

Implementing Sustainable Groundwater Management Act in CA



WIMS Workshop

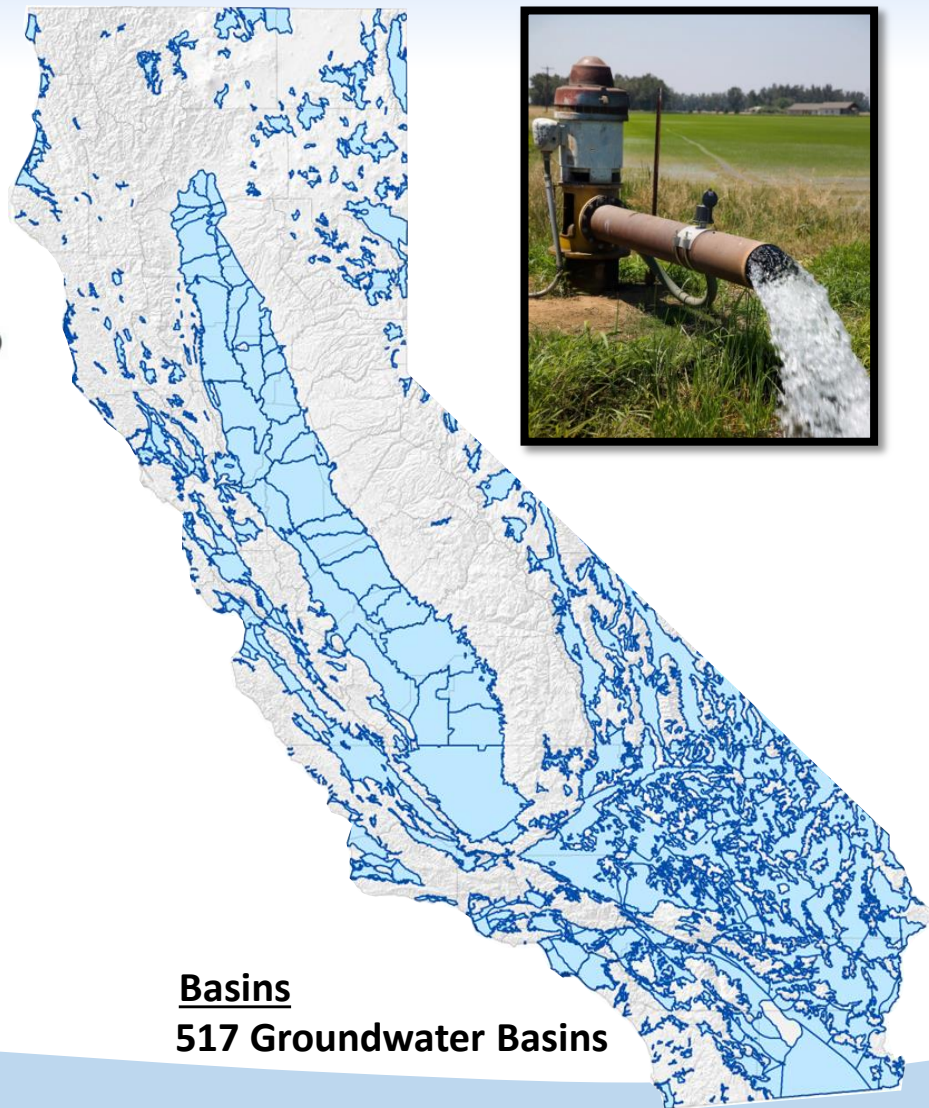
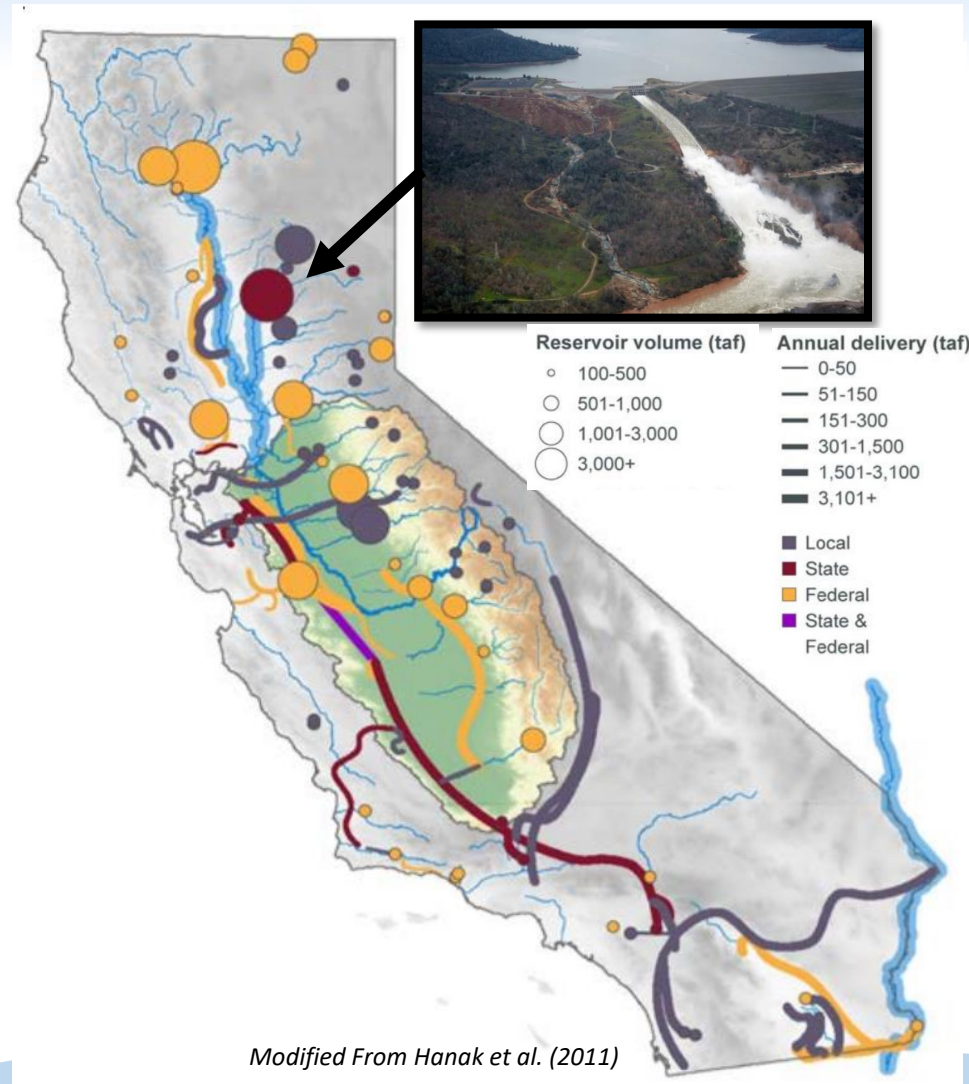
January 16, 2018

CA Department of Water Resources

Presentation Overview

- Background on CA Water Resources
- SGMA Overview
- SGMA Technical Assistance & Data Mgmt.

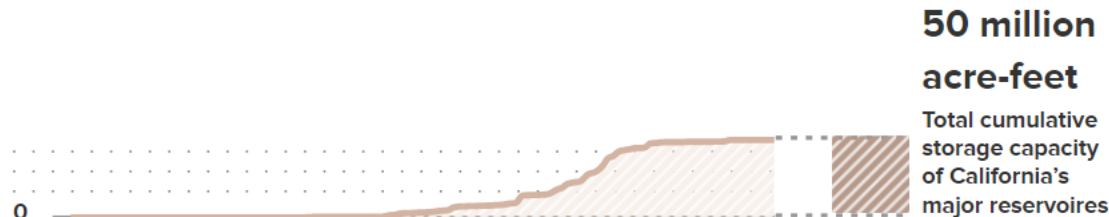
CA's Surface Water Vs. Groundwater Storage Capacity



Surface Water Vs. Groundwater Storage Capacity

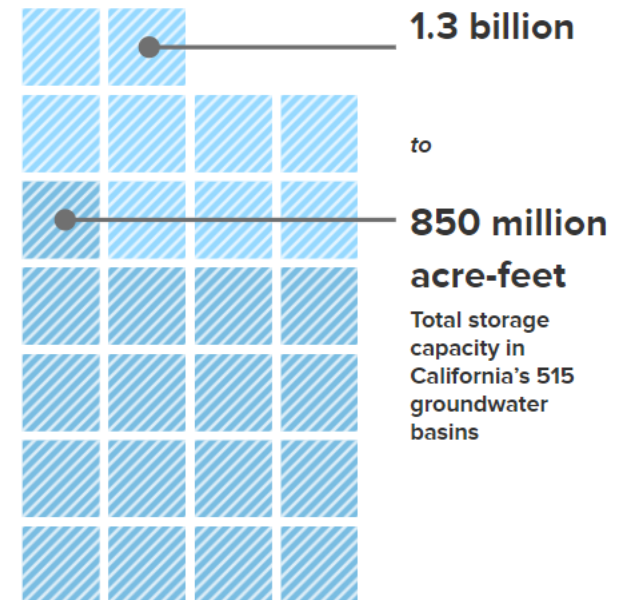
Reservoir Capacity

[Replay](#)



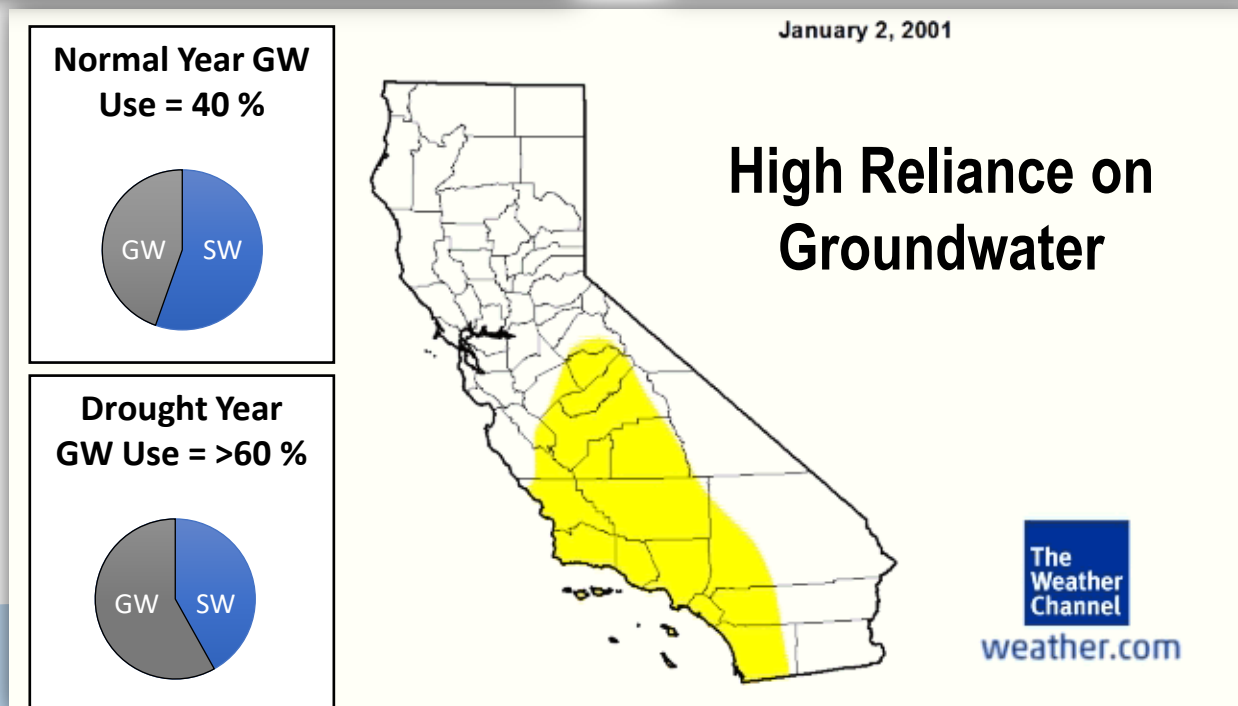
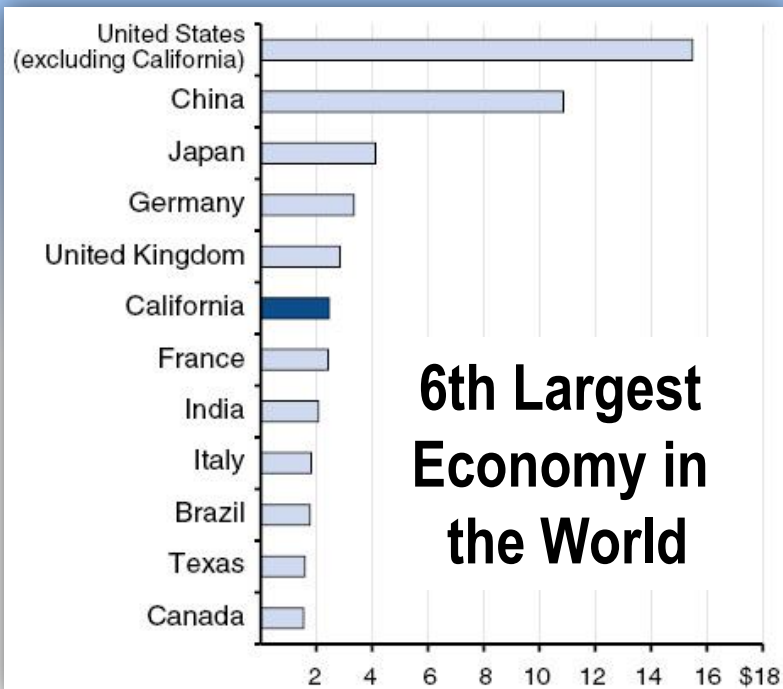
> 100 yrs of Regulation

Groundwater Basin Capacity



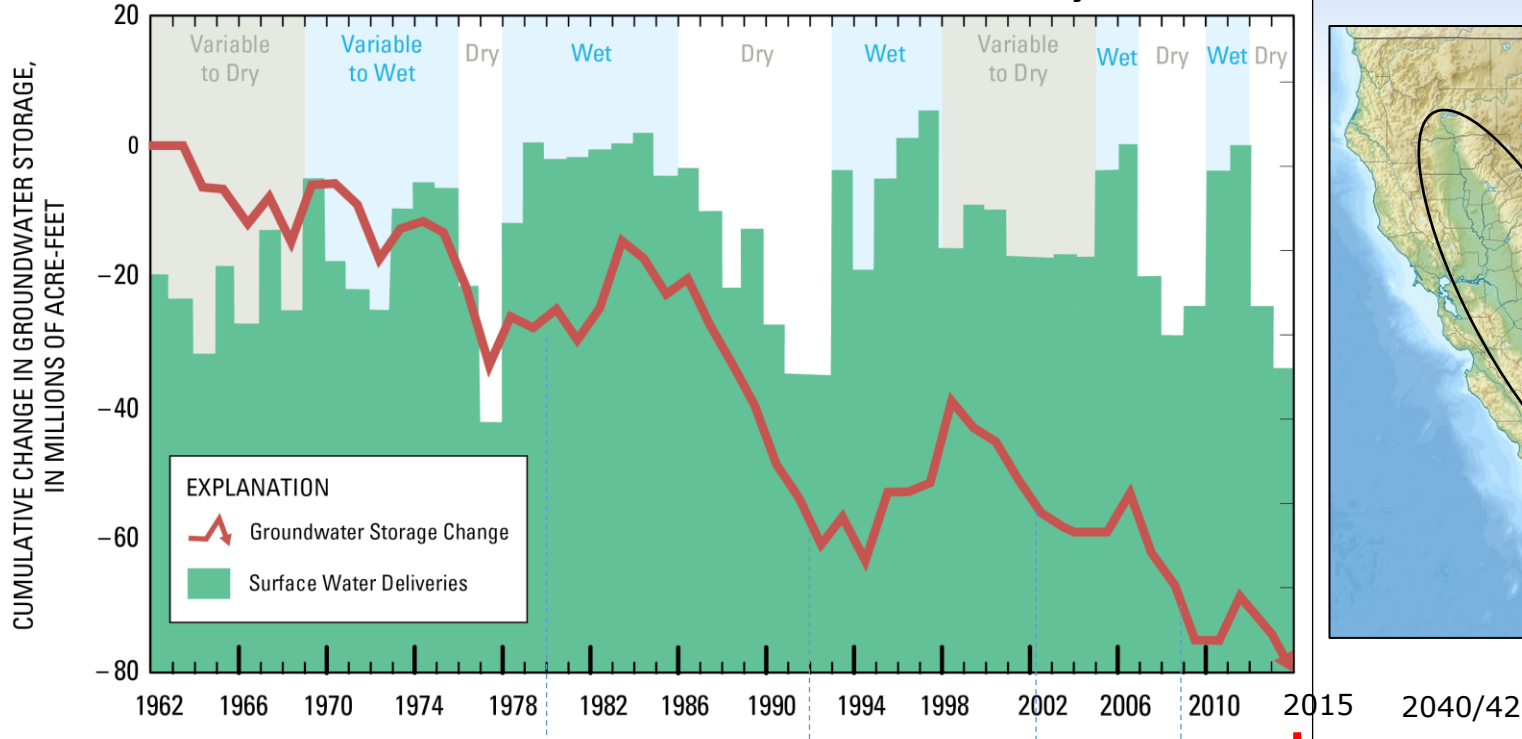
Modified from Stanford Water in the West

> 3 yrs of Regulation



SGMA Background

Historical Groundwater Use in Central Valley



Modified from Faunt & Sneed, 2015

Post-SGMA

Required Groundwater Management (Regulatory)

B-118
COD

AB 3030

SB 1938

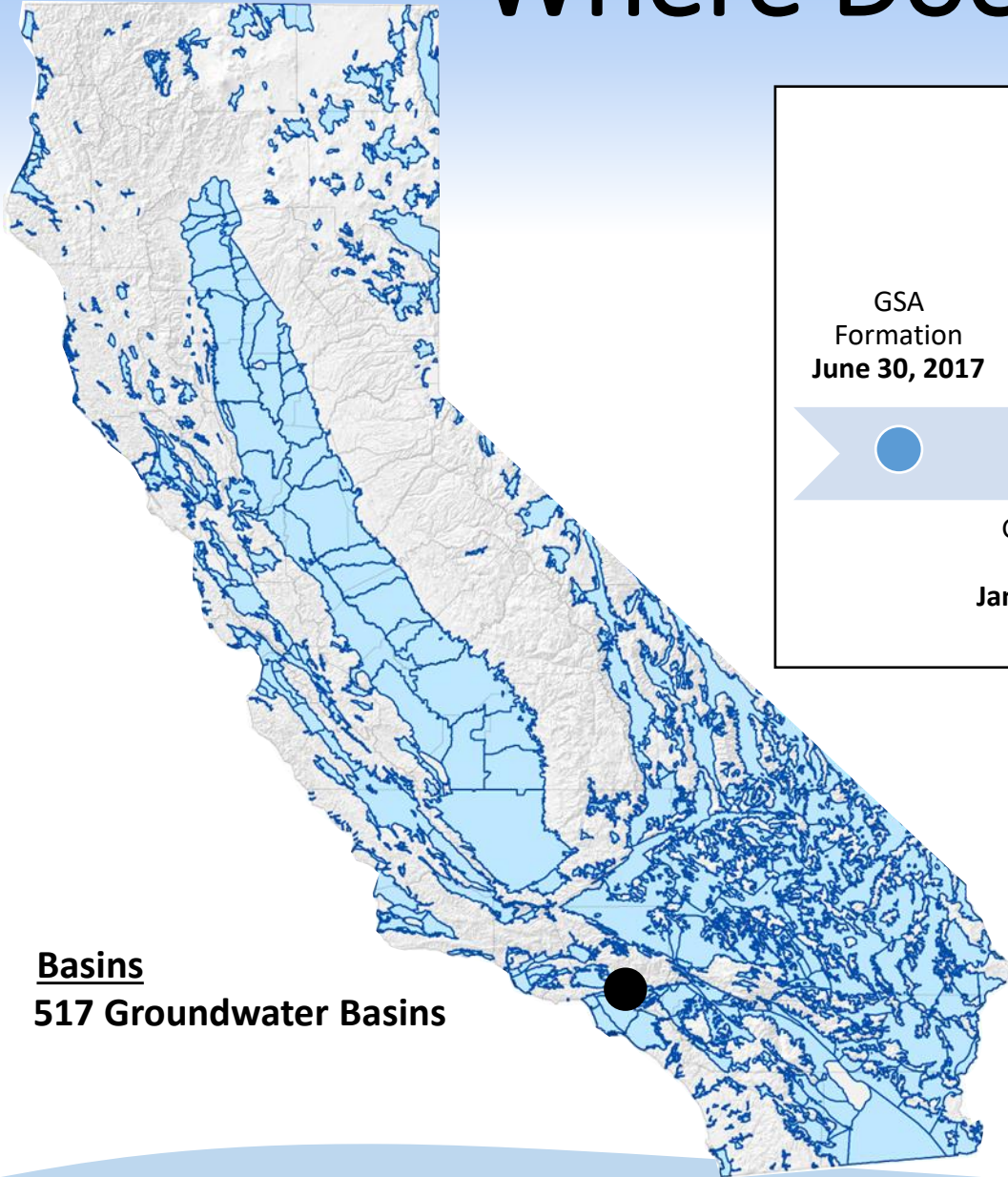
CASGEM

SGMA

Statewide Sustainability

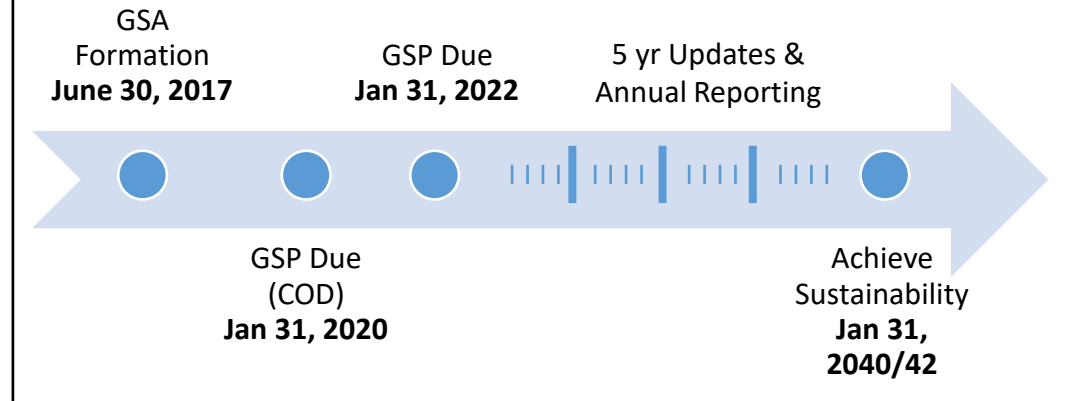
Requirements ↑

Where Does SGMA Apply?

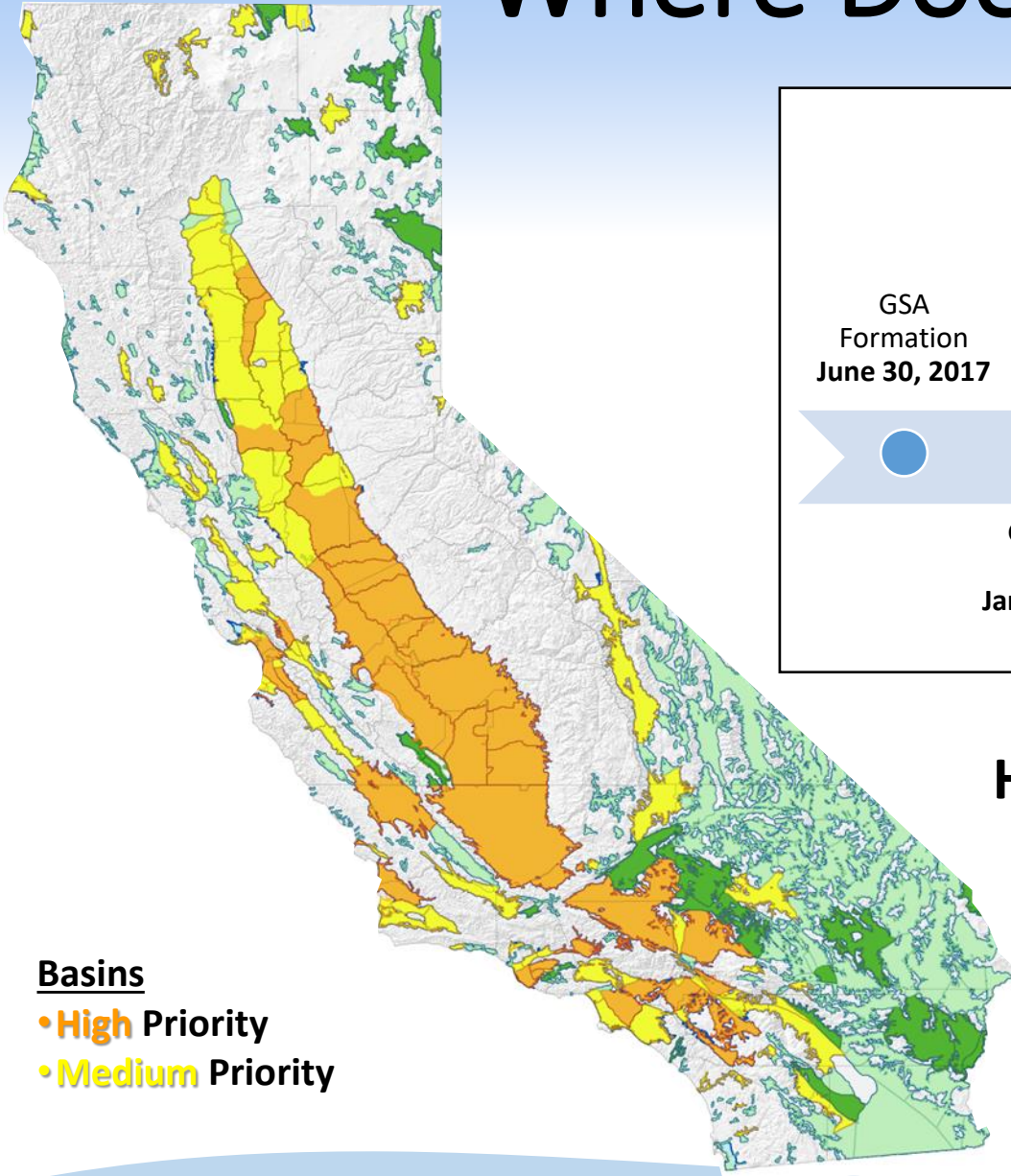


Basins
517 Groundwater Basins

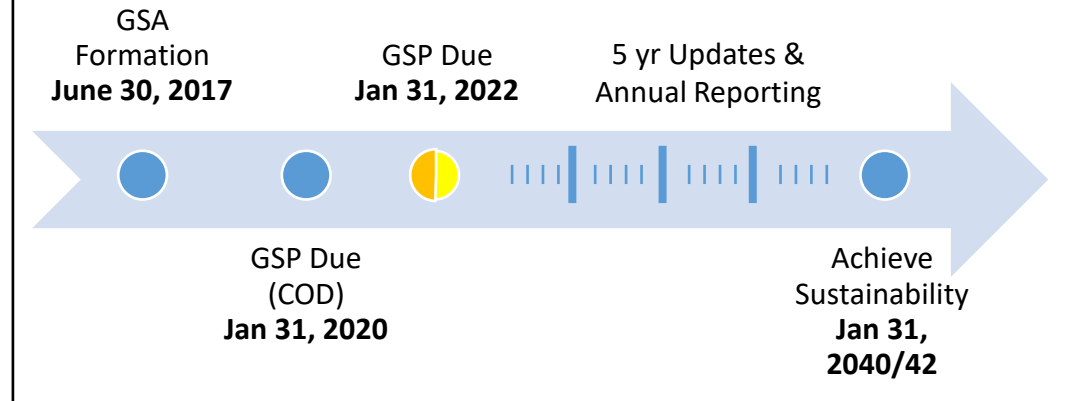
SGMA Timeline:



Where Does SGMA Apply?



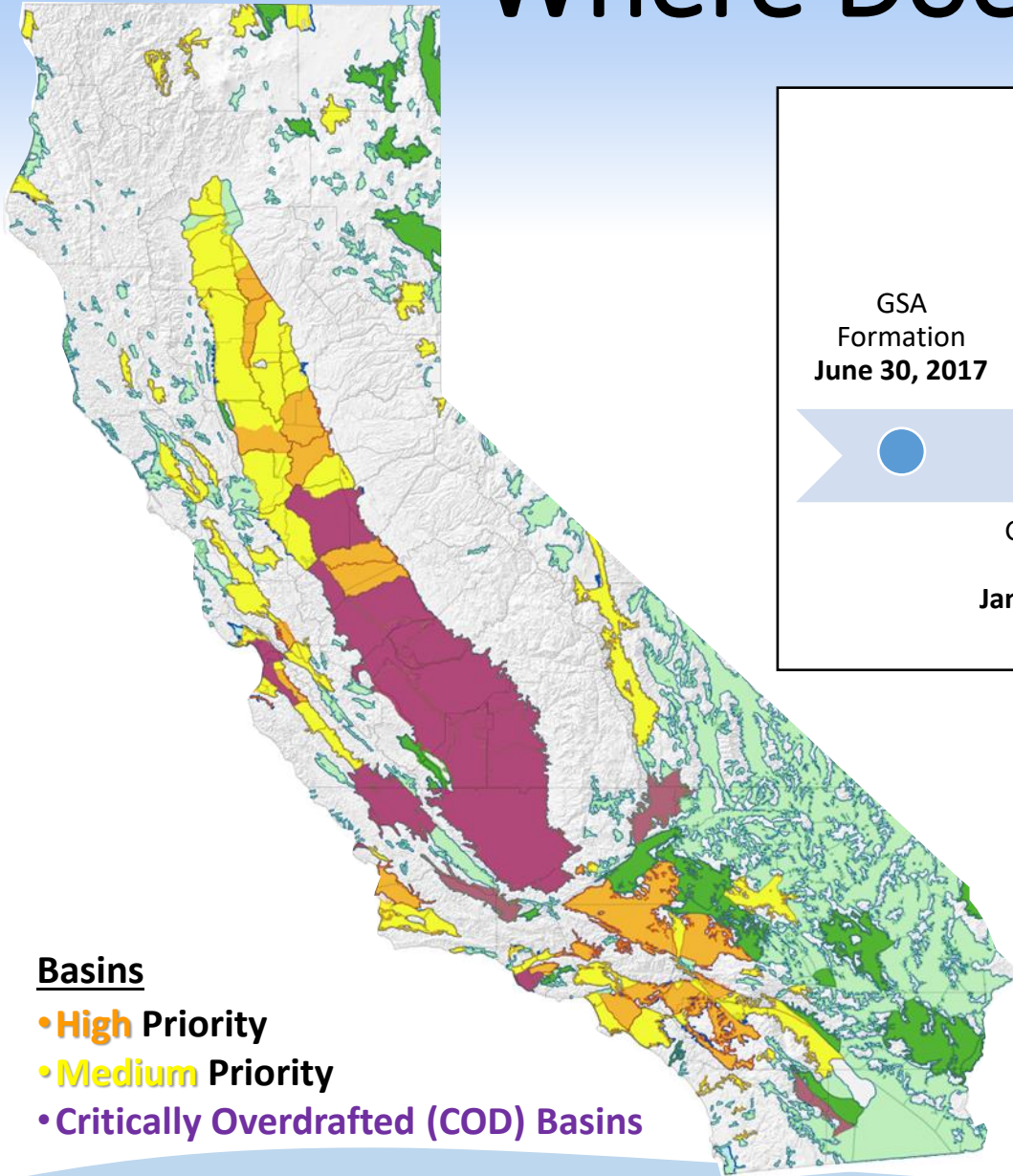
SGMA Timeline:



High & Medium Priority basins

- 96% of groundwater use
- 88% of overlying population

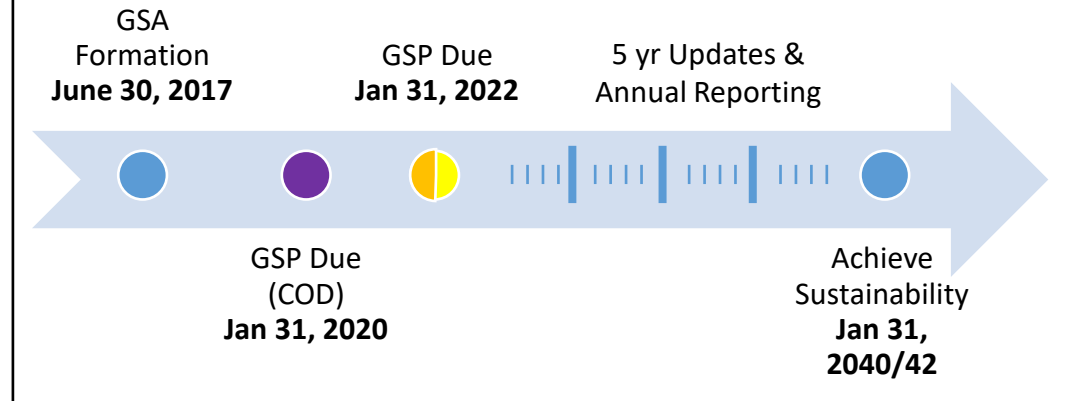
Where Does SGMA Apply?



Basins

- **High** Priority
- **Medium** Priority
- **Critically Overdrafted (COD) Basins**

SGMA Timeline:



➤ **2 yrs** – *Critically Overdrafted*

➤ **4 yrs** – *High & Medium Priority*

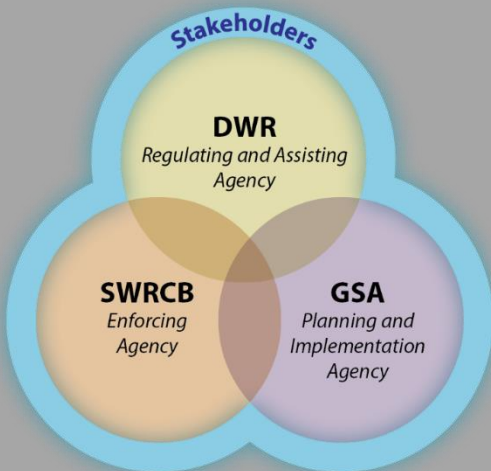
SGMA Overview

Local Control



“A central feature of these bills is the recognition that groundwater management in California is best accomplished locally.”

Governor Jerry Brown, September 2014



Sustainability

Avoid Six Undesirable Results



Lowering
GW Levels



Reduction
of Storage



Seawater
Intrusion



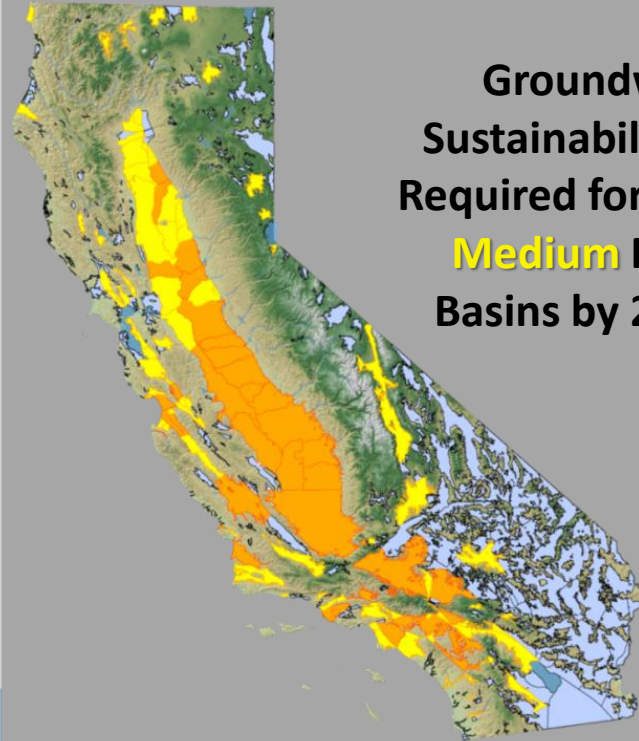
Degraded
Quality



Land
Subsidence



Surface Water
Depletion

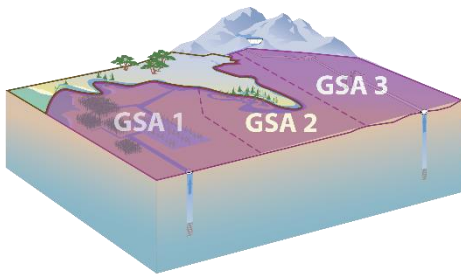


**Groundwater
Sustainability Plans
Required for High and
Medium Priority
Basins by 2020/22**

General Groundwater Sustainability Plan (GSP) Components

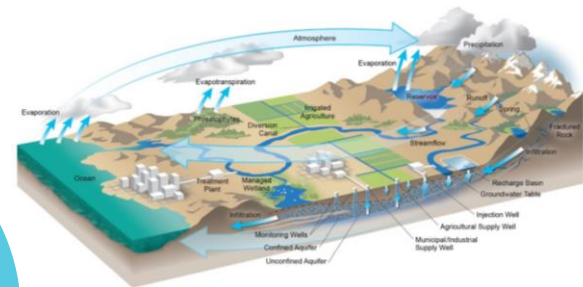
Who

- Administrative Information -



What

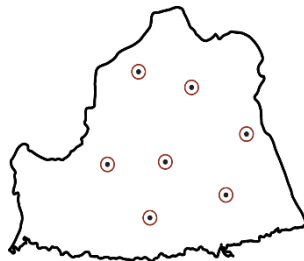
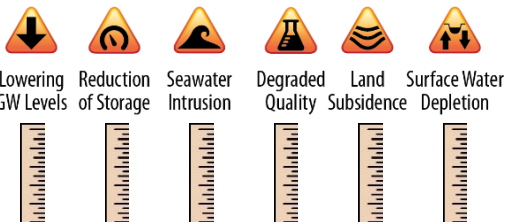
- Basin Setting -



GSP

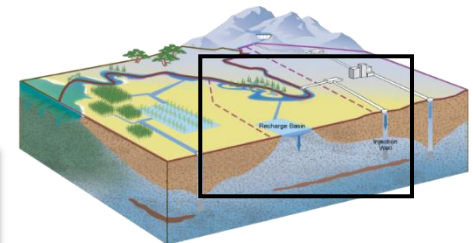
Where

- Sustainable Management Criteria -
- Monitoring Network -



How

- Projects & Management Actions -



DWR SGMA Assistance

Financial Assistance

- Prop 1

Planning Assistance

*- Facilitation
- GSA Support*

Technical Assistance

*- Statewide Datasets, Analysis, and Tools
- Best Management Practices
- Water Available for Replenishment Report*

Advisory Role

**DWR
Evaluation of
GSPs**

**Sustainable
Groundwater
Management**

Evaluation Role

DWR SGMA Assistance Technical Assistance



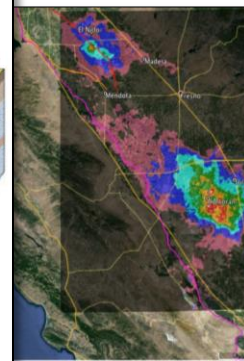
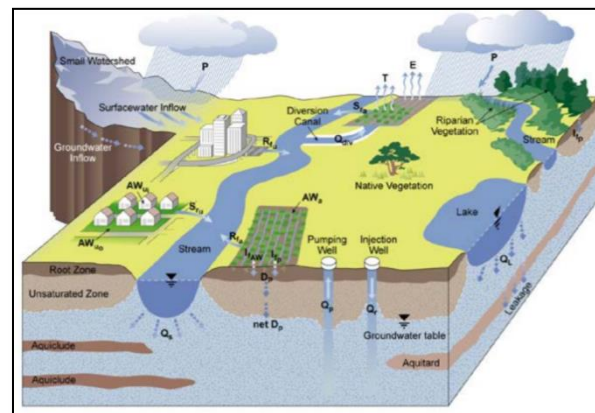
1. Guidance and Education

- Best Management Practices
- Guidance Documents
- Fact Sheets and Reports



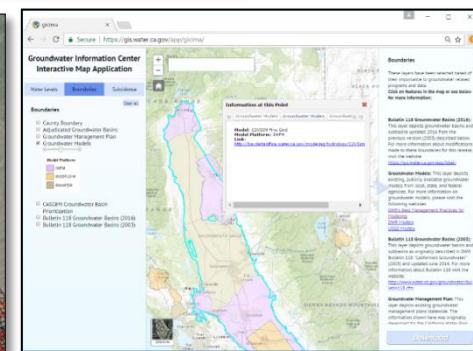
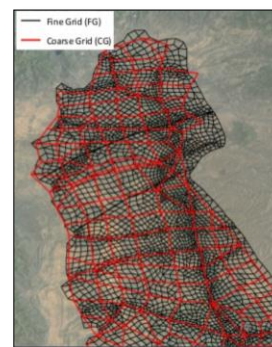
2. Technical Support Services (TSS)

- GSAs will be able to request TSS
- Can help fill data gaps
 - Field Activities
 - Modeling and Tools



3. Statewide Datasets and Tools

http://water.ca.gov/groundwater/sgm/data_tools_reports.cfm

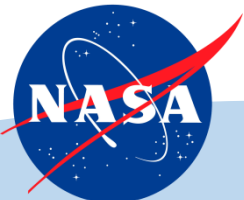
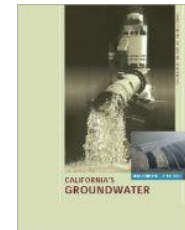
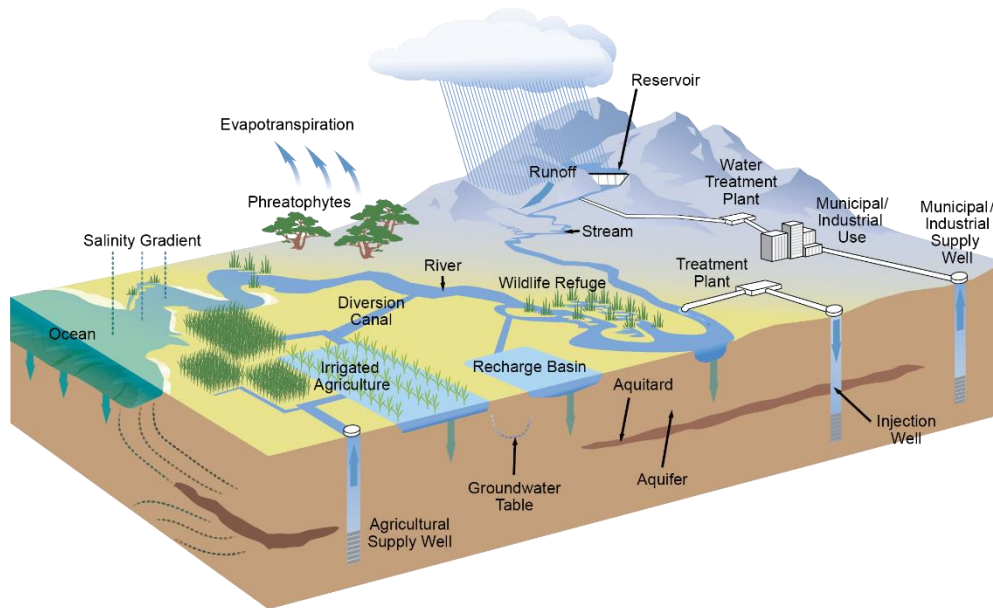


Data and Tools

Existing Data Challenges

>80 – GSP Requirements to Compile Data

>20 – Websites Containing SGMA Data



Data and Tools

DWR Data, Tools, and Reports Webpage

1. Download Data
2. Groundwater Tools
 - Interactive Maps
 - Modeling Tools
3. Maps and Reports
 - SGMA BMPs
 - Statewide GW Maps
4. Related Resources



New Datasets – Land Use

<https://gis.water.ca.gov/app/CADWRLandUseViewer/>

The screenshot shows the CADWR Land Use Viewer application. The top navigation bar includes the title "CADWR LAND USE VIEWER", an "About this application" link, and several icons for map navigation and data management. A search bar at the top left contains the text "pasadena, ca". Below the search bar, a map of Southern California is displayed with various land use overlays. Two popups are visible: "Statewide Remote Sensing 2014" and "Download Statewide Crop Mapping 2014". The "Statewide Remote Sensing 2014" popup has a large blue download icon. The "Download Statewide Crop Mapping 2014" popup asks if the user wants to download the entire dataset or a clipped version, and provides buttons for "FileGDB", "Shapefile", and "Close".

Statewide Remote Sensing 2014

Statewide Remote Sensing 2014

Glenn County

Download Survey

Download Statewide Crop Mapping 2014

Are you sure you want to download the entire Statewide Crop Mapping 2014 dataset?

Alternatively, the dataset has been clipped to the following layers and can be accessed using the layer feature popup windows:

- County Surveys
- Groundwater Basins - B118

Or proceed to download the entire statewide dataset in file geodatabase or shapefile format:

FileGDB Shapefile Close

Alternatively, use the feature popup windows to download pre-clipped portions of the dataset

Select a file format to download the entire dataset

New Datasets – Well Logs

<https://gis.water.ca.gov/app/WCR/>

Well Completion Report Map Application Well Completion Report PDFs are temporarily not available.

Find address or place

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California
Well Completion Report
Refer to Instruction Pamphlet No. 69116782

Page 1 of 1
Owner's Well Number MW-2
Date Work Began 02/22/2010 Date Work Ended 2/22/2010
Local Permit Agency County of Sacramento Environmental Management Department
Permit Number 37270 Permit Date 2/17/10

DWR Use Only - Do Not Fill In
APN 05121
State Well Number
Latitude Longitude
APNs/Other

Geologic Log
Orientation ☒ Vertical ☐ Horizontal ☐ Angle Specify
Drilling Method ☐ Drilling Fluid
Depth from Surface
Feet to Feet
Describe material, grain size, color, etc.
0 89 Well destruction completed by pressure grouting methods. The upper five feet of the annulus was overdrilled and backfilled to the surface with a neat cement grout slurry mix.

Well Owner
Address 1251 El Camino Avenue
City Sacramento County Sacramento
Latitude Dec Min Sec N Longitude Dec Min Sec W
Datum Decimal Lat Decimal Long
APN Book 265 Page 0333 Parcel 011
Township 3N Range 6E Section

Location Sketch
(Sketch must be drawn by hand after form is printed)
North
West East
South
Indicate or describe location of well from roads, buildings, fences, trees, etc. and other points. Use reference paper. Indicate names for accuracy and complete.

Activity
☐ New Well
☐ Modification/Repair
☐ Deepen
☐ Other
☒ Destroy
(Describe procedure and reference well logs)

Planned Uses
☐ Water Supply
☐ Domestic ☐ Public
☐ Irrigation ☐ Industrial
☐ Cathodic Protection
☐ Dewatering
☐ Heat Exchange
☐ Injection
☐ Monitoring
☐ Remediation
☐ Sparging
☐ Test Well
☐ Vapor Extraction
☐ Other

Water Level and Yield of Completed Well
Depth to first water (Feet below surface)
Depth to Static Water Level (Feet) Date Measured
Estimated Yield (GPM) Test Type
Test Length (Hours) Total Drawdown (Feet)
*May not be representative of a well's long term yield.

Casings
Depth from Surface Feet to Feet
Borehole Diameter (Inches)
Type
Material
Well Thickness (Inches)
Outside Diameter (Inches)
Screen Type
Slot Size (If Any) (Inches)
Depth from Surface Feet to Feet
Annular Material
FILL Description

Attachments
☒ Geologic Log
☐ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☐ Other

Certification Statement
I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.
Name Bob Sullivan
Signature [Signature] City Woodland State CA 95776
Signed [Signature] Date Signed 9-10-10 802384
C-57 License Number
IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

Well Completion Report Summary

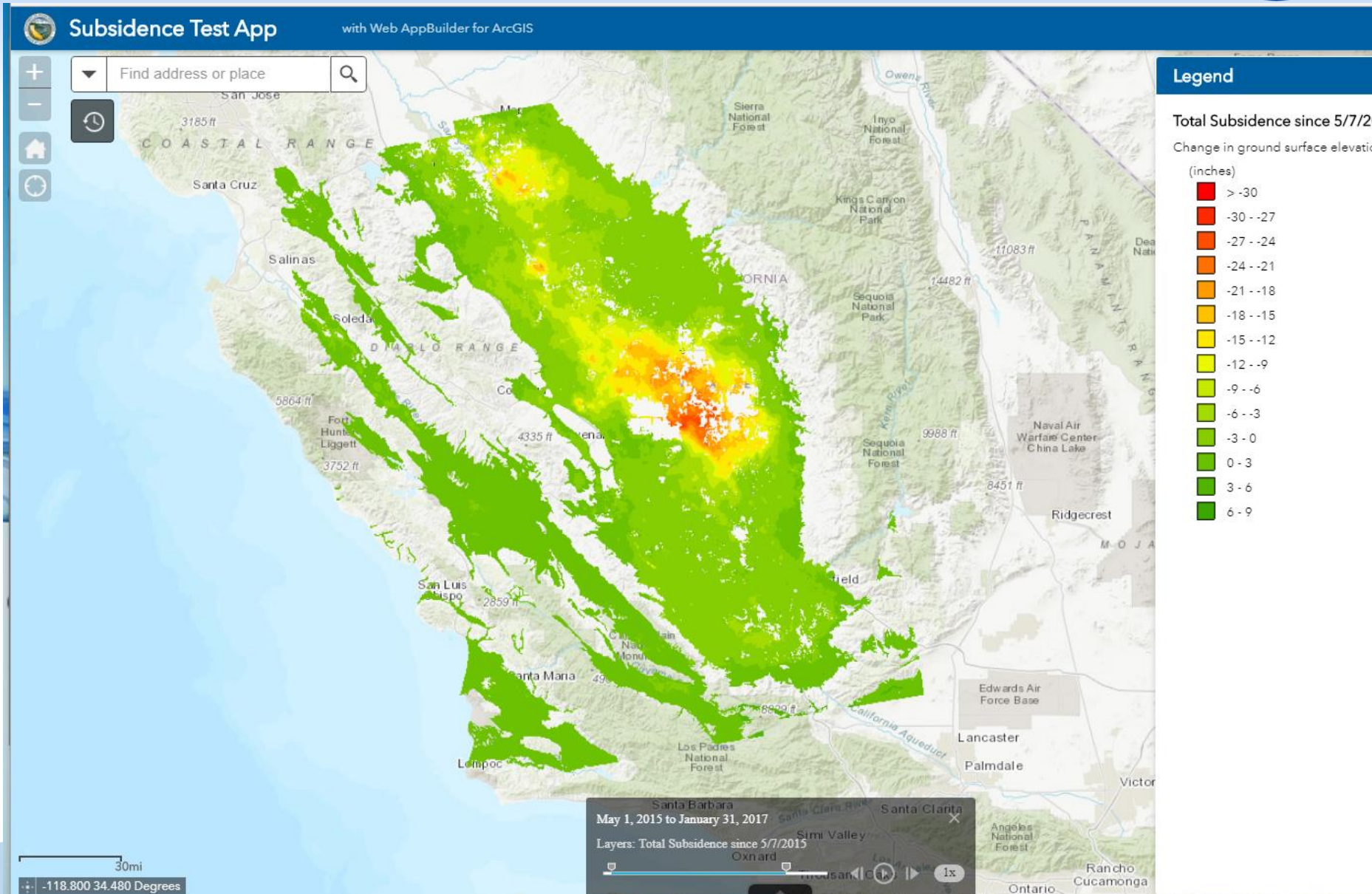
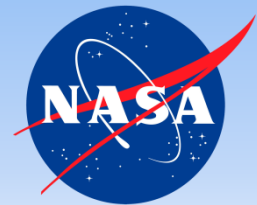
Domestic Well Count	Average Domestic Well Depth	Minimum Domestic Well Depth	Maximum Domestic Well Depth	Production Well Count	Average Production Well Depth	Minimum Production Well Depth	Maximum Production Well Depth	Public Well Count	Average Public Well Depth	Minimum Public Well Depth	Maximum Public Well Depth
2	720	640	800	2	720	640	800	2	720	640	800

Zoom to

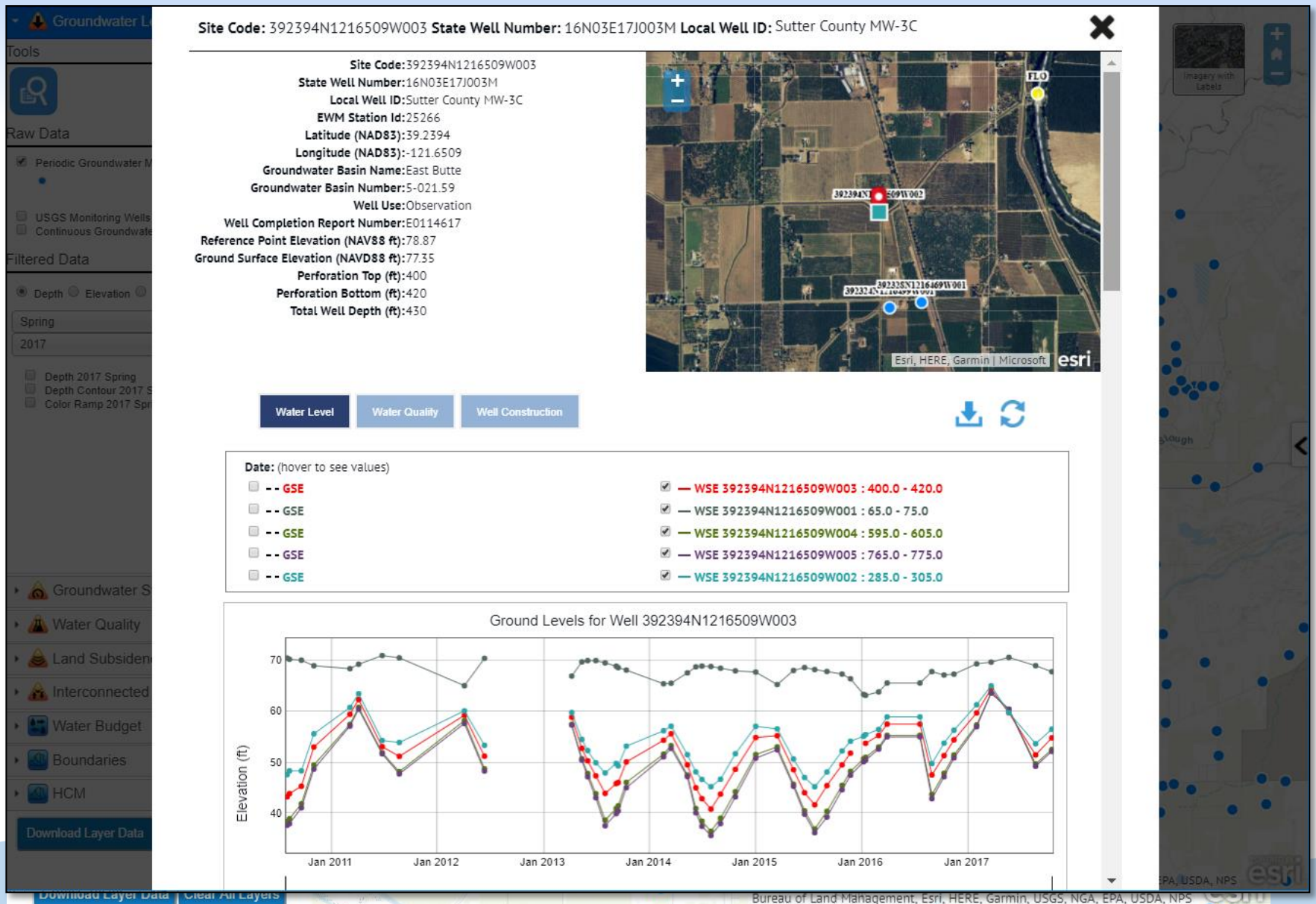
PLSS MTRS Domestic Well Count Average Domestic Well Depth Minimum Domestic Well Depth Maximum Domestic Well Depth Production Well Count Average Producti Depth

PLSS MTRS	Domestic Well Count	Average Domestic Well Depth	Minimum Domestic Well Depth	Maximum Domestic Well Depth	Production Well Count	Average Producti Depth
H19N01W32	1	120	120	120		
H19N01W33						
H19N01W34						

Upcoming Subsidence Map

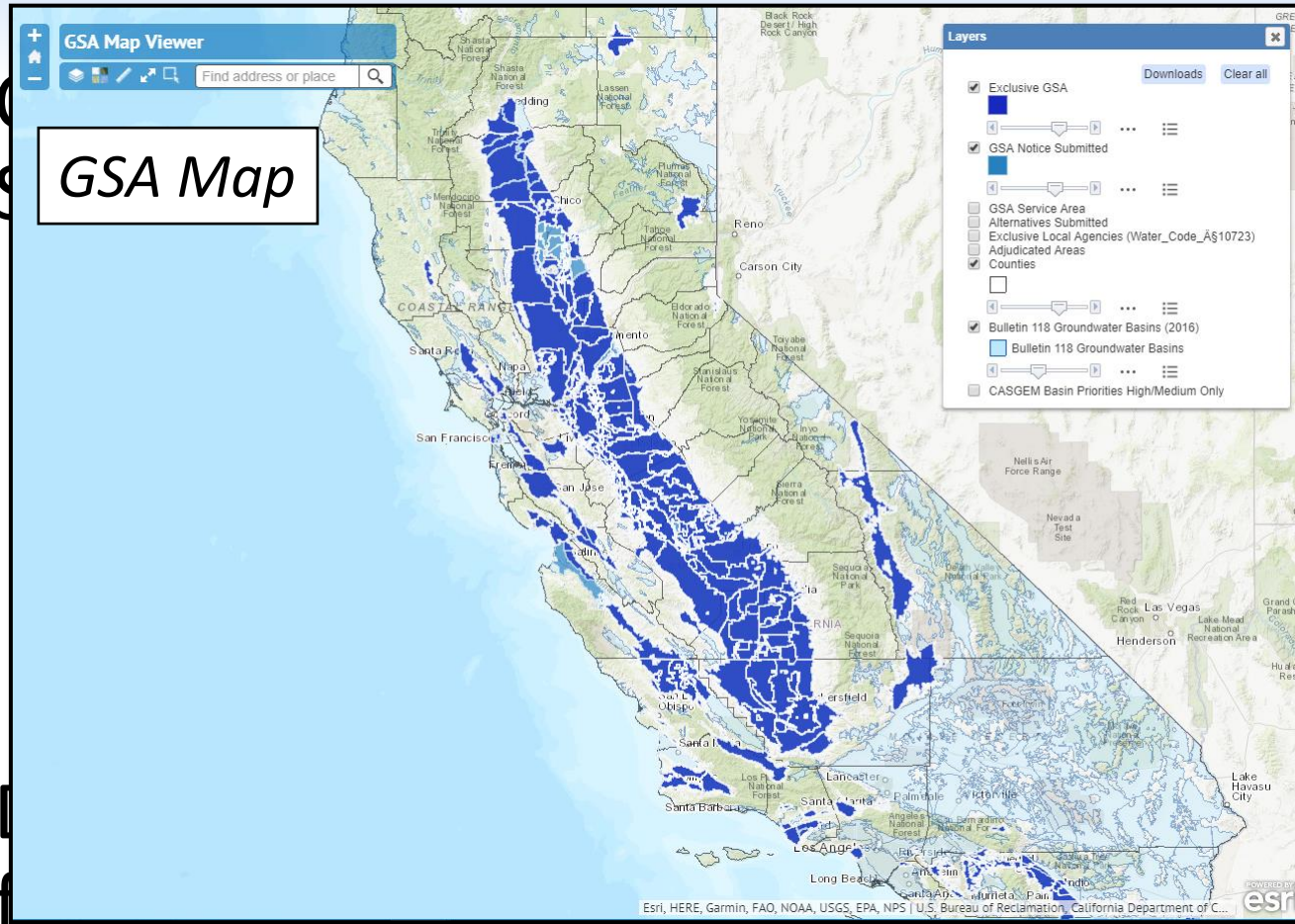


Upcoming SGMA Data Viewer

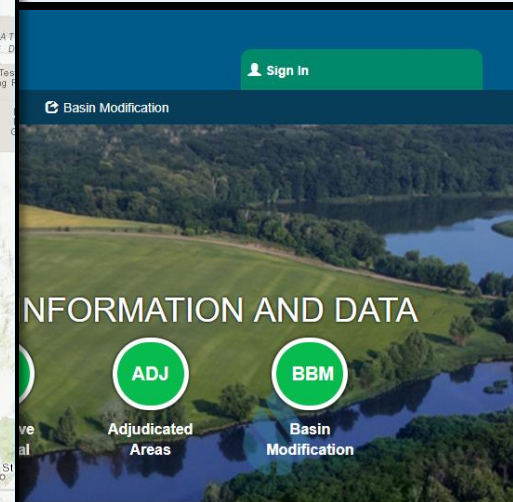


SGMA Portal

<http://sgma.water.ca.gov/portal/>



GSA Map



Watermasters to submit, modify, and view the information required by the
interested stakeholders to view submitted information and provide comments, where

Watermaster will only have access to the information that it has uploaded, as well as

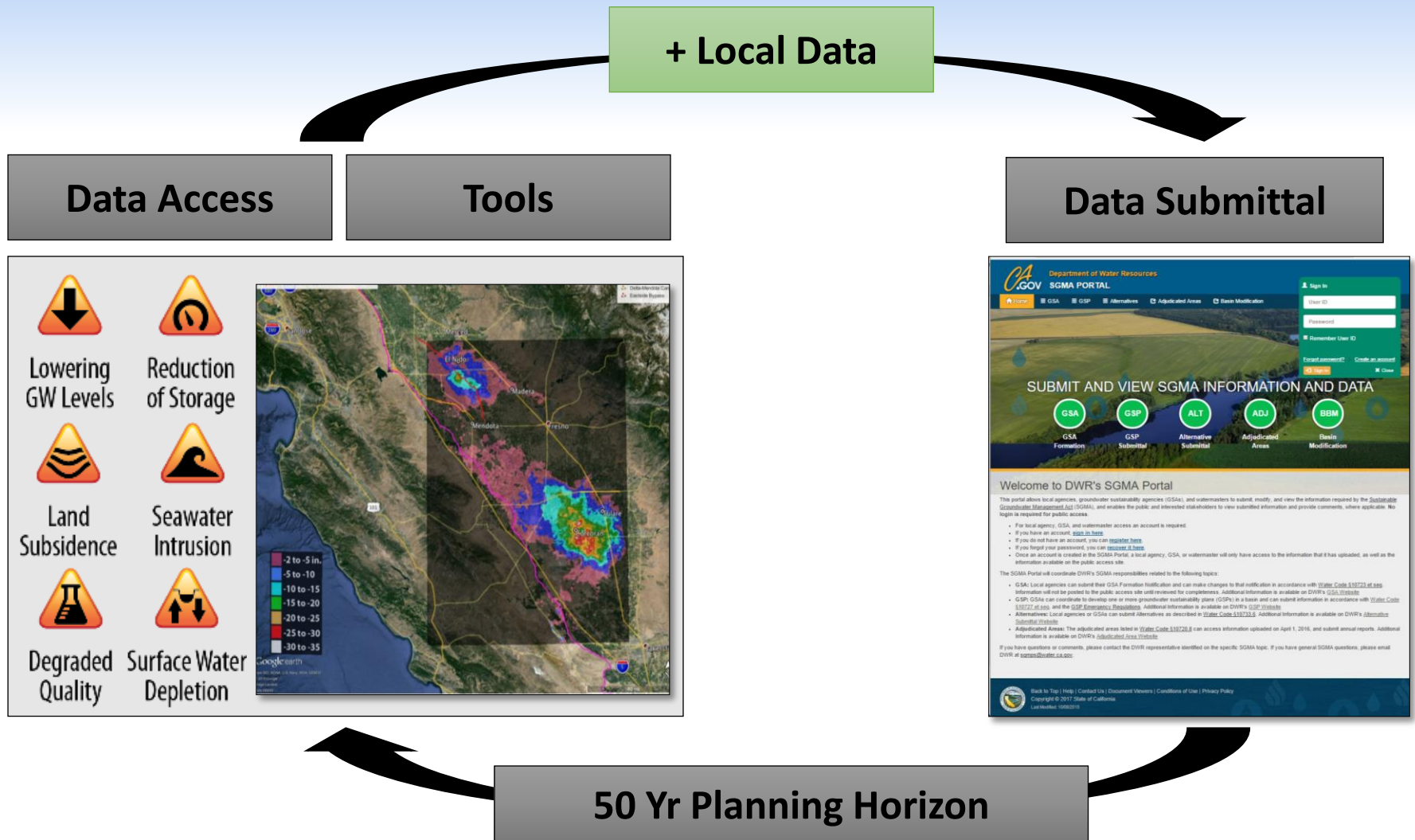
Topics:

Make changes to that notification in accordance with [Water Code §10723 et seq.](#)
Additional Information is available on DWR's [GSA Website](#)
Plans (GSPs) in a basin and can submit information in accordance with [Water](#)
Code §10733.6. Additional Information is available on DWR's [Alternative](#)

- Adjudicated Areas:** The adjudicated areas listed in [Water Code §10720.8](#) can access information uploaded on April 1, 2016, and submit annual reports.
Additional Information is available on DWR's [Adjudicated Area Website](#)

If you have questions or comments, please contact the DWR representative identified on the specific SGMA topic. If you have general SGMA questions, please email
DWR at sgmps@water.ca.gov

Flow of SGMA Data



DWR Contacts & SGMA Resources

DWR Sacramento:

- **Steven Springhorn**
Steven.Springhorn@water.ca.gov

SGMA Resources

- **DWR SGMP Webpage**
www.water.ca.gov/groundwater/sgm/index.cfm
- **Subscribe to DWR SGMP Email List**
www.water.ca.gov/groundwater/sgm/subscribe.cfm
- **DWR Data, Tools, and Reports Webpage**
www.water.ca.gov/groundwater/sgm/data_tools_reports.cfm

DWR Regional Offices:

