ATTACHMENT 3

APPLICATION WORK PLAN, BUDGET, AND SCHEDULE

Grant Proposal Title: **Salinas Valley GSP Implementation Grant (Eastside Aquifer, Forebay Aquifer, Langley Area, and Upper Valley Aquifer Subbasins)**

Applicant: **Salinas Valley Basin Groundwater Sustainability Agency**

Project Description: The Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA) partially or entirely manages the 6 subbasins of the Salinas Valley Groundwater Basin that are hydraulically connected, either directly or indirectly connected to the Salinas River, and are mainly recharged through reservoir releases. The Work Plan includes GSP implementation activities for 4 Salinas Valley subbasins: Eastside Aquifer, Forebay Aquifer, Upper Valley Aquifer, and Langley Area. These activities emphasize the integrated, valley-wide approach to groundwater sustainability adopted by SVBGSA. These activities build on and complement the existing 180/400-Foot Aquifer Subbasin existing Round 1 SGMA Implementation Grant, are coordinated with the Arroyo Seco GSA, and complement the Monterey Subbasin Round 2 SGMA Implementation Grant application that is being led by Marina Coast Water District GSA.

This grant application consists of 8 Components. Components 1 through 3 address important management, data, and outreach activities that are core to SGMA compliance and SVBGSA's collaborative approach. Components 4 through 8 focus on reaching groundwater sustainability through specific GSP projects and actions, including completing early implementation measures, planning for demand management appropriate to each subbasin, and conducting feasibility/pre-feasibility of high priority projects. These components will allow informed selection and funding of projects and management actions. Components include:

- Component 1: Grant Agreement Administration
- Component 2: Data Expansion and SGMA Compliance.
- Component 3: Engagement of Interested Parties and Underrepresented Communities
- Component 4: Groundwater Recharge Feasibility
- Component 5: Demand Management
- Component 6: Alternative Supply Feasibility and CEQA
- Component 7: Agricultural Water Conservation Best Management Practices Program
- Component 8: San Lucas Drinking Water Project

A. General

COMPONENT 1. GRANT ADMINISTRATION

Component 1 includes all work to comply with Grant reporting and administration requirements, including expenditures of allocated grant monies, preparation of Quarterly Progress Reports, invoices, and associated documentation, Component and Grant completion reporting, and as-needed communications with the California Department of Water Resources (DWR) Sustainable Groundwater Management (SGM) Grant Project Manager and/or administration staff.

COMPONENT 2. DATA EXPANSION AND SGMA COMPLIANCE

1. Component 2 Description

Component 2 collects, refines, and updates necessary data and assessment tools for 4 adjacent subbasins of the Salinas Valley: the Eastside Aquifer, Forebay Aquifer, Upper Valley Aquifer, and Langley Area Subbasins. It focuses on data expansion and SGMA compliance by filling data gaps, revising the hydrogeologic conceptual models, and updating the groundwater models. These tasks address anticipated DWR comments on the GSPs, complete the monitoring networks, and provide the foundational groundwater basin understanding that will be used to develop 5-year updates, complete with new data. The new data and refined modeling will increase the understanding of the subbasins and are critical for making decisions on projects and management actions to reach sustainability.

Each of the 4 subbasin GSPs (Eastside, Forebay, Langley, and Upper Valley) identified data gaps in the groundwater levels monitoring network, interconnected surface water (ISW) monitoring network, and hydrogeologic conceptual model. In addition, wells are needed GDE and Deep Aquifers monitoring. In coordination with the Arroyo Seco GSA (ASGSA), SVBGSA will install a total of 18 monitoring wells and complete 12 aquifer properties tests, concentrating on the subbasins where geographic coverage is limited and groundwater monitoring is lacking:

- 3 wells (1 ISW, 1 Deep Aquifers, 1 GDE) and 3 aquifer tests will be completed in the Eastside Subbasin
- 3 wells (1 ISW, 1 Deep Aquifers, 1 GDE) and 3 aquifer tests will be completed in the Forebay Subbasin
- 7 wells (6 groundwater levels, 1 GDE) and 4 aquifer tests will be completed in the Langley Subbasin
- 5 wells (4 groundwater levels, 1 ISW, 1 GDE) and 2 aquifer tests will be completed in the Upper Valley Subbasin

New monitoring wells will complete the groundwater level and ISW monitoring networks, and the lithologic information obtained through well installation will help fill data gaps in the hydrogeologic conceptual model.

Component 2 also supports expansion of groundwater extraction monitoring and well registration. Through the existing Groundwater Extraction Management System (GEMS), Monterey County Water Resources Agency (MCWRA) collects substantial extraction data; however, it does not cover the entire geographic area of the subbasins. Furthermore, GEMS is based on self-reporting and does not capture all wells. The GSPs identified expansion and enhancement of GEMS as a necessary action in order to understand, model, and manage the Salinas Valley. Component 2 builds on initial discussions regarding how to leverage GEMS into a system that will enable SVBGSA to manage the groundwater basin according to SGMA.

Groundwater modeling is critical for understanding groundwater flow and determining how to reach and maintain sustainability. SVBGSA and ASGSA are committed to developing broad community support for the groundwater models through regular improvements and updates. Model updates and improvements are critical for prioritizing, designing, and assessing benefits of projects and management actions that will enable the Salinas Valley subbasins to reach and maintain sustainability. Component 2 will update and refine the Valley-wide Salinas Valley Integrated Hydrologic Model (SVIHM) under development by the USGS and reassess climate scenarios to prepare for the 5-year updates and project modeling. SVBGSA plans to update the SVIHM to enhance its usability for specific SGMA needs and to address interested party concerns. SVBGSA will make model adjustments based on existing data, add recent and newly gathered data, and recalibrate the model with a focus on accurate SMC representation. SVBGSA will work with interested parties to evaluate climate scenarios and incorporate them into modeling to assess how to reach sustainability under various potential climates.

Finally, Component 2 conducts field reconnaissance of groundwater dependent ecosystems (GDEs) and establishes monitoring near specific GDEs. DWR identified the need for GDE field studies in the review of the 180/400-Foot Aquifer Subbasin of the Salinas Valley. In anticipation of similar GSP comments for the Eastside, Forebay, Langley, and Upper Valley GSPs, Component 2 includes GDE field reconnaissance and installs shallow monitoring wells near GDEs.

<u>GSPs, communities served, minimum thresholds, and measurable objectives</u>:
The Eastside, Forebay, Langley, and Upper Valley Subbasins are almost entirely dependent on groundwater. The Langley Area, located in the northern part of the Valley, consists primarily of small water systems and domestic users, with a few agricultural users close to the southern subbasin border. Agriculture is the dominant water user in the Eastside, Forebay, and Upper Valley Subbasins. All cities and communities in the Valley rely on groundwater, with the largest city, Salinas, partially located in the Eastside Subbasin. Domestic wells and small drinking water systems that support the agricultural farming community are spread out over these 4 subbasins. Groundwater supports GDEs along the Salinas River, Arroyo Seco River, Gabilan Creek, and potentially some small tributaries. Field reconnaissance is needed to establish GDE monitoring in the Eastside, Forebay and Upper Valley Subbasins and to determine whether groundwater supports vegetation present throughout the Langley Subbasin along dry-bed creeks and depressions. Component 2 addresses groundwater conditions that affect all groundwater users, including large and small water systems, agriculture, and environmental groundwater users.

Component 2 directly supports the groundwater level, groundwater storage, and ISW SMCs. Accurate data supporting modeling of all three of these SMC will improve SVBGSA and ASGSA's ability to plan for and achieve sustainability.

SVBGSA assessed conditions in the 4 subbasins and worked with subbasin-specific interested parties to develop the SMC measurable objectives (MOs) and minimum thresholds (MTs) appropriate for each subbasin. The SMC in all 4 subbasin GSPs align, setting groundwater levels, groundwater storage by proxy, and interconnected surface water MOs to recent high groundwater levels and MTs to recent low groundwater levels. The degradation of groundwater quality SMC seeks to avoid degradation caused by a direct result of GSA groundwater management action(s). All subbasins want no subsidence or seawater intrusion. Component 2 will indirectly support the seawater intrusion SMC; the seawater intrusion front is within 0.7 and 2.3 miles of the Eastside and Langley Subbasins, respectively, making accurate groundwater elevation data and a coordinated approach to groundwater levels near the subbasin borders particularly important for preventing further seawater intrusion. These SMC are aimed at preventing groundwater conditions from degrading beyond historical conditions and levels, and they aim for recent high groundwater levels in order to protect the communities, industries, and ecosystems dependent on groundwater.

How Component furthers GSP implementation timeline and feasibility:
Component 2 supports SVBGSA efforts to reach MOs and protect beneficial uses of groundwater by filling data gaps, refining the hydrogeologic conceptual models, and refining the modeling. While each of the 4 included subbasins have unique GSPs driven by their specific conditions and beneficial users, this grant streamlines and accelerates each GSP's implementation by leveraging SVBGSA effort across multiple subbasins. For example, the GEMS program for groundwater extraction monitoring and groundwater modeling efforts are applicable to all subbasins. To meet the GSP implementation timelines, this Component fills data gaps, updates hydrogeologic conceptual models with new information, and refines groundwater models within the next 3 years for all 4 subbasins to prepare for the 5-year updates.

Component 2 tasks furthers GSP project feasibility by providing the data and models needed for decisions on how and where to develop projects and management actions to reach sustainability. Component 2 will be coupled with the other grant components that will produce feasibility assessments and information and support the involvement of interested parties. These data and analyses are necessary in both Eastside and Langley subbasins, where undesirable results for groundwater levels and groundwater storage have occurred in Water Year 2021 and previous years. Groundwater levels have been declining and have not rebounded after droughts. This has led to water supply issues for some small water systems and domestic wells, many of which are underrepresented communities. These subbasins need quick action to stop groundwater level declines. In the Forebay and Upper Valley Subbasins, groundwater levels have historically rebounded after droughts; however, the additional information to be gathered under this grant is critical for understanding how groundwater conditions impact small water systems and domestic wells.

Component needs, goals, and objectives and how proposed tasks will meet them:
Component 2 meets data gap and SGMA compliance needs. The Component 2 **goal** is to improve the data and tools that SVBGSA and all interested parties need to manage groundwater sustainably.

The **objectives** of Component 2 are: (1) fill data gaps identified in the 4 GSPs; (2) Update the HCM to reflect new data, ensuring the GSP is based on best available data; (3) refine the groundwater model to address SGMA-specific issues and address concerns of interested parties prior to the update before the 5-year GSP assessment.

Component 2 addresses data expansion and SGMA compliance **needs**, including:

- Each GSP identified data gaps that need to be filled in order to adequately assess groundwater conditions and monitor sustainability. Component 2 fills these data gaps.
- New data, such as the AEM data collected by DWR and lithologic information from new wells, needs to be integrated into the Salinas Valley hydrogeologic conceptual model to prepare for development of the 5-year GSP updates, update the groundwater model, and refine the conceptualization upon which projects and management actions are assessed.
- The groundwater model currently being developed for the Salinas Valley by the USGS was initiated prior to SGMA. The model's focus was not on specific sustainable management criteria or other SGMA metrics. The model needs to be refined to accurately represent and reflect the SGMA-specific concerns of each subbasin and gain stakeholder trust in model results that are used for assessing projects and management actions.
- Field reconnaissance of GDEs and shallow groundwater level monitoring near GDEs is needed to establish monitoring of GDEs and address anticipated DWR GSP review comments.

2. Project Benefits / Coordination Efforts

Coordination: Component 2 builds on data gaps identified during GSP development, in conjunction with ASGSA. In summer 2022, SVBGSA additionally brought data gaps and the plan for addressing them to each Subbasin Implementation Committee. SVBGSA meets regularly with MCWRA to ensure data collection, new monitoring wells, and modeling efforts are complementary and support both agencies. Modeling builds upon USGS models and there is ongoing collaboration. Field reconnaissance of GDEs is conducted with the Central Coast Wetland Group.

Component 2 is coordinated with the other components of this grant, providing the data and groundwater modeling that supports engagement of interested parties (Component 3) and planning for and assessing projects and management

actions (Components 4, 5, 6, 7, 8). This grant for the Eastside, Forebay, Langley, and Upper Valley Subbasins is also coordinated with the Round 1 SGMA Implementation Grant SVBGSA received for the critically over-drafted 180/400-Foot Aquifer Subbasin and the SVBGSA/MCWD GSA Round 2 SGMA Implementation Grant application for the Monterey Subbasin.

Addressing DWR Comments: The Eastside, Forebay, Langley, and Upper Valley GSPs followed a similar approach to the approved 180/400-Foot Aquifer Subbasin GSP. The 4 GSPs were improved by incorporating all DWR's recommended corrective actions for the 180/400-Foot Aquifer Subbasin into them, except Recommended Corrective Action 3: conducting necessary field reconnaissance for GDE identification, due to lack of data. An expanded GDE section was added to the 4 GSPs; however, there was insufficient data to fully address the comment. To address anticipated DWR GSP comments and help better understand GDEs as a beneficial user and the impact of groundwater conditions on GDEs, Task 8 includes field reconnaissance for GDEs.

Filling Data Gaps: Component 2 is focused on filling data gaps and groundwater modeling to prepare for the 5-year updates and project work. It includes filling monitoring network and hydrogeologic conceptual model data gaps identified in the Eastside, Forebay, Langley, and Upper Valley GSPs and incorporating new data into the hydrogeologic conceptual models. This will ensure that interested parties can engage on the 5-year GSP updates using data collected since GSP completion in 2022. In addition to needed monitoring wells identified in the GSPs, SVBGSA plans to install shallow wells near some GDEs and deep wells in the Deep Aquifers. Preliminary results from the Deep Aquifers Study found the Deep Aquifers extend farther than previously known, extending into the Langley, Eastside, and Forebay Subbasins, highlighting the need to update the GSP hydrogeologic conceptual models and understanding of intersubbasin flow and recharge to the Deep Aquifers. Component 2 also includes interpreting and incorporating AEM geophysical data within the Valley, which is anticipated to help interpret key areas, such as the connection between the Langley and Eastside Subbasins, connectivity of Eastside alluvial fan clays, and Upper Valley Subbasin stratigraphy away from the river where little hydrogeologic data exists.

The additional data will also feed into modeling updates. SVBGSA's refinements of the SVIHM's system conceptualization will help interpret less-studied areas away from the Salinas River, where many small drinking water systems and domestic wells are located. Updating the SVIHM with 2014-2022 data will enhance the understanding of current groundwater conditions, intersubbasin flow, and impacts of multi-year droughts.

Assisting with Feasibility of GSP Implementation: Component 2 assists with feasibility of GSP implementation by providing new, needed data and updated modeling that will provide for better assessment of potential project impacts. Incorporating recent multi-year droughts and multiple climate scenarios will help select and design more resilient projects and management actions for all subbasins.

Further data production is a quantifiable benefit of this Project and is consistent with goals for implementing the GSP. This work is done in coordination with ASGSA, who manages the Arroyo Seco Cone Management Area in the Forebay Subbasin.

3. Maps Included

Figure 1 shows the area covered by this Component, including the 4 groundwater subbasins and management areas. Figure 2 shows the land use. Figure 3 includes the groundwater-dependent communities that will benefit, shown by both cities and drinking water systems. Figure 4 shows underrepresented communities (URCs) and severely disadvantaged communities (SDACs) that will benefit from this Component. Figure 5 shows domestic well density. Figure 6 shows current groundwater conditions. Figure 7 shows the groundwater level and interconnected surface water data gaps and approximate locations for new monitoring wells to fill data gaps.

4. Benefit to URC and/or SDACs

Improved data and an updated understanding of the groundwater basin will inform SVBGSA efforts to improve groundwater conditions in the project area, which will benefit residents who depend on groundwater for drinking water and/or are employed in the agricultural sector. Since nearly the entire population of the project area depends on groundwater for drinking water and much of the population is employed in the agricultural sector, Component 2 benefits virtually all residents of the project area, including many who live in URCs and SDACs. Letters from Senator Laird, Assemblymember Rivas, County Supervisors Alejo and Lopez, CHISPA and the Greater Monterey County IRWM group reflect the broad positive support across the Valley from leaders committed to serving their underrepresented communities and the region as a whole.

Of the nearly 200,000 residents of the 4 subbasins, roughly 75% live in a URC of at least one category (DACs, SDACs, EDAs, EnvDACs, Fringe Areas, and Tribes), with 48% living in DACs, 12% in SDACs, 61% in EDAs, and 40% in Fringe Areas (some areas have overlapping categories). URCs also cover a large percentage of the area of the 4 subbasins, with roughly 93% of the total project area covered by a URC of any category, including 34% covered by DACs and 80% by EDAs. Therefore, between 75% and 93% of the grant amount for Component 2 will benefit URCs.

Many of the URCs and SDACs in the project area are concentrated in the Eastside and Langley Subbasins, where residents are particularly vulnerable to chronic declines in groundwater levels. Component 2 will provide data transparency and

technical information for URCs and SDACs in these subbasins, including for the community of Chualar, which is a DAC; the City of Salinas, much of which is comprised of DACs, SDACs, EDAs, EnvDACs, and Fringe Areas; and the City of Gonzales, which is an EDA and part of which is an SDAC. Letters from the Cities of Salinas and Gonzales confirm their support of the GSP implementation and the positive impacts to underrepresented communities. Rural areas in the southern part of the Langley Area Subbasin are also DACs or EDAs and would benefit from improved groundwater conditions considering their reliance on agriculture, as would the rural areas of the Eastside Subbasin, almost all of which are either DACs or Fringe Areas.

The Forebay and Upper Valley subbasins also contain URCs and SDACs. While these subbasins do not face acute concerns related to chronic declines in groundwater levels, they are vulnerable to declining groundwater levels during drought; therefore, residents of URCs in these subbasins, nearly all of whom depend on groundwater for drinking or work in the agricultural sector, would benefit from improved groundwater conditions. Component 2 will also provide technical information to communities in these subbasins, including Soledad, Greenfield, and King City, which are mostly comprised of DACs and include some SDACs. DACs also cover much of the rural areas of the Forebay Subbasin, and EDAs cover the entirety of the Upper Valley Subbasin and most of the Forebay Subbasin, suggesting the improved data and progress toward groundwater sustainability provided by Component 2 will almost entirely benefit URCs in these subbasins. Letters from the cities of Soledad and King reflect their support.

5. Positive impact associated with small water systems or private shallow domestic wells

The project area includes a high concentration of domestic wells (Figure 5) and many small public water systems that are dependent on groundwater for drinking water (Figure 3). Component 2 includes expanding groundwater extraction monitoring which will improve the assessment of groundwater extraction and elucidate where extraction occurs and its impact on groundwater levels. New monitoring wells will provide for a more complete understanding of groundwater levels, which will be particularly helpful for projecting whether groundwater conditions will impair wells and the impact of groundwater extraction on groundwater levels in specific areas. This will help the GSA, as well as small water systems and households that rely on shallow domestic wells, understand vulnerabilities and impacts of groundwater conditions. Additionally, Component 2 establishes well registration for all wells, which will fill a key data gap and help the GSA assess impacts to private domestic wells. This additional data will also assist with the preparation of the 5-year update of the GSP.

Component 2 will help meet the needs of the State Water Board's SAFER program by filling data gaps, developing a better understanding of why groundwater conditions have degraded, and providing modeling to assess how to improve groundwater conditions. Of the 1,150 shallow domestic wells (depth <450 ft.) in the project area, 763 are in sections identified as having a water quality risk of "High" according to the SAFER Aquifer Risk map, since they are in sections with MCL exceedances. Of the 142 small public water systems in the project area, 104 are in sections with a water quality risk of "High" according to the SAFER Aquifer Risk map. Since all these water systems are dependent on groundwater for their drinking supplies, additional data and modeling that will help make improvements to management of groundwater conditions which help prevent further water quality degradation and maintain access to safe drinking water.

6. How the Component addresses the Human Right to Water (AB 685 Section 106.3)

Component 2 addresses the Human Right to Water by filling data gaps, improving modeling, and providing information to water systems that are currently failing or at risk of failing to provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. There are 8 community water systems in the project area that DWR has identified as currently failing to meet Human Right to Water standards, spread across the subbasins, and additional systems that are "At-Risk." Additionally, a large percentage of the population of the project area lives in and around Salinas, and the water systems serving Salinas are in-compliance with Human Right to Water standards; however, Component 2 will provide updated data to these water systems so that they can continue to stay in compliance.

The increased understanding of groundwater conditions gained through filling data gaps will assist SVBGSA with groundwater management around these water systems, which will help the systems meet Human Right to Water standards. For example, incorporating AEM data into the hydrogeologic conceptual model and modeling will enhance the understanding of groundwater connectivity around those systems and enable modeling of which actions will best support access to drinking water.

COMPONENT 3. ENGAGEMENT OF INTERESTED PARTIES AND UNDERREPRESENTED COMMUNITIES

1. Component 3 Description

Component 3 engages interested parties and conducts outreach in the 4 subbasins of the Salinas Valley included in this grant application: the Eastside Aquifer, Forebay Aquifer, Upper Valley Aquifer, and Langley Area Subbasins. Engagement builds on SVBGSA's robust collaborative approach and conducts additional outreach to underrepresented communities. It will increase awareness of groundwater conditions, SVBGSA efforts, and individual actions that can be undertaken to increase water reliability. SVBGSA's work relates to, and at times overlaps with, work of other agencies, and this component will support SVBGSA's collaboration with partner agencies to ensure coordination. Finally, work on project and management actions conducted both under this grant and in parallel tracks will be brought together in a Project Update Report that will provide a basis for interested parties to assess projects and management actions.

SVBGSA takes a highly collaborative approach that complements Agency-wide Board of Directors and Advisory Committee meetings with subbasin-specific Subbasin Implementation Committees meetings. These efforts help ensure that interested parties are well informed about groundwater data and conditions, potential projects, and management strategies. Beyond awareness, meetings provide the foundation for SVBGSA's collaborative process where interested parties guide the direction of groundwater management. Outreach and engagement cover the wide range of SVBGSA efforts, including tasks under other grant components, such as data expansion, project feasibility work, and demand management discussions. Extensive interested party outreach and engagement is necessary to refine projects, assess feasibility, and gain project cost understanding.

A focus of Component 3 is expanding interested party engagement and outreach to DACs, SDACs, and Underrepresented Communities in the Eastside, Forebay, Langley, and Upper Valley Subbasins with the intent of increasing awareness of SVBGSA and groundwater management. Ensuring these communities can continue to engage in discussions of groundwater conditions, feasibility assessments, and strategies to increase groundwater sustainability is critical for continuously hearing their concerns and enabling their participation in management decisions. While spreading this awareness, SVBGSA also aims to give access to tools and information to domestic water users and underrepresented community members. SVBGSA will spread awareness and support use of the State Dry Well Notification System for reporting dry wells, which will in turn provide updated data on where groundwater conditions are affecting domestic wells. To arm individuals with strategies to increase their own water reliability, SVBGSA will conduct workshops on residential projects such as rain barrels and rain gardens. In addition, ASGSA will inform rural domestic well owners of options for improving their water quality.

Component 3 also supports SVBGSA engagement of partner agencies, including the Arroyo Seco GSA, County of Monterey GSA, County Environmental Health Bureau, and Monterey County Water Resources Agency (MCWRA). MCWRA collects monitoring data, operates the 2 reservoirs that release water into the Salinas River, and owns the Castroville Seawater Intrusion Project, and therefore many groundwater projects involve their infrastructure and work. SVBGSA will implement 2 implementation actions identified within the GSPs: the Water Quality Coordination Group, which facilitates regular discussions with the Central Coast Regional Water Quality Control Board, County Environmental Health Bureau, and other water quality agencies, and the Land Use Jurisdiction Program, which will enhance collaboration with land use agencies.

Finally, this grant will culminate in project feasibility studies and management discussions that update current estimated costs and benefits. SVBGSA will summarize these in a Project Update Report to enable interested parties to assess potential groundwater impacts of projects and management actions, moving forward towards sustainability. The Project Update Report will provide a basis for engaging interested parties in decision making, and will include analysis of combinations of projects and management actions. Some combination of projects is likely necessary and may allow for a more efficient, equitable, and resilient path towards sustainability.

<u>GSPs, communities served, minimum thresholds, and measurable objectives:</u>
The Eastside, Forebay, Langley, and Upper Valley Subbasins are almost entirely dependent on groundwater. The Langley Area, located in the northern part of the Valley, consists primarily of small water systems and domestic users, with a few agricultural users close to the southern subbasin border. Agriculture is the dominant water user in the Eastside, Forebay, and Upper Valley Subbasins. All cities and communities in the Valley rely on groundwater, with the largest city, Salinas, partially located in the Eastside Subbasin. Domestic well owners and small drinking water systems that support the agricultural farming community are spread out over these 4 subbasins. Groundwater supports GDEs along the Salinas River, Arroyo Seco River, Gabilan Creek, and potentially some small tributaries. Component 3 provides outreach to all communities to increase awareness of and engagement in groundwater management.

SVBGSA assessed conditions in the 4 subbasins and worked with subbasin-specific interested parties to develop the SMC measurable objectives (MOs) and minimum thresholds (MTs) appropriate for each subbasin. The SMC in all 4 subbasin GSPs align, setting groundwater levels, groundwater storage by proxy, and interconnected surface water MOs to recent high groundwater levels and MTs to recent low groundwater levels. The degradation of groundwater quality SMC seeks to avoid degradation caused by a direct result of GSA groundwater management action(s). All subbasins want no subsidence

or seawater intrusion. The seawater intrusion front within the 180/400-Foot Aquifer Subbasin is within 0.7 and 2.3 miles of the Eastside and Langley Subbasins, respectively, making a coordinated approach to groundwater levels near the subbasin borders particularly important for preventing further seawater intrusion. These SMC are aimed at preventing groundwater conditions from degrading beyond historical conditions and levels, and they aim for recent high groundwater levels in order to protect the communities, industries, and ecosystems dependent on groundwater.

How Component 3 furthers GSP implementation timeline and feasibility:
Component 3 supports SVBGSA efforts to reach MOs and protect beneficial uses of groundwater by continuing a robust and collaborative process, increasing broad awareness of groundwater conditions and management efforts, strengthening coordination with partner agencies, and developing an updated, integrated summary of options for reaching sustainability. While each of the 4 included subbasins have unique GSPs driven by their specific conditions and beneficial users, this grant streamlines and accelerates each GSP's implementation by leveraging SVBGSA effort across multiple subbasins and ensures integration of subbasin-specific actions. For example, coordination with partners agencies is applicable to all subbasins, as are SVBGSA policies and implementation actions.

Interested party engagement is core to SVBGSA's collaborative approach and is ongoing; however, immediate outreach is critical to increase awareness and boost engagement. Within the next 3 years, SVBGSA will push to complete feasibility studies and refine the approach for management actions and projects, which will require broad outreach. By that point, SVBGSA needs to move from feasibility studies to project selection and implementation. SVBGSA is already moving forward with shovel ready projects; however, larger efforts will be needed to reach sustainability in all subbasins, and more outreach and feasibility work is needed. Currently, the Eastside and Langley Subbasins have declining groundwater levels and need to move forward as quickly as possible, while continuing to do so in an open and transparent manner. Continued engagement throughout the feasibility and planning process will be critical for funding and implementation. Meanwhile, while not chronically overdrafted, the Forebay and Upper Valley Subbasins experience severe conditions during droughts, which have been more prevalent, and therefore, the subbasins are taking an adaptive management approach. SVBGSA will use outreach funds to convene SMC Technical Advisory Committees that will indicate if/when additional action is needed.

The Project Update Report will be foundational by bringing the results from individual feasibility studies and further scoping into a comparable and digestible format. It will integrate all relevant grant-funded and non-grant-funded work that is needed to inform the sustainability strategy for each subbasin and for the Valley as a whole. With hydraulically connected subbasins, SVBGSA must integrate subbasin-specific efforts to ensure all subbasins will reach and maintain sustainability. The Report will also provide a basis for updating the Projects and Management Actions chapters for the 5-year GSP Updates.

Component 3 needs, goals, and objectives and how proposed tasks will meet them:
Component 3 meets SVBGSA stakeholder engagement and outreach needs. The Component 3 **goal** is to ensure broad awareness and strong engagement of interested parties to support SVBGSA's efforts to manage groundwater sustainably, as evidenced by avoiding undesirable results and operating within the sustainable yield. This operationalizes the overarching GSP goal to balance the needs of all water users and ensure long-term viable water supplies, while maintaining the unique cultural, community, and economic aspects of each of the subbasins.

The **objectives** of Component 3 are: (1) interested parties are well informed about groundwater conditions and management strategies, particularly underrepresented communities; (2) homeowners, landowners, drinking water users, and underrepresented community members have access to tools and information; (3) partner agencies are involved and coordinated with; (4) interested parties are actively involved throughout feasibility and assessment of projects.

Component 3 addresses GSA outreach and interested parties' engagement **needs**, including:

- As most of the Salinas Valley is groundwater dependent, there is a need to increase outreach and awareness of SGMA, groundwater conditions, and SVBGSA efforts to reach groundwater sustainability, beyond agencies and individuals that currently attend meetings. Groundwater management, including projects, are likely to impact most people that live or work within the Salinas Valley, either directly or indirectly. In particular, greater outreach to underrepresented communities is needed. Component 3 meets these needs through continuing a robust organizational structure with both Agency-wide and subbasin-specific meetings, conducting appropriate outreach to underrepresented communities, and developing outreach materials.
- In addition to awareness, individuals need tools and information to increase their own water reliability. Component 3 supports this through spreading awareness of groundwater conditions and SGMA-related efforts while holding workshops and giving individuals information on available support and tools, such as the State Dry Well Notification System and residential improvements. In addition, ASGSA will inform rural domestic well owners on options for improving their water quality.
- Other partner agencies conduct work that is related to SVBGSA groundwater management, resulting in the need for SVBGSA to coordinate on a regular basis. As each agency moves its own work forward, addresses new challenges, and adapts its management, regular check-ins and ongoing dialogues can help ensure continued coordination. Through regular meetings with partner agencies, the Water Quality Coordination Group, and Land

Use Jurisdiction Program, SVBGSA seeks to avoid duplication of efforts, support joint problem-solving, and leverage partner agency efforts to support groundwater sustainability.

- Interested parties need to be updated as project scoping and feasibility studies advance so that they can knowledgeably engage in the assessment of projects and management actions which is essential to successful implementation. Costs of building projects and implementing management actions will ultimately be borne by the community members and therefore requires their engagement throughout the feasibility process. Component 3 addresses this need first through regular and project-specific meetings, and second through the Project Update Report. The Report will bring the results of feasibility work and management discussions together to update, refine, and detail the cost estimates, expected benefits, and circumstances for implementation within the GSPs. Itwill integrate individual feasibility studies and consider combinations of projects and management action to enable interested parties to engage in defining how to move forward toward sustainability.

2. Project Benefits / Coordination Efforts

Coordination: Component 3 is focused on coordinating all grant Components and collaboration with interested parties and partner agencies. It supports continued engagement of interested parties through the extensive meetings that underpin SVBGSA's collaborative approach, increased outreach specifically targeted to underrepresented communities and domestic well owners, coordination with partner agencies, and implementation actions to coordinate with agencies on water quality and land use. Component 3 is coordinated with the other components of this grant, supporting engagement of interested parties that builds on data expansion and modeling improvements (Component 2) and assists with planning for and assessing projects and management actions (Components 4, 5, 6, 7, 8). In particular, Task 7 supports other grant components with project-specific meetings to outreach to interested parties, and Task 2 provides for the fundamental coordination between feasibility studies by bringing them together into a Project Update Report that will help interested parties engage in discussions on how to reach sustainability in each subbasin.

SVBGSA meets regularly with MCWRA to ensure data collection, new monitoring wells, and modeling efforts are complementary and support both agencies, and with ASGSA to coordinate Forebay Subbasin GSP implementation efforts. ASGSA will implement Task 7.

This grant for the Eastside, Forebay, Langley, and Upper Valley Subbasins is also coordinated with the Round 1 SGMA Implementation Grant SVBGSA received for the critically over-drafted 180/400-Foot Aquifer Subbasin and the SVBGSA/MCWD GSA Round 2 SGMA Implementation Grant application for the Monterey Subbasin.

Addressing DWR Comments: The Eastside, Forebay, Langley, and Upper Valley Subbasins have not yet received DWR comments on the GSPs; however, given the similar approach to the 180/400-Foot Aquifer Subbasin GSP, SVBGSA anticipates similar comments. To address DWR recommended corrective action to coordinate more closely with other water quality agencies, namely the Central Coast Regional Water Quality Control Board, SVBGSA added the Water Quality Coordination Group to the GSPs. Funding from Component 3 will operationalize that Group.

Filling Data Gaps: Component 3 is not focused on filling data gaps, but will complement data gap work included under Component 2 by relaying new information to interested parties through regular committee meetings and also extending the new information to underrepresented communities and domestic water users.

Assisting with Feasibility of GSP Implementation: Component 3 assists with feasibility of GSP implementation through maintaining a robust set of open, transparent meetings that are at the Agency level, at the subbasin level, and for specific projects and management actions. These enable SVBGSA to develop broad public support for projects and management actions, thereby increasing the feasibility that the GSP can be successfully implemented and funded. These meetings will involve appropriate agencies and individuals depending on specific meeting needs, and will coordinate and integrate implementation across subbasins.

3. Maps Included

Figure 1 shows the area covered by this Component, including the 4 groundwater subbasins and management areas. Figure 2 shows the land use. Figure 3 includes the groundwater-dependent communities that will benefit, shown by both cities and drinking water systems. Figure 4 shows underrepresented communities (URCs) and severely disadvantaged communities (SDACs) that will benefit from this Component. Figure 5 shows domestic well density. Figure 6 shows current groundwater conditions.

4. Benefit to URC and/or SDACs

Strengthened outreach and engagement will benefit URCs and SDACs in the 4 subbasins. Since the entire population of the project area depends on groundwater for drinking water and much of the population is employed in the agricultural sector, Component 3 benefits virtually all residents of the project area with information and tools, including many who live in URCs and SDACs. Letters from Senator Laird, Assemblymember Rivas, County Supervisors Alejo and Lopez, CHISPA and the Greater Monterey IRWM Group reflect the broad positive support across the Valley from leaders committed to serving their underrepresented communities and the region as a whole.

Of the nearly 200,000 residents of the 4 subbasins, roughly 75% live in a URC of at least one category (DACs, SDACs, EDAs, EnvDACs, Fringe Areas, and Tribes), with 48% living in DACs, 12% in SDACs, 61% in EDAs, and 40% in Fringe Areas (some areas have overlapping categories). URCs also cover a large percentage of the area of the 4 subbasins, with roughly 93% of the total project area covered by a URC of any category, including 34% covered by DACs and 80% by EDAs. Therefore, between 75% and 93% of the grant amount for Component 3 will benefit URCs.

Many of the URCs and SDACs in the project area are concentrated in the Eastside and Langley Subbasins, where residents are particularly vulnerable to chronic declines in groundwater levels. Component 3 will provide outreach, opportunities for engagement, and support for URCs and SDACs in these subbasins, including for the community of Chualar, which is a DAC; the City of Salinas, much of which is comprised of DACs, SDACs, EDAs, EnvDACs, and Fringe Areas; and the City of Gonzales, which is an EDA and part of which is an SDAC. Letters from the Cities of Salinas and Gonzales confirm their support of the GSP implementation and the positive impacts to underrepresented communities. Rural areas in the southern part of the Langley Area Subbasin and much of the Eastside Subbasin are also URCs, and agricultural communities in these areas will be targeted for outreach and support.

The Forebay and Upper Valley subbasins also contain URCs and SDACs. While these subbasins do not face acute concerns related to chronic declines in groundwater levels, they are vulnerable to declining groundwater levels during drought; therefore, residents of URCs in these subbasins, nearly all of whom depend on groundwater for drinking or work in the agricultural sector, would benefit from improved groundwater conditions. Component 3 conducts outreach regarding groundwater, provides information and tools to communities in these subbasins, and engages them in SVBGSA decision making, including to Soledad, Greenfield, and King City, which are mostly comprised of DACs and include some SDACs. DACs also cover much of the rural areas of the Forebay Subbasin, and EDAs cover the entirety of the Upper Valley Subbasin and most of the Forebay Subbasin, suggesting the engagement provided by Component 3 will almost entirely benefit URCs in these subbasins. Letters from the cities of Soledad and King reflect their support.

5. Positive impact associated with small water systems or private shallow domestic wells

The project area includes a high concentration of domestic wells (Figure 5) and many small public water systems that are dependent on groundwater for drinking water (Figure 3). Component 3 provides outreach to small water systems and private shallow domestic wells owners and seeks to educate them on groundwater sustainability, provide tools to increase their water reliability, and on opportunities to improve water quality in their wells. Another element of outreach in Component 3 is communicating to small water systems and domestic well owners how projected groundwater levels, informed by newly installed monitoring wells, could affect their wells and impact their ability to extract groundwater. This will help small water systems and households that rely on shallow domestic wells understand vulnerabilities and impacts of groundwater conditions. Component 3 will direct outreach toward well owners identified through the well registration program established in Component 2. Additionally, Component 3 aims to continue robust engagement in collaborative groundwater management and strengthen participation of small water systems, private domestic well owners and domestic water users.

Component 3 will help meet the needs of the State Water Board's SAFER program by increasing outreach, engagement, and coordination with partners agencies. The SAFER program identifies public water systems and domestic wells at risk of failing to provide safe and affordable drinking water. Of the 1,150 shallow domestic wells (depth <450 ft.) in the project area, 763 are in sections identified as having a water quality risk of "High" according to the SAFER Aquifer Risk map, since they are in sections with MCL exceedances. Using information gained through the well registration program established in Component 2, the GSA will provide expanded outreach targeted specifically at owners of domestic wells in sections with higher water quality risk. Of the 142 small public water systems in the project area, 104 are in sections with a water quality risk of "High" according to the SAFER Aquifer Risk map. The GSA will also target outreach to these water systems, in particular regarding options to improve water quality.

6. How Component 3 addresses the Human Right to Water (AB 685 Section 106.3)

Component 3 addresses the Human Right to Water by providing education and outreach on groundwater conditions and management to water systems that are currently failing or at risk of failing to provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. There are 8 community water systems in the project area that DWR has identified as currently failing to meet Human Right to Water standards, spread across the subbasins, and additional systems that are "At-Risk." Additionally, a large percentage of the population of the project area lives in and around Salinas, and the water systems serving Salinas are in-compliance with Human Right to Water standards; however, Component 3 can provide updated data to these water systems regarding water quality and availability, so they can continue to stay in compliance.

The increased communication with water systems and domestic well owners will assist SVBGSA with groundwater management around these water systems, which will help the systems meet Human Right to Water standards. In Component 3, SVBGSA will inform the water systems of the identified actions that best support access to drinking water and work with them to implement these actions.

COMPONENT 4. GROUNDWATER RECHARGE FEASIBILITY

1. Component 4 Description

Component 4 undertakes feasibility work for groundwater recharge projects in the 4 subbasins of the Salinas Valley included in this grant application: the Eastside Aquifer, Forebay Aquifer, Upper Valley Aquifer, and Langley Area Subbasins. The Salinas Valley imports no water from outside the Valley, and therefore enhancing groundwater recharge is critical for reaching and maintaining sustainability. Each subbasin has unique recharge needs and potential projects based on the surface water availability, stratigraphy, and groundwater conditions. The GSPs included conceptual projects and management actions that could be implemented in each subbasin to reach and/or maintain sustainability, taking a 3-prong approach of demand management, groundwater recharge, and alternative water supplies. Component 4 advances the scoping and feasibility of the main groundwater recharge projects in the Eastside, Langley, Forebay, and Upper Valley GSPs. This will enable assessment and comparison of which projects to move forward within each of the 4 subbasins. This work builds on data expansion and modeling under Component 2 and interested party engagement in Component 3. Components 4, 5, and 6 are complementary and will be integrated into the Project Update Report for ease of comparison. Component 4 includes:

- **Planning for Multi-benefit Stream Channel Improvements** – The Salinas River is the main location of groundwater recharge within the Salinas Valley, and high evapotranspiration from invasive riparian vegetation reduces groundwater recharge from the River. SVBGSA will support the Resource Conservation District of Monterey County (RCDMC) to strengthen existing programs for stream maintenance, invasive vegetation removal, and floodplain restoration, which directly and indirectly will increase groundwater recharge. SVBGSA will scope future stream channel improvements by mapping the prevalence of the invasive species *Arundo donax* to plan for its removal, completing hydraulic modeling with HEC-RAS to evaluate percolation, and preparing and submitting permits.
- **Mapping Areas of Potential Recharge** – Assessing areas of high recharge and identifying potential project locations for Managed Aquifer Recharge (MAR) of overland flow and stormwater recharge in the Eastside and Langley Subbasin advances potential recharge projects. Task 2 conducts high level feasibility by mapping areas of potentially high recharge based on compiling existing data (soil, near surface geology, water table, topography, etc.), georeferencing, and integrating surface and subsurface data to derive a spatial distribution of MAR/stormwater recharge suitability values. Areas with high recharge potential will be ground-truthed with tTEM geophysics to determine site specific recharge capacity and refined mapping, if needed.
- **Assessing Feasibility of Reservoir Reoperation** – Shifting reservoir releases from the summer to winter/spring may have groundwater recharge, decreased evaporation, and endangered species benefits, and could support other groundwater sustainability projects in the Salinas Valley. Feasibility and potential benefits will be assessed through 2 tasks: Task 3 designs and models reservoir reoperation scenarios to assess recharge and available diversion water. Task 4 conducts field studies of recharge (temporary stream gauging and temperature probes) near Somavia Road, an area of unquantified recharge that potentially affects reservoir management.
- **Updating the Water Availability Analysis for the 11043 Diversion Project** – One project that would bring water to the Eastside Subbasin for recharge is the 11043 Diversion of natural flows off the Salinas River. This permit only diverts water during high flows, so could greatly be affected by climate change and increased droughts. This analysis conducts a water availability analysis based on climate change scenarios to determine the viability and potential size of an 11043 Diversion project.

<u>GSPs, communities served, minimum thresholds, and measurable objectives</u> – The Eastside, Forebay, Langley, and Upper Valley Subbasins are almost entirely dependent on groundwater. The Langley Area, located in the northern part of the Valley, consists primarily of small water systems and domestic users, with a few agricultural users close to the southern subbasin border. Agriculture is the dominant water user in the Eastside, Forebay, and Upper Valley Subbasins. All cities and communities in the Valley rely on groundwater, with the largest city, Salinas, partially located in the Eastside Subbasin. Domestic wells and small drinking water systems that support the agricultural farming community are spread out over these 4 subbasins. Groundwater supports GDEs along the Salinas River, Arroyo Seco River, Gabilan Creek, and potentially some small tributaries. Recharge will directly or indirectly benefit all groundwater users by raising groundwater levels.

SVBGSA assessed conditions in the 4 subbasins and worked with subbasin-specific interested parties to develop the SMC measurable objectives (MOs) and minimum thresholds (MTs) appropriate for each subbasin. The SMC in all 4 subbasin GSPs align, setting groundwater levels, groundwater storage by proxy, and interconnected surface water MOs to recent high groundwater levels and MTs to recent low groundwater levels. Groundwater recharge will directly address the groundwater level, groundwater storage, and interconnected surface water SMC. Groundwater recharge will also address some concerns about existing groundwater degradation. The degradation of groundwater quality SMC seeks to avoid degradation caused by a direct result of GSA groundwater management action(s); a recharge project will not only avoid degradation, but enhance groundwater quality. Recharge will furthermore improve conditions to avoid or slow subsidence and seawater intrusion. All subbasins want no subsidence or seawater intrusion. The seawater intrusion front within the 180/400-Foot Aquifer Subbasin is within 0.7 and 2.3 miles of the Eastside and Langley Subbasins, respectively, making a

coordinated approach to groundwater levels near the subbasin borders particularly important for preventing further seawater intrusion. These SMC are aimed at preventing groundwater conditions from degrading beyond historical conditions and levels, and they aim for recent high groundwater levels in order to protect the communities, industries, and ecosystems dependent on groundwater.

How Component 4 furthers GSP implementation timeline and feasibility – Component 4 is integral for reaching and maintaining sustainability across the SVBGSA subbasins because it conducts key feasibility steps needed for decisions on how and where to develop recharge projects to help reach sustainability. The GSP implementation timeline is to conduct project selection, planning, and funding in the first 2 years after GSP submittal, and then begin implementation.

Component 4 tasks further GSP project feasibility by providing critical feasibility data for potential recharge projects. These data and analyses are necessary in both Eastside and Langley Subbasins, which have undesirable results for groundwater levels and groundwater storage in Water Year 2021 and previous years. Groundwater levels have been declining and have not rebounded after droughts. This has led to water supply issues for some small water systems and domestic wells, many of which are underrepresented communities. Component 4 builds on updated data and modeling from Component 2 and assesses specific recharge projects and management actions, which will enable informed decision making on how to reach sustainability and engage interested parties through Component 3. These subbasins need quick action to stop groundwater level declines. In the Forebay and Upper Valley Subbasins, groundwater levels have historically rebounded after droughts; however, recharge in those subbasins along the Salinas River is critical during multi-year droughts and for the groundwater sustainability of adjacent subbasins.

Component 4 needs, goals, and objectives and how proposed tasks will meet them – Component 4 meets specific needs and goals listed in various GSPs regarding groundwater recharge. The Component 4 **goal** is to assess the feasibility of groundwater recharge projects and their ability to help the Eastside, Langley, Forebay, and Upper Valley reach and maintain groundwater sustainably, as evidenced by avoiding undesirable results and operating within the sustainable yield. This operationalizes the overarching GSP goal to balance the needs of all water users and ensure long-term viable water supplies, while maintaining the unique cultural, community, and business aspects of each of the subbasins.

The **objectives** of Component 4 are: (1) to reduce evapotranspiration of groundwater through planning for removal of *Arundo donax* and other species; (2) map areas of high recharge to identify potential locations for groundwater recharge projects; (3) assess the potential groundwater benefits from reservoir reoperation; and (4) provide an updated water availability analysis to determine viability of river diversion projects.

Component 4 addresses GSA groundwater recharge **needs**, including:

- **Decreased evapotranspiration and increased recharge along the Salinas River** – The invasive non-native *Arundo donax* has overtaken 1,500 acres of the Salinas Valley Basin, one of the largest infestations in California. Arundo is a giant cane that grows in dense, 20-30-foot-tall stands, crowding out native species, altering the natural river channel, and compromising streambed conditions appropriate for steelhead and flood control. Arundo's high evapotranspiration rates in areas of groundwater-surface water interconnection reduce groundwater recharge rates. To continue existing programs to eradicate Arundo, mapping needs to be updated and permits renewed. To assess groundwater benefits of Arundo removal and stream channel maintenance, modeling of recharge needs to be completed to assess groundwater benefits. Task 5 addresses these needs by mapping Arundo, completing hydraulic modeling with HEC-RAS to evaluate percolation, and preparing and submitting permits.
- **Mapping of areas of potential recharge to locate potential projects** – An estimate of potential recharge rates is needed to site and design recharge projects. Task 2 addresses this need, and furthers 2 projects that rely on off-stream recharge by identifying potential project locations: Managed Aquifer Recharge (MAR) of Overland Flow in the Eastside and Langley GSPs and Decentralized Stormwater Recharge in the Langley Area GSP. This task conducts high level feasibility by mapping areas of high recharge based on compiling existing data (soil, near surface geology, water table, topography, etc.), georeferencing, and integrating surface and subsurface data to derive a spatial distribution of MAR/stormwater recharge suitability values. Identified areas of high recharge will be ground-truthed with tTEM geophysics to determine site specific recharge capacity and refine mapping, if needed.
- **Feasibility Assessment of Reservoir Reoperation** – An assessment of potential benefits from reservoir reoperation is needed before developing any reservoir reoperation plan. Currently, MCWRA makes reservoir releases primarily in the summer to get water to the coastal seawater intruded area to be used instead of pumping. Shifting reservoir releases from the summer to winter/spring may have groundwater recharge, decreased evaporation, and endangered species benefits, and could support 180/400 Aquifer Storage and Recovery, the Eastside Irrigation Supply Project, and CSIP Expansion. Feasibility and potential benefits will be assessed through: (1) Task 3 that designs and models reservoir reoperation scenarios to assess recharge and available diversion water, and (2) Task 4 that conducts field studies of recharge (temporary stream gauging and temperature probes) by Somavia Road, an area of unquantified recharge that potentially affects reservoir management.
- **An updated assessment of water availability for diversion to the Eastside Subbasin** – An updated assessment of potential source water is needed to determine the viability and size of the 11043 Diversion Project, which is the

only project that would bring additional surface water into the Eastside Subbasin for recharge. This existing permit only diverts Salinas River water during high flows, so could greatly be affected by climate change and increased droughts. This analysis conducts a water availability analysis based on climate change scenarios to determine the viability and potential size of an 11043 Diversion project.

2. Project Benefits / Coordination Efforts

Coordination: SVBGSA is coordinating Component 4 with ASGSA and MCWRA, who operates the reservoirs, river diversions, and CSIP. Agencies meet regularly. For the Multi-benefit Stream Channel Improvements, SVBGSA also coordinates closely with RCDMC, who implements the existing Arundo removal and River Management Unit Association whose Stream Maintenance Program this project builds on.

Component 4 is coordinated with the other components of this grant, building on data expansion and modeling improvements (Component 2) and providing feasibility on recharge projects that interested parties will use to determine how to reach sustainability (Component 3). It is complementary to the other project and management action feasibility and implementation efforts (Components 5, 6, 7, 8). This grant for the Eastside, Forebay, Langley, and Upper Valley Subbasins is also coordinated with the Round 1 SGMA Implementation Grant SVBGSA received for the critically over-drafted 180/400-Foot Aquifer Subbasin and the SVBGSA/MCWD GSA Round 2 SGMA Implementation Grant application for the Monterey Subbasin.

Addressing DWR Comments and Filling Data Gaps: Component 4 assists with feasibility of GSP implementation, not with addressing DWR comments or filling data gaps.

Assisting with Feasibility of GSP Implementation: The Eastside, Forebay, Langley, and Upper Valley GSPs each included a list of potential projects and management actions that could be implemented to reach and maintain sustainability; however, further scoping is needed to assess their feasibility and determine which to implement. Component 4 tasks complete feasibility steps on the main projects and management actions that could increase groundwater recharge: Task 5 maps and models Arundo removal and drafts permitting documents to enhance groundwater recharge along the Salinas River in the Forebay and Upper Valley Subbasins to advance the Multi-Benefit Stream Channel Improvement Project. Task 2 maps and conducts geophysical surveys to identify areas of high recharge. Task 3 conducts feasibility analysis of reservoir reoperation to assess potential additional recharge and diversion water. To contribute to reservoir reoperation feasibility and potential feasibility of the Eastside Irrigation Supply Project and CSIP expansion, Task 4 conducts field studies of existing recharge in an area of unquantified recharge that potentially affects reservoir management. Finally, Task 6 assesses potential water available for the 11043 Diversion project to the Eastside Subbasin – a needed feasibility step before undertaking a feasibility study. Together, the tasks under Component 4 complete initial feasibility on the main projects and management actions that could increase groundwater recharge in the Eastside, Forebay, Langley, and Upper Valley Subbasins.

3. Maps Included

Figure 1 shows the area covered by this Component, including the 4 groundwater subbasins and management areas. Figure 2 shows the land use. Figure 3 includes the communities that will benefit, shown by both cities and drinking water systems. Figure 4 shows underrepresented communities (URCs) and severely disadvantaged communities (SDACs) that will benefit from this Component. Figure 5 shows domestic well density. Figure 6 shows current groundwater conditions. Figure 8 shows Component 4 tasks and the subbasins they benefit.

4. Benefit to URC and/or SDACs

Groundwater recharge projects will improve groundwater conditions in the project area, which will benefit residents who depend on groundwater for drinking water and/or are employed in the agricultural sector. Since nearly the entire population of the project area depends on groundwater for drinking water and much of the population is employed in the agricultural sector, Component 4 benefits virtually all residents of the project area, including many who live in URCs and SDACs. Letters from Senator Laird, Assemblymember Rivas, County Supervisors Alejo and Lopez, CHISPA and the Greater Monterey IRWM Group reflect the broad positive support across the Valley from leaders committed to serving their underrepresented communities and the region as a whole.

Of the nearly 200,000 residents of the 4 subbasins, roughly 75% live in a URC of at least one category (DACs, SDACs, EDAs, EnvDACs, Fringe Areas, and Tribes), with 48% living in DACs, 12% in SDACs, 61% in EDAs, and 40% in Fringe Areas (some areas overlap). URCs also cover a large percentage of the area of the 4 subbasins, with roughly 93% of the total project area covered by a URC of any category, including 34% covered by DACs and 80% by EDAs. Therefore, between 75% and 93% of the grant amount for Component 4 will benefit URCs.

Many of the URCs and SDACs in the project area are concentrated in the Eastside and Langley Subbasins, where residents are particularly vulnerable to chronic declines in groundwater levels. Arundo removal and mapping of potential recharge areas will improve recharge along the Salinas River, which is the main area of recharge for the aquifer system that URCs and DACs in the Forebay and Upper Valley Subbasins depend on for groundwater. Task 6 evaluates a potential new water source that would improve access to water for groundwater-dependent communities in the Eastside Subbasin, including

the community of Chualar, which is a DAC; the City of Salinas, much of which is comprised of DACs, SDACs, EDAs, EnvDACs, and Fringe Areas; and the City of Gonzales, which is an EDA and part of which is an SDAC. Letters from the Cities of Salinas and Gonzales confirm their support of the GSP implementation and the positive impacts to underrepresented communities. Rural areas in the southern part of the Langley Area Subbasin are also DACs or EDAs would benefit from recharge projects and improved groundwater conditions evaluated in Component 4 considering their reliance on agriculture, as would the rural areas of the Eastside Subbasin, almost all of which are either DACs or Fringe Areas.

The Forebay and Upper Valley subbasins also contain URCs and SDACs. While these subbasins do not face acute concerns related to chronic declines in groundwater levels, they are vulnerable to declining groundwater levels during drought; therefore, residents of URCs in these subbasins, nearly all of whom depend on groundwater for drinking or work in the agricultural sector, would benefit from improved groundwater conditions. Component 4 will support improved groundwater levels in the Forebay and Upper Valley Subbasins through continued removal of *Arundo donax* and potentially through reservoir reoperation. These higher groundwater levels will improve access to water, in the groundwater-dependent communities of Soledad, Greenfield, and King City, which are mostly comprised of DACs and include some SDACs. DACs. These improvements will also help much of the rural areas of the Forebay Subbasin and Upper Valley Subbasin. Letters from the cities of Soledad and King reflect their support.

5. Positive impact associated with small water systems or private shallow domestic wells

The project area includes a high concentration of domestic wells and many small public water systems that are dependent on groundwater for drinking water. Component 4 conducts feasibility studies for recharge projects that will help raise groundwater levels, which will improve access to water for small water system wells and shallow private domestic wells. Tasks 3, 4, and 5 focus primarily on enhancing recharge along the Salinas River, which is the main area of recharge for the aquifer system. Task 2 focuses on strategically identifying potential areas of recharge in the overdrafted basins, addressing the heterogeneity of the subsurface and high prevalence of clay. Task 6 completes a water availability analysis for a potential new source water for the Eastside Subbasin to ensure that project assessment accounts for anticipated impacts from climate change. Undertaking recharge feasibility studies in this holistic manner will help develop a more realistic assessment of options for reaching sustainability and ensuring access to water for small water systems and private domestic wells.

Component 4 will help meet the needs of the State Water Board's SAFER program by conducting feasibility for groundwater recharge projects in the project area. The SAFER program identifies public water systems and domestic wells at risk of failing to provide safe and affordable drinking water. Of the 1,150 shallow domestic wells (depth <450 ft.) in the project area, 763 are in sections identified as having a water quality risk of "High" according to the SAFER Aquifer Risk map. Of the 142 small public water systems in the project area, 104 are in sections with a water quality risk of "High" according to the SAFER Aquifer Risk map. The recharge feasibility studies conducted in Component 4 will benefit these small water systems and domestic well owners by leading to improvements in the management of groundwater conditions, which will help prevent further water quality degradation and maintain access to safe drinking water.

6. How Component 4 addresses the Human Right to Water (AB 685 Section 106.3)

Component 4 addresses the Human Right to Water by assessing where and how groundwater levels can be improved through increased groundwater recharge, which will help water systems that are currently failing or at risk of failing to provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. There are 8 community water systems in the project area that DWR has identified as currently failing to meet Human Right to Water standards, spread across the subbasins, and additional systems that are "At-Risk." Additionally, a large percentage of the population of the project area lives in and around Salinas, and the water systems serving Salinas are in-compliance with Human Right to Water standards; however, Component 4 can help ensure access to groundwater for these water systems so that they can continue to stay in compliance.

The increased understanding of the benefit of these projects to groundwater conditions gained through the feasibility studies will assist SVBGSA with groundwater management around these water systems, which will help the systems meet Human Right to Water standards. For example, mapping areas of higher recharge will enhance the understanding of subsurface conditions around those systems and enable modeling of which actions will best support access to drinking water.

COMPONENT 5. DEMAND MANAGEMENT

1. Component 5 Description

Component 5 advances concepts and plans for potential demand management in the Eastside, Forebay, Langley, and Upper Valley Subbasins, in ways appropriate for each subbasin. Demand management measures have been identified in the GSPs as potential management actions that could be undertaken to reach or maintain sustainability. The Salinas Valley imports no water from outside the Valley, and therefore demand management measures are important components of Salinas Valley GSPs to avoid sole reliance on supply side management actions and projects. The need for and design of demand management measures are unique for each subbasin based on groundwater conditions, water demands, and discussions within subbasin implementation committees. The GSPs include conceptual management actions and projects that could be implemented in each subbasin, taking a 3-prong approach of demand management, groundwater recharge, and alternative water supplies. Component 5 advances planning for demand management in the 4 subbasins included in the grant to enable assessment and comparison of which projects and management actions to move forward. This work builds on data expansion and modeling under Component 2 and interested party engagement in Component 3. Components 4, 5, and 6 are complementary and will be integrated into the Project Update Report for ease of comparison. Component 5 includes:

- **Planning for Demand Management in Overdrafted Subbasins -** The Eastside and Langley Subbasins are experiencing chronic declines of groundwater levels. The GSPs include 2 demand management actions: (1) Pumping Allocations and Controls; and (2) Fallowing, Fallow Bank, and Agricultural Land Retirement. Task 2 plans for these management actions through robust, facilitated working groups meetings with interested parties on demand management measures, options, and expected results. Support for these meetings will include legal analyses of water rights in the context of demand management, modeling of potential options for reducing demand, and engagement of water and land planning agencies.
- **Establishing SMC Technical Advisory Committees (SMC TACs) in Non-overdrafted Subbasins –** The Forebay and Upper Valley Subbasins are not currently experiencing chronic declines in groundwater levels but do experience drastic declines during droughts and acknowledge the need to be responsive if groundwater levels decline in the future. To do so, the GSPs call for the establishment of SMC TACs to annually review groundwater conditions and assess whether they warrant action, such as demand management. Task 3 supports initial establishment and convening of the SMC TACs to develop guiding principles and identify the groundwater conditions that trigger the need to initiate demand management measures or projects.
- **Assessing Inter-subbasin Impacts of Demand Management –** SVBGSA takes a subbasin-by-subbasin approach to establishing appropriate demand management measures, while also acknowledging that subbasins are hydraulically connected. SVBGSA will use the Salinas Valley Integrated Hydrologic Model to assess the impacts of potential demand management actions on groundwater conditions in adjacent subbasins. Task 3 integrates subbasin-specific demand management and addresses transboundary demand management if needed. If there is need for 2 adjacent subbasins to both implement demand management measures, this Task will assess the joint interaction of impacts to groundwater conditions and inter-subbasin flow. Additionally, after GSP submittal, the Deep Aquifers Study found that the Deep Aquifers exist in 5 of the 6 Salinas Valley subbasins, including the Eastside, Forebay, and Langley Subbasins. Task 3 supports development of Deep Aquifers demand management concepts, in collaboration with other SVBGSA subbasins.

<u>GSPs, communities served, minimum thresholds, and measurable objectives:</u>

The Eastside, Forebay, Langley, and Upper Valley Subbasins are almost entirely dependent on groundwater. The Langley Area, located in the northern part of the Valley, consists primarily of small water systems and domestic users, with a few agricultural users close to the southern subbasin border. Agriculture is the dominant water user in the Eastside, Forebay, and Upper Valley Subbasins. All cities and communities in the Valley rely on groundwater, with the largest city, Salinas, partially located in the Eastside Subbasin. Domestic wells and small drinking water systems that support the agricultural farming community are spread out over these 4 subbasins. Groundwater supports GDEs along the Salinas River, Arroyo Seco River, Gabilan Creek, and potentially some small tributaries. Demand management could directly or indirectly benefit all groundwater users by reducing groundwater level declines.

SVBGSA assessed conditions in the 4 subbasins and worked with subbasin-specific interested parties to develop the SMC measurable objectives (MOs) and minimum thresholds (MTs) appropriate for each subbasin. The SMC in all 4 subbasin GSPs align, setting groundwater levels, groundwater storage by proxy, and interconnected surface water MOs to recent high groundwater levels and MTs to recent low groundwater levels. Demand management is one action that will maintain or achieve the groundwater level and groundwater storage SMC. The degradation of groundwater quality SMC seeks to avoid degradation caused by a direct result of GSA groundwater management action(s). Demand management will also help avoid or slow subsidence and seawater intrusion in the subbasins that may be impacted by these two criteria. The seawater intrusion front is within 0.7 and 2.3 miles of the Eastside and Langley Subbasins, respectively, making a coordinated approach to groundwater levels near the subbasin borders particularly important for preventing further seawater

intrusion. These SMC are aimed at preventing groundwater conditions from degrading beyond historical conditions and levels, and they aim for recent high groundwater levels in order to protect the communities, industries, and ecosystems dependent on groundwater.

How Component 5 furthers GSP implementation timeline and feasibility:
Component 5 is integral for reaching and maintaining sustainability across the SVBGSA subbasins because it plans for demand management. The GSP implementation timeline is to conduct project selection, planning, and funding in the first 2 years after GSP submittal, and then begin implementation.

Both Eastside and Langley subbasins experienced undesirable results for groundwater levels and groundwater storage in Water Year 2021 and previous years. Groundwater levels have been declining and have not rebounded after droughts. This has led to water supply issues for small water systems and domestic wells, many of which are underrepresented communities. Component 5 builds on updated data and modeling from Component 2 and facilitates planning for pumping allocations and controls, which will enable informed decision making on how to reach sustainability and engage interested parties through Component 3. These subbasins need quick action to stop groundwater level declines. In the Forebay and Upper Valley Subbasins, groundwater levels have historically rebounded after droughts; however, the SMC TACs in this Component provide a mechanism to continually assess groundwater conditions and pre-determine triggers for when demand management or other action is needed, allowing for a faster management response in future droughts.

Component 5 needs, goals, and objectives and how proposed tasks will meet them:
Component 5 meets SVBGSA needs for demand management planning. The Component 5 **goal** is to plan for demand management and its ability to help the Eastside, Langley, Forebay, and Upper Valley reach and maintain groundwater sustainably, as evidenced by avoiding undesirable results and operating within the sustainable yield. This operationalizes the overarching GSP goal to balance the needs of all water users and ensure long-term viable water supplies, while maintaining the unique cultural, community, and business aspects of each of the subbasins.

The **objectives** of Component 5 are: (1) plan for demand management in overdrafted subbasins; (2) establish SMC TACs in non-overdrafted subbasins that will identify when conditions warrant demand management; (3) plan for demand management in overdrafted aquifers that extend through multiple subbasins; and (4) assess intersubbasin impacts of demand management.

Component 5 addresses GSA demand management **needs**, including:

- **Planning for demand management in overdrafted subbasins -** The Eastside and Langley Subbasins need to take quick action to stop and reverse groundwater level declines. SVBGSA recognizes that demand management is an important groundwater management tool, and more planning is needed to determine the extent to which sustainability will be reached through other projects and management actions versus through demand management. Establishment of robust, accepted pumping allocations and controls takes time and requires working group meetings, legal analyses, groundwater modeling, and inter-agency coordination. Task 2 undertakes this work to establish pumping allocations and consider how pumping controls could be implemented.
- **Triggers for demand management or other action in non-overdrafted subbasins –** The Forebay and Upper Valley Subbasins are not in need of immediate action on demand management; however, they need to determine the point at which groundwater conditions would trigger action so that groundwater levels do not fall to minimum thresholds. Task 3 completes this with the establishment of SMC TACs and their initial work to develop groundwater level triggers for additional demand management measures or projects.
    - **Assessment of inter-subbasin impacts of demand management –** Salinas Valley subbasins are hydraulically connected. Since SVBGSA takes a subbasin-by-subbasin approach to establishing appropriate demand management measures, there needs to be assessment of inter-subbasin impacts of demand management. This is critical for managing the Valley as a whole. Task 4 addresses the impact of demand management on adjacent subbasins, the joint interaction of demand management in adjacent subbasins, and co-development of demand management between subbasins. This is particularly needed for the Deep Aquifers, which span 5 of the 6 SVBGSA subbasins.

2. Project Benefits / Coordination Efforts

Coordination: SVBGSA is coordinating Component 5 with ASGSA, as a partner GSA in the Forebay Subbasin, and Monterey 1 Water and MCWRA, who own and operate the reservoirs, river diversions, and CSIP. Agencies meet regularly. SVBGSA will also coordinate demand management work with the County, cities, and CPUC regulated water providers. For Task 3 work on demand management for the Deep Aquifers, SVBGSA will work closely with the recently established agencies working group for Deep Aquifers Management. Subbasin-specific planning occurs through the Subbasin Implementation Committees, and coordination between subbasins is completed by the Advisory Committee.

Component 5 is coordinated with the other components of this grant, building on data expansion and modeling improvements (Component 2) and providing the planning for demand management that interested parties will use to determine how to reach sustainability (Component 3). It is complementary to the other project and management action

feasibility and implementation efforts (Components 4, 6, 7, 8). This grant for the Eastside, Forebay, Langley, and Upper Valley Subbasins is also coordinated with the Round 1 SGMA Implementation Grant SVBGSA received for the critically over-drafted 180/400-Foot Aquifer Subbasin and the SVBGSA/MCWD GSA Round 2 SGMA Implementation Grant application for the Monterey Subbasin.

Addressing DWR Comments and Filling Data Gaps: Component 5 assists with feasibility of GSP implementation, not addressing DWR comments or filling data gaps.

Assisting with Feasibility of GSP Implementation: The Eastside, Forebay, Langley, and Upper Valley GSPs each included a list of potential projects and management actions that could be implemented to reach and maintain sustainability; however, further scoping is needed to assess their feasibility and determine which to implement. Component 5 tasks plan for demand management appropriate to each subbasin. In the Eastside and Langley Subbasins, Task 2 integrates and develops 2 management actions in the GSP: (1) Pumping Allocations and Controls and (2) Fallowing, Fallow Bank, and Agricultural Land Retirement. This provides critical planning steps that will inform assessment of which projects and management actions to implement. In the Forebay and Upper Valley Subbasins, SMC TACs establish objective triggers for when demand management or other action is needed and set up regular assessment of groundwater conditions. Assessment of inter-subbasin impacts of demand management enables SVBGSA to take subbasin-specific approaches to demand management while managing groundwater conditions in the Valley as a whole.

3. Maps Included

Figure 1 shows the area covered by this Component, including the 4 groundwater subbasins and management areas. Figure 2 shows the land use. Figure 3 includes the communities that will benefit, shown by both cities and drinking water systems. Figure 4 shows underrepresented communities (URCs) and severely disadvantaged communities (SDACs) that will benefit from this Component. Figure 5 shows domestic well density. Figure 6 shows current groundwater conditions. Figure 9 shows Component 5 tasks and the subbasins they benefit.

4. Benefit to URC and/or SDACs

Demand management will maintain or improve groundwater conditions in 4 subbasins, which will benefit residents who depend on groundwater for drinking water and/or are employed in the agricultural sector. Since nearly the entire population of the project area depends on groundwater for drinking water and much of the population is employed in the agricultural sector, Component 5 benefits virtually all residents of the 4 subbasins, including many who live in URCs and SDACs. Letters from Senator Laird, Assemblymember Rivas, County Supervisors Alejo and Lopez, CHISPA and the Greater Monterey IRWM Group reflect the broad positive support across the Valley from leaders committed to serving their underrepresented communities and the region as a whole.

Of the nearly 200,000 residents of the 4 subbasins, roughly 75% live in a URC of at least one category (DACs, SDACs, EDAs, EnvDACs, Fringe Areas, and Tribes), with 48% living in DACs, 12% in SDACs, 61% in EDAs, and 40% in Fringe Areas (some areas have overlapping categories). URCs also cover a large percentage of the area of the 4 subbasins, with roughly 93% of the total project area covered by a URC of any category, including 34% covered by DACs and 80% by EDAs. Therefore, between 75% and 93% of the grant amount for Component 5 will benefit URCs.

Many of the URCs and SDACs in the project area are concentrated in the Eastside and Langley Subbasins, where residents are particularly vulnerable to chronic declines in groundwater levels. Component 5 will help these subbasins pump within the sustainable yield, effectively assisting the community of Chualar, which is a DAC; the City of Salinas, much of which is comprised of DACs, SDACs, EDAs, EnvDACs, and Fringe Areas; and the City of Gonzales, which is an EDA and part of which is an SDAC. Letters from the Cities of Salinas and Gonzales confirm their support of the GSP implementation and the positive impacts to underrepresented communities. Rural areas in the southern part of the Langley Area Subbasin are also DACs or EDAs and would benefit from improved groundwater conditions considering their reliance on agriculture, as would the rural areas of the Eastside Subbasin, almost all of which are either DACs or Fringe Areas.

The Forebay and Upper Valley subbasins also contain URCs and SDACs. While these subbasins do not face acute concerns related to chronic declines in groundwater levels, they are vulnerable to declining groundwater levels during drought; therefore, residents of URCs in these subbasins, nearly all of whom depend on groundwater for drinking or work in the agricultural sector, would benefit from improved groundwater conditions. Component 5 initiates the planning process for determining when demand management is needed to protect residents of Soledad, Greenfield, and King City, which are mostly comprised of DACs and include some SDACs. DACs also cover much of the rural areas of the Forebay Subbasin, and EDAs cover the entirety of the Upper Valley Subbasin and most of the Forebay Subbasin, suggesting SMC TACs initiated under Component 5 will almost entirely benefit URCs in these subbasins. Letters from the cities of Soledad and King reflect their support.

5. **Positive impact associated with small water systems or private shallow domestic wells**

The project area includes a high concentration of domestic wells and many small public water systems that are dependent on groundwater for drinking water. Component 5 provides the foundation for either developing demand management strategies (Eastside and Forebay Subbasins), or establishing the structure and process for annually reviewing groundwater conditions and assessing if demand management is necessary (Forebay and Upper Valley Subbasins.) This will improve access to drinking water for small water system wells and private domestic wells.

Component 5 will help meet the needs of the State Water Board's SAFER program by developing plans to avoid pumping in excess of the sustainable yield, and maintaining groundwater elevations. The SAFER program identifies public water systems and domestic wells at risk of failing to provide safe and affordable drinking water. Of the 1,150 shallow domestic wells (depth <450 ft.) in the project area, 763 are in sections identified as having a water quality risk of "High" according to the SAFER Aquifer Risk map, since they are in sections with MCL exceedances. Of the 142 small public water systems in the project area, 104 are in sections with a water quality risk of "High" according to the SAFER Aquifer Risk map. Since all these water systems are dependent on groundwater for their drinking supplies, additional data and modeling that will help make improvements to management of groundwater conditions which help prevent further water quality degradation and maintain access to safe drinking water.

6. **How Component 3 addresses the Human Right to Water (AB 685 Section 106.3)**

Component 5 addresses the Human Right to Water by developing plans to avoid pumping in excess of the sustainable yield, thereby helping water systems that are currently failing or at risk of failing to provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. There are 8 community water systems in the project area that DWR has identified as currently failing to meet Human Right to Water standards, spread across the subbasins, and additional systems that are "At-Risk." Additionally, a large percentage of the population of the project area lives in and around Salinas, and the water systems serving Salinas are in-compliance with Human Right to Water standards; however, Component 5 can improve groundwater conditions and improve access to drinking water for water systems so that they can continue to stay in compliance. Developing demand management measures provides tools to address water level declines, which will assist SVBGSA with groundwater management around these water systems, which will help the systems meet Human Right to Water standards.

COMPONENT 6. ALTERNATE SUPPLY FEASIBILITY AND CEQA

1. Component 6 Description

Component 6 undertakes feasibility work for the 2 main alternative supply projects in the Eastside and Langley Subbasins of the Salinas Valley. The Salinas Valley imports no water from outside the Valley, and therefore taking advantage of any potential alternative supply is critical for reaching sustainability. Potential alternative supply projects are unique for each subbasin based on location of potential source water, distribution system, and centralization of water needs. The GSPs include conceptual projects that could be implemented in each subbasin to reach sustainability, taking a 3-prong approach of demand management, groundwater recharge, and alternative water supplies. Component 6 advances the scoping and feasibility of the main alternative supply projects in the 2 overdrafted subbasins. These feasibility studies will enable SVBGA and interested parties to conduct an informed assessment and comparison of projects and management actions. This work builds on data expansion and modeling under Component 2 and interested party engagement in Component 3. Components 4, 5, and 6 are complementary and will be integrated into the Project Update Report for ease of comparison. Component 6 includes:

- **Advancing the Seawater Intrusion Project through CEQA to Bring Desalted Water to the Eastside Subbasin** – One of the key regional projects that could stop seawater intrusion and provide alternative municipal supplies to be used in lieu of groundwater extraction is the Seawater Intrusion Project. The Project consists of a line of extraction wells that form a hydraulic barrier to seawater intrusion and desalting of the extracted brackish groundwater. The Project will both address the seawater intrusion that is advancing toward the Eastside Subbasin and City of Salinas and provide an alternative water supply for the City of Salinas a. Component 6 builds on Phase I feasibility being undertaken with the 180/400-Foot Aquifer Subbasin Round 1 SGMA Implementation Grant and Phase II feasibility in the Monterey Subbasin Round 2 SGMA Implementation Grant application. Task 1 completes the Phase I feasibility by adding 10% design of the distribution system needed to bring desalted water to the City of Salinas and funds the Phase III CEQA analysis, an essential step to move the Project forward.
- **Conducting Initial Feasibility of Expanding the Castroville Seawater Intrusion Project (CSIP) to the Eastside and Langley Subbasins** – CSIP delivers a combination of recycled, river, and groundwater to supply irrigation water in lieu of groundwater extraction within and near the seawater-intruded area. CSIP has helped slow seawater intrusion; however, it has not fully halted seawater intrusion. The Eastside and Langley Subbasins are experiencing declining groundwater levels and expanding CSIP to those Subbasins could provide an alternative supply that reduces extraction. Task 3 conducts initial feasibility for CSIP expansion, including assessing system constraints, options for the area to be expanded to, annexation policies, source water options, and refined cost estimates. This feasibility work will provide critical information regarding options for reducing agricultural extraction, to be considered in conjunction with demand management or other options.

<u>GSPs, communities served, minimum thresholds, and measurable objectives</u> – The Eastside and Langley Subbasins are almost entirely dependent on groundwater. The Langley Area, located in the northern part of the Valley, consists primarily of small water systems and domestic users, with a few agricultural users close to the southern subbasin border. The Eastside Subbasin is primarily agricultural and contains part of the largest city in the Salinas Valley, Salinas, whose drinking water is threatened by advancing seawater intrusion. All cities and communities in the Valley rely on groundwater. Domestic wells and small drinking water systems that support the agricultural farming community are spread out over these 2 subbasins. Groundwater may support GDEs along Gabilan Creek and some small tributaries.

SVBGSA assessed conditions in each SVBGSA subbasin and worked with subbasin-specific interested parties to develop the SMC measurable objectives (MOs) and minimum thresholds (MTs) appropriate for each subbasin. The SMC in all subbasin GSPs align, setting groundwater levels, groundwater storage by proxy, and interconnected surface water MOs to recent high groundwater levels and MTs to recent low groundwater levels. Replacing groundwater pumping with alternative supplies will directly address the groundwater level, groundwater storage, and interconnected surface water SMC. The degradation of groundwater quality SMC seeks to avoid degradation caused by a direct result of GSA groundwater management action(s). Providing alternative supplies will furthermore improve conditions to avoid or slow subsidence and seawater intrusion. All subbasins want no subsidence or seawater intrusion. The seawater intrusion front within the 180/400-Foot Aquifer Subbasin is within 0.7 and 2.3 miles of the Eastside and Langley Subbasins, respectively, making a coordinated approach to groundwater levels near the subbasin borders particularly important for preventing further seawater intrusion. These SMC are aimed at preventing groundwater conditions from degrading beyond historical conditions and levels, and they aim for recent high groundwater levels in order to protect the communities, industries, and ecosystems dependent on groundwater.

<u>How Component 6 furthers GSP implementation timeline and feasibility</u> – Component 6 is integral for reaching sustainability in the Eastside and Langley Subbasins because it conducts key feasibility steps on alternative supply projects needed for decisions on how and where to develop projects and management actions to reach sustainability. The GSP implementation timeline is to conduct project selection, planning, and funding in the first 2 years after GSP submittal, and then begin implementation.

Both Eastside and Langley Subbasins experienced undesirable results for groundwater levels and groundwater storage during Water Year 2021 and previous years. Groundwater levels have been declining and have not rebounded after droughts. This has led to water supply issues for small water systems and domestic wells, many of which supply underrepresented communities. Component 6 builds on updated data and modeling from Component 2 and assesses specific alternative supply projects, which will enable informed decision making on how to reach sustainability and engage interested parties through Component 3. These subbasins need quick action to stop groundwater level declines.

Component 6 needs, goals, and objectives and how proposed tasks will meet them – Component 6 meets SVBGSA needs for feasibility of alternative supply projects. The Component 6 **goal** is to assess the feasibility of alternative supply projects and their ability to help the Eastside and Langley Subbasins reach groundwater sustainably, as evidenced by avoiding undesirable results and operating within the sustainable yield. This operationalizes the overarching GSP goal of balancing the needs of all water users and ensuring long-term viable water supplies, while maintaining the unique cultural, community, and business aspects of each of the subbasins.

The **objectives** of Component 6 are: (1) to advance the Seawater Intrusion Project through CEQA, resulting in a shovel-ready project; and (2) to determine potential viability, extent, and cost of CSIP expansion.

Component 6 addresses GSA groundwater recharge **needs**, including:

- **A reliable municipal water supply to reduce extraction while stopping seawater intrusion** – The City of Salinas' wells are threatened by advancing seawater intrusion in the 180/400-Foot Aquifer Subbasin and declining groundwater levels in the Eastside Subbasin. In addition, the northern Eastside Subbasin has a pumping depression. Addressing groundwater levels in this area is needed to meet groundwater levels and storage SMC, as well as prevent intrusion from reaching the Eastside Subbasin. The Seawater Intrusion Project is a regional solution that would stop seawater intrusion with a hydraulic extraction barrier and provide desalted water as an alternative supply for the City of Salinas, among other areas. Task 2 completes initial design on the distribution network to Salinas and supports the CEQA documentation.
- **Assessing feasibility of expanding CSIP to the Eastside and Langley Subbasins** – Seawater intrusion has compromised water supplies in both the 180-Foot and 400-Foot Aquifers of the 180/400-Foot Aquifer Subbasin and is advancing toward the Eastside and Langley Subbasins. Providing irrigation water through CSIP has slowed seawater intrusion since its development in 1998; however, it has not halted seawater intrusion. In addition, groundwater levels in the Eastside and Langley Subbasins are declining. Expanding CSIP could potentially provide an alternative source of irrigation water to agricultural areas in the northern part of Eastside and southern part of Langley Subbasin. Assessing the viability of CSIP expansion requires assessing system constraints, annexation policies and fees, source water, and costs. Task 3 undertakes this work to enable comparison to other options to reach sustainability.

2. Project Benefits / Coordination Efforts

Coordination: SVBGSA is coordinating with MCWD GSA and other local agencies on the Seawater Intrusion Project. Phase I feasibility for 10% design on the extraction barrier and desalting plant is funded through a 180/400-Foot Aquifer Subbasin SGMA Implementation Grant. Component 6 of this grant and the Monterey Subbasin Grant application will complete the 10% design with scoping the distribution networks to the Eastside and Monterey Subbasins, respectively. The Monterey Subbasin grant applies for funding for the 30% and 60% design on the full project. This grant completes CEQA documentation on the full project. SVBGSA is coordinating CSIP expansion closely with Monterey One Water and MCWRA, who owns and operates the reservoirs, river diversions, and CSIP. Agencies meet regularly.

Component 6 is coordinated with the other components of this grant, building on data expansion and modeling improvements (Component 2) and providing feasibility on alternative supply projects that interested parties will use to determine how to reach sustainability (Component 3). It is complementary to the other project and management action feasibility and implementation efforts (Components 4, 5, 7, 8). This grant for the Eastside, Forebay, Langley, and Upper Valley Subbasins is also coordinated with the Round 1 SGMA Implementation Grant SVBGSA received for the critically over-drafted 180/400-Foot Aquifer Subbasin and the SVBGSA/MCWD GSA Round 2 SGMA Implementation Grant application for the Monterey Subbasin.

Addressing DWR Comments and Filling Data Gaps: Component 6 assists with feasibility of GSP implementation, not addressing DWR comments or filling data gaps.

Assisting with Feasibility of GSP Implementation: The Eastside and Langley GSPs each included a list of potential projects and management actions that could be implemented to reach and maintain sustainability; however, further scoping is needed to assess their feasibility and determine which to implement. Component 6 tasks complete feasibility steps on the main projects that could provide alternative supply to the Eastside and Langley Subbasins: (1) the Seawater Intrusion Project and CSIP Expansion. Feasibility studies for the Seawater Intrusion Project are underway; however, current work does not assess the distribution network to bring desalted water to the City of Salinas. Task 2 provides the initial design of for delivering water to Salinas, and advances the 60% design through the CEQA documentation. (2) CSIP expansion could

provide an alternative water supply for irrigation. The viability based on system constraints, financial options, and source water are all interrelated, so Task 2 undertakes initial feasibility to assess the potential for CSIP expansion.

3. Maps Included

Figure 1 shows the area covered by this Component, including the 4 groundwater subbasins and management areas. Figure 2 shows the land use. Figure 3 includes the communities that will benefit, shown by both cities and drinking water systems. Figure 4 shows underrepresented communities (URCs) and severely disadvantaged communities (SDACs) that will benefit from this Component. Figure 5 shows domestic well density. Figure 6 shows current groundwater conditions. Figure 10 shows 2021 seawater intrusion and the CSIP area, as well as Component 6 tasks and the areas they benefit.

4. Benefit to URC and/or SDACs

Preventing further seawater intrusion and increasing groundwater levels will benefit residents of the Langley Area and Eastside Subbasins who depend on groundwater for drinking water and/or are employed in the agricultural sector. Since nearly the entire population of these subbasins depends on groundwater for drinking water and much of the population is employed in the agricultural sector, Component 6 benefits virtually all residents of the project area, including many who live in URCs and SDACs. Letters from Senator Laird, Assemblymember Rivas, County Supervisors Alejo and Lopez, CHISPA and the Greater Monterey IRWM Group reflect the broad positive support across the Valley from leaders committed to serving their underrepresented communities and the region as a whole.

Of the nearly 142,000 residents of the Langley Area and Eastside Subbasins, roughly 74% live in a URC of at least one category (DACs, SDACs, EDAs, EnvDACs, Fringe Areas, and Tribes), with 45% living in DACs, 11% in SDACs, 53% in EDAs, and 54% in Fringe Areas. (Some residents are covered by multiple categories.) URCs also cover a large percentage of the area of the 2 subbasins, with roughly 72% of the total project area covered by a URC of any category, including 40% covered by DACs. Therefore, between 72% and 74% of the grant amount for Component 6 will benefit URCs. Letters from the Cities of Salinas and Gonzales confirm their support of the GSP implementation and the positive impacts to underrepresented communities.

By advancing the seawater intrusion barrier project and improving groundwater conditions in the Eastside Subbasin, Component 6 will help protect the municipal water supply of the City of Salinas, where most of the project area's population resides, including many who live in DACs, SDACs, EDAs, EnvDACs, and Fringe Areas. Component 6 also expands CSIP, which will allow rural areas in the southern part of the Langley Subbasin and northern part of the Eastside Subbasin to access alternate sources of irrigation water, which will reduce seawater intrusion and increase groundwater levels, benefitting groundwater-dependent rural communities, many of which are DACs, EDAs, and/or Fringe Areas.

5. Positive impact associated with small water systems or private shallow domestic wells

The Langley Area and Eastside Subbasins include a high concentration of domestic wells and many small public water systems that are dependent on groundwater for drinking water. Component 6 advances the Seawater Intrusion Project and expands CSIP, which will help prevent deterioration in water quality due to seawater intrusion and raise groundwater levels, which will improve access to water for small water system wells and private domestic wells. CSIP expansion in Component 6 would benefit small water systems and shallow domestic well owners by creating a new irrigation water source for agricultural users, which will reduce pumping and increase groundwater levels in the pumping depression area north of Salinas, which is near an area with a high concentration of small water systems and private shallow domestic wells.

Component 6 will help meet the needs of the State Water Board's SAFER program by preventing further advance of seawater intrusion and identifying an alternate source of irrigation water. The SAFER program identifies public water systems and domestic wells at risk of failing to provide safe and affordable drinking water. Of the 879 shallow domestic wells (depth <450 ft.) in the Langley Area and Eastside Subbasins, 588 are in sections identified as having a water quality risk of "High" according to the SAFER Aquifer Risk map, since they are in sections with MCL exceedances. Of the 87 small public water systems in the project area, 78 are in sections with a water quality risk of "High" according to the SAFER Aquifer Risk map. Since all these water systems are dependent on groundwater for their drinking supplies, preventing seawater intrusion through the Seawater Intrusion Project advanced in Component 6 will prevent further water quality degradation and maintain access to safe drinking water.

6. How Component 6 addresses the Human Right to Water (AB 685 Section 106.3)

Component 6 addresses the Human Right to Water by improving groundwater levels through reduced pumping in rural parts of the project area and by preventing seawater intrusion, which will help water systems that are currently failing or at risk of failing to provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. There are 7 community water systems in the Langley Area and Eastside Subbasins that DWR has identified as currently failing to meet Human Right to Water standards and additional systems that are "At-Risk." Additionally, a large percentage of the population of the project area lives in and around Salinas, and the water systems serving Salinas are in-compliance with Human Right to Water standards; however, Component 6 can help to ensure these systems stay in compliance by preventing seawater intrusion and improving groundwater conditions. Furthermore, implementing projects aimed at preventing seawater intrusion and improving water levels in areas of pumping depression will assist SVBGSA with groundwater management around these water systems, which will help the systems meet Human Right to Water standards.

COMPONENT 7. AGRICULTURAL WATER CONSERVATION BEST MANAGEMENT PRACTICES PROGRAM

1. Component 7 Description

Component 7 promotes water efficiency by expanding existing agricultural extension programs to provide resources to growers and underrepresented farmers who farm throughout the 4 subbasins of the Salinas Valley included in this grant: the Eastside Aquifer, Forebay Aquifer, Upper Valley Aquifer, and Langley Area Subbasins. The Salinas Valley agricultural industry is a key driver of the local economy and is a significant beneficial user of groundwater. The Salinas Valley imports no water from outside the Valley, therefore efficiently using groundwater and not wasting it is essential for maintaining sustainability. Increasing use of conservation measures and irrigation best practices that increase soil moisture holding capacity are critical practices that promote efficient use of groundwater. Increasing adoption of best management practices that minimize surface water runoff provides wide-scale recharge benefits and also improves surface water quality. The GSPs included conceptual projects and management actions that could be implemented in each subbasin to reach and maintain sustainability, including Conservation and Agricultural Best Management Practices (BMPs). Providing information and access to tools offers assistance to growers and complements demand management and other actions that will be needed to reach and maintain groundwater sustainability. Component 7 includes:

- University of California Cooperative Extension (UCCE) and Resource Conservation District of Monterey County (RCDMC) Extension Program Expansion – UCCE and RCDMC have independent outreach programs that will be expanded and adapted in a pilot three-organization partnership with the SVBGSA As part of Task 3. This program will reach additional growers and underrepresented farmers and focus on efficient groundwater use. To support efficient irrigation, UCCE and RCDMC will provide targeted technical assistance to improve irrigation system efficiency and use of irrigation scheduling relative to crop need. Many irrigation scheduling tools depend on ET data, and the accuracy of regional reference ET provided by CIMIS can greatly impact the recommendations. An assessment of the feasibility of providing more accurate ET data for the Valley through enhanced or expanded CIMIS reference ET stations will guide the improvement of the data used for irrigation scheduling. The RCDMC and partners will perform outreach and education to increase public awareness of groundwater issues, facilitate grower access to conservation resources, and target technical assistance to maximize water conservation and reduce surface water runoff.
- **Create Regional Agricultural Water Conservation Website –** Task 4 will create a Regional Agricultural Water Conservation Website to provide a hub where the relevant Salinas Valley UCCE and RCDMC technical resources will be centralized in one place. In addition, other regional technical resources from the nearby central coastal farming areas will be linked. This will also serve to inform non-agricultural interested parties about agricultural water conservation BMPs, which will support SVBGSA efforts to balance all beneficial users of groundwater.

<u>GSPs, communities served, minimum thresholds, and measurable objectives</u> - The Eastside, Forebay, Langley, and Upper Valley Subbasins are almost entirely dependent on groundwater. The Langley Area, located in the northern part of the Valley, consists primarily of small water systems and domestic users, with a few agricultural users close to the southern subbasin border. Agriculture is the dominant water user in the Eastside, Forebay, and Upper Valley Subbasins and constitutes 86% of the land use by area in these 4 subbasins. Groundwater is used to irrigate row crops, field crops, vineyards, orchards, cannabis, and rangeland. The Salinas Valley agricultural region supports a $4.25 billion dollar industry. Agriculture accounts for approximately 182,000 irrigated acres and 93% of pumping in these 4 subbasins (Water Year 2021). All cities and communities in the Valley rely on groundwater, with the largest city, Salinas, partially located in the Eastside Subbasin. Domestic wells and small drinking water systems that support the agricultural farming community are spread out over these 4 subbasins. Groundwater supports GDEs along the Salinas River, Arroyo Seco River, Gabilan Creek, and potentially some small tributaries.

SVBGSA assessed conditions in the 4 subbasins and worked with subbasin-specific interested parties to develop the SMC measurable objectives (MOs) and minimum thresholds (MTs) appropriate for each subbasin. The SMC in all 4 subbasin GSPs align, setting groundwater levels, groundwater storage by proxy, and interconnected surface water MOs to recent high groundwater levels and MTs to recent low groundwater levels. Improving irrigation efficiency will reduce groundwater use, directly addressing the groundwater level, groundwater storage SMC. The degradation of groundwater quality SMC seeks to avoid degradation caused by a direct result of GSA groundwater management action(s). Reducing groundwater pumping through improved efficiency will furthermore improve conditions to avoid or slow subsidence and seawater intrusion. All subbasins want no subsidence or seawater intrusion. The seawater intrusion front within the 180/400-Foot Aquifer Subbasin is within 0.7 and 2.3 miles of the Eastside and Langley Subbasins, respectively, making a coordinated approach to groundwater levels near the subbasin borders particularly important for preventing further seawater intrusion. These SMC are aimed at preventing groundwater conditions from degrading beyond historical conditions and levels, and they aim for recent high groundwater levels in order to protect the communities, industries, and ecosystems dependent on groundwater.

<u>How Component 7 furthers GSP implementation timeline and feasibility</u> - Component 7 is integral for reaching and maintaining sustainability across the SVBGSA subbasins because the majority of groundwater use is for the irrigation of

crops. Providing tools for increasing efficiency and minimizing runoff will decrease groundwater pumping and increase on-farm recharge. Reaching underrepresented farmers will ensure that all agriculture producers have access to the tools to maximize efficient use of groundwater.

Both Eastside and Langley Subbasins experienced undesirable results for groundwater levels and groundwater storage in Water Year 2021 and previous years. Groundwater levels have been declining and have not rebounded after droughts. This has led to water supply issues in some areas, many of which are underrepresented communities. These subbasins need quick action to stop groundwater level declines. In the Langley Subbasin, the largest declines are in the southern part of the Subbasin, where the agricultural use is located. In the Eastside Subbasin, declines are spread out across the Subbasin. In the Forebay and Upper Valley Subbasins, groundwater levels have historically rebounded after droughts; however, recharge in those subbasins along the Salinas River is critical during multi-year droughts and for the groundwater sustainability of adjacent subbasins.

Component 7 needs, goals, and objectives and how proposed tasks will meet them - Component 7 meets SVBGSA needs for increased use of agricultural water conservation BMPs. The Component 7 **goal** is to reduce groundwater extraction and minimize surface water runoff to help the Eastside, Langley, Forebay, and Upper Valley reach and maintain groundwater sustainability, as evidenced by avoiding undesirable results and operating within the sustainable yield. This operationalizes the overarching GSP goal to balance the needs of all water users and ensure long-term viable water supplies, while maintaining the unique cultural, community, and business aspects of each of the subbasins.

The **objectives** of Component 7 are: (1) establish pilot partnership between the UCCE, RCDMC and SVBGSA to increase extension of agricultural BMPs to growers and underrepresented farmers; (2) create regional water conservation website with Salinas Valley-specific resources.

Component 7 addresses GSA extension of agricultural water conservation best practices **needs**, including:

- **University of California Cooperative Extension (UCCE) and Resource Conservation District of Monterey County (RCDMC) Extension Program Expansion**– Irrigation efficiency has improved within the Salinas Valley over the past few decades; however, information and tools regarding how to do so have often missed small and underrepresented growers. Effectively helping growers adopt agricultural BMPs requires consistent and often individual assistance. Task 3 provides this through a UCCE/RCDMC partnership with SVBGSA that reaches underrepresented growers, tailors assistance to the Salinas Valley, and is focused on groundwater sustainability. In addition, the partnership will support the assessment of enhancing existing or adding additional CIMIS reference ET stations, which are needed to produce the accurate ET data needed to support this work. Technical assistance offered to growers may include distribution uniformity evaluations, training on irrigation system operation and maintenance, assistance with irrigation scheduling (CropManage software, water-use monitoring, soil moisture monitoring, installing and monitoring irrigation system trials (e. g., drip- tape trials), and training irrigators. Information will be accessible to small-scall, Spanish-speaking farmers.
- **Create Regional Water Conservation Website –** Most agricultural BMP resources are geared towards the Central Valley or other agricultural regions, often making them less appropriate for the Salinas Valley and its unique specialty crop types and climatic conditions. Appropriate resources are located in different places, making them harder to access, compare, and use. Task 4 pulls together appropriate resources to provide a quick and organized resource for growers, which will help increase the use of agricultural BMPs appropriate to the Salinas Valley. In addition, non-agricultural interested parties often do not understand why not all agricultural BMPs are appropriate for every crop, often leading to misconceptions regarding the effort all parties are putting into sustainability and a breakdown in the collaborative process. This website will have the secondary benefit of spreading broader awareness of the options for increasing irrigation efficiency.

2. Project Benefits / Coordination Efforts

Coordination: SVBGSA is coordinating Component 7 with the University of California Cooperative Extension (UCCE) and Resource Conservation District of Monterey County (RCDMC). SVBGSA engaged the UCCE and RCDMC in the scoping of this work. The SVBGSA has held 6 meetings for discussions with interested parties on the information and tools needed for growers to adopt more efficient practices and how SVBGSA should support adoption of agricultural BMPs. Interested parties' input will continue to be incorporated into the implementation of Component 7.

Component 7 is coordinated with the other components of this grant, building on data expansion and modeling improvements (Component 2) and providing feasibility on recharge projects that interested parties will use to determine how to reach sustainability (Component 3). It is complementary to the other project and management action feasibility and implementation efforts (Components 4, 5, 6, 8). This grant for the Eastside, Forebay, Langley, and Upper Valley Subbasins is also coordinated with the Round 1 SGMA Implementation Grant SVBGSA received for the critically over-drafted 180/400-Foot Aquifer Subbasin and the SVBGSA/MCWD GSA Round 2 SGMA Implementation Grant application for the Monterey Subbasin.

Addressing DWR Comments and Filling Data Gaps: Component 7 assists with feasibility of GSP implementation, not addressing DWR comments or filling data gaps.

Assisting with Feasibility of GSP Implementation: The Eastside, Forebay, Langley, and Upper Valley GSPs each included a list of potential projects and management actions that could be implemented to reach and maintain sustainability; however, further scoping is needed to assess their feasibility and determine which to implement. Component 7 tasks completes a technical analysis to determine the best manner to augment ET tools for the Valley and then implements increased extension: Task 2 extends BMPs to increase irrigation efficiency and maximize surface water infiltration. Task 3 consolidates BMPs information and tools for non-agricultural stakeholders, growers, and underrepresented farmers. Together, the tasks under Component 7 extend agricultural water conservation BMPs to decrease groundwater pumping in the Eastside, Forebay, Langley, and Upper Valley Subbasins. This work complements other management actions and projects by helping bring pumping in line with the sustainable yield and offering support and options to growers.

3. Maps Included

Figure 1 shows the area covered by this Component, including the 4 groundwater subbasins and management areas. Figure 2 shows land use. Figure 3 includes the communities that will benefit, shown by both cities and drinking water systems. Figure 4 shows underrepresented communities (URCs) and severely disadvantaged communities (SDACs) that will benefit from this Component. Figure 5 shows domestic well density. Figure 6 shows current groundwater conditions. Figure 11 shows current CIMIS stations, as well as Component 7 tasks and the subbasins they benefit.

4. Benefit to URC and/or SDACs

Providing tools for increasing efficiency and minimizing runoff will benefit residents of the project area who depend on groundwater for drinking water and/or are employed in the agricultural sector. Since nearly the entire population of these subbasins depends on groundwater for drinking water and much of the population is employed in the agricultural sector, Component 7 benefits virtually all residents of the project area, including many who live in URCs and SDACs. Letters from Senator Laird, Assemblymember Rivas, County Supervisors Alejo and Lopez, CHISPA and the Greater Monterey IRWM Group reflect the broad positive support across the Valley from leaders committed to serving their underrepresented communities and the region as a whole.

Of the nearly 200,000 residents of the 4 subbasins, roughly 75% live in a URC of at least one category (DACs, SDACs, EDAs, EnvDACs, Fringe Areas, and Tribes), with 48% living in DACs, 12% in SDACs, 61% in EDAs, and 40% in Fringe Areas (some residents are covered by multiple categories). URCs also cover a large percentage of the area of the 4 subbasins, with roughly 93% of the total project area covered by a URC of any category, including 34% covered by DACs and 80% by EDAs. Therefore, between 75% and 93% of the grant amount for Component 7 will benefit URCs.

Many of the URCs and SDACs in the project area are concentrated in the Eastside and Langley Subbasins, where residents are particularly vulnerable to chronic declines in groundwater levels. Component 7 provides tools for agricultural users to more efficiently use ET data, thus reducing groundwater pumping, which will increase groundwater levels in these subbasins and improve access to drinking water for groundwater-dependent communities, such as Chualar, which is a DAC; the City of Salinas, much of which is comprised of DACs, SDACs, EDAs, EnvDACs, and Fringe Areas; and the City of Gonzales, which is an EDA and part of which is an SDAC. Letters from the Cities of Salinas and Gonzales confirm their support of the GSP implementation and the positive impacts to underrepresented communities. Rural areas in the southern part of the Langley Area Subbasin and much of the Eastside Subbasin are also DACs, EDAs, and/or Fringe Area, and Component 7 would directly benefit agricultural users in these areas by providing them with more information about ET and water use efficiency; furthermore, residents of these rural areas, nearly all of whom depend on groundwater for drinking water, would benefit from improved groundwater conditions.

The Forebay and Upper Valley subbasins also contain URCs and SDACs. While these subbasins do not face acute concerns related to chronic declines in groundwater levels, they are vulnerable to declining groundwater levels during drought; therefore, residents of URCs in these subbasins, nearly all of whom depend on groundwater for drinking or work in the agricultural sector, would benefit from improved groundwater conditions. Component 7 will provide agricultural users in these subbasins with tools for increasing water efficiency, which will increase groundwater conditions and improve access to drinking water for groundwater-dependent communities, including Soledad, Greenfield, and King City, which are mostly comprised of DACs and include some SDACs. DACs also cover much of the rural areas of the Forebay Subbasin, and EDAs cover the entirety of the Upper Valley Subbasin and most of the Forebay Subbasin, suggesting the tools provided to agricultural users by Component 7 will almost entirely benefit URCs in these subbasins. Letters from the cities of Soledad, and King reflect their support.

5. Positive impact associated with small water systems or private shallow domestic wells

The project area includes a high concentration of domestic wells and many small public water systems that are dependent on groundwater for drinking water. Component 7 provides agricultural users with tools for increasing water use efficiency

and minimizing runoff and educates users on agricultural BMPs, which will reduce groundwater pumping and increase groundwater levels. This will improve access to drinking water for small water system wells and private domestic wells.

Component 7 will help meet the needs of the State Water Board's SAFER program by improving irrigation efficiency and reducing groundwater pumping. The SAFER program identifies public water systems and domestic wells at risk of failing to provide safe and affordable drinking water. Of the 1,150 shallow domestic wells (depth <450 ft.) in the project area, 763 are in sections identified as having a water quality risk of "High" according to the SAFER Aquifer Risk map, since they are in sections with MCL exceedances. Of the 142 small public water systems in the project area, 104 are in sections with a water quality risk of "High" according to the SAFER Aquifer Risk map. Since all these water systems are dependent on groundwater for their drinking supplies, improved irrigation efficiency and reduced groundwater pumping will lead to improved groundwater conditions, which will help prevent further water quality degradation and maintain access to safe drinking water.

6. How Component 7 addresses the Human Right to Water (AB 685 Section 106.3)

Component 7 addresses the Human Right to Water by improving irrigation efficiency and reducing groundwater pumping by agricultural users, which will increase groundwater levels and improve access to drinking water for water systems that are currently failing or at risk of failing to provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. There are 8 community water systems in the project area that DWR has identified as currently failing to meet Human Right to Water standards, spread across the subbasins, and additional systems that are "At-Risk." Additionally, a large percentage of the population of the project area lives in and around Salinas, and the water systems serving Salinas are in-compliance with Human Right to Water standards; however, Component 7 can improve groundwater conditions and improve access to drinking water for water systems so that they can continue to stay in compliance. Furthermore, implementing projects aimed at improving irrigation efficiency and improving water levels by reducing agricultural pumping will assist SVBGSA with groundwater management around these water systems, which will help the systems meet Human Right to Water standards.

COMPONENT 8. SAN LUCAS DRINKING WATER PROJECT

1. Component 8 Description

Component 8 completes the construction of a Storage Tank Nitrate Water Treatment System (STNWTS) with new water transmission lines for the San Lucas County Water District to deliver drinking water to approximately 415 residents with 85 service connections in the Upper Valley Subbasin. Groundwater conditions have caused this disadvantaged community to lack a consistent, clean water supply. Since 2016, their sole water supply well has had periodic spokes in nitrates above the maximum contaminant level (MCL) for drinking water and this project will address their need for a long-term uninterrupted replacement water supply. The community of San Lucas is located 10 miles from the City of King and based on its remote location, improvements to the existing system with a new distribution line is the most efficient method to provide clean drinking water. The water system distribution improvement includes the use of a storage tank to receive and store groundwater before it is distributed as drinking water, preventing unmonitored water from being delivered directly. The concentration of nitrates of the water in the storage tank can be monitored and the water diluted if needed to reach levels below the MCL of 10 ppm NO3-N. Component 8 includes:

- **Development of final engineering design –** Completing additional planning work needed prior to construction. A field survey and water system hydraulic modeling are utilized for the completion of the final engineering design documents. Completing the environmental review and permit preparation, as required.
- **Construction –** The transmission pipeline consists of approximately 5,000 linear feet of 8" pipe and additional water system additions to complete the Storage Tank Nitrate Water Treatment System.

<u>GSPs, communities served, minimum thresholds, and measurable objectives:</u>
The Upper Valley Subbasin is almost entirely dependent on groundwater for agricultural and domestic use. The disadvantaged community of San Lucas is the community served by this project.

SVBGSA assessed conditions in the Upper Valley subbasin and worked with subbasin-specific interested parties to develop the SMC measurable objectives (MOs) and minimum thresholds (MTs) appropriate for each subbasin. The SMC in all SVBGSA subbasin GSPs align, setting groundwater levels, groundwater storage by proxy, and interconnected surface water MOs to recent high groundwater levels and MTs to recent low groundwater levels. The degradation of groundwater quality SMC seeks to avoid degradation caused by a direct result of GSA groundwater management action(s). These SMC are aimed at preventing groundwater conditions from degrading beyond historical conditions and levels, and they aim for recent high groundwater levels in order to protect the communities, industries, and ecosystems dependent on groundwater.

<u>How Component 8 furthers GSP implementation timeline and feasibility</u>:
Component 8 is integral for ensuring that a disadvantaged community has a long-term uninterrupted water supply throughout GSP implementation.

Degradation of groundwater quality is measured in public water system supply wells and agricultural supply wells. Each set of wells in the GSPs are monitored for constituents of concern (COC) associated with the well's use for irrigation or domestic purposes. In the 2021 Annual Report, none of the COCs in the Upper Valley Subbasin exceeded their regulatory standard. While there are existing and historical exceedances of nitrate, a COC, in the San Lucas well, the nitrate concentrations fluctuate and was not reported in 2021 as an exceedance during the annual reporting. However, even periodic fluctuations pose a threat to drinking water and therefore constructing a solution to monitor and dilute the source water is essential.

<u>Component 8 needs, goals, and objectives and how proposed tasks will meet them</u>:
Component 8 meets SVBGSA needs for supporting safe and reliable drinking water for communities. The Component 8 **goal** is to provide a reliable source of clean drinking water for the community of San Lucas. This operationalizes the overarching GSP goal to balance the needs of all water users and ensure long-term viable water supplies, while maintaining the unique cultural, community, and business aspects of each of the subbasins.

The **objective** of Component 8 is: (1) to construct a new transmission line and Storage Tank Nitrate Water Treatment System.

Component 8 addresses GSA **needs**, including:

- Supporting a disadvantaged community that has relied on bottled water for the past 5 years with a long-term uninterrupted replacement water supply.

2. Project Benefits / Coordination Efforts

SVBGSA is coordinating Component 8 with San Lucas County Water District. Subbasin-specific planning occurs through the Subbasin Implementation Committees, and coordination between subbasins is completed by the Advisory Committee.

Quantifiable Benefits of Implementation:

The Community of San Lucas will have a reliable drinking water supply that is below the maximum contaminate level (MCL) of 10 ppm NO3-N. The nitrate levels will be continuously monitored online and with electronic recording to ensure no water is distributed that exceeds the MCL for NO3-N.

3. Maps Included

Figure 13 shows the San Lucas community covered by this Component and the underrepresented communities (URCs) and severely disadvantaged communities (SDACs) that will benefit. Figure 2 shows the land use. Figure 3 includes the communities that will benefit, shown by both cities and drinking water systems.

4. Benefit to URC and/or SDACs

The construction of a STNWTS with new water lines for the San Lucas County Water District will benefit the 415 residents of the San Lucas community, all of whom are dependent on groundwater for drinking water and all of whom (100%) live in a URC. The San Lucas census-designated place (CDP) meets the criteria for URC as it is both a DAC and EDA. Furthermore, 100% of the area benefitted by Component 8 is covered by the URC of San Lucas, which is both a DAC and EDA.

Letters from Senator Laird, Assemblymember Rivas, County Supervisors Alejo and Lopez, CHISPA and the Greater Monterey IRWM Group reflect the broad positive support across the Valley from leaders committed to serving their underrepresented communities and the region as a whole. A letter from San Lucas Water District documents their specific support for this project funding. The letter from the nearest municipality, the City of King, indicates their support for the grant.

5. Positive impact associated with small water systems or private shallow domestic wells

Component 8 will help meet the needs of the State Water Board's SAFER program by improving the water quality of the water supply that the San Lucas community depends on for drinking water. The SAFER program identifies public water systems at risk of failing to provide safe and affordable drinking water and currently rates the San Lucas Water District as 'Failing' to meet SAFER criteria, due to high water quality risk related to nitrate exceedance. The San Lucas Water District is a relatively small public water system, with fewer than 100 connections. Component 8 will help San Lucas provide its residents with access to safe drinking water and thus meet SAFER standards.

6. How Component 3 addresses the Human Right to Water (AB 685 Section 106.3)

Component 8 addresses the Human Right to Water by constructing a system that will provide approximately 415 residents with a reliable clean water supply. DWR has identified San Lucas Water District as currently failing to meet Human Right to Water standards. Constructing a STNWTS that improves the water quality of the community's water supply will allow the system to provide clean drinking water and meet Human Right to Water standards.

PROJECT/COMPONENT DETAILS

B. Scope of Work and Deliverables

COMPONENT 1. GRANT ADMINISTRATION

Component 1 develops the grant's administrative record to support DWR and ensure timely reimbursement of expended funds.

Category (a): Grant Agreement Administration

Prepare reports detailing work completed during reporting period in accordance with DWR "Report Formats and Requirements". Progress Reports will include sufficient information for the DWR Grant Manager to understand and review backup documentation submitted with invoices. Quarterly invoices will accompany the Quarterly Progress Reports and will be submitted to the DWR Grant Manager for review to receive reimbursement of Eligible Project Costs. Collect and organize backup documentation by component, budget category, and task and prepare a summary Excel document detailing contents of the backup documentation organized by component, budget category, and task.

Prepare and submit the Environmental Information Form (EIF) within 30 days of the execution date of the Grant Agreement. Submit a deliverable due date schedule within 30 days of the execution date of the Grant Agreement to be reviewed and approved by the DWR Grant Manager.

If not addressed in Component 2-8 category (a), Component Administration, prepare Draft Component Completion Report and submit to the DWR Grant Manager for comment and review 90 days before the end date for each component. Prepare a Final Component Completion Report addressing the DWR Grant Manager's comments within 30 days before each Component end date outlined in the Schedule. The report will be prepared and presented in accordance with DWR "Report Formats and Requirements". All deliverables listed within the Work Plan will be submitted with each Final Component Completion Report unless a new deliverable due date was approved by the DWR Grant Manager.

Prepare the Draft Grant Completion Report and submit to the DWR Grant Manager for comment and review 90 days before the work completion date. Prepare a Final Grant Completion Report addressing the DWR Grant Manager's comments prior to the work completion date. The report will be prepared and presented in accordance with DWR "Report Formats and Requirements" and approved by the DWR Grant Manager within 30 days after the work completion report. All deliverables listed within the Work Plan will be submitted with the Final Grant Completion Report unless a new deliverable due date was approved by the DWR Grant Manager.

<u>Deliverables:</u>

- EIF
- Deliverable due date schedule
- Quarterly Progress Reports, Quarterly Invoices, and all required backup documentation
- Draft and Final Grant Completion Reports

COMPONENT 2. DATA EXPANSION AND SGMA COMPLIANCE

Component 2 fills data gaps identified in the GSPs, updates the hydrogeologic conceptual models with new data, and revises existing numerical groundwater models to strengthen long-term planning and to prepare for working with stakeholders on the 5-year update. Specific tasks include expanding the existing groundwater extraction monitoring program, installing additional monitoring wells to fill data gaps, establishing GDE monitoring, and conducting aquifer tests to refine aquifer property estimates. The newly collected data, along with data from DWR and SVBGSA's airborne electromagnetic (AEM) surveys, will be incorporated into updated hydrogeologic conceptual models of the 4 subbasins. Existing numerical models will be refined to focus on issues important to stakeholders and 5-year GSP assessment needs.

Category (a): Grant Agreement Administration

Task 1. Component Administration

Conduct planning, coordination, and oversight associated with Component 6. Meet with consultants and implementing partners to refine implementation schedule and process, coordinate work, and complete budget and progress check ins.

Prepare reports detailing Component 2 work completed during the reporting period for inclusion in Component 1 Quarterly Progress Reports. Quarterly Progress Reports will include sufficient information for the DWR Grant Manager to understand and review backup documentation submitted with invoices. Quarterly invoices will accompany Quarterly Progress Reports. Collect and organize backup documentation by the Component 2 budget category and task and prepare a summary Excel document detailing contents of the backup documentation organized by task. Prepare the Draft Component Completion Report and submit to the DWR Grant Manager for comment and review 90 days before the end date of Component 2 as outlined in the Schedule. All deliverables listed within the Work Plan will be submitted with the Final Component Completion Report unless a new deliverable due date was approved by the DWR Grant Manager.

Deliverables:

- Component reporting to be included in Quarterly Progress Reports and Invoices
- Draft and Final Component Completion Reports

Category (b): Environmental / Engineering / Design

Task 2. Expansion of Groundwater Extraction Monitoring

Develop plan for expanding and enhancing the existing Groundwater Extraction Management System (GEMS) to increase reliability and efficiency of extraction data collection, and expand to include all areas of the Eastside, Forebay, Langley, and Upper Valley Subbasins. Design GEMS expansion in collaboration with the MCWRA. Feasibility and planning analysis under this task will help determine the costs and benefits of various data collection methods including ultrasonic flow meters, energy meters, satellite imagery, and the existing self-reporting system with calibrated flow meters. Leverage reports from similar analyses in other parts of the state to balance accuracy and cost of implementation. Develop a summary report with recommendations. Initiate a well registration program to establish a relatively accurate count of all active wells in the 4 Subbasins. Collaborate with MCWRA and the County Environmental Health Bureau to develop the initial data set of active wells. The well registration work builds on and complements the program begun in the 180/400-Foot Aquifer Subbasin. Includes software updates to facilitate inter-agency data transfers and shared databases.

Deliverables:

- Well Registration Completion Report Update
- GEMS Enhancement Feasibility Report

Task 3. Monitoring Well Location Identification, Planning, and Landowner Access Agreement

Plan and design up to 18 monitoring wells in the 4 Subbasins - 11 to fill groundwater level data gaps, 3 to fill interconnected surface water data gaps, and 4 to monitor conditions near GDEs. Review existing well locations, land uses, and hydrogeologic conceptual models to identify exact locations for monitoring wells. Acquire site access and landowner agreements. Any access agreements obtained pursuant to this Agreement will allow for adequate access for construction and maintenance of the well for the Term of this Agreement. Obtain all necessary permits required for well installation, including and CEQA documentation, if required. Develop technical specifications for each of the 18 monitoring wells that detail the project components, requirements, logistics, and performance metrics.

Deliverables:

- Landowner access agreement(s)
- Map(s) of approved locations for monitoring wells
- 100% well design, plans and specifications, if applicable
- Required environmental documentation for CEQA compliance, if applicable
- Copies of required permits, if applicable

Category (c): Implementation / Construction

Task 4. Groundwater Level and Interconnected Surface Water Monitoring Well Installation

Complete installation of the monitoring wells sited and designed in Task 3. Develop all necessary pre-bid and bid documents, incorporating the specifications developed in Task 3, to secure a contractor and award the contract. Provide hydrogeologist field oversight during well installation including pre-, during-, and post-construction activities; and develop detailed field notes on all activities, safety, changes, and progress. Prepare any change orders and provide summaries in associated quarterly Progress Reports. Record drawings of each well and submit to the DWR Grant Manager.

Deliverables:

- Well completion report(s) and detailed geologic logs
- Bid document(s) and awarded drilling and hydrogeological services contracts, if applicable
- Notice of Award and Notice to Proceed, if applicable
- Photo documentation included within the quarterly Progress Reports

Category (d): Monitoring / Assessment

Task 5. Aquifer Properties Tests

Select potential wells for aquifer testing in each of the 4 subbasins, for a total of 12 wells, considering factors such as well design, well condition, and water disposal options. Identify nearby wells for monitoring, negotiate with landowners for well access, and obtain necessary permits. Test each well for a minimum of 8 hours, followed by a 4-hour monitored recovery period. Analyze both drawdown and recovery tests to determine aquifer properties and spatially varying aquifer properties. Draft a technical memorandum of all test data and results, including photos and analyses.

Deliverables:

- Aquifer Properties Tests Technical Memorandum

Task 6. Incorporate New Data into Hydrogeologic Conceptual Models (HCMs) for 4 Subbasins

Compile all new data generated since original GSPs were written, including AEM surveys, aquifer tests, new WCRs, and any newly provided data from stakeholders. Use new data to enhance HCMs for individual subbasins and the Valley as a whole. Compare new data to existing data and estimate data accuracy and worth using a scientifically sound framework that includes overall geologic history and current groundwater conditions. Refine HCMs by comparing resistivities from AEM surveys to borehole geophysical logs, high quality well-completion reports, existing geologic interpretations (such as cross-sections), and known geology. Subbasin-specific HCMs will be complemented by a Valley-wide HCM to minimize boundary disparities and other data gaps.

Deliverables:

- Refined and enhanced HCM Chapters for inclusion in 4 Subbasins' GSP 5-year Updates
- Valley-wide Hydrogeologic Conceptual Model

Task 7. Modeling for 5-Year Updates: Review Completed Model, Update, and Reevaluate Climate Assumptions

Refine and update the final SVIHM to enhance its usability for SGMA needs, building on a review of the Salinas Valley Integrated Hydrologic Model (SVIHM) under the 180/400-Foot Aquifer Subbasin Round 1 SGMA Implementation Grant (anticipated mid-2023). Review and adopt new climate change scenarios based on DWR's anticipated guidance. Assess and improve calibration data set. Update system conceptualization, including adapting layering according to data from DWR and SVBGSA's airborne electromagnetic (AEM) surveys, and results from the Deep Aquifers Study. Interrogate and potentially revise simulated crop information. Refine pumping distribution to enhance usability for demand management. Refine connection between the 180/400-Foot Aquifer Subbasin and Eastside Subbasin. Add mountain block recharge. Develop tools to enhance water budget capabilities.

Deliverables:

- Technical Memorandum of climate change scenario options and recommendations
- Report summarizing model updates

Task 8. Establishment of GDE Monitoring

Establish Groundwater Dependent Ecosystem (GDEs) monitoring protocols. Includes prioritization of field reconnaissance to verify the presence of GDEs. Extend methodology developed by Central Coast Wetlands Group (CCWG) using state wetland monitoring protocols (RipRam or California Rapid Assessment Method). Use existing wells and additional shallow monitoring wells installed under Tasks 3 and 4 to monitor the relationships between groundwater levels and GDEs.

Deliverables:

- GDE Mapping and Identification Memorandum Update
- GDE monitoring protocol

Category (e): Engagement / Outreach

Not applicable to this Component.

COMPONENT 3. ENGAGEMENT OF INTERESTED PARTIES AND UNDERREPRESENTED COMMUNITIES

Component 3 provides interested party outreach and engagement activities by the SVBGSA for the filling data gaps, feasibility work, and demand management discussions included in this grant. SVBGSA is committed to an inclusive process, and extensive interested party outreach and engagement is necessary to increase awareness of groundwater conditions, refine project concepts, and assess project feasibility. Component 3 will provide additional interested party outreach and engagement to DACs, SDACs, and Underrepresented Communities in the Eastside, Forebay, Langley, and Upper Valley Subbasins with the intent to keep these communities engaged in GSP implementation, including regularly scheduled SVBGSA Advisory Committee meetings (bi-monthly); Board of Directors meetings (quarterly); the Eastside, Forebay, Langley, and Upper Valley Subbasin Implementation Committees (16 meetings per year),and technical advisory committee meetings (bi-monthly) . There will also be project specific meetings for interested parties. To increase outreach and assist domestic well owners with water reliability, Component 3 also includes support for the State Dry Well Notification System and workshops on residential projects such as rain barrels and rain gardens. Component 3 includes SVBGSA coordination with partner agencies, including the Arroyo Seco GSA, MCWRA, County Environmental Health Bureau, and Central Coast Regional Water Quality Control Board.

Category (a): Grant Agreement Administration

Task 1. Component Administration

Conduct planning, coordination, and oversight associated with Component 6. Meet with consultants and implementing partners to refine implementation schedule and process, coordinate work, and complete budget and progress check ins. Carry out as-needed communications with the California Department of Water Resources (DWR) Sustainable Groundwater Management (SGM) Grant Project Manager and/or administration staff.

Prepare reports detailing Component 3 work completed during the reporting period for inclusion in Component 1 Quarterly Progress Reports. Quarterly Progress Reports will include sufficient information for the DWR Grant Manager to understand and review backup documentation submitted with invoices. Quarterly invoices will accompany the Quarterly Progress Reports. Collect and organize backup documentation by the Component 3 budget category and task and prepare a summary Excel document detailing contents of the backup documentation organized by task. Prepare the Draft Component Completion Report and submit to the DWR Grant Manager for comment and review 90 days before the end date for Component 3 as outlined in the Schedule. Prepare a Final Component Completion Report addressing the DWR Grant Manager's comments within 30 days before the Component 3 end date. All deliverables listed within the Work Plan will be submitted with the Final Component Completion Report unless a new deliverable due date was approved by the DWR Grant Manager.

Deliverables:

- Component reporting to be included in Quarterly Progress Reports and Invoices
- Draft and Final Component Completion Reports

Category (b): Environmental / Engineering / Design: Not applicable to this Component.

Not applicable to this Component

Category (c): Implementation / Construction: Not applicable to this Component

Not applicable to this Component

Category (d): Monitoring / Assessment

Not applicable to this Component

Category (e): Engagement / Outreach

Task 2. SVBGSA Interested Party Engagement Meetings and Materials

Conduct regular, open, public meetings to provide interested parties opportunities to be informed and engaged in GSP implementation. This includes scientific communication and groundwater model educational programs in addition to the development of outreach materials. Staff booths at community events and develop storyboards for the website. Conduct engagement and outreach with the following committees and communities annually over the contract period:

- SVBGSA Board of Directors (4 meetings)
- SVBGSA Advisory Committee (6 meetings)
- Subbasin Implementation Committees (16 meetings)
- Groundwater Technical Advisory Committee Meetings (6 meetings)
- Public Workshops (2)
- Produce accessible communications products including web page information, outreach materials, public presentations, and hosting of public workshops.

Deliverables:

- Copies of committee meetings, board meetings, and workshop agendas and meeting packets

- Photo of Updated Web Home Page
- Copies of updated Mailchimp newsletters

Task 3. Outreach to Underrepresented Communities and Domestic Well Owners

Prioritize implementation of the SVBGSA Underrepresented Communities Engagement Strategy. Hire an Outreach Coordinator to provide additional information to underrepresented communities and domestic well owners to engage them in GSP implementation, before and during public meetings. Conduct simultaneous translation of workshops and translation of written materials. Work with domestic well owners to connect them to resources and information for water reliability, including the Dry Well Notification System, well registration, and conservation opportunities.

Deliverables:

- Update to the SVBGSA Underrepresented Communities engagement strategy
- Translated materials available on SVBGSA website
- Copies of outreach materials for domestic well owners

Task 4. Water Quality Coordination Group, and Land Use Jurisdiction Coordination Program, and Other Coordination with Partner Agencies

Partner with local Agencies to jointly implement the 4 GSPs. Coordinate on jointly implementing the Deep Aquifers Study's guidance for management, implementing the Water Quality Coordination Group, and Land Use Jurisdiction Coordination Program. Includes close collaboration with the Monterey County Water Resources Agency (MCWRA), Arroyo Seco Groundwater Sustainability Agency (ASGSA), and the County of Monterey Environmental Health Bureau. Conduct coordination meetings with the following committees and communities over the contract period:

- Deep Aquifer Study (6 meetings)
- Land Use Jurisdiction Coordination Program (6 meetings)
- Water Quality Coordination Group (6 meetings)
- Monterey County Water Resources Agency (50 per year)
- Monterey County Environmental Health Bureau (10 per year)
- Arroyo Seco Groundwater Sustainability Agency and other GSAs (6 per year)

Deliverables:

- Land Use Jurisdiction Coordination Program Update Report
- Water Quality Coordination Group meeting agenda and report out

Task 5. Improve Water Quality in the Arroyo Seco Cone Management Area

Improve rural residential water quality in the Arroyo Seco Cone Management Area by developing information for rural residents about common groundwater quality issues and options for obtaining safe and aesthetic potable water in homes.

Deliverables:

- Report: Rural residential water quality in Arroyo Seco Cone Management Area

Task 6. Project Specific Meetings for Interested Parties

Conduct project specific meetings for interested parties to learn about project concepts and provide input. Inter-subbasin impacts of demand management, groundwater recharge feasibility, alternative supply feasibility and agricultural water conservation are projects that require additional outreach and involvement from interested parties. Conduct coordination meetings about the following specific projects and actions over the contract period:

- Inter-subbasin impacts of demand management (4 per year)
- Multi-benefit stream channel improvements (18 meetings)
- Alternative supply feasibility including seawater intrusion phase II and CSIP Expansion (4 meetings)
- Agricultural water conservation (2 meetings)

Deliverables:

- Interested party outreach meeting agendas and meeting packets

Task 7. Project Update Report

Summarize and coordinate updated information on projects and management actions resulting from this grant and other concurrent work. This Report will build off work done under the Round 1 SGMA Implementation Grant in the 180/400-Foot Aquifer Subbasin and will include modeling of multiple projects together and partial implementation of multiple projects to help refine the options for reaching sustainability across all subbasins. Refine estimates of project costs in relation to benefits and potential beneficiaries. This Feasibility Update Report will help subbasin implementation committees and the Board of Directors assess possible projects to promote for achieving sustainability. It will serve as the basis for the 5-year Update revisions to the GSP Projects and Management Actions chapters.

Deliverables:

- Project and Management Actions Feasibility and Costs Update Report

COMPONENT 4. GROUNDWATER RECHARGE FEASIBILITY

Component 4 will undertake high-level feasibility studies on groundwater recharge projects in the Eastside, Forebay, Langley, and Upper Valley, in accordance with subbasin-specific appropriate projects, as outlined in each respective GSP. Recharge projects from the Langley and Eastside Subbasin GSPs include feasibility for stormwater recharge and overland flow managed aquifer recharge (MAR). In the Eastside, the overland MAR feasibility study will map areas of higher recharge potential, and will be complemented by an updated Water Availability Analysis for the 11043 Diversion to determine the viability of the 11043 Diversion project. Recharge projects from the Forebay and Upper Valley Subbasin GSPs include the Multi-Benefit Stream Channel Improvement Project, a Reservoir Reoperation Feasibility Study, and Salinas River Recharge Study at Somavia Road. These projects may also provide indirect benefit to the Eastside Subbasin.

Category (a): Grant Agreement Administration

Task 1. Component Administration

Conduct planning, coordination, and oversight associated with Component 6. Meet with consultants and implementing partners to refine implementation schedule and process, coordinate work, and complete budget and progress check ins. Carry out as-needed communications with the California Department of Water Resources (DWR) Sustainable Groundwater Management (SGM) Grant Project Manager and/or administration staff.

Prepare reports detailing Component 4 work completed during the reporting period for inclusion in Component 1 Quarterly Progress Reports. Quarterly Progress Reports will include sufficient information for the DWR Grant Manager to understand and review backup documentation submitted with invoices. Quarterly invoices will accompany the Quarterly Progress Reports. Collect and organize backup documentation by the Component 4 budget category and task and prepare a summary Excel document detailing contents of the backup documentation organized by task. Prepare the Draft Component Completion Report and submit to the DWR Grant Manager for comment and review 90 days before the end date for Component 4 as outlined in the Schedule. Prepare a Final Component Completion Report addressing the DWR Grant Manager's comments within 30 days before the Component 4 end date. All deliverables listed within the Work Plan will be submitted with the Final Component Completion Report unless a new deliverable due date was approved by the DWR Grant Manager.

Deliverables:

- Component reporting to be included in Quarterly Progress Reports and Invoices
- Draft and Final Component Completion Reports

Category (b): Environmental / Engineering / Design

Task 2. Feasibility Studies for Managed Aquifer Recharge and Stormwater Recharge

Complete high-level feasibility studies for potential Managed Aquifer Recharge (MAR) and stormwater recharge projects in the Eastside and Langley Subbasins. Gather relevant existing data (soil, near surface geology, water table, topography, etc.) and review the current conceptual models to develop map of regional suitability for suitable MAR/stormwater recharge sites. Mapping consists of compiling, georeferencing, and integrating surface and subsurface data to derive a spatial distribution of MAR/stormwater recharge suitability values. Based on mapping, identify areas for potential tTEM geophysics and reach out to landowners of those sites. Collect tTEM at 10 sites to determine site specific recharge capacity. Update mapping and modeling based on tTEM data. Produce technical memorandum of mapping methods and results.

Deliverables:

- Map of regional suitability for MAR/stormwater recharge
- Report documenting assessment of regional suitability methods
- Technical memorandum summarizing TOE-TEM results

Task 3. Reservoir Reoperation Feasibility Study

Design and model reservoir reoperation scenarios for enhanced groundwater recharge and/or diverting water for use in lieu of groundwater. Reservoir reoperation is a management action in the Forebay and Upper Valley GSPs and supports other GSP projects such as aquifer storage and recovery in the 180/400-Foot Aquifer Subbasin. Shifting reservoir releases from summer to winter/spring may have groundwater recharge, decreased evaporation, and endangered species benefits. Reservoir reoperation scenarios will be developed in collaboration with MCWRA and the modeled scenarios will be evaluated for groundwater benefits and to better assess depletion of interconnected surface water. The scenarios build on MCWRA work to develop a Habitat Conservation Plan and will include legal analysis needed to determine viability of scenarios under existing flow prescriptions.

Deliverables:

- Technical memorandum summarizing reservoir reoperation scenario design, method of analysis, and impact on groundwater conditions

Task 4. Salinas River Recharge Study at Somavia Road

Conduct higher level feasibility for Reservoir Reoperation, the Eastside Irrigation Supply Project, and Castroville Seawater Intrusion Project (CSIP) Expansion by conducting field studies to assess Salinas River recharge around Somavia Road, an area of high recharge. Complete field studies to estimate recharge rates using temporary stream gauges and temperature probes to address uncertainty that complicates reservoir operations. Assess river recharge rates in terms of: (1) optimizing reservoir operations in terms of releasing water for CSIP, (2) evaluating potential source water for CSIP expansion, and (3) establishing project feasibility and a conceptual project size for the Eastside Irrigation Supply Project, since the size of the project is highly dependent on the Salinas River recharge rates in that specific area.

Deliverables:

- Report on Salinas River recharge rates and locations near Somavia Road

Task 5. Multi-benefit Stream Channel Improvements

Build on and expand existing multi-benefit programs that increase recharge by removing invasive riparian plant species and supporting stream channel maintenance. Support removal of the invasive *Arundo donax* by conducting aerial mapping of existing *Arundo* across 6,000 riparian acres and processing imagery to quantify and identify the existing Arundo stands. Assess groundwater benefits of Arundo removal through a groundwater benefit assessment using hydraulic modeling with HEC-RAS to evaluate percolation from the river, its floodplain, and potential off-channel detention basins under a variety of flow regimes. Rescope the current Arundo Removal and Stream Channel Maintenance programs to enhance groundwater recharge as part of the GSP Multi-benefit Stream Channel Improvement Project. Work will be conducted by the Resource Conservation District of Monterey County (RCDMC), which currently leads this work. After rescoping, develop draft permits to reflect potential groundwater benefits and a more streamlined and effective effort. Develop a mechanism for increasing landowner access and permissions. Prioritize removal sites that will maximize potential recharge and flood conveyance benefits. Revise project descriptions for permit renewals in 2025.

Deliverables:

- Groundwater/Surface Water Analysis HEC-RAS model report
- Landowner access agreement
- Map of existing Arundo

Task 6. 11043 Diversion Updated Water Availability Analysis

Complete updated water availability analysis for the 11043 Diversion projects in the Eastside Subbasin GSP. This analysis will leverage DWR's streamlined Water Availability Analysis approach if possible. Develop water availability analysis based on historical streamflow and reservoir release data. Review and select at least 2 climate change scenarios. Based on selected climate change scenarios, complete future water availability analysis for the 11043 Diversion project with the 2 diversion points in the permit (Soledad and Chualar); may include modeling and/or legal analysis to assess streamflow available at diversion points. Undertake analysis in coordination with MCWRA and SVBGSA.

Deliverables:

- 11043 Diversion Updated Water Availability Analysis

Category (c): Implementation / Construction

Not applicable to this Component

Category (d): Monitoring / Assessment

Not applicable to this Component

Category (e): Engagement / Outreach

Not applicable to this Component

COMPONENT 5. DEMAND MANAGEMENT

Demand management measures are identified in all 4 GSPs as potential management actions that could be undertaken to reach or maintain sustainability. Demand management measures are important components of Salinas Valley GSPs to avoid sole reliance on supply side management actions and projects. Component 5 refines the conceptual descriptions and plans for demand management appropriate to each subbasin. , since the need for, and design of demand management measures varies by subbasin. The overdrafted Eastside and Langley Subbasin GSPs include Pumping Allocations and Controls, Fallowing, Fallow Bank, and Agricultural Land Retirement actions. The non-overdrafted Forebay and Upper Valley Subbasin GSPs call for the establishment of SMC Technical Advisory Committees (SMC TACs) to annually review groundwater conditions and assess whether they warrant action, such as demand management. Each subbasin's demand management measures will require common agreements about extraction data, stakeholder involvement, potential and specific actions, goals, monitoring methods, and contingency plans for drought or other conditions. This Component conducts the planning and design of demand management measures appropriate for each subbasin, including legal analyses, modeling of options, and facilitating discussions on the structure, options, and expected results. No demand measurement measure is appropriate for the entire Valley, and demand management measures will be designed on the subbasin level, led by subbasin implementation committees. To ensure alignment between subbasin-specific demand management measures and prevention of harm to adjacent subbasins, Task 4 supports modeling and assessment of inter-subbasin impacts of demand management.

Category (a): Grant Agreement Administration

Task 1. Component Administration

Conduct planning, coordination, and oversight associated with Component 6. Meet with consultants and implementing partners to refine implementation schedule and process, coordinate work, and complete budget and progress check ins. Carry out as-needed communications with the California Department of Water Resources (DWR) Sustainable Groundwater Management (SGM) Grant Project Manager and/or administration staff.

Prepare reports detailing Component 5 work completed during the reporting period for inclusion in Component 1 Quarterly Progress Reports. Quarterly Progress Reports will include sufficient information for the DWR Grant Manager to understand and review backup documentation submitted with invoices. Quarterly invoices will accompany the Quarterly Progress Reports. Collect and organize backup documentation by the Component 5 budget category and task and prepare a summary Excel document detailing contents of the backup documentation organized by task. Prepare the Draft Component Completion Report and submit to the DWR Grant Manager for comment and review 90 days before the end date for Component 5 as outlined in the Schedule. Prepare a Final Component Completion Report addressing the DWR Grant Manager's comments within 30 days before the Component 5 end date. All deliverables listed within the Work Plan will be submitted with the Final Component Completion Report unless a new deliverable due date was approved by the DWR Grant Manager.

Deliverables:

- Component reporting to be included in Quarterly Progress Reports and Invoices
- Draft and Final Component Completion Reports

Category (b): Environmental / Engineering / Design

Task 2. Plan for Demand Management in Overdrafted Subbasins

Work with interested parties to plan for demand management in the overdrafted Eastside and Langley Subbasins. Include flexibility options such as rotational fallowing and coordinating with land repurposing efforts. Activities include:

- Facilitated discussions on demand management measures, options, and expected results
- Legal analyses of water rights in the context of demand management
- Modeling of potential options for reducing demand
- Engagement of water and land planning agencies

Deliverables:

- Copy of meeting minutes and outcomes
- Copy of interested party agreements and recommendations

Task 3. Establish SMC Technical Advisory Committees in Non-overdrafted Subbasins

Establish and convene the SMC TAC in the non-overdrafted Forebay and Upper Valley Subbasins. These SMC TACs will review current conditions, assess when conditions warrant additional action, and make recommendations to the Subbasin Committee on management actions and projects such as recharge or demand management.

- Establishment of SMC TACs
- SMC TAC review of Annual Reports

Deliverables:

- Copies of agendas and meeting packets

Task 4. Inter-subbasin Impacts of Demand Management

Assess inter-subbasin impacts of subbasin-specific demand management and demand management in areas that cross subbasins, specifically the Deep Aquifers which exist in 5 of the 6 Salinas Valley subbasins. Use the SVIHM groundwater model to assess the impacts of potential demand management actions on groundwater conditions in adjacent subbasins. If there is need for 2 adjacent subbasins to both implement demand management measures, assess the joint interaction of impacts to groundwater conditions and inter-subbasin flow. Develop Deep Aquifers demand management concepts with the Eastside, Forebay, and Langley Subbasins, in collaboration with other SVBGSA subbasins (Monterey is included in Monterey Subbasin grant). This task complements Tasks 2 and 3 by enabling consideration of inter-subbasin impacts. Includes:

- Inter-subbasin discussions on demand management measures, options and expected results
- Legal analyses of water rights in the context of demand management, when relevant across multiple subbasins
- Inter-subbasin modeling of potential options for reducing demand
- Engagement of water and land planning agencies, as relevant for multi-subbasin demand management measures

Deliverables:

- Copy of meeting agendas and agenda packets
- Copy of interested party agreements and recommendations

Category (c): Implementation / Construction

Not applicable to this Component

Category (d): Monitoring / Assessment

Not applicable to this Component

Category (e): Engagement / Outreach

Not applicable to this Component

COMPONENT 6. ALTERNATE SUPPLY FEASIBILITY AND CEQA

Component 6 assesses the feasibility of expanding the regional benefits of the proposed Seawater Intrusion Project, which consists of a seawater extraction barrier, desalting facility, and distribution system for desalted water. This project will have extensive regional benefits, and project success relies on coordinating efforts of many beneficiaries and funds from multiple grant applications. The Project helps stop advancement of seawater intrusion toward the Eastside Subbasin with the seawater extraction barrier and helps reduce extraction in the Eastside with the delivery of desalted water. The project additionally benefits the Monterey Subbasin, which is covered under a separate grant application. Component 6 builds on the Phase I study being completed with the Round 1 SGMA Implementation Grant for the 180/400-Foot Aquifer Subbasin. This Component completes Phase I through conducting 10% design on the distribution system for desalted water to the Eastside, builds on Phase II 30% and 60% design being completed with the Monterey Subbasin SGMA Implementation Grant, and undertakes Phase III through drafting the Seawater Intrusion Project CEQA documents. In addition, to bring additional water supplies to the Eastside and Langley Subbasins, Component 6 includes a high-level feasibility study of expanding the Castroville Seawater Intrusion Project (CSIP) which delivers a blend of recycled, river, and groundwater for irrigation. Expanding CSIP would provide an alternative supply of irrigation water to reduce reliance on groundwater.

Category (a): Grant Agreement Administration

Task 1. Component Administration

Conduct planning, coordination, and oversight associated with Component 6. Meet with consultants and implementing partners to refine implementation schedule and process, coordinate work, and complete budget and progress check ins. Carry out as-needed communications with the California Department of Water Resources (DWR) Sustainable Groundwater Management (SGM) Grant Project Manager and/or administration staff.

Prepare reports detailing Component 6 work completed during the reporting period for inclusion in Component 1 Quarterly Progress Reports. Quarterly Progress Reports will include sufficient information for the DWR Grant Manager to understand and review backup documentation submitted with invoices. Quarterly invoices will accompany the Quarterly Progress Reports. Collect and organize backup documentation by the Component 6 budget category and task and prepare a summary Excel document detailing contents of the backup documentation organized by task. Prepare the Draft Component Completion Report and submit to the DWR Grant Manager for comment and review 90 days before the end date for Component 6 as outlined in the Schedule. Prepare a Final Component Completion Report addressing the DWR Grant Manager's comments within 30 days before the Component 6 end date. All deliverables listed within the Work Plan will be submitted with the Final Component Completion Report unless a new deliverable due date was approved by the DWR Grant Manager.

Deliverables:

- Component reporting to be included in Quarterly Progress Reports and Invoices
- Draft and Final Component Completion Reports

Category (b): Environmental / Engineering / Design

Task 2. Seawater Intrusion Project Feasibility Phase III: Desalted Water Distribution and CEQA

Assess the feasibility of expanding regional benefits of the proposed desalting plant. Build on feasibility work completed under the Round 1 SGMA Implementation Grant underway in the 180/400-Foot Aquifer Subbasin, and in coordination with the seawater intrusion control feasibility work in the Monterey Subbasin Round 2 grant. Identify potential end users for desalted water in the Eastside Subbasin. Complete Phase I conceptual scoping the 10% design of a distribution system to deliver desalted water to the Eastside Subbasin to be used in lieu of groundwater extraction. Based on the 30% and 60% engineering designs developed as part of the coordinated Monterey Subbasin Round 2 implementation grant, advance the Seawater Intrusion Project Feasibility Studies through CEQA. In the event the Monterey Subbasin grant is not funded, this grant could cover the 30% and 60% engineering designs instead of the CEQA analysis. Specific activities include:

- Developing a conceptual plan (10% design) for the distribution network needed to deliver desalted water to the City of Salinas. Identifying locations for the piping, high level archeology review, and high level sensitive species and habitat review. Comparison of options for distribution network. Updated costs associated with 3 options.
- Completing CEQA Environmental Impact Report for Seawater Intrusion Project, including Extraction Barrier, Brackish Water Treatment Plant, and Distribution Network. Includes alternatives.
- Prepare required CEQA documentation pursuant to current CEQA guidelines. Conduct a biological assessment to determine if there may be potential impacts to special species and comply with the mitigation measures of the Seawater Intrusion Project. Complete Environmental Impact Report. Obtain applicable permit(s) pertinent to the Project.

Deliverables:

- 10% engineering design for distribution network for desalted water
- CEQA Environmental Impact Report for Seawater Intrusion Project

- Biological Assessment Report (if applicable)

Task 3. High Level Feasibility Study for CSIP Expansion

Develop and compare options for CSIP expansion. Conduct hydraulic modeling and assessment of potential expansion options. Assess expansion configurations and extents based on land use, anticipated groundwater impacts of expansion, system constraints, and source water options. Undertake legal studies and develop annexation policies critical for expanding CSIP. Analyze options for expansion into contiguous and non-contiguous lands. Develop annexation policy for contiguous versus non-contiguous access lands and rights-of-way.

Deliverables:

- Feasibility Study for CSIP Expansion
- Annexation policy for contiguous versus non-contiguous access lands and rights-of-way

Category (c): Implementation / Construction

Not applicable to this Component

Category (d): Monitoring / Assessment

Not applicable to this Component

Category (e): Engagement / Outreach

Not applicable to this Component

COMPONENT 7. AGRICULTURAL WATER CONSERVATION BEST MANAGEMENT PRACTICES PROGRAM

This component supports the development and expansion of existing agricultural extension programs to provide resources to growers and underrepresented farmers through a pilot partnership program between the Resource Conservation District of Monterey County, University of California Cooperative Extension, and the SVBGSA. The partnership will build on each of the organization's individual work coalescing around efficient groundwater use and minimizing runoff from farms. The outcomes will be increased grower access to conservation resources, targeted technical assistance to maximize water conservation, expanded public awareness of groundwater issues, and an assessment of the feasibility of providing more accurate evapotranspiration (ET) data for the Valley by enhancing the reference weather station network. . SVBGSA will facilitate awareness of agricultural best management practices through the development of a regional water conservation website.

Category (a): Grant Agreement Administration

Task 1. Component Administration

Conduct planning, coordination, and oversight associated with Component 6. Meet with consultants and implementing partners to refine implementation schedule and process, coordinate work, and complete budget and progress check ins. Carry out as-needed communications with the California Department of Water Resources (DWR) Sustainable Groundwater Management (SGM) Grant Project Manager and/or administration staff.

Prepare reports detailing Component 7 work completed during the reporting period for inclusion in Component 1 Quarterly Progress Reports. Quarterly Progress Reports will include sufficient information for the DWR Grant Manager to understand and review backup documentation submitted with invoices. Quarterly invoices will accompany the Quarterly Progress Reports. Collect and organize backup documentation by the Component 7 budget category and task and prepare a summary Excel document detailing contents of the backup documentation organized by task. Prepare the Draft Component Completion Report and submit to the DWR Grant Manager for comment and review 90 days before the end date for Component 7 as outlined in the Schedule. Prepare a Final Component Completion Report addressing the DWR Grant Manager's comments within 30 days before the Component 7 end date. All deliverables listed within the Work Plan will be submitted with the Final Component Completion Report unless a new deliverable due date was approved by the DWR Grant Manager.

Deliverables:

- Component reporting to be included in Quarterly Progress Reports and Invoices
- Draft and Final Component Completion Reports

Category (b): Environmental / Engineering / Design

Task 2. UCCE/RCDMC Extension

Support the development of agricultural extension programs to provide resources to underrepresented farmers and growers through a pilot partnership program between the Resource Conservation District of Monterey County, University of California Cooperative Extension and the SVBGSA. Assess feasibility of reference ET data expansion through the rehabilitation of existing CIMIS weather station sites or the establishment of new CIMIS station sites. Facilitate the extension of agricultural best management practices through the development of a regional water conservation website.

Develop pilot UCCE/RCDMC Extension programs for best management practices to efficiently irrigate and minimize runoff. The RCDMD and partners will perform outreach and education to increase public awareness of groundwater issues, facilitate grower access to conservation resources, and target technical assistance to maximize water conservation. Technical assistance offered to growers may include distribution uniformity evaluations, training on irrigation system operation and maintenance, assistance with irrigation scheduling (CropManage software, water-use monitoring, soil moisture monitoring, installing and monitoring irrigation system trials (e. g., drip- tape trials), and training irrigators.

Emphasize working with underserved/underrepresented producers in the Valley to ensure equitable access to knowledge and resources related to efficient agricultural water management.

Deliverables:

- Summary report of UCCE/RCDMC Extension Program describing outreach and technical assistance
- Summary report of feasibility of reference ET data expansion

Task 3. Create Regional Agricultural Water Conservation Website

Develop an informational website for agricultural best management practices. Highlight and consolidate technical resources on the website to support implementation of agricultural water conservation best management practices and minimizing runoff from farms. Also draft website content targeted toward non-agriculture affiliated interested parties to better understand how agriculture is managing water resources through on-farm practices. Dedicate the informational Regional Water Conservation Website to be an informational hub by providing links to new and existing resources and also educate the public about agricultural water conservation best management practices.

Deliverables:

- Photos of website pages

Category (c): Implementation / Construction

Not applicable to this Component

Category (d): Monitoring / Assessment

Not applicable to this Component

Category (e): Engagement / Outreach

Not applicable to this Component

COMPONENT 8. SAN LUCAS DRINKING WATER PROJECT

This component supports the construction of a Storage Tank Nitrate Water Treatment System (STNWTS) with new water lines for the San Lucas County Water District to deliver drinking water to approximately 415 residents with 85 service connections. Prior to construction, it includes a field survey, hydraulic modeling, the development of full design documents, environmental review, permit preparation, and permit fees. The water system distribution improvement includes the use of a storage tank to receive and store groundwater before it is distributed as drinking water. While in the storage tank, the concentration of nitrates in the water can be monitored and the water diluted if needed to reach levels below the maximum contaminate level of 10 ppm (NO3-N).

Category (a): Grant Agreement Administration

Task 1. Component Administration

Conduct planning, coordination, and oversight associated with Component 6. Meet with consultants and implementing partners to refine implementation schedule and process, coordinate work, and complete budget and progress check ins. Carry out as-needed communications with the California Department of Water Resources (DWR) Sustainable Groundwater Management (SGM) Grant Project Manager and/or administration staff.

Prepare reports detailing Component 7 work completed during the reporting period for inclusion in Component 1 Quarterly Progress Reports. Quarterly Progress Reports will include sufficient information for the DWR Grant Manager to understand and review backup documentation submitted with invoices. Quarterly invoices will accompany the Quarterly Progress Reports. Collect and organize backup documentation by the Component 7 budget category and task and prepare a summary Excel document detailing contents of the backup documentation organized by task. Prepare the Draft Component Completion Report and submit to the DWR Grant Manager for comment and review 90 days before the end date for Component 7 as outlined in the Schedule. Prepare a Final Component Completion Report addressing the DWR Grant Manager's comments within 30 days before the Component 7 end date. All deliverables listed within the Work Plan will be submitted with the Final Component Completion Report unless a new deliverable due date was approved by the DWR Grant Manager.

Deliverables:

- Component reporting to be included in Quarterly Progress Reports and Invoices
- Draft and Final Component Completion Reports

Category (b): Environmental / Engineering / Design

Task 2. Complete Environmental Review Documents and Transmission Line Plans

Complete field survey for the final engineering design documents, building on the completed feasibility study. Complete water system hydraulic model. Complete environmental review documents and file for a categorical exemption from CEQA. Prepare and file permits.

Deliverables:

- Final engineering design
- Record drawings

Category (c): Implementation / Construction

Task 3. Construct Transmission Lines and Install Storage Tank Nitrate Water Treatment System

Install a Storage Tank Nitrate Water Treatment System (STNWTS) where pumped groundwater is sent to an existing storage tank first to allow any potential nitrate spikes to be buffered and diluted by the large tank volume. Construct new 8" 5,000 linear feet transmission supply line to the storage tank which eliminates the possibility of high nitrate water to be distributed as drinking water. Photo-document pre-construction conditions, construction activities, and post-construction reservoir. Finalize record drawings and submit to DWR's Grant Manager.

Deliverables:

- Storage Tank Nitrate Water Treatment System
- Health and Safety Plan (if applicable)
- Photos documenting pre-construction conditions, construction activities, and post-construction reservoir

Category (d): Monitoring / Assessment

Not applicable to this Component

Category (e): Engagement / Outreach

Not applicable to this Component

C. Budget

BUDGET TABLE

Table 1a: Budget Summary

Grant Title: Salinas Valley GSP Implementation Grant (Eastside Aquifer, Forebay Aquifer, Langley Area, and Upper Valley Aquifer Subbasins)

Grantee: Salinas Valley Basin Groundwater Sustainability Agency

Components	Grant Amount
Component 1: Grant Administration	$ 984,600.00
Component 2: Data Expansion and SGMA Compliance	$ 5,852,000.00
Component 3: Engagement of Interested Parties and Underrepresented Communities	$ 3,597,000.00
Component 4 : Groundwater Recharge Feasibility	$ 2,750,000.00
Component 5 : Demand Management	$ 1,815,000.00
Component 6: Alternative Supply Feasibility and CEQA	$ 3,025,000.00
Component 7: Agricultural Water Conservation Best Management Practices Program	$ 825,000.00
Component 8: San Lucas Drinking Water Project	$ 1,828,000.00
Total:	**$ 20,676,600.00**

Table 1b: Component Budget Summaries

Component 1: Grant Administration

Component 1 serves a need of a DAC, SDAC, Tribe and/or Underrepresented Community?

(check all that apply): ☒DAC, ☒SDAC, ☐Tribe, and/or ☒Underrepresented Community

Budget Categories	Grant Amount
(a) Grant Agreement Administration	$ 984,600.00
(b) Environmental / Engineering / Design	$0
(c) Implementation / Construction	$0
(d) Monitoring / Assessment	$0
(e) Engagement / Outreach	$0
Total:	**$ 984,600.00**

Component 2: Data Expansion and SGMA Compliance

Component 2 serves a need of a DAC, SDAC, Tribe and/or Underrepresented Community?

(check all that apply): ☒DAC, ☒SDAC, ☐Tribe, and/or ☒Underrepresented Community

Budget Categories	Grant Amount
(a) Component Administration	$ 532,000.00
(b) Environmental / Engineering / Design	$ 320,000.00
(c) Implementation / Construction	$ 3,350,000.00
(d) Monitoring / Assessment	$ 1,650,000.00
(e) Engagement / Outreach	$ 0
Total:	**$ 5,852,000.00**

Component 3: Engagement of Interested Parties and Underrepresented Communities

Component 3 serves a need of a DAC, SDAC, Tribe and/or Underrepresented Community?

(check all that apply): ☒DAC, ☒SDAC, ☐Tribe, and/or ☒Underrepresented Community

Budget Categories	Grant Amount
(a) Component Administration	$ 327,000.00
(b) Environmental / Engineering / Design	$ 0
(c) Implementation / Construction	$ 0
(d) Monitoring / Assessment	$ 700,000.00
(e) Engagement / Outreach	$ 2,570,000.00
Total:	**$ 3,597,000.00**

Component 4: Groundwater Recharge Feasibility

Component 4 serves a need of a DAC, SDAC, Tribe and/or Underrepresented Community?

(check all that apply): ☒DAC, ☒SDAC, ☐Tribe, and/or ☒Underrepresented Community

Budget Categories	Grant Amount
(a) Component Administration	$ 250,000.00
(b) Environmental / Engineering / Design	$ 2,500,000.00
(c) Implementation / Construction	$ 0
(d) Monitoring / Assessment	$ 0
(e) Engagement / Outreach	$ 0
Total:	**$ 2,750,000.00**

Component 5: Demand Management

Component 5 serves a need of a DAC, SDAC, Tribe and/or Underrepresented Community?

(check all that apply): ☒DAC, ☒SDAC, ☐Tribe, and/or ☒Underrepresented Community

Budget Categories	Grant Amount
(a) Component Administration	$ 165,000.00
(b) Environmental / Engineering / Design	$ 1,650,000.00
(c) Implementation / Construction	$ 0
(d) Monitoring / Assessment	$ 0
(e) Engagement / Outreach	$ 0
Total:	**$ 1,815,000.00**

Component 6: Alternative Supply Feasibility and CEQA

Component 6 serves a need of a DAC, SDAC, Tribe and/or Underrepresented Community?

(check all that apply): ☒DAC, ☒SDAC, ☐Tribe, and/or ☒Underrepresented Community

Budget Categories	Grant Amount
(a) Component Administration	$ 275,000.00
(b) Environmental / Engineering / Design	$ 2,750,000.00
(c) Implementation / Construction	$ 0
(d) Monitoring / Assessment	$ 0
(e) Engagement / Outreach	$ 0
Total:	**$ 3,025,000.00**

Component 7: Agricultural Water Conservation Best Management Practices Program

Component 7 serves a need of a DAC, SDAC, Tribe and/or Underrepresented Community?

(check all that apply): ☒DAC, ☒SDAC, ☐Tribe, and/or ☒Underrepresented Community

Budget Categories	Grant Amount
(a) Component Administration	$ 75,000.00
(b) Environmental / Engineering / Design	$ 0
(c) Implementation / Construction	$ 700,000.00
(d) Monitoring / Assessment	$ 0
(e) Engagement / Outreach	$ 50,000.00
Total:	**$ 825,000.00**

Component 8: San Lucas Drinking Water Project

Component 8 serves a need of a DAC, SDAC, Tribe and/or Underrepresented Community?

(check all that apply): ☒DAC, ☒SDAC, ☐Tribe, and/or ☒Underrepresented Community

Budget Categories	Grant Amount
(a) Component Administration	$ 200,000.00
(b) Environmental / Engineering / Design	$ 328,000.00
(c) Implementation / Construction	$ 1,300,000.00
(d) Monitoring / Assessment	$0
(e) Engagement / Outreach	$0
Total:	**$ 1,828,000.00**

Table 2 – Ranking of Proposed Components

Rank	Name	SJV Funds Component Requirement	Readiness	Partnerships with Non-Profits, Non-Governmental Organizations (NROs), and/or Colleges/Universities	Benefactors	Cost
Rank in order of importance with 1 being most important. Do not use rank # more than once each.	*Provide a name for each proposed component.*	*Please check box if the component is eligible for SJV-funds*	*Please check if the component will be under constructio n by the end of 2023*	*Please list all partnering agencies that are collaborating on a component with the estimate amount of funding being provided to the nonprofit(s), NGO(s), and/or college(s)/ university (-ies)*	*Does this component benefit any of the following communities ? (Check all that apply)*	*Provide a cost estimate for the total component cost. Round to nearest hundred.*
	Grant Administration	☐	☐		☐ Tribe(s) ☐ URC(s) ☐ SDAC(s)	$ 984,600.00
1	Data Expansion and SGMA Compliance	☐	☐	Central Coast Wetlands Group: $300,000	☐ Tribe(s) ☒ URC(s) ☒ SDAC(s)	$ 5,852,000.00
2	Engagement of Interested Parties and Underrepresented Communities	☐	☐	Resource Conservation District of Monterey County: $120,000	☐ Tribe(s) ☒ URC(s) ☒ SDAC(s)	$ 3,597,000.00
3	Groundwater Recharge Feasibility	☐	☐	Salinas River Channel Management Unit Association, Resource Conservation District of Monterey County: $200,000	☐ Tribe(s) ☒ URC(s) ☒ SDAC(s)	$ 2,750,000.00
4	Alternative Supply Feasibility and CEQA	☐	☐		☐ Tribe(s) ☒ URC(s) ☒ SDAC(s)	$ 3,025,000.00
5	Demand Management	☐	☐		☐ Tribe(s) ☒ URC(s) ☒ SDAC(s)	$ 1,815,000.00
6	Agricultural Water Conservation Best Management Practices Program	☐	☐	Resource Conservation District of Monterey County: $400,000 University of California Cooperative Extension: $300,000	☐ Tribe(s) ☒ URC(s) ☒ SDAC(s)	$ 825,000.00
7	San Lucas Transmission Line	☐	☒		☐ Tribe(s) ☒ URC(s) ☒ SDAC(s)	$ 1,828,000.00
					Total Cost:	**$ 20,676,600.00**

D. Schedule

Grant Title: Salinas Valley GSP Implementation Grant (Eastside Aquifer, Forebay Aquifer, Langley Area, and Upper Valley Aquifer Subbasins)

Categories	Start Date	End Date
Component 1: Grant Administration	**January 1, 2023**	**April 30, 2026**
(a) Component Administration	01/01/2023	04/30/2026
(b) Environmental / Engineering / Design	NA	NA
(c) Implementation / Construction	NA	NA
(d) Monitoring / Assessment	NA	NA
(e) Engagement / Outreach	NA	NA
Component 2: Data Expansion and SGMA Compliance	**January 1, 2023**	**April 30, 2026**
(a) Component Administration	01/01/2023	04/30/2026
(b) Environmental / Engineering / Design	01/01/2023	07/30/2025
(c) Implementation / Construction	12/01/2023	12/30/2025
(d) Monitoring / Assessment	12/01/2023	04/30/2026
(e) Engagement / Outreach	NA	NA
Component 3: Engagement of Interested Parties and Underrepresented Communities	**October 4, 2022**	**April 30, 2026**
(a) Component Administration	010/04/2022	04/30/2026
(b) Environmental / Engineering / Design	NA	NA
(c) Implementation / Construction	NA	NA
(d) Monitoring / Assessment	12/01/2023	04/30/2026
(e) Engagement / Outreach	10/04/2022	04/30/2026
Component 4: Groundwater Recharge Feasibility	**July 1, 2023**	**April 30, 2026**
(a) Component Administration	07/01/2023	04/30/2026
(b) Environmental / Engineering / Design	07/01/2023	04/30/2026
(c) Implementation / Construction	NA	NA
(d) Monitoring / Assessment	NA	NA
(e) Engagement / Outreach	NA	NA
Component 5: Demand Management	**January 1, 2023**	**April 30, 2026**
(a) Component Administration	01/01/2023	04/30/2026
(b) Environmental / Engineering / Design	01/01/2023	04/30/2026
(c) Implementation / Construction	NA	NA
(d) Monitoring / Assessment	NA	NA
(e) Engagement / Outreach	NA	NA
Component 6: Alternative Supply Feasibility and CEQA	**July 1, 2023**	**December 30, 2025**
(a) Component Administration	07/01/2023	12/30/2025
(b) Environmental / Engineering / Design	07/01/2023	12/30/2025
(c) Implementation / Construction	NA	NA
(d) Monitoring / Assessment	NA	NA
(e) Engagement / Outreach	NA	NA
Component 7: Agricultural Water Conservation Best Management Practices Program	**July 1, 2023**	**April 30, 2026**
(a) Component Administration	07/01/2023	04/30/2026
(b) Environmental / Engineering / Design	NA	NA
(c) Implementation / Construction	07/01/2023	04/30/2026
(d) Monitoring / Assessment	NA	NA
(e) Engagement / Outreach	07/01/2023	04/30/2026

Categories	Start Date	End Date
Component 8: San Lucas Transmission Line	**July 1, 2023**	**December 30, 2025**
(a) Component Administration	07/01/2023	12/30/2025
(b) Environmental / Engineering / Design	07/01/2023	12/30/2025
(c) Implementation / Construction	07/01/2023	12/30/2025
(d) Monitoring / Assessment	NA	NA
(e) Engagement / Outreach	NA	NA

Environmental Compliance and Permitting

COMPONENT 1: GRANT ADMINISTRATION

Not applicable to grant administration.

COMPONENT 2: DATA EXPANSION AND SGMA COMPLIANCE

No environmental compliance and permitting will be required for the planning tasks of Component 2 per California Water Code Section 10728.6. Given monitoring wells will be utilized for data collection efforts, they are anticipated to require submittal of a Notice of Exemption (NOI) for a categorical exemption under Section 15306, Class 6 to the Monterey County clerk's office to comply with CEQA obligations. Monitoring wells will also require well construction permits from Monterey County Environmental Health Bureau and associated well permit verification forms from the relevant GSAs. Landowner access agreements may be needed.

COMPONENT 3: ENGAGEMENT OF INTERESTED PARTIES AND UNDERREPRESENTED COMMUNITIES

Not applicable to reporting.

COMPONENT 4: GROUNDWATER RECHARGE FEASIBILITY

This component funds the preparation and submission of Regional Water Quality Control Board 401 water quality certification, California Department of Fish and Wildlife 1600 RMA and National Pollution Discharge Elimination Systems compliance for Arundo removal and stream channel maintenance (if needed).

COMPONENT 5: DEMAND MANAGEMENT

Not applicable to stakeholder engagement.

COMPONENT 6: ALTERNATIVE SUPPLY FEASIBILITY AND CEQA

This Component funds the preparation of required CEQA documentation pursuant to current CEQA guidelines for the Seawater Intrusion Project. It is anticipated that completion of an Environmental Impact Report will be required. Component may also include applicable permit(s) pertinent to the Project.

COMPONENT 7: AGRICULTURAL WATER CONSERVATION BEST MANAGEMENT PRACTICES PROGRAM

Not applicable to reporting.

COMPONENT 5: SAN LUCAS TRANSMISSION LINE

This Component funds the preparation of required CEQA documentation pursuant to current CEQA guidelines. In addition, permits with the Monterey County Environmental Health Bureau and any necessary encroachment permits will be prepared and filed. A grading permit from Monterey County may be required.