The Department of Water Resources (DWR) provides data, tools, and guidance to help Groundwater Sustainability Agencies (GSAs) develop, implement, and update Groundwater Sustainability Plans (GSPs), and fulfill the requirements of the Sustainable Groundwater Management Act (SGMA).

Data—Available Datasets

- SGMA Portal – Submit and view SGMA data: https://sgma.water.ca.gov/portal/
- Groundwater levels, water quality, and more:
  - Water Data Library: https://wdl.water.ca.gov/waterdatalibrary/
  - California Statewide Groundwater Elevation Monitoring: http://bit.ly/dwr-casgem
- CNRA Open Data Platform: https://data.cnra.ca.gov/
- Airborne Electromagnetic Surveys (AEM): https://data.cnra.ca.gov/dataset/aem

Additional related datasets:
  - Climate Change: https://data.cnra.ca.gov/dataset/sgma-climate-change-resources
  - Urban water use and land use: https://www.water.ca.gov/Programs/Water-Use-And-Efficiency
  - Precipitation, evapotranspiration, streamflow, and more: https://cimis.water.ca.gov/Default.aspx or at https://cdec.water.ca.gov/snow_rain.html

Tools—Interactive Maps

SGMA Data Viewer: https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer
The SGMA Data Viewer provides access to groundwater related datasets that are organized by the requirements of SGMA and the Groundwater Sustainability Plan (GSP) regulations for the purpose of supporting GSP development and implementation. ***Now with USGS CVHM2 Texture Data.***
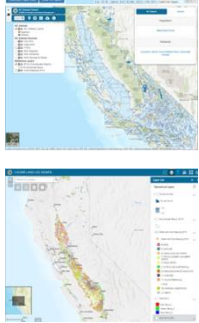
Natural Communities Commonly Associated with Groundwater (NCCAG) Dataset Viewer: https://gis.water.ca.gov/app/NCDatasetViewer/
The NC Dataset Viewer provides efficient access to the Natural Communities dataset and related source datasets, allowing both query and download of features in the NC Dataset and query of source data sets used in the development of the NC Dataset.
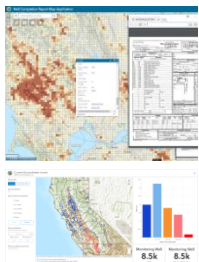
California DWR Land Use Viewer: https://gis.water.ca.gov/app/CADWRLandUseViewer/
The CADWR Land Use Viewer allows you to easily view and download both statewide (as recent as 2020 crop data) and existing county land use datasets that have been collected over the last 30+ years. The application also enables you to filter crop specific information and visualize land use change over time. Learn more about the Viewer in the Land Use Fact Sheet or view the SGMA Tech Talk webinar for a demo on how to use it.

California DWR Well Completion Report Map Application: https://gis.water.ca.gov/app/wcr/
The Well Completion Report Map Application provides direct statewide access to copies of Well Completion Reports. Well Completion Reports contain information collected by drillers during the drilling and construction of water wells, including the location, dates of construction, planned use, depth of the well, subsurface geologic units encountered, well construction, and well yield.

California's Groundwater Live: https://sgma.water.ca.gov/CalGWLive/
California's Groundwater Live provides the most relevant and recent groundwater information at the click of a button. The webpage also includes a series of interactive dashboards which allow users to interact and customize what groundwater data they would like to view. Users can filter the data by address, county, groundwater basin, well depth and even time period to see unique data summaries.

Water Management Planning Tool: https://gis.water.ca.gov/app/boundaries/
The Water Management Planning Tool is an interactive map application that allows you to overlay numerous Geographic Information Systems (GIS) layers onto a map of California. Each planning layer includes a brief description and a location or source where you can find additional information regarding that layer.
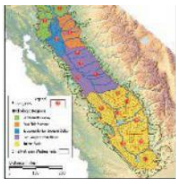
Tools—Models Provided by DWR

Integrated Water Flow Model (IWFM): IWFM is a water resources management and planning model that simulates groundwater, surface water, stream-groundwater interaction, and other components of the hydrologic system. Find out more at: https://water.ca.gov/Library/Modeling-and-Analysis/Modeling-Platforms/Integrated-Water-Flow-Model

California Central Valley Groundwater Surface Water Simulation Model (C2VSim): C2VSim applies the IWFM to Central Valley groundwater. C2VSim simulates the historical response of the Central Valley's groundwater and surface water flow system to historical stresses and can also be used to simulate the response to projected future stresses. Version 1.0 was released November 17, 2022. Find out more at: https://water.ca.gov/Library/Modeling-and-Analysis/Central-Valley-models-and-tools/C2VSim
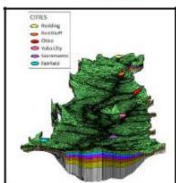
Sacramento Valley Simulation Model (SVSIM; Under Development): SVSim is a new model of the Sacramento Valley using the IWFM code and based on the C2VSim-Fine Grid dataset. This model supports more detailed analysis of streamflow depletion due to groundwater substitution transfers as well as supports the implementation of SGMA. SVSim has an updated representation of the hydrogeologic conceptual model and aquifer parameters based on an extensive lithologic texture analysis. It also has a more refined (smaller) horizontal grid along major waterways and more discretized vertical layering. Version 1.0 supersedes the SVSim Beta Version released in April 2020. Documentation of SVSim model design, input data development, and model calibration and sensitivity analysis is also available. Find out more at: https://data.cnra.ca.gov/dataset/svsim

For additional information on DWR's modeling tools, visit: https://www.water.ca.gov/Library/Modeling-and-Analysis

Reports and Guidance—Best Management Practices & Guidance Documents

Available for download: https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents

- **Monitoring Protocols, Standards and Sites**
- **Monitoring Networks and Identification of Data Gaps**
- **Hydrogeologic Conceptual Model**
- **Water Budget**
- **Modeling**
- **Sustainable Management Criteria (Draft)**
- **Resource Guide for Climate Change Data and Guidance**
- **Guidance for Climate Change Data Use During Sustainability Plan Development**
- **Stakeholder Communication and Engagement**
- **Engagement with Tribal Governments**

California Groundwater Recharge Information: https://data.cnra.ca.gov/dataset/california-groundwater-recharge-information

California's Groundwater (Bulletin 118): https://water.ca.gov/Programs/Groundwater-Management/Bulletin-118

- **California's Groundwater (Bulletin 118) Update 2020**
- **California's Groundwater Conditions Semi-Annual Updates (March 2023)**

Sign up to receive monthly Sustainable Groundwater Management Program Newsletters and regular updates: https://public.govdelivery.com/accounts/CNRA/signup/31790

For general SGMA inquiries, please email: SGMPS@water.ca.gov