

Sustainable Groundwater Management Program

Informational Update

ACWA Groundwater Committee| February 21, 2019



CALIFORNIA DEPARTMENT OF WATER RESOURCES
SUSTAINABLE GROUNDWATER
MANAGEMENT OFFICE

Presentation Overview

- **SGMP Update**
 - **Alternative Assessments**
 - **Basin Boundary Modifications**
 - **Basin Prioritization**
 - **Technical Assistance**
 - **Planning and Financial Assistance**

SGMP Update

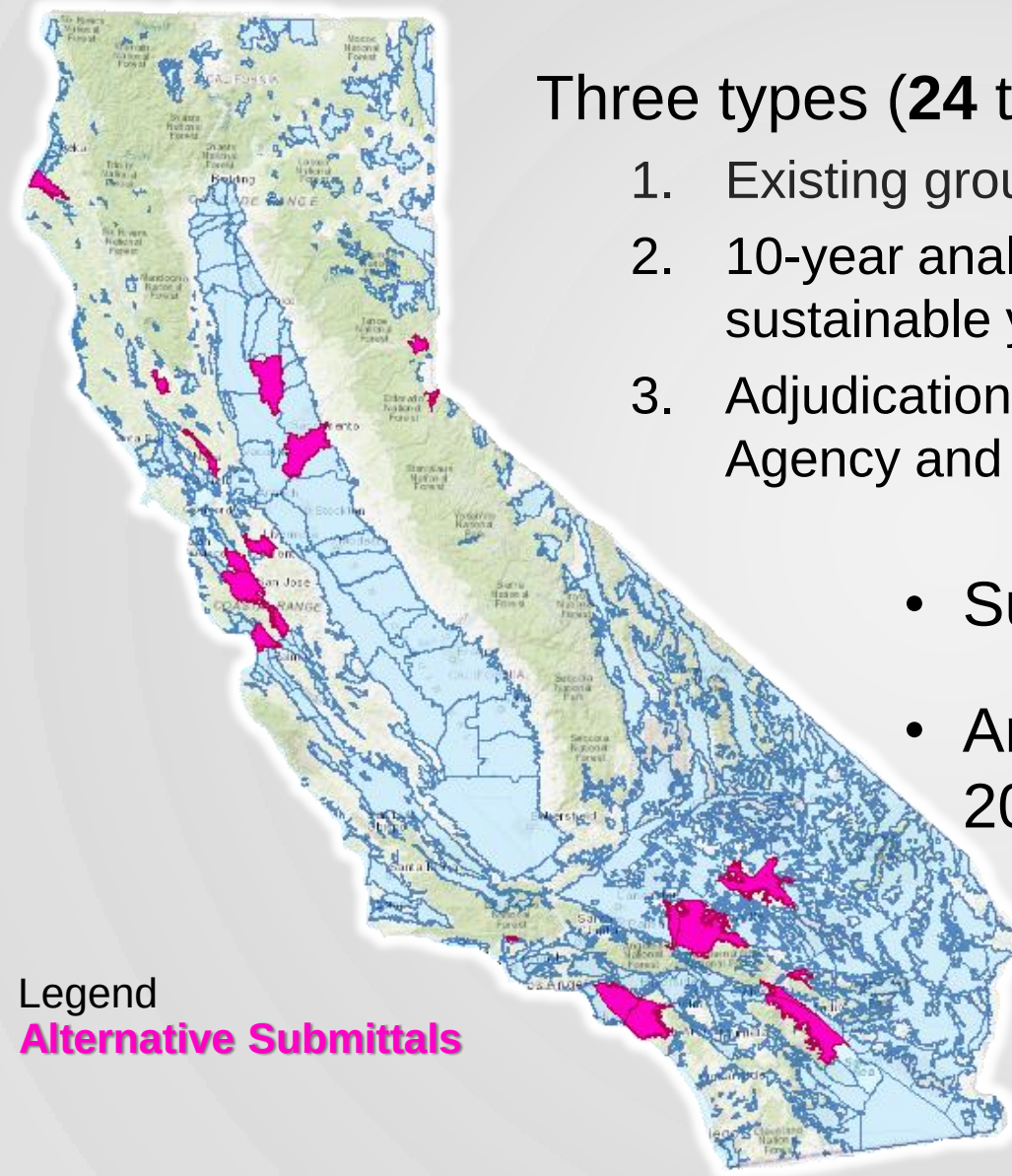
Alternative Evaluation and Assessment Update

Alternative Submittals

Three types (**24** total submittals)

1. Existing groundwater management plan (**9**)
2. 10-year analysis of operation within the sustainable yield (**11**; 2 withdrawn early 2019)
3. Adjudication (**4** submitted by Mojave Water Agency and withdrawn in late 2017)

- Submitted by January 1, 2017
- Annual Reports for Water Year 2017 received by April 1, 2018



Legend
Alternative Submittals

Alternative Evaluation and Assessment

Next Steps

- **Early 2019** – Public Release of Alternative Assessments
- **Alternative Annual Reports** – Due every April 1 for the preceding water year
- **Alternative 5-Year Update** – Local agencies will update and DWR will review Alternative Submittals every 5 years

Basin Boundary Modifications

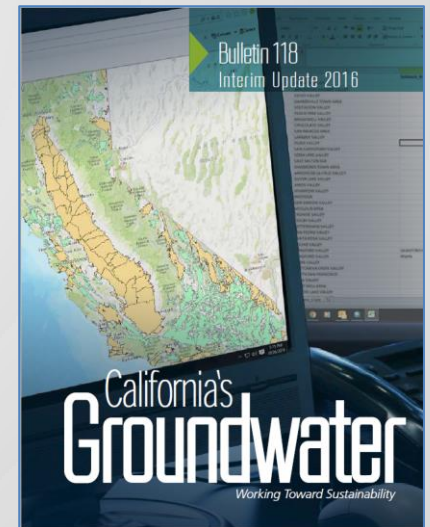
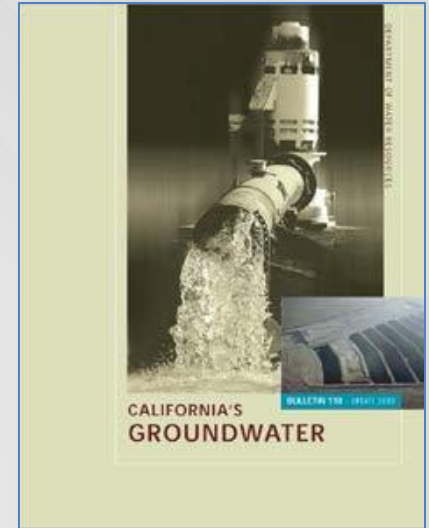
Introduction

- Background
- 2018 Basin Boundary Modifications Information
- 2018 Final Basin Boundaries
- Impact to GSA Boundaries



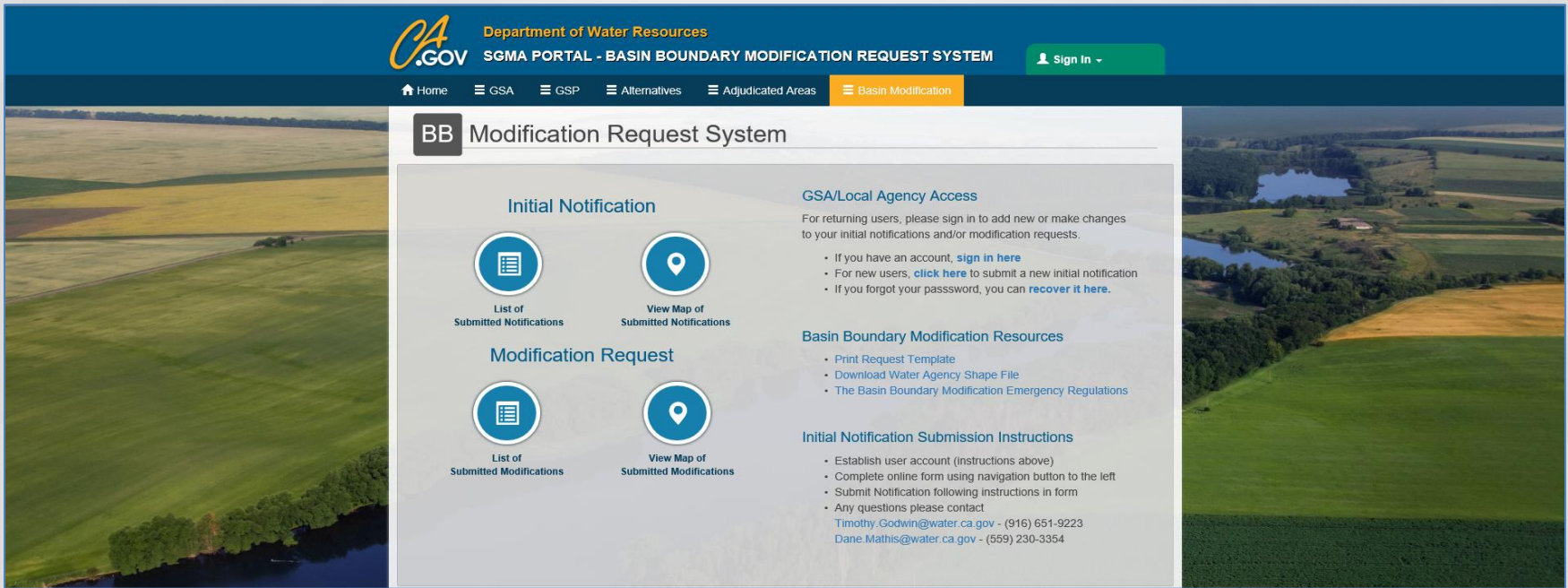
Background

- Groundwater Basins and Subbasins are defined in Bulletin 118
- SGMA – Applicable to all basins, as defined in B118
 - 10722.2 – Established process for local agency to request modifications
 - Basin Boundary Emergency Regulations (October 2015)
- All 2018 Modifications were at the request of local agencies
- Boundary Modifications require re-prioritization
 - Draft re-prioritization of 2016 Boundary modifications released during 2018 period



2018 Basin Boundary Modifications

Basin Boundary Modification Request System (BBMRS)



The screenshot displays the web portal for the Basin Boundary Modification Request System (BBMRS). The header features the California State Water Resources Control Board (CSWRB) logo and the text "Department of Water Resources" and "SGMA PORTAL - BASIN BOUNDARY MODIFICATION REQUEST SYSTEM". A "Sign In" button is located in the top right corner. The main navigation bar includes links for Home, GSA, GSP, Alternatives, Adjudicated Areas, and Basin Modification. The central content area is titled "BB Modification Request System" and is divided into two main sections: "Initial Notification" and "Modification Request". Each section contains two circular icons: a document icon for "List of Submitted Notifications" and a location pin icon for "View Map of Submitted Notifications". To the right of these sections, there are links for "GSA/Local Agency Access" and "Basin Boundary Modification Resources". The "Initial Notification Submission Instructions" section provides a list of steps for users to follow, including establishing an account, completing the online form, and submitting the notification. Contact information for Timothy Godwin and Dane Mathis is provided at the bottom of the instructions.

Department of Water Resources
SGMA PORTAL - BASIN BOUNDARY MODIFICATION REQUEST SYSTEM

Sign In

Home GSA GSP Alternatives Adjudicated Areas Basin Modification

BB Modification Request System

Initial Notification

- List of Submitted Notifications
- View Map of Submitted Notifications

Modification Request

- List of Submitted Modifications
- View Map of Submitted Modifications

GSA/Local Agency Access

For returning users, please sign in to add new or make changes to your initial notifications and/or modification requests.

- If you have an account, [sign in here](#)
- For new users, [click here](#) to submit a new initial notification
- If you forgot your password, you can [recover it here](#).

Basin Boundary Modification Resources

- [Print Request Template](#)
- [Download Water Agency Shape File](#)
- [The Basin Boundary Modification Emergency Regulations](#)

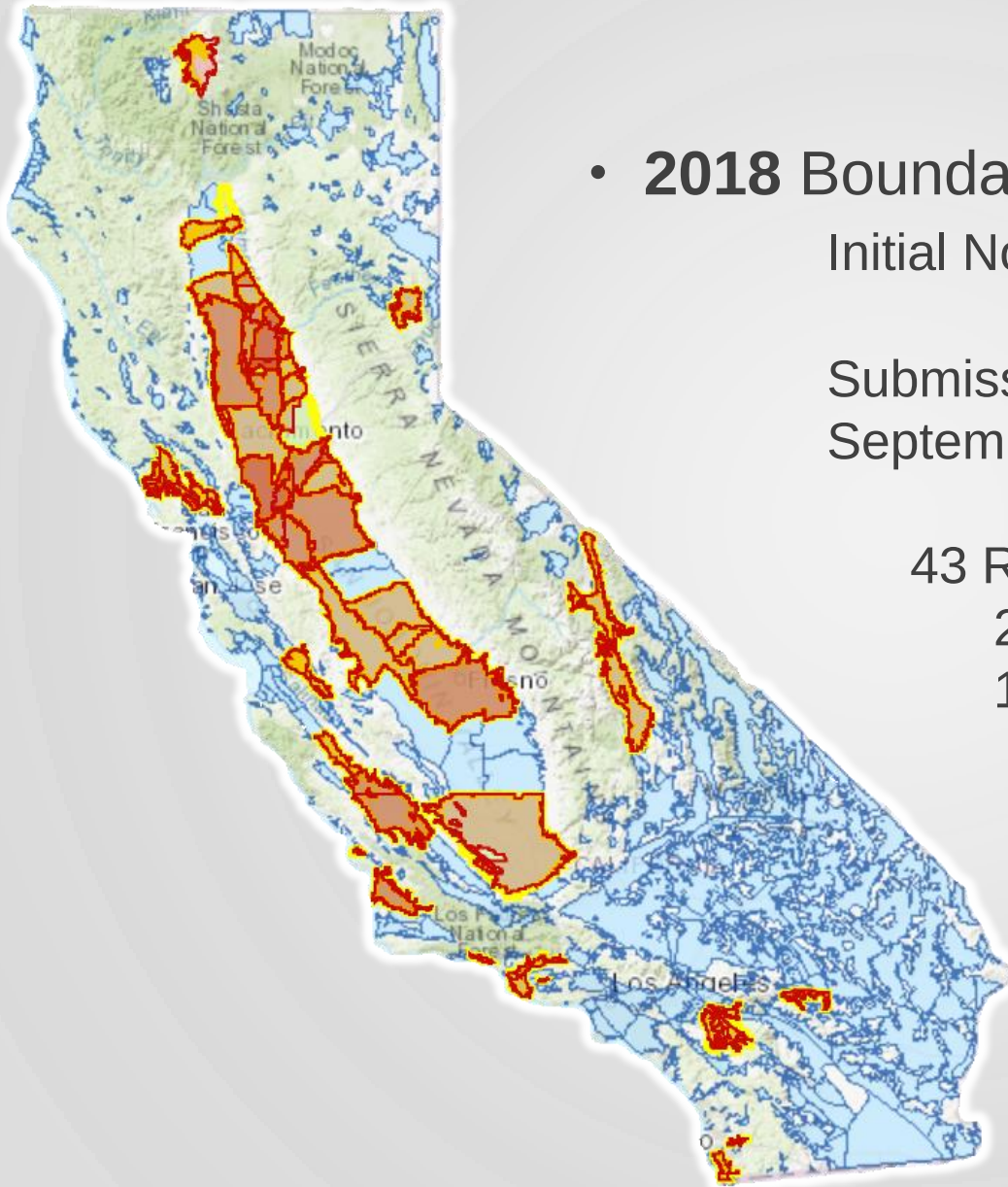
Initial Notification Submission Instructions

- Establish user account (instructions above)
- Complete online form using navigation button to the left
- Submit Notification following instructions in form
- Any questions please contact

Timothy Godwin@water.ca.gov - (916) 651-9223
Dane.Mathis@water.ca.gov - (559) 230-3354

<https://sgma.water.ca.gov/basinmod/>

Basin Boundary Modifications



- **2018 Boundary Modifications**

Initial Notification - July 2017

Submission Period - January 1 to September 28, 2018

43 Requests

23 Jurisdictional

15 Scientific

5 Jurisdictional/Scientific

Summary of Final Decisions (Posted February 11, 2019)

- <https://water.ca.gov/Programs/Groundwater-Management/Basin-Boundary-Modifications>



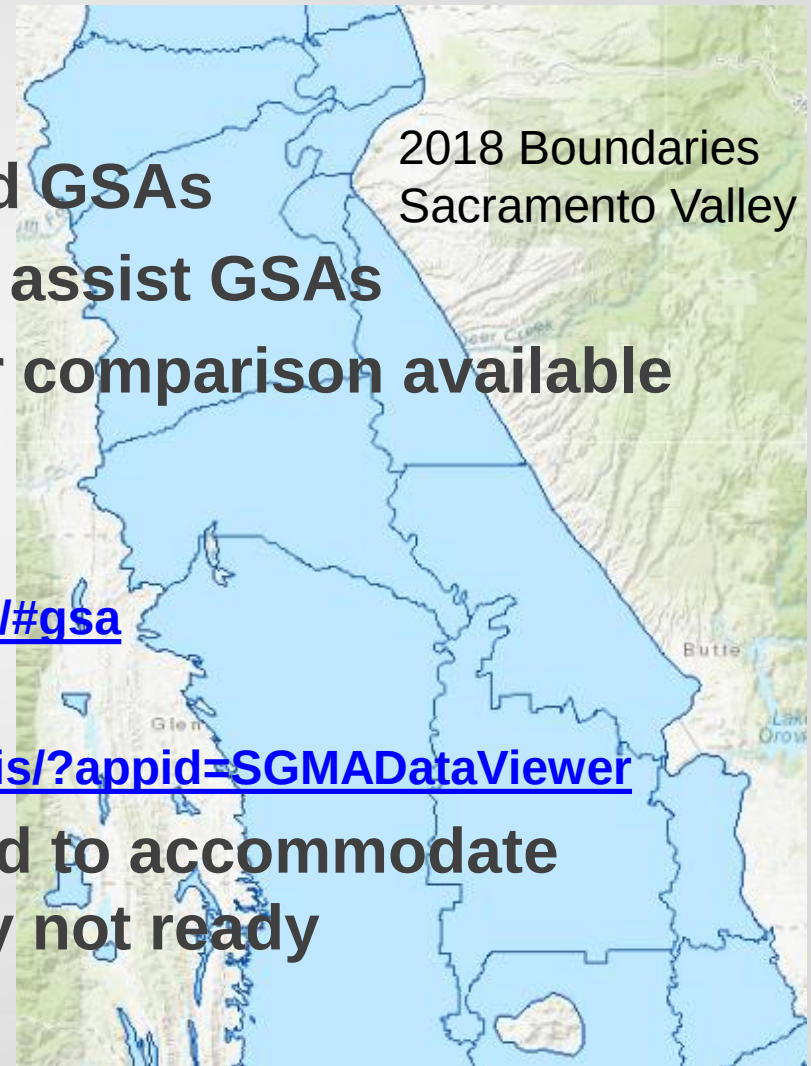
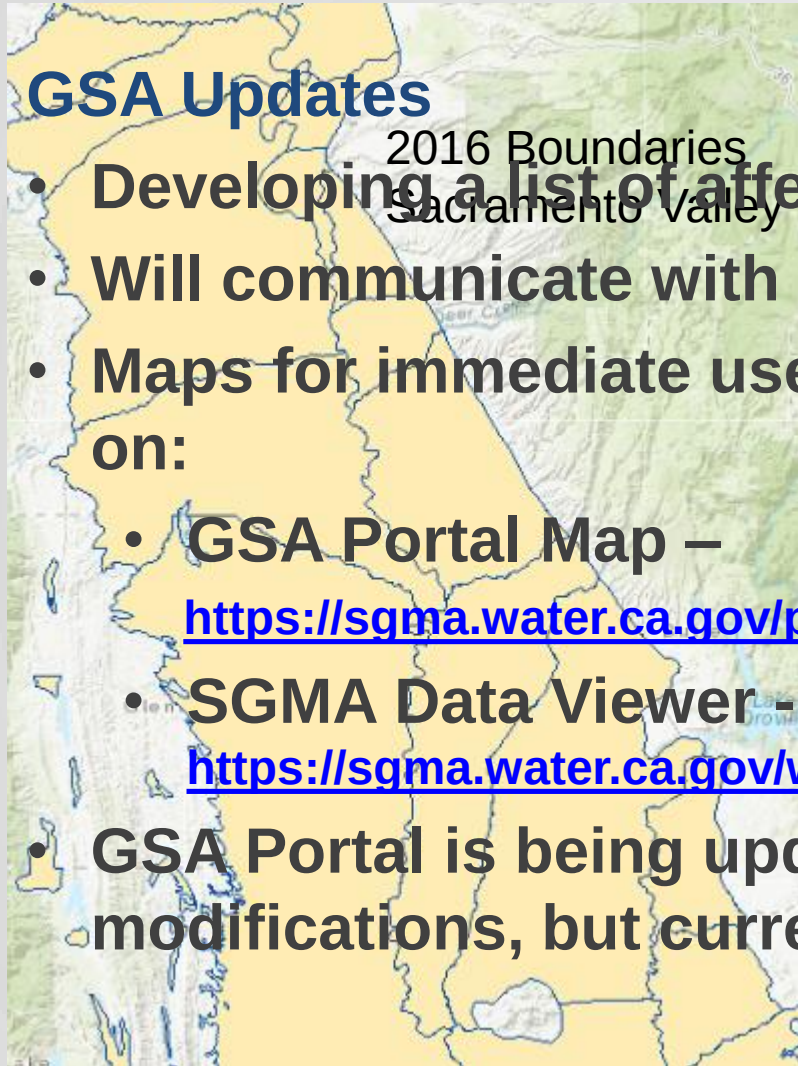
Addressing GSA Boundaries

GSA Updates

- **Developing a list of affected GSAs**
- **Will communicate with and assist GSAs**
- **Maps for immediate use for comparison available on:**
 - **GSA Portal Map –**
<https://sgma.water.ca.gov/portal/#gsa>
 - **SGMA Data Viewer –**
<https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer>
- **GSA Portal is being updated to accommodate modifications, but currently not ready**

2016 Boundaries
Sacramento Valley

2018 Boundaries
Sacramento Valley



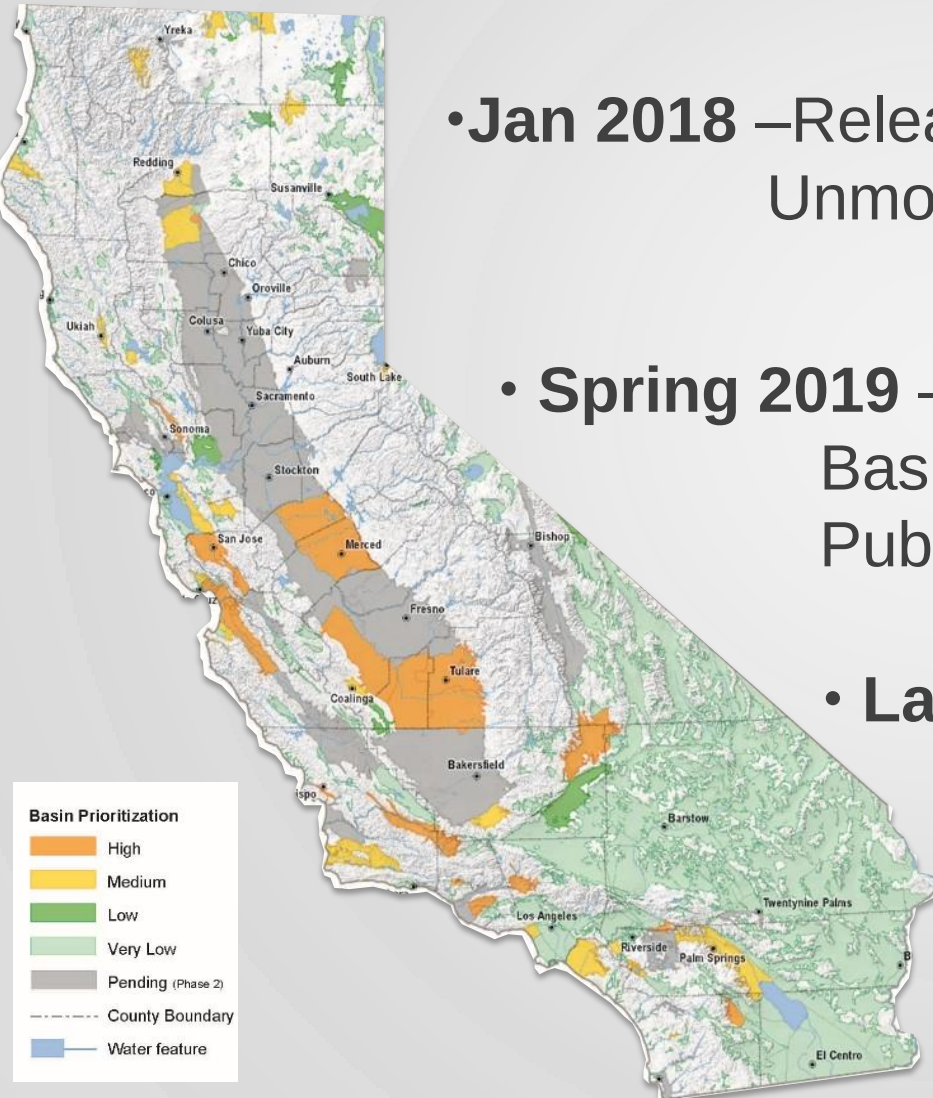
Basin Prioritization

Basin Prioritization - *Legislative Directive*

- Basin prioritization triggered by boundary modifications – 2016 & 2018
- Prioritization based on:
 1. The **population** overlying the basin.
 2. The rate of current and **projected growth** of the population in basin.
 3. The number of **public supply wells** that draw from the basin.
 4. The **total** number of **wells** that draw from the basin.
 5. The **irrigated acreage** overlying the basin.
 6. The degree to which persons overlying the basin **rely on groundwater**.
 7. Any **documented impacts** on the groundwater within the basin, including overdraft, subsidence, saline intrusion, and water quality.
 8. Any **other information** determined to be relevant by the department, including adverse impacts on local habitat and local streamflows.

2018 – Basin Prioritization

- **Jan 2018** – Released Final Priorities for Unmodified Basins (458)
- **Spring 2019** – Draft Priorities for Modified Basins (57), Public Comments & Public Meeting
- **Late Spring 2019** – Final Priorities for Modified Basins (57)



Basin Prioritization Resources

<https://www.water.ca.gov/Programs/Groundwater-Management/Basin-Prioritization>

Basin Prioritization Webpage

[About](#) [Contact](#) [Current Conditions](#) [Settings](#)

 CALIFORNIA DEPARTMENT OF
WATER RESOURCES

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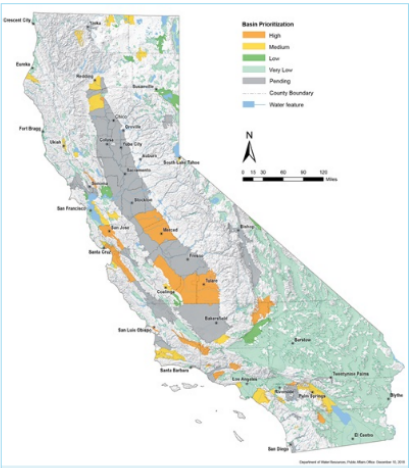
[Home](#) | [Programs](#) | [Groundwater Management](#) | [Basin Prioritization](#)

Basin Prioritization

Basin prioritization classifies California's 517 groundwater basins (basins) into priorities based on components identified in the [California Water Code Section 10933\(b\)](#). The priority of basins determine the provisions that apply for the [California Statewide Groundwater Elevation Monitoring \(CASGEM\)](#) and [Sustainable Groundwater Management Act \(SGMA\)](#) programs in a basin. The prioritization process consists of applying datasets and information in a consistent, statewide manner in accordance to the provisions in the California Water Code.

DWR was first directed to prioritize basins as part of the Groundwater Monitoring legislation enacted in California's [2009 Comprehensive Water package](#). DWR prioritized groundwater basins through the CASGEM Program and released the results in 2014.

In 2015, SGMA went into effect and required DWR to prioritize basins for purposes of SGMA and to reassess the basin priority when DWR updates Bulletin 118 basin boundaries. In 2015, DWR implemented the 2014 CASGEM Basin Prioritization as the initial SGMA basin prioritization. In 2016, DWR received 54 requests for [basin boundary modifications](#). DWR released the final groundwater basin boundaries, which incorporated numerous statewide jurisdictional and scientific modifications. On December 22, 2016, DWR published [Bulletin 118 Interim](#)

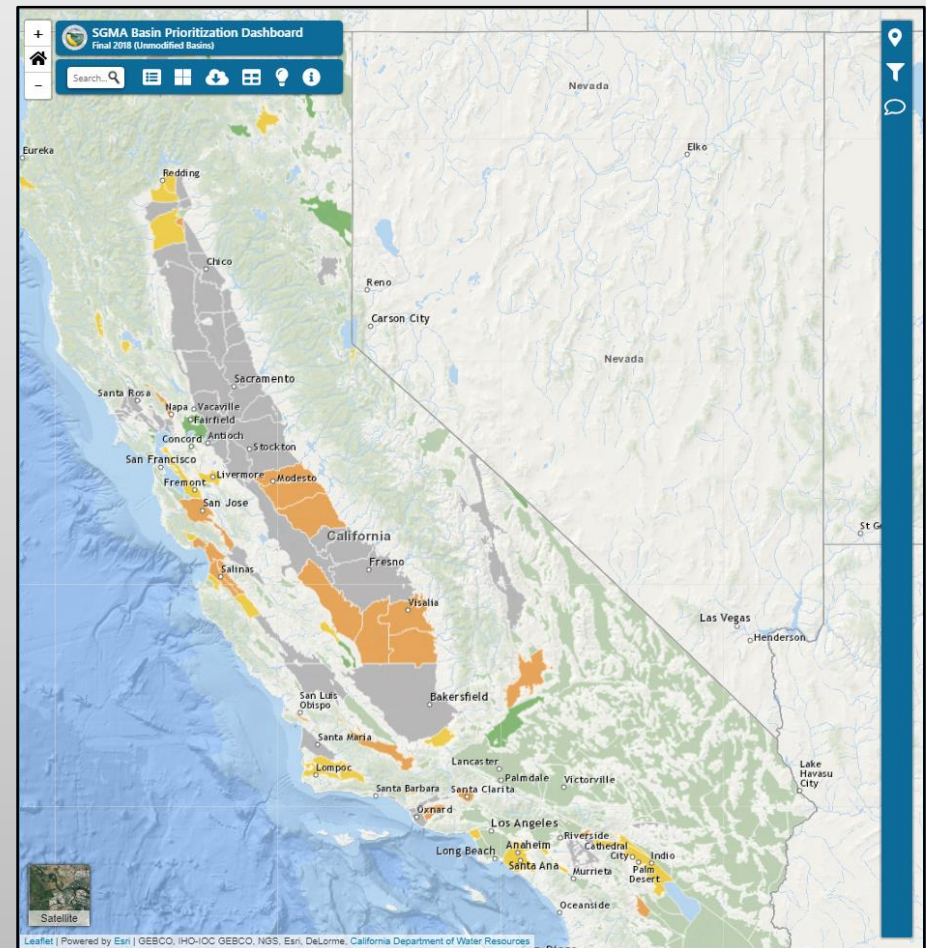


Statewide Map of 2018 SGMA Basin Prioritization

Basin Prioritization Legend:

- High (Orange)
- Medium (Yellow)
- Low (Green)
- Very Low (Light Green)
- Pending (Grey)
- County Boundary (Dashed Line)
- Water Feature (Blue)

Basin Prioritization Dashboard



Update on Assistance Programs

Technical Assistance

SGMP Technical Assistance

1. Guidance and Education

- Best Management Practices
- Guidance Documents
- Fact Sheets and Reports (B-118)

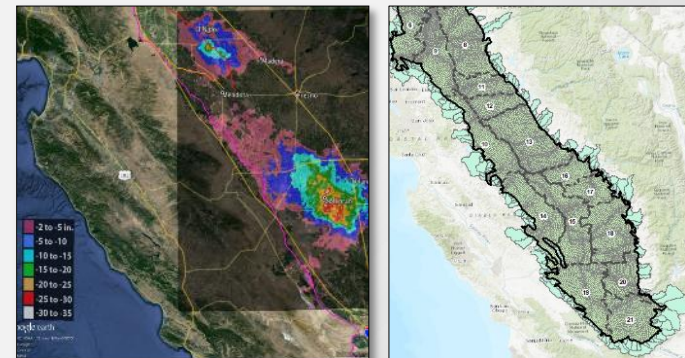


2. Technical Support Services

- Available to GSAs
- Can help fill data gaps
 - Field Activities
 - Modeling and Tools



3. Statewide Datasets and Tools



Guidance and Education

- Statewide & Regional References
 - DWR's SGMP Webpages
 - Bulletin 118 – 2020 *In Development*
 - Bulletin 160 – Groundwater Content
- SGMA References



Best Management Practices

- BMP 1: Monitoring Protocols, Standards, Sites
- BMP 2: Monitoring Networks & Identification of Data Gaps
- BMP 3: Hydrologic Conceptual Model
- BMP 4: Water Budget
- BMP 5: Modeling
- BMP 6: Sustainable Management Criteria (Draft)

Guidance Documents

- Preparation Checklist for GSP submittal
- GSP Annotated Outline
- Engagement with Tribal Governments
- Stakeholder Comm. & Engagement

Water Quality Survey Results Summary

- Open for three weeks (September – October)
- 15 Questions
- Received 221 participants
- 63% of participants part of a GSA
- Nitrate, Arsenic, and Salts are the top 3 constituents of concern
- Significant number of existing WQ programs being implemented throughout the State
- Main Concerns:
 - Coordination/Coming to an agreement on establishing UR/MTs
 - Lack of WQ data
 - How to leverage existing programs to meet SGMA/Regulations
 - Cost

Technical Support Services (TSS)

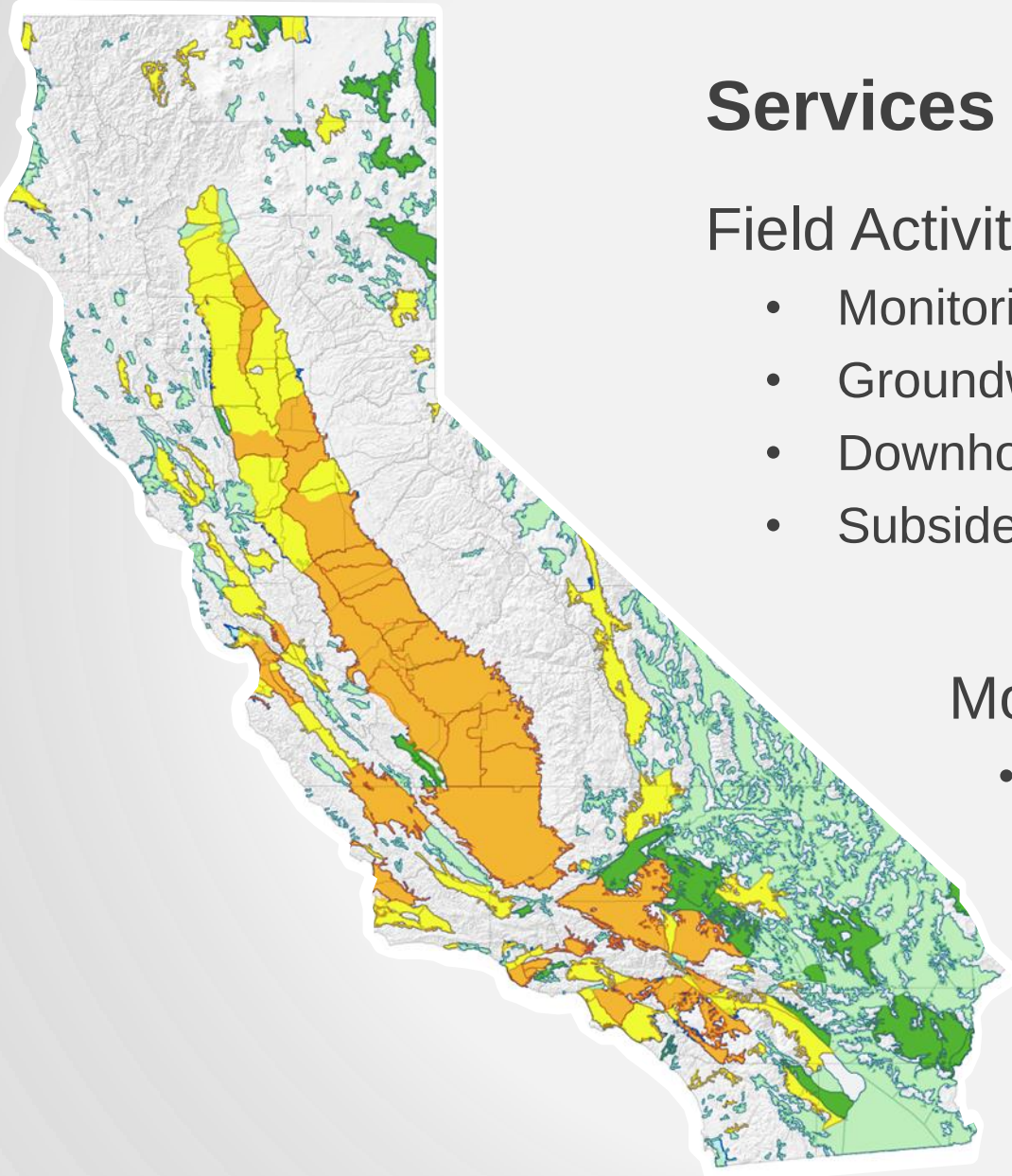
Services Offered

Field Activities:

- Monitoring well installation
- Groundwater monitoring training
- Downhole camera surveys
- Subsidence monitoring

Modeling Support/Training:

- Groundwater-surface water modeling



Statewide Datasets and Tools

Data, Tools, and Reports Webpage

- Download Data
- Groundwater Tools
 - Interactive Maps
 - Modeling Tools
- Climate Change Data/Tools
- Maps and Reports

The screenshot shows the 'Data and Tools' webpage of the California Department of Water Resources. The header includes the department's logo and navigation links for 'Water Basics', 'What We Do', and 'Programs'. A secondary navigation bar lists 'Home', 'Programs', 'Groundwater Management', and 'Data and Tools'. The main content area is titled 'Data and Tools' and contains two paragraphs of text. The first paragraph discusses the history of data collection and the need for public access under the Sustainable Groundwater Management Act (SGMA). The second paragraph mentions the importance of multiple datasets for complex analysis. Below the text is a featured section for a 'Data Tools and Reports Fact Sheet (PDF)' published on August 01, 2017, which serves as a guide for Groundwater Sustainability Agencies (GSAs). At the bottom, there is a horizontal menu with tabs for 'Data', 'Mapping', 'Modeling', 'Climate Change', 'Maps', and 'Reports'. The 'Data' tab is selected, displaying a preview of the 'DWR's SGMA Portal' which includes a map and buttons for submitting and viewing SGMA information.

CALIFORNIA DEPARTMENT OF
WATER RESOURCES

Water Basics What We Do Programs

Home | Programs | Groundwater Management | Data and Tools

Data and Tools

We have a long history of data collection, monitoring, and reporting. With the passage of the [Sustainable Groundwater Management Act \(SGMA\)](#), there is an increased need for local and state agencies and the public to easily access water data in order to make informed management decisions. , there is an increased need for local and state agencies and the public to easily access water data in order to make informed management decisions.

Science-based analysis of complex issues may require the analysis of multiple datasets, such as the study of groundwater and surface water interaction, or evaluating the impact of water quality on water quality. The following data collections, interactive mapping tools, and reports are important resources to inform sustainable groundwater management decision-making.

Data Tools and Reports Fact Sheet (PDF) | (Publish Date: Aug 01, 2017)
Quick reference guide to data, tools and guidance that help Groundwater Sustainability Agencies (GSAs) develop Groundwater Sustainability Plans (GSPs), and implement the requirements of the Sustainable Groundwater Management Act (SGMA).

Data Mapping Modeling Climate Change Maps Reports

DWR's SGMA Portal

DWR's [SGMA Portal](#) allows local agencies, groundwater sustainability agencies (GSAs), and watermasters to submit, modify, and view the information required by the Sustainable Groundwater Management Act (SGMA). It also enables you to view submitted information and provide comments, where applicable. You don't need a login for public access.

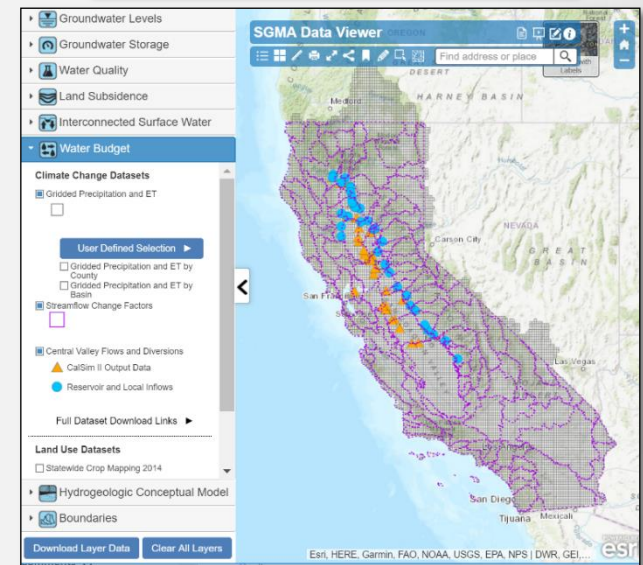
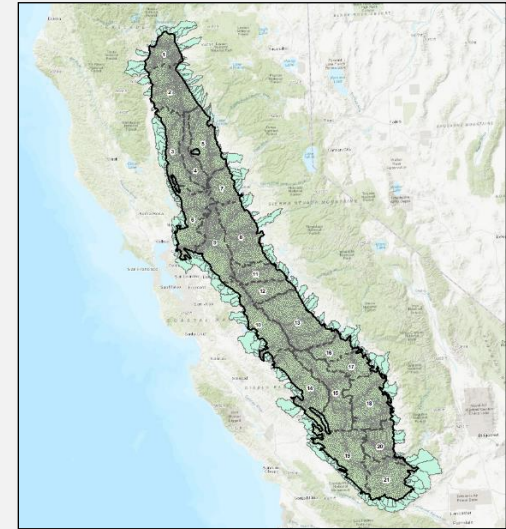
Statewide Datasets and Tools

DWR Models

- **IWFM** – Available
- **C2VSim** – **Fine Grid** (Central Valley)
 - Beta version – Available now
 - Beta 2.0 – Available March 2019
 - Calibrated version – June 2019

Climate Change Guidance

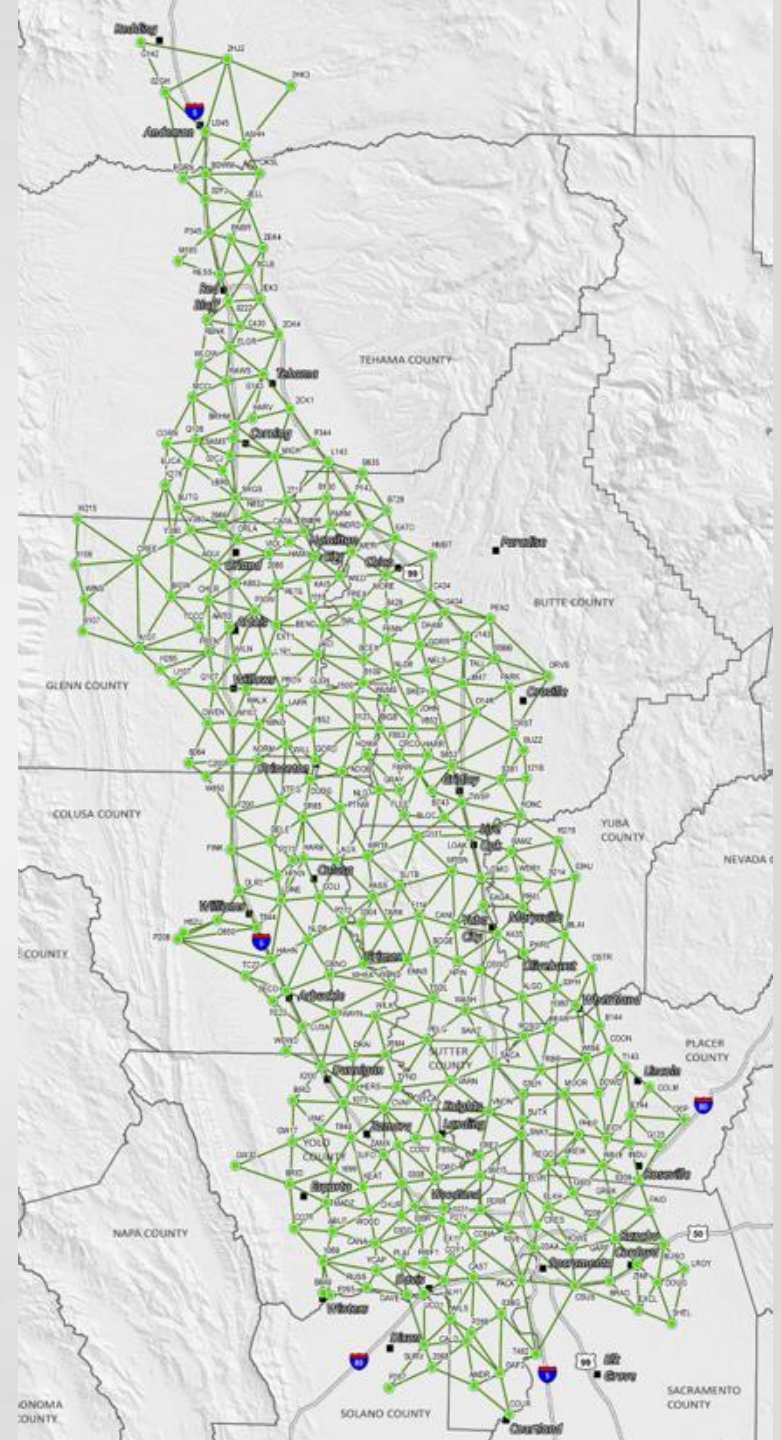
- Resource Guide
- Guidance Document
- Data & Tools – SGMA Data Viewer



Sacramento Valley GPS Subsidence Report

Background

- In 2008, DWR contracted with a private consultant to establish over 300 survey monuments that spans 11 counties.



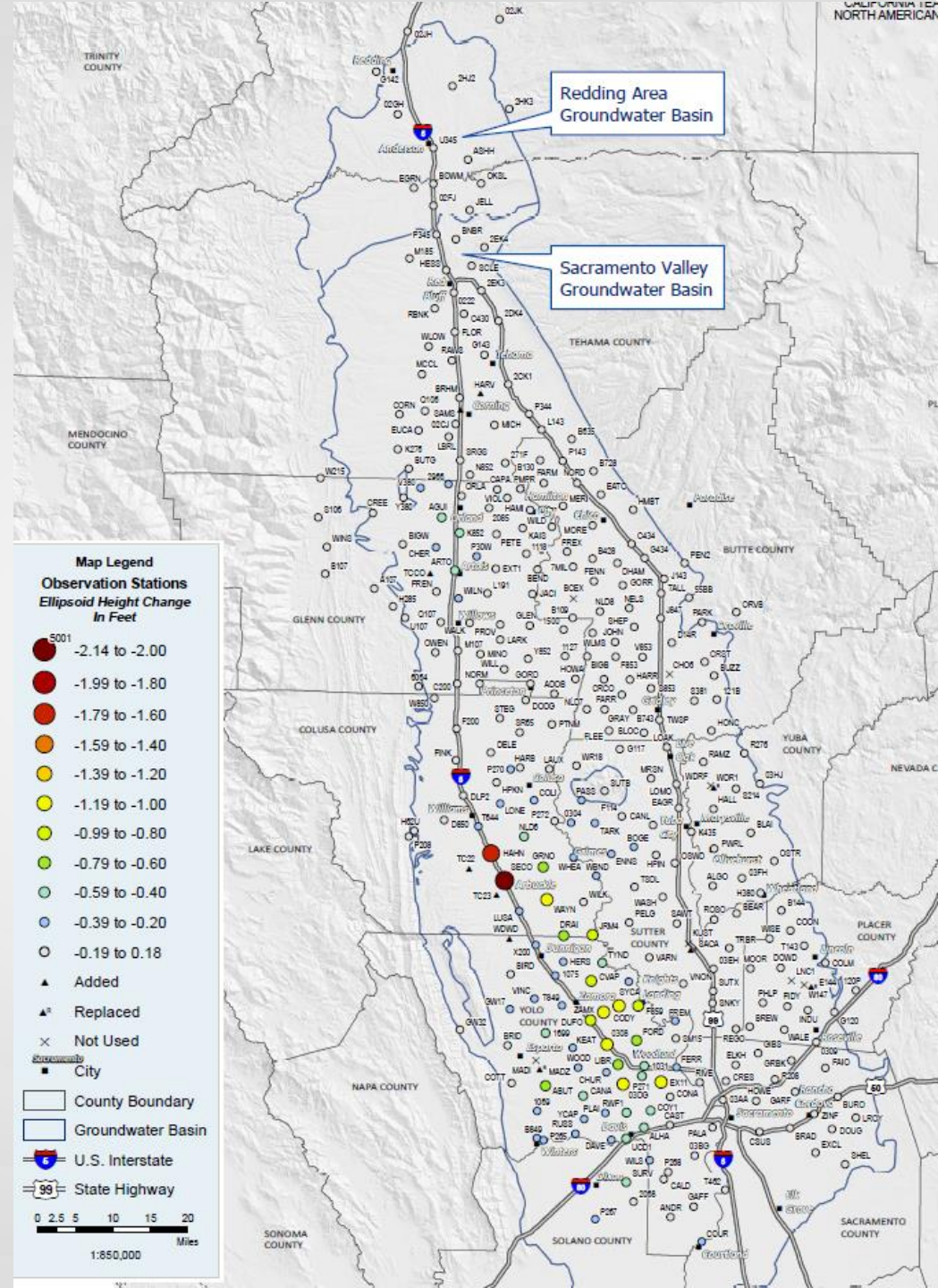
Background

- In 2008, 25 local, state, and federal agencies assisted with the GPS survey
- In 2017, DWR with the help of 18 local, state, and federal agencies, resurveyed the GPS monument grid in order to determine any change in land surface elevation over 9 yrs.



Key Findings

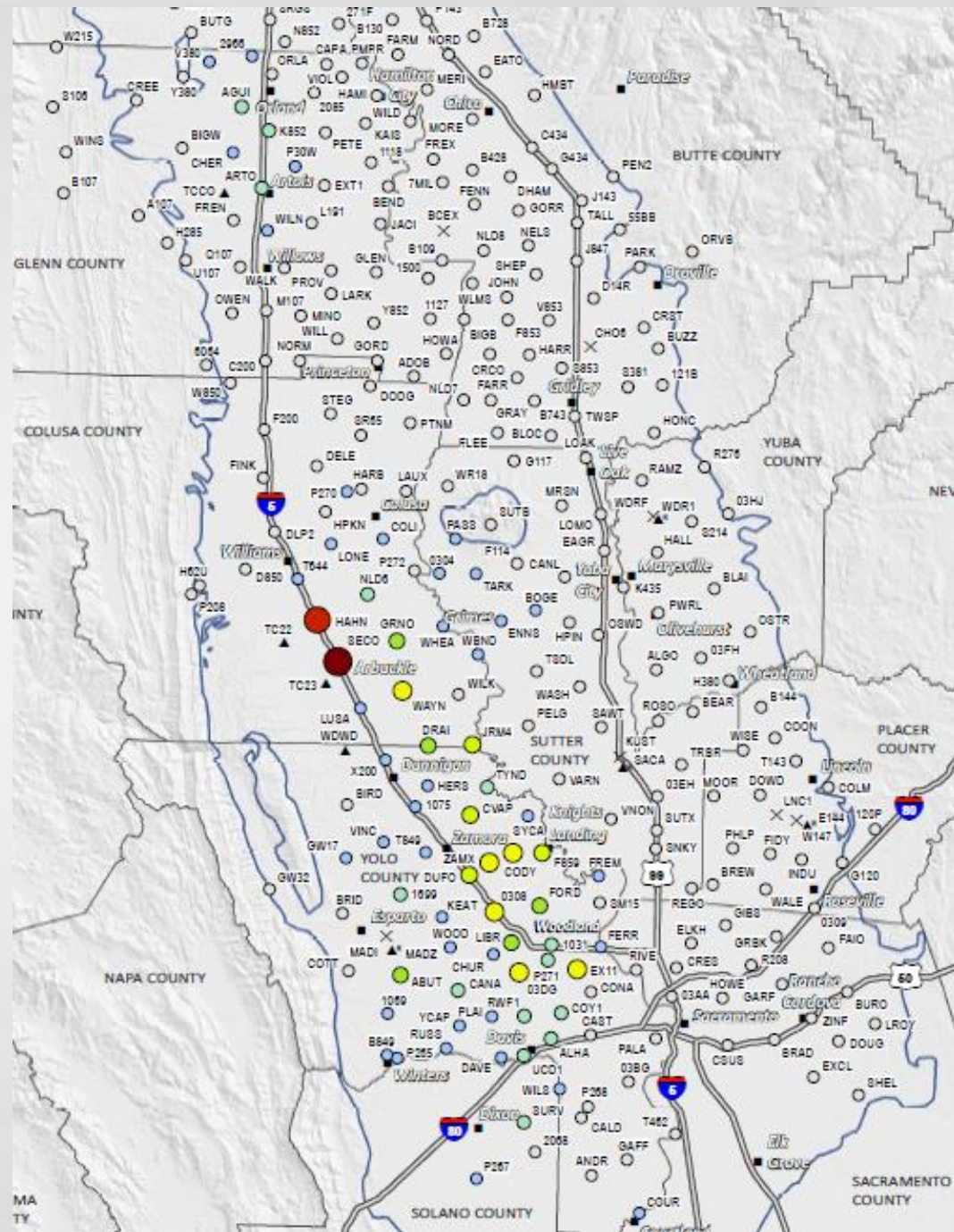
- Changes in elevation of greater than 0.17 feet (~2") are statistically significant
- The majority of the Sacramento Valley showed little to no statistically significant land subsidence.



Key Findings

Colusa County

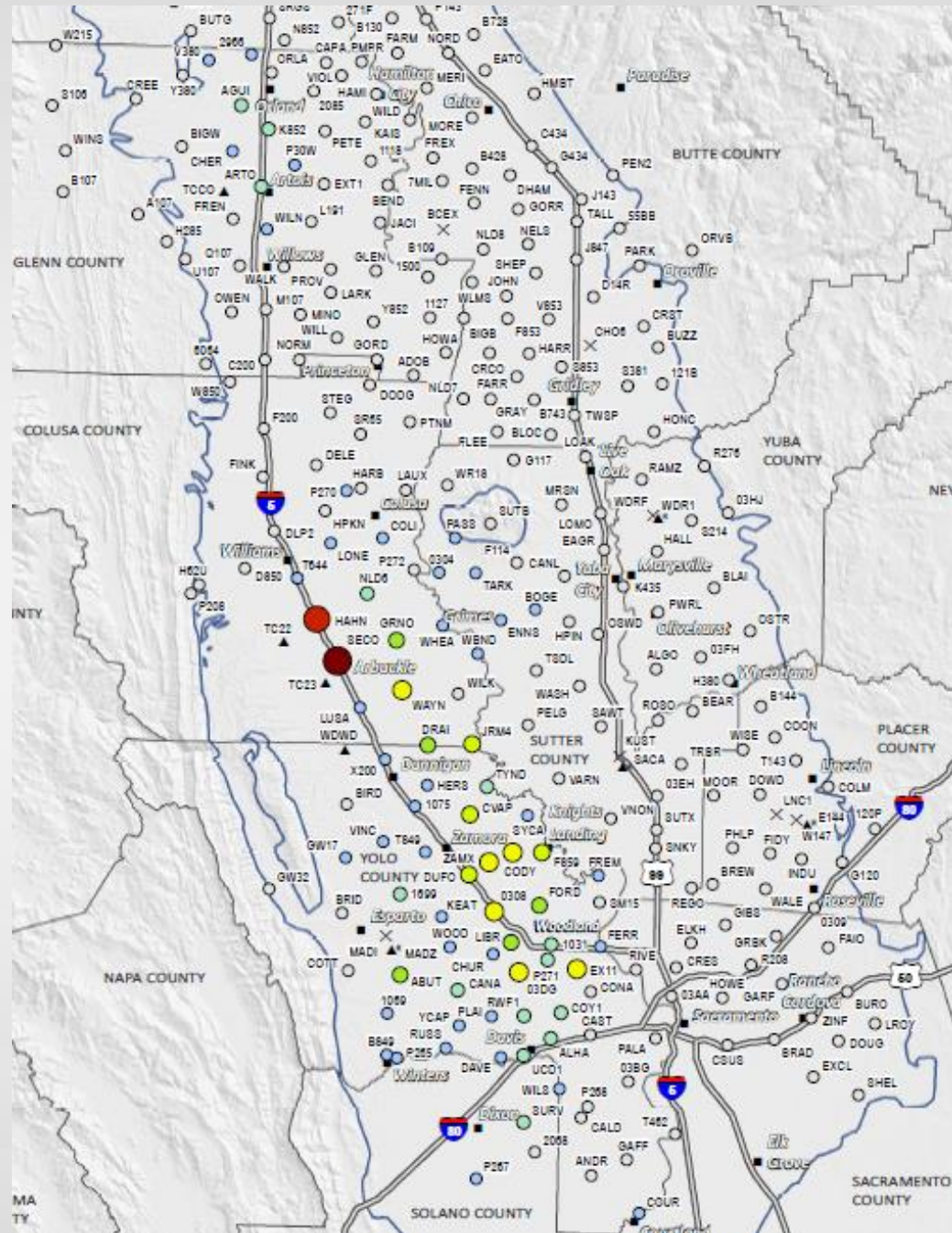
- The Arbuckle area experienced the most subsidence with a maximum change of -2.14 feet.



Key Findings

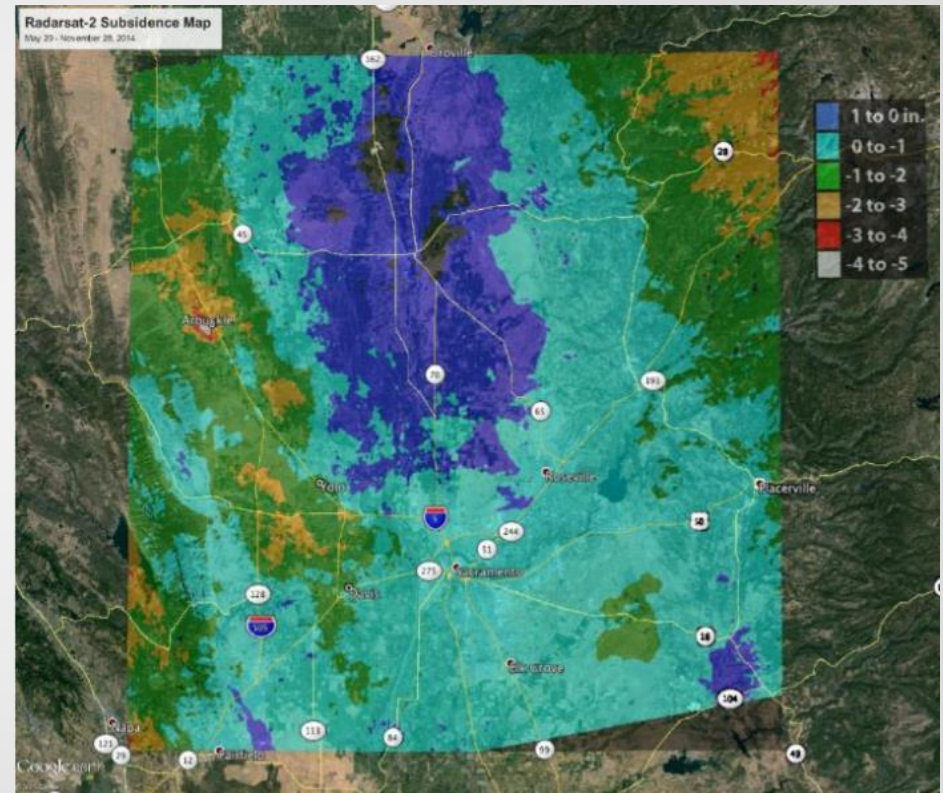
Yolo County

- Exhibits the largest spatial extent of subsidence that range from -0.3 to -1.1 feet at 31 monuments.



Key Findings

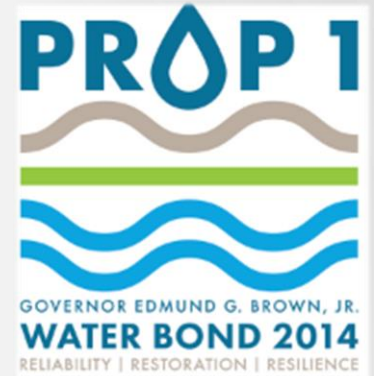
- The GPS survey results are consistent with the limited InSAR data.
- Further investigation and analysis by local agencies and state are planned.



Financial Assistance

Proposition 1 – SGMA Funding

\$100 million in grants awarded



Sustainable Groundwater Planning Grant Program

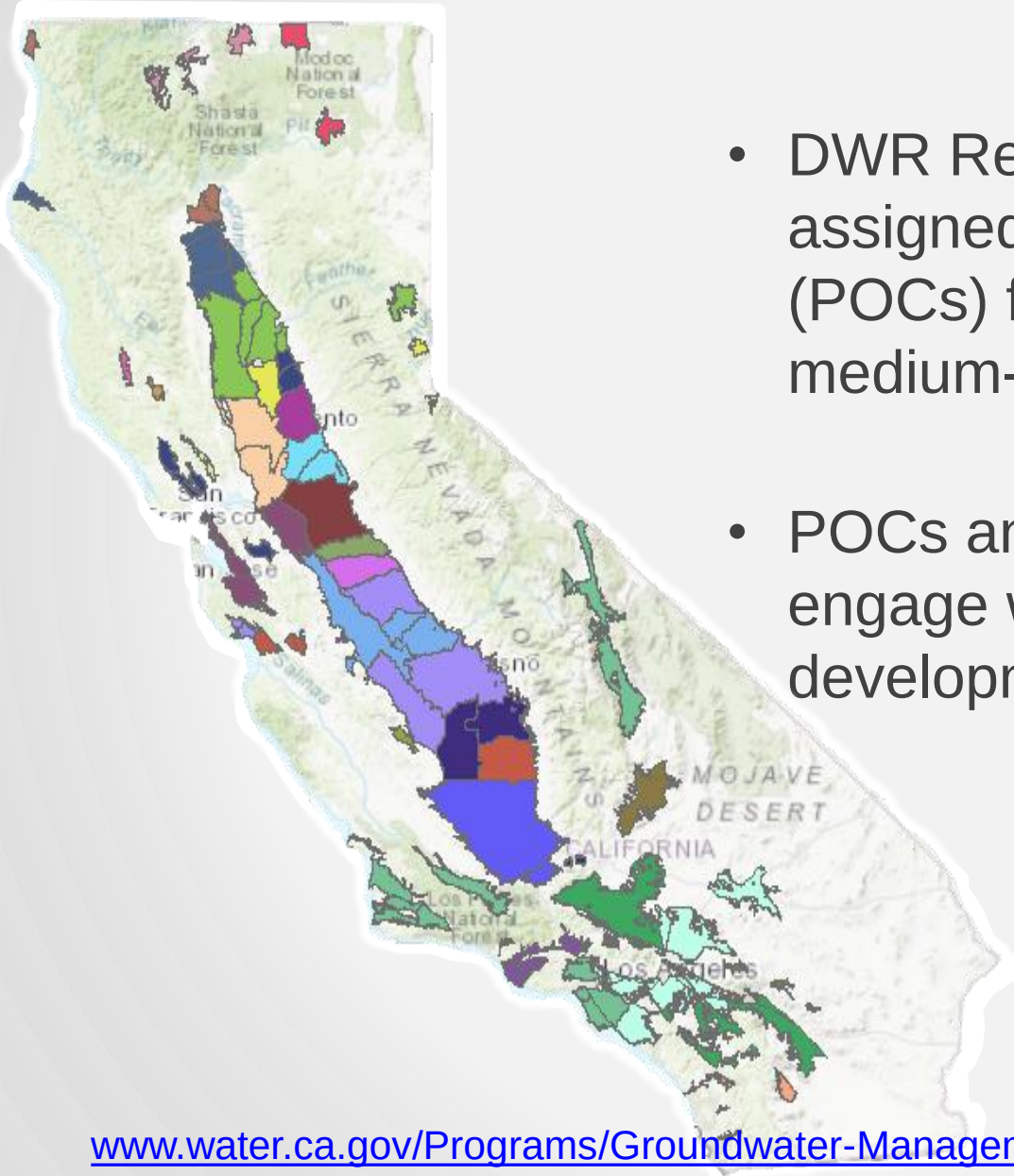
- **Feb. 2016** - Round 1
 - **\$6.7M** awarded to counties with stressed basins
- **Apr. 2018** - Round 2
 - **\$85.8M** awarded across all 78 applicants
 - \$16.2 M for projects benefiting Severely DACs
 - \$69.6 M for developing GSPs

Proposition 68 – SGMA Funding

- Passed in June 2018
- Authorized **\$50M** for extension of
Sustainable Groundwater Planning Grant Program
 - Tentative Schedule: Draft PSP – Spring 2019
 - Fund activities that support the development of a GSP
 - Likely priority to GSAs that did not receive Prop 1 grant
- Authorized **~\$100M** for
Sustainable Groundwater Implementation Grant Program
 - Tentative Schedule: Draft PSP – early 2020
 - Fund projects and programs that will assist GSAs implement a GSP
 - Likely priority to GSAs in critically overdrafted basins

Planning Assistance

DWR's GSA Engagement



- DWR Regional Office staff assigned as Points of Contact (POCs) for each high- and medium- priority basin/subbasin
- POCs and Regional Coordinators engage with GSAs during GSP development

GSA Forum

- Scheduled for March 21, 2019 (West Sacramento)
- Forum for an exchange of ideas and approaches focused on ***communication, coordination, engagement, and outreach.***
- Participants: GSAs and stakeholders



Facilitation Support Services (FSS)

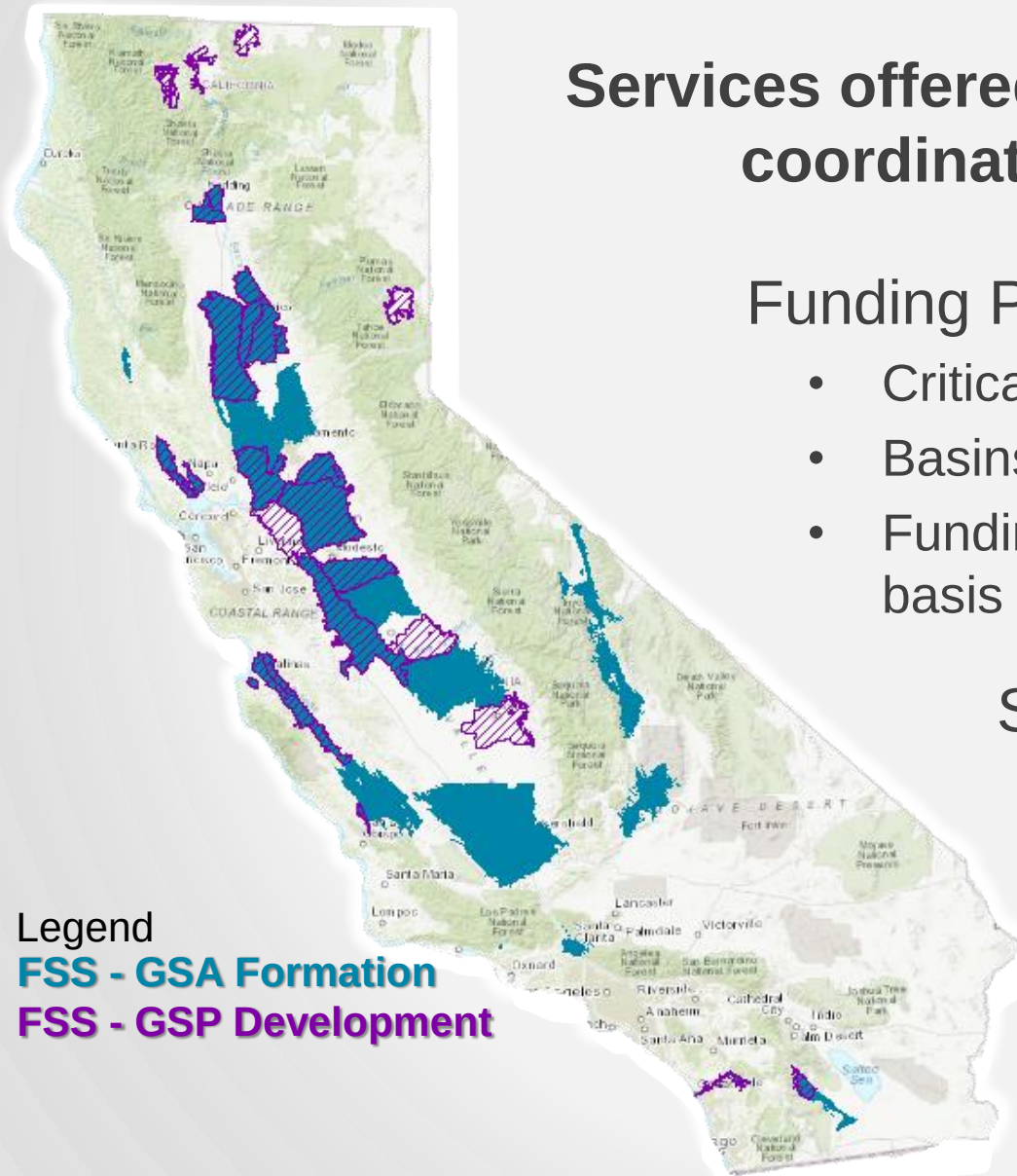
Services offered to GSAs or groups coordinating with GSAs

Funding Priorities:

- Critically overdrafted basins
- Basins without prior FSS
- Funding decisions made on a continuous basis

Services Offered:

- Stakeholder identification and engagement
- Public outreach facilitation
- GSA meeting facilitation
- Consensus building



SGMP Contacts & Resources

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SCRO: *Dane Mathis*

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SRO: *Tim Ross*

Timothy.Ross@water.ca.gov



SGMP Resources:

DWR SGMP Webpage

<https://www.water.ca.gov/Programs/Groundwater-Management>

Subscribe to DWR SGMP Email List

<https://bit.ly/2HdRRGK>

Thank You