

Table of Contents

10	Groundwater Sustainability Plan Implementation.....	1
10.1	Data, Monitoring, and Reporting	1
10.1.1	Annual Monitoring and Reporting	2
10.1.2	Updating the Data Management System	3
10.1.3	Improving Monitoring Networks	4
10.1.4	Address Identified Data Gaps in the Hydrogeologic Conceptual Model.....	5
10.2	Communication and Engagement.....	6
10.3	Road Map for Refining and Implementing Projects and Management Actions.....	8
10.4	Five-Year Update	11
10.5	Start-up Budget and Funding Strategy	12
10.5.1	SVBGSA Operational Fee	12
10.5.2	Start-up Budget.....	12
10.5.3	Funding for Projects and Management Actions	15
10.6	Implementation Schedule and Adaptive Management	16
	References.....	18

List of Figures

Figure 10-1.	General Schedule of 5-Year Start-Up Plan.....	17
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List of Tables

Table 10-1.	Upper Valley Aquifer Subbasin Specific Estimated Planning-Level Costs for First 5 Years of Implementation	14
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10 GROUNDWATER SUSTAINABILITY PLAN IMPLEMENTATION

This chapter describes how the GSP for the Upper Valley Aquifer Subbasin will be implemented. The chapter serves as a roadmap for addressing all of the activities needed for GSP implementation between 2022 and 2042 but focuses on the activities between 2022 and 2027.

Implementing this GSP will require the following formative activities, each of which is detailed in a subsequent subsection:

- Data, monitoring, and reporting
 - Annual monitoring and reporting
 - Updating the data management system
 - Improving monitoring networks
 - Addressing identified data gaps in the hydrogeologic conceptual model
- Continuing communication and stakeholder engagement
- Refining and implementing projects and management actions
- Adapting management with the 5-year Update
- Developing a funding strategy

The implementation plan in this chapter is based on the best available data used to understand groundwater conditions in the Subbasin and the current assessment of projects and management actions described in Chapter 9. The Subbasin's conditions and the details of the projects and actions will likely evolve over time based on future data collection, model development, and input from Subbasin stakeholders.

10.1 Data, Monitoring, and Reporting

Beginning in the first year of GSP implementation, SGMA requires submittal of annual monitoring data and development of an annual report. This annual process tracks groundwater conditions with respect to the SMC established in Chapter 8. The SVBGSA will hire consultant(s), form agreements with agencies, and/or hire staff to implement the monitoring and reporting functions.

Monitoring of the 5 sustainability indicators will begin upon adoption of the GSP. Most of the monitoring networks described in Chapter 7 rely on existing monitoring programs. Only interconnected surface water needs the establishment of a new monitoring network. Data from the monitoring programs will be maintained in the Data Management System and evaluated annually to ensure progress is being made toward sustainability or to identify exceedances of

minimum thresholds. SVBGSA will assess monitoring data to prepare annual reports and guide decisions on projects and management actions.

10.1.1 Annual Monitoring and Reporting

SGMA requires completion of annual reports to document Subbasin conditions relative to the SMC presented in Chapter 8. Starting on April 1, 2022, SVBGSA will submit annual reports for the Upper Valley Aquifer Subbasin to DWR and make them publicly available. The purpose of the reports is to provide monitoring, groundwater extraction, and total water use data to DWR, compare monitoring data to the SMC, and adaptively manage actions and projects implemented to achieve sustainability.

The monitoring of the 5 sustainability indicators relevant to the Subbasin are described below. Chapter 7 outlines the data collected through the monitoring programs that will be used to complete annual reports. Where possible, SVBGSA will leverage data collection and analysis completed by MCWRA to avoid duplication of efforts.

10.1.1.1 Groundwater Elevations

For groundwater elevation monitoring, SVBGSA relies on MCWRA's collection of groundwater elevation data and analyzes it to meet SGMA requirements. MCWRA collects groundwater elevation monitoring data under the statewide CASGEM program and their annual, monthly, and August groundwater elevation monitoring programs. The CASGEM system will be replaced by the SGMA groundwater elevation monitoring program after GSP submission. The new monitoring system will include the 4 existing CASGEM wells and at least 24 additional wells that are already part of MCWRA's monitoring programs. Groundwater monitoring will continue to be conducted by MCWRA, and they will make these data available to the SVBGSA. The GSA will use MCWRA's annual fall contour maps and develop additional spring contour maps. These contours will be adapted to expand into the entire Upper Valley Subbasin using groundwater elevation data collected from the groundwater elevation monitoring network and adjacent subbasins. The GSA will also prepare summary tables and figures, compare the data to SMC, and annually upload the data for DWR and to the DMS.

10.1.1.2 Groundwater Storage

For groundwater storage, SVBGSA relies on MCWRA's collection of groundwater extraction data and analyzes it to meet SGMA requirements. Through the Groundwater Extraction Monitoring System (GEMS), MCWRA collects groundwater pumping data for agricultural supply wells and public groundwater system wells that have discharge pipes larger than 3 inches within MCWRA Zones 2, 2A and 2B. SVBGSA plans to update and enhance this program, as detailed in Section 10.1.3.2. The GSA will annually use these data to prepare summary tables and figures and compare the data to SMC. Due to the GEMS reporting period and submittal

deadlines defined by Monterey County Ordinance No. 3717 and 3718, groundwater extraction reported in the Annual Reports will be lagged by one year.

10.1.1.3 Groundwater Quality

For groundwater quality, SVBGSA relies on state monitoring systems and analyzes it to meet SGMA requirements. SWRCB compiles groundwater quality monitoring data for DDW and ILRP wells in their GeoTracker GAMA groundwater information system. The GSA will annually download these data, analyze exceedances for the constituents of concern, prepare summary tables, compare the data to SMC, and upload it to the DMS.

10.1.1.4 Land Subsidence

For land subsidence, SVBGSA relies on data provided by the State and analyzes it to meet SGMA requirements. DWR provides InSAR data that SVBGSA will use to assess land subsidence. InSAR data will be downloaded annually and are provided through DWR's SGMA Data Viewer, if available, and used to create annual change in subsidence maps to compare to SMC in the annual report.

10.1.1.5 Interconnected Surface Water

No entity currently monitors ISW. As described in Chapter 7, the monitoring network for interconnected surface water is in the process of development. Shallow groundwater elevations will be used as proxies for depletion rates; thus, shallow wells near the areas of interconnected surface water are needed. Monitoring wells will be located near USGS stream gauges and MCWRA's Salinas River Series measurement sites to evaluate groundwater gradient and effects of groundwater levels on surface water depletion. This will also help determine the extent of interconnection. The ISW monitoring wells will be incorporated into MCWRA's existing monitoring network and MCWRA will make these data available to SVBGSA. Water level measurements will be made at least once a year at each ISW monitoring site during MCWRA's annual fall groundwater monitoring event that occurs from mid-November to December. The GSA will annually prepare summary tables and figures and compare the data to SMC.

10.1.2 Updating the Data Management System

The SVBGSA has developed a Data Management System (DMS) that is used to store, review, and upload data collected from the monitoring programs outlined above, as described in Chapter 7. A web application reporting these data is available on the SVBGSA's website for stakeholders to view the data. The DMS will be updated as new information is collected for annual reports, developed as part of GSP implementation, and provided by stakeholders.

10.1.3 Improving Monitoring Networks

As discussed in Chapter 7, the existing groundwater quality and subsidence monitoring networks already provide sufficient spatial coverage and do not need to be improved.

10.1.3.1 Groundwater Elevations

Chapter 7 identifies spatial data gaps in the groundwater level monitoring network due to insufficient coverage of wells in the southeastern half of the Subbasin. These data gaps are largely due to the lack of overlap between the MCWRA's Upper Valley Subarea boundaries and the new DWR Upper Valley Aquifer Subbasin boundaries shown on Figure 5-1. There are 3 general data gaps in the groundwater level monitoring network, shown on Figure 7-3, that would require at least 3 new monitoring wells to fill. To add wells to the monitoring network, SVBGSA will first incorporate existing wells if possible. SVBGSA will contact well owners to gain permission and secure access agreements to incorporate their wells into the groundwater elevation monitoring network. All candidate existing wells for incorporation into the monitoring network will be inspected to ensure they are adequate for monitoring and to determine depth, perforated intervals, and aquifer designation.

If an existing well cannot be identified, or permission to use data from an existing well cannot be secured to fill a data gap, then a new monitoring well will be drilled and added to the monitoring network. The SVBGSA will obtain required permits and access agreements before drilling new wells. The SVBGSA will retain the services of licensed geologists or engineers and qualified drilling companies for drilling new wells. To the extent possible, the SVBGSA will use grant funds and technical assistance support services through DWR or other entities for new wells. Once drilled, the new wells will be tested as necessary and equipped with dedicated data loggers for monitoring. All new monitoring wells identified as RMS locations will be added to MCWRA's monitoring network for continuity and consistency in data collection.

10.1.3.2 Groundwater Storage

Accurate extraction data is necessary to meet the SGMA requirement of managing groundwater extractions within the Subbasin's sustainable yield. As shown in Figure 3-11, the current GEMS area that includes Zones 2, 2A, and 2B does not provide adequate coverage of the Upper Valley Aquifer Subbasin. SVBGSA and MCWRA will work together to expand the existing GEMS Program to cover the entire Subbasin and potentially include other program improvements.

10.1.3.3 Interconnected Surface Water

Depletion of interconnected surface water will be monitored through shallow wells adjacent to locations of interconnected surface water. The SVBGSA identified 4 existing wells adjacent to the Salinas River that will be added to the ISW monitoring network. These existing wells have

been deemed adequate based on their shallow groundwater elevations but still require preliminary inspection. SVBGSA will secure an agreement with the well owner to incorporate the well into the monitoring network and report data from the well. Despite these 4 existing wells, there is a spatial data gap near the southern boundary of the Subbasin where SVBGSA plans to install a new shallow well along the Salinas River. The new shallow well will be added to MCWRA's monitoring program. All existing wells are already part of MCWRA's groundwater elevation monitoring programs.

10.1.4 Address Identified Data Gaps in the Hydrogeologic Conceptual Model

Chapter 4 identified a few key data gaps related to the hydrogeologic conceptual model. Filling these data gaps would allow the SVBGSA to improve the HCM and thus, the characterization of the Subbasin and the principal aquifer. The data gaps are related to aquifer properties for the Subbasin and the Salinas Valley, and lithologic and hydrostratigraphic data for the southern half of the Subbasin.

To fill these key data gaps and meet §354.14, during early GSP implementation SVBGSA will implement:

- **Aquifer properties assessment.** The values and distribution of aquifer properties throughout the entire Subbasin have not been well characterized and documented. There are very few measured aquifer parameters in the Salinas Valley Groundwater Basin overall. Aquifer properties are important to understanding groundwater flow directions and magnitude within the aquifer. This informs the model with better data, which in turn leads to better model predictions. With better understanding of the aquifer and potential future conditions, SVBGSA and stakeholders will be better equipped to guide the management of water resources throughout the entire Subbasin. To develop better estimates of aquifer properties, the SVBGSA will identify up to 2 wells in the Upper Valley Aquifer for aquifer testing. Each well test will last a minimum of 8 hours and will be followed by a minimum 4-hour monitored recovery period. Wells for testing will be identified using the following criteria:
 - Wells are owned by willing well owners
 - Wells have known well completion information
 - Wellheads are completed such that water elevations in wells can be monitored with data loggers
 - Wells are equipped with accurate flow meters
 - Wells have area for discharge of test water
 - Preferred wells will have nearby wells that can be monitored during the test.

- **Lithologic and hydrostratigraphic data collection.** The Upper Valley Aquifer Subbasin boundaries defined by DWR are nearly double the total acreage of previously defined MCWRA Upper Valley Subarea boundaries. This leaves a large area of hydrogeologic data gaps in the southern half of the Subbasin where the MCWRA Upper Valley Subarea does not overlap with the Subbasin (Figure 5-1). These data gaps can be filled during the drilling and installation of new monitoring wells. Lithologic data such as sediment composition and formation designation, as well as hydrologic data such as groundwater elevation data and depth-specific water chemistry can be collected during drilling activities. Additionally, more hydrologic data can be collected during well development and well testing. These data will improve the understanding of the aquifer properties and potential groundwater-surface water relationships. The southern half of the Subbasin consists of more than the area adjacent to the Salinas River, and therefore gathering more subsurface data in these added areas will help characterize not only the lateral and vertical extent of the principal aquifer with greater resolution, but also the associated aquifer characteristics for improved understanding of groundwater flow. These data will inform SVBGSA and stakeholders for future development location decisions, injection or recharge project locations, as well as overall groundwater management directions to use the aquifer sustainably under all climatic and future development conditions. Many stakeholders have discussed the importance of data for their decisions throughout the GSP development process; acquiring these data will improve all future GSP updates and subsequent implementation activities.

10.2 Communication and Engagement

The SVBGSA will routinely report information to the public about GSP implementation and progress towards sustainability and the need to use groundwater efficiently. The SVBGSA website will be maintained as a communication tool for posting data, reports, and meeting information. This website features a link to an interactive mapping function for viewing Salinas Valley Groundwater Basin-wide data that were used during GSP development.

- **GSP Implementation – Data, Monitoring, and Reporting:** During GSP implementation, SVBGSA will engage in technical collaboration with partner agencies and stakeholders on data collection and analysis. Correspondingly, it will report out on findings to stakeholders through a variety of engagement strategies and pathways, including but not limited to:
 - Annual Report presentations to Subbasin Committees, Upper Valley SMC TAC, Advisory Committee and Board of Directors
 - FAQs
 - Online communications, including SVBGSA website and Facebook page and direct emails

- Mailings to most-impacted water users and residents
- Media coverage
- Talks and presentations to interested stakeholders, agencies, and groups

This collaboration and outreach will be done on an annual basis as data are analyzed for the annual report. Additional outreach will occur more frequently depending on the data collection and analysis undertaken and its relevance for projects, management actions, and other implementation activities.

- **GSP Implementation – Projects and Management Actions:** SVBGSA will engage in outreach, communication, and engagement as part of its efforts to reach and maintain sustainability through undertaking projects and management actions. This will include engagement of stakeholders and other decision-making processes, such as the Upper Valley Subbasin Committee, the Integrated Implementation Committee, the Advisory Committee, and the Board of Directors. It will also involve outreach to interested and potentially affected stakeholders through engagement strategies such as:
 - FAQs
 - Online communications
 - Mailings to most-impacted water users and residents
 - Co-promotional opportunities with partner entities
 - Talks and presentations to interested stakeholders, agencies, and groups
- **Engagement in Governance and Partnerships:** In addition to Subbasin-specific processes, SVBGSA will continue to pursue multiple means of engagement in governance and partnerships that directly or indirectly affect the Upper Valley Aquifer Subbasin. These include:
 - Valley-wide – The Integrated Implementation Committee will consolidate the needs of all Salinas Valley subbasins and create an integrated approach to groundwater management throughout the Salinas Valley.
 - Other agencies – SVBGSA will work with other local agencies, as well as state and federal agencies, to meet the Upper Valley Aquifer sustainability goals as detailed in this GSP.
- **General Outreach on Groundwater:** SVBGSA will further pursue outreach in order to ensure stakeholders and interested or affected users are aware of SVBGSA efforts, as well as promote broader awareness of groundwater conditions and management. It will do this through means such as:
 - Offer public informational sessions and subject-matter workshops and if possible provide online access via Facebook Live or via Zoom

- SVBGSA Map Portal
- FAQs
- Online communications
- Media coverage
- Promote/Celebrate National Groundwater Week
- Educational materials available through mailers or at public events
- **Underrepresented Communities:** SVBGSA acknowledges that Underrepresented Communities have little or no representation in water management and have often been disproportionately less represented in public policy decision making. SVBGSA will engage more constructively with Underrepresented Communities, including activities such as to:
 - Conduct workshops with specific partners on the importance of water and groundwater sustainability
 - Identify Underrepresented Communities concerns and needs for engagement, as well as Underrepresented Communities specific engagement strategies
 - Plan listening sessions around GSA milestones
 - Coordinate with partner organizations to develop a “resource hub” where people can go for support
 - Identify community allies in groundwater engagement work and bring down barriers for participation
 - Consider particular Underrepresented Communities impacts during routine GSA proceedings
 - Convene a partnership group on domestic water, including Underrepresented Communities with partner entities

10.3 Road Map for Refining and Implementing Projects and Management Actions

The projects and management actions identified in Chapter 9 are sufficient for maintaining sustainability in the Upper Valley Aquifer Subbasin. They will be integrated with projects for the other Salinas Valley subbasins during GSP implementation. The projects and management actions described in this plan have been identified as beneficial for the Upper Valley Aquifer Subbasin. Prior to implementation, they will be evaluated in the context of this Subbasin and the entire Valley. The SVBGSA Board of Directors will approve projects and management actions that are selected to move forward. These projects assume continued operation of current

infrastructure. If conditions change, such as other projects being undertaken that are outside of this GSP, SVBGSA will adapt its approach to maintaining sustainability, including the projects and management actions considered.

This section outlines a road map to refining and implementing projects and management actions. It organizes the key steps SVBGSA will undertake with respect to Upper Valley projects and management actions and the contingency of certain actions.

1. Implementation Actions

Data collection and analysis are critical for the implementation of the Upper Valley Aquifer Subbasin GSP. These actions, as highlighted in the sections above, are a top priority to be able to better understand the groundwater conditions and necessity of projects and management actions. Along with the expansion of monitoring networks, including updating and enhancing GEMS to improve the collection of extraction data, SVBGSA will consider registering wells to gain more information on active wells, especially *de minimis* users. In addition, it will begin standing up the Dry Well Notification System within the first 2 years of GSP implementation, which will assist well owners whose access could be jeopardized if groundwater elevations decline. SVBGSA plans to undertake the development of these actions within the first 2 years after GSP submittal, and fully implement them through years 3 and 4 through actively reaching out to well owners, visiting and checking wells, and inputting data.

The Domestic Water Partnership is also a critical implementation action to coordinate with other agencies that have responsibilities affecting domestic water quality and access. After undertaking preliminary planning work in the first 2 years after implementation, SVBGSA plans to establish the Partnership in years 3 and 4.

2. Multi-benefit Stream Channel Improvements

SVBGSA will begin supporting multi-benefit stream channel improvements immediately after GSP implementation. The initial steps that need to be undertaken include working with MCWRA, the RCDMC, and the Salinas River Management Unit Association on outreach to landowners, extension of permits, and the establishment of funding mechanism. Current Stream Maintenance Program permits are in place until 2025. The permitting process includes development of work plans, noticing, and pre-maintenance surveys. After undertaking maintenance activities, biological monitoring and reporting must be completed. During GSP implementation, SVBGSA will evaluate the extent to which funding the maintenance activities themselves could increase participation.

3. SMC TAC

Subbasin stakeholders plan to establish the SMC TAC within the first 2 years of GSP implementation. SVBGSA will work with the Subbasin Committee to determine the criteria for professional and scientific experts that will serve on the SMC TAC. After it is established, the SMC TAC will establish guiding principles, triggers, and the decision-making process. The SMC TAC will convene annually in April, and subsequently as needed, to review the Annual Report and whether conditions trigger the need for projects and management actions, recommend implementation of specific projects and management actions, and review data.

4. Projects and Management Actions that Result in Reservoir Reoperation

The potential projects and management actions that could result in reoperation of the Nacimiento and San Antonio Reservoirs are at differing stages of development. As of the development of this GSP, the MCWRA Drought TAC was already established and will convene to develop release recommendations for reservoir releases when drought conditions occur. MCWRA has undertaken some analyses and preliminary designs of the Interlake Tunnel and Spillway Modification. The Winter Reservoir Release with ASR in the 180/400-Foot Aquifer Subbasin is in the project conceptualization phase. If additional projects arise that would result in reoperation of the reservoirs, they could also be evaluated and compared to the listed projects.

MCWRA owns and operates the reservoirs. SVBGSA will continue and deepen conversations with MCWRA regarding potential projects that would result in reservoir reoperation and their impact on groundwater conditions. The Drought TAC will likely be compatible with either the Interlake Tunnel or Winter Release project; however, the compatibility of the Interlake Tunnel, Winter Release project, and any other reservoir reoperation projects that arise needs to be evaluated. SVBGSA will begin these steps before or immediately following submittal of the GSP.

Steps that need to be completed to move forward with a project that results in reoperation of the reservoirs, aside from the Drought TAC, include:

- Examination and clarification of water rights and permits
- Applying for change of diversion or change of timing on water rights as necessary
- Evaluation of the recharge benefit to the Upper Valley
- Refining yields of proposed projects
- Analyzing the interaction with other potential projects
- Assessing the ability to meet flows needed for steelhead and other species

- Assessing flood mitigation potential
- Producing preliminary design of projects
- Ability to meet downstream surface water needs, such as for CSIP

After selection of a project that will result in reoperation of the reservoirs, a funding mechanism needs to be established, feasibility studies undertaken, permitting and any water rights adjustments completed. This project will likely be subject to new flow restrictions and reservoir operations resulting from the planned HCP.

5. Other Projects

The remaining projects are not currently needed; however, they could be pursued if it is determined that they are needed in the Upper Valley or if the Upper Valley can leverage similar efforts in other subbasins. Therefore, these projects will not be implemented immediately, but rather will move forward only if conditions warrant it or other subbasins initiate implementation of them. This includes overland flow MAR, agricultural BMPs, and fallowing, fallow bank, and land retirement.

The implementation of all projects and management actions will be a dynamic, adaptive process. Refinement of the projects and actions will occur simultaneously with adjustment of the funding mechanism that supports the projects and actions. A start-up budget that covers required actions such as data, monitoring, and reporting initial funds for selecting and scoping projects and management actions that would need to occur prior to financing a project. Projects and management actions will be approved by the Board of Directors and will be implemented in a coordinated manner across the entire Salinas Valley.

10.4 Five-Year Update

SGMA requires the development of 5-year GSP assessment reports, starting in 2027. The 5-year update will assess whether the GSA is achieving the sustainability goal in the Subbasin. The assessment will include a description of significant new information that has been made available since GSP submittal, whether any new information warrants changes to any aspect of the plan, and how the GSP will be adapted accordingly.

The 5-year update will include updating the SVIHM and SVOM with newly collected data and updating model scenarios to reflect both the additional data and refinements in project design or assumptions. It will also include a reevaluation of climate change to ensure assumptions in the GSP are still valid.

SVBGSA will engage stakeholders in the development of the 5-year update. In contrast to the annual reports, which share monitoring data and progress related to the SMC, the 5-year update will involve a more systemic reevaluation of the SMC minimum thresholds and measurable results, as well as report on progress meeting the interim milestones.

10.5 Start-up Budget and Funding Strategy

10.5.1 SVBGSA Operational Fee

SVBGSA established a valley-wide Operational Fee to fund the typical annual operational costs of its regulatory program authorized by SGMA, including regulatory activities of management groundwater to sustainability (such as GSP development), day-to-day administrative operations costs, and prudent reserves. The Operational Fee funds GSA operational costs, and therefore covers any tasks undertaken by staff, such as planning, technical review, partnership development, communication, stakeholder engagement, and support for the selection, development, and implementation of projects and management actions. The fee is a regulatory fee with the purpose of ensuring that ground water use is managed sustainably so that adequate supplies remain for all users. The Operational Fee is also used as local cost share for grants.

The Operational Fee is based on the 2018 Regulatory Fee Study (Hansford Economic Consulting, 2019) commissioned by SVBGSA. The SVBGSA has the authority to charge fees, as set forth in the California Water Code Sections 10730, 10730.1, and 10730.2. The Operational Fee is a regulatory fee authorized under California Water Code Section 10730 and is exempt from voter approval, as it is not a tax pursuant to California Constitution Article XIIC (Proposition 26, Section 1(e)(3)). As the fee must be proportional and related to the benefits of the program, this study analyzed options and proposed a regulatory fee structure whereby agricultural beneficiaries are responsible for 90% of the cost and all other beneficiaries are responsible for 10% of the cost. The SVBGSA Board of Directors approved this fee in March 2019.

The Upper Valley Aquifer Subbasin urban and agricultural groundwater are charged the Operational Fee by domestic connection or irrigated acreage by land use code. The Operational Fee funds valley-wide activities, including initial GSP development; however, additional funding is needed for meeting future requirements, GSP implementation, and projects and management actions.

10.5.2 Start-up Budget

Table 10-1 summarizes the conceptual planning-level costs for the initial 5 years of GSP implementation for the Upper Valley Aquifer Subbasin. This table does not include the Valley-wide costs for routine administrative operations and other Valley-wide costs funded through the SVBGSA operational fee outlined in 10.5.1. The Subbasin specific costs, shown on Table 10-1,

include data collection and analysis beyond tasks already undertaken by other agencies. These tasks could be undertaken by staff, consultants, or partner agencies. The costs comprise activities required by SGMA: annual analysis and reporting of sustainability conditions; improvements to the monitoring networks, including installation of 4 new monitor wells; and supplemental hydrogeologic investigations to address data gaps.

The start-up budget includes implementation actions envisioned to occur within the first 5 years of GSP implementation. It does not include funding for development or implementation of projects and management actions; however, does include some funding for refinement and selection of projects and management actions. When projects and management actions move forward with implementation, they will require additional funding for project feasibility and design studies, environmental permitting, and landowner outreach. These are initial estimates of costs and will likely change as more data become available.

These costs are independent of fees currently collected by MCWRA; SVBGSA will aim to not duplicate fees already being collected by MCWRA.

For components of this GSP being developed in coordination with other GSPs in the Salinas Valley, the establishment costs are split between subbasins and initial implementation costs are estimated based on the direct costs to the Upper Valley Aquifer Subbasin. These are initial estimates; however, the final cost and division between subbasins will be reviewed and revised as necessary prior to implementation and per approval of the SVBGSA Board.

Table 10-1. Upper Valley Aquifer Subbasin Specific Estimated Planning-Level Costs for First 5 Years of Implementation

Activity	Estimated Annual Cost	Total Cost for 5 years or Lump Sum	Assumptions
Required Compliance Activities: Data, Monitoring, and Reporting		\$473,000	
Annual Monitoring and Reporting	50,000	\$250,000	
Updating the Data Management System	3,000	\$15,000	Valley-wide cost split equally between subbasins; includes hosting fee and updating information
Improving Monitoring Networks		\$197,000	
Install up to 3 wells for groundwater elevation monitoring		\$75,000	
Development of GEMS expansion ordinance		\$7,000	Valley-wide cost split equally between subbasins; includes hosting fee and updating information
Implementation of GEMS expansion		\$100,000	Estimate for implementation in the Upper Valley
Install up to 1 shallow wells for monitoring ISW		\$15,000	
Addressing Identified Data Gaps in the HCM – Aquifer properties assessment		\$11,000	For two aquifer properties tests
Coordination with MCWRA		\$10,000	Setting up a shared system; MCWRA time
Required Five-year Update		\$200,000	
SVIHM and SVOM update (gathering data, getting it into model)		\$9,000	
Reevaluate climate change		\$2,000	Valley-wide cost split equally between subbasins; includes evaluating extent to which previous estimates of climate change are still valid
Update model scenarios		\$14,000	
Stakeholder engagement		\$50,000	
Analysis and report-writing		\$125,000	
Refine and Implement Projects and Management Actions		\$50,000	Depends on projects and management actions pursued; Could be grant or project match
Engineering feasibility studies and project design			
Permitting and environmental review			
Cost-benefit analyses			
TOTAL		\$723,000	

10.5.3 Funding for Projects and Management Actions

The start-up budget does not include funding for specific projects and management actions. Projects and management actions implemented by other agencies and organizations that contribute to groundwater sustainability will follow the funding strategies developed by those respective agencies and organizations. For projects funded by SVBGSA or funding SVBGSA raises to contribute to the implementation of projects, SVBGSA will evaluate the most appropriate funding mechanisms and engage stakeholders and the Board of Directors in this analysis. These include:

- **Grant funding** – SVBGSA will pursue grants to the extent possible to fund projects and management actions.
- **Contributions from local jurisdictions, partner agencies, organizations, and companies** – Where appropriate, SVBGSA will work with partners to solicit contributions to jointly implement a project or management action.
- **Benefit assessment (218 vote)** – For projects with considerable capital cost or that benefit multiple subbasins, SVBGSA will consider holding a 218 vote to levy an assessment based upon the special benefits conferred from a specific project. Before doing so, SVBGSA will undertake an analysis to identify the special benefit of the conferred project, the cost of the benefit, the zone of benefit, and method of calculating the assessments to be levied. This requires a public hearing and is subject to a majority protest.
- **Fees** – Fees may be collected for a variety of purposes, such as funding a regulatory program or providing a product or service. Fees are not subject to a vote or protest proceeding, but they cannot exceed the cost of running the program or providing the product or service. Some regulatory programs need to be implemented via ordinance.
- **Fines and penalties** – With the establishment of an ordinance, SVBGSA has the authority to impose fines and penalties, such as may be associated with a regulatory program. Imposition of a fine or penalty must provide due process, usually a hearing after notice/citation and before assessment of the fine or penalty, and funds must be put back into the program.
- **Special tax** – SVBGSA has the authority to levy a special tax for a specific purpose, such as a parcel tax or some sales tax components. This requires a two-thirds vote of the electorate.

SVBGSA acknowledges that the costs associated with projects and management actions will need to be funded through mechanisms such as these. It will work with funding agencies and local partners to do so.

10.6 Implementation Schedule and Adaptive Management

The SVBGSA oversees all or part of 6 subbasins in the Salinas Valley Groundwater Basin. Implementing the Upper Valley Aquifer Subbasin GSP must be integrated with the implementation of the 5 other GSPs in the Salinas Valley. The implementation schedule reflects the significant integration and coordination needed to implement all 6 GSPs in a unified manner.

The general implementation schedule focuses on implementation actions and projects that result in reservoir reoperation within the first 2 to 3 years. Recharge projects and management actions could be pursued at any point that groundwater conditions warrant them or at any point Subbasin stakeholders and the SVBGSA decide is appropriate.

A general schedule showing the major tasks and estimated timeline during the first 5 years of GSP implementation is provided on Figure 10-1.

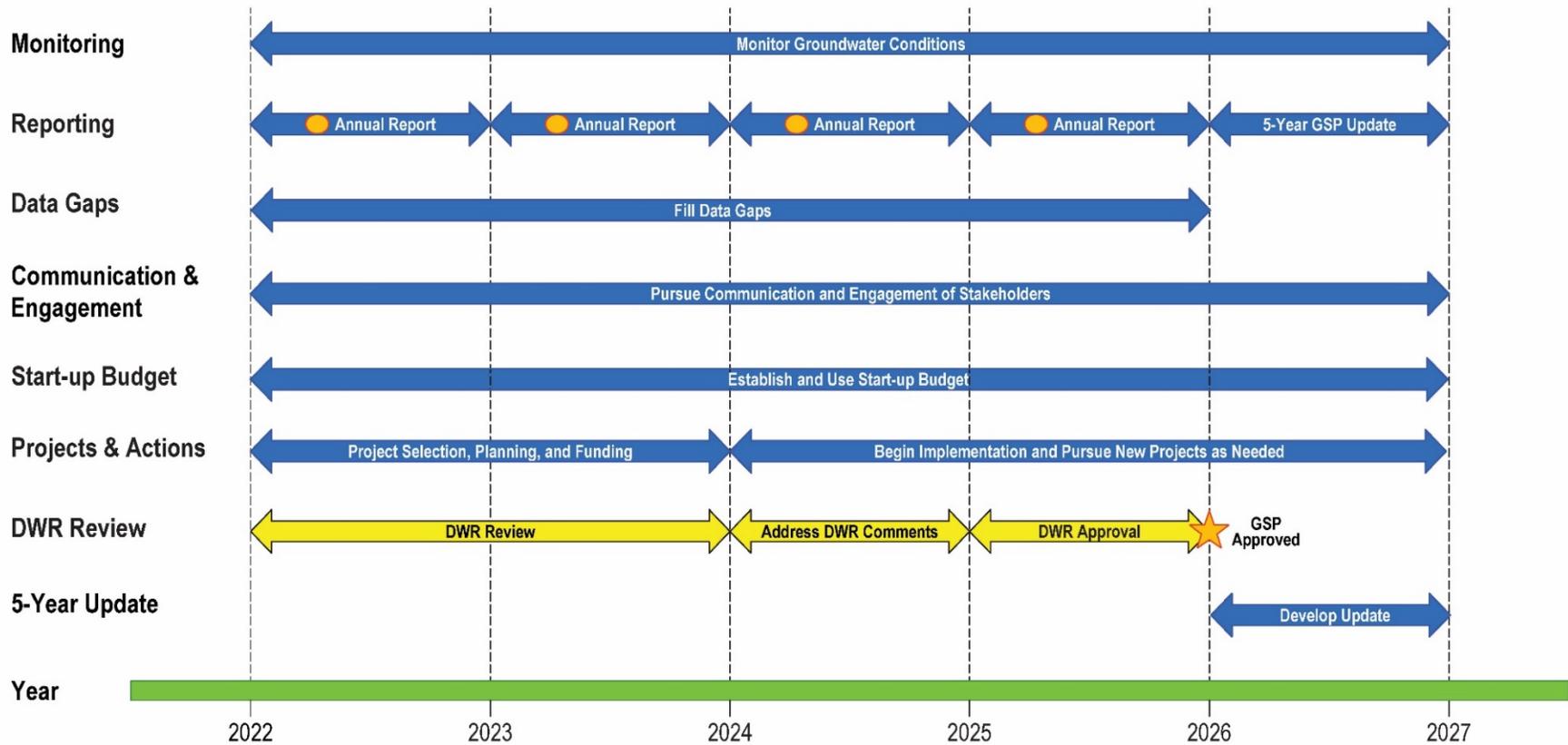


Figure 10-1. General Schedule of 5-Year Start-Up Plan

References

Hansford Economic Consulting, 2019. 2018 Regulatory Fee Study: Prepared for Salinas Valley Basin Groundwater Sustainability Agency.