Attachment C

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Salinas Valley Groundwater Basin Recommended Measures

The Investigation Report recommends that these measures be considered and some combination of them be implemented. Below is a summary of current activities and status for these measures.

General Measures	Current Activities/Status
1. Maintain current infrastructure: Replace the San Antonio spillway and other critical infrastructure at San Antonio and Nacimiento Reservoirs. Maintain and improve the Castroville Seawater Intrusion Project ("CSIP") infrastructure. Operate CSIP to maximize the reliance on recycled and re-diverted stored reservoir water, and minimize groundwater extraction from supplemental wells.	MCWRA – San Antonio Spillway replacement in design phase. MCWRA - CSIP hydraulic model developed to evaluate needed improvements. Scheduling system being implemented. Recycled Water Master Plan to be developed. Maintenance and replacement of supplemental wells is ongoing. SVBGSA - Evaluating feasibility of projects to provide additional sources of supply to replace CSIP supplemental well pumping (Brackish Groundwater Restoration Project, Aquifer Storage and Recovery).
2. Consider groundwater conditions in Land Use Planning: Take into account water availability and the impact of extraction on groundwater conditions and working with the groundwater sustainability agencies when approving land use permits. Consider groundwater sustainability plans and consult the relevant agencies to the specific area when revising or adopting policies. Work collaboratively with GSAs to consider water availability when considering future growth. Specific examples could be considering the impact on long term water supplies or groundwater sustainability through zoning changes that accommodate development of new water supplies, enhancing	Land Use Coordination working group being established with staff from GSAs, County and Cities. Agency staff to develop protocols for consultation between agencies and to include review of GSPs and related reports as part of discretionary permitting and environmental review processes.

General Measures	Current Activities/Status
groundwater recharge, and encouraging water conservation efforts. Work collaboratively to proactively identify how to manage future growth without compromising long-term water supplies or groundwater sustainability, such as through zoning changes that accommodate development of new water supplies, enhance groundwater recharge, encourage water conservation efforts, and promote water recycling projects.	
3. Prevent declines in groundwater recharge: Protect areas of high groundwater recharge (Arroyo Seco Cone, and along the Salinas River south of Chualar). Areas of high groundwater recharge exist and should be protected from land use activities that would reduce recharge. Use low impact development if development is necessary.	MCHCD/SVBGSA/ASGSA - Include consideration to protect recharge areas as part of Land Use Coordination process and during discretionary permitting and environmental review processes.
4. Support conservation to reduce groundwater demand: Continue to support urban and agricultural water conservation to reduce demand from existing and new sources. This includes following State of California policies for urban water conservation, adopting more efficient technologies, and supporting water efficiency programs. Agricultural water conservation work through the University of California Cooperative Extension and the Resource Conservation District of Monterey County help growers identify and tailor conservation practices. Install more California Irrigation Management Information System stations to develop more accurate evapotranspiration data to provide a tool to help growers determine the amount of irrigation needed. Secure funding or coordinate with existing	SVBGSA – Demand Management program under development. • Valley wide demand management assessment completed spring 2023. • Valley wide demand management workshops held spring 2024. • Currently evaluating strategies and assessing feasibility of demand management approaches and options with Subbasin Committees. • Subbasin committee recommendations to be considered by SVBGSA Board in 2025. Urban water suppliers under new state mandates to reduce per capita consumption.

General Measures	Current Activities/Status
specialists to encourage programs that reduce groundwater demand.	MCWRA – Annually gathers data from agricultural and urban water users on the types of water conservation Best Management Practices that are being implemented.
5. Prevent seawater intrusion leakage between aquifers: Prevent vertical mitigation by destroying wells perforated in numerous aquifers and/or leaking. Additionally, well design restrictions and pumping management could help in the coastal area. The Protection of Domestic Drinking Water Supplies for the Lower Salinas Valley project by the MCWRA has destroyed 31 wells already. Wells in the CSIP area or in or near the areas of seawater intrusion should be evaluated and considered for destruction to prevent leakage of seawater between aquifers. Continued implementation of Monterey County Code Chapter 15.08 requires new wells to be screened in one aquifer to prevent seawater intrusion leakage between aquifers.	MCWRA continuing to implement Protection of Domestic Drinking Water Supplies for the Lower Salinas Valley project.
6. Reservoir operations: Reservoir operations must balance multiple needs, including groundwater recharge in the Salinas Valley, providing surface water to the Salinas River Diversion Facility ("SRDF"), protecting endangered species, flood control, and recreation. MCWRA is working with the National Marine Fisheries Service to develop a Habitat Conservation Plan (HCP) to meet Endangered Species Act requirements for activities associated with water operations and management activities. Reservoir operations must comply with laws, regulations, and water rights.	MCWRA • Salinas River Operations HCP in development. • Drought Technical Advisory Committee convened.
7. Reduce groundwater extraction: Implement extraction controls or reductions on groundwater extraction, alongside the previously noted conservation efforts. This option requires planning, data, and engagement of interested parties.	SVBGSA – Under consideration as part of demand management program development. See notes under #4. Greater Monterey County Integrated Regional Water Management (IRWM) Group - $10 million Multi-benefit Land

General Measures	Current Activities/Status
	Repurposing (MLRP) grant from the California Department of Conservation for the 180/400-Foot Aquifer, Eastside Aquifer, and Langley Area Subbasins to strategically and voluntarily acquire and repurpose the least viable, most flood-prone portions of irrigated agricultural lands in the lower Salinas Valley.
8. Provide alternative supplies: Under this recommendation, alternative water supply projects could be implemented or optimized. Reduce required shut-down time for CSIP maintenance, expand CSIP to provide irrigation water to additional farmland, and develop smaller recycled water plants. Some of these efforts are already existing, such as Monterey One Water's recycled water distribution to CSIP. Surface water could be diverted for use instead of groundwater, including creek diversions and stormwater diversions. This would require storage options. Seawater desalination is the third alternative supply option that could be considered.	MCWRA – Implementing CSIP optimization projects (see #1) SVBGSA – Several alternative supply project feasibility studies underway or planned. Initial feasibility studies to be completed by year end 2024. • Brackish Groundwater Restoration Project (previously known as Seawater Intrusion Extraction Barrier/Regional Water Supply) • Seasonal Release with Aquifer Storage and Recovery. • Grant funding secured for feasibility study of CSIP expansion; to be prepared in 2025/2026 in conjunction with MCWRA.
9. Increase groundwater recharge: Groundwater recharge varies along the Salinas River. Groundwater recharge along the Salinas River could be enhanced by reducing vegetation, including invasive Arundo, a project that exists under the Resource Conservation District of Monterey County (RCDMC) guidance. Floodplain restoration efforts along Gabilan creek, and other streams within the Salinas Valley would slow stormwater runoff and recharge the aquifer. Focusing efforts near the streams would reduce the impact on adjacent farmland. Stormwater recapture could be increased by encouraging landowners to collect runoff in recharge ponds and directing overland flow into the ponds. Climate change is anticipated to	RCDMC – Stream Maintenance Program (SMP) implementation. SVBGSA • Analysis of groundwater benefits from SMP underway • Participating in MLRP program implementation (see #7), including recharge suitability mapping MCHDC and MCPWFP – LID requirements implemented in some areas under Monterey Regional Stormwater Management Program.

General Measures	Current Activities/Status
bring more frequent and extreme precipitation events. Small scale efforts to increase rain and stormwater infiltration could be implemented in Prunedale where the subsurface consists of fractured granite. Low Impact Development (LID), dry wells, or rain gardens improve infiltration of stormwater into the ground water. Larger scale projects would have the highest impacts. Small scale or dispersed efforts would be unlikely to have substantial impacts on the groundwater table.	
10. Reduce groundwater extraction near seawater intrusion: Reduce extraction near seawater intruded areas to help raise groundwater levels and increase hydraulic pressure against seawater intrusion. Some areas will have the highest impact. CSIP has already slowed the rate of seawater by providing recycled and rediverted water for irrigation in lieu of increased extraction.	SVBGSA - May be considered as part of demand management program development. See notes under #4.
11. Increase groundwater recharge near seawater intrusion: Recharging groundwater inland increases the hydraulic pressure against intruding seawater. Recharge is most beneficial closest to the intrusion front. Three options that inject water into the underlying aquifers are injection with no recovery, indirect potable reuse, and aquifer storage and recover ("ASR"). Injection with no recovery provides a permanent hydraulic barrier but requires a source of water that be injected and never used. Both indirect potable reuse and ASR effectively use aquifers as a reservoir for storage of water that will be extracted in the future. More water would be needed to be injected than recovered. Injected water would need to be treated to meet regulatory requirements.	SVBGSA - Project feasibility studies include injection wells as project components (Brackish Groundwater Restoration Project, Aquifer Storage and Recovery). To be completed December 2024.

General Measures	Current Activities/Status
12. Install seawater extraction barrier: Extracting seawater from a line of wells to create a hydraulic barrier of low pressure that captures seawater intrusion and prevents seawater from moving inland of the wells. The brackish water could be desalted and used for municipal or agricultural use instead of groundwater.	SVBGSA – Brackish Groundwater Restoration Project feasibility study combines extraction barrier concept with brackish desalination treatment and in-lieu supplies for delivery to both municipal and agricultural end users, as well as injection of treated water for groundwater recharge. To be completed December 2024.