Salinas Valley Basin
Groundwater Sustainability Agency

Eastside Subbasin Groundwater Sustainability Plan Amendment 1 Summary and Guide to Changes

INTRODUCTION

This summary compares the 2022 Groundwater Sustainability Plan (2022 GSP) with the draft 2027 GSP Amendment 1 (GSP or GSP Amendment 1) for the Eastside Aquifer Subbasin (Eastside Subbasin, or Subbasin), Chapters 1 through 10. Amendment 1 supersedes the original GSP. It will be submitted to the California Department of Water Resources (DWR) with the Periodic Evaluation in January 2027. This high-level summary is intended to provide a guide to key changes but is not an exhaustive list of all edits, revisions, or updates.

Amendment 1 incorporates changes based on the improved understanding of the Subbasin and its conditions. These changes are derived from new data, studies, and updated models: the Deep Aquifers Study, airborne electromagnetic (AEM) surveys, the Salinas Valley Integrated Hydrologic Model (SVIHM version 1), and the corresponding updated Salinas Valley Operational Model (SVOM), and the Seawater Intrusion Model (SWIM). Amendment 1 addresses the Recommended Corrective Actions (RCAs) from DWR on SVBGSA's 2022 GSPs and revises the sustainability criteria for groundwater quality. With new data and updated tools, the estimate of historical overdraft drops from 10,000 to 4,800 acre-feet per year (AF/yr). GSP Amendment 1 still concludes the Subbasin is in overdraft, and seawater intrusion is projected to reach it by about 2045 without projects.

GSP Amendment 1 continues to describe a wide range of potential projects and management actions (PMAs) and adds priority and contingency categorization. Descriptions of several PMAs are updated based on feasibility studies that have been completed since the 2022 GSP. GSP Amendment 1 describes the next phase of implementation, moving from a broad, unprioritized menu of PMAs in the 2022 GSP, toward a prioritized set of PMAs that enable the Subbasin to reach sustainability by 2042. GSP Amendment 1 aligns with the Valley-wide Integrated Implementation Strategy (IIS) that includes a preferred portfolio of PMAs. The goal is of the preferred portfolio of PMAs is to avoid undesirable results and achieve or maintain sustainability in each subbasin in the Salinas Valley.

Several themes run through the GSP Amendment 1:

- **New data update the conceptual model.** AEM and the Deep Aquifers Study define the alluvial fans, the bottom of the Subbasin near the Gabilan Range, and show that the Deep Aquifers extend into the edge of the Subbasin.
- **The Monterey County Water Resources Agency (MCWRA) Groundwater Monitoring Program (GMP) is the new foundation of groundwater data collection.** The GMP integrates well registration, groundwater extraction reporting, water quality monitoring for seawater intrusion, groundwater level monitoring, and the Deep Aquifers Monitoring Plan.
- **Groundwater flows from adjacent subbasins dominate the water budget, along with pumping.** The updated models show the estimated net subsurface flow entering the Eastside Subbasin from the 180/400 Subbasin is about 38,000 AF/yr. This inflow shapes both the overdraft and sustainable yield findings.
- **Reducing pumping alone will not stop seawater intrusion by 2040/2042.** Feasibility studies show that reducing pumping either through demand management or delivery of an in-lieu supply have a limited effect on seawater intrusion within SGMA timelines, and more substantial PMA are needed to mitigate seawater intrusion and achieve the minimum thresholds.
- **Seawater intrusion is an Eastside issue.** Groundwater modeling estimates that seawater intrusion could reach the Eastside around 2045 without projects.
- **Groundwater quality criteria are refined.** GSP Amendment 1 addresses DWR's direction to revise the criteria, adds clarity, and outlines evaluation steps.
- **From toolbox to implementation plan.** The 2022 GSP listed options that could achieve sustainability. Amendment 1 uses completed studies, modeling, and demand management work to outline what the SVBGSA intends to implement.

The sections that follow summarize the changes chapter by chapter, listing key parts that are new, revised, or removed. Section numbers in parentheses refer to GSP Amendment 1.

CHAPTER 1: INTRODUCTION

Chapter 1 includes governance details that had previously been in Chapter 2. The chapter describes coordination and an overview of the GSP Amendment 1 for the Eastside Subbasin in the context of the broader Salinas Valley. Table 1 summarizes key changes in Chapter 1.

Table 1. Key Changes in Chapter 1, Introduction

Topic	2022 GSP	2027 Amendment 1 (draft)	GSP Section
Plan manager	Donna Meyers	Piret Harmon	1.2.1

Topic	2022 GSP	2027 Amendment 1 (draft)	GSP Section
Advisory Committee	25 members	Reconfigured in 2025: 6 Subbasin Committee, 4 partner agencies, up to 3 Board-appointed seats	1.2.2

New Content:

- Plan history: the original GSP was submitted in 2022. Amendment 1 replaces it and will be submitted with the GSP 2027 Periodic Evaluation (1.1).

Revised Content:

- SVBGSA Board of Directors seats are described. The Planning Committee is listed as not currently active. The Advisory Committee was reconfigured in 2025 (1.2.2).
- The planned Integrated Implementation Plan is now the IIS. The goal is Sustainable Groundwater Management Act (SGMA) compliance across all six subbasins by 2040/2042 and sustainability through 2070 (1.2.2).

CHAPTER 2: COMMUNICATION AND PUBLIC ENGAGEMENT

Chapter 2 is shorter and focused on how communications and public engagement are now conducted. Governance moved to Chapter 1, and the PMA list now points to Chapters 9 and 10.

New Content:

- Updates include the 2024 Subbasin Committee Program, the 2025 Advisory Committee refocus, and the process for updating the GSP. The committee is renamed the Eastside Subbasin Committee with a clarified role (2.3, 2.4).
- Periodic evaluations are added as an opportunity for the GSAs to communicate how GSP implementation is progressing (2.5.1).
- New tools for communication and engagement include hybrid Zoom meetings, StoryMaps, Instagram, YouTube, paid advertising, fliers, and bilingual materials with interpretation (2.5.2, 2.5.6).
- A summary of engagement actions now goes in each annual report, tied to the annual work plan. It replaces the 2022 GSP list of evaluation questions (2.5.8).
- Salinas Valley Water Leadership Institute (2025–2026) is added as a key community engagement program SVBGSA developed and held in partnership with the Environmental Defense Fund and local organizations during the first phase of GSP implementation (2.6).

Revised Content:

- Stakeholder lists add the Central Coast Wetlands Group (CCWG), the Community Water Center, and others (2.2).
- Agricultural production value changes from $4.25 billion to $5 billion (2.2).
- Disadvantaged community (DAC) data are updated to the 2019–2023 American Community Survey. In the Subbasin, 29.5% of the population lives in a DAC by census block, and 44% by census tract (2.6.1).

Removed Content:

- The governance section, the planning-phases and development-process graphics (previous Figures 2-1 and 2-2), the workshop table (previous Table 2-1), and the list of projects and management actions. Older outreach items such as basin tours, Facebook Live, and Mailchimp are also removed.

CHAPTER 3: DESCRIPTION OF PLAN AREA

Chapter 3 is updated with 2024 land use, MCWRA's new GMP, and the first well counts from MCWRA's registration program. Table 2 summarizes key changes in Chapter 3.

Table 2. Key Changes in Chapter 3, Description of Plan Area

Topic	2022 GSP	2027 Amendment 1 (draft)	GSP Section
Land use data	2019	2024	3.2
Well counts	OSWCR: 706 wells	MCWRA registration: 458 wells (OSWCR data also included in the chapter)	3.5
Conjunctive use	None	No facilities in the Eastside; Salinas Valley reservoir and SRDF operations described	3.4
Groundwater Monitoring Program	—	New: MCWRA Ordinance 5426 (2024)	3.6.1

New Content:

- GMP (3.6.1), adopted in 2024 under MCWRA Ordinance 5426 combines data collection for well registration, groundwater levels, water quality for seawater intrusion, groundwater extraction, and a Deep Aquifers Monitoring Plan.
- The County of Monterey's Salinas Valley Basin Investigation found that demand has increased higher than 2010 projections leading to increased groundwater pumping and

continued seawater intrusion. Demand of 485,000 AF/yr is projected to reach 518,000 AF/yr by 2030 (3.2).

- 2025 Alco Urban Water Management Plan (UWMP) (3.7).

Revised Content:

Table 3 compares revised values in Chapter 3.

Table 3. Revised Values in Chapter 3, Description of Plan Area

Item	2022 GSP	2027 Amendment 1 (draft)
Top crops	Lettuce, strawberries, broccoli (2017)	Strawberries, leaf lettuce, head lettuce (2025)
Wells: domestic / production / public supply	214 / 468 / 24 (OSWCR)	MCWRA registration after first 6 months: 27 / 394 / 37 (OSWCR data also in chapter)
Cal Water UWMP	2015	2025

Chapter 3 also revises the following content:

- MCWRA's authority under the Agency Act is described in more detail (3.1).
- Conjunctive use: there are still no programs in Eastside. Reservoir licenses, release operations, and the Salinas River Diversion Facility (SRDF) are now described for context (3.4).
- Diversion reporting moves from Electronic Water Rights Information Management System (eWRIMS) to California Water Accounting, Tracking, and Reporting System (CalWATRS) (3.3).

CHAPTER 4: HYDROGEOLOGIC CONCEPTUAL MODEL

Chapter 4 identifies AEM data as a key source for this HCM update. Two AEM surveys (DWR Survey Area 1 in 2020 and the Deep Aquifers Survey in 2023), the Deep Aquifers Study, and the updated groundwater flow model layering replace older well-log interpretations of aquifer layering. Previous data gaps for groundwater-dependent ecosystems (GDEs) and interconnected surface water (ISW) have been addressed (4.4.5). While key data gaps are filled and understanding is sufficient for management, further information about the location of bedrock underneath the City of Salinas would help inform a potential no flow boundary condition in the area (4.7). Table 4 summarizes key changes in Chapter 4.

Table 4. Key Changes in Chapter 4, Hydrogeologic Conceptual Model

Topic	2022 GSP	2027 Amendment 1 (draft)	GSP Section
Main HCM data	Well logs, older cross sections	2 AEM surveys, Deep Aquifers Study, bedrock revised near the Gabilan Range, updated locations of ISW and GDE mapping	4.2–4.4

New Content:

- New cross sections A-A′ and B-B′, drawn as SVIHM model layers, replace the Kennedy/Jenks cross sections. B-B′ extends into the 180/400 Subbasin (4.4.1).
- AEM data shows the alluvial fans extend across the Subbasin (halfway across the basin) and have higher clay content from weathered Gabilan granite (4.2).
- Aquifer properties from 2023 aquifer tests and the SVIHM (4.4.2). Storativity is 0.0002–0.0009. SVIHM hydraulic conductivity averages about 20 ft/day in the shallow zone and about 15 ft/day in the deep zone.
- Coarse sediment zones detected through AEM data and tritium ages identify Quail Creek as a potential recharge area (4.4.4).

Revised Content:

- The single principal aquifer is named the Basin Fill Aquifer instead of “Alluvium”. “Shallow” and “deep” are kept as generalized zones (4.4.1).
- The Deep Aquifers are now described as only marginally within the Subbasin. The 2022 GSP said they could potentially extend into the Subbasin and needed more study.
- The base of the Subbasin is now the granite contact revised with AEM near the Gabilan Range, joined to the Durbin (1978) defined basin bottom near the 180/400 Subbasin (4.3).
- ISW mapping now flags areas connected in more than 10% of months over 1968–2022, identified with the revised SVIHM. In the 2022 GSP, the threshold was more than 50% of months, in part due to being based on a provisional model. No ISW is identified in either version (4.4.5).
- Potential GDEs are now mapped by CCWG (2026) based on the Natural Communities Commonly Associated with Groundwater dataset where the depth to groundwater table is high enough to support the above ecosystems and where the Salinas Valley Aquitard is not present. The table lists species that directly depend on groundwater or have an unknown reliance on it, with 2 species instead of 26. The GDE species table focuses on

species in the Eastside Subbasin, updated from the entire Monterey County in the 2022 GSP and without indirectly dependent species (4.4.8).

- Seawater intrusion may be slowed or inhibited by clay-rich alluvial fan sediments; however, GSP Amendment 1 no longer calls intrusion into the Subbasin unlikely (4.6).

Removed Content:

- HCM data gaps removed, including the aquifer properties and Deep Aquifers, and marked as addressed (4.7).

- The natural recharge estimates (17,000 AF/yr inflow and 41,000 acre-feet total) is in GSP Amendment 1 draft, but will be removed in final draft and only included in water budget chapter (Chapter 6).

CHAPTER 5: GROUNDWATER CONDITIONS

Groundwater conditions have not been revised unless the understanding of them has changed. The GSP baseline is still 2015–2019 – these were renamed from "current conditions" to GSP baseline conditions, as more recent conditions have occurred since then. Historical conditions still refer to prior to 2015. GSP Amendment 1 refers readers to the annual reports and periodic evaluations for recent conditions. Updates include lower storage loss, a new water quality analysis, and the inclusion of water use data for water year (WY) 2021–2025.

New Content:

- For 1995 (historical) and 2019 (GSP baseline), fall contours are added for both the shallow and deep zones, adding to spring and August trough contour maps (5.1.2).
- A third well group for vertical gradient review, which adds the Deep Aquitard in the northwest corner (5.1.4).
- Analyses of the relationship between changes in water quality, groundwater levels, and extraction for 1995–2024. Nitrate is increasing in 58% of wells. Extraction is not driving changes in water quality at the Subbasin scale (5.4.3).
- Water use for WY 2021–2025: groundwater totals of 77,730–83,370 AF/yr and reported surface water diversions of 400–520 AF/yr (5.7). Rural domestic use is estimated at 0.35 AF/yr per connection.

Revised Content:

- Storage loss from declining groundwater levels for 1944–2019 was revised from about 3,400 to about 1,900 AF/yr. The storage coefficient is refined from 0.08 to 0.043, based on storage coefficients from the updated SVIHM rather than the provisional SVIHM (5.2.2).
- Spatial change in storage calculation was revised to use SVIHM storage parameters and is now calculated on a cell-by-cell basis and summed for the Subbasin total (5.2).
- Water quality comparison table now uses the stricter of the Title 22 and Basin Plan limits. For example, the chloride limit for an irrigation well is 106 milligrams per liter (mg/L) (Basin Plan) instead of 350 mg/L (Title 22) (5.4.3).
- The Active Contamination Sites table has 7 instead of 2 sites, adding leaking underground storage tank and landfill sites (5.4.2).
- Locations of ISW are evaluated with the updated SVIHM and still find no locations of ISW within the Subbasin (5.6).
- The shallow and deep spatial storage maps are now replaced with a map showing change in storage calculation only using the groundwater elevation contours for the Shallow Zone because they are generally representative of overall aquifer conditions of the principal aquifer (Figure 5-17).

CHAPTER 6: WATER BUDGETS

Every water budget component is different because the groundwater flow models were updated and reporting time periods are now different. The 2022 GSP water budgets required adjustment of SVIHM pumping to better match reported Groundwater Extraction Management System (GEMS) data, and the 2022 GSP described a storage loss of 10,000 AF/yr. These adjustments are no longer needed since the SVIHM v1 pumping is better calibrated to GEMS data and the storage loss estimate is updated. Subsurface inflow from neighboring subbasins is now the largest inflow.

Water Budget Time Periods:

Water budget time periods were revised based on additional years included in the model, analysis of average hydrology, and analysis of land use. The current periods analyzed in both the 2022 GSP and GSP Amendment 1 are both noted as having drier than average hydrology.

Table 5. Water Budget Time Periods

Budget	2022 GSP	2027 GSP Amendment 1 (draft)
Historical	WY 1980–2016	WY 2003–2020
Current	WY 2016	WY 2021–2022
Projected	47 years averaged under 2030 and 2070 climate change	SVOM baseline WY 2023–2072, no climate change, averaged over WY 2040–2064; sea level rise included

The projected period in the 2022 GSP repeated 47 years of historical climate and added DWR climate change at 2030 and 2070. For GSP Amendment 1, the projected water budget period is now generated using a SVBGSA updated versions of the SVOM run with a repeated sequence of years with conditions equivalent to long-term average historical conditions, no climate change, 2022 land use, and sea level rise. Projected budgets now include Association of Monterey Bay Area Governments (AMBAG) urban growth and 2022 land use. The effects of climate change are added in a separate section for the same projected period.

Projected change in usable storage and sustainable yield now includes loss of storage due to both groundwater level decline and seawater intrusion. Seawater intrusion advances into the Subbasin at 2045, according to the SWIM version 3; however, the exact year it reaches the Subbasin may vary from this estimate.

Key Numbers:

All water budget numbers are revised due to the updated model versions and the water budget periods used. Table 6 summarizes key values that changed substantially.

Table 6. Key Revised Values in Chapter 6, Water Budgets

	2022 GSP	2027 Amendment 1 (draft)	GSP Section	Explanation
HISTORICAL				
Pumping	90,600 AF/yr (adjusted using reported data)	86,100 AF/yr (simulated in model)	6.3	The pumping calibration in the updated historical model was improved to more accurately match GEMS reported pumping
Change in storage (minus is decrease)	-21,700 AF/yr simulated; -10,000 AF/yr (adjusted)	-4,800 AF/yr	6.3	2022 GSP adjusted a storage loss rather than using the simulated value. Amendment 1 uses the updated model without adjustment
Sustainable yield	69,300–86,700 AF/yr	81,300 AF/yr	6.3	The updated model no longer needs to be adjusted to match observed data
Net subsurface flow from 180/400 to Eastside Subbasin	3,600 AF/yr	38,300 AF/yr	6.3	The updated model with improved calibration of pumping and water levels results in significantly larger flows between subbasins

	2022 GSP	2027 Amendment 1 (draft)	GSP Section	Explanation
PROJECTED				
Pumping	90,400 AF/yr (2030 climate change); 94,500 AF/yr (2070 climate change) (adjusted using reported data)	82,520 AF/yr	6.4	2022 GSP adjusted pumping based on the ratio between historical average SVIHM and GEMS agricultural pumping. Amendment 1 uses the model results directly
Change in usable storage (minus is negative)	-10,000 AF/yr (adjusted, groundwater levels only)	-2,910 AF/yr, including -1,570 AF/yr from seawater intrusion after about 2045	6.4	2022 GSP adjusted based on historical change in storage. New estimate that combines storage loss from groundwater levels and seawater intrusion
Sustainable yield	80,400 AF/yr (2030 climate change); 84,500 AF/yr (2070 climate change)	79,610 AF/yr; demand management runs reach zero storage change at 75,000–80,000 AF/yr (Appendix 6A)	6.4	Updates to the projected models provide a more realistic estimate of future conditions

New Content:

Chapter 6 adds 2 new sections:

- Climate Change Scenarios (6.5) runs 3 DWR scenarios against the projected baseline. Storage change due to groundwater levels for the full Subbasin – not change in usable storage that adjusts for seawater intrusion for the projected sustainable yield calculation – is -900 AF/yr for the baseline, -1,000 AF/yr for central tendency, -2,600 AF/yr for dry–extreme warming, and +900 AF/yr for wet–moderate warming. These estimates do not account for loss of usable storage due to seawater intrusion.
- Overdraft Assessment (6.6) tests 15- and 20-year observed groundwater level trends in 78 wells. Of these, 26% are declining, 10% are rising, and 64% show no statistically significant trend. It concludes the Subbasin is in overdraft (Appendix 6B).

CHAPTER 7: MONITORING NETWORKS

The groundwater level network gains 4 new SVBGSA monitoring wells. GSP Amendment 1 now describes every network with sufficient site density and measurement frequency. Table 7 compares the size of each monitoring network in the 2022 GSP and GSP Amendment 1.

Table 7. Monitoring Network Comparison for Chapter 7

Network	2022 GSP	2027 Amendment 1 (draft)	GSP Section
Groundwater level RMS wells (shallow / deep / both zones)	35 wells (12 / 7 / 16)	39 wells (12 / 10 / 17); 35 with SMC (4 new wells will have SMC added after initial years of data)	7.2, 8.6
Seawater intrusion wells	2	4	7.4
ISW wells	1 proposed (Gabilan Creek)	None; no ISW identified	7.7
GDE monitoring	None	New network; no potential GDEs identified	7.8.1

Revised Content:

- Groundwater levels (7.2): the new wells ES-1-A, ES-1-B, ES-1-C, and ES-DA-2 are added, 2 of them filling Deep Aquifers Study data gaps. Five older wells are dropped and 5 others added. Twice-yearly monitoring closes the 2022 once-a-year data gap.
- Water quality (7.5): Drinking water well data is from active Division of Drinking Water (DDW) wells and Irrigated Lands Program (ILP) on-farm domestic wells. ILP agricultural wells are included provisionally until the CCRWQCB approves the groundwater quality trend monitoring workplan. When the CCRWQCB approves the trend monitoring (GQTM) workplan, a smaller subset of wells will be used for trend monitoring.
- ISW (7.7): the proposed Gabilan Creek shallow well is removed. Protocols apply only if ISW is found in the future.
- Extraction (7.8.2): Previous ordinances are replaced by MCWRA Ordinance 5426. Reporting is monthly and shifted to a water-year basis covering all Salinas Valley Subbasins Reporting will be included in future annual reports.
- Diversions (7.8.3): reporting moves from eWRIMS to CalWATRS starting in WY 2025.
- Data management (7.9): California Statewide Groundwater Elevation Monitoring (CASGEM) transitioned into the SGMA Portal, ILP data from CCRWQCB are added, and U.S. Geological Survey (USGS) streamflow data are now downloaded through a live link.

CHAPTER 8: SUSTAINABLE MANAGEMENT CRITERIA

Most criteria keep their basis from the 2022 GSP. Minimum thresholds are still set at 2015 levels, measurable objectives at 1999 levels, and undesirable results at more than 15% of wells. The main changes are a revised water quality method, an updated representative monitoring site (RMS) well list, and a new storage correlation. The groundwater level SMC clarifies that it is not

set to prevent seawater intrusion and that PMAs will be needed to prevent seawater intrusion (8.5, 8.6). Table 8 summarizes key SMC changes in Chapter 8.

Table 8. Key Changes in Chapter 8, Sustainable Management Criteria

Topic	2022 GSP	2027 Amendment 1 (draft)	GSP Section	Reason for Change
Water quality SMC	Number of DDW or ILP wells over regulatory limit due to GSA action	Percentage of DDW or ILP wells over regulatory limit due to GSA action or extraction; watchlist	8.9	Addressed DWR Recommended Corrective Action: DWR directed GSA to change SMC. Additional refinements made to add process to determine undesirable result, prepare for monitoring network changes, and incorporate lessons learned.

Revised Content:

Changes to the SMC for chronic lowering of groundwater levels (8.6) include the following:

- The method is the same: the minimum threshold is 2015 levels, and the measurable objective is 1999 levels. Per-well values and the well list were revised. There are still 35 RMS wells with SMC, with 5 wells swapped out; 4 newer wells will get SMC once they have enough data.
- New domestic well assessment of the effect of minimum thresholds on domestic wells, conducted with the active domestic wells from the MCWRA database. Of the total 27 active domestic wells, the 23 that had known well depths or screen depths were used to compare to minimum threshold groundwater levels. All 23 keep at least 25 feet of water at the minimum threshold.

Changes to the SMC for reduction in storage (8.7) include the following:

- The method is the same. Using groundwater levels as a proxy for storage is justified in the 2022 GSP. With the revised model. the supporting correlation is now $R^2 = 0.705$ for 1980–2022. In the 2022 GSP it was 0.4512 for 1980–2016 and 0.8149 for 1998–2016.

Changes to the SMC for seawater intrusion (8.8) include the following:

- The criteria are unchanged: the 500 mg/L chloride line at the Subbasin boundary. Potential causes of undesirable results are rewritten to cover inland gradients, drought pumping, and sea level rise. The minimum threshold may be revised as projects develop.

Changes to the SMC for degraded water quality (8.9) include the following:

- To address DWR's required RCA, the undesirable result statement was revised to not only be if degradation occurs due to GSA action, but also if it is due to extraction, regardless of whether the GSA regulates extraction or not.
- Minimum thresholds are now based on a percentage of monitored wells over the limit in 2019, instead of a number of monitored wells. The limit is the Title 22 drinking water standard or Basin Plan objective, whichever is stricter.
- A constituent watchlist (Table 8-4) replaces the old constituent lists. The table identifies constituents of concern (COCs) analyzed to determine if a constituent exceeds the limit in at least 3 of 5 years (WY 2021–2025), in at least 10% of wells, and in at least 5 wells. This approach focuses SMC on subbasin-wide management where degradation is not temporary.
- A new 5-step screening process (Figure 8-9) clarifies how minimum threshold exceedances will be evaluated to determine if they constitute an undesirable result.

The SMC for subsidence (8.10) are unchanged: zero net long-term subsidence, with 0.1 ft/yr allowed for interferometric synthetic aperture radar (InSAR) error.

The ISW SMC (8.11) remains the same. The SMC section clarifies that the significant and unreasonable condition is shallow groundwater levels below those observed in 2015, rather than surface water depletion greater than 2015, since the SMC relies on shallow monitoring wells. No ISW locations are identified.

CHAPTER 9: PROJECTS AND MANAGEMENT ACTIONS

The 2022 GSP organized PMAs by type in categories A–G and relied on conceptual, order-of-magnitude analysis. GSP Amendment 1 reorganizes the PMAs into 5 management actions (MA1–MA5), 9 projects (P1–P9), and 3 Salinas River actions (SR1–SR3). Feasibility studies completed since 2022, updated modeling, and the Demand Management Framework were used to refine the PMAs. PMAs are now split into priority and contingency actions, with contingency PMAs implemented if needed.

Key Changes:

Table 9 summarizes key changes in Chapter 9.

Table 9. Key Changes in Chapter 9, Projects and Management Actions

Topic	2022 GSP	2027 Amendment 1 (draft)	GSP Section
PMA approach	Broad menu of PMAs to investigate and refine	Same approach in Chapter 9. In Chapter 10, priority, and contingency PMAs; priority PMAs are the preferred IIS pathway	Chapter 9
Demand management	3 actions, including E3 Pumping Allocations and Controls	5 actions led by MA1, with a DM Framework; no allocations set	Chapter 9
Major projects	Separate 11043 diversions; Regional Municipal Supply Project; CSIP expansion	Castroville and Eastside Canals, BGRP, Coastal Injection/ASR, New Seawater Intrusion Project	Chapter 9
Rural residential users	Conservation treated as another groundwater management activity	MA4 efficiency and MA5 well mitigation added as formal actions	Chapter 9

New Content:

- MA4 Rural Residential Demand Management Water Use Efficiencies offers voluntary efficiency services and incentives to rural residential groundwater users.
- MA5 Rural Residential Well Mitigation is added to assist rural residential drinking water users through monitoring, well registration, dry-well reporting, and drinking-water assistance coordination.
- MA4 and MA5 shift focus toward actions can be taken in the event of impacts on beneficial users, not solely on achieving SMC.
- P6 Coastal Injection/Aquifer Storage and Recovery uses modified Permit 11043 winter flows, storage and treatment, and injection into the 400-Foot Aquifer or northern Eastside. Average injection is 5,100–9,700 AF/yr.

Revised Content:

- MA1 Demand Management and Planning replaces E3 Pumping Allocations and Controls as an umbrella for measures activated as needed (Table 9-1). Allocations stay available as a type of demand management measure that could be developed if needed. The Demand Management Framework adds stages, triggers, 6 agricultural and 4 domestic measures, administrative requirements, funding approaches, and accounting.
- P2 Brackish Groundwater Restoration Project (BGRP) updates the 2022 GSP Extraction Barrier and Regional Municipal Supply. BGRP combines both projects into one, with an extraction barrier, brackish desalination, and injection or direct delivery. BGRP will create a hydraulic barrier to seawater intrusion and reverse the inland flow gradient, while

creating a new supply. The BGRP Small Scenario yields about 28,000 AF/yr of treated water for injection or direct delivery.

- MA2 expands fallowing, fallow bank, and agricultural land retirement to also include multi-benefit land repurposing.
- P1 Castroville and Eastside Canals replaces the distinct concepts described in the 2022 GSP: 11043 Diversions at Chualar and Soledad. P1 modifies Permit 11043 for seasonal storage and diverts near the Castroville Canal intake to central Eastside recharge basins. The selected 100 cfs scenario yields about 9,700 AF/yr.
- P7 Irrigation Water Supply Project (Somavia Road) Project remains about 3,000 AF/yr of estimated supply. Further assessment of the area did not conclusively indicate rapid, additional recharge at Somavia Road. The concept has additional uncertainty because of the need to ensure that a project would not induce stream depletion, reduce flows to the SRDF, or reduce reservoir storage or surface water flows needed for a variety of purposes.
- P8 New Seawater Intrusion Project/CSIP Expansion changes from expanding Castroville Seawater Intrusion Project (CSIP) into northwest Eastside to expansion beyond Zone 2B or a new parallel system. It could serve up to 17,600 acres and deliver 5,320–25,080 AF/yr in lieu of pumping.
- SR2 MCWRA Reservoir Operation continues to emphasize collaboration with MCWRA and shifts to evaluation of reservoir operation scenarios if a new project necessitates altering reservoir operations or interconnected surface water compliance.
- Modeling of PMA effects is updated from use of the NSV model and provisional SVOM to use of SVOM v1 or SWIM v3. USGS finalized SVOM v0 in April 2025; SVBGSA updated it to v1 in October 2025

Removed Content:

- Implementation Actions identified in chapter 9 in the 2022 GSP are moved to chapter 10 and are now routine programs. These include well registration, monitoring networks, models, data management system (DMS), annual reporting, 5-year evaluations, agency and land-use coordination, water-quality coordination, and outreach.
- E3 Pumping Allocations and Controls is no longer a standalone PMA.
- B1 and B2 11043 diversions at Chualar and Soledad are consolidated into P1 Castroville and Eastside Canals.
- D1 Regional Municipal Supply Project evolves into P2 BGRP.

Tables 10 through 12 compare the management Actions, projects, and Salinas River Actions listed in the 2022 GSP and 2027 Amendment 1 draft.

Table 10. Comparison of Management Actions in 2022 GSP and 2027 GSP Amendment 1 draft

2022 GSP	2027 Amendment 1 (draft)	Key Change
E1 Conservation and Agricultural BMPs	MA3 Conservation and Agricultural BMPs	Retained and updated
E2 Fallowing, Fallow Bank, and Agricultural Land Retirement	MA2 adds Multi-Benefit Land Repurposing	Adds Multi-Benefit Land Repurposing
E3 Pumping Allocations and Controls	MA1 Demand Management and Planning	Broadened to an umbrella for DM measures; does not set allocations
—	MA4 Rural Residential Demand Management	New; voluntary efficiency services and incentives
—	MA5 Rural Residential Well Mitigation	New; assesses impacts to rural residential drinking-water users

Table 11. Comparison of Projects in 2022 GSP and 2027 GSP Amendment 1 draft

2022 GSP	2027 Amendment 1 (draft)	Key Change
A1 MAR with Overland Flow	P3 MAR with Overland Flow	Retained
A2 Floodplain Enhancement and Recharge	P4 Eastside Floodplain Enhancement and Recharge	Retained
B1 and B2 11043 Diversions at Chualar and Soledad	P1 Castroville and Eastside Canals	Modified MCWRA Permit 11043 diversion and recharge concept
B3 Diversion from Gabilan Creek	P5 Diversion from Gabilan Creek	Retained
C1 Eastside Irrigation Water Supply Project (Somavia Road)	P7 Irrigation Water Supply Project (Somavia Road)	Added uncertainty, still about 3,000 AF/yr
C2 Salinas Scalping Plant	P9 Salinas Scalping Plant	Retained
D1 Regional Municipal Supply Project	P2 BGRP	Desalination, treated supply, and injection. Treated brackish supply folded into BGRP.
D2 CSIP Optimization and Expansion	P8 New Seawater Intrusion Project/CSIP Expansion	Expanded CSIP or new parallel system serving additional agricultural areas
—	P6 Coastal Injection/ASR	Modified MCWRA Permit 11043 diversion and injection

Table 12. Comparison of Salinas River Actions in 2022 GSP and 2027 GSP Amendment 1 draft

2022 GSP	2027 Amendment 1 (draft)	Key Change
F1 Multi-benefit Stream Channel Improvements	SR1 Multi-benefit Stream Channel Improvements	Retained and updated
F3 Reservoir Reoperation	SR2 MCWRA Reservoir Operation	Emphasizes MCWRA collaboration to evaluate reservoir operation scenarios if a new project necessitates altering reservoir operations or for interconnected surface water compliance
F2 MCWRA Drought Reoperation	SR3 MCWRA Drought Reoperation	Retained and updated
G Implementation Actions	—	Moved to Chapter 10 implementation program

CHAPTER 10: GSP IMPLEMENTATION

Chapter 10 changes from a startup implementation plan to the strategy for achieving sustainability. The 2022 GSP covered monitoring, communications, a PMA refinement roadmap, the 5-year update, startup budget, and schedule. GSP Amendment 1 plans for the next phase of GSP implementation and includes an improved and refined strategy for achieving sustainability. It identifies what PMA or other activities SVBGSA intends to move forward and how SVBGSA plans to advance implementation over the next 5-year evaluation period.

Key Changes:

- Addition of Valley-wide Integrated Implementation Strategy (IIS) that includes a preferred portfolio of priority PMAs to achieve or maintain groundwater sustainability throughout SVBGSA's jurisdiction (10.1.1).
- Subbasin-specific section highlighting priority PMAs and how PMAs will enable the Subbasin to avoid undesirable results and mitigate overdraft by 2040/2042 (10.1.2).
- New budget and schedule for the next 5-year GSP implementation period (10.6, 10.7).

New Content:

- The IIS recognizes that the 6 Salinas Valley subbasins are hydraulically connected to varying degrees. The southern subbasins' recharge, and groundwater and surface-water inflows can affect the northern subbasins. Surface water and groundwater management are linked.
- The IIS includes a preferred portfolio of priority PMAs, with other PMAs kept as contingencies and others only included in Chapter 9 (Table 10-1). A table evaluates the IIS portfolio's effects on Eastside SMC (Table 10-2).
    - Priority management actions include Demand Management and Planning, voluntary Fallowing/Repurposing, Conservation and Agricultural BMPs, as well as targeted efficiency management actions for rural residential areas.
    - Priority projects include BGRP, and Eastside Recharge Basins (Castroville and Eastside Canals). Other supply and injection projects remain contingency projects.
- New sections cover the funding strategy, SGMA compliance, coordination and outreach, administration, implementation costs (to be further developed), and the implementation schedule (to be further developed).

Revised Content:

- The structure changes from:

  progress, monitoring, communication, roadmap, 5-year update, start-up budget, and adaptive management

  to:

  IIS, preferred PMA portfolio, funding, compliance, coordination, administration, costs, and schedule.

- Data and monitoring content moves into a combined section on data, monitoring, and SGMA compliance.
- Start-up budget and funding change to an implementation cost and funding section paired with a funding strategy.

Removed Content:

The standalone roadmap and 5-year update sections are replaced by the IIS and implementation schedule.

ACRONYMS & ABBREVIATIONS

AEM	airborne electromagnetic
AF	acre-feet
AF/yr	acre-feet per year
ASR	aquifer storage and recovery
BGRP	Brackish Groundwater Restoration Project
BMP	best management practice
CalWATRS	California Water Accounting, Tracking, and Reporting System
CASGEM	California Statewide Groundwater Elevation Monitoring
CCWG	Central Coast Wetlands Group
cfs	cubic feet per second
COC	constituent of concern
CSIP	Castroville Seawater Intrusion Project
DAC	disadvantaged community
DDW	Division of Drinking Water
DM	demand management
DMS	data management system
DWR	California Department of Water Resources
eWRIMS	Electronic Water Rights Information Management System

ft/day	feet per day
ft/yr	feet per year
GDE	groundwater dependent ecosystem
GEMS	Groundwater Extraction Management System
GMP	Groundwater Monitoring Program
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
HCM	hydrogeologic conceptual model
HCP	Habitat Conservation Plan
IIS	Integrated Implementation Strategy
ILP	Irrigated Lands Program
InSAR	interferometric synthetic aperture radar
ISW	interconnected surface water
JPA	joint powers authority
MAR	managed aquifer recharge
MCWDGSA	Marina Coast Water District Groundwater Sustainability Agency
MCWRA	Monterey County Water Resources Agency
mg/L	milligrams per liter
MOU	memorandum of understanding
NSIP	New Seawater Intrusion Project
OSWCR	Online System for Well Completion Reports
PMA	project and management action
RMS	representative monitoring site
SMC	sustainable management criteria
SRDF	Salinas River Diversion Facility
SVBGSA	Salinas Valley Basin Groundwater Sustainability Agency
SVIHM	Salinas Valley Integrated Hydrologic Model
SVOM	Salinas Valley Operational Model
SWIM	Seawater Intrusion Model
SWRCB	State Water Resources Control Board
USGS	U.S. Geological Survey
UWMP	urban water management plan
WY	water year