QC), data entry and security, and data sharing
- As needed groundwater-dependent ecosystems (GDEs) monitoring

5.1.2.2 Technical support, including Sierra Valley Subbasin Integrated Hydrological Model (SVIHM) model updates, SMC tracking, other data analysis and technical support

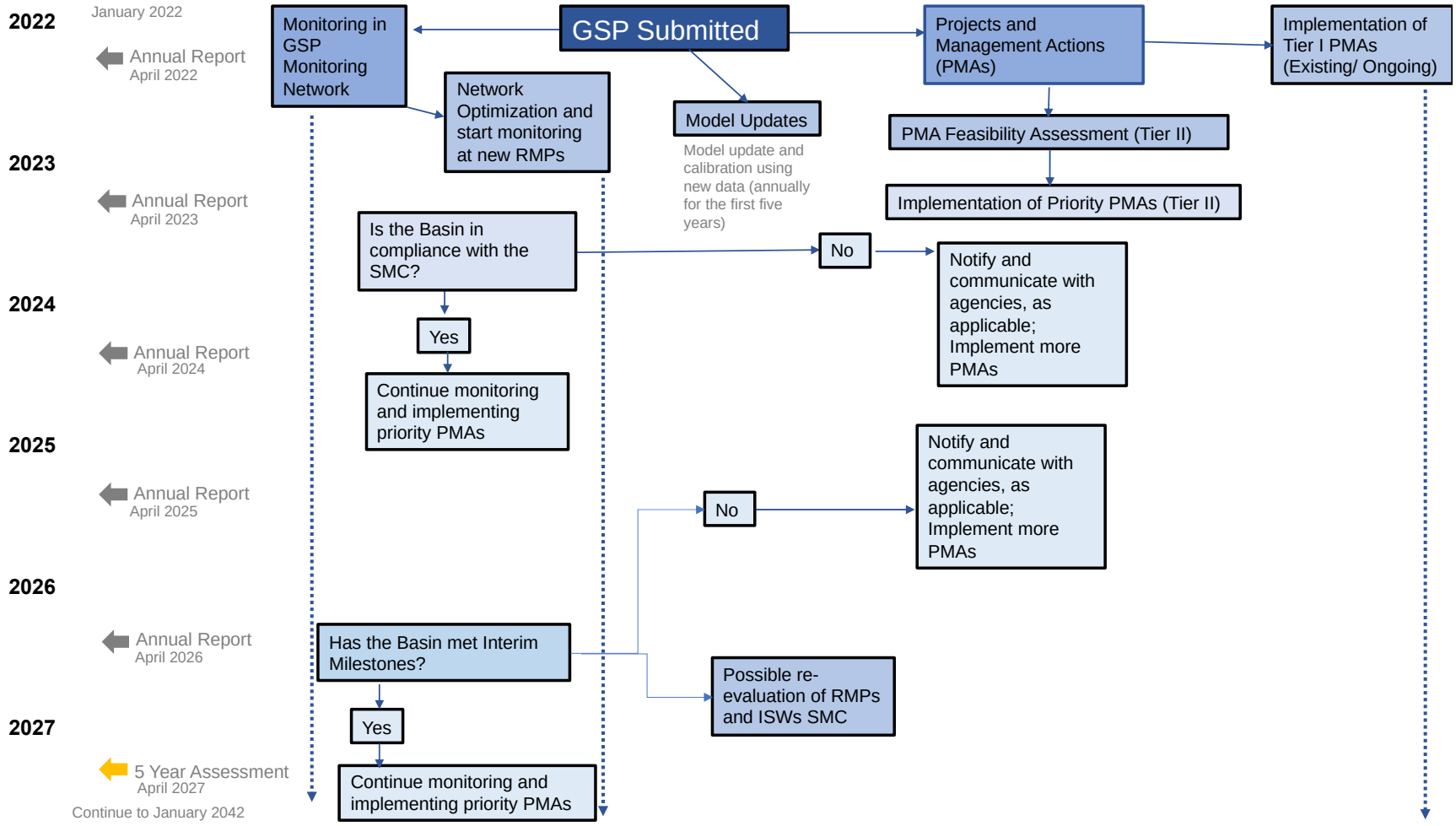
SVIHM updates – Management activities and ongoing performance evaluation of the SMC are informed by SVIHM model output, which will require periodic updates and refinements as more data become available. Model updates and refinements help maintain, and potentially improve, the model functionality and its capabilities in providing more representative simulation results. These activities include incorporation of new model tools, features, and new data and calibration and model parameter updates as additional data from the monitoring network and stream gauges is obtained, use of SVIHM to update water budgets, assess water usage, and assess the status of basin-wide storage volumes, and related work to support ongoing simulations of PMAs and reporting requirements.

SMC tracking – Synthesis of data to analyze and track the status of compliance with SMC at the RMP wells and other monitoring locations included in the Monitoring Network. This information will comprise an essential element of the annual reports and five-year updates. A template for SMC tracking based on the annual report requirements from DWR is available in Appendix 5-2.

Data analysis – Additional data analysis and associated technical support, outside of the GSAs' resource capabilities, will be needed for annual reporting and five-year GSP update and outreach activities. The GSAs may also have an ongoing need for technical and administrative support for the subbasin management, such as vulnerability assessments for climate change, hydrologic technical support, assessment of managed aquifer recharge opportunities, economic and funding mechanisms assessments, and studies to address data gaps.

Results of the monitoring program activities will inform GSAs management actions and next steps. The flowchart shown in Figure 5.1.2-1 illustrates the process and decision points for the first five years of GSP implementation. This process will be refined, as necessary, throughout the first five years of GSP implementation and will be updated in parallel with the five-year evaluations. The initial GSP is a starting point toward achievement of the sustainability goal for the subbasin. Although available information and monitoring data have been evaluated throughout the GSP planning process to set SMC and define projects and management actions, there are gaps in knowledge and additional monitoring requirements. Information gained in the first five years of plan implementation, and through the planned monitoring network expansions, will be used to further refine the strategy outlined in this version of the GSP. The GSAs will work towards implementation of the GSP to meet all provisions of SGMA and will utilize available local resources, and likely resources from State and Federal agencies to achieve this. It is anticipated that coordination with other agencies that conduct monitoring and/or management activities will occur throughout GSP implementation to fund and conduct this important work. As described in Appendix 5-1, additional funding required may be achieved through fees, or other means, to support progress towards compliance with SGMA. The GSAs will use this preliminary flowchart to develop a more defined roadmap at the beginning of the implementation period in February 2022. Further detail on the prioritization and implementation timeline of PMAs can be found in the discussion of PMAs below.

Figure 5.1.2-1: GSP Implementation Process for the First Five Years of Implementation



Notes:
- The road map is expected to be similar for the following five-year cycles.

5.1.2.3 Re-evaluation of depletion of ISWs sustainable management criteria

As discussed in Chapter 3, SMC set for ISWs are based on groundwater levels due to existing data gaps. However, installation of streamflow gages is an element of the ISW monitoring network, and a framework is proposed to re-assess available data, upon collection of additional data and information during GSP implementation to update depletion of ISWs sustainable management criteria and set them based on the rate and/or volume of streamflow depletion due to groundwater pumping, as required by SGMA. This action is planned to be preferably conducted during the first five -year evaluation of the Plan, or if available data is not sufficient, at the second five-year evaluation of the GSP. The cost of this re-evaluation which includes subtasks including but not limited to data analysis, SVIHM updates, and calibration, and additional monitoring, will be included in the respective round of periodic evaluation of GSP.

5.1.2.4 Re-evaluation of RMPs for different sustainability indicators

Similar to the re-evaluation of depletion of ISWs SMC, Chapter 3 discusses the possible re-evaluation of RMPs for chronic lowering of groundwater elevations, subsidence, and degradation of groundwater quality monitoring networks and SMC. The GSP is primarily utilizing the existing wells with established records of monitoring for its RMPs for chronic lowering of groundwater levels and for the decrease in storage. However, efforts are ongoing to supplement the monitoring networks with wells at suitable locations, establishing monitoring records. Upon collection of a sufficiently long record of measurements at such wells, it may be beneficial to the management of the subbasin if those dedicated monitoring wells are considered as RMPs. Needed analysis to assess if those wells satisfy the requirements of an RMP will be done before updating the plan. The cost of this re-evaluation will be included in the respective round of periodic evaluation of GSP and will be covered by new grant funding if possible.

5.1.2.5 Projects and Management Actions described in Chapter 4.

Chapter 4 of this GSP identifies two different tiers of projects and management actions (PMAs) in the Basin, as follows:

1. Tier I: Existing PMAs that are currently being implemented and are anticipated to continue to be implemented and enhanced as proposed in Chapter 4.
2. Tier II: PMAs planned for near-term initiation and implementation (2022–2027) by individual member agencies or PMAs that may be implemented in the future, as necessary (initiation and/or implementation 2027–2042).

The PMAs listed in Chapter 4 reflect a collection of potential options that may be employed to support the sustainability goals outlined ed in this plan. Tier I PMAs are anticipated to continue to be implemented throughout the GSP implementation period. For the Tier II Potential PMAs and proposed enhancements to Tier 1 PMAs, a preliminary strategy for prioritization and associated criteria has been developed. As a first step in Plan implementation, Tier II PMAs and Tier II enhancements will be ranked using criteria including the projected effectiveness, complexity, cost, and level of support for the project or management action. This preliminary prioritization step will be initiated immediately after submission of the GSP to provide the GSAs with enough time to evaluate projects' feasibility and include the selected projects into future funding requests. The GSAs are expected to continue to refine this prioritization as more information on the feasibility, costs and anticipated benefits becomes available for these PMAs.

5.1.3 Outreach

5.1.2.6 Coordination activities with other entities

The GSAs may need to budget for ongoing coordination during GSP implementation. Coordination will be required with the following entities on the following topical areas:

- With agencies in the subbasin with land use jurisdiction to identify and communicate regarding activities that may impact basin sustainability.
- With local utility districts and irrigators, to obtain updated information regarding water use efficiency programs, encourage such programs, and obtain information regarding the impacts of those programs on water demands.
- With Sierra and Plumas County Environmental Health Divisions to implement as needed updates environmental regulations, ordinances, and existing procedures for new and existing groundwater wells such as well permitting.
- With entities sponsoring projects, such as recharge, forest management or efficiency improvements in the subbasin that will provide benefits to attainment of sustainability goals and objectives, including support for grant funding.
- With any other entities working in the subbasin to support the sustainability goal and aspirational watershed goal, as applicable.

To achieve this coordination, the GSAs may need to develop additional governance and communication processes to support these activities efficiently and effectively.

5.1.2.7 Outreach to stakeholders

Activities under this element of the GSP implementation plan include continuation of education, outreach, and engagement with stakeholders, building off the framework and activities established in the Communication and Engagement Plan, as described in Appendix 2-3. Such activities performed during GSP implementation include maintaining the SVGMD website and the online/social media presence, community meetings, workshops, and public events. These activities may also include electronic newsletters, informational surveys, coordination with entities conducting outreach to diverse communities in the Basin, and development of brochures and print materials. Decisions regarding the nature and extent of these outreach activities will be made by the GSA.

5.2 Estimate of GSP Implementation Costs

The implementation costs for the Sierra Valley GSP will include funding for functions associated with the GSP implementation elements described above, including GSAs management and administration, monitoring, technical support, data management, coordination, reporting, management actions, and outreach. GSP implementation costs will also cover the building of sufficient fiscal reserves to address other potential costs for the twenty-year implementation horizon.

5.2.1 Projected Implementation Costs

Implementation of the GSP over the 20-year planning horizon is projected to cost $68,500 - $142,000 annually for operation and maintenance along with capital projects, which are expected to be funded through future available grants. A breakdown of these costs by implementation element is summarized in Table 5.2.1-1. These costs are based on the best

available estimates at the time of Plan development and may vary throughout the period of Plan implementation. Costs include 3% annual Consumer Price Index increases and the cost of each task may vary in different years. For example, the five -year assessment cost may need to be primarily funded every 4 to 5 years. Overall, GSP implementation cost, not including capital projects, is estimated to fall within the total range provided. If the GSAs develop additional projects or management actions during the GSP implementation period, the cost estimates will be refined and reported to DWR through the annual reports or five-year periodic assessments. Similarly, grant awards may offset some of the costs estimated and shown in Table 5.2.1-1.

Development of this GSP was funded largely through a Proposition 1 Groundwater Grant Program and Proposition 68 Grant. The GSAs will pursue additional grant funding for GSP implementation as it is available. In the following analysis, it is assumed that the GSAs will identify other sources of funding to cover GSP implementation costs. Sources of funding are being considered and are presented in Appendix 5-1. The exact funding mechanisms will be decided by the GSAs and will depend on their legal authority.

Table 5.2.1-1 Summary of Preliminary GSP Implementation Costs

GSP Implementation Tasks	Recurring Annual Cost
GSAs Management, Administration, Legal and Day-to-Day Operations	$7,000-$22,000
Administrative Staff Support /Accounting	TBD
GSAs management and staff support	TBD
Legal support	TBD
Data management	TBD
GSP Reporting	
Annual Reports	$11,000-$20,000
5-Year GSP Assessments	TBD
Tier I: Existing or Ongoing Projects and Management Actions	
High-capacity wells Inventory and Metering	Included in Monitoring
Monitoring	$32,000-$45,000
Modeling Updates	$11,500 - $37,000
Education & Outreach	$7,000-$18,000
Well Permit Ordinance	**TBD**
Water Reuse	**TBD**
Sierra Brooks-Smithneck Wildland Urban Interface Fuels Reduction Project	**TBD**
Tier II: Planned Projects and Management Actions	
Agricultural Efficiency Improvements	TBD/Prop 68 Funding
Agricultural Water Use Management	TBD
All wells Inventory	TBD
Reoperation of Surface Water Supplies	TBD
Off-Stream Storage	TBD
Drought Mitigation Planning	TBD
Water Conservation and Demand Management	TBD
Watershed and Upland Management and Restoration	TBD/Leverage multiple funding sources
Voluntary Managed Land Repurposing	TBD
Groundwater Recharge/Managed Aquifer Recharge	TBD
Assessment of Post-Fire Hydrology and Potential Water Supply Augmentation	TBD
Total	$68,500-$142,000

5.2.2 Financial Reserves and Contingencies

To mitigate financial risks associated with expense overruns due to unanticipated expenditures and actual expenses exceeding estimated costs, the GSAs may carry a general reserve with no restrictions on the types of expenses for which it can be used. Adoption of a financial reserves policy is authorized by SGMA Sections 10730(a) and 10730.2(a)(1).

5.2.3 Total Implementation Costs Through 2042

The implementation of this GSP is estimated to have a total annual cost of $68,500 – $142,000 excluding capital projects based on the best available information at the time of Plan preparation and submittal. Actual cost of the GSP implementation for each year will depend on the specific tasks that need to be conducted during that year. The breakdown of this total estimated annual cost is presented by major budget category in Table 5.2.1-1.

5.3 Schedule for Implementation

The final GSP will be presented to the GSA Boards for adoption in January 2022 and will be submitted to DWR no later than January 31, 2022.

5.3.1 Preliminary Schedule

The preliminary schedule for agency administration, management, and coordination activities, GSP reporting, and community outreach and education are provided in Table 5.3.1-1. While most activities are continuous during GSP implementation, annual reports will be submitted to DWR by April 1st of each year and periodic five-year assessment reports will be submitted to DWR by April 1st every five years after the initiation of Plan implementation in 2022 (i.e., assessment report submittal in 2027, 2032, 2037, and 2042).

To provide a sense of how the planned GSP implementation actions will need to be coordinated, a more detailed potential schedule for implementing the existing and potential management actions is shown in Table 5.3.1-2Table 5.3.1-2. The table provides a detailed list of actions for each quarter of 2022, details for the following years will be developed at the beginning of the implementation phase and based on preliminary results of the PMAs that are being implemented. As shown in Table 5.3.1-2, monitoring of groundwater levels is an existing and ongoing management action. As described in Chapters 3 and 4, additional monitoring will be implemented for subsidence, water quality and ISWs/GDEs. The summary of existing and planned monitoring activities from Chapter 3 is repeated in Table 5.3.1-3 to provide a more complete picture of monitoring that will be included in GSP implementation.

Table 5.3.1-1: Preliminary GSP Implementation Schedule

	Start	2022-2042																				
		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Data Management and Reporting																						
Milestones																						
GSP Submitted to DWR	January 2022	●																				
Groundwater Sustainability Goal Attained	January 2042																					●
Reporting																						
Annual Reporting	April 2022	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
5-Year Evaluations	April 2027						●					●					●					
Possible re-evaluation of GSP RMPs	April 2027						●					●										
Possible re-evaluation of depletion of ISWs SMC	April 2027						●					●										
Monitoring																						
Monitoring: Groundwater (all)	Quarterly or Continuous																					
Monitoring: Streamflow	Continuous																					
Monitoring: Stream transects	Continuous																					
Groundwater Quality Monitoring Network Expansion	January 2022																					
Data Management	Continuous																					
Outreach and Education																						
Stakeholder Outreach and Education	Continuous																					
Projects and Management Actions																						
Teir I PMAs: Ongoing	January 2022																					
Teir II PMAs: Feasibility study and prioritization upon funding availability	January 2022	●																				
Teir II PMAs: Implementation of highly prioritized PMAs depending of funding availability	January 2023		●																			

Table 5.3.1-2: **Preliminary Schedule and Status for Projects and Management Actions**

			GSP Implementation Year[1]							
			1 (2022)				2	3	3	5
Task and Project and Management Action (Chapter 4)	**Status**	**Funding**	**Q1**	**Q2**	**Q3**	**Q4**	**2023**	**2024**	**2025**	**2026**
Existing (on-going) and Required										
Inventory and Metering for high-capacity Wells (see Chapter 4.2.1)										
Flow Meter Readings during Irrigation Season	On-going, Monthly	SVGMD Existing O&M		x	x	x	x	x	x	x
Flow Meter Replacements (**nineteen** planned)	On-going (completion by April 15, 2022)	DWR Grant - Existing	x	x						
GSA activities after GSP submission: Monitoring and Reporting (Chapter 4.2.2)										
Water Level Measurements at existing SVGMD MW1-MW7 and W1-W6 (includes winter monthly monitoring for post-pumping recovery); Subsidence, water quality; continuous monitoring to assess GDE and ISW	On-going, Monthly except in winter months or continuous	SVGMD Existing O&M		x	x	x	x	x	x	x
Annual Report (water levels, pumped volumes, differences in water levels, ongoing and planned actions)	Required, April 1st Submittal to DWR	NOT CURRENTLY FUNDED, but propose using existing DWR grant to develop first report and template	x				x	x	x	
5-Year Basin Status Report, including modelling updates	Required	NOT CURRENTLY FUNDED								x

[1] **x = occurs, blue = funded by existing DWR grant to SVGMD, orange = funded by existing SVGMD revenue, yellow = funded directly by DWR)**

			GSP Implementation Year[1]							
			1 (2022)				2	3	3	5
Task and Project and Management Action (Chapter 4)	**Status**	**Funding**	**Q1**	**Q2**	**Q3**	**Q4**	**2023**	**2024**	**2025**	**2026**
Additional Existing PMAs (4.2)										
Well Permit Ordinance (4.2.5)	Ongoing	SVGMD Existing O&M		x	x	x	x	x	x	x
Water Reuse (4.2.6)	SVGMD to coordinated with existing efforts	TBD		x	x					
Sierra Brooks- Smithneck Wildland Urban Interface Fuels Reduction Project (4.2.7)	SVGMD to explore coordination with existing project	TBD		x	x					
Proposed Advancement of Potential Projects & Management Actions (4.3): prioritization to be considered in February 2022										
Agricultural Efficiency Improvements (4.3.1)	Initiated Q4 2021 and Q1 2022	Identify opportunities and implement pilot studies covered by existing DWR grant; future large scale IMPLEMENTATION NOT FUNDED	x	x	x	x	x	x	x	
Reoperation of Surface Water Supplies (4.3.4) Preliminary Feasibility Review for Frenchman Reservoir and Little Last Chance Creek Resource; Lake Davis water source utilization	Q1 - Q3 2022	Feasibility study funded through existing DWR Grant		x	x	x				
Additional Off-stream storage (4.3.5)	Q1 - Q3 2022	Feasibility study funded through existing DWR Grant		x	x	x				

			GSP Implementation Year[1]							
			1 (2022)				2	3	3	5
Task and Project and Management Action (Chapter 4)	**Status**	**Funding**	**Q1**	**Q2**	**Q3**	**Q4**	**2023**	**2024**	**2025**	**2026**
Preliminary Feasibility for Groundwater Recharge/Managed Aquifer Recharge (4.3.10)	Q1 - Q3 2022	Feasibility study funded through existing DWR Grant		x	x	x				
Prepare Additional Grant Funding Applications based on Feasibility Reviews and on prioritization discussed in February 2022	Q3-Q4 2022 (as available)	NOT CURRENTLY FUNDED				x	x	x	x	x
Education and Outreach (4.2.4)	Quarterly to Annual (TBD)	NOT CURRENTLY FUNDED after GSP completion	x		x		x	x	x	x
Additional Possible Projects & Management Actions in 5-year Horizon (4.3)										
Drought Mitigation Planning (4.3.6)	Scheduling Pending release of State Funding, TBD	NOT CURRENTLY FUNDED - SEEK STATE FUNDING	x	x	x	x	x	x	x	x
Watershed and Upland Management and Restoration (4.3.8)	Feasible projects identified and prioritized within two years Implementation within five years contingent on funding	NOT CURRENTLY FUNDED - SEEK FUNDING OPPORTUNITIES AND PARTNERS	x	x	x	x	x	x	x	x
Voluntary Managed Land Repurposing (4.3.9)	Feasible projects identified and prioritized within two years Implementation within	NOT CURRENTLY FUNDED - SEEK FUNDING OPPORTUNITIES AND PARTNERS	x	x	x	x	x	x	x	x

Task and Project and Management Action (Chapter 4)	Status	Funding	GSP Implementation Year[1]							
			1 (2022)				2	3	3	5
			Q1	Q2	Q3	Q4	2023	2024	2025	2026
	five years contingent on funding									
Assessment of Post-Fire Hydrology and Potential Water Supply Augmentation (4.3.11)	SVGMD to support the project and coordinate as needed with Plumas Fire Safe Council to collect data	NOT CURRENTLY FUNDED – SEEK FUNDING OPPORTUNITIES AS NEEDED	x	x	x	x	x	x	x	x
Water Conservation and Demand Management (4.3.7)	Approach to this project would be based on effectiveness of other PMAs and the implementation approach would be developed as needed within the first 5 years of GSP implementation	TBD					x	x		
Climate Change Impact Assessment (4.3.12)	Approach to this effort will be developed within the first 5 years of GSP implementation and are based on availability of new climate change scenarios	NOT CURRENTLY FUNDED – SEEK FUNDING OPPORTUNITIES AS NEEDED			x	x	x	x		

Table 5.3.1-3: Summary of Existing and Proposed New Monitoring for Assessment of SMCs

SMC	Wells		Measurement		Potential other measurement, based on funding availability
	Existing	New	Existing	New	
Groundwater Levels	19 district wells 17 CASGEM wells	0	Measured at least 2x/year, additional measurements during the irrigation season Measured at least 2x/year, but with continuous measurements in the latest multi-completion wells	(a)	N/A
Storage	Groundwater Levels as Proxy				N/A
Water Quality	17	Up to 6 (b)	1x/3 years (c)	1x/3 years (b)	N/A
ISW	13 mostly shallow	4 (d)	13 at least quarterly and 4 continuously	(a)	Up to Ten stream flow gauges (e) and Eight stage gauges (e)
Subsidence	Groundwater Levels as Proxy at least for the first 2 years		InSAR Data (g)	4 monuments (f)	

(a) Telemetry may be employed to increase data collection frequency and minimize field visits.

(b) Five community members have volunteered their wells for inclusion in the water quality monitoring network. DWR is installing one new observation well that can be used for both groundwater level and groundwater quality monitoring. If incorporated in the network, the new DWR wells would be monitored on the same frequency as the other volunteered wells

(c) Coordinate with existing GAMA water quality monitoring to obtain data

(d) 4 existing shallow wells will be considered for installation of continuous pressure transducers in the area near Groundwater Dependent Ecosystem. Funding for the instrumentation is already available through the implementation grant and there are opportunities for more external funding (e.g., from USGS/DWR project). Cost of maintaining these stations will be minimal and data are expected to be downloaded twice per year.

(e) More continuous data in existing shallow wells may be considered in the future as implementation funding become available and as the model provides more certainty about locations where these data are critical. Shallow wells will be paired with flow and/or stage gauges, pending funding availability over the first 5 years of the implementation period. Feasibility study required to assess potential locations. Gauges may benefit by using telemetry to provide continuous data.

(f) Funding currently allocated to install monuments. Monuments will be surveyed as needed if InSAR data show undesirable results and at least every five years for the GSP updates.

5.4 Funding Sources and Mechanisms

SGMA authorizes GSAs to charge fees, such as pumping and permitting fees, to fund the costs of groundwater management and sustainability programs. Consistent with this approach, SVGMD has been funded by contributions from Sierra and Plumas Counties, management charges on parcels and on wells, and grants as described in more detail in Appendix 5-1.

5.4.1 Funding Opportunities

The GSAs will pursue various funding opportunities from state and federal sources for GSP implementation. As the GSP implementation proceeds, the GSAs will further evaluate funding mechanisms and may perform a cost-benefit analysis of fee collection to support consideration of potential refinements. Appendix 5-1 presents examples of potential financing options. At the start of the GSP implementation, the GSAs will be funded according to the current fee structure as described in Appendix 5-1.

The need for additional revenue beyond the GSAs' existing revenue structure will be determined in the coming months. Several factors will be evaluated in choosing the optimal funding mechanism should additional revenue be necessary. As described in Appendix 5-1, Several potential funding mechanisms are being considered. Should the GSAs determine a pressing need for additional funding, a regulatory fee could be implemented with an expedited timeline. Several aspects of regulatory fees highlight their advantages and disadvantages and will inform the GSAs' decision-making process.

Use of Funds – Regulatory fees, in accordance with California Proposition 26 and Article XIII C of the California Constitution, may be imposed to recover the costs of a regulatory program. In accordance with Water Code Section 10730, regulatory fees may be used to fund the costs of a groundwater sustainability program, including, but not limited to: preparation, adoption, and amendment of a groundwater sustainability plan; investigations, inspections, compliance assistance, enforcement, and program administration; a prudent reserve. Revenue from regulatory fees may not contribute to the funding of capital projects. (If revenue is needed to support capital projects, a property-related fee is recommended).

It is anticipated that the GSAs will utilize grant funding for the implementation of capital projects. For this reason, a regulatory fee program may be best suited to the Sierra Valley Basin. Should the GSAs determine that additional funding for operations and maintenance will be necessary, the clearest path forward would be a regulatory fee on wells.

Methodology – Such a fee program could employ a methodology of either groundwater extraction, which would require metering of all non-de minimis wells, or estimated groundwater extraction, which would place a flat estimated use fee on each non-de minimis well. A regulatory fee on all affected parcels in the basin could also be explored, though there is some legal vulnerability and concerns over this methodology.

Revenue Generation Potential – As modeled in Appendix 5-1, a fee-based on groundwater extraction could generate $83,000 per year with a rate of $6.50 per acre-foot extracted. A fee-based on estimated groundwater extraction could generate $83,000 per year with a rate of $1,350 per large-capacity well, and $50 to $60 per medium-capacity non-de minimis well. The revenue generated by a new regulatory fee program, in addition to the revenue generated by the GSAs' current revenue structure, must collectively not exceed the reasonable costs of the governmental activity they will fund.

Required Documents – A fee study is highly recommended, as it establishes the legal, methodological, and policy basis for the fee program. When provided to the public, the fee study would satisfy Water Code Section 10730(b)(2), which requires that the GSAs provide to the public the data upon which the fee is based.

Timeline – Regulatory fee implementation is advantageous due to its relatively streamlined process. The fee study would take approximately 2-3 months to complete. This time would be used to establish compliance with Proposition 26, including that: the levy, charge, or other exaction is not a tax; the amount is not more than necessary to cover the reasonable cost of the governmental activity; and that the way those costs are allocated to a payor bears a fair or reasonable relationship to the payor's burden on, or benefits received from, the governmental activity. This process would also include data refinement and determination of specific methodology.

Once complete, the fee study would be provided to the public at least 20 days before a public meeting is held to provide opportunity for public comment and discussion. The Board could then approve the fee program by resolution at the next Board meeting.

A detailed timeline is provided below in Figure 5.4.1-1.

Figure 5.4.1-1: Timeline of Regulatory Fee Implementation