



Sustainable Groundwater Management Program

Technical Assistance—Data, Tools, and Reports

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

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

Data—Available Datasets

- SGMA Portal – Submit and view SGMA data: <http://sgma.water.ca.gov/portal>
- Groundwater levels, water quality, and more:
 - Water Data Library: <http://www.water.ca.gov/waterdatalibrary/>
 - California Statewide Groundwater Elevation Monitoring (CASGEM): <http://www.water.ca.gov/groundwater/casgem/index.cfm>
- Additional related datasets:
 - Urban water use and land use. Find out more at: <http://www.water.ca.gov/landwateruse/>
 - Precipitation, evapotranspiration and temperature. Find out more at: <http://www.cimis.water.ca.gov/>, or at https://cdec.water.ca.gov/snow_rain.html

Upcoming Datasets for Climate Change Analysis and Water Budget Development: for 2030 and 2070 planning purposes, the following datasets below will be available. Please refer to the Climate Change Fact Sheet for more information:

http://www.water.ca.gov/groundwater/sgm/pdfs/SGMP_Climate_Change_Fact_Sheet.pdf

- Precipitation and reference evapotranspiration change factors
- Central Valley water diversions and deliveries
- Reservoir inflows and outflows
- Streamflows at select locations
- Information related to unimpaired flows throughout the state

Tools—Interactive Maps



California DWR Land Use Viewer— The CADWR Land Use Viewer allows you to easily view and download both statewide (as recent as 2014 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. Find out more at <https://gis.water.ca.gov/app/CADWRLandUseViewer/>



Well Completion Report Map Application — This interactive map provides 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. Find out more at <https://gis.water.ca.gov/app/WCR/>



Groundwater Information Center Interactive Map—This interactive map displays groundwater and subsidence data. The application allows users to view and download individual geographic information systems (GIS) layers containing geospatially referenced groundwater-related information. Find out more at <https://gis.water.ca.gov/app/gicima/>



Water Management Planning Tool—This interactive map displays jurisdictional boundaries. The application allows users to overlay various GIS boundary layers onto a map of California. Find out more at <https://gis.water.ca.gov/app/boundaries/>



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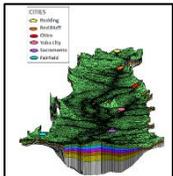
Tools—Models Provided by DWR



Integrated Water Flow Mode (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: <http://baydeltaoffice.water.ca.gov/modeling/hydrology/IWFM/>



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. This model is currently being enhanced and is expected to be available in early 2018. Find out more at: http://baydeltaoffice.water.ca.gov/modeling/hydrology/C2VSim/index_C2VSIM.cfm



Sacramento Valley Simulation Model (SVSIM; Under Development): SVSIM is being developed using the IWFM modeling platform, and is based on the C2VSim fine-grid dataset, allowing for more detailed analysis of stream depletion due to groundwater substitution transfers in the Sacramento Valley; anticipated release is early 2018.

For additional information on DWR's modeling tools, visit: http://water.ca.gov/groundwater/sgm/pdfs/DWR_Modeling_Tools_Fact_Sheet.pdf

Reports and Guidance—Best Management Practices



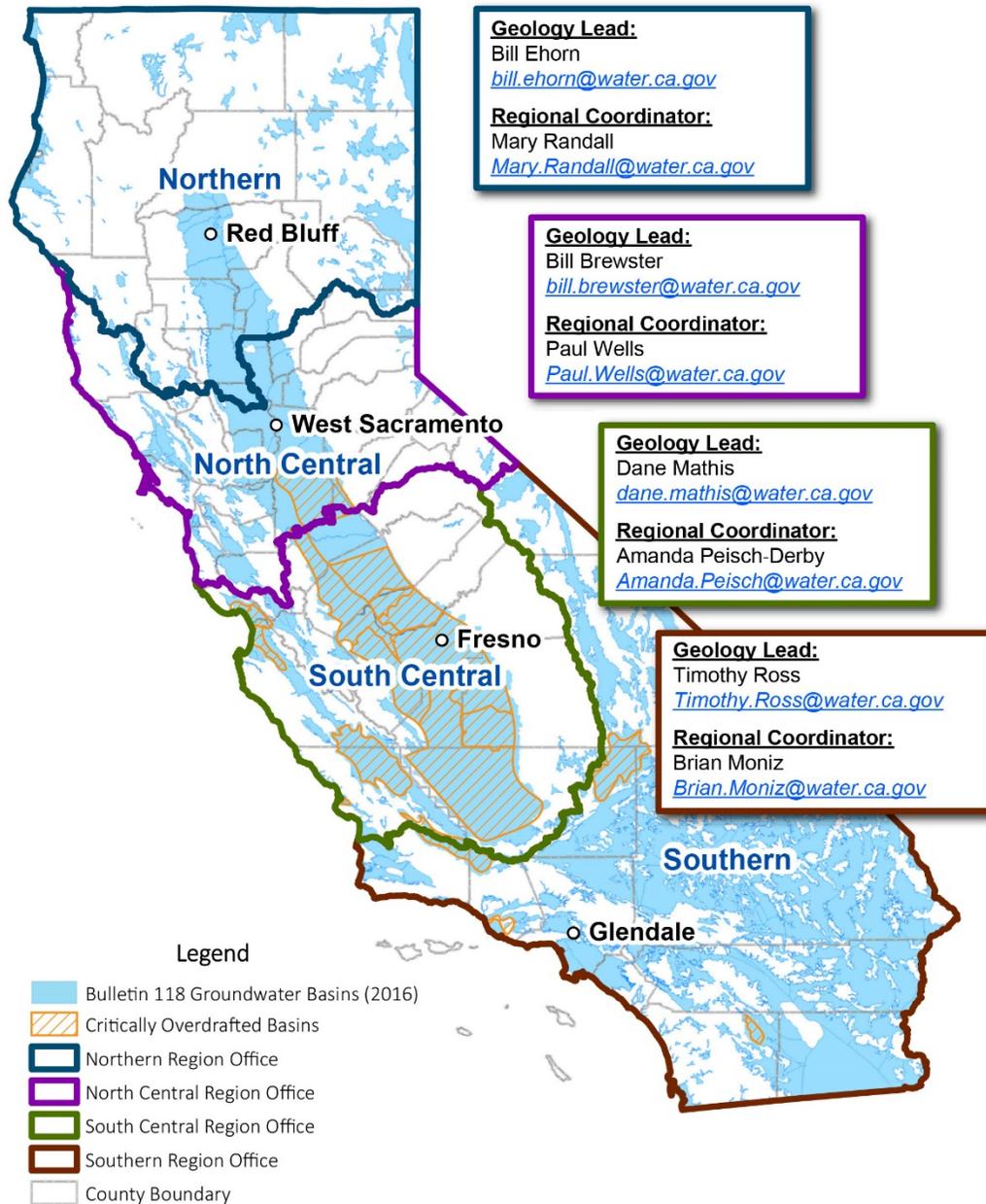
- Best Management Practice 1—**Monitoring Protocols, Standards and Sites**. Find out more at http://www.water.ca.gov/groundwater/sgm/pdfs/BMP_Monitoring_Protocols_Final_2016-12-23.pdf
- Best Management Practice 2—**Monitoring Networks and Identification of Data Gaps**. Find out more at http://www.water.ca.gov/groundwater/sgm/pdfs/BMP_Monitoring_Networks_Final_2016-12-23.pdf
- Best Management Practice 3—**Hydrogeologic Conceptual Model**. Find out more at http://www.water.ca.gov/groundwater/sgm/pdfs/BMP_HCM_Final_2016-12-23.pdf
- Best Management Practice 4—**Water Budget**. Find out more at http://www.water.ca.gov/groundwater/sgm/pdfs/BMP_Water_Budget_Final_2016-12-23.pdf
- Best Management Practice 5—**Modeling**. Find out more at http://www.water.ca.gov/groundwater/sgm/pdfs/BMP_Modeling_Final_2016-12-23.pdf

Reports and Guidance—Other Guidance Documents and Groundwater Reference Reports

- Preparation checklist for GSP submittal. Find out more at: http://www.water.ca.gov/groundwater/sgm/pdfs/GD_GSP_Checklist_Final_2016-12-23.pdf
- Annotated GSP outline. Find out more at: http://www.water.ca.gov/groundwater/sgm/GO_GSP_Outline_Final_2016-12-23.pdf
- Engaging with Tribal government. Find out more at: http://www.water.ca.gov/groundwater/sgm/pdfs/GD_Tribal_Final_2017-06-28.pdf
- Stakeholder communications and engagement. Find out more at: http://www.water.ca.gov/groundwater/sgm/pdfs/GD_C&E_Final_2017-06-29.pdf
- Sustainable management criteria. This item is under development.
- Guidance for performing climate change analysis. This item is under development.
- Groundwater References Reports:
 - Bulletin 118 Interim Update 2016. Find out more at: www.water.ca.gov/groundwater/bulletin118/update.cfm
 - California Groundwater Update 2013. Find out more at: www.water.ca.gov/waterplan/topics/groundwater/index.cfm



Sustainable Groundwater Management Program Regional Contacts



For more information about Sustainable Groundwater Management Program (SGMP) news and resources, subscribe to the twice-monthly SGMP newsletter:

www.water.ca.gov/groundwater/sgm/subscribe.cfm

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