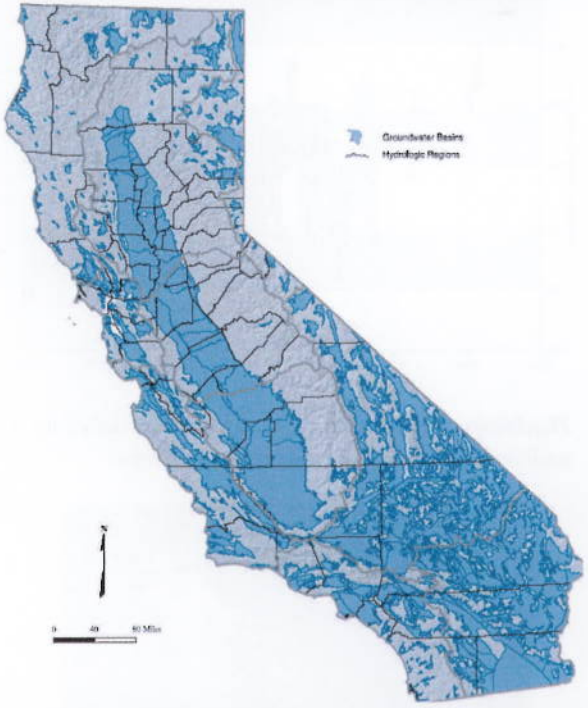
California's Groundwater Basins



Are Groundwater Elevations Now Monitored in California?

The Department of Water Resources' four region offices monitor groundwater elevations and report the data on DWR's Water Data Library (www.water.ca.gov/waterdatalibrary); however, those data are limited in some areas. Other agencies also collect groundwater elevation data, but are not required to make that data available to DWR for public use.

Implementation of the CASGEM Program will establish a statewide monitoring network for all of California's groundwater basins, and will allow that data to be used to plan for future water supply demands.

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Timeline

Preparing to Implement CASGEM:

Summer 2010. Public Workshops

Fall 2010.

- Develop, solicit public comments, and finalize program guidelines
- Develop online monitoring entity notification and data submittal system
- Local agencies work together to identify prospective monitoring entity for their basin/subbasin

Late Fall 2010.

- Online system ready for submission of monitoring entity notifications
- Prospective monitoring entities submit notifications to DWR

January 1, 2011. Notifications due to DWR

Spring and Summer 2011. Designated monitoring entities submit monitoring network plan to DWR

January 1, 2012.

- Monitoring entities begin submitting groundwater level data
- DWR submits first CASGEM status report to Governor and Legislature

California Statewide Groundwater Elevation Monitoring Program

CASGEM Program

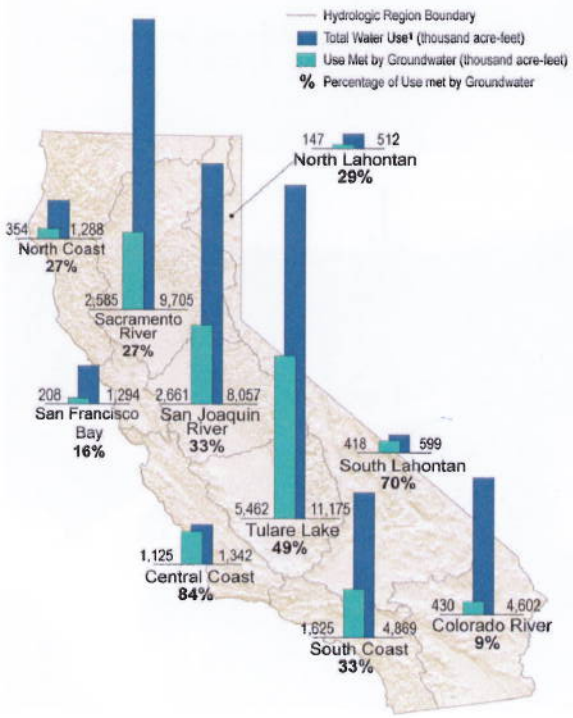
Why Is CASGEM Important?

Department of Water Resources (DWR)
California Natural Resources Agency
State of California

Why Is CASGEM Important for Management of California's Groundwater?

Why Is Groundwater Important To California's Water Supply?

Groundwater accounts for about 30 percent of California's total water supply. In dry years, this increases to over 40 percent. Some coastal basins, cities, and rural areas are entirely dependent upon groundwater for their water supply. With a projected population of 46 million by the year 2020, California will need to rely on groundwater even more.



Blue bars are total water used

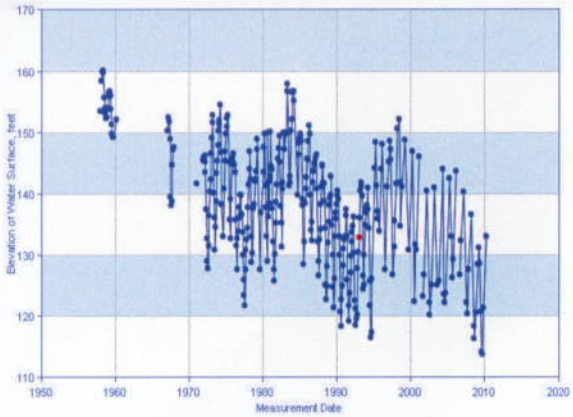
Green bars are the percentage of total water used that was groundwater

How Will CASGEM Program Help With Groundwater Management?

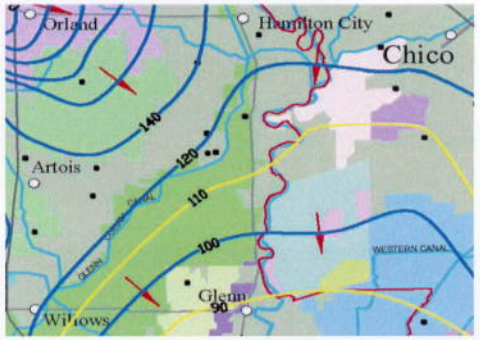
CASGEM (pronounced KASjem) provides a mechanism for local entities to be active in groundwater monitoring in their basins. It expands the current groundwater elevation monitoring to all 515 of California's groundwater basins. This monitoring allows interested parties to evaluate groundwater conditions and identify areas where there are problems, such as overdraft, occurring within a groundwater basin.

Even if there are no problems currently occurring within a basin, the baseline data that will be collected as part of this program can help to detect future problems before there is damage, such as subsidence, in a groundwater basin.

The data will be compiled in a statewide database that is available to the public. The goal is to determine seasonal and long-term trends in groundwater elevations within the basins. DWR will produce a summary report to the Governor and the Legislature in 2012 and 2015, and every 5 years thereafter.



Hydrographs *depict groundwater elevations in a well or wells over the measurement period.*



Groundwater elevation contour maps *depict groundwater elevations and flow directions.*

What Will CASGEM Data Tell Us About Groundwater Conditions?

Groundwater elevation measurements can be used in many ways to evaluate groundwater conditions within a basin. Two of the most common ways are to use the data to create hydrographs and groundwater elevation contour maps.

Full details on CASGEM Program are available online: www.water.ca.gov/groundwater/casgem