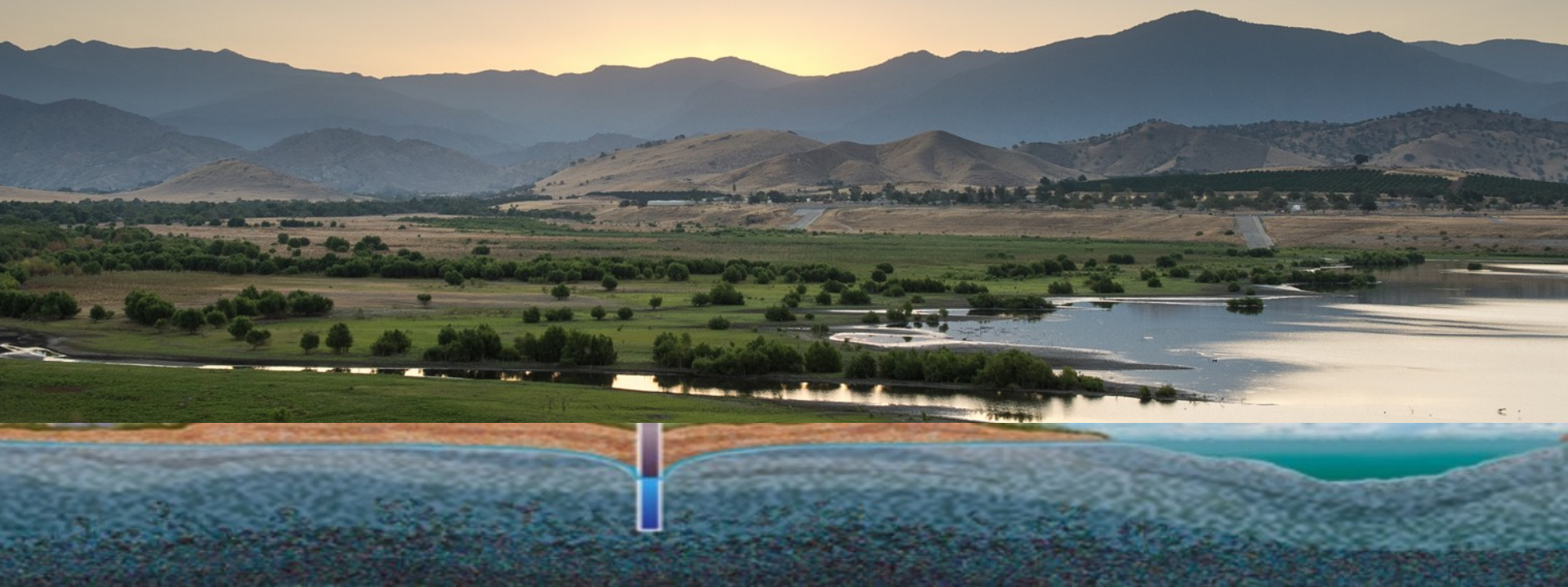


General SGMA Webinar on Groundwater Sustainability Planning



Jointly Hosted By the Department of Water Resources and the State Water Board
February 18, 2021



CALIFORNIA DEPARTMENT OF WATER RESOURCES
SUSTAINABLE GROUNDWATER
MANAGEMENT OFFICE

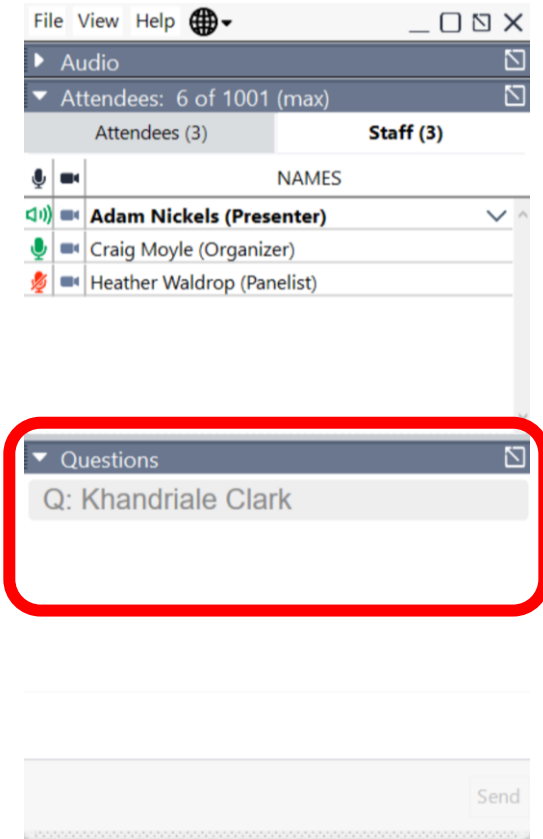


Agenda Overview

- Introduction: California's Groundwater Management
- SGMA Regulatory Framework: GSP Assessments
 - Public Question and Answer
- State Assistance: Implementation
 - Public Question and Answer



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California's Groundwater Management



Agriculture



Drinking Water



Environment



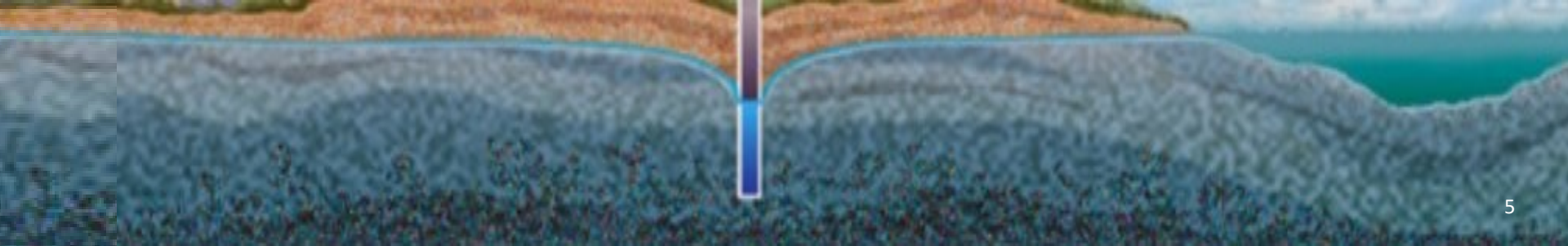
Businesses

Effective statewide groundwater management is imperative to ensuring the State's future water supply reliability and system resiliency.

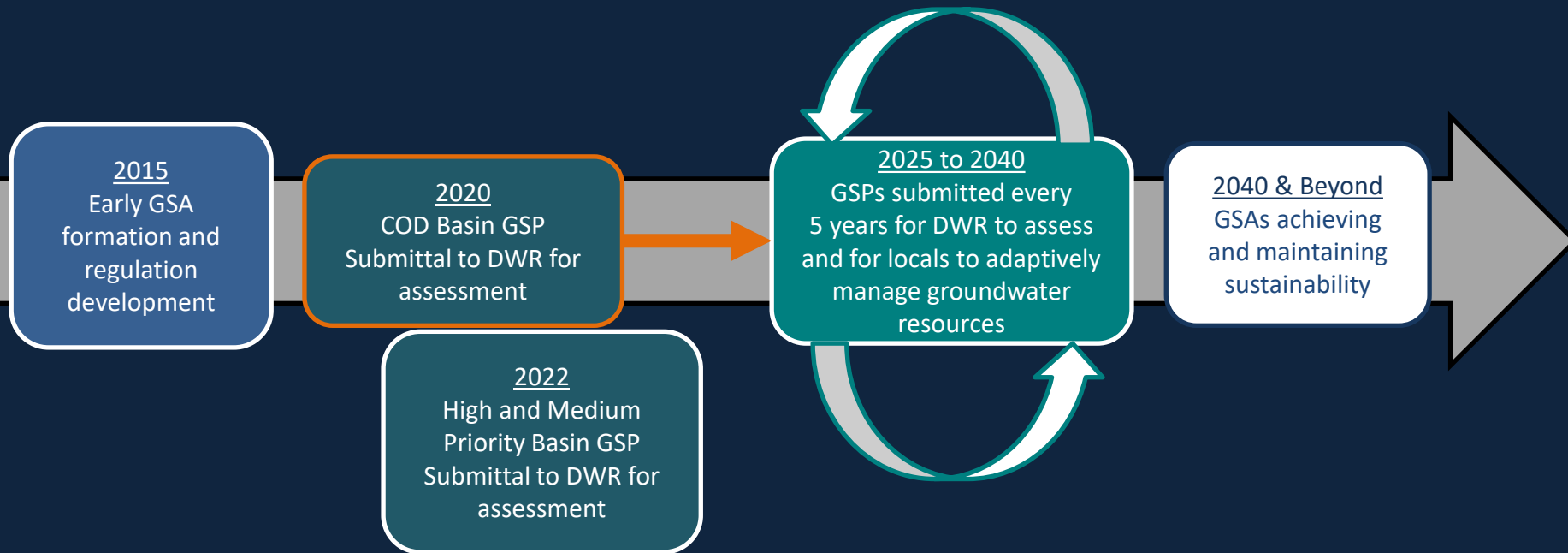
A Paradigm Shift To Comprehensive Water Management

For over 100 years, surface water has been actively managed in California

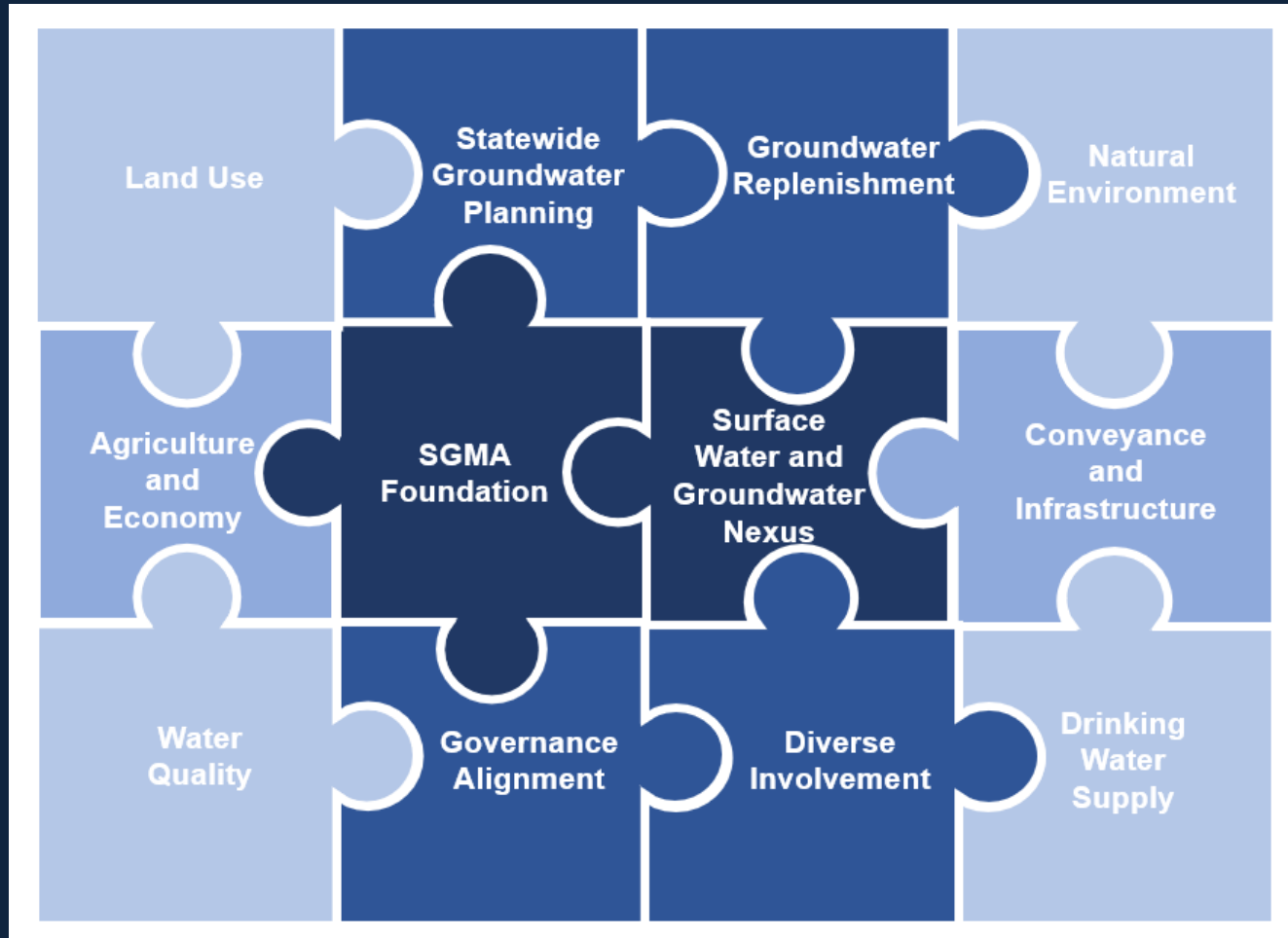
Sustainable groundwater management is a new statewide effort



Looking Forward to Implementation: SGMA's 20-Year Plan Horizon



Opportunities of Groundwater Management



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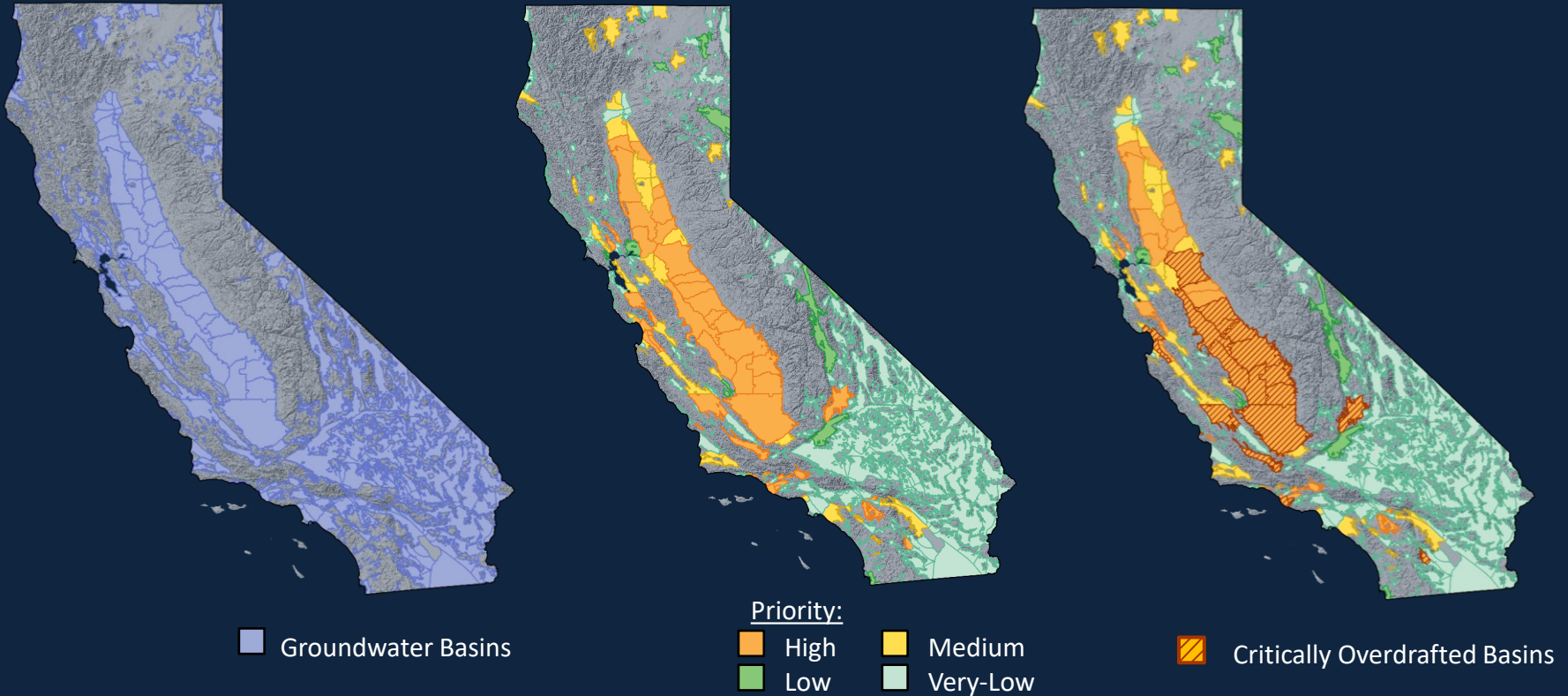


Where Are We At?

515 Basins

94 High and Medium
Priority Basins

21 Critically
Overdrafted Basins



The high and medium priority basins cover 96% of groundwater use and 88% of California's overlying population.

Groundwater Sustainability Plans (GSP) Regulation



- Local GSAs required to develop and implement GSPs for all high and medium priority basins

1. Introductory Provisions
2. Definitions
3. Technical & Reporting Standards
4. Procedures
5. Plan Contents
6. Department Evaluation & Assessment
7. Annual Reports and Periodic Evaluations by the Agency
8. Interagency Agreements
9. Alternatives

Plan Contents

1. Administrative Information

2. Basin Setting

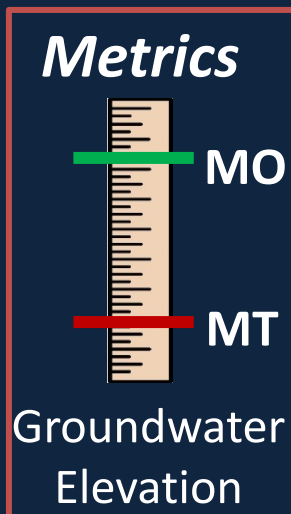
- Hydrogeologic Conceptual Model
- Groundwater Conditions
- Water Budget
- Management Areas

3. Sustainable Management Criteria

- Sustainability Goal
- Undesirable Results
- Minimum Thresholds
- Measurable Objectives

4. Monitoring Networks

5. Projects and Management Actions



Single GSA, Single GSP



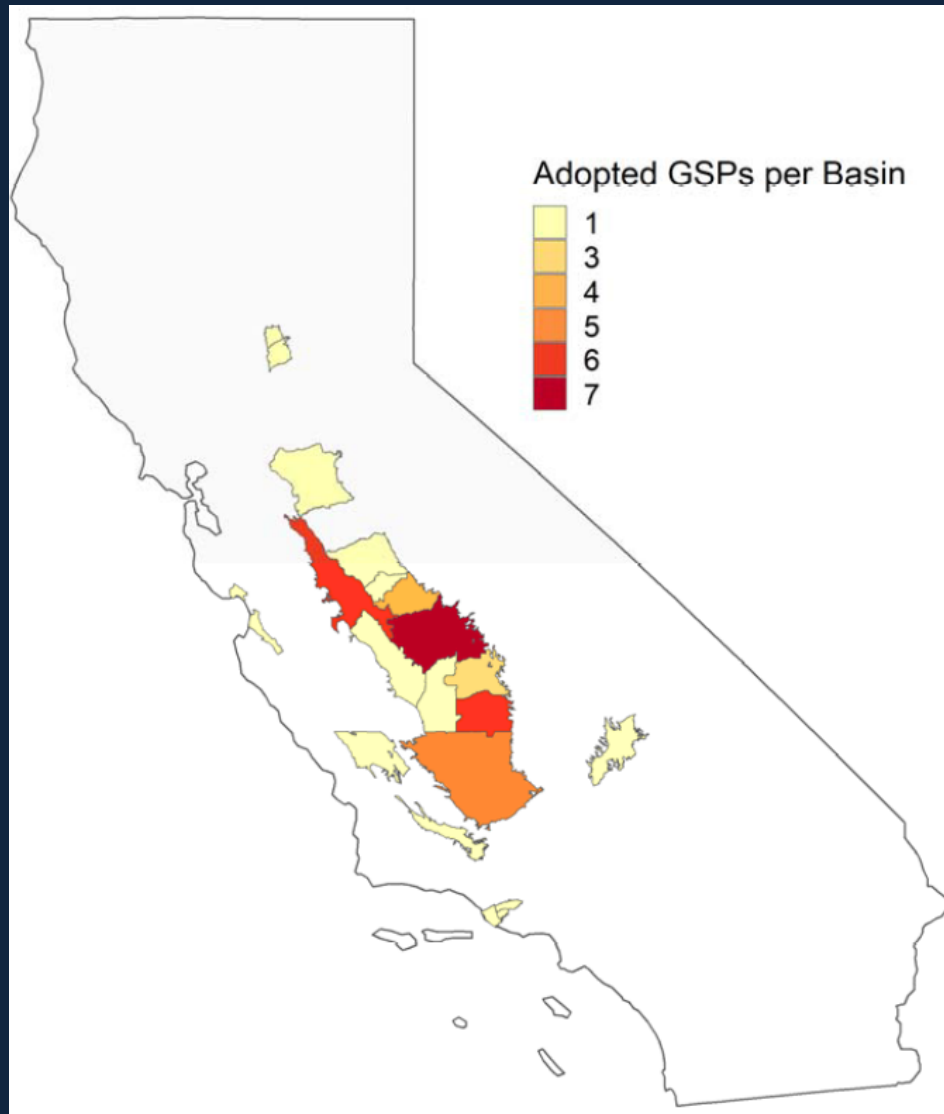
Multiple GSAs, One GSP with optional Interbasin Agreement



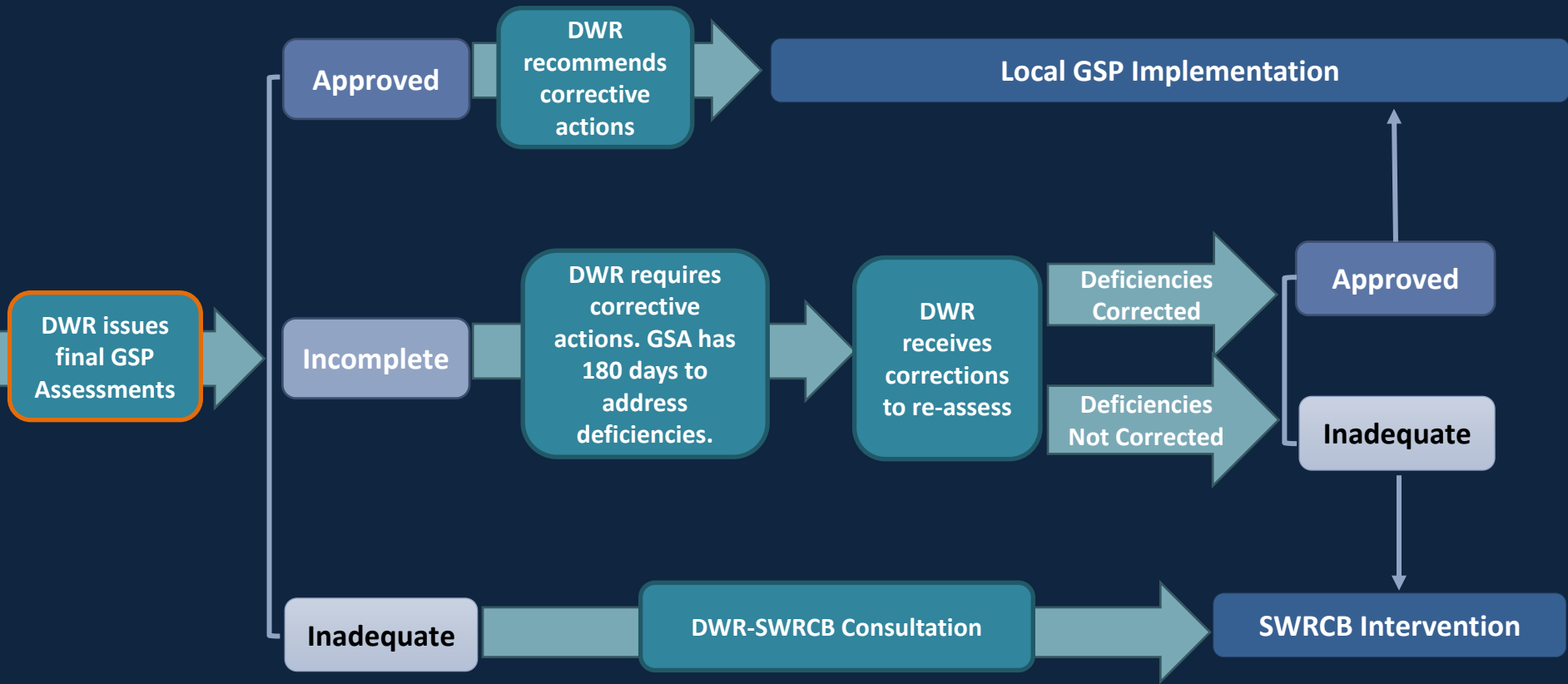
Multiple GSAs, Multiple GSPs with required Coordination Agreement



Groundwater Sustainability Plans



SGMA Regulatory Pathways



Assessment Release Approach

GSA's Implementing Local Projects & Management Actions

Annual Reporting – Data and Implementation Progress

2020 (2021) 2022

2025/2027

2030/2032

2035/2037

2040/2042

Initial GSP Due

COD Basins – 2020
High & Medium
Priority Basins – 2022

**5-Year Plan
Update**

**5-Year Plan
Update**

**5-Year Plan
Update**

**Sustainability
Goal Reached**

COD Basins – 2040
High & Medium
Priority Basins – 2042

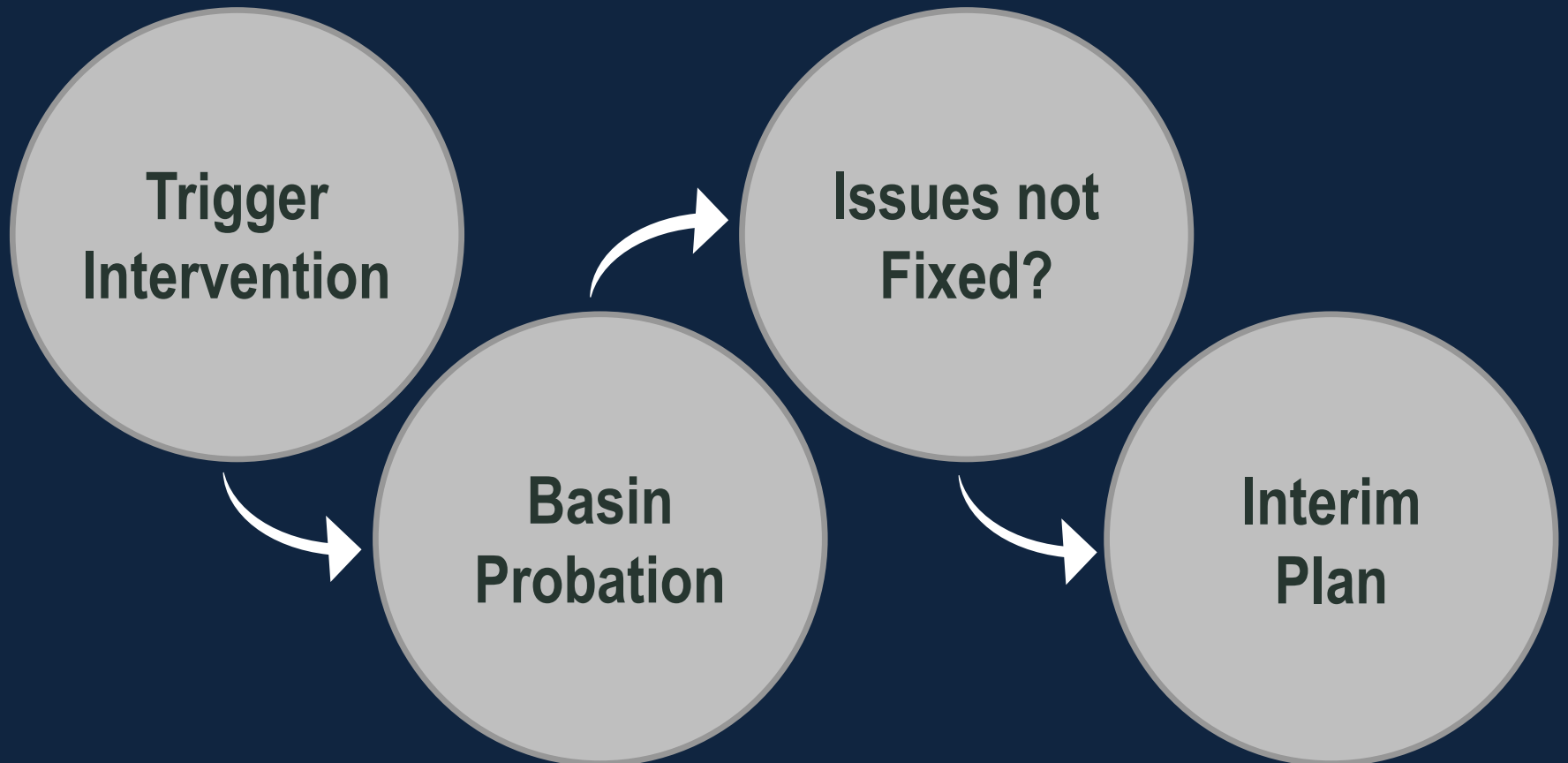
Critical
decision-
making year
on first GSPs

Board Backstop Basics

- 1 Board only steps in when local efforts fail.
- 2 Temporarily protects the basin until locals come up-to-speed.
- 3 Backstop is triggered by SGMA deadlines.



Backstop



Probationary groundwater BASIN



State Water Board makes decisions



Opportunity to fix issues



Board gathers data



May require meters



Fees



FEES beginning in Water Year 2018

**Base
Filing Fee**
(per well)

\$300

+

**Volumetric
Rate**
(per acre-foot)

Unmanaged
\$25

Probation
\$40*

Interim Plan
\$55*

+

**Late
Fee**
(per month)

25%

*special studies extra

Extraction **REPORTS**

Reports are submitted annually.

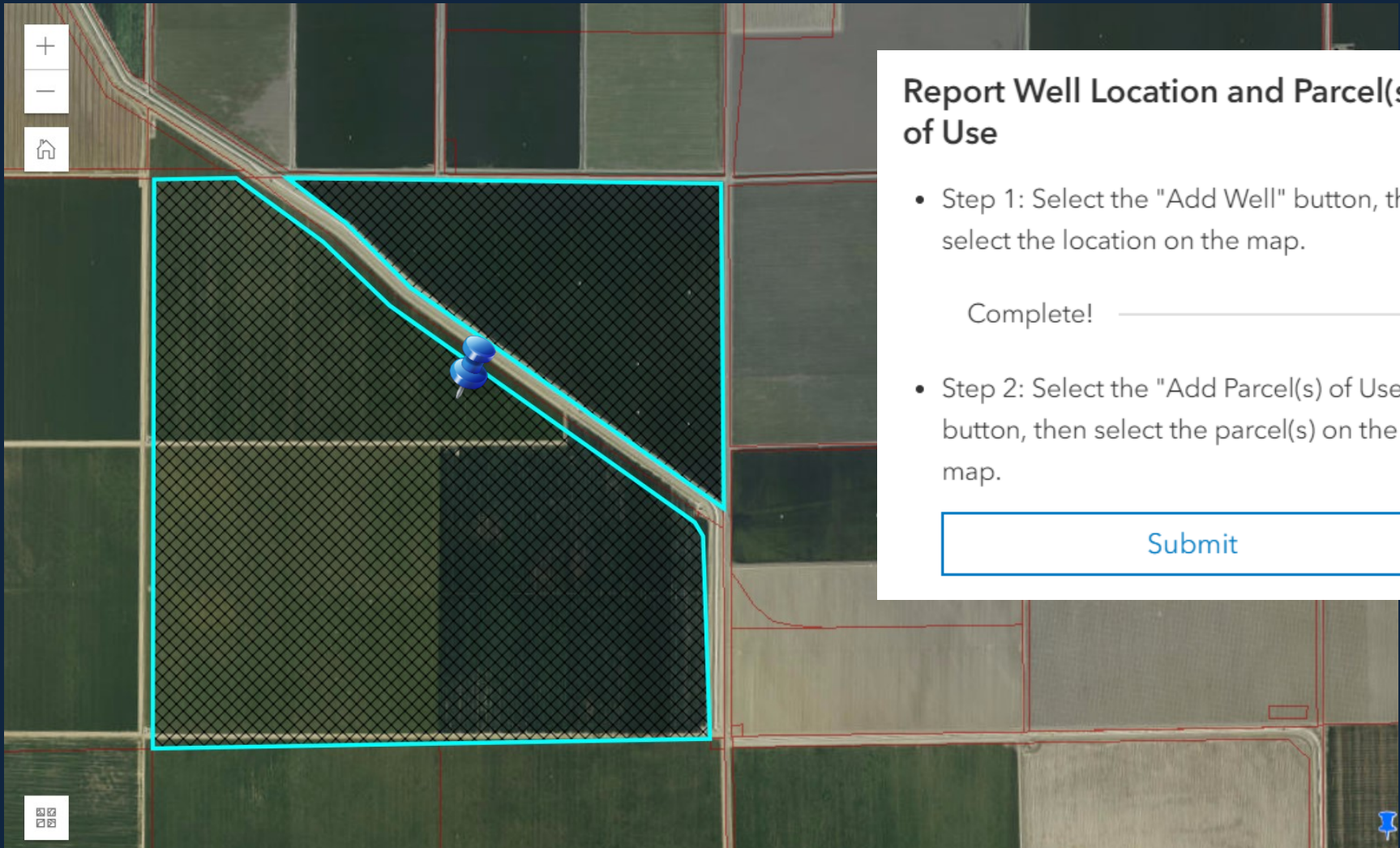
Reports require...

- well location & capacity
- monthly extraction volumes
- place & purpose of use

Reports must be filed electronically.

Information on extraction reports is available at
www.waterboards.ca.gov/water_issues/programs/gmp/reporting.shtml.

GEARS Groundwater Evaluation, Analysis, and Reporting System



Report Well Location and Parcel(s) of Use

- Step 1: Select the "Add Well" button, then select the location on the map.

Complete! _____

- Step 2: Select the "Add Parcel(s) of Use" button, then select the parcel(s) on the map.

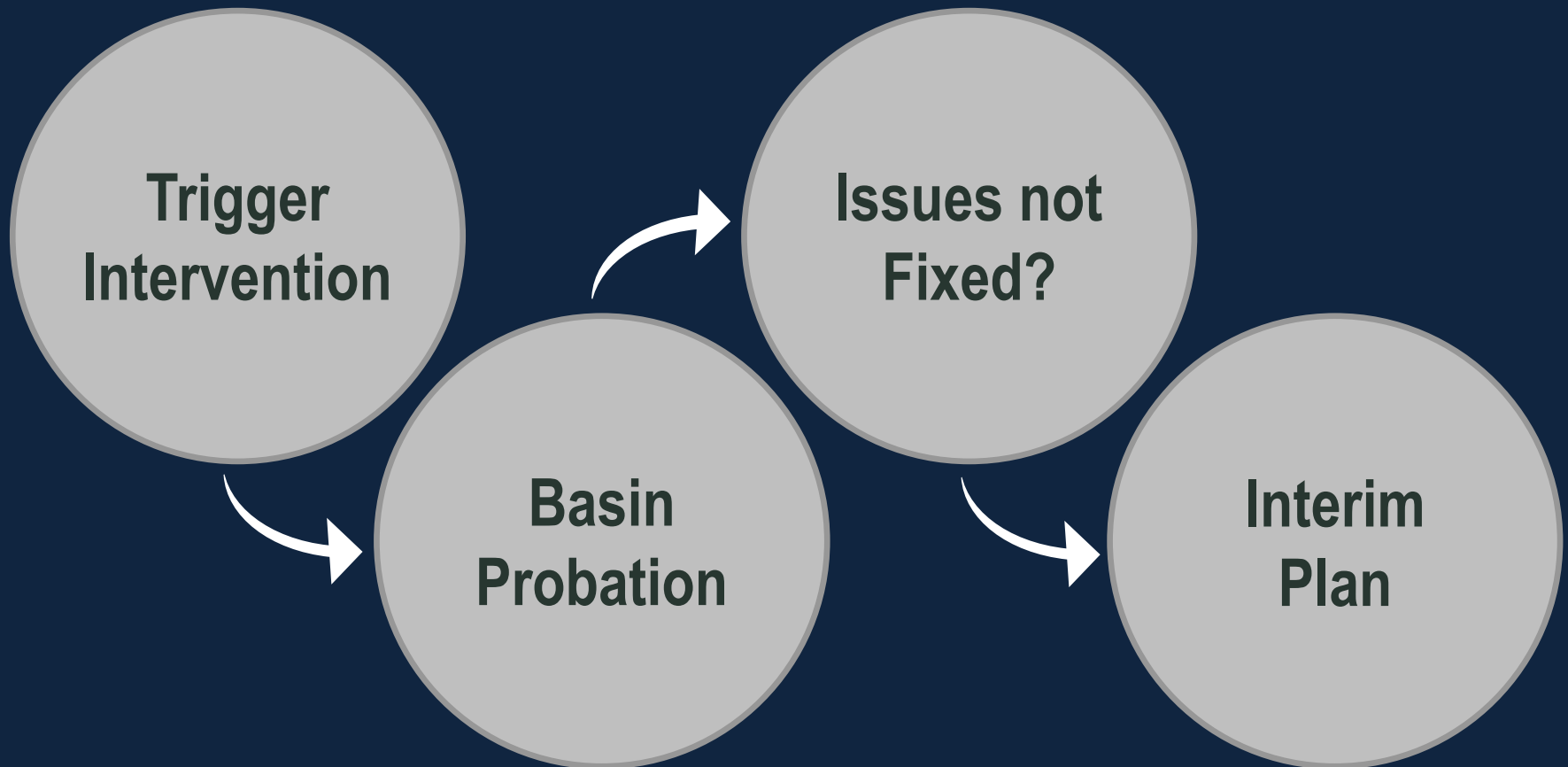
Submit

Board INVESTIGATIONS



- Broad authority to conduct investigations
- Informational orders
- Board works with individual pumpers
- Additional fees (beyond reporting fees)

Backstop





Corrective Actions



Enforcement

Interim PLAN



Monitoring
Plan



Schedule

NO Plan

90 Days

Probation

**Public notice
of hearing and
contact cities
and counties**

180 Days

**Local
Agencies**

**Remedy
deficiencies
resulting in
probation**



Water Board

**Develops
Interim Plan**

Board - DWR coordination

INCOMPLETE Plan

180 Days

Local Agencies

Remedy Plan Inadequacies

90 Days

Probation

Public notice of hearing and contact cities and counties

1 Year

Local Agencies

Remedy deficiencies resulting in probation



Water Board

Develops Interim Plan

Board - DWR coordination

INADEQUATE Plan

90 Days

Probation

**Public notice
of hearing and
contact cities
and counties**

1 Year

**Local
Agencies**

**Remedy
deficiencies
resulting in
probation**



Water Board

**Develops
Interim Plan**

Board - DWR coordination

SGMA Coordination



Boards are working to **support** the Department's GSP review

Drinking Water
Water Rights
Water Quality

SAFER
ILRP
CV-SALTS

SGMA Coordination



SGMA fits into a broader framework of **water quality** and **drinking water** issues

Storm
Water/
MS4

Non-15
WDR

CV-
SALTS

Basin
Plans

Title 27
Program

SGMA

TMDL
Program

Oil Field
Program

UST Site
Cleanup

NPDES

Nonpoint
Source
Program

SNMPs

DoD

ILRP

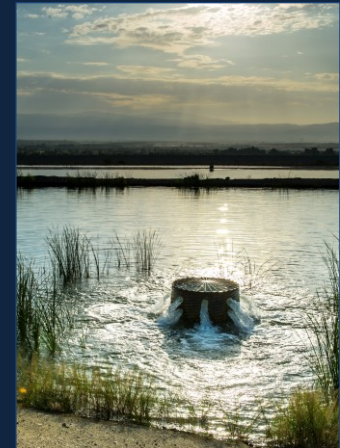
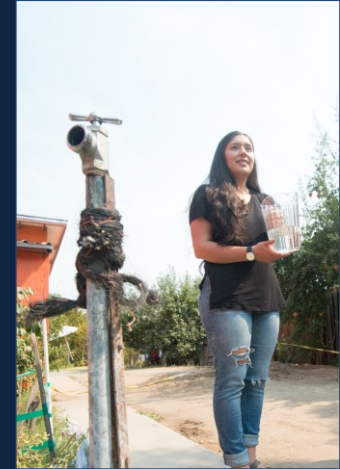
Confined
Animals
Facilities

SGMA Fact Sheets

- Probationary designation and groundwater regulation
- Stakeholder inclusion
- State and regional boards basics
- Funding opportunities for GSAs
- Purpose of use for underground storage projects
- Water Quality FAQ
- More coming...

<https://www.waterboards.ca.gov/sgma/>

Common Themes and Stakeholder Comments



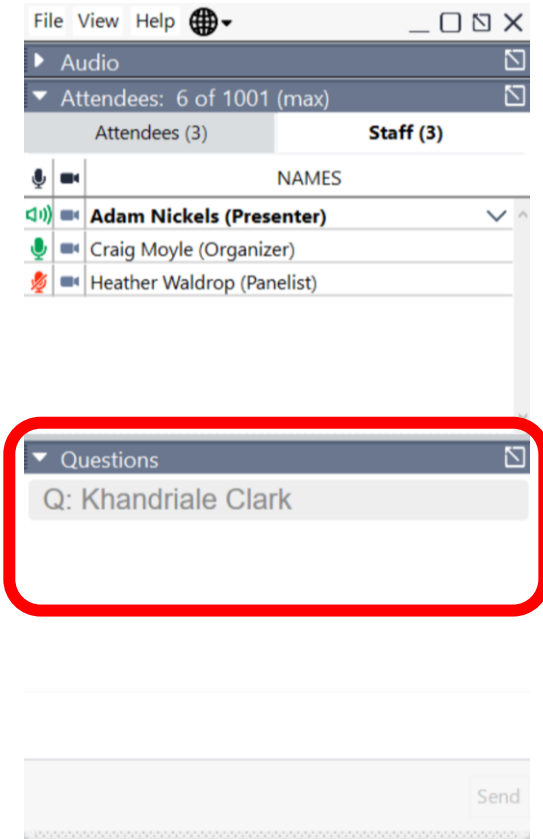
DWR received over 500 public comments on the critically overdrafted groundwater sustainability plans from over 80 organizations, local, state, and federal agencies, non-governmental organizations, and the public

Public Question and Answer

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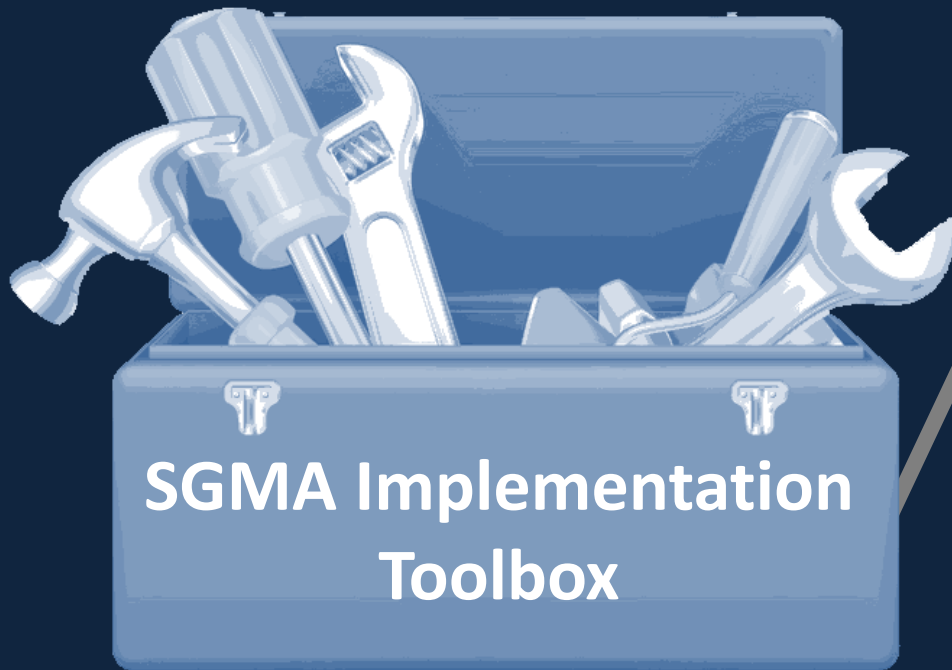
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Implementation: Toolbox Approach



State Support for Toolbox Approach for Local Implementation:

- ✓ Funding Assistance for Planning and Implementation
- ✓ SGMA Network: DWR GSA Points-of-Contact
- ✓ Guidance Materials
- ✓ Best Management Practices
- ✓ Facilitation Support
- ✓ Written Translation
- ✓ Technical Support
- ✓ Statewide Groundwater Planning information (CalGW)
- ✓ Datasets and Models
- ✓ Aerial Electromagnetic Surveys for Recharge Areas

Local Efforts

Governance

Public
Engagement

Data Gaps/
Modeling

Monitoring

Projects/
Actions

DWR Financial Assistance

Financial Assistance:

- **Sustainable Groundwater Management (SGM) Planning Grant Program**
 - Funded three rounds to date with Prop. 1 and Prop. 68
 - Most recent round in March 2020; Totaling ~\$150M

- **SGM Implementation Grant Program**
 - Recently closed the grant application submittal period for project implementation in the COD Basins
 - \$26M available for local projects
 - More information on the [SGM Implementation Grant funding](#) on our website
 - Round 2 starting in 2022; ~\$70M available

DWR Planning Assistance

Planning Assistance:

- DWR has developed a number of resources to support GSA outreach and engagement efforts
 - Most recently: Tips and Tactics for Online Meetings
 - Guidance documents
 - Points of Contacts, Regional Coordinators, and Geology Leads
 - Facilitation Support Services
 - Written Translation Services

For more information, visit the [Assistance and Engagement](#) webpage

The screenshot shows the California Department of Water Resources website. The header includes the department logo and navigation links: Water Basics, What We Do, Programs, Work with Us, News, Library, and Search. The main content area is titled "Assistance and Engagement" and features a paragraph about Governor Jerry Brown's signing of the Sustainable Groundwater Management Act (SGMA). Below this is a photo of a workshop with the caption: "Workshop attendees listen to overviews of new groundwater legislation during a drought response workshop in Irvine, California in February 2015." A navigation bar below the photo lists: Communication and Engagement, Technical Services, Facilitation Support, and Written Translation. Below this bar, there are two expandable sections: "+ SGMA Workshops" and "+ DWR Region Office Contacts". On the right side of the page, there is a "Contact Us" section with general and regional inquiry emails, and a "Subscribe" section with a sign-up form and a "Subscribe" button. At the bottom right, there is a "Tags" section with buttons for "Sustainability", "Proposition 1", and "Groundwater Managemen...".

DWR Technical Assistance

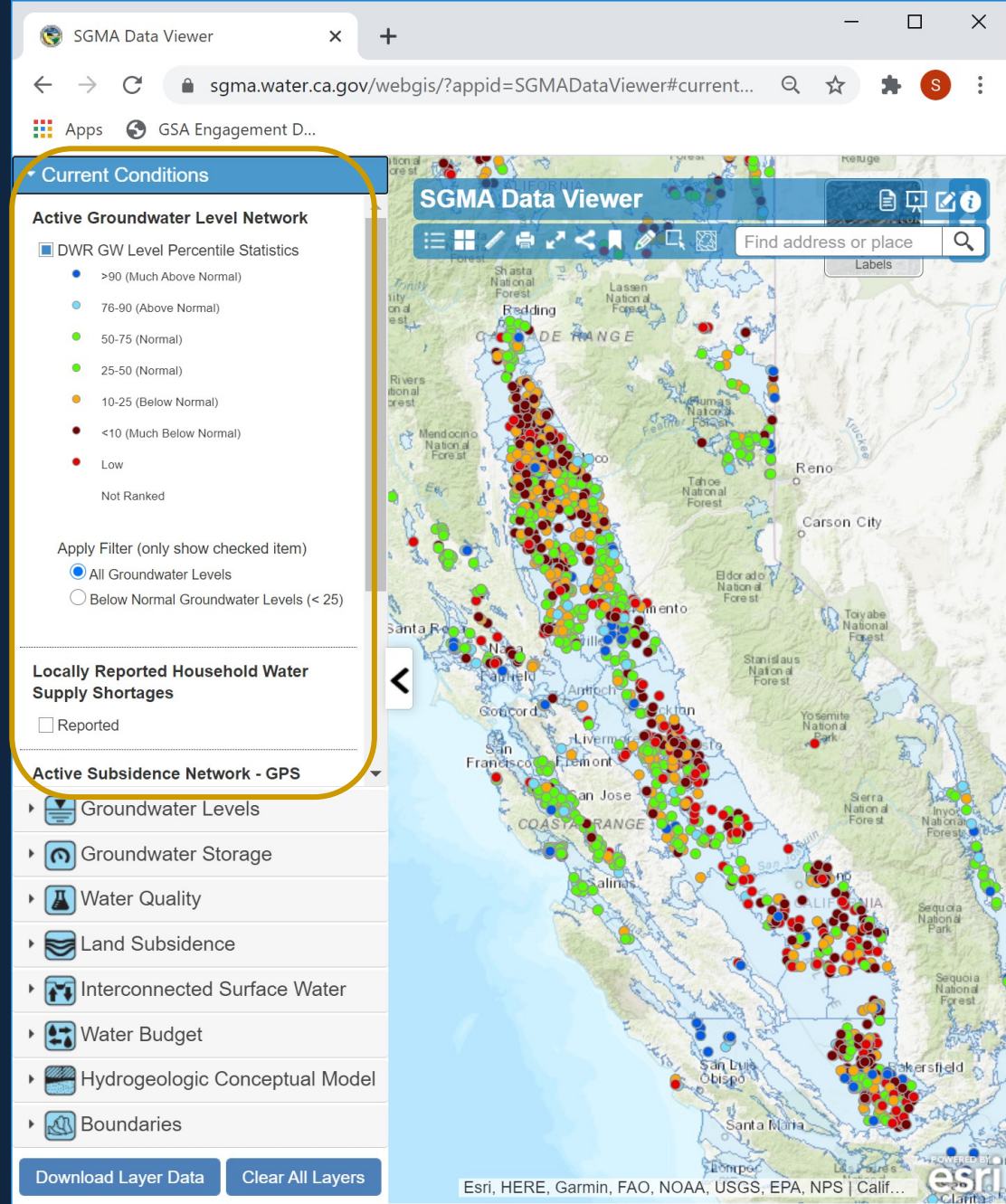
Technical Assistance:

- **Technical Support Services**
 - Services include: monitoring well installation, subsidence monitoring, and downhole camera surveys
- **Guidance and Education**
 - Website
 - BMPs/Guidance Documents
 - CA Groundwater Update 2020
- **Statewide Datasets**



Statewide Datasets

- Statewide datasets inform GSP development and implementation
 - SGMA Water Year Type Data
 - January 2021
 - 2018 Statewide Land Use
 - Spring 2021
 - Statewide InSAR dataset
 - Spring 2021
- Interactive Maps – SGMA Data Viewer
- SGMA data on CNRA Open Data



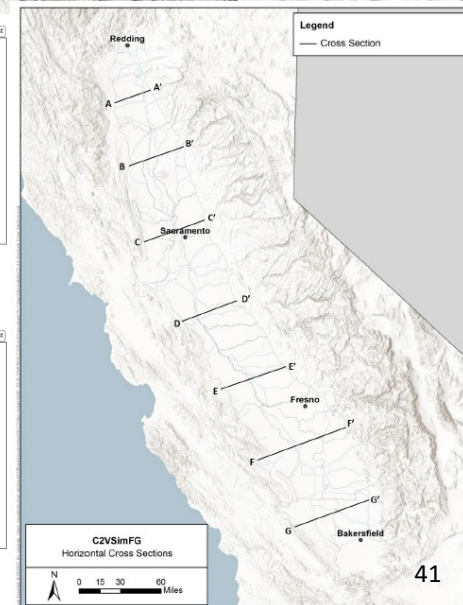
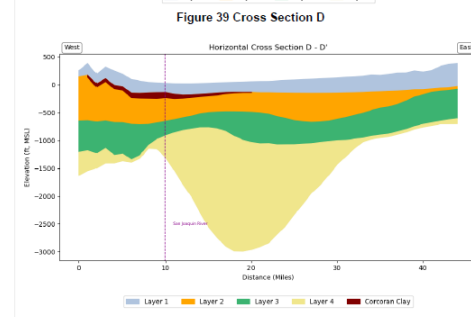
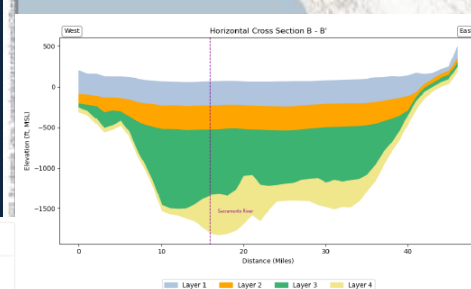
California's Groundwater (Bulletin 118) Update 2020

- Statewide compendium report of technical groundwater information updated every 5 years
- CalGW Update 2020 in development
 - Release Public Review Draft Spring 2021
 - Initiate 45-day Public Comment Period
 - Finalize Summer 2021
 - More information on CalGW available on our website



C2VSimFG v1.0 Models

- Provides a digitized model for GSAs and stakeholders to inform groundwater sustainability planning
- Model Uses:
 - Visualizes the aquifer conditions and characteristics
 - Provides historical water budgets
 - Identifies data gaps and limitations
 - Available on the Open Data Platform



Organization: California Department of Water Resources

Dataset: C2VSimFG V1.0 Model files

Topics: Groundwater

Activity Stream: Road map to running C2Vsim

Showcases: GIS files, DWR Report: California Central Valley Groundwater-Surface Water ...

Data and Resources

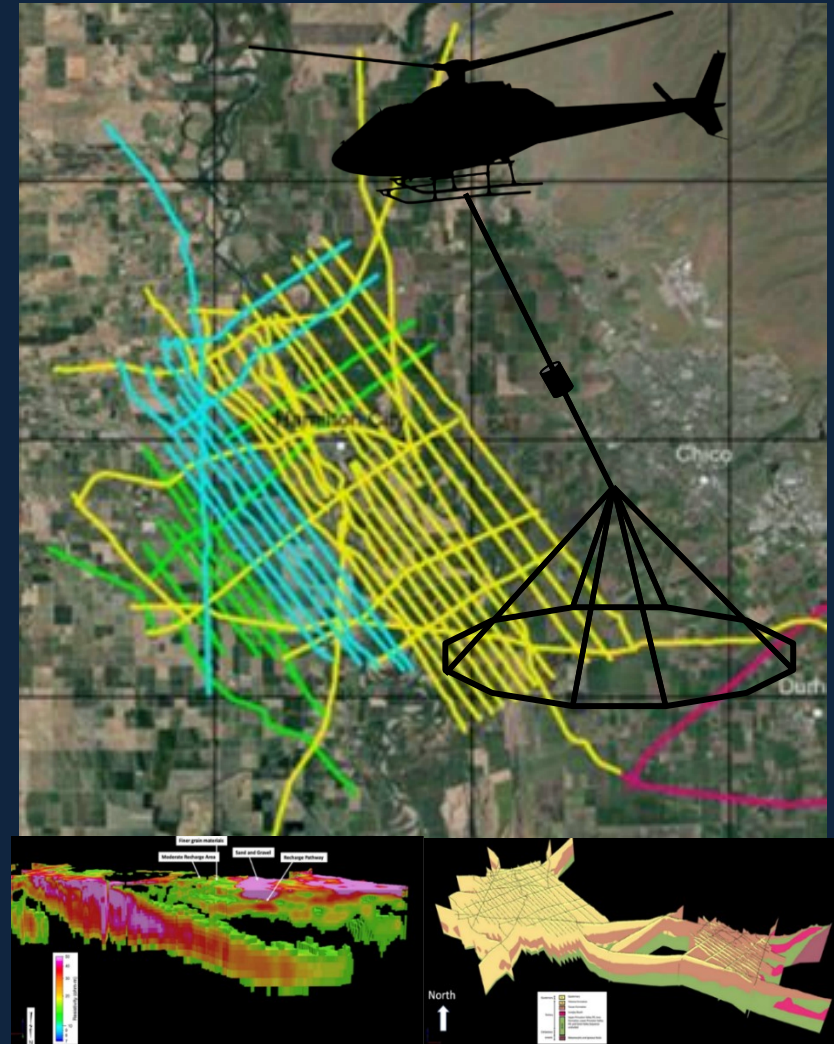
- C2VSimFG V1.0 Model files**
The C2VSimFG V1.0 Model is available in a compressed zip format due to its size (4.39 GB)
[More info](#) [Download](#)
- Road map to running C2Vsim**
This resource provides an overview of the process to run the C2Vsim model including the...
[Full Preview](#) [Download](#)
- GIS files**
[More info](#) [Download](#)
- DWR Report: California Central Valley Groundwater-Surface Water ...**
[Full Preview](#) [Download](#)

Tags

C2VSim IWFM SGMA groundwater model

Statewide Airborne Electromagnetic (AEM) Surveys

- AEM data can improve the understanding of regional and local aquifer structure
 - Surveys to be conducted in all high and medium priority basins
 - Data collected in a coarse grid with flight lines oriented to cover important areas
 - Surveys to begin in summer 2021
 - AEM Webinar to be held this spring
 - Ongoing GSA and public outreach
 - More information from [AEM webpage](#)



Water Right Permitting Options

for underground storage

180-day temporary permit

5-year temporary permit

Standard permit

Standard permit:
Streamlined pathway

Water Rights: Water Availability Tool

Contact Us

STREAM SYSTEMS DECLARED FULLY APPROPRIATED BY THE STATE WATER BOARD

This interactive map displays information regarding fully appropriated stream systems (FASS) in California. On November 19, 1998, the State Water Resources Control Board (State Water Board) adopted [Water Right Order 98-08](#), which was based on prior decisions and orders that determined no water remains available for appropriation from certain sources during specified months. [Exhibit A of Water Right Order 98-08](#) defines the critical reaches of each FASS listing, including the seasons in which water is unavailable for appropriation. The FASS Streams layer is for general reference purposes only, potential

State Water Board Grant Programs

- **Water Recycling Funding Program**

- Limits: \$150,000 (planning grant) to \$5M (construction grant)
- Due date: continuous

- **Small Community Grant Fund**

- Limits: \$500,000 (planning grant) to \$6M (construction grant)
- Due date: continuous

State Water Board Grant Programs

- **Drinking Water Grants**

- Limits: Maximum grant (\$45-80K/residential connection) determined by project type and includes all funding the community receives for all DWSRF in a 5-year period
- Due date: continuous

- **Groundwater Grant Program**

- Limits: \$2M (planning grant) to \$50M (construction grant)
- Round 3 Solicitation to be released Summer 2021

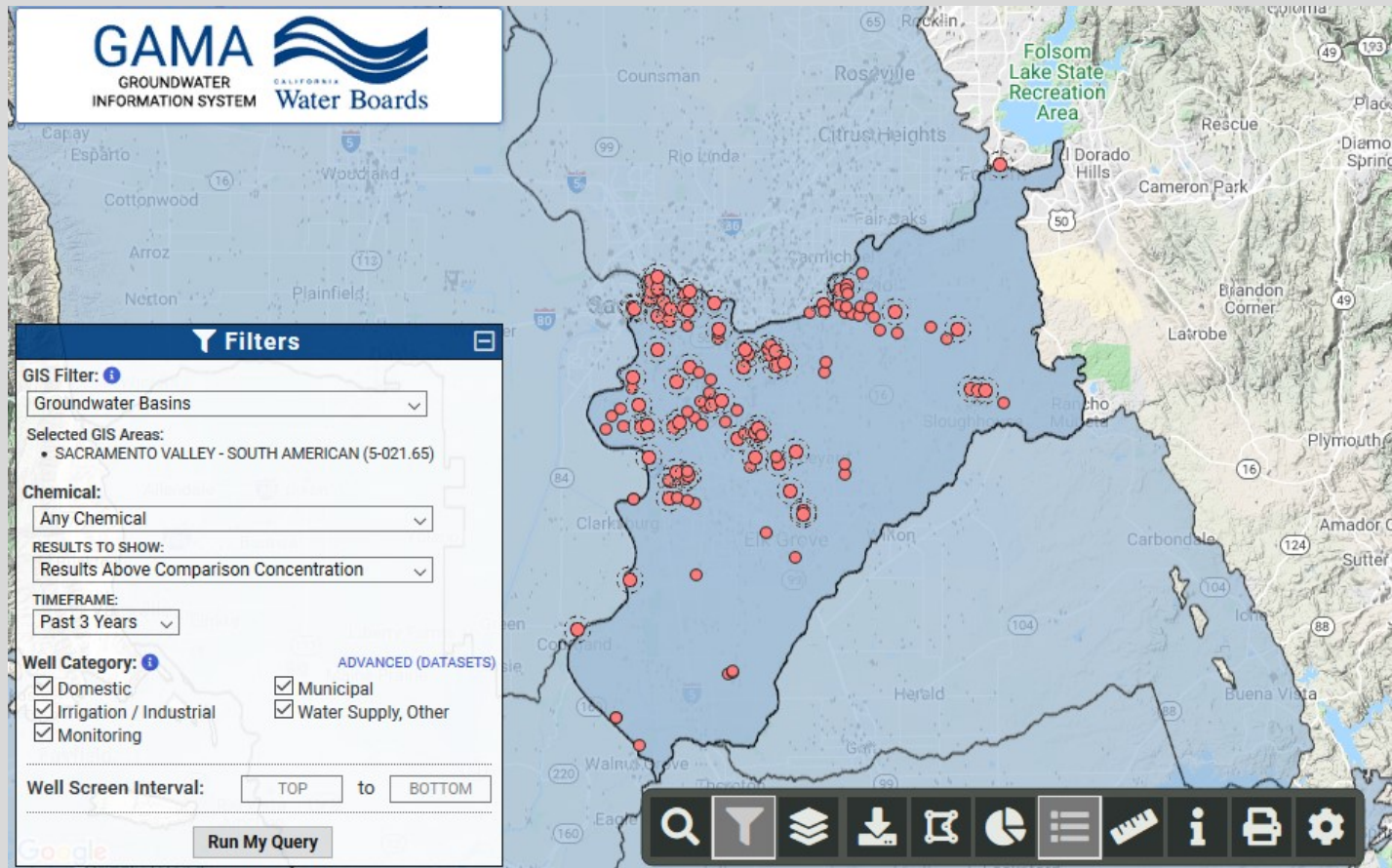
State Water Board Data



Water Quality Tools

- GAMA Groundwater Information System
- USGS Trend analysis tool
- Domestic Well Water Quality Tool

State Water Board Data



State Water Board Data



Drinking Water Tools

- Drinking Water Watch (SDWIS)
- Exceedances/Compliance of Public Water Systems

https://www.waterboards.ca.gov/resources/data_databases/drinking_water.html

<https://sdwis.waterboards.ca.gov/PDWWW/>

<https://gis.data.ca.gov/datasets/waterboards::california-drinking-water-system-area-boundaries/>

<https://www.arcgis.com/apps/MapJournal/index.html?appid=143794cd74e344a29eb8b96190f4658b>

SGMA Implementation

GSA's Implementing Local Projects & Management Actions

Annual Reporting – Data and Implementation Progress

2020/2022

2025/2027

2030/2032

2035/2037

2040/2042

Initial GSP Due
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High & Medium
Priority Basins – 2022

**5-Year Plan
Update**

**5-Year Plan
Update**

**5-Year Plan
Update**

**Sustainability
Goal Reached**
COD Basins – 2040
High & Medium
Priority Basins – 2042

State Technical, Planning, & Financial Assistance

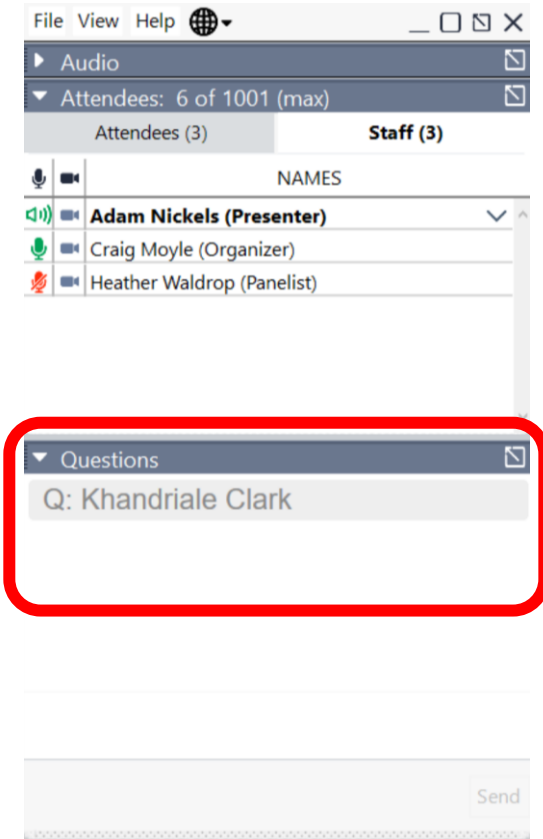
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Thank You!

General DWR Inquiries:

sgmps@water.ca.gov

General State Water Board Inquires:

sgma@waterboards.ca.gov



CALIFORNIA DEPARTMENT OF WATER RESOURCES
SUSTAINABLE GROUNDWATER
MANAGEMENT OFFICE

