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# Sustainable Groundwater Management Update

Presented By: The California Department of Water Resources

February 2022



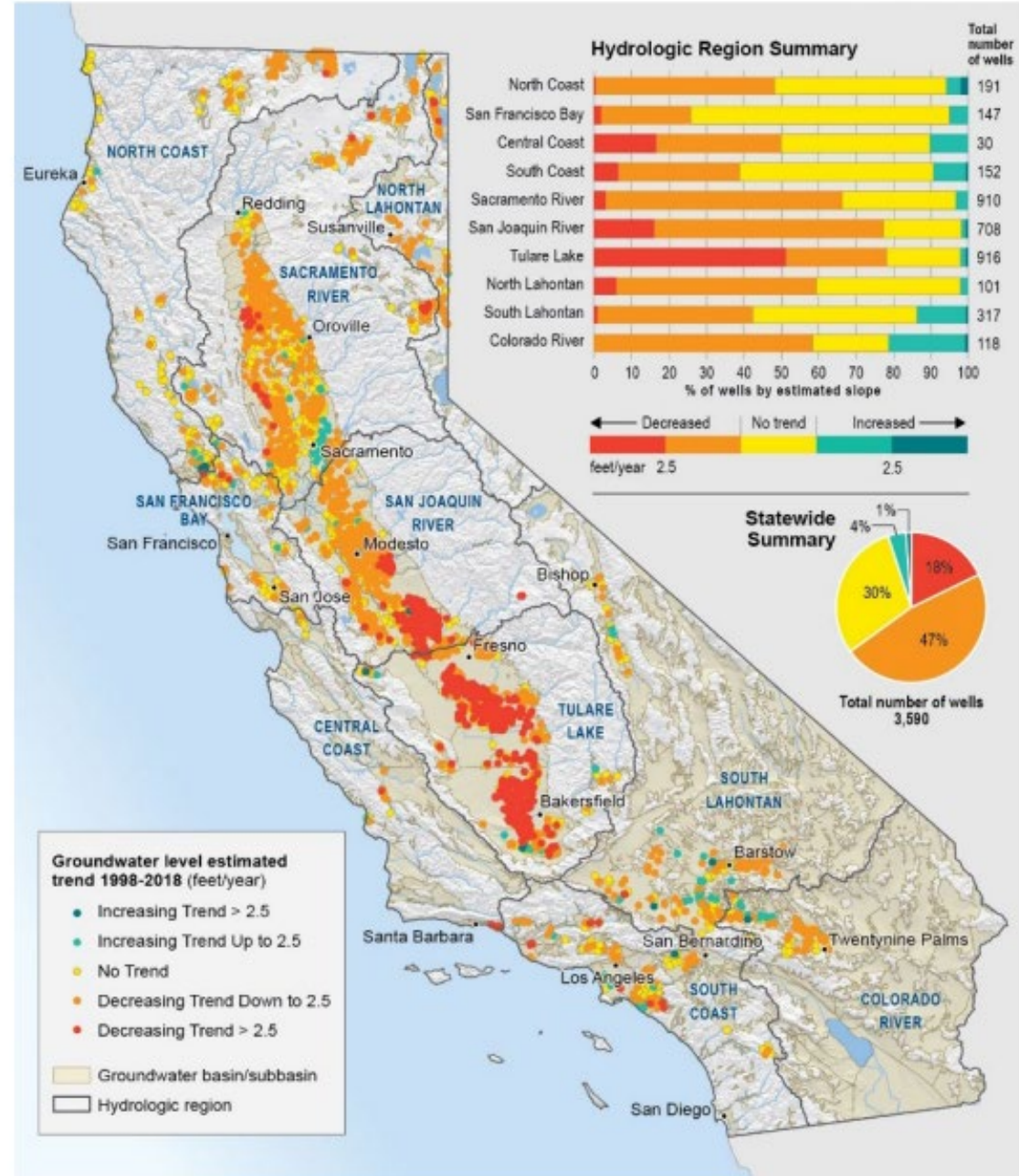


# Groundwater Conditions



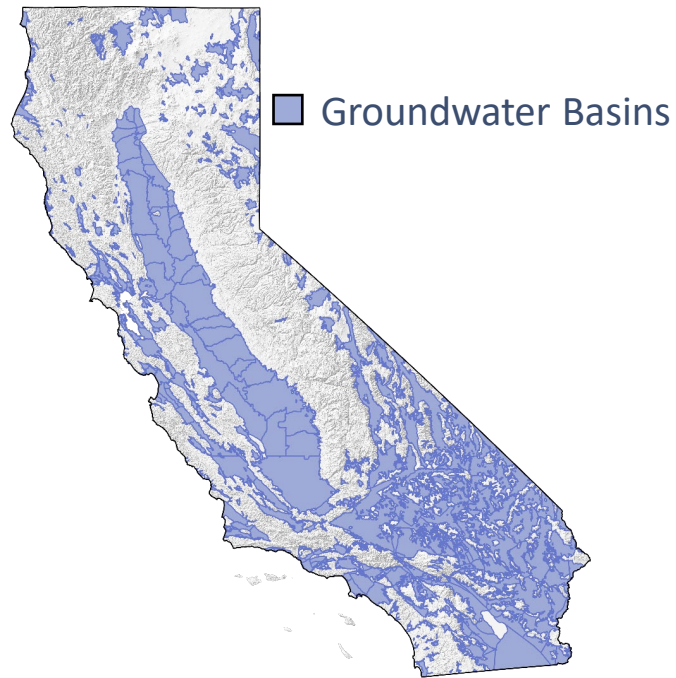
In dry years,  
up to **60%** of California's  
water supply comes from  
**GROUNDWATER**

Figure H-14: Statewide Groundwater Level Trends (1998–2018)

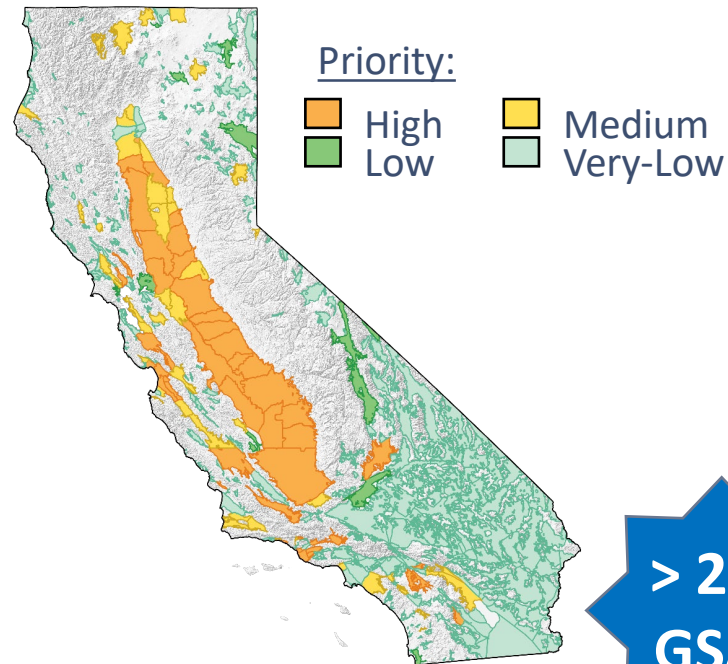


# Where Does SGMA Apply?

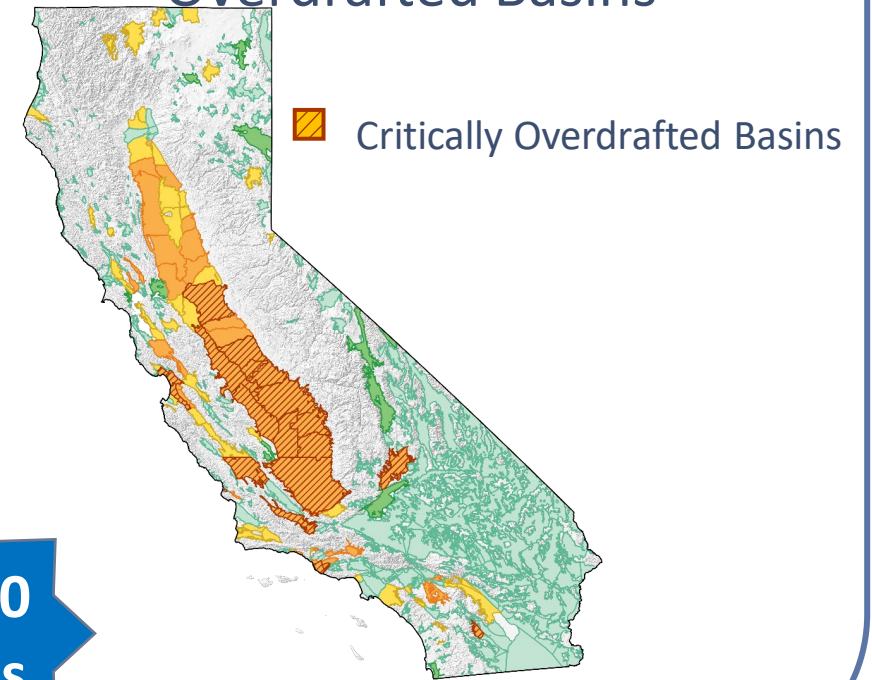
**515** Basins



**94** High and Medium Priority Basins



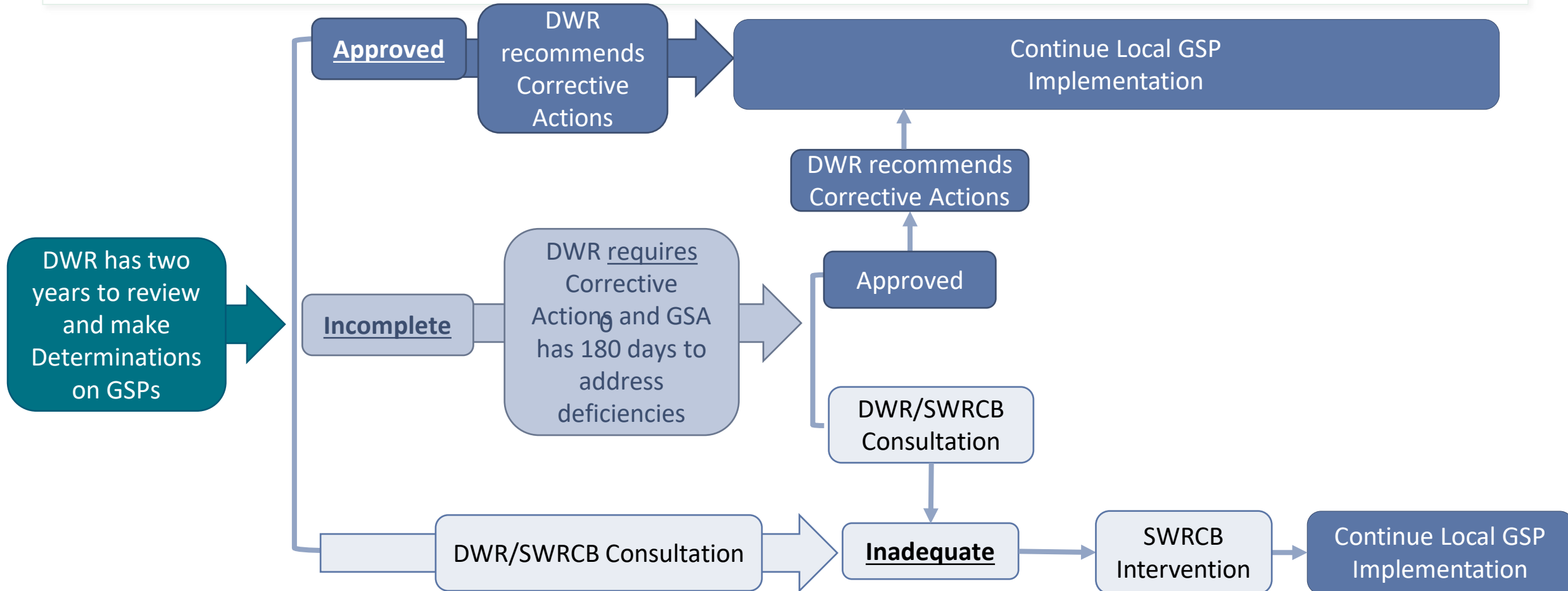
**21** Critically Overdrafted Basins



**> 250**  
**GSA**s

Formed by June 30, 2017

# SGMA Regulatory Pathways



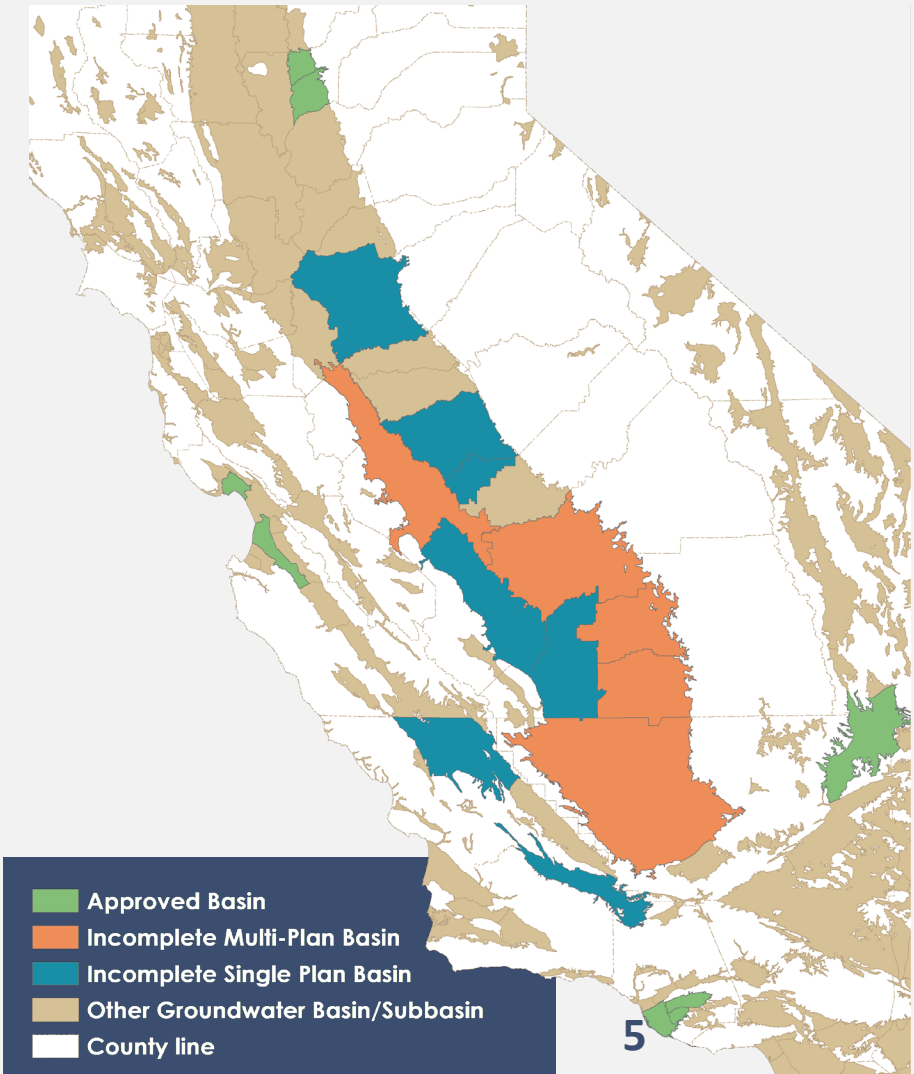


# Groundwater Sustainability Plans Determinations

8  
out of  
20

## Approved Plans:

1. Santa Cruz Mid-County Basin
2. 180/400 Foot Aquifer Subbasin
3. North Yuba Subbasin
4. South Yuba Subbasin
5. Oxnard Basin
6. Pleasant Valley Subbasin
7. Las Posas Basin
8. Indian Wells Valley Basin

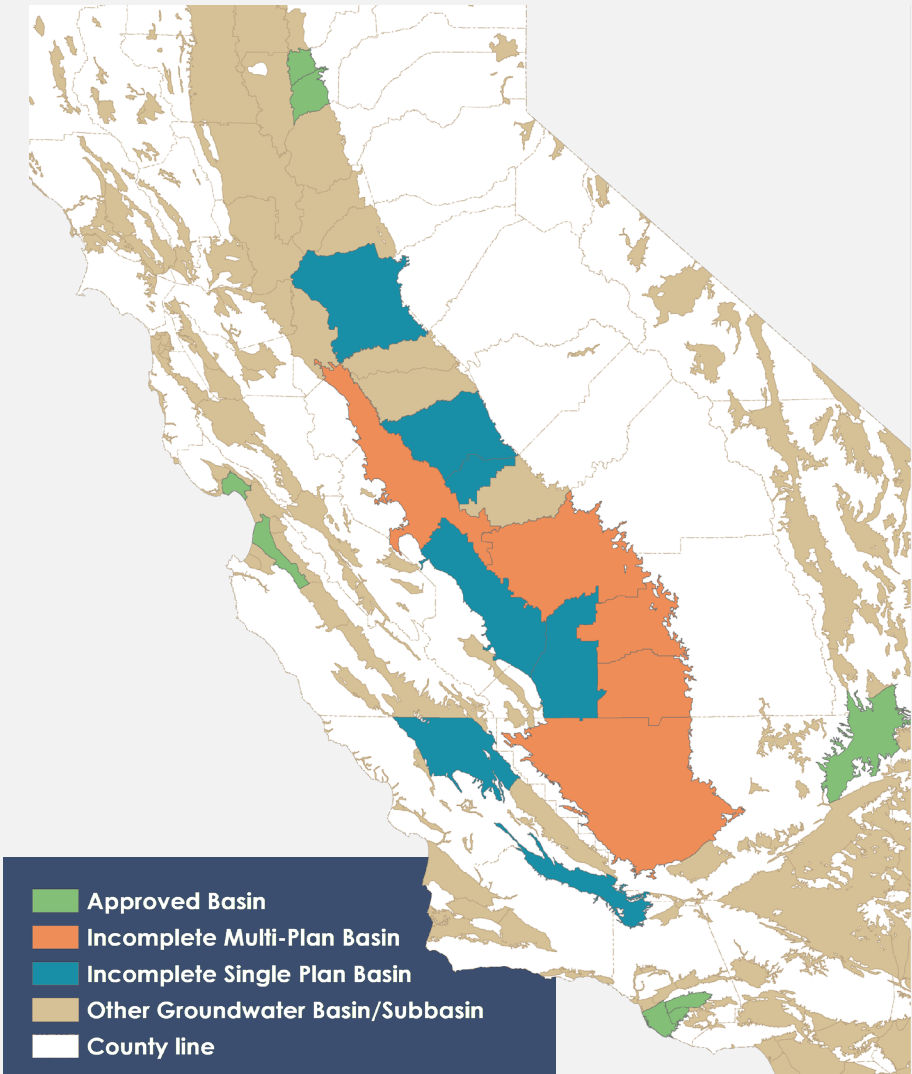


# Groundwater Sustainability Plans Determinations

12  
out of  
20

## Incomplete Plans:

1. Paso Robles Subbasin
2. Cuyama Valley Basin
3. Eastern San Joaquin Subbasin
4. Merced Subbasin
5. Chowchilla Subbasin
6. Westside Subbasin
7. Delta Mendota Subbasin
8. Kings Subbasin
9. Kaweah Subbasin
10. Tule Subbasin
11. Kern Subbasin
12. Tulare Lake Subbasin



# Common Themes from the GSP Evaluations

- **Eliminating overdraft** is central to SGMA but not the only requirement
- This should be done in concert with **avoiding the six undesirable results**



Lowering  
of GW Levels



Reduction of  
GW Storage



Seawater  
Intrusion



Degraded  
Water Quality

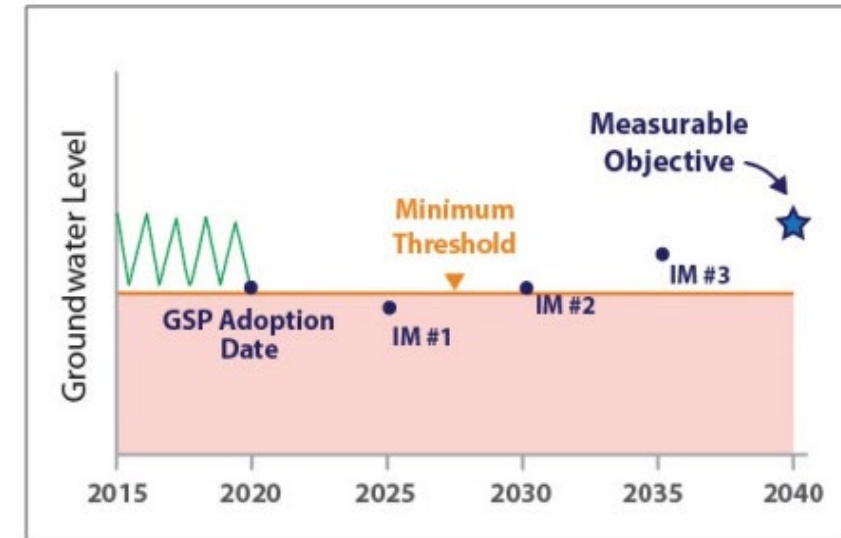


Land  
Subsidence



Depletion of  
Interconnected  
Streams

- Sustainable management criteria need to be developed with **consideration of all beneficial uses and users**



Diagrams from [DWR's Draft Best Management Practices document on Sustainable Management Criteria](#)

# Actions Related to Drinking Water

- **Further analyze the impacts on drinking water users**
- **Revise the sustainable management criteria**, in particular minimum thresholds, in relation to shallow wells
- **Include projects and actions** describing how drinking water impacts will be addressed that may occur due to continued overdraft during the period between the start of GSP implementation and achievement of the sustainability goal
- **Continue ongoing communication and outreach with beneficial users** as GSPs are updated and projects advance, **including drinking water users**





# Actions Related to Subsidence

- Needs to be greater understanding of **potential effects on land surface users**, such as canals or levees, that may be susceptible to continued subsidence
- Revise minimum thresholds and measurable objectives to reflect the intent of SGMA to **avoid or minimize subsidence impacts**
- **Additional analysis** to understand **significant correlation between groundwater levels and land subsidence**, particularly where groundwater levels will continue to decline
- Use of remotely-sensed **subsidence data** to verify the appropriateness of groundwater level proxies



# Actions Related to Stream Depletion

- Provide **comprehensive analysis** for interconnected surface water with groundwater
- **By 2025, provide the specific methodology to quantify stream depletion**, including the location, quantity, and timing of depletion of interconnected surface waters
- Develop sustainable management criteria based on **quantifiable changes in depletion** that are **significant and unreasonable**, and **evaluate and disclose the potential effects** of the sustainable management criteria on beneficial uses and users



# Actions Related to Coordination

- Some basins with **multiple Plans** will need to further coordinate and address **inconsistencies in their data and methodologies**, as well as address other deficiencies DWR has identified

Subsidence

Water quality

Drinking water impacts

Depletion of Interconnected  
surface water

Lack of coordination among GSPs  
Inconsistent data and methodology



# Other Key Considerations

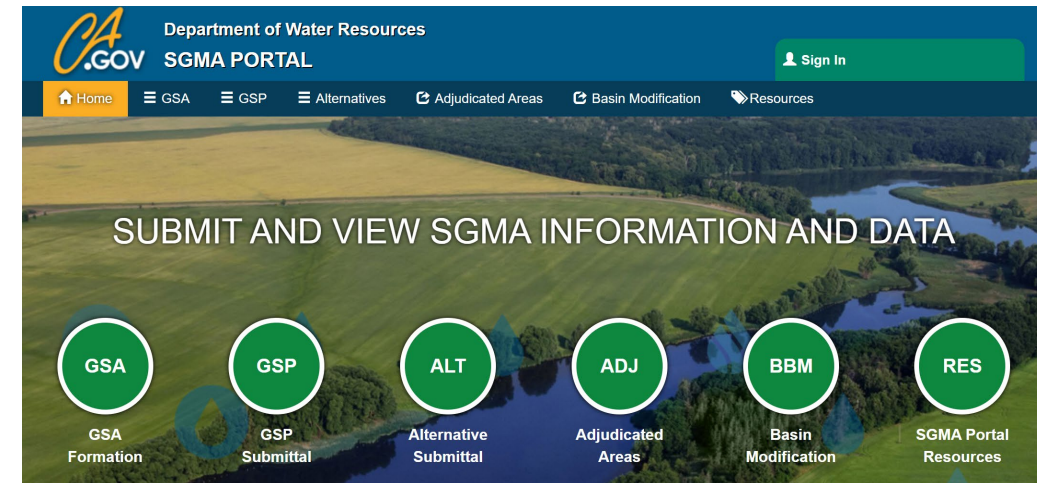
- Clearly show work and identify **data gaps**
- Uphold **public transparency** when correcting plans
- **Continue local outreach** and engagement with beneficial users
- Implement **comprehensive projects** and management actions
  - Supply augmentation & demand reduction
  - Consider water rights for supply augmentation

Stakeholder Engagement Chart for GSP Development

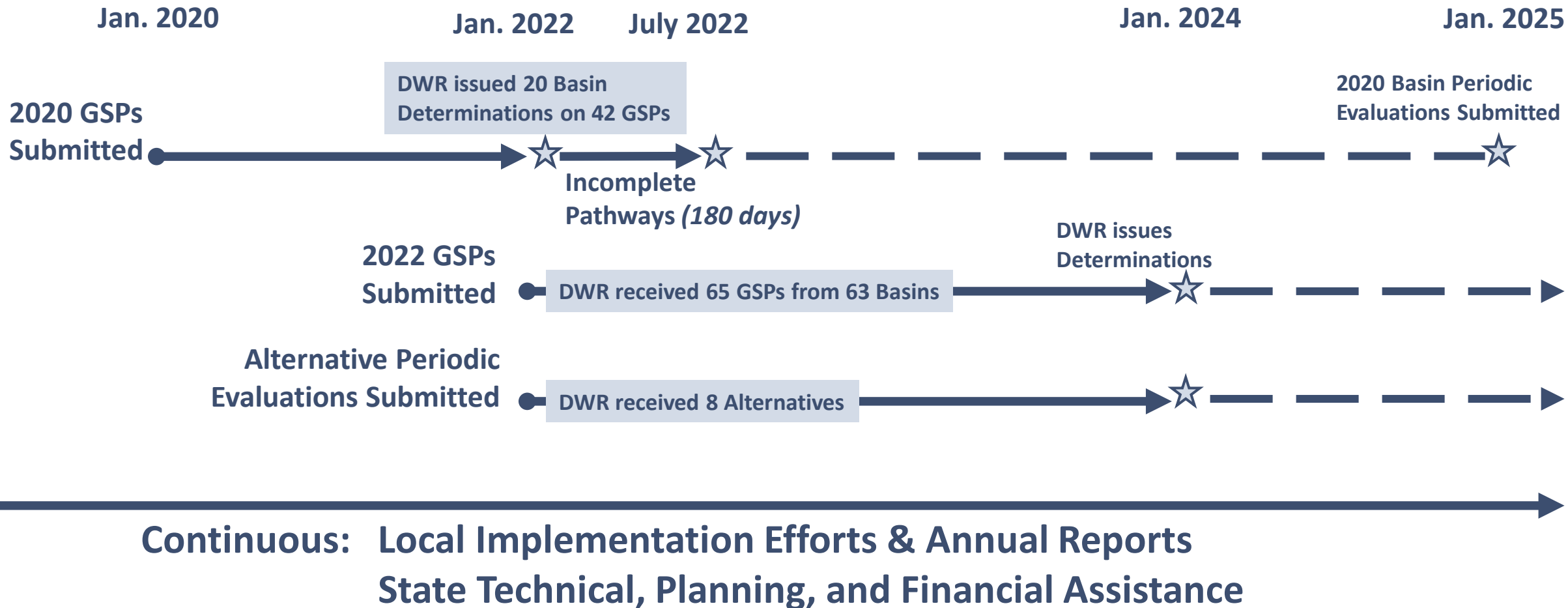
Category of Interest	Examples of Stakeholder Groups
General Public	<ul style="list-style-type: none"> <li>• Citizens groups</li> <li>• Community leader</li> </ul>
Land Use	<ul style="list-style-type: none"> <li>• Municipalities (City, County planning departments)</li> <li>• Regional land use agencies</li> </ul>
Private users	<ul style="list-style-type: none"> <li>• Private pumpers</li> <li>• Domestic users</li> <li>• Schools and colleges</li> <li>• Hospitals</li> </ul>
Urban/ Agriculture users	<ul style="list-style-type: none"> <li>• Water agencies</li> <li>• Irrigation districts</li> <li>• Municipal water companies</li> <li>• Resource conservation districts</li> <li>• Farmers/Farm Bureaus</li> </ul>
Industrial users	<ul style="list-style-type: none"> <li>• Commercial and industrial self-supplier</li> <li>• Local trade association or group</li> </ul>
Environmental and Ecosystem	<ul style="list-style-type: none"> <li>• Federal and State agencies (Fish and Wildlife)</li> <li>• Wetland managers</li> <li>• Environmental groups</li> </ul>
Economic Development	<ul style="list-style-type: none"> <li>• Chambers of commerce</li> <li>• Business groups/associations</li> <li>• Elected officials (Board of Supervisors, City Council membe)</li> <li>• State Assembly members</li> <li>• State Senators</li> </ul>
Human right to water	<ul style="list-style-type: none"> <li>• Disadvantaged Communities</li> <li>• Small community systems</li> <li>• Environmental Justice Groups</li> </ul>
Tribes	<ul style="list-style-type: none"> <li>• Tribal Government</li> </ul>
Federal and State lands	<ul style="list-style-type: none"> <li>• Military bases/Department of Defense</li> <li>• Forrest service</li> <li>• National Park Service</li> <li>• Bureau of Land Management</li> <li>• California Department of Fish and Wildlife</li> </ul>
Integrated Water Management	<ul style="list-style-type: none"> <li>• Regional water management groups (IRWM regions)</li> <li>• Flood agencies</li> <li>• Recycled water coalition</li> </ul>

# 2022 GSP Submittals & Alternative Periodic Evaluation Submittals

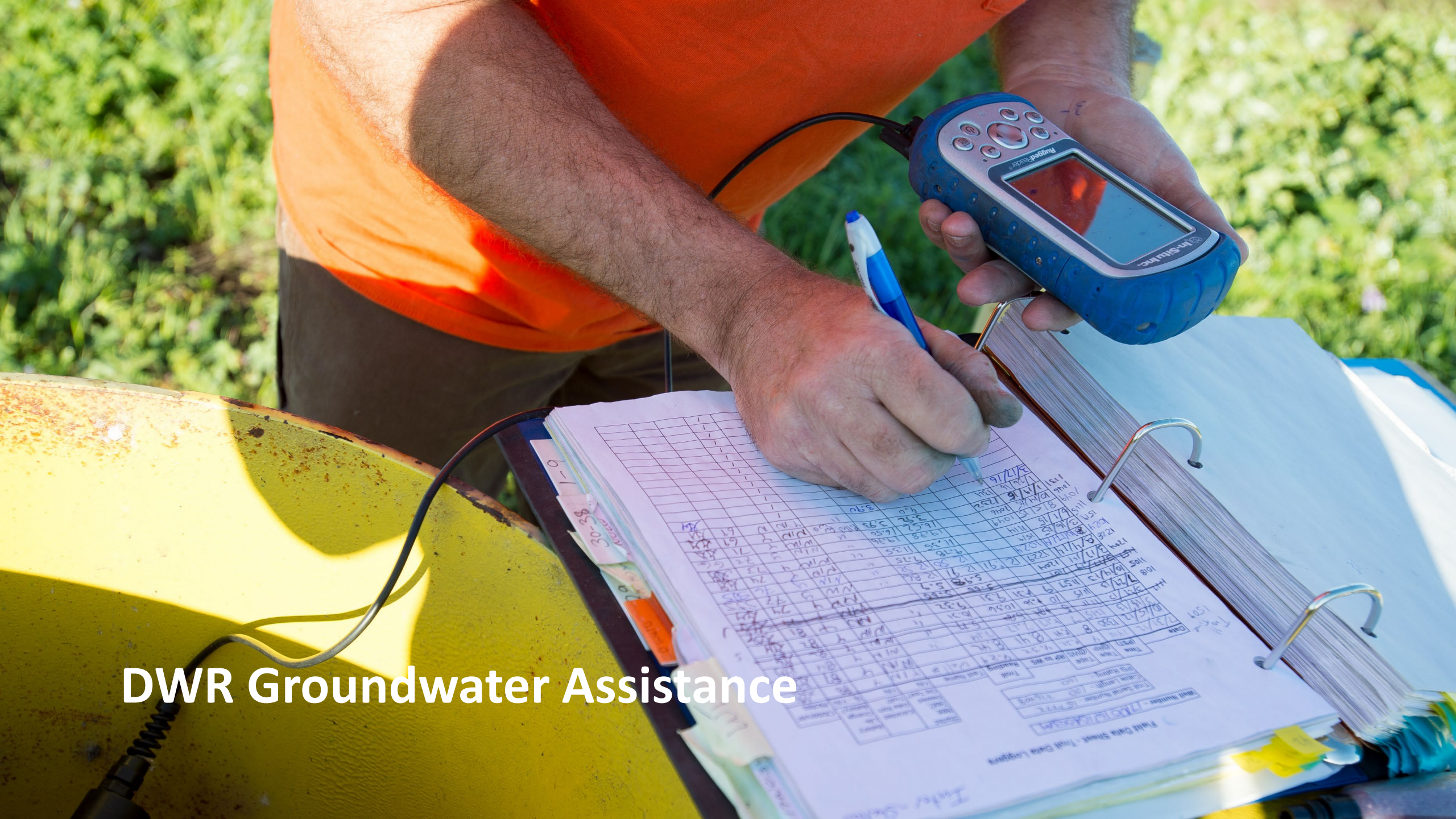
- High and Medium Priority GSPs were due to DWR by January 31, 2022
- Alternative Periodic Evaluations were due to DWR due January 1, 2022
- DWR SGMA Portal: <https://sgma.water.ca.gov/portal/>
  - Find Groundwater Sustainability Agencies
  - Find Groundwater Sustainability Plans Submitted in 2022 to DWR
  - Find Alternative Periodic Evaluations Submitted in 2022 to DWR
  - Find DWR's Determinations for Basins that Submitted GSPs in 2020
  - Find Areas that are Adjudicated
  - Other SGMA Resources



# Moving Forward to Sustainability





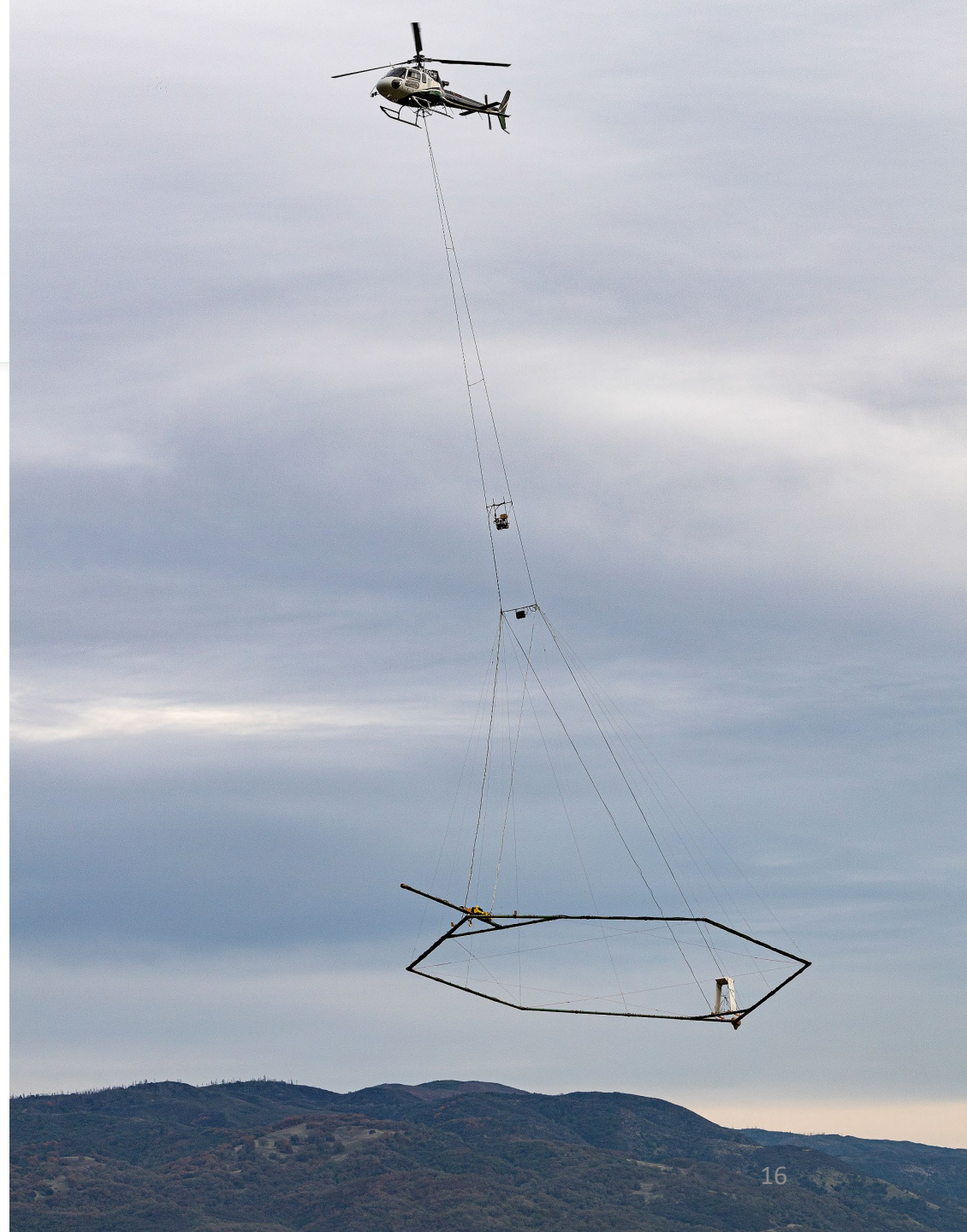


DWR Groundwater Assistance



# Technical Assistance

- **Accessing Groundwater Data and Tools Webinar:**
  - [More information on the DWR Data and Tools Webinar](#)
- **Land Subsidence Data - Now Available Quarterly:**
  - [More information on the DWR Data and Tools Webpage](#)
- **Airborne Electromagnetic (AEM) Surveys:**
  - [More information on the DWR AEM Webpage](#)
- **Technical Support Services:**
  - [Monitoring well installation and borehole camera surveys](#)
- **New Efforts on Accounting & Water Trading**
  - [More information about the CA Water Data Consortium accounting platform efforts](#)



# Planning Assistance

- DWR has a number of resources to support GSA outreach and engagement efforts:
  - DWR has [Basin Points of Contact Staff Available to Locals](#)
  - [Engagement with Tribal Governments Guidance](#)
  - [Communication and Engagement Guidance](#)
  - [Engaging Underrepresented Groundwater Users Guidance](#)
  - [Facilitation Support Services](#)
  - [Written Translation Services](#) (up to 8 different languages)
  - [Public Education and Toolkits Materials](#)
- 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 the Sustainable Groundwater Management Act (SGMA) and a photo of workshop attendees. Below this is a table with tabs for Communication and Engagement, Technical Services, Facilitation Support, and Written Translation. The table content describes the importance of communication and lists links for SGMA Workshops and DWR Region Office Contacts. On the right side, there is a "Contact Us" section with general and regional inquiries, basin points of contact, and a "Subscribe" section for monthly updates. A "Tags" section at the bottom right includes Sustainability, Proposition 1, and Groundwater Management.

CALIFORNIA DEPARTMENT OF WATER RESOURCES

Water Basics | What We Do | Programs | Work with Us | News | Library | Search

Home | Programs | Groundwater Management | Assistance and Engagement

## Assistance and Engagement

Then-Governor Jerry Brown noted upon signing the Sustainable Groundwater Management Act (SGMA) that groundwater is best managed at the local level, and that the State's primary role is to provide guidance and support. We are committed to providing this guidance and support as you implement SGMA and work toward managing your groundwater basins sustainably.

We provide a variety of services including Facilitation Support, Technical Services and Field Activities, Communication and Engagement, and Financial Assistance.

Workshop attendees listen to overviews of new groundwater legislation during a drought response workshop in Irvine, California in February 2015.

Communication and Engagement	Technical Services	Facilitation Support	Written Translation
Timely, forthright, and consistent communication among all partners and stakeholders is important for SGMA implementation. Proactive outreach and engagement of partners and stakeholders will help basins move towards sustainable management of groundwater.			
+ SGMA Workshops			
+ DWR Region Office Contacts			

### Contact Us

General Inquiries: [sgmps@water.ca.gov](mailto:sgmps@water.ca.gov)

Regional Inquiries: [sgmp\\_rc@water.ca.gov](mailto:sgmp_rc@water.ca.gov)

Basin Points of Contact:  
Northern Region  
North Central Region  
South Central Region  
Southern Region

### Subscribe

Sign up to receive monthly Sustainable Groundwater Management program updates.

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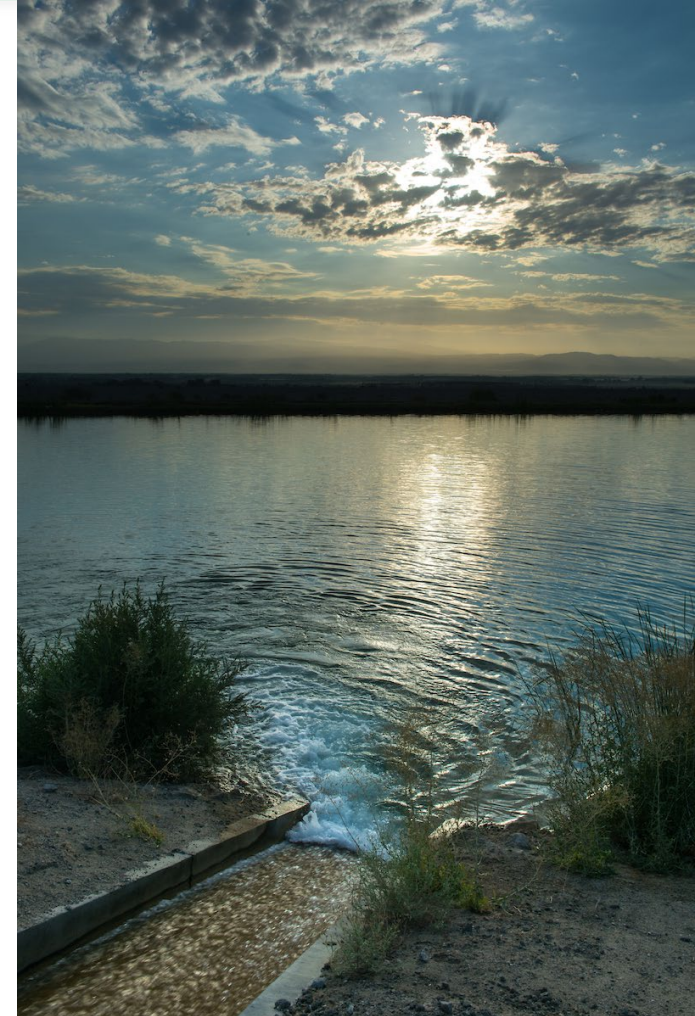
### Tags

Sustainability | Proposition 1 | Groundwater Management ...



# Sustainable Groundwater Management Funding

- ~\$350 Million available over the next 3 years
- Funding for SGMA Planning and Implementation activities including, but not limited to:
  - GSP update activities and filling data gaps
  - Outreach and engagement efforts
  - Project development, planning, and construction
- *More information on the [SGM Grant funding](#) on our website*



# Thank You

For questions, please contact the Sustainable Groundwater Management Office: [SGMPS@water.ca.gov](mailto:SGMPS@water.ca.gov)