

Availability Of Ground-Water Data For California, Water Year 1998

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with Federal, State, and local water agencies, obtains a large amount of data pertaining to the ground-water resources of California each water year. These data constitute a valuable data base for developing an improved understanding of the water resources of the State. Beginning with the 1985 water year and continuing through 1993, these data were published in a report series entitled "Water Resources Data for California, Volume 5. Ground-Water Data." Prior to the introduction of this series, historical ground-water information was published in U.S. Geological Survey Water-Supply Papers.

In 1994, the Volume 5 Ground-Water Data report was discontinued, but data continue to be available in our data bases. This Fact Sheet serves as an index to ground-water data for 1998. The 2-page report contains a map of California showing the number of wells (by county) with available water-level and water-quality data for the current water year (fig. 2) and instructions for obtaining this and other ground-water information contained in the data bases of the Water Resources Division, California District.

HYDROLOGIC CONDITIONS

Because the geography and geology of California are so complex, ground-water conditions are difficult to summarize. Ground-water levels fluctuate in response to various stresses and changes in stress. Recharge and discharge are affected by short- and long-term climatic by short- and long-term climatic

conditions and also by ground-water withdrawals and irrigation.

DATA COLLECTION

WATER-LEVEL MEASUREMENTS

Measurements of water levels are made in many types of wells under varying conditions, but the methods and equipment are standardized to ensure that these measurements are consistently accurate and reliable. All water levels in the California data base are given in feet with reference to land-surface datum.

WATER-QUALITY MEASUREMENTS

The quality of ground water ordinarily changes slowly; therefore, a single annual sampling usually is sufficient. When the quality of ground water is likely to change rapidly because of special circumstances, more frequent sampling is done to identify the nature of the change.

WELL-NUMBERING SYSTEM

Wells and springs in California are assigned numbers according to their location in the rectangular system for the subdivision of public

land. For example, in the number 005S012E22P001M (fig. 1), the first four characters indicate the township (T. 5 S.), and the next four characters indicate the range (R. 12 E.); the digits following the range indicate the section (sec. 22); the letter following the section indicates the 40-acre sub-division of the section. Within each 40-acre sub-division, the wells are numbered serially, as indicated by the last three digits. The final letter indicates the baseline and meridian designation as follows: H, Humboldt; M, Mount Diablo; S, San Bernardino. This 15-digit number is called the Local Number or State Well Number.

Information for an area may be requested using all or part of the Local Number (township/range/section) or by defining a latitude/longitude polygon.

DATA AVAILABILITY

Data are available on paper, floppy disc, or magnetic tape, by ftp transfer, or by internet e-mail in table or flatfile format. For more information on how to obtain data, send e-mail or call: pshiffer@usgs.gov for northern California data (916) 278-3100; jahuff@usgs.gov for southern California data (619) 637-6823.

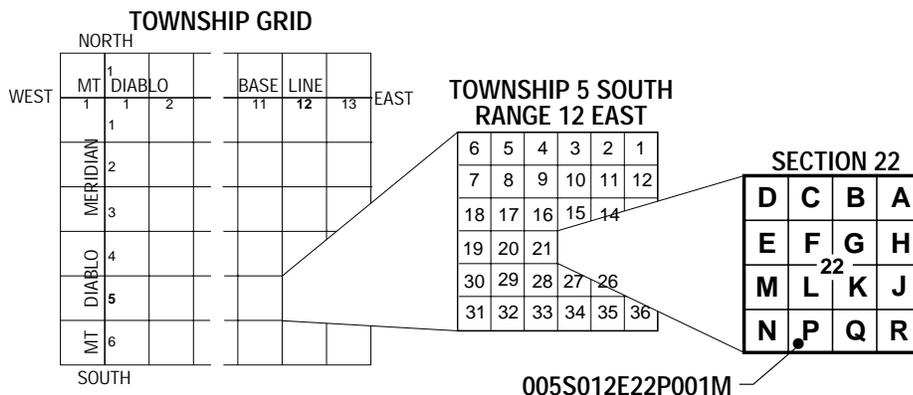


Figure 1. Well-numbering system.

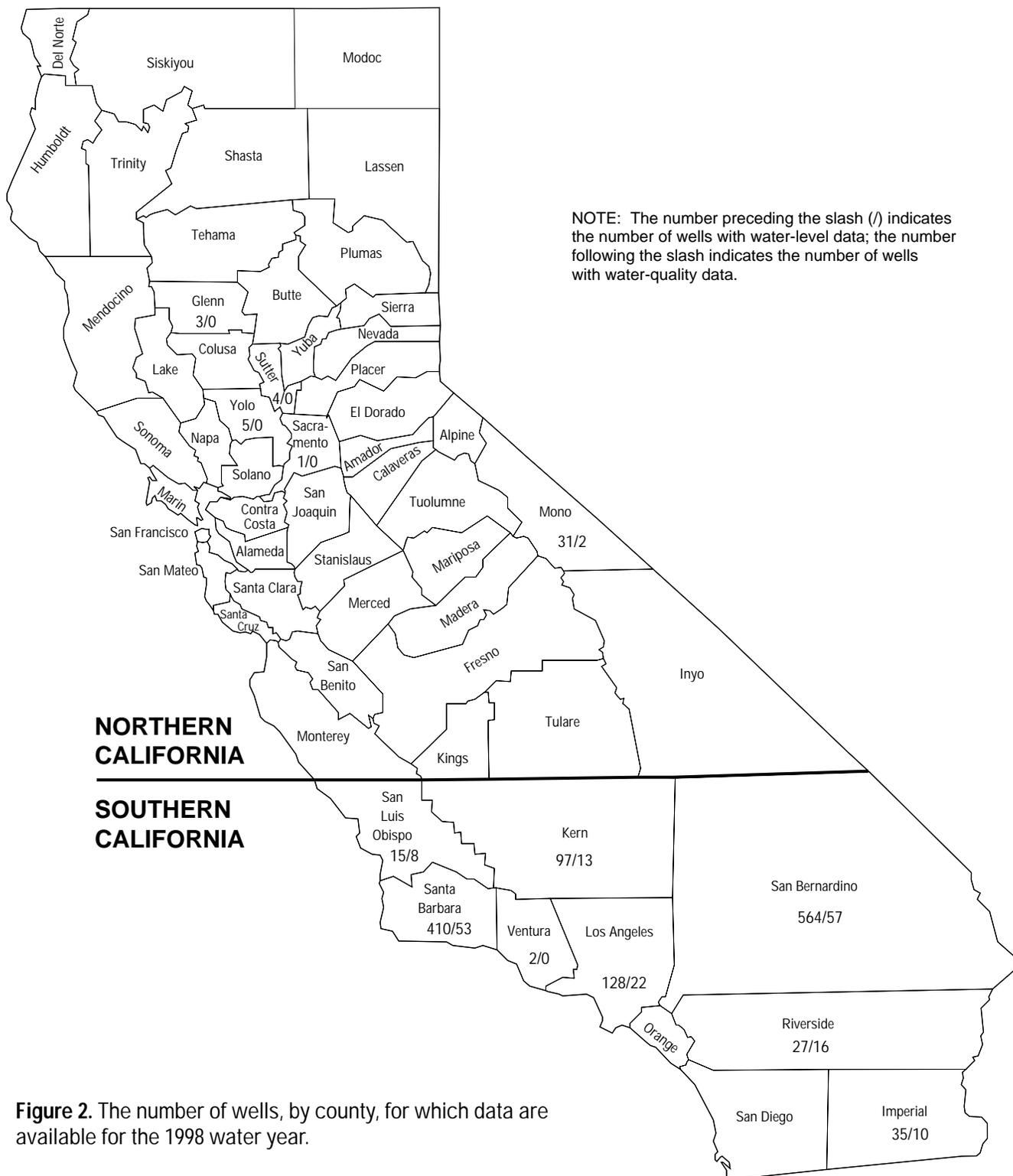


Figure 2. The number of wells, by county, for which data are available for the 1998 water year.

For more information on ground water in California please write:
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Access this fact sheet and other U.S. Geological Survey water resources information at:
<http://water.wr.usgs.gov>