INTRODUCTION

1 PURPOSE OF THE GROUNDWATER SUSTAINABILITY PLAN

The purpose of this Groundwater Sustainability Plan (GSP or Plan) is to meet the regulatory requirements set forth in the three-bill legislative package consisting of Assembly Bill (AB) 1739 (Dickinson), Senate Bill (SB) 1168 (Pavley), and SB 1319 (Pavley), collectively known as the Sustainable Groundwater Management Act (SGMA). SGMA defines sustainable groundwater management as the "management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results." Undesirable Results (URs) are defined by SGMA as any of the following effects caused by groundwater conditions occurring throughout a basin:

- Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply;
- Significant and unreasonable reduction of groundwater storage;
- Significant and unreasonable seawater intrusion;
- Significant and unreasonable degraded water quality;
- Significant and unreasonable land subsidence; and/or
- Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water.

The Delta-Mendota Subbasin (California Department of Water Resources [DWR] Basin No. 5-022.07; referred to herein as the "Basin") of the San Joaquin Valley Groundwater Basin is a critically overdrafted basin located in portions of San Joaquin, Stanislaus, Merced, Fresno, Madera, and San Benito Counties. This GSP has been developed to meet SGMA regulatory requirements (see **Appendix A**) while reflecting local needs and preserving local control over water resources.

As described further below, this GSP was explicitly prepared to address DWR's "inadequate" determination and provide an update on groundwater conditions in the Basin. This GSP will supersede the six GSPs, Common Chapter, and the Coordination Agreement that were submitted to DWR in January 2020 (referred to herein as the "2020 GSPs") and the versions that were amended and resubmitted in July 2022 (referred to herein as the "2022 GSPs").

1.1 Background

As described in **Section 5**, this GSP was jointly prepared by seven Groundwater Sustainability Agency (GSA) Groups – the Aliso Water District GSA Group, the Farmers Water District GSA Group, the Fresno County Management Areas A and B (FCMA) GSA Group, the Grassland GSA Group, the Northern Delta-Mendota GSA Group, the Central Delta-Mendota GSA Group, and the San Joaquin River Exchange Contractors (SJREC) GSA Group – which are made up of the 23 Basin GSAs.

The 2020 GSPs were collectively designated as "incomplete" by DWR in its 21 January 2022 letter entitled *"Incomplete Determination of the 2020 Groundwater Sustainability Plans Submitted for the San Joaquin Valley – Delta-Mendota Subbasin"* (**Appendix B**). The Basin GSAs revised their respective GSPs and the

Common Chapter per DWR's comments and resubmitted the GSPs in June 2022 (referred to herein as the "Revised 2022 GSPs").

The Revised 2022 GSPs were deemed "inadequate" by DWR in its 2 March 2023 letter entitled *"Inadequate Determination of the Revised 2020 Groundwater Sustainability Plans Submitted for the San Joaquin Valley – Delta-Mendota Subbasin*" (**Appendix B**). As such, the Basin is subject to the State Water Resources Control Board (SWRCB) intervention process per California Water Code (CWC) § 10735 et seq. Under this statute, the SWRCB may designate a basin as "probationary" after holding a public hearing (CWC § 10735.2(a)). If a basin is designated as probationary, the SWRCB may adopt an interim plan to fix the deficiencies that resulted in probationary status, which could potentially include: "(1) Restrictions on groundwater extractions, (2) A physical solution, (3) Principles and guidelines for the administration of rights to surface waters that are connected to the Basin" (CWC § 10735.8(c)).

If the Basin is designated as "probationary", a GSA or authorized person may petition to exit the SWRCB intervention process or have the interim plan modified if "the [SWRCB], in consultation with [DWR]], determines that the groundwater sustainability plan or adjudication action is adequate" (CWC § 10735.8(g)).

In response to DWR's "inadequate" determination and prior to the Basin's probationary hearing, the Basin GSAs collectively agreed to develop a single GSP for the Basin that synthesizes, updates, and replaces content from the Revised 2022 GSPs and Common Chapter to address the Corrective Actions outlined by DWR in its March 2023 "Inadequate" Determination Letter. As of August 2024, all the Basin GSAs adopted this GSP as a GSP for submission to DWR and the SWRCB (see **Appendix C**). This GSP provides a path to maintain and document sustainable groundwater management in the Basin and preserves the long-term sustainability of locally managed groundwater resources.

Since January 2022, the Basin GSAs have participated in numerous Basin-wide coordination efforts to develop a coordinated response to DWR's Corrective Actions. Basin-wide coordination efforts have included the following:

- Adoption of a new Memorandum of Agreement (MOA) between the Basin GSAs;
- Basin Coordination Committee meetings with GSA Group representatives;
- Basin ad-hoc Technical Subcommittee meetings with GSA Group representatives and technical staff;
- Consultation meetings with DWR and SWRCB staff (see **Table Intro-1**); and,
- Intra- and Inter-basin stakeholder outreach and engagement efforts (see **Section 5.5**).

As summarized in **Table Intro-1**, the GSAs participated in more than 10 meetings with DWR and SWRCB staff to provide updates on the Basin's coordinated response to the DWR-identified deficiencies, including review of the planned approach and technical justifications for the updated Sustainable Management Criteria (SMC) and other Plan revisions. In all instances, the GSP was developed to incorporate the feedback provided during those meetings. Specific revisions to the Revised 2022 GSPs and Common Chapter, as part of the synthesis into this single GSP and in response to DWR's Determination Letter, are summarized below in **Section 1.2**. The revisions that were further made to update the Plan by incorporating new information, data, and the best available science are summarized in **Section 1.3**.

Table Intro-1 Summary of Basin Meetings with DWR and SWRCB Staff

Date	Meeting Topic	Outcome		Relevant DWR Deficiency	Revision in Single GSP
3/23/2023	State intervention process	Series of meetings held between GSAs and SWRCB staff to facilitate development of the revised single GSP according to SWRCB staff recommendations.		-	Section 1
7/26/2023	Technical Meeting #1 Basin Coordination and SMCs	SWRCB staff	Expressed support for the development of a single GSP and advised that Undesirable Results definitions should be tied to effects to beneficial users.	#1, #2	Section 13, Appendices
		GSP	UR definitions explicitly reflect impacts to beneficial users.		
9/13/2023	Technical Meeting #2 Water Quality SMCs	SWRCB staff	Acknowledged that setting water level MTs at 2015 levels would help avoid Undesirable Results for other Sustainability Indicators and expressed that SMCs should be set for the six individual COCs identified in SWRCB's 2022 letter to DWR.	#2, #3	Sections 8.5, 13.1, 13.4, Appendices
		GSP	Water level SMCs are set at 2015 levels and water quality SMCs are set for all six individual COCs.		
10/11/2023	Technical Meeting #3 Land Subsidence	SWRCB staff	Expressed support for the subsidence MT tied to design criteria for critical infrastructure, acknowledged the impacts to the Basin from subsidence occurring outside of the Basin, and appreciated that coordination with adjacent basins is emphasized in approach to subsidence.	#3	Sections 13.5, 15.3, 16.1.1.5
		GSP	Subsidence SMCs are set consistent with the discussion with SWRCB staff.		

Date	Meeting Topic	Outcome		Relevant DWR Deficiency	Revision in Single GSP
10/11/2023	SWRCB Tour #1	SWRCB Vice Chair and staff	GSAs showed SWRCB Vice Chair D'Adamo on a tour of the Basin, with a focus on legacy water quality issues. The tour concentrated on disadvantaged communities (DACs) in the southern and central parts of the Basin.	-	-
11/15/2023	SWRCB Tour #2	SWRCB staff	GSAs showed SWRCB members Maguire and Morgan and staff around the southern Basin. The tour highlighted legacy water quality, subsidence, and natural habitat issues.	-	-
12/20/2023	Technical Meeting #4 Groundwater Level and Storage SMCs	SWRCB staff	Expressed support for MTs tied to 2015 low groundwater elevations and for how assessment of potential dewatered wells was conducted. Requested that specific values of number of impacted wells be added to Undesirable Results definition.	#1, #2, #3	Sections 13.1.1, 13.1.2
		GSP	Groundwater level SMCs are set consistent with the discussion with SWRCB staff. Well Mitigation Policy (Appendix N) was designed to address worst case scenario well impacts.		

Date	Meeting Topic	Outcome		Relevant DWR Deficiency	Revision in Single GSP
2/21/2024	Technical Meeting #5 Water Quality SMCs	SWRCB staff	Agreed with setting SMCs for the six individual COCs identified in SWRCB's 2022 letter to DWR but requested additional monitoring and more stringent SMCs. Acknowledged significant legacy water quality issues that exist in the Basin and issues that may be beyond GSA's control (e.g., migration of the high salinity water through the Basin due to regional gradients). Suggested that such conditions may be "significant but not unreasonable". Requested that papers supporting GSA findings on legacy water quality issues be provided.	#3	Sections 8.5.2, 13.4.2.2, 14.3.2, 16.1.1.4, Appendices
		GSP	Provided links and descriptions of multiple papers describing legacy water quality issues in the Basin. Committed to revisiting the connection between water levels and water quality once more data is collected or if increasing concentrations or MT exceedances are observed. Established semiannual water quality monitoring as part of routine GSP implementation and increased monitoring if there is an MT exceedance as part of the Basin's Pumping Reduction Plan (Section 16.1.1.4).		
4/10/2024	Technical Meeting #6 Summary of Response to DWR Deficiencies	SWRCB staff	Expressed support for Pumping Reduction Plan and adaptive management. Requested that the threshold for Undesirable Result for Water Quality be lowered from 25% of RMW-WQs over three years and that additional climate change scenarios be evaluated in the projected water budgets.	#2	Sections 13.4.1.3, 9.4

Date	Meeting Topic	Outcome		Relevant DWR Deficiency	Revision in Single GSP
		GSP	A projected water budget was developed with four different climate scenarios and a sensitivity analysis was conducted wherein varying benefits were assumed for P/MAs. The threshold for Undesirable Results for water quality was lowered to 15% of RMW-WQs.		
4 /23/2024	SWRCB Tour #3	SWRCB Chairman and staff	The GSAs hosted SWRCB Chairman Esquivel and staff in the northern portions of the Basin, which covered six sites with a focus on recently developed groundwater management and recharge projects that demonstrate the feasibility for success of the Basin's Pumping Reduction Plan.	-	-
6/20/2024	Technical Meeting #7 Review of Revised, Single GSP	SWRCB staff	Acknowledged Basin's efforts in conducting stakeholder outreach and engagement. Emphasized the need for Basin-wide consistency in the implementation of the Water Quality MT Exceedance Plan under the Pumping Reduction Plan. Requested broader eligibility, elimination of expense caps, and faster and more permanent provision of emergency water in the Well Mitigation Policy, inclusive of water quality mitigation. Requested that the duration of MT exceedances to trigger an Undesirable Result for water quality be lowered. Requested additional clarification on Basin's plan to eliminate overdraft by 2040 given that the GSP discussed multiple uncertainties that are inherent and unavoidable in forecasting.	#1, #2	Sections 9.4.5.4, 16.1.1, 16.1.7.2, 13.4.1, Appendices

Date	Meeting Topic	Outcome		Relevant DWR Deficiency	Revision in Single GSP
		GSP	Clarified that the Pumping Reduction Plan is based on Basin-wide coordinated approaches. Removed funding caps from Well Mitigation Policy and reduced maximum wait for emergency water from 10 days to two. Shortened duration to trigger an Undesirable Result for water quality to three consecutive semiannual measurements (i.e., one year). Clarified the Model representation of the interaction of the P/MAs and the Pumping Reduction Plan with GSA objective to maintain conditions (i.e., groundwater levels and storage) in the Basin at or better than 2015 conditions, differently represented in each aquifer in Model simulation.		
7/1/2024	One-on-One Meeting #1	SWRCB staff Natalie Stork and John Coburn and GSA Representative Jarrett Martin	Discussed the Degraded Water Quality Sustainable Management Criteria (SMC). SWRCB staff appreciated the revisions to the SMCs. SWRCB staff recommended the GSP include a standardized WQ exceedance plan and add mitigation for water quality in the Well Mitigation Policy. Discussed the water budget figure that shows the Basin will achieve sustainability by 2040. SWRCB recommended presenting the figure for each aquifer.	#3	Sections 9.4.5, 15.6, 13.4, 16.1.1, Appendix N, Figure WB-6
		GSP	Clarified that the PRP and WQ MT Exceedance Plans will be closely coordinated. Revised the water budget figures to present cumulative change in groundwater storage relative to 2015 for each aquifer.		

Date	Meeting Topic	Outcome		Relevant DWR Deficiency	Revision in Single GSP
7/15/2024	One-on-One Meeting #2	SWRCB staff Natalie Stork and John Coburn and GSA Representative Jarrett Martin	SWRCB confirmed the applicability and appropriateness of the proposed water budget figures and requested that information be provided in the respective sections of the GSP to help explain them.	-	Section 9.4.5.4, 15.6.3, Figure WB-6
		GSP	Revised the GSP text to present cumulative change in groundwater storage relative to 2015 for each aquifer.		

Abbreviations
COC = Constituent of Concern
DWR = Department of Water Resources
GSA = Groundwater Sustainability Agency
GSP = Groundwater Sustainability Plan
MT = Minimum Threshold
P/MA = Projects and Management Actions
PRP = Pumping Reduction Plan
RMW-WQ = Representative Monitoring Well for Water Quality
SWRCB = State Water Resources Control Board

1.2 Summary of Major Plan Revisions to Address the Deficiencies

The DWR January 2022 "incomplete" determination letter outlined four deficiencies and associated Corrective Actions for the GSAs to address within a 180-day window (**Appendix B**). After GSP revisions and resubmittal in July 2022, DWR designated the Revised 2022 GSPs as collectively "inadequate" in March 2023 and determined that the Basin had sufficiently addressed only one out of the four identified deficiencies (Deficiency #4).

After consultation with DWR and SWRCB staff, the following revisions were made to the Plan to address the remaining three DWR-identified deficiencies and to improve overall Basin coordination efforts.

Deficiency #1 – The GSPs do not use the Same Data and Methodologies

Corrective Action 1. *"The Common Chapter and the Technical Memoranda do not provide sufficient explanation to confirm that the GSPs have been developed using the same data and methodologies and that elements of the GSPs have been based upon consistent interpretations of the Subbasin's setting. As presented, the GSPs use different data and different methodologies that rely upon multiple versions of the Subbasin setting, with many of the GSPs defining their own version of a hydrogeological conceptual model, often for very small areas of the Subbasin. The 23 GSAs developing the six GSPs should provide supporting information that is sufficiently detailed and provide explanations that are sufficiently thorough and reasonable to explain how the various components of each GSP will together achieve the Subbasin's common sustainability goal. The explanation should describe how the sustainable management criteria established for each GSP (including the management areas if applicable) relate to each other and how they are collectively informed by the basin setting, including the water budget, change in groundwater storage, and sustainable yield, on the Subbasin-wide level."*

DWR conclusions on the adequacy of revisions in the 2022 GSPs:

- *"Information in the Common Chapter was modified significantly but neither Technical Memorandum #3 nor Technical Memorandum #1 were revised and are still dated July 25, 2019, as are the other six memoranda that coordinate the Subbasin's six GSPs. As a consequence, the water budget, change in storage, and sustainable yield revisions made to multiple sections of the Common Chapter and, in some fashion, the six GSPs no longer align with the Technical Memoranda and the Coordination Agreement which is still dated December 12, 2018. Numerous inconsistencies exist throughout the Subbasin's six GSPs when compared to the required coordination materials."*
- *"Each of the GSPs still rely upon separate water budgets compiled for the individual GSP areas and still use a variety of modeling approaches built around localized hydrogeologic conceptual models, which calls into question the accuracy and usefulness of the Plan's fragmented methodology to track sustainable conditions on a Subbasin-wide scale."*
- *"There still does not appear to be a straightforward quantification of overdraft in the Subbasin and no discussion of how it will be mitigated."*

- *"There does not appear to be a discussion regarding how the continued loss of storage and groundwater elevation declines will affect drinking water wells in the Subbasin or the other beneficial uses and users of groundwater."*

This Plan includes the following major revisions to address Deficiency #1:

- Adopted a new MOA among the Basin GSAs to implement a single GSP, achieve a common Sustainability Goal, and emphasize collective implementation (see **Section 3.2**).
- Developed a single GSP that incorporates and synthesizes information from the six 2022 Revised GSPs and Common Chapter and articulates how the Basin GSAs will together achieve the Basin's common Sustainability Goal.
- Established a uniform Basin Setting, including a common Hydrogeological Conceptual Model (HCM), water budgets, sustainable yield, and change in groundwater storage, and quantification of overdraft for the Basin that were developed using the same data and methodologies (see **Sections 7**, **8**, and **9**).
- Revised SMCs for each applicable Sustainability Indicator that are informed by the best available data and information included in the uniform Basin Setting, consistent with the SGMA and GSP regulations, and protective of all beneficial uses and users (see **Section 13**).
- Established a Basin-wide monitoring network that refines and synthesizes the six individual monitoring networks outlined in the 2022 Revised GSPs (see **Section 14**).
- Conducted a well impact analysis to quantify the approximate number of wells that may be dewatered when local groundwater elevations reach Minimum Thresholds under multiple hypothetical scenarios (See **Section 13.1.2.4** and **Appendix M**).
- Developed a Basin-wide Pumping Reduction Plan (PRP) to be implemented beginning in 2025 that outlines the measures the GSAs will take to eliminate overdraft and achieve sustainability, including a 42,000 acre-feet per year (AFY) pumping reduction by 2030 (**Section 16.1.1**) and other adaptive management measures.

Deficiency #2 – The GSPs Have Not Established Common Definitions of Undesirable Results in the Subbasin.

Corrective Action 2. *"The GSAs in the Subbasin should modify each of their respective GSPs, as well as any applicable coordination materials, to substantially comply with the GSP Regulations and define undesirable results in a manner that addresses groundwater conditions occurring throughout the Subbasin, not for only the small portion of the Subbasin represented by the respective GSPs. One way for this deficiency to be remedied is for each of the six separate GSPs to use the same quantitative minimum thresholds, or the same methodology to develop the thresholds, and explicit criteria for undesirable results. Alternatively, if the GSAs believe it is not possible, or for some other reason still desire to use different definitions and metrics for undesirable results within each of the Subbasin's six GSP areas, the Plan must specifically explain how any differences do not affect the requirement to utilize the same data and methodologies for the assumed sustainable yield of the Subbasin. Additionally, if a GSP determines that a sustainability*

indicator is not applicable within the defined GSP area, then that information must be supported by the best available information and best available science."

DWR conclusions on the adequacy of revisions in the 2022 GSPs:

- *"To address Deficiency 2, the GSAs revised the definition of undesirable results for each of the five applicable sustainability indicators in the Common Chapter and, as a result, nearly all of the associated sustainable management criteria."*
- *"While Department staff acknowledge the considerable effort taken by the Subbasin's GSAs to establish common definitions of undesirable results in the Subbasin, the resubmitted effort was not sufficient because the Coordination Agreement and its associated technical components were not updated, and numerous inconsistencies exist throughout the six GSPs. Many of the details in the revised GSPs still reflect the intent of the Subbasin's original groundwater management structure, which was to establish a range of sustainable management criteria that focused on the individual GSP area and was based on tailored hydrogeologic conceptual models, not the Subbasin as a whole."*
- *"By not updating the definitions of undesirable results in Technical Memorandum #4, which present the original coordinated assumptions for the Subbasin's sustainable management criteria, this creates an inconsistency in the definitions that should be rectified to ensure there is clear understanding of how the Subbasin will be managed."*

This Plan includes the following major revisions to address Deficiency #2:

- Updated Basin-wide criteria for Undesirable Results for each applicable Sustainability Indicator to be consistent with the SGMA and GSP regulations, including explicit (i.e., quantitative) and protective criteria for the Undesirable Results (see **Section 13**).
- Revised SMCs for each applicable Sustainability Indicator that are informed by the best available data and information included in the uniform Basin Setting, consistent with the SGMA and GSP regulations, and protective of all beneficial uses and users (see **Sections 13**).
- Used common Basin-wide methodologies to revise the Measurable Objectives (MOs), Minimum Thresholds (MTs), and Interim Milestones (IMs; see **Section 13**) for each applicable Sustainability Indicator, informed by the best available data and information included in the uniform Basin Setting.

Deficiency #3 – The GSPs in the Subbasin Have Not Set Sustainable Management Criteria in Accordance with the GSP Regulations.

Corrective Action 3. *"The GSAs in the Subbasin should adhere to Subarticle 3 of the GSP Regulations which describes sustainable management criteria. The Plan should explain the coordinated criteria by which the GSAs define conditions occurring throughout the Subbasin that constitute sustainable groundwater management, including the process or processes by which the GSAs characterize undesirable results, establish minimum thresholds, and set measurable objectives for each applicable sustainability indicator. Undesirable results should be coordinated and should define when significant and unreasonable effects for any of the sustainable indicators are caused by groundwater conditions occurring throughout the*

Subbasin, not only in small GSP areas or even smaller management areas. The minimum thresholds must set numeric values that, if exceeded, may cause undesirable results, and must be defined in accordance with 23 CCR § 354.28(c). The supporting information must be sufficiently detailed and the analyses sufficiently thorough and reasonable, and any effort to disregard the applicability of a sustainability indicator in a GSP must be supported by the best available information and best available science. Additionally, if management areas will continue to be used throughout the Subbasin, the management areas must comply with 23 CCR § 354.20, as discussed in Deficiency 4."

DWR conclusions on the adequacy of revisions in the 2022 GSPs:

"As previously concluded, Deficiency 2 associated with undesirable results was not sufficiently addressed. The revised Plan relies upon the collective Coordination Agreement, Technical Memoranda, Common Chapter, and the six GSPs; however, the revisions are not consistent throughout the revised Plan and numerous inconsistencies present unclear management of the Subbasin. Sustainable management criteria for all sustainability indicators have not been prepared in a manner consistent with the GSP Regulations."

This Plan includes the following major revisions to address Deficiency #3:

- Eliminated the use of management areas (see **Section 10**).
- Consolidated all information into a single, updated and comprehensive GSP document.
- Revised Basin-wide definitions for SMCs for each applicable Sustainability Indicator at all Representative Monitoring Sites (RMS) informed by the best available data and information included in the uniform Basin Setting (see **Section 13**).
- Used explicit (i.e., quantitative) criteria for Undesirable Results that define the groundwater conditions, including a description of the Basin-wide groundwater conditions that constitute Undesirable Results for each Sustainability Indicator and "significant and unreasonable" effects on groundwater users that the GSAs seek to avoid (see **Section 13**).
- Described the process used by GSAs to define Undesirable Results, establish the MTs and MOs, and set IMs for each applicable Sustainability Indicator (see **Section 13**).
- For Chronic Lowering of Groundwater Levels, added a well impacts analysis to the justification of criteria for Undesirable Results that demonstrates in the worse-case scenario, 98 drinking water wells will be partially or fully dewatered, which is within the scope of the Well Mitigation Policy to address (see **Section 13.1.2.4**).

1.3 Summary of Major Plan Updates

The following additional updates were made to the Plan to incorporate new information, data, and the best available science.

- Collected and compiled Basin-wide data through September 2023 (Water Year [WY] 2023) pertaining to groundwater elevations, water quality, and land subsidence in the Basin Data Management System (DMS) to inform development of this GSP.

- Described the Basin's new governance structure, new information gathered, and recent outreach and coordination efforts in the Plan Area chapter (see **Section 5**).
- Incorporated significant new information into the Basin Setting and updated the HCM and Groundwater Conditions (GWC) assessments accordingly (see **Sections 7** and **8**).
- Evaluated current groundwater conditions relative to the revised MOs, MTs, and IMs (see **Section 8**).
- Developed Basin-wide current, historical, and projected water budgets using the Central Valley Hydrologic Model Version 2 (CVHM2; see **Section 9**).
- Estimated the long-term sustainable yield for each principal aquifer using the revised water budget approach (see **Section 9.5**).
- Revised the applicable SMCs at all RMS to incorporate new data and information and selected methodologies (see **Section 13**).
- Established SMCs at new RMS (see **Section 13**).
- Refined the Basin-wide monitoring network to include 25 additional Representative Monitoring Wells for Chronic Lowering of Groundwater Levels (RMW-WLs), 20 additional Representative Monitoring Wells for Degraded Groundwater Quality (RMW-WQs), and 25 additional Representative Monitoring Sites for Interconnected Surface Water (RMS-ISW) relative to the monitoring networks in the Revised 2022 GSPs, in addition to adding Interferometric Synthetic Aperture Radar (InSAR) coverage of the entire Basin as an RMS for Land Subsidence (see **Section 14**).
- Prepared updated descriptions of Projects and Management Actions (P/MAs) planning, implementation, and benefits (see **Section 15**).
- Conducted a quantitative assessment of how planned P/MAs will address overdraft conditions (see **Sections 15.6** and **9**).
- Developed a Basin-wide PRP to be implemented beginning in 2025 that outlines the measures the GSAs will take to achieve sustainability and avoid MT exceedances, including a 42,000 AFY pumping reduction by 2030 (**Section 16.1.1**).
- Developed a Basin-wide Well Mitigation Policy to address impacts to domestic and small community well owners associated with declining groundwater levels (**Section 16.1.7.2**).

2 SUSTAINABILITY GOAL

§ 354.24 Sustainability Goal
Each Agency shall establish in its Plan a sustainability goal for the basin that culminates in the absence of undesirable results within 20 years of the applicable statutory deadline. The Plan shall include a description of the sustainability goal, including information from the basin setting used to establish the sustainability goal, a discussion of the measures that will be implemented to ensure that the basin will be operated within its sustainable yield, and an explanation of how the sustainability goal is likely to be achieved within 20 years of Plan implementation and is likely to be maintained through the planning and implementation horizon.

☑ **23 CCR § 354.24**

The Sustainability Goal adopted by all Groundwater Sustainability Agencies (GSAs) in the Delta-Mendota Subbasin (Basin), is as follows:

> "The Delta-Mendota Subbasin will manage groundwater resources for the benefit of all users of groundwater in a manner that allows for operational flexibility, ensures resource availability under drought conditions, and does not negatively impact surface water diversion and conveyance and delivery capabilities. This goal will be achieved through the implementation of the proposed projects and management actions to reach identified measurable objectives and milestones through the implementation of the Groundwater Sustainability Plan (GSP), and through continued coordination with neighboring subbasins to ensure the absence of undesirable results by 2040."

3 AGENCY INFORMATION

§ 354.6. When submitting an adopted Plan to the Department, the Agency shall include a copy of the information provided pursuant to Water Code Section 10723.8, with any updates, if necessary, along with the following information:

(a) The name and mailing address of the Agency.
(b) The organization and management structure of the Agency, identifying persons with management authority for implementation of the Plan.
(c) The name and contact information, including the phone number, mailing address and electronic mail address, of the plan manager.
(d) The legal authority of the Agency, with specific reference to citations setting forth the duties, powers, and responsibilities of the Agency, demonstrating that the Agency has the legal authority to implement the Plan.
(e) An estimate of the cost of implementing the Plan and a general description of how the Agency plans to meet those costs.

3.1 Name and Mailing Address of the Agency

☑ 23 CCR § 354.6(a)

The Delta-Mendota Subbasin (herein referred to as the "Basin") of the San Joaquin Valley Basin (California Department of Water Resources [DWR] Basin No. 5-022.07) is fully covered by 23 Groundwater Sustainability Agencies (GSAs), each acting as the exclusive GSA in their respective portion of the Basin.

The name and mailing addresses of the 23 GSAs covering the Basin are listed below.

Aliso Water District GSA
Aliso Water District
Groundwater Sustainability Agency
13991 Avenue 7
Madera, CA 93637

Central Delta-Mendota GSA
Central Delta-Mendota GSA
c/o Santa Nella County Water District
12931 S Hwy 33
Santa Nella, CA 95322

City of Dos Palos GSA
City of Dos Palos GSA
2174 Blossom Street
Dos Palos, CA 93620

City of Firebaugh GSA
City of Firebaugh GSA
1133 P Street
Firebaugh, CA 93622

City of Gustine GSA

City of Gustine GSA
352 Fifth Street, P.O. Box 16
Gustine, CA 95322

City of Los Banos GSA

City of Los Banos GSA
520 J Street
Los Banos, CA 93635

City of Mendota GSA

City of Mendota GSA
643 Quince Street
Mendota, CA 93640

City of Newman GSA

City of Newman GSA
938 Fresno Street
Newman, CA 95360

City of Patterson GSA

City of Patterson GSA
1 Plaza, P.O. Box 667
Patterson, CA 95363

County of Fresno GSA – Delta-Mendota Management Area A (MAA)

County of Fresno
Department of Public Works and Planning
Water and Natural Resources Division
2220 Tulare Street, 6th Floor
Fresno, CA 93721

County of Fresno GSA – Delta-Mendota Management Area B (MAB)

County of Fresno
Department of Public Works and Planning
Water and Natural Resources Division
2220 Tulare Street, 6th Floor
Fresno, CA 93721

County of Madera GSA – Delta-Mendota

County of Madera

200 W. Fourth Street
Madera, CA 93637

County of Merced GSA – Delta-Mendota
County of Merced
2222 M Street
Merced, CA 95340

DM-II GSA
DM-II GSA
P.O. Box 1596
Patterson, CA 95363

Farmers Water District GSA
Farmers Water District
4460 W. Shaw Avenue, #219
Fresno, CA 93720

Grassland GSA
Grassland Groundwater Sustainability Agency
200 W. Willmott Avenue
Los Banos, CA 93635

Northwestern Delta-Mendota GSA
Northwestern Delta-Mendota GSA
3800 Cornucopia Way, Suite C
Modesto, CA 95358

Oro Loma Water District GSA
Oro Loma Water District GSA
264 I Street
Los Banos, CA 93635

Patterson Irrigation District GSA
Patterson Irrigation District
P.O. Box 685
Patterson, CA 95363

San Joaquin River Exchange Contractors (SJREC) Water Authority GSA
San Joaquin River Exchange Contractors Water Authority
541 H Street, P.O. Box 2115
Los Banos, CA 93635

Turner Island Water District GSA – Delta-Mendota
Turner Island Water District
P.O. Box 2586
Los Banos, CA 93635

West Stanislaus Irrigation District GSA
West Stanislaus Irrigation District
P.O. Box 37
116 E St.
Westley, CA 95387

Widren Water District GSA
Widren Water District
259 I Street
Los Banos, CA 93635

Information regarding the GSAs and current GSA representatives can be found on the Basin's Sustainable Groundwater Management Act (SGMA) website: https://deltamendota.org/

3.2 Organization and Management Structure of the Agency

☑ **23 CCR § 354.6(b)**

On 12 December 2018, the Basin GSAs adopted and executed a Coordination Agreement and Cost Sharing Agreement to comply with the SGMA requirement that if a Basin is covered by multiple Groundwater Sustainability Plans (GSPs), GSAs must coordinate when developing and implementing their individual GSPs (Title 23 of the California Code of Regulations [23 CCR] § 357.4).

Because the Basin GSAs collectively decided to develop a single GSP for the Basin and a Coordination Agreement is no longer required by the SGMA statute, the Basin GSAs (Parties) signed and executed a Memorandum of Agreement (MOA) (**Appendix D**), which will supersede the 2018 Coordination Agreement and Cost Sharing Agreement upon adoption of this GSP by the GSAs. The MOA reflects the GSAs' commitment to adopt a single, coordinated, and streamlined GSP for the Basin in response to DWR's Deficiency #1. The MOA updates the Basin governance structure with an emphasis on GSP implementation and defines seven groups of GSAs (the "GSA groups") to guide management of separate portions of the Basin through a Coordination Committee. This structure continues to support localized knowledge and management of the Basin while striving for more coordinated Sustainability Goal, criteria, and objectives. Elements of the MOA are further described in **Section 5.5.5**.

The GSAs acknowledge that management of the Basin through 23 GSAs introduces complexity to the Basin's organizational structure. However, the complexity of the organization structure mirrors the complexity of factors and conditions found within the Basin. The GSAs recognize a profound responsibility to local communities to uphold their representation in SGMA decision-making processes. Notably, a

majority of communities (including disadvantaged communities [DACs]) within the Basin are directly represented through their own GSA, which was a deliberate approach aimed to foster direct participation in SGMA matters. While this single GSP was prepared to streamline the Basin Plan, the GSAs have chosen to preserve the diversity and inclusion that exists within the 23 GSAs through the Basin's organizational structure.

The GSA Groups and member agencies are listed below in **Table Intro-2** and shown in **Figure Intro-1**. Descriptions of individual GSA Groups are provided in **Section 5.1.2.**

Table Intro-2. GSA Groups and GSAs in the Delta-Mendota Subbasin

GSA Group	GSA Name	Member Agency
Aliso Water District	Aliso Water District GSA	Aliso Water District
Farmers Water District	Farmers Water District GSA	Farmers Water District
Fresno County	County of Fresno GSA - Delta-Mendota Management Area A	County of Fresno
	County of Fresno GSA - Delta-Mendota Management Area B	County of Fresno
Grassland	County of Merced GSA - Delta-Mendota	County of Merced
	Grassland GSA	Grassland Water District
		Grassland Resource Conservation District
Central Delta-Mendota	Central Delta-Mendota GSA	San Luis Water District
		Panoche Water District
		Tranquillity Irrigation District
		Fresno Slough Water District
		Eagle Field Water District
		Pacheco Water District
		Santa Nella County Water District
		Mercy Springs Water District
		County of Merced
		County of Fresno
	Oro Loma Water District GSA	Oro Loma Water District
	Widren Water District GSA	Widren Water District
Northern Delta-Mendota	City of Patterson GSA	City of Patterson
	DM-II GSA	Del Puerto Water District
		Oak Flat Water District
	Northwestern Delta-Mendota GSA	County of Merced
		County of Stanislaus
	Patterson Irrigation District GSA	Patterson Irrigation District
		Twin Oaks Irrigation District
	West Stanislaus Irrigation District GSA	West Stanislaus Irrigation District
San Joaquin River Exchange Contractors	City of Dos Palos GSA	City of Dos Palos
	City of Firebaugh GSA	City of Firebaugh

GSA Group	GSA Name	Member Agency
	City of Gustine GSA	City of Gustine
	City of Los Banos GSA	City of Los Banos
	City of Mendota GSA	City of Mendota
	City of Newman GSA	City of Newman
	County of Madera GSA - Delta-Mendota	County of Madera
	County of Merced GSA - Delta-Mendota	County of Merced
	San Joaquin River Exchange Contractors GSA	Central California Irrigation District
		Columbia Canal Company
		Firebaugh Canal Water District
		San Luis Canal Company
	Turner Island Water District GSA - Delta-Mendota	Turner Island Water District

Abbreviations:
GSA = Groundwater Sustainability Agency

3.2.1 Coordination Committee

The MOA establishes a slightly revised Coordination Committee to provide a forum for the GSA Groups to work collaboratively and develop recommendations for technical and substantive Basin-wide activities. The Coordination Committee operates in full compliance with the Brown Act and is composed of a Chairperson and Vice Chairperson, Secretary, Plan Manager, and at least one GSA Group Representative and Alternate Representative for each of the seven GSA Groups. The Chairperson and Vice Chairperson are rotated annually among GSA Groups in alphabetical order. The Secretary assumes primary responsibility for Brown Act compliance.

The Coordination Committee has seven voting members and is comprised of at least one Representative from each GSA Group. GSA Group Representatives are selected by each respective GSA Group at the discretion of the respective GSA Group, and such appointments are effective upon providing written notice to the Secretary and to each Group Contact. Each GSA Group Representative is entitled to one vote at the Coordination Committee. The Alternate Representative is authorized to vote in the absence of the GSA Group Representative. A unanimous vote of all Representatives is required on most items upon which the Coordination Committee is authorized to act, with the exception of certain ministerial and administrative items.

The number of voting members for each GSA Group as defined in the MOA are listed below:

- (1) Aliso Water District GSA Group
- (1) Central Delta-Mendota GSA Group
- (1) Farmers Water District GSA Group
- (1) Fresno County GSA Group
- (1) Grassland GSA Group
- (1) Northern Delta-Mendota GSA Group

- (1) SJREC GSA Group

Voting procedures to address a lack of unanimity take place upon a majority vote of a quorum of the Coordination Committee and include straw polls, provisional voting, and delay of voting. Where the law or the MOA require separate written approval by each of the Parties, such approval is evidenced in writing by providing the resolution, motion, or minutes of their respective Board of Directors to the Secretary of the Coordination Committee. Minutes of the Coordination Committee are kept and prepared by the Secretary or the Secretary's appointee and maintained by the Secretary and are available to the Parties and the public upon request. Meeting agendas are posted on the Delta-Mendota website (www.deltamendota.org).

The Coordination Committee will continue to meet and confer on GSP implementation as the Parties to the MOA deem necessary. The focus of the meetings will be to review data and other Plan implementation actions that will ensure the GSAs are progressing toward the Basin Sustainability Goal, while meeting the Annual Reporting requirements and any other requirements agreed upon for purposes of coordination.

Coordination Committee meetings are open to the public and include opportunities for public comment. Meetings are typically held on the second Monday of each month at 1:00 pm in the San Luis & Delta Mendota Water Authority (SLDMWA) Boardroom, 842 6th Street, Los Banos, CA.

3.2.1.1 Ad-Hoc Subcommittees

The Coordination Committee may appoint ad-hoc subcommittees, working groups, and otherwise direct staff made available by the Parties. Subcommittees or working groups may include qualified individuals possessing the knowledge and expertise on the topics being addressed by the subcommittee or working group, whether or not such individuals are GSA Group Representatives. Tasks assigned to subcommittees, working groups, or staff made available by the Parties may include developing technical data, supporting information, and/or recommendations on specialized matters to the Coordination Committee. During development of this GSP, the Coordination Committee appointed several ad-hoc subcommittees for single purpose issues that were disbanded after that issue was resolved. Standing ad-hoc subcommittees include:

- **Basin Ad-hoc Technical Subcommittee:** The Basin Ad-hoc Technical Subcommittee provided input and recommendations to the Coordination Committee on technical issues during GSP development and implementation. The Basin Ad-hoc Technical Subcommittee was comprised of GSA representatives and technical staff who met at least monthly, and often more frequently during the development of this GSP. The Basin Ad-hoc Technical Subcommittee was charged with coordinating implementation of the required technical elements of the GSP (e.g., water budgets, monitoring networks) and providing recommendations to the Coordination Committee. The Coordination Committee took actions to provide direction to the Basin Ad-hoc Technical

Subcommittee and approve Basin Ad-hoc Technical Subcommittee recommendations and work products.

- **Communication Subcommittee:** The Communication Subcommittee supported the Basin public outreach efforts and recommended various outreach activities.
- **Budget Subcommittee:** The Budget Subcommittee reviewed and recommended proposed budgets for projects and other committees.

3.3 Plan Manager

☑ **23 CCR § 354.6(c)**

The Plan Manager for this GSP is John Brodie, Water Resources Programs Manager for the SLDMWA. The contact information for Mr. Brodie is provided below.

John Brodie
Water Resources Programs Manager
San Luis & Delta-Mendota Water Authority
842 6th Street
Los Banos, CA 93635
Email: john.brodie@sldmwa.org
Office Phone: (209) 826-1872

3.4 Legal Authority of the GSA

☑ **23 CCR § 354.6(d)**

All 23 GSAs covering the Basin applied for and were granted exclusive GSA status under California Water Code (CWC) § 10723(c).

3.5 Estimated Cost of Implementing the GSP and the Agency's Approach to Meet Costs

☑ **23 CCR § 354.6(e)**

Information on estimated costs to implement this GSP and the plan to meet those costs is provided in **Section 16.2**.

4 GSP ORGANIZATION

This Groundwater Sustainability Plan (GSP) is organized as follows:

- Sections 1 through 4 comprise the Introduction, including the following sections:
    - Section 1. Purpose of the Groundwater Sustainability Plan
    - Section 2. Sustainability Goal
    - Section 3. Agency Information
    - Section 4. GSP Organization
- Section 5 provides a Description of the Plan Area.
- Sections 6 through 10 present the Basin Setting, including the following sections:
    - Section 6. Introduction to Basin Setting
    - Section 7. Hydrogeologic Conceptual Model
    - Section 8. Current and Historical Groundwater Conditions
    - Section 9. Water Budget Information
    - Section 10. Management Areas
- Sections 11 through 13 present the Sustainable Management Criteria, including the following sections:
    - Section 11. Introduction to Sustainable Management Criteria
    - Section 12. Sustainability Goal
    - Section 13. Sustainability Indicators
- Section 14 presents the Monitoring Network.
- Section 15 presents the Projects and Management Actions.
- Section 16 presents the Plan Implementation.
- References and Technical Studies are included at the end of this document.
- Supporting information is provided in appendices as follows:

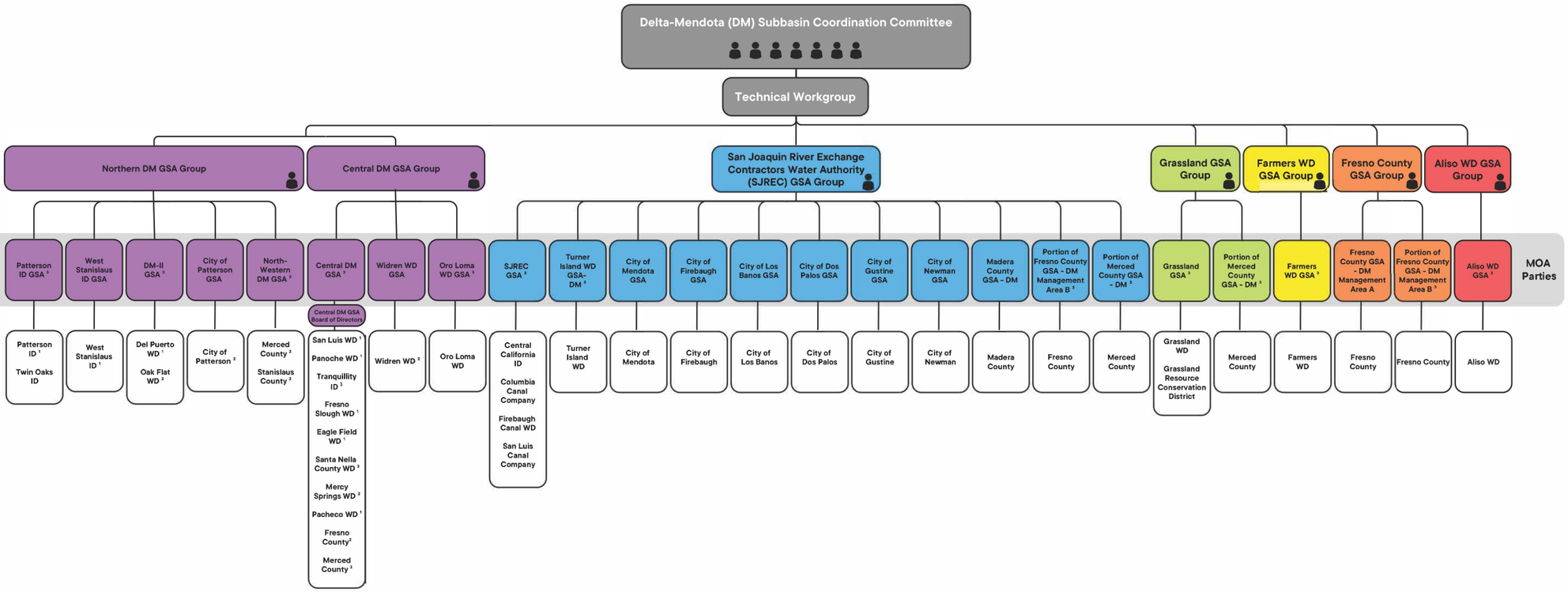
    Appendix A. GSP Submittal Checklist

    Appendix B. DWR Determination Letters

    Appendix C. Board Resolutions to Adopt the Delta-Mendota Subbasin Groundwater Sustainability Plan

    Appendix D. Memorandum of Agreement Among the Delta-Mendota Subbasin

	Groundwater Sustainability Agencies
Appendix E.	Public Outreach and Communications Log
Appendix F.	Delta-Mendota Subbasin Communications Plan
Appendix G.	Comments Received on the GSP
Appendix H.	Modeling Memo
Appendix I.	Concentrations, Trends, and Correlations of Constituents of Concern
Appendix J.	Conceptual Master Plan for Subsidence Monitoring and Management for the Delta-Mendota Subbasin (Prepared by GSI Environmental, Inc. for SLDMWA June 2022)
Appendix K.	Freshwater Species in the Basin
Appendix L.	Hydrographs for RMW-WLs
Appendix M.	Well Impact Analysis for All Production Wells
Appendix N.	Well Mitigation Policy



Legend

Delta-Mendota Subbasin Coordination Committee Voting Member

Abbreviations

DM = Delta–Mendota
ID = Irrigation District
WD = Water District
GSA = Groundwater Sustainability Agency
SGMA = Sustainable Groundwater Management Act

Notes

1. Participation in North-Central Delta-Mendota Region GSP through Activity Agreement with the Authority
2. Participation in North-Central Delta-Mendota Region GSP through Memorandum of Agreement with the Authority
3. Technical Workgroup Member

Delta-Mendota Subbasin
SGMA Governance Structure

eki environment & water

Delta-Mendota Subbasin
July 2024
C00041.09

Figure Intro-1