



February 13, 2019

**TO:** Delta-Mendota Subbasin Coordination Committee, Technical Working Group, and Interested Parties

**FROM:** Cheri Worthy (on behalf of Federico Barajas, Executive Director)

**RE:** JOINT WORKSHOP OF THE COORDINATION COMMITTEE AND THE TECHNICAL WORKING GROUP OF THE DELTA-MENDOTA SUBBASIN, **TUESDAY, February 19<sup>th</sup>, 2019, 10:00 AM**

**NOTICE IS HEREBY GIVEN** that a Joint Workshop of the Coordination Committee and the Technical Working Group of the Delta-Mendota Subbasin Groundwater Sustainability Agencies has been called for **Tuesday, February 19<sup>th</sup>, 2019, 10:00 AM at the San Luis & Delta-Mendota Water Authority Los Banos Administrative Office, 842 6<sup>th</sup> Street**, Los Banos, California, on items listed on the attached agenda, which is incorporated by reference and made a part hereof.



**Delta-Mendota Subbasin  
Joint Workshop of the Coordination Committee and Technical Working Group**

**Tuesday, February 19, 2019, 10:00 AM  
842 6th Street, Los Banos, CA  
Call-in Number: (866) 661-7061; Code: 9811738464**

**AGENDA**

1. Introductions
2. Committee to Consider Corrections or Additions to the Agenda of Items, as authorized by Government Code Section 54950 et seq.
3. Opportunity for Public Comment

**Report Items**

4. Meeting Minutes Review
5. Status Update - TSS Application
6. Discussion of Common Terminology
  - What words to define
  - Definitions and use
7. Definition of Undesirable Results
8. Status of Projected Water Budgets (with CCF and Projects/Management Actions)
  - By GSP
    - North/Central
    - Grassland
    - Aliso
    - Farmers
    - Exchange Contractors
    - Fresno County
  - Confirmation of Assumptions and Methods
9. Preliminary Monitoring Networks

10. Next Steps

11. Reports Pursuant to Government Code Section 54954.2(a)(2)

12. ADJOURNMENT

Persons with a disability may request disability-related modification or accommodation by contacting Cheri Worthy at the Water Authority, 842 6<sup>th</sup> Street, Los Banos, CA 93635, and telephone: (209) 826-9696 at least 3 for regular or 1 for special day(s) before the meeting date.

**Delta-Mendota Subbasin Coordination Committee  
and Technical Working Group  
February 19, 2019**

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Joe Hopkins	NISO / P&P		
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KEN SWANSON	GWD		
Will Halligan	LSLE		
ALEXANDER PROCTOR	SLCC		
Samuel Madson	CCID / SSGC	-	-

Delta-Mendota Subbasin  
Technical Working Group Meeting

Tuesday, February 19, 2019, 10:00 AM  
842 6<sup>th</sup> Street, Los Banos, CA

Meeting Minutes

**Voluntary Technical Working Group Representatives in Attendance**

Adam Scheuber (Del Puerto WD)  
Will Halligan (LSCE)  
Ken Swanson (Grassland WD)  
Ben Fenters (San Luis WD)  
Alejandro Paolini (San Luis Canal Company)  
Jarrett Martin (Central California Irrigation District/SJREC)  
Joe Hopkins (Provost & Pritchard/Aliso WD)  
Augustine Ramirez (Fresno County)  
Kyle Hill (CCID)  
Chris Rogers (CCID)  
Kait Palys (Provost & Pritchard/Aliso WD)  
Ric Ortega (Grassland WD)  
Juan Cadena (Panoche WD)  
Larry Harris (Turner Island WD)  
Chris Olvera (DWR)  
Keasha Blew (Provost & Pritchard/Grassland WD)  
Ken Schmidt (Kenneth D. Schmidt & Associates; by phone)  
Rick Iger (Provost & Pritchard/Grassland WD; by phone)

**Authority Representatives Present**

Andrew Garcia  
Seth Harris

**Others in Attendance**

Leslie Dumas (Woodard & Curran)

1. Introductions

Leslie Dumas/Woodard & Curran called the meeting to order at approximately 10:10 AM.

2. Committee to Consider Corrections or Addition to the Agenda of Items, as authorized by Government Code Section 54950 et seq.

No comments were received regarding corrections or addition to agenda items for this meeting.

3. Opportunity for Public Comment

No public comments were received prior to the report items for this meeting.

4. Meeting Minutes Review

Keasha Blew/P&P will add to the list of attendees for the last two Technical Work Group meetings in on December 19, 2018 and January 15, 2019. Working Group members have until close of business on February 20, 2019 to send comments to Leslie. The minutes will then be finalized.

5. Status Update – TSS Application

Andrew Garcia/SLDMWA provided a status update on the TSS application. Matt Owens is the DWR contact for the TSS application. Matt will be sending a draft agreement to Andrew shortly. There is currently no schedule for well construction near Little Panoche Creek and Mendota Wildlife Area. Grassland is still trying to site their well.

Andrew will be submitting an application for well video logging shortly. Wells to be videoed need to be free of equipment (clean open hole). Each GSP Group will provide Andrew with specific wells to include in the application over the next couple of weeks. Ken Swanson/Grassland WD has identified some good locations for both new monitoring wells and for video surveying.

6. Discussion of Common Terminology

The goal of developing the common terminology list is to make sure that all GSP groups are using the same terminology. To start, a file was prepared compiling the definitions contained in the SGMA and GSP regulations. The following terms were identified and defined by the Technical Working Group. Definitions can be found in the Google Doc distributed to meeting attendees. Claire Howard/SLDMWA will also start an acronym list to be referenced by each GSP Group.

- Terms related to wells and water levels
  - Production well, Upper Aquifer
  - Production well, Lower Aquifer
  - Nested multi-completion monitoring well
  - Cluster multi-completion monitoring well
  - Composite well
  - Above A Clay well
  - First Encountered Groundwater (FEG) well
  - Monitored wells

- Monitoring wells
- Monitoring seasonal high and low water levels
- Seasonal High – January, February, March (for doing the required annual reporting)
- Seasonal Low – July through October (for doing the required annual reporting)
- Additional terms to define
  - Representative year
  - Representative water year type
    - Wet, Normal, Dry, and Shasta Critical
  - Significant & unreasonable
  - Interconnected surface water
  - Surface Water-Groundwater interaction
  - Current Year (WY2013)
  - Static
  - Ambient
  - Domestic supply well
  - Municipal production well
  - Agricultural production well

## 7. Definition of Undesirable Results

A table was created for Sustainable Management Criteria by each Undesirable Result, as defined under SGMA, including information provided by each GSP Group to drive discussion of Undesirable Results definition.

The following working definitions of Undesirable Results were drafted during this meeting:

**For Declining WL:** *Significant and unreasonable chronic change in in water levels, as defined by each GSP Group, that has an impact on the beneficial users of groundwater in the Subbasin through either intra- and/or inter-basin actions*

**For Decreasing Storage:** *Significant and unreasonable chronic decrease in groundwater storage, as defined by each GSP Group, that has an impact on the beneficial users of groundwater in the Subbasin through either intra- and/or inter-basin actions*

**For Water Quality:** *Significant and unreasonable degradation of groundwater quality, as defined by each GSP Group, that has an impact on the beneficial users of groundwater in the Subbasin through either intra- and/or inter-basin actions and/or activities*

**For Interconnected Surface Water:** *Depletions of interconnected surface water, as defined by each GSP Group, that have significant and unreasonable adverse impacts on the beneficial uses of surface water*

**For Subsidence:** *Reduction in conveyance capacity for water distribution and/or damage to critical*

*infrastructure*

This discussion will continue during the February 25, 2019 Technical Working Group call.

8. Status of Projected Water Budgets (with CCF and Projects/Management Actions)

This topic was tabled until a future meeting; however, agreed-upon milestones were reiterated, including:

- All GSP Groups agreed to provide Woodard & Curran with their Projected Water Budgets (including with Climate Change Factors and Projects/Management Actions applied) by March 1, 2019.
- Woodard & Curran staff will start rolling up the individual projected water budgets into a subbasin-wide on beginning on March 4, 2019.
- The rolled up Projected Water Budgets for the Delta-Mendota Subbasin will be presented to the Delta-Mendota Coordination Committee on March 11, 2019.

9. Preliminary Monitoring Networks

This topic was tabled until a future meeting.

10. Next Steps

The following action items were identified during this meeting:

1. Modify and finish definition of undesirable results
2. Define significant and unreasonable
3. Define sustainable yield

11. Reports Pursuant to Government Code Section 54954.2(a)(2)

No additional reports were made.

12. Adjournment

Leslie Dumas/Woodard & Curran adjourned the Technical Working Group meeting at approximately 12:36 PM.



Delta-Mendota Subbasin  
Technical Working Group Meeting

Tuesday, January 15, 2019, 10:00 AM  
842 6<sup>th</sup> Street, Los Banos, CA

Meeting Minutes

**Voluntary Technical Working Group Representatives in Attendance**

Adam Scheuber (Del Puerto WD)  
Will Halligan (LSCE; by phone)  
Andrew Francis (LSCE)  
Ben Fenters (San Luis WD)  
Christina Guzman (Fresno County)  
Jarrett Martin (Central California Irrigation District/SJREC)  
Joe Hopkins (Provost & Pritchard/Aliso WD)  
Augustine Ramirez (Fresno County)  
Kyle Hill (CCID)  
Chris Rogers (CCID)  
Kait Palys (Provost & Pritchard/Aliso WD)  
Jim Stilwell (Farmers WD)  
Ken Swanson (Grassland WD)  
Ric Ortega (Grassland WD)  
Rick Iger (Provost & Pritchard/Grassland WD)  
Juan Cadena (Panoche WD)

**Authority Representatives Present**

Andrew Garcia  
Claire Howard

**Others in Attendance**

Leslie Dumas (Woodard & Curran)  
Reza Namvar (Woodard & Curran; by phone)

1. Introductions

Leslie Dumas/Woodard & Curran called the meeting to order at approximately 10:10 AM.

2. Meeting Minutes Review

There were no comments on the draft meeting minutes from December 19, 2019 Technical Working Group Meeting; Working Group members have until close of business on January 16, 2019 to send comments to Leslie. The minutes will then be finalized.

3. Application of Climate Change Factors to Projected Water Budgets

The goal at this time is to confirm the proposed methodology for applying the climate change factors in the projected water budget. Jarrett Martin/CCID had discussion with DWR regarding what to do in the intervening years between the 2030 climate change period and the 2070 climate change period and was told to pick representative years. Jarrett then proposed the following representative years:

- For years 1 through 4 on our projected water budgets (WY 2014-2017), use actual data. Do not add a climate change factor for these years since you have actual data.
- For years 38 – 43 (repeated WY 2012-2017), the DWR modeling did not establish Precipitation/ET climate change factors. For this reason, DWR suggested using surrogate years’ climate change factors for the projection. The following climate change factors for ET and Precipitation were selected:

WY2012	Use 2001 2070 CCF
WY2013	Use 1992 2070 CCF
WY2014	Use 1976 2070 CCF
WY2015	Use 1977 2070 CCF
WY2016	Use 2002 2070 CCF
WY2017	Use 2011 2070 CCF

- For years 30 – 43 (repeated WY 2004-2017), the DWR modeling did not establish streamflow climate change factors. For this reason, DWR suggested to use surrogate years’ climate change factors for the projection. The following climate change factors were selected for streamflows:

WY 2004	Use 2002 2030 CCF
WY 2005	Use 2002 2030 CCF
WY 2006	Use 1998 2030 CCF
WY 2007	Use 1992 2070 CCF
WY 2008	Use 1992 2070 CCF
WY 2009	Use 2002 2070 CCF
WY 2010	Use 2003 2070 CCF
WY 2011	Use 1997 2070 CCF
WY 2012	Use 1992 2070 CCF

WY 2013	Use 1992 2070 CCF
WY 2014	Use 1976 2070 CCF
WY 2015	Use 1977 2070 CCF
WY 2016	Use 2002 2070 CCF
WY 2017	Use 1998 2070 CCF

All representatives of the Technical Working Group in attendance agreed to use the climate change factors provided by DWR as augmented above in their projected water budgets. They also agreed that, in the upcoming January 28<sup>th</sup> water budget meeting, that projected water budgets with climate change factors will be compared. Leslie Dumas agreed to send out projected water budget cheatsheet that she developed for this prior to the meeting.

Leslie Dumas then asked how each GSP group is planning to address upcoming legislation/programs that have the potential to change surface water deliveries and/or stream flows. For projected change in surface water deliveries as a result of possible projects, most GSP regions plan on addressing this element qualitatively and only capturing projects in place in their projected water budgets.

#### 4. Current Status of Management Areas

Leslie Dumas inquired as to which GSP areas are planning to use management areas and for what sustainability indicators. She understands that this is preliminary for most GSP areas but is trying to gauge what's being done in the subbasin. The following updates were provided by each GSP region regarding preliminary Management Area (MA) identification:

- SJREC – using 11 MAs for all sustainability indicators when applicable
- Northern & Central – For subsidence, Tranquillity ID will be a MA; For water levels and change in storage, *de minimis* and shallow groundwater are the preliminary MAs
- Grassland – White areas without reliable surface water supply will be a separate management area for all Sustainability Indicators. Habitat areas with and without reliable surface water supply will also be a separate management area
- Fresno/Farmers – both have management areas for water quality (Spreckles and western saline front) and surface water-groundwater interaction
- Aliso – considering MAs but not locked in on them; will most likely establish MA for surface water-groundwater interaction

Discussion then turned to the Common Chapter and its required content (which includes a discussion of MAs). The Common Chapter content will include a compilation/roll-up of all 6 GSPs in the Delta-Mendota Subbasin with the exception of the Hydrogeologic Conceptual Model (HCM) and Groundwater Conditions sections, which will be developed in a coordinated fashion from existing documentation (such as GARs, CASGEM, and AB 3030 workplan).

The Common Chapter will include the following sections:

- Introduction
- Governance/Administration
- Basin Setting

- Monitoring
- Data Management System (DMS)
- Executive Summaries from the GSPs

Each preparer of the GSP will stamp their respective GSP executive summaries. Woodard & Curran will prepare the Introduction, Administration, Monitoring and DMS sections. The Basin Setting section will be composed of the following subsections:

- HCM
- Groundwater Conditions, including cross-sections, hydrographs, groundwater contour maps for current year seasonal high and low, GDE mapping, gains, losses in the San Joaquin River (SJR) and bottom of basin
- Water Budgets, including change in storage
- Management Areas

Woodard & Curran will prepare the HCM and groundwater conditions from existing documents. For the groundwater conditions section, USGS documents will be used for the required cross-sections, each GSP will be required to provide their hydrographs for their representative monitoring sites. The Subbasin-wide GDE mapping and groundwater contour maps currently being prepared will also be included. The bottom of the basin mapping, as previously agreed upon by the Working Group will be included. SJR gains/losses will be developed individually for each GSP region bordering the river and provided to Woodard & Curran to 'roll-up'. Water budgets and management areas will also be 'rolled up' to the Subbasin level for inclusion in this chapter. The rolled-up change in storage for the Upper Aquifer will be compared against a change in storage using changes in Upper Aquifer groundwater elevations between 2003 and 2013, calculated with GSP-specific specific yield numbers and areas. Change in storage in the Lower Aquifer will be compared against loss of storage from inelastic land subsidence as calculated using change in land surface elevation times area.

Lower Aquifer potentiometric head data are scarce – 37 wells in Spring 2013 and 48 wells in Fall 2013, with most wells being linear along the Delta-Mendota Canal. Because of the sparse data, change in Lower Aquifer storage from decrease head will not be calculated. These data will be used to develop Lower Aquifer contour maps, however, as required by GSP regulations and will be augmented with approximated contour lines in wide intervals as data allows and as estimated from past mapping available from the SJR Exchange Contractors for 'typical' water year types. The Technical Working Group also discussed determining the current water year seasonal high and seasonal low boundaries for the 2013 contour maps. The group agreed that the timeframe would begin with February – April 2013 for Spring, and September – October 2013 for Fall. If necessary, the timeframes could be expanded to capture more data for the seasonal high and seasonal low of 2013.

This approach was agreed upon by the Technical Working Group for approval by the Delta-Mendota Coordination Committee.

As part of the discussion regarding the development of Lower Aquifer groundwater contours, the Working Group discussed whether to consider the lack of monitoring points in that aquifer as a data gap or not. Concerns were expressed about labeling potential data gaps with the expectation that actions would need to be initiated to fill them. It was also

noted that some GSP areas have data gaps where others don't. Jarrett Martin/CCID then proposed that the Technical Working Group recommend to the Coordination Committee that each GSP group be required to identify data gaps within their respective boundaries and provide solutions and financing for data deficiencies that lie within their respective GSP boundaries.

5. Defining Gaining/Losing SJR Reaches and Estimating Gains/Losses

Ken Schmidt looked at San Joaquin River Restoration Program (SJRRP) data and identified reaches as gaining, losing, or interconnected. The north end of the SJREC area has been mapped by Ken Schmidt. It was agreed that SJRRP mapping would be used to identify gaining and losing reaches by each GSP region along with other available data. A table will be developed showing which SJR reaches are within each GSP region, whether those reaches are gaining or losing, and what the volumes of gains and losses are. Each GSP region will provide these numbers to Leslie Dumas by the next Technical Working Group call.

6. Coordinated Activities and Milestones

A coordinated milestone schedule has been prepared and comments are due back to Leslie Dumas by Wednesday, January 23<sup>rd</sup>. Representatives are able to download the milestone schedule via Google Drive.

7. Water Quality Sustainability Indicators

Due to time constraints, this agenda item was tabled until the next Technical Working Group call.

8. Subsidence Sustainability Indicators (if time allows)

Due to time constraints, this agenda item was tabled until the next Technical Working Group call.

9. Next Steps

Leslie Dumas/Woodard & Curran adjourned the Technical Working Group meeting at approximately 12:40 PM.

# SGMA Common Terminology

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## GSP Regulations: ARTICLE 2. Definitions

- “Agency” refers to a groundwater sustainability agency as defined in the Act.
- “Agricultural water management plan” refers to a plan adopted pursuant to the Agricultural Water Management Planning Act as described in Part 2.8 of Division 6 of the Water Code, commencing with Section 10800 et seq.
- “Alternative” refers to an alternative to a Plan described in Water Code Section 10733.6.
- “Annual report” refers to the report required by Water Code Section 10728.
- “Baseline” or “baseline conditions” refer to historic information used to project future conditions for hydrology, water demand, and availability of surface water and to evaluate potential sustainable management practices of a basin.
- “Basin” means a groundwater basin or subbasin identified and defined in Bulletin 118 or as modified pursuant to Water Code 10722 et seq.
- “Basin setting” refers to the information about the physical setting, characteristics, and current conditions of the basin as described by the Agency in the hydrogeologic conceptual model, the groundwater conditions, and the water budget, pursuant to Subarticle 2 of Article 5.
- “Best available science” refers to the use of sufficient and credible information and data, specific to the decision being made and the time frame available for making that decision, that is consistent with scientific and engineering professional standards of practice.
- “Best management practice” refers to a practice, or combination of practices, that are designed to achieve sustainable groundwater management and have been determined to be technologically and economically effective, practicable, and based on best available science.
- “Board” refers to the State Water Resources Control Board.
- “CASGEM” refers to the California Statewide Groundwater Elevation Monitoring Program developed by the Department pursuant to Water Code Section 10920 et seq., or as amended.
- “Data gap” refers to a lack of information that significantly affects the understanding of the basin setting or evaluation of the efficacy of Plan implementation, and could limit the ability to assess whether a basin is being sustainably managed.
- “Groundwater dependent ecosystem” refers to ecological communities or species that depend on groundwater emerging from aquifers or on groundwater occurring near the ground surface.
- “Groundwater flow” refers to the volume and direction of groundwater movement into, out of, or throughout a basin.
- “Interconnected surface water” refers to surface water that is hydraulically connected at any point by a continuous saturated zone to the underlying aquifer and the overlying surface water is not completely depleted.
- “Interested parties” refers to persons and entities on the list of interested persons established by the Agency pursuant to Water Code Section 10723.4.
- “Interim milestone” refers to a target value representing measurable groundwater conditions, in increments of five years, set by an Agency as part of a Plan.
- “Management area” refers to an area within a basin for which the Plan may identify different minimum thresholds, measurable objectives, monitoring, or projects and management actions based on differences in water use sector, water source type, geology, aquifer characteristics, or other factors.

- “Measurable objectives” refer to specific, quantifiable goals for the maintenance or improvement of specified groundwater conditions that have been included in an adopted Plan to achieve the sustainability goal for the basin.
- “Minimum threshold” refers to a numeric value for each sustainability indicator used to define undesirable results.
- “NAD83” refers to the North American Datum of 1983 computed by the National Geodetic Survey, or as modified.
- “NAVD88” refers to the North American Vertical Datum of 1988 computed by the National Geodetic Survey, or as modified.
- “Plain language” means language that the intended audience can readily understand and use because that language is concise, well-organized, uses simple vocabulary, avoids excessive acronyms and technical language, and follows other best practices of plain language writing.
- “Plan” refers to a groundwater sustainability plan as defined in the Act.
- “Plan implementation” refers to an Agency’s exercise of the powers and authorities described in the Act, which commences after an Agency adopts and submits a Plan or Alternative to the Department and begins exercising such powers and authorities.
- “Plan manager” is an employee or authorized representative of an Agency, or Agencies, appointed through a coordination agreement or other agreement, who has been delegated management authority for submitting the Plan and serving as the point of contact between the Agency and the Department.
- “Principal aquifers” refer to aquifers or aquifer systems that store, transmit, and yield significant or economic quantities of groundwater to wells, springs, or surface water systems.
- “Reference point” refers to a permanent, stationary and readily identifiable mark or point on a well, such as the top of casing, from which groundwater level measurements are taken, or other monitoring site.
- “Representative monitoring” refers to a monitoring site within a broader network of sites that typifies one or more conditions within the basin or an area of the basin.
- “Seasonal high” refers to the highest annual static groundwater elevation that is typically measured in the Spring and associated with stable aquifer conditions following a period of lowest annual groundwater demand.
- “Seasonal low” refers to the lowest annual static groundwater elevation that is typically measured in the Summer or Fall, and associated with a period of stable aquifer conditions following a period of highest annual groundwater demand.
- “Seawater intrusion” refers to the advancement of seawater into a groundwater supply that results in degradation of water quality in the basin, and includes seawater from any source.
- “Statutory deadline” refers to the date by which an Agency must be managing a basin pursuant to an adopted Plan, as described in Water Code Sections 10720.7 or 10722.4.
- “Sustainability indicator” refers to any of the effects caused by groundwater conditions occurring throughout the basin that, when significant and unreasonable, cause undesirable results, as described in Water Code Section 10721(x).
- “Uncertainty” refers to a lack of understanding of the basin setting that significantly affects an Agency’s ability to develop sustainable management criteria and appropriate projects and management actions in a Plan, or to evaluate the efficacy of Plan implementation, and therefore may limit the ability to assess whether a basin is being sustainably managed.



- “Urban water management plan” refers to a plan adopted pursuant to the Urban Water Management Planning Act as described in Part 2.6 of Division 6 of the Water Code, commencing with Section 10610 et seq.
- “Water source type” represents the source from which water is derived to meet the applied beneficial uses, including groundwater, recycled water, reused water, and surface water sources identified as Central Valley Project, the State Water Project, the Colorado River Project, local supplies, and local imported supplies.
- “Water use sector” refers to categories of water demand based on the general land uses to which the water is applied, including urban, industrial, agricultural, managed wetlands, managed recharge, and native vegetation.
- “Water year” refers to the period from October 1 through the following September 30, inclusive, as defined in the Act.
- “Water year type” refers to the classification provided by the Department to assess the amount of annual precipitation in a basin.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 25, 10720.7, 10721, 10722, 10722.4, 10723, 10727.2, 10728, 10729, 10733.2, 10733.6, and 10924, Water Code.

## SGMA Regulations Definitions

- “Adjudication action” means an action filed in the superior or federal district court to determine the rights to extract groundwater from a basin or store water within a basin, including, but not limited to, actions to quiet title respecting rights to extract or store groundwater or an action brought to impose a physical solution on a basin.
- “Basin” means a groundwater basin or subbasin identified and defined in Bulletin 118 or as modified pursuant to Chapter 3 (commencing with Section 10722).
- “Bulletin 118” means the department’s report entitled “California’s Groundwater: Bulletin 118” updated in 2003, as it may be subsequently updated or revised in accordance with Section 12924.
- “Coordination agreement” means a legal agreement adopted between two or more groundwater sustainability agencies that provides the basis for coordinating multiple agencies or groundwater sustainability plans within a basin pursuant to this part.
- “De minimis extractor” means a person who extracts, for domestic purposes, two acre-feet or less per year.
- “Governing body” means the legislative body of a groundwater sustainability agency.
- “Groundwater” means water beneath the surface of the earth within the zone below the water table in which the soil is completely saturated with water, but does not include water that flows in known and definite channels.
- “Groundwater extraction facility” means a device or method for extracting groundwater from within a basin.
- “Groundwater recharge” means the augmentation of groundwater, by natural or artificial means.
- “Groundwater sustainability agency” means one or more local agencies that implement the provisions of this part. For purposes of imposing fees pursuant to Chapter 8 (commencing with Section 10730) or taking action to enforce a groundwater sustainability plan, “groundwater sustainability agency” also means each local agency comprising the groundwater sustainability agency if the plan authorizes separate agency action.
- “Groundwater sustainability plan” or “plan” means a plan of a groundwater sustainability agency proposed or adopted pursuant to this part.
- “Groundwater sustainability program” means a coordinated and ongoing activity undertaken to benefit a basin, pursuant to a groundwater sustainability plan.
- “Local agency” means a local public agency that has water supply, water management, or land use responsibilities within a groundwater basin.
- “Operator” means a person operating a groundwater extraction facility. The owner of a groundwater extraction facility shall be conclusively presumed to be the operator unless a satisfactory showing is made to the governing body of the groundwater sustainability agency that the groundwater extraction facility actually is operated by some other person.
- “Owner” means a person owning a groundwater extraction facility or an interest in a groundwater extraction facility other than a lien to secure the payment of a debt or other obligation.
- “Personal information” has the same meaning as defined in Section 1798.3 of the Civil Code.

- “Planning and implementation horizon” means a 50-year time period over which a groundwater sustainability agency determines that plans and measures will be implemented in a basin to ensure that the basin is operated within its sustainable yield.
- “Public water system” has the same meaning as defined in Section 116275 of the Health and Safety Code.
- “Recharge area” means the area that supplies water to an aquifer in a groundwater basin.
- “Sustainability goal” means the existence and implementation of one or more groundwater sustainability plans that achieve sustainable groundwater management by identifying and causing the implementation of measures targeted to ensure that the applicable basin is operated within its sustainable yield.
- “Sustainable groundwater management” means the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results.
- “Sustainable yield” means the maximum quantity of water, calculated over a base period representative of long-term conditions in the basin and including any temporary surplus, that can be withdrawn annually from a groundwater supply without causing an undesirable result.
- “Undesirable result” means one or more of the following effects caused by groundwater conditions occurring throughout the basin:
  - (1) Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply if continued over the planning and implementation horizon. Overdraft during a period of drought is not sufficient to establish a chronic lowering of groundwater levels if extractions and recharge are managed as necessary to ensure that reductions in groundwater levels or storage during a period of drought are offset by increases in groundwater levels or storage during other periods.
  - (2) Significant and unreasonable reduction of groundwater storage.
  - (3) Significant and unreasonable seawater intrusion.
  - (4) Significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies.
  - (5) Significant and unreasonable land subsidence that substantially interferes with surface land uses.
  - (6) Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water.
- “Water budget” means an accounting of the total groundwater and surface water entering and leaving a basin including the changes in the amount of water stored.
- “Watermaster” means a watermaster appointed by a court or pursuant to other law.
- “Water year” means the period from October 1 through the following September 30, inclusive.
- “Wellhead protection area” means the surface and subsurface area surrounding a water well or well field that supplies a public water system through which contaminants are reasonably likely to migrate toward the water well or well field.

## Delta-Mendota Coordination Agreement

### Section 2 – Definitions

- “Coordinated Plan Expenses” shall mean any expenses incurred by the Secretary and the Plan Manager for purposes of developing and implementing the Coordination Agreement.
- “Coordination Agreement” shall mean this Coordination Agreement.
- “Coordination Committee” shall mean the committee of GSP Group Representatives established pursuant to this Coordination Agreement.
- “Group Contact” shall mean one Party designated on Exhibit “A” attached hereto and by reference incorporated herein as responsible to supply notices and to circulate information and invoices for its respective Exhibit “A” GSP Group, as said Exhibit may be updated from time to time.
- “GSA” shall mean a groundwater sustainability agency established in accordance with SGMA and its associated regulations, and “GSAs” shall mean more than one such groundwater sustainability agency. Each Party is a GSA.
- “GSP” shall mean a groundwater sustainability plan as defined by SGMA and its regulations, and “GSPs” shall mean more than one such plan.
- “GSP Group” shall mean a grouping of Parties, stakeholders, and interested parties developing an individual GSP within the Subbasin, as shown in Exhibit “A,” who are combined for purposes of representation and voting on the Coordination Committee and for purposes of sharing Coordinated Plan Expenses as set forth in this Coordination Agreement.
- “GSP Group Alternate Representative,” “Alternate Representative,” or “Alternate” and their plural forms shall mean an alternate member of the Coordination Committee selected to represent the GSP Groups in accordance with Exhibit “A” and Section 5.1.2-5.1.4 of this Coordination Agreement who shall serve in the absence of the respective GSP Group Representative and shall be entitled to cast the vote for the absent GSP Representative.
- “GSP Group Representative” or “Representative” and their plural forms as appropriate shall mean a member or members of the Coordination Committee selected to represent the GSP Groups in accordance with Exhibit “A” and Section 5.1.2 – 5.1.4 this Coordination Agreement.
- “Participation Percentages” shall mean that percentage of Coordinated Plan Expenses allocated to each GSP Group as described on Exhibit “A” to this Coordination Agreement, which is attached and incorporated by reference herein, as updated from time to time.
- “Party” or “Parties” shall mean a Groundwater Sustainability Agency or in the plural, two or more Groundwater Sustainability Agencies within the Delta-Mendota Subbasin.
- “Plan Manager” shall mean an entity or individual, appointed at the pleasure of the Coordination Committee, or as provided in section 4.1.2 of this Coordination Agreement, to perform the role of the Plan Manager to serve as the point of contact to DWR as set forth in Section 5.2.3 of this Coordination Agreement.
- “Seasonal High” shall mean the highest annual static groundwater elevation associated with stable aquifer conditions following a period of lowest annual groundwater demand.
- “Seasonal Low” shall mean the lowest annual static groundwater elevation associated with a period of stable aquifer conditions following a period of highest annual groundwater demand.
- “San Luis & Delta-Mendota Water Authority” or “SLDMWA” shall mean the San Luis & Delta-Mendota Water Authority, a California joint powers agency.

- “SGMA” shall mean the Sustainable Groundwater Management Act, as amended from time to time, commencing at Water Code section 10720, together with its implementing regulations applicable to Groundwater Sustainability Plans, set forth at California Code of Regulations, Title 23, Division 2, Chapter 1.5, Subchapter 2.
- “SGMA Definitions” shall mean those SGMA-specific definitions provided by statute or regulation and attached in the Appendix to this Coordination Agreement; in the event of any inconsistency between a term defined in this Section and a SGMA-specific definition, the definition contained in this Coordination Agreement shall prevail.
- “Subbasin” shall mean the Delta-Mendota Subbasin (Basin Number 5-22.07, DWR Bulletin 118) within the San Joaquin Valley Groundwater Basin.
- “Technical Memoranda” shall mean the memoranda prepared by the Coordination Committee that include the data and methodologies for assumptions described in Water Code section 10727.6 to prepare coordinated plans. Individually, the memoranda shall be referred to as a “Technical Memorandum.”
- “Water Year” shall mean the period from October 1 through the following September 30 as defined by SGMA.
- “Water Year Type” shall mean the classification provided by DWR to assess the amount of annual precipitation in a basin and as defined by SGMA.

#### Appendix – SGMA Definitions

- “Agency” or “GSA” shall mean a groundwater sustainability agency as defined in SGMA.
- “Coordination Agreement” shall mean this Coordination Agreement, unless indicated otherwise.
- “Annual Report” shall mean the report required by Water Code Section 10728 and SGMA Regulations Section 356.2.
- “Basin” shall mean the Delta-Mendota subbasin and defined in Bulletin 118 as Basin 5- 22.07; for purposes of the Coordination Agreement, “Basin” and “Subbasin shall have the same meaning.
- “Basin Setting” shall mean the information about the physical setting, characteristics, and current conditions of the basin as described by the Agency in the hydrogeologic conceptual model, the groundwater conditions, and the water budget, pursuant to California Code of Regulations, title 23, sections 354.12-354.20.
- “CASGEM” shall mean the California Statewide Groundwater Elevation Monitoring Program developed by the DWR.
- “DWR” shall mean the Department of Water Resources.
- “Groundwater” shall mean the water beneath the surface of the earth within the zone below the water table in which the soil is completely saturated with water, but does not include water that flows in known and definite channels.
- “Groundwater flow” shall mean the volume and direction of groundwater movement into, out of, or throughout a basin.
- “Interconnected surface water” shall mean the surface water that is hydraulically connected at any point by a continuous saturated zone to the underlying aquifer and the overlying surface water is not completely depleted.

- “Measureable objectives” shall mean specific, quantifiable goals for the maintenance or improvement of specified groundwater conditions that have been included in an adopted GSP to achieve the sustainability goal for the basin.
- “Principal Aquifers” shall mean aquifers or aquifer systems that store, transmit, and yield significant or economic quantities of groundwater to wells, springs, or surface water systems.
- “Representative Monitoring” shall mean a monitoring site within a broader network of sites that typifies one or more conditions within the basin or an area of the basin.
- “Sustainability Indicator” shall mean any of the effects caused by groundwater conditions occurring throughout the basin that, when significant and unreasonable, cause undesirable results.
- “Water Source Type” shall mean the source from which water is derived to meet the applied beneficial uses, including groundwater, precipitation, recycled water, reused water, and surface water sources.
- “Water Use Sector” shall mean categories of water demand based on the general land uses to which the water is applied, including urban, industrial, agricultural, managed wetlands, managed recharge, and native vegetation.

Terms to Define

Undesirable Results Definition (13Feb19)

	<b>WL Decline</b>	<b>Decline in Storage</b>	<b>Subsidence</b>	<b>Interconnected Surface Water</b>	<b>Groundwater Quality</b>
Northern & Central	<ul style="list-style-type: none"> <li>Continual decline in water levels that prevent extraction during a 3-year drought cycle</li> <li>More than 10% of private domestic wells go dry</li> <li>Running out of storage to get through a 3-year drought (as defined by change in storage between 2012 and 2015)</li> </ul>	<ul style="list-style-type: none"> <li>Continual decline in water levels that prevent extraction during a 3-year drought cycle</li> <li>More than 10% of private domestic wells go dry</li> <li>Running out of storage to get through a 3-year drought (as defined by change in storage between 2012 and 2015)</li> </ul>	<p>For N&amp;C: Impacts to primary sensitive infrastructure (the Delta Mendota Canal and California Aqueduct delivery capacity) and secondary sensitive infrastructure (local conveyance infrastructure) as a result of differential subsidence</p> <p>For WSID-PID MA: Impacts to laterals from differential settlement</p> <p>For TRID MA: Inadequate freeboard on levee system in wet years</p>	<ul style="list-style-type: none"> <li>Inability to divert from SJR under water rights due to low groundwater elevations</li> <li>Loss of GDEs</li> </ul>	<ul style="list-style-type: none"> <li>Exceedance of Primary MCLs in public water systems</li> <li>Crop damage resulting in &gt;10% yield reduction as a result of the quality of applied water.</li> </ul>
SJREC					
Grassland	Lowering of groundwater levels would lead to increased costs associated with higher total lift, lowering pumps, need to drill deeper wells or costs securing alternative water sources. Impacts to habitat would require mitigation, including alternative water supplies and habitat restoration.	Insufficient water storage to develop necessary water to maintain critical habitat. Reduction in storage would lead to increased costs associated with higher total lift, lowering pumps, need to drill deeper wells or costs securing alternative water sources. Impacts to habitat would require mitigation, including alternative water supplies and habitat restoration.	Damage to infrastructure, lose of conveyance capacity and potential inability to flood or drain by gravity and associated habitat impacts.	Reduction of Interconnected SW bodies and associated habitats, requiring reduction in groundwater pumping. (No management activities have depleted interconnected SW in GGSA within the Historic Period.)	Degradation of groundwater quality resulting in reduced ability to develop groundwater for habitat purposes.
Aliso				Aliso Water District groundwater pumping does not influence SW depletion. The district landowners are	Reduction in crop production of up to 50% or more due to water quality issues



PRELIMINARY DRAFT

	WL Decline	Decline in Storage	Subsidence	Interconnected Surface Water	Groundwater Quality
				<p>limited by the Herminghaus and similar agreements along the SJR that prevent pumping from above the A-Clay. The primary aquifer, where groundwater pumping occurs, is disconnected from surface water source.</p> <p>A significant and unreasonable result would be a reduction in water availability to downstream beneficial users beyond what was experienced in similar water years in recent history as a result of groundwater extractions</p>	
Farmers					
Fresno					