



# Domestic Wells

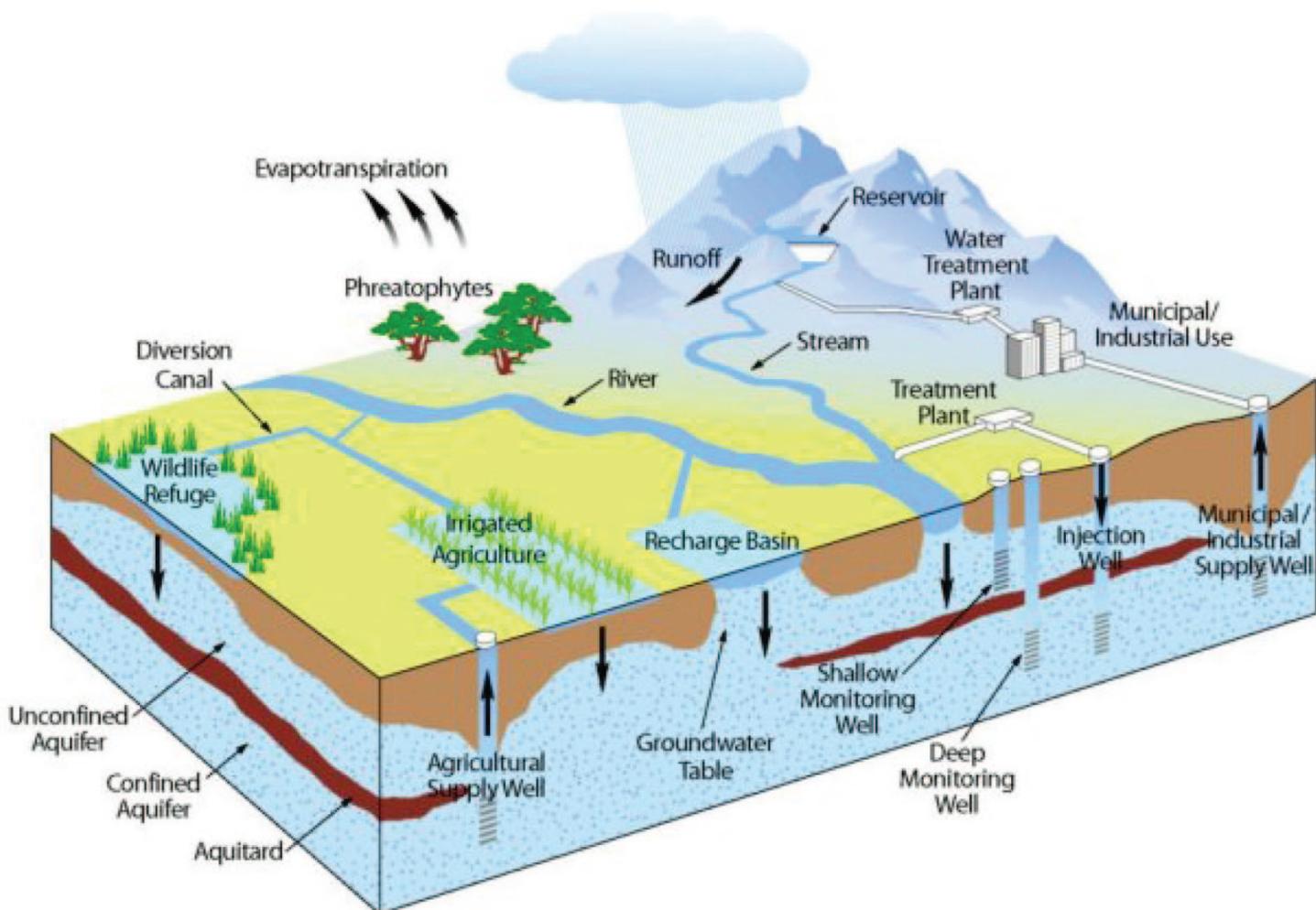
Many property owners in Butte County receive their water via private domestic wells. Like any other aspect of property ownership, wells require regular, ongoing maintenance. However, well maintenance is extensive and is important to the health of your family and property.

## What is a Well?

Simply stated, a well is a hole drilled into the earth to access groundwater stored in underground aquifers. A well may be constructed by digging, drilling, driving or boring a hole, into which slotted plastic or metal well casing is placed and a pump is installed to pump the water out. Well depth will depend on the specific intended use for the well. Is it for domestic use or for agricultural purposes? There can also be wide variations in necessary well depth, water volume and water quality, even in wells on the same property, due to the physical properties below the ground surface, or the hydrogeology.

## Keeping Your Well – and Water – Safe

Private well owners are responsible for ensuring their water is safe because the water quality of private wells is not regulated. The construction and abandonment of wells is regulated. Wells must be drilled and constructed properly under permit from the Butte County Environmental Health Division as defined in Chapter 23 of the Butte County Code. Properly constructed wells have a seal installed around the upper well casing to reduce the chance of contaminants entering the well. Once a well is installed, maintenance becomes your responsibility. Maintenance of your well and regular testing of your water will help ensure your water is of high quality and safe to use. Should you ever choose to abandon a well, you must first obtain a permit through the Butte County Environmental Health Department just as you would for constructing a well. It is your responsibility to maintain your well, monitor your water quality and help protect the quality of drinking water in Butte County.



## Water Quality Testing

Having your water tested regularly will help you become aware of a potential problem early so you can take steps to address and resolve it. Testing your water is important because, although your water may taste and smell fine, the only way to know for sure that your water is safe is by testing it. Harmful bacteria or chemicals that you cannot see, smell or taste could be present. Water testing is important because it:

- Helps you identify if contaminants are present
- Tells you how much contaminant is present
- Establishes a comparison with past or future results

Water tests should be conducted regularly. As a guideline:

- **Bacteriological** tests should be conducted at least twice a year.
- **Volatile Organic Compounds and Pesticides** tests should be conducted at least once every three to five years.
- **Nitrates and Metals** tests should be conducted at least once every five years.

Water quality tests should be conducted by a professional, State certified laboratory. You may obtain laboratory information by calling the Butte County Environmental Health Offices at 530-538-7281 or 530-891-2727.

## Well Maintenance

In addition to monitoring water quality, it is recommended that you perform routine annual maintenance checks to ensure the proper operation of your well to prolong its years of service. The maintenance activities recommended include:

- Flow test
- Pressure test
- Pump motor test
- General inspection to ensure compliance with local codes
- Water testing for bacteria, chemicals and other contaminants



Regular maintenance will not only ensure the safety of your water, but will also alert you to any problems that need attention and ensure the continued efficient operation of your well.

## Potential Natural Impacts to Wells

Wells are influenced by natural occurrences as well as the man-made impacts discussed above. Power outages and consistent demands during peak-use hours can influence both pump efficiencies and levels of contaminants drawn into your water supply. Drought conditions occur when there is a lack of precipitation over an extended period of time, usually one season or more in length, resulting in a water shortage. Drought conditions may lower the level of water available in underground aquifers, resulting in less water available via a private well and performance issues with your well pump.

There are many resources available that provide additional information about well maintenance and safety. Please review the below listed resources, or visit <http://www.buttecounty.net/waterandresource> for more information.

### Resources

#### Butte County Public Health Department Division of Environmental Health

202 Mira Loma Drive

Oroville, CA 95965

530-538-7281 or 530-891-2727

<http://www.buttecounty.net/publichealth/environmental/land.html>

#### State of California Central Valley Regional Water Quality Control Board Central Valley Region

415 Knollcrest, Suite 100

Redding, CA 96002

530-224-4845

<http://www.waterboards.ca.gov/centralvalley/>

#### U.S. Environmental Protection Agency

Office of Ground Water and Drinking Water

1200 Pennsylvania Avenue, NW

Washington, DC 20460

The Safe Drinking Water Hotline: 800-426-4791

<http://www.epa.gov/safewater>

*The Butte County Department of Water and Resource Conservation's Watershed Education and Outreach Project is designed to share information on a variety of water-related topics that are important to residents of Butte County. There are multiple interrelated watersheds in Butte and Tehama Counties that are affected by our actions. Watershed protection is important not only for the health of the natural environment, but for all of us, too. Funds for this project have been provided by a grant from the CALFED Watershed Program and administered by the Department of Water Resources. For more information about the Watershed Education and Outreach Project, please visit <http://www.buttecounty.net/waterandresource/>.*