

Water Facts

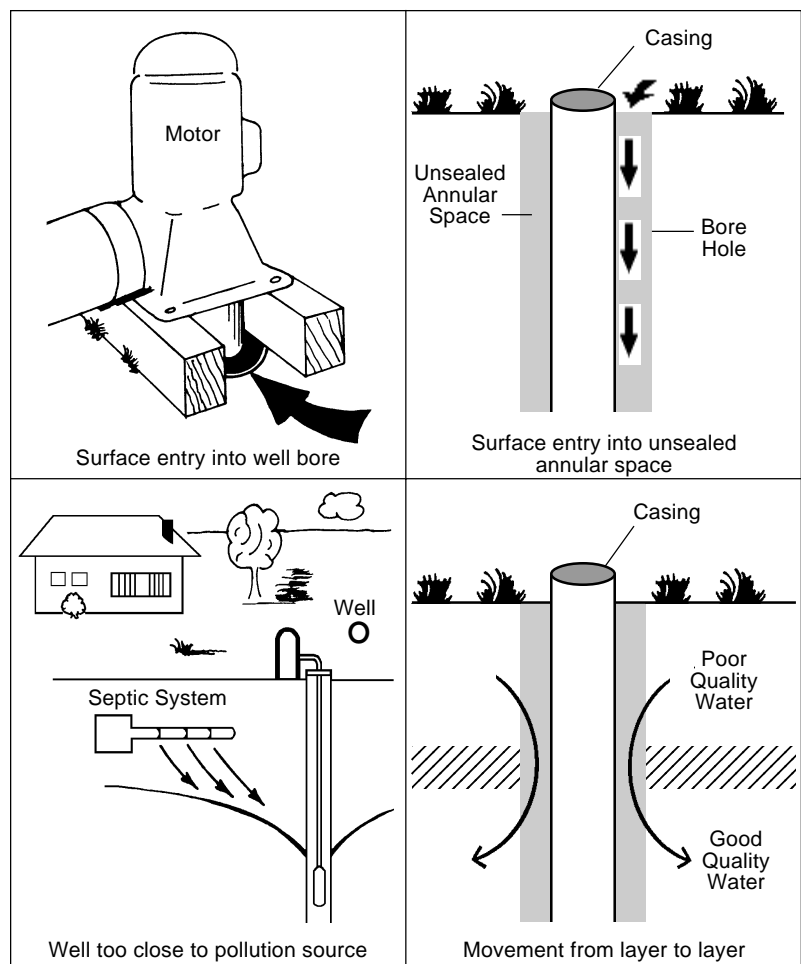
State of California
The Resources Agency
**Department of
Water Resources**



California Well Standards Questions & Answers

During normal years, almost 40 percent of California's water supply comes from ground water. It is used for agricultural, industrial, domestic, and municipal purposes. This is a significant amount of water; therefore, protecting the quality is essential.

California Water Code Section 231 requires the California Department of Water Resources to develop well standards to protect California's ground water quality. DWR Bulletin 74-90 (Supplement to Bulletin 74-81), *California Well Standards, Water wells, Monitoring wells, Cathodic protection wells, June 1991*, contains the *minimum* requirements for constructing, altering, maintaining, and destroying these types of wells. The standards apply to all water well drillers in California and the local agencies that enforce them. (To get a copy of the standards, see details on page 4.) This *Water Facts* answers five commonly-asked questions about DWR's well standards.



Some Causes of Ground Water Pollution

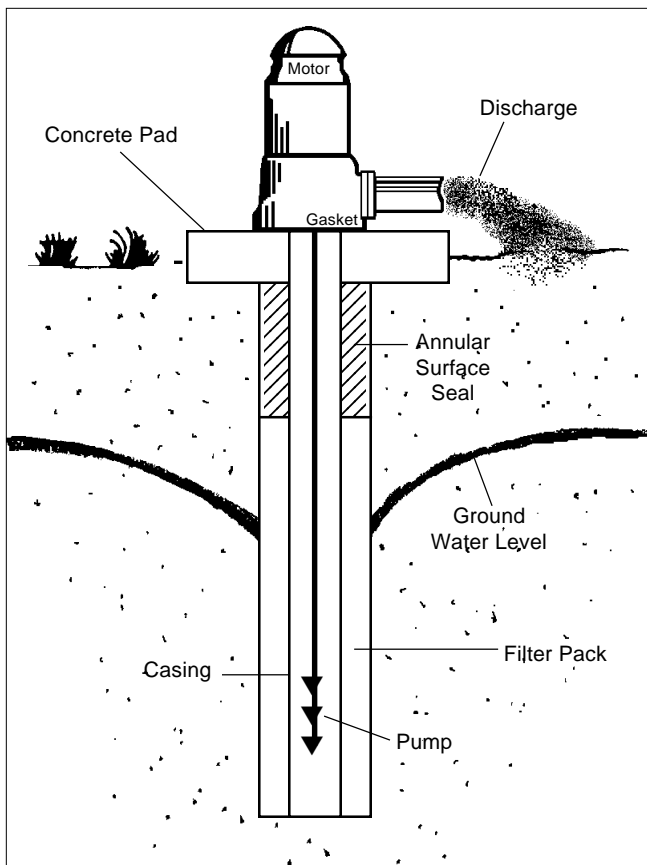
Water Facts are short reports on water resources issues of general interest. They are published periodically by the California Department of Water Resources and can be obtained free by contacting DWR Bulletins & Reports, P.O. Box 942836, Sacramento, CA 94236-0001; 916/653-1097.

1 Why are DWR's well standards necessary?

DWR's well standards provide **minimum** standards for the construction, alteration, maintenance, or destruction of wells to prevent pollution of ground water. Ground water is polluted when poor-quality water or chemicals enter a well from the surface and that well provides a conduit for the pollution to enter the ground water. Pollution also occurs when poor-quality ground water or chemicals already in an underground layer enter a well and then move through the well to another layer containing good-quality water.

2 What do DWR's well standards cover?

By law, DWR is responsible for issuing standards for constructing, altering, maintaining, and destroying wells to prevent pollution. DWR issues standards for three types of wells—**water wells, monitoring wells, and cathodic protection wells.**



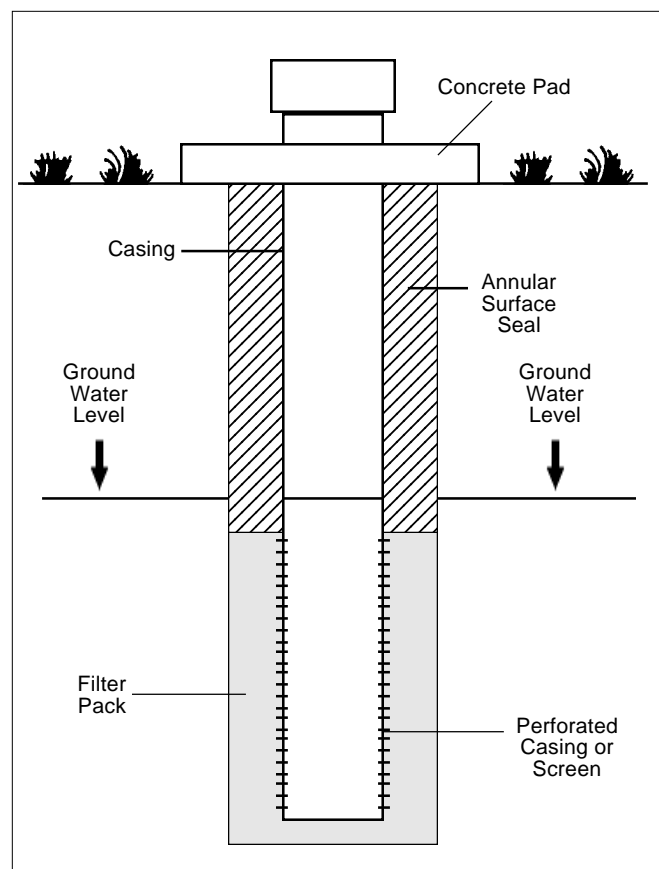
Water Well

Items addressed by DWR well standards include:

- Setback of wells from pollution sources
- Casing materials
- Annular seal dimensions and materials
- Surface features—pads, locks, covers, backflow preventers, vaults
- Well development
- Disinfection
- Repair
- Destruction

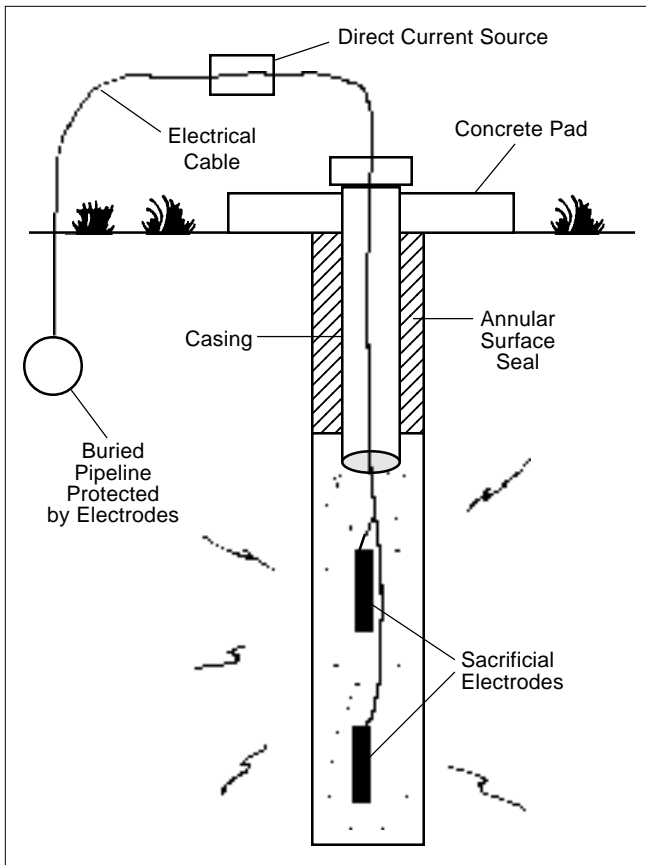
Water wells are used to supply water for drinking, industrial processing, and irrigating.

Monitoring wells are specialized wells in which the depth to ground water can be measured and samples of ground water can be collected for analysis.



Monitoring Well

Cathodic protection wells are holes in the ground in which pieces of metal (electrodes) are buried. These metal pieces are connected with electrical wire that runs up to the surface and is connected to a source of direct current. The flow of electricity between the pipeline and the electrode is reversed so the sacrificial electrode corrodes instead of the pipeline or storage tank.



Cathodic Protection Well

3 What don't DWR's well standards cover?

DWR's well standards **do not** provide requirements for the proper function of a well. They **do not** address how much water or the quality of water a well should produce. They **do not** require monitoring wells to be properly built to provide good groundwater depth measurements or representative water samples. And they **do not** require cathodic protection wells to function properly.

DWR's well standards are designed to prevent wells from becoming a conduit for polluting good-quality ground water. Other agencies may have performance standards (see number 5).

4 Who enforces DWR's well standards?

Local governments, counties, cities, and some water districts are responsible for enforcing standards that are either equal to or more stringent than DWR's well standards. These agencies usually require permits for well construction. They also conduct inspections to make sure the wells are constructed properly.

To determine who enforces well standards in your community, contact your local county environmental health department.

5 Do other state agencies have well standards too?

Yes. For special types of wells, performance standards are required by other agencies in addition to DWR's ground water quality protection well standards.

The *California Department of Health Services, Office of Drinking Water*, has special requirements for public water supply wells to protect public health. Public water supply wells supply drinking water to 15 or more service connections. The DHS Office of Drinking Water, and sometimes local agencies, enforce these standards.

The *California Department of Toxic Substances Control* has recommended standards for constructing ground water monitoring wells at hazardous waste sites. The purpose of these recommended standards is to ensure that these wells provide accurate information about chemicals in ground water in toxic areas. DTSC approves design of wells built for obtaining samples for chemical analysis.

The *State Water Resources Control Board* has requirements for constructing ground water monitoring wells at regulated facilities, such as municipal landfills and gasoline stations with underground tanks. The *State Water Board* and its *Regional Water Quality Control Boards* enforce these standards. The *U. S. Environmental Protection Agency* has published standards for some types of wells.

How do you get more information about DWR's well standards?

For more information contact DWR's well standards coordinator at:

Department of Water Resources
Division of Local Assistance
P. O. Box 942836
Sacramento, CA 94236-0001
(916) 327-8861

Or contact your local DWR District Office:

Northern District (916) 527-6530
2440 Main Street
Red Bluff, CA 96080-2398

Central District (916) 322-7164
3251 "S" Street
Sacramento, CA 95816-7017

San Joaquin District (559) 230-3300
3374 E. Shields Avenue
Fresno, CA 93726-6990

Southern District (818) 543-4600
770 Fairmont Avenue
P. O. Box 29068
Glendale, CA 91209-9068

How do you get a copy of DWR's well standards?

For a copy of DWR's well standards contact:

Department of Water Resources
Bulletins & Reports, Room 338
P. O. Box 942836
Sacramento, CA 94236-0001
(916) 653-1097

DWR's well standards are free to California-licensed water well drillers and the local agencies responsible for enforcing them. The standards are available to all others for \$10 a copy (plus sales tax).

How do you get more information about other agencies' well standards?

For information about other agencies' well standards contact any of the following:

State Water Resources Control Board
Division of Clean Water Programs
P. O. Box 944212
Sacramento, CA 94244-2120
(916) 739-4400

Department of Health Services
Office of Drinking Water
601 North 7th Street
P.O. Box 942732
Sacramento, CA 94234-7320
(916) 323-6111

Department of Toxic Substances Control
P. O. Box 806
Sacramento, CA 95812-0806
(916) 255-2007

U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105
(415) 744-1924