Statewide Groundwater Management Updates

Presentation for the California Water Commission

September 14, 2021

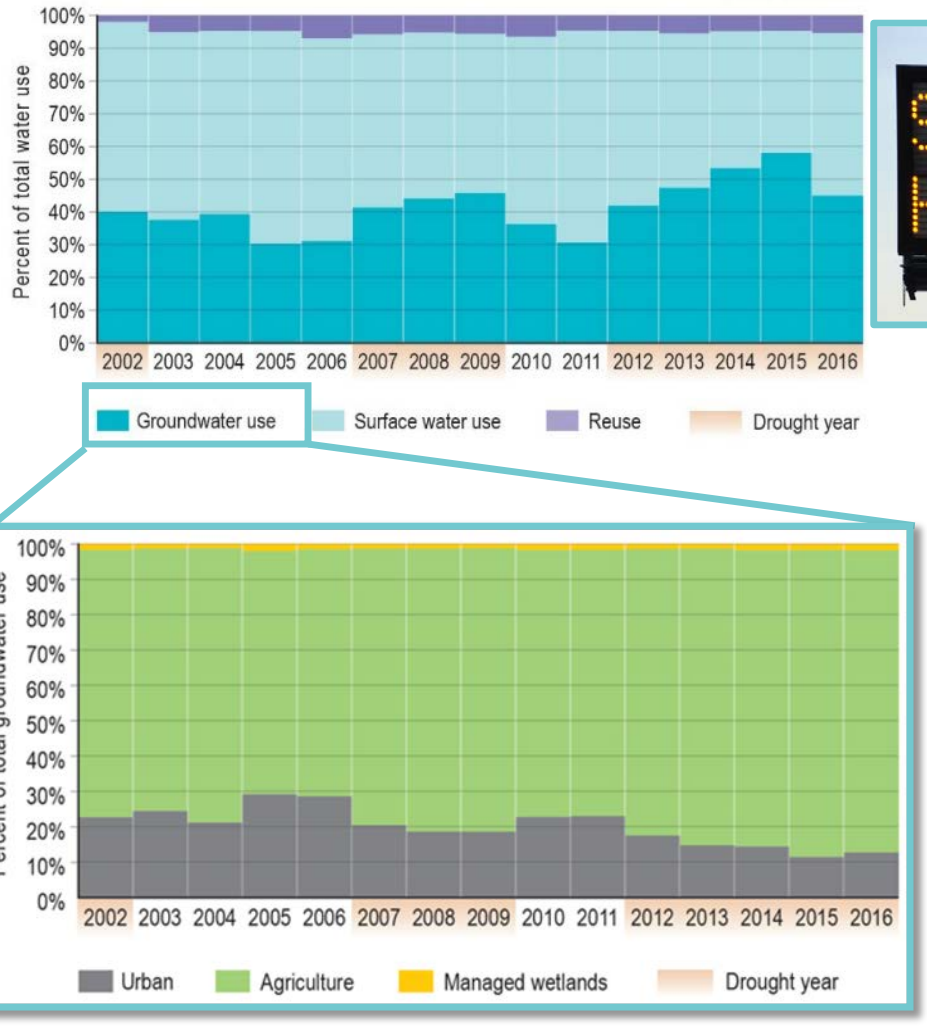
California's Groundwater Supports…

The Environment

Businesses

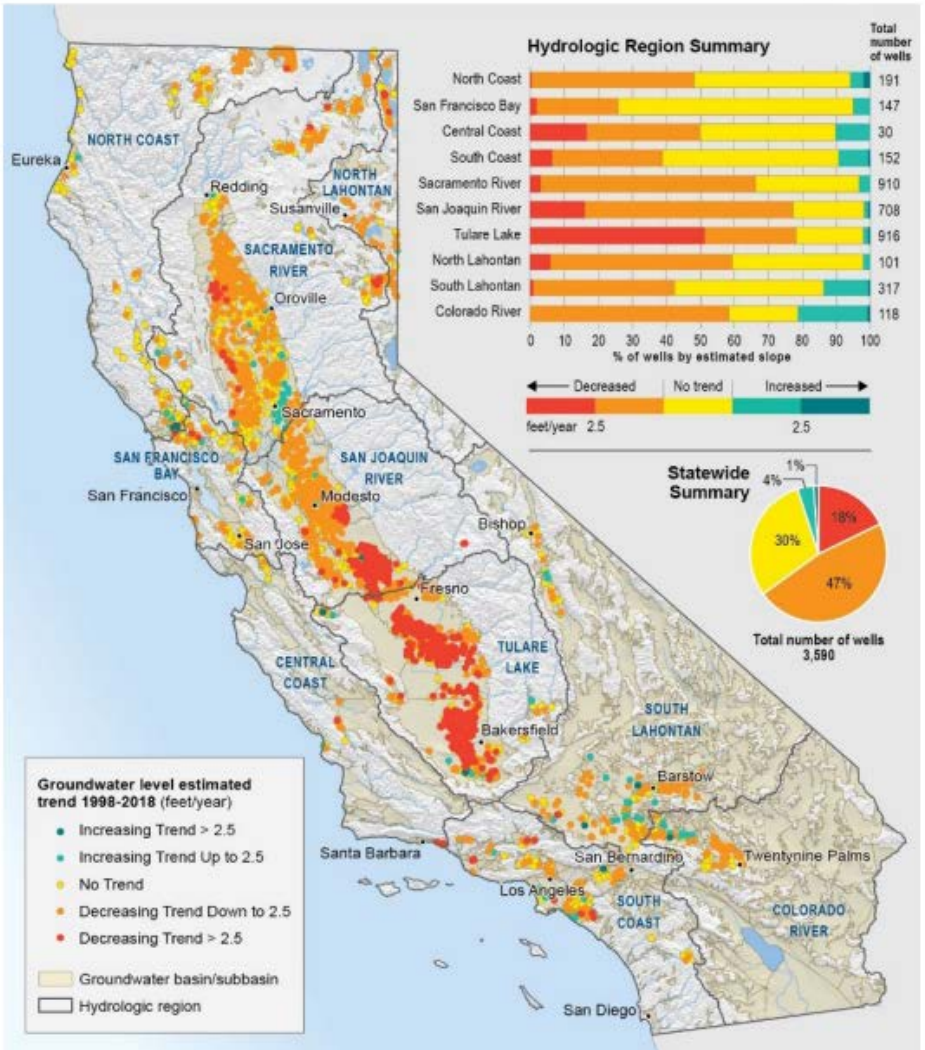
California's Groundwater Conditions

Figure H-9: Groundwater Use as Percentage of Total Water Use



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

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



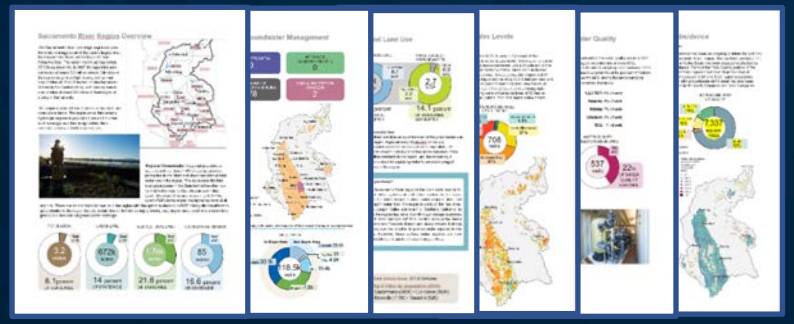
California's Groundwater (B-118): Update 2020

Highlights *(English and Spanish)*

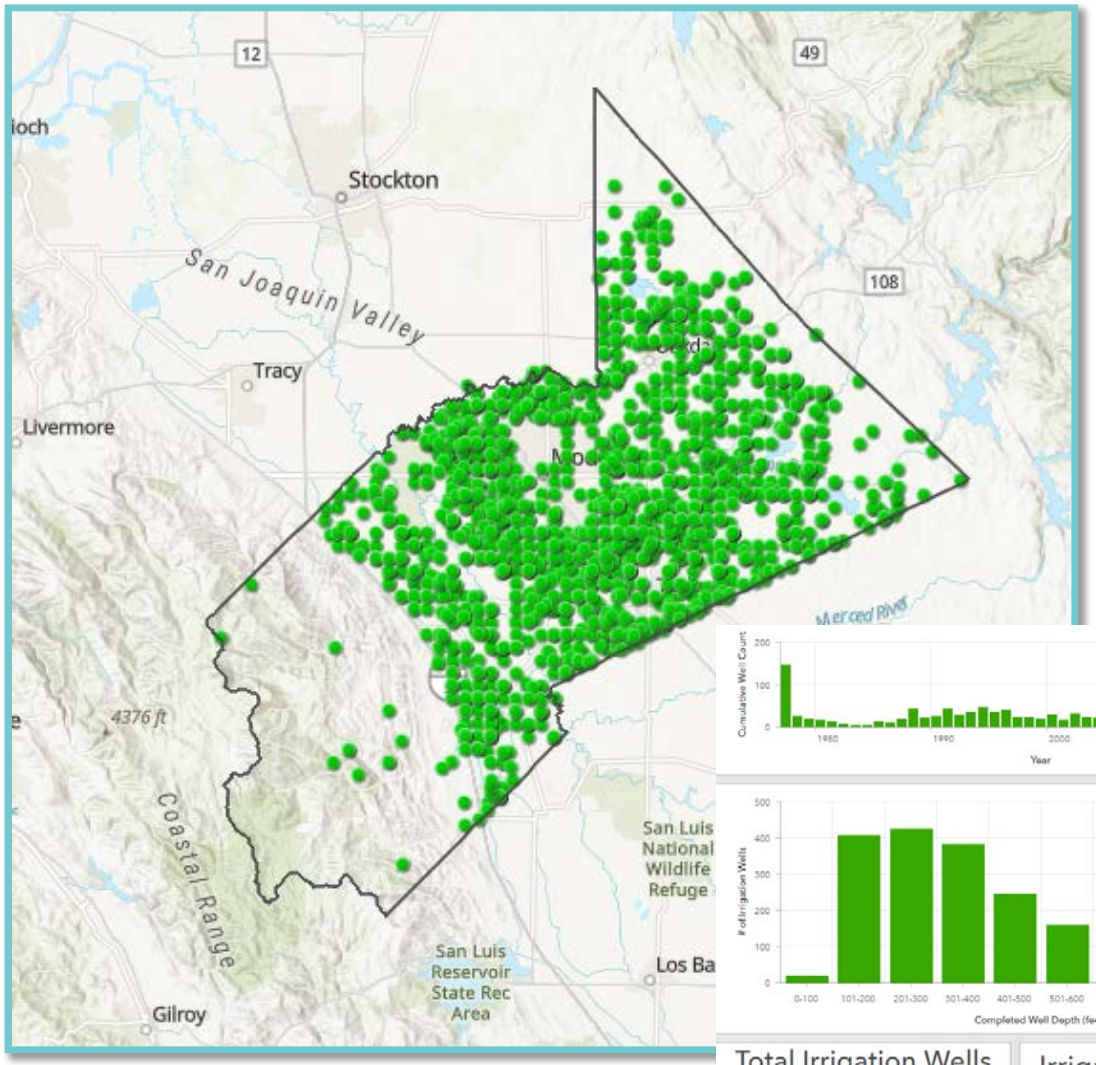
- Summary of Statewide Report
- Key Findings & Recommendations

Statewide Report *(English)*

1. Introduction
2. Groundwater: Occurrence, Economic Value, and Climate Change
3. Groundwater: Use, Extraction, and Water Budgets
4. Groundwater Management
5. Groundwater Monitoring
6. Groundwater Conditions
7. Regional Groundwater at a Glance



CalGW Live - Demo



Total Irrigation Wells

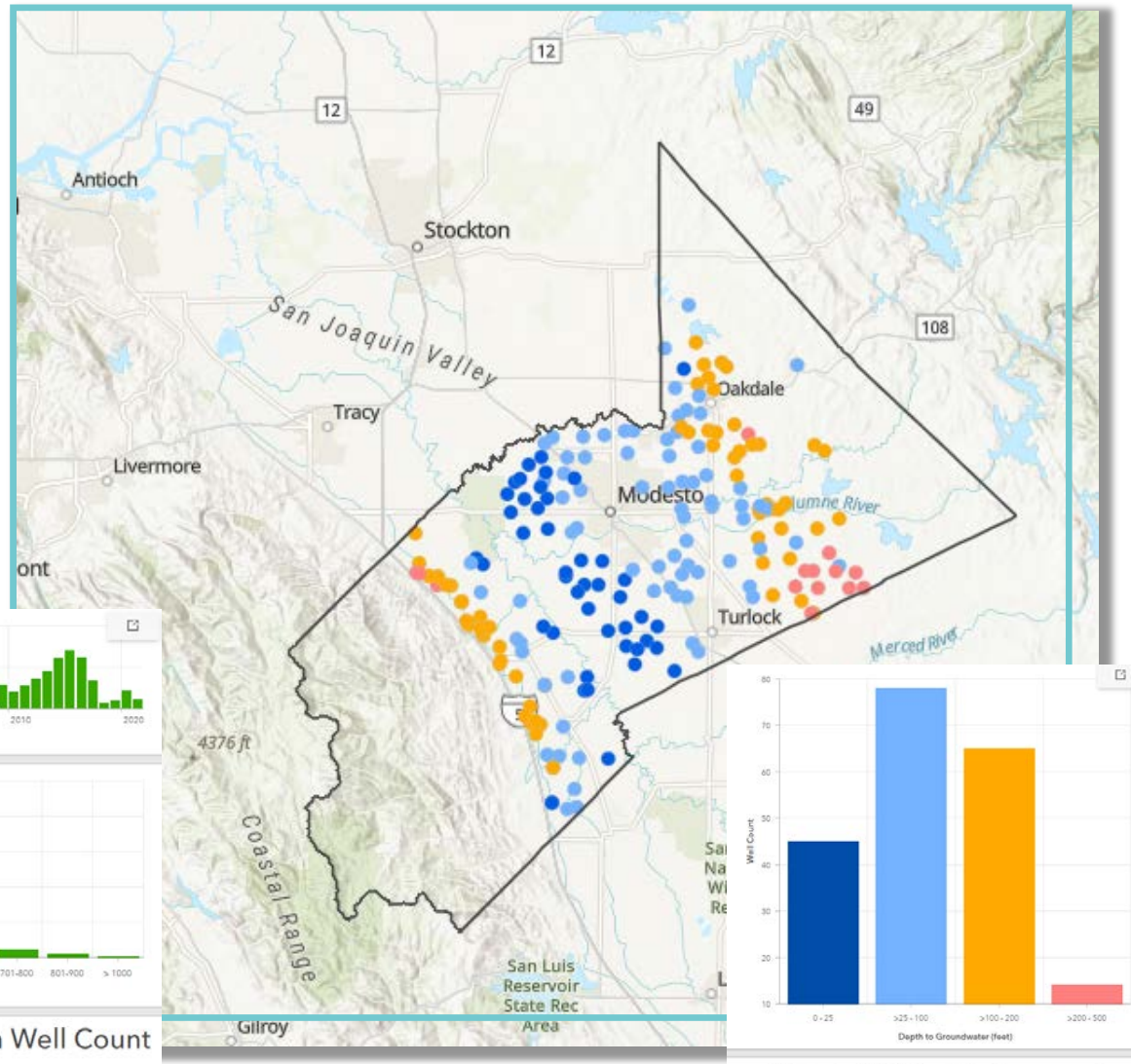
1.8k

Drilled Since 1977

Irrigation Well Count

1.8k

For the Selected Time Period



Total Well Count

202

Based on Selection

First Decisions Released on Local SGMA Plans

- Staggered approach for releasing DWR decisions
- June 3 release included:

Approved Plans

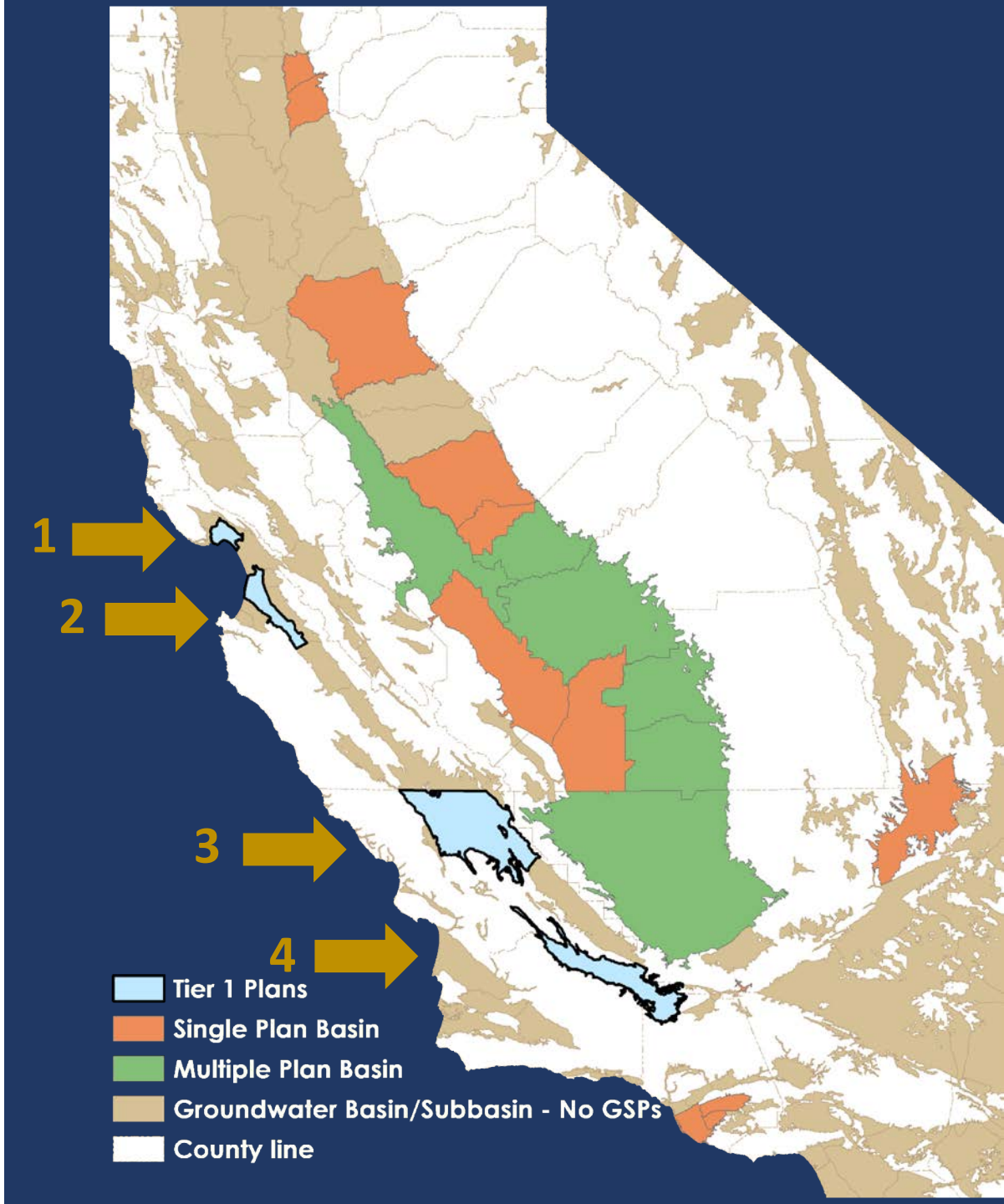
1. Santa Cruz Mid-County Basin
2. 180/400 Foot Aquifer Subbasin

Notified Locals to Consult on Plan Deficiencies

(final determination to be released by January 2022)

3. Paso Robles Subbasin
4. Cuyama Valley Basin

- Other critically-overdrafted basins will receive determinations throughout this year to meet DWR's overall January 2022 statutory deadline
- Assessment information & video message: https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management/Groundwater-Sustainability-Plans



Initial GSP Findings

- Eliminating overdraft is central to SGMA but not the only requirement
- This should be done in concert with avoiding Undesirable Results and the development of Sustainable Management Criteria (SMCs)
- SMCs need to be developed with consideration of all beneficial uses and users

Sustainable Management Criteria that consider Beneficial Uses and Users

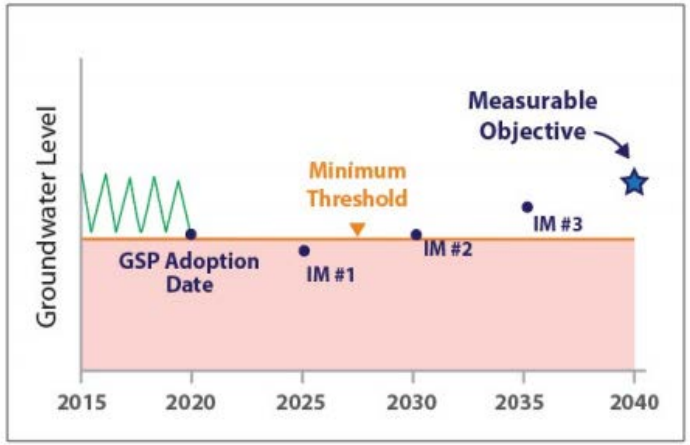
Undesirable Results

Measurable Objectives & Minimum Thresholds

Basin Sustainability Goal

*In general, the **sustainable yield** of a basin is the amount of groundwater that can be withdrawn annually without causing undesirable results*

Sustainability Indicators	Lowering GW Levels	Reduction of Storage	Seawater Intrusion	Degraded Quality	Land Subsidence	Surface Water Depletion
Metric(s) Defined in GSP Regulations	• Groundwater Elevation	• Total Volume	• Chloride concentration isocontour	• Migration of Plumes • Number of supply wells • Volume • Location of isocontour	• Rate and Extent of Land Subsidence	• Volume or rate of surface water depletion



Diagrams from DWR's Draft Best Management Practices document on Sustainable Management Criteria

Initial GSP Findings, cont.

- Identify and define undesirable results
  - Significant and unreasonable effects in a basin
- Define the minimum thresholds & measurable objectives (goal)
  - Justification for the minimum thresholds
  - Evaluate and disclose the effects on beneficial uses and users
- Include projects and actions that are consistent with avoiding undesirable results and mitigating overdraft
  - Comprehensive approach with supply augmentation & demand reduction strategies
- Clearly show work and identify data gaps

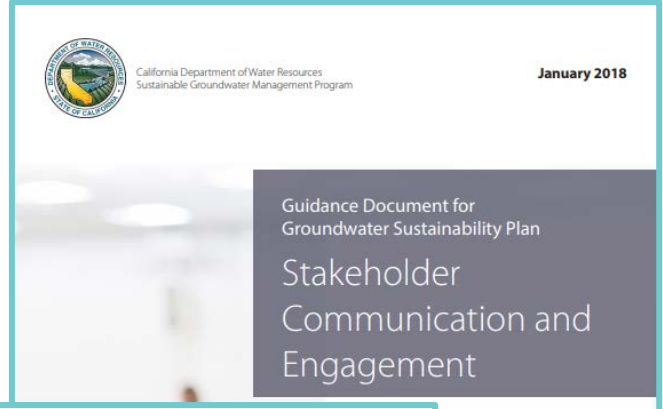
Stakeholder Engagement Chart for GSP Development

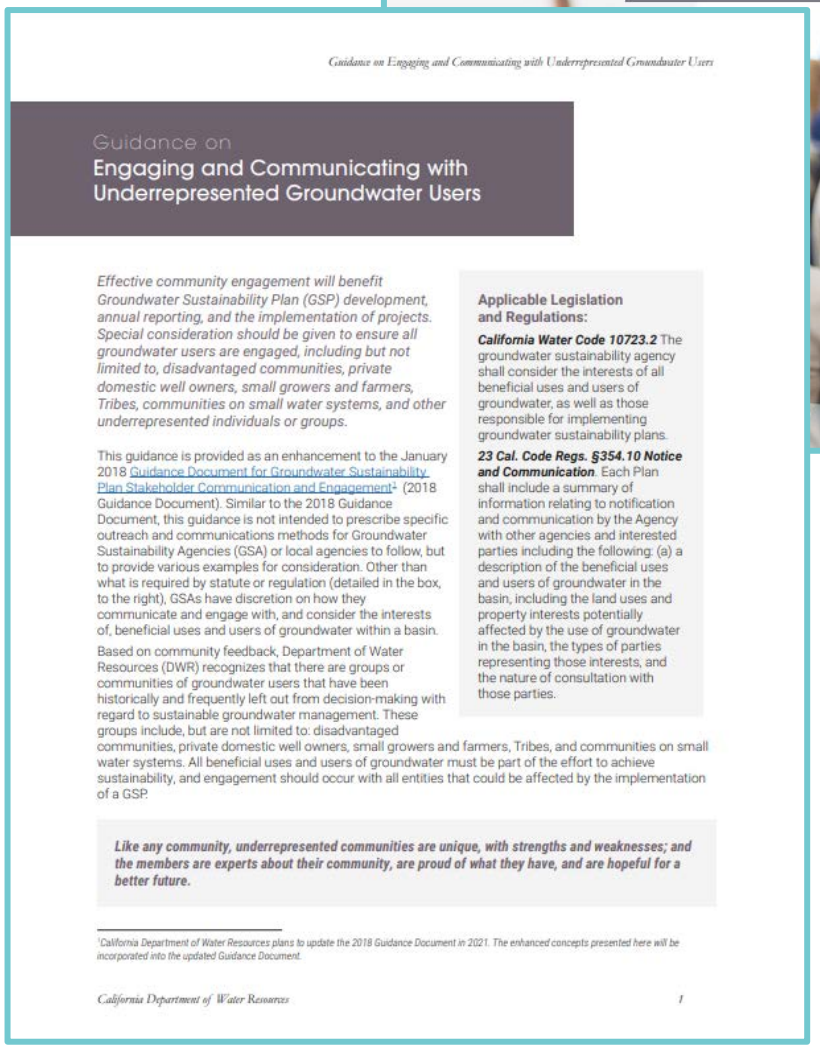
Category of Interest	Examples of Stakeholder Groups
General Public	• Citizens groups • Community leader
Land Use	• Municipalities (City, County planning departments) • Regional land use agencies
Private users	• Private pumpers • Domestic users • Schools and colleges • Hospitals
Urban/ Agriculture users	• Water agencies • Irrigation districts • Municipal water companies • Resource conservation districts • Farmers/Farm Bureaus
Industrial users	• Commercial and industrial self-supplier • Local trade association or group
Environmental and Ecosystem	• Federal and State agencies (Fish and Wildlife) • Wetland managers • Environmental groups
Economic Development	• Chambers of commerce • Business groups/associations • Elected officials (Board of Supervisors, City Council membe) • State Assembly members • State Senators
Human right to water	• Disadvantaged Communities • Small community systems • Environmental Justice Groups
Tribes	• Tribal Government
Federal and State lands	• Military bases/Department of Defense • Forrest service • National Park Service • Bureau of Land Management • California Department of Fish and Wildlife
Integrated Water Management	• Regional water management groups (IRWM regions) • Flood agencies • Recycled water coalition

California Department of Water Resources
SGMA Stakeholder Communication and Engagement Digital Toolkit

Actions Related to Drinking Water

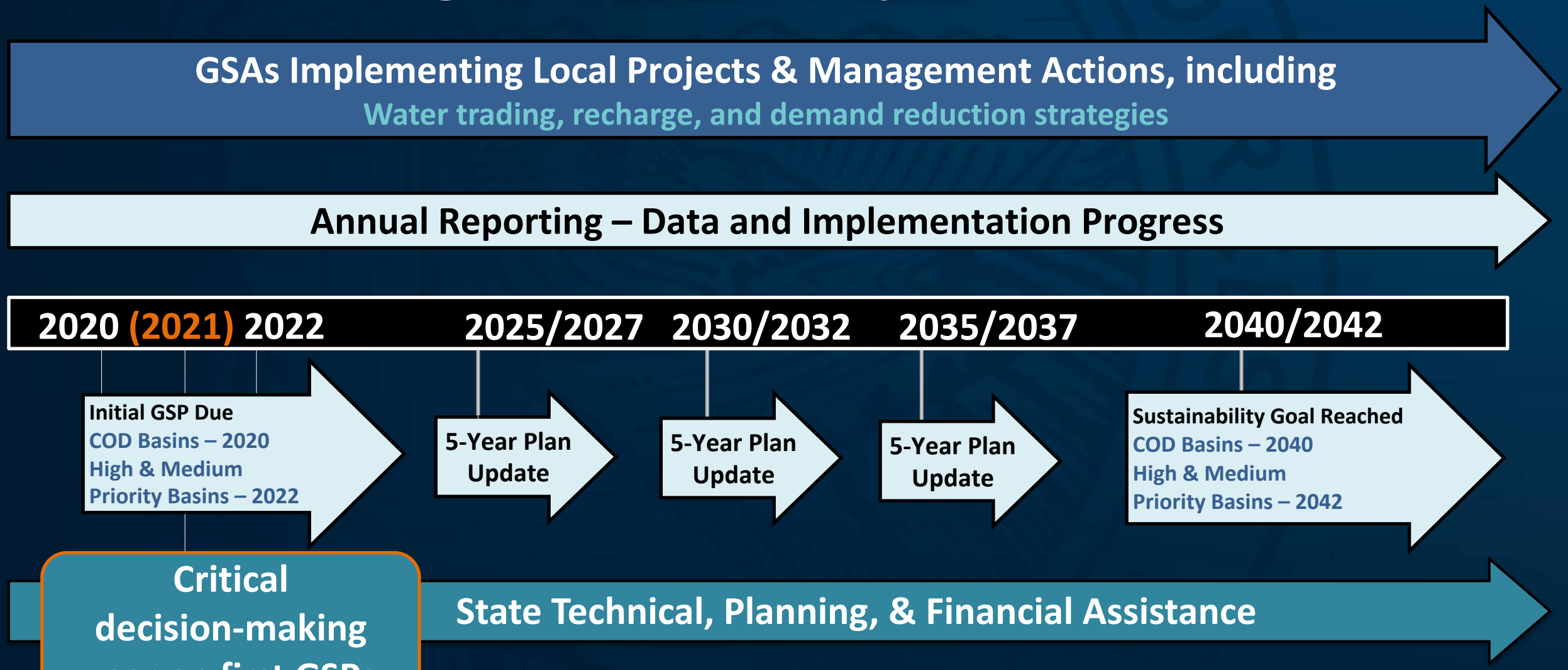
- **Incorporate best available data on groundwater conditions, water quality and well infrastructure**
- **Evaluate and disclose the impacts** of the management criteria on groundwater infrastructure, **including domestic wells**
- **Inventory and better define the location of active wells** in the next GSP update
- **Document known impacts to drinking water users** caused by groundwater management, in annual reports and GSP updates should they occur
- **Consider including mitigation strategies** 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 with beneficial users** as GSPs are updated and projects advance, specially **including drinking water users**





DWR guidance on engaging with underrepresented users: https://water.ca.gov/Programs/Groundwater-Management/Assistance-and-Engagement

Long-Term SGMA Implementation



April 21, 2021 Executive Drought Proclamation

Action 11. To ensure the potential impacts of drought on communities are anticipated and proactively addressed, the Department of Water Resources, in coordination with the Water Board, shall develop groundwater management principles and strategies to monitor, analyze, and minimize impacts to drinking water wells.

NOTE: *Drinking water well users are identified as domestic well owners or individuals, Tribal Governments, or water systems that use wells for drinking water needs.*

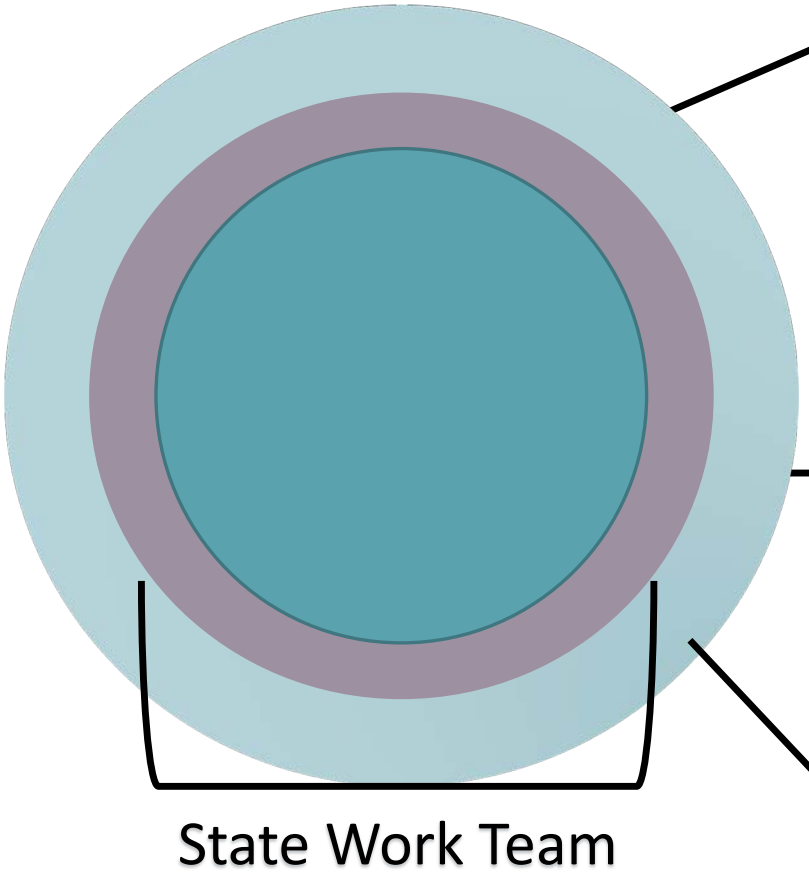
GOALS

GOAL 1: Present clear principles and vision from the state on how to anticipate and address potential drought impacts to communities who rely on drinking water wells

GOAL 2: Develop strategies for the state, local entities, and community leaders to deploy and use for decision-making for drought management

FINAL PRODUCT: A shared policy framework capturing both principles and strategies

WORK TEAM COORDINATION



DWR programs

- Sustainable Groundwater Management Office
- Water Use Efficiency, County Drought Advisory Group
- Financial Assistance Branch
- Division of Regional Assistance, Region Offices
- Tribal Policy Office

SWRCB programs

- Sustainable Groundwater Management Program
- SAFER Program
- Division of Water Rights
- Division of Water Quality

Public outreach for external input

PUBLIC ENGAGEMENT PROCESS

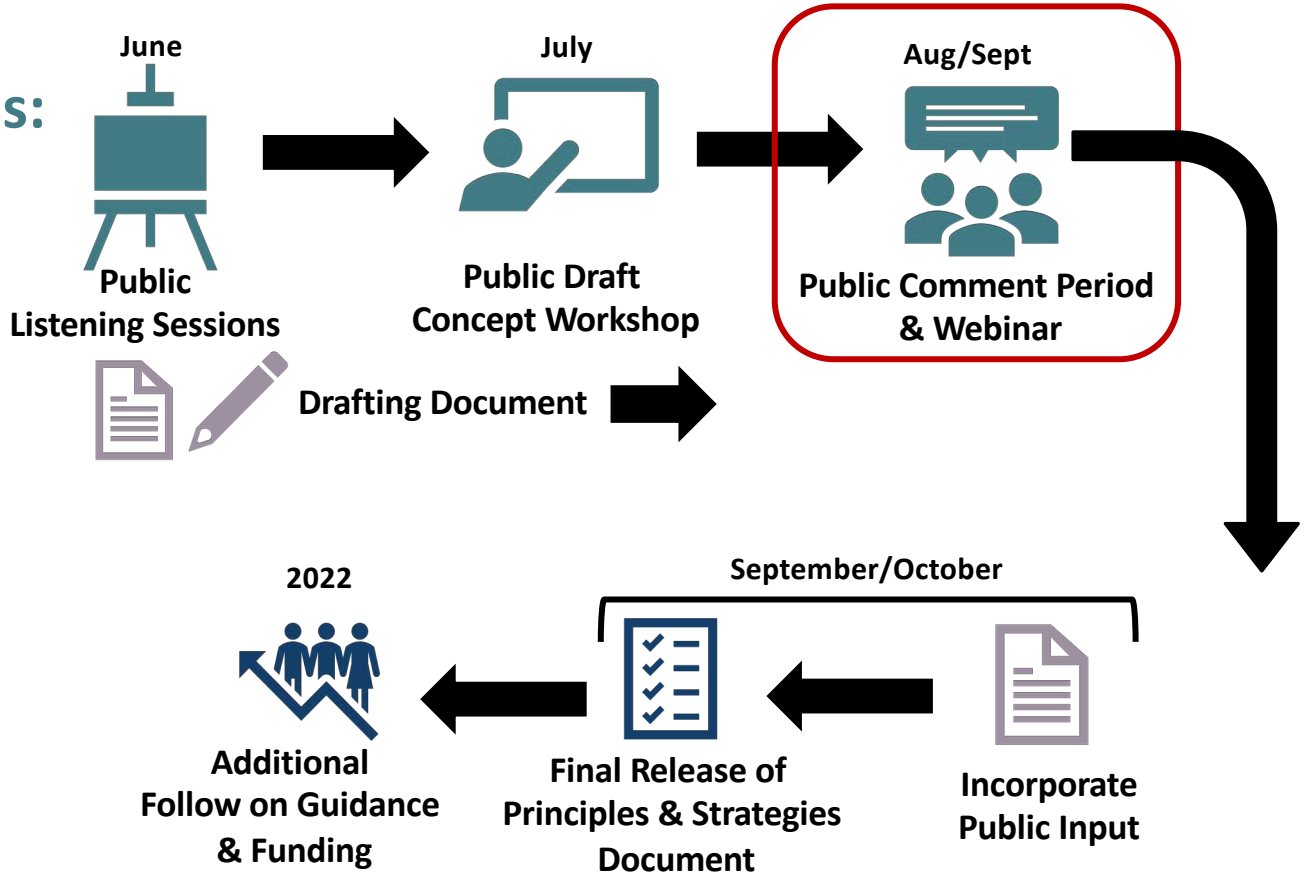
Outcomes:

1. Create a public process that is:

- **Robust**
- **Inclusive**
- **Transparent**
- **Accessible**

2. Final product is:

- **Foundational**
- **Vetted**
- **Applicable**
- **Realistic**



DRAFT PRINCIPLES & STRATEGIES

Achieve	Drinking Water Resilience	6 strategies
Integrate	Equity	9 strategies
Address	Underlying Challenges	8 strategies
Lead	With Best Available Data	7 strategies
Build	Trusted Relationships	6 strategies
Implement	Lasting Solutions	9 strategies

THANK YOU

Public comments accepted through October 7, 2021 at 5pm:
sgmps@water.ca.gov

Public Webinar will be held September 23 from noon to 1:30pm:
Visit our webpage to register