

# Plumas County Environmental Health

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## Well Manual

### Information On the Well Installation and Permit Process

FOR MORE INFORMATION CONTACT ENVIRONMENTAL HEALTH

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PO Box 1194  
Chester, CA 96020  
Phone: (530) 258-2536  
Fax: (530) 258-2844

**Quincy Office:**  
270 County Hospital Rd. Rm. 127  
Quincy, CA 95971  
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Visit our web site at  
[www.countyofplumas.com/publichealth/envhealth](http://www.countyofplumas.com/publichealth/envhealth)

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## I. Introduction

Congratulations on beginning the well drilling process! Often, this is the first step taken towards making property buildable and habitable. No matter your walk of life – a recent retiree, frequent vacationer, or younger property owner – this is an exciting beginning.

In this manual you will find information on the well application and permitting process, details on requirements for well location, and advice about protecting your well from contamination. In addition, a list of well drillers in the area is provided for your convenience.

We are pleased to assist you throughout this process. If you have any questions that are not addressed or answered in this manual, please do not hesitate to call. We can be reached in Quincy at (530) 283 – 6355 and in Chester at (530) 258 – 2536.





## II. Well Location and Construction Requirements

The most important consideration to take into account with well location is all potential sources of contamination. The following setbacks must be met in order to protect groundwater quality.

### Minimum Separation Distances in Feet

Sources of Contamination	Public Water Well	Domestic Water Well
Septic Tank	50	50
Leachfield, Leach trench or other sewage infiltration system	100	100
Sewer lines	50	50*
Perennial Surface Water including lakes, streams, and ponds	100	50
Community Water system mains and laterals	NA	NA

\* May be reduced to 25 feet if the sewer line is constructed of materials approved for use in a building.

#### **Location:**

Some parcels have designated well or septic sites. If applicable, you are required to drill your well within this area. Exceptions are allowed only with careful consideration of your parcel and adjacent parcels, and when allowed by the recorded subdivision map.

There are greater limitations on the location of septic systems; installation of a well can severely limit placement, or prohibit the use, of an on-site septic system. Environmental Health strongly recommends obtaining a septic permit prior to or along with a well permit.

Wherever possible, wells should be located up the groundwater gradient from potential sources of pollution or contamination. This can provide an extra measure of protection for the well. Wells should also be located outside areas that are subject to flooding.

All wells should be located an adequate distance from buildings and other structures to allow access for well modification, maintenance, repair, and/or destruction

**Construction:**

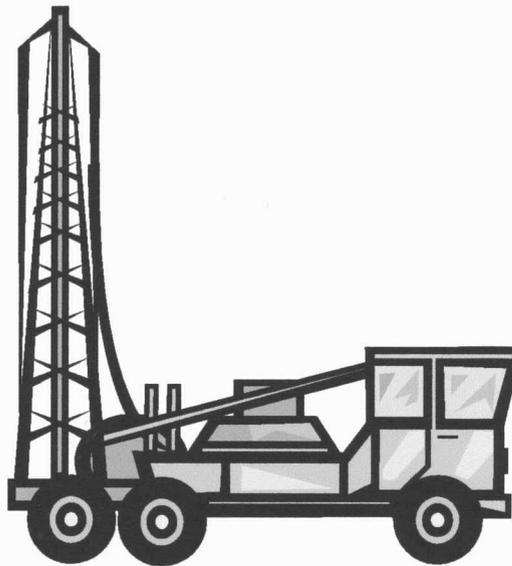
Proper construction of your well will allow for the maximum protection of your drinking water. The following requirements will be verified upon final inspection of the well.

Wells must be drilled to a minimum depth of fifty (50) feet.

The space between the well casing and the wall of the drilled hole (called the annular space) must be sealed to a minimum depth of twenty (20) feet [a minimum of fifty (50) feet for commercial or community wells]. This prevents contamination of well water by surface pollutants and run-off.

Additional protection of your drinking water can be obtained by the placement of a concrete pad extending at least twelve (12) inches out from the well casing and sloping slightly down and away from the casing. This will direct surface water and potential pollutants away from the well. If you intend to build a well house or cover, this pad can also serve as the foundation or flooring for this structure. Although constructing a concrete pad is recommended, it is not required.

**Wells that are to be used for shared, public, commercial or community services have additional regulations and requirements that apply. Please contact our office for further information.**



### III. Well Installation Application Procedure

This application procedure is for domestic (residential) well, agriculture/irrigation or community well. *Shared, public, commercial and community wells may have additional regulations that apply. Please contact our office for further information.*

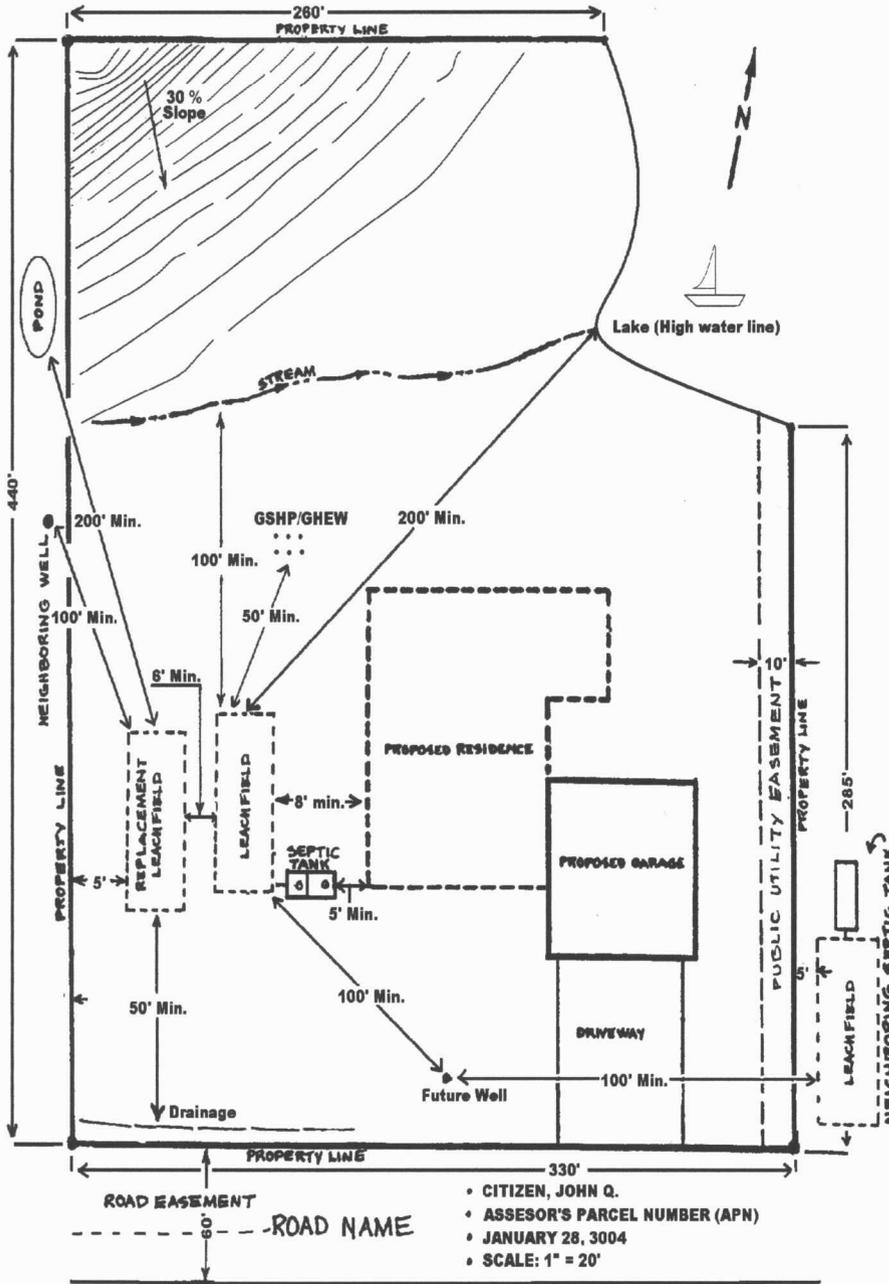
In addition to a completed well, an approved sewage disposal system must be in place before the Planning and Building Services Agency will issue a Certificate of Occupancy.

Only a State licensed and bonded C-57 Drilling contractor is authorized to drill a well.

1. Submit the completed Sewage Disposal System Application and preliminary plot plan drawn to scale on an 8 ½" X 11" sheet to the Planning and Building Services Agency with the appropriate fee. Follow the instructions given on the Sample Plot Map on page seven (7). *Environmental Health strongly recommends obtaining a septic permit prior to or along with a well permit. There are greater limitations on the location of septic systems; installing a well first can severely limit placement, or prohibit the use, of an on-site septic system.* Please note that a water supply permit application can be processed concurrently with a building permit for new construction.
2. After the application has been processed by the Planning and Building Services Agency, including review and approval of land use and set back requirements, it will be forwarded to Environmental Health.
3. With the approved permit and preliminary plot plan, the applicant will have all of the information necessary to construct the system, including the size, configuration and special conditions of installation. Construction may commence at this time.



# SAMPLE PLOT PLAN DIAGRAM



1. Plot plan to be drawn on 8 1/2" x 11" paper, in ink or otherwise indelible.
2. In the lower right corner: List the parcel owner's name and current mailing address. List the date of the plot map, Assessor's Parcel Number (APN), address and lot number if applicable
3. Indicate Scale (example 1" = 20')
4. True North Arrow
5. Indicate location of any survey monuments and how property corners/lines can be located by the Environmental Health inspector.
6. Show location(s) of existing and/or proposed well's (within 100 feet of proposed leach area) and any public water supply main (within 10 feet).
7. Show all existing and/or future leach area(s).
8. Show all of the following that are within 200 feet of proposed leach area(s): year-round and seasonal watercourses (streams, springs etc.), drainage, bodies of water, meadows and wet marshy areas.
9. Show all cut or fill banks and natural escarpments in excess of 50% slope within 100 ft of leach area.
10. Show area of current and/or future buildings and structures.
11. Show all roadways, easements, areas of vehicular traffic, driveways and off-street parking.
12. Show location of proposed/current Geothermal Heat Exchange Wells (GHEW).
13. Show locations of all soil profiles, percolation test and piezometers.

#### IV. Permit Processing Procedures

1. After the application has been processed by the Planning and Building Services Agency, it will be forwarded to Environmental Health.
2. A representative from Environmental Health will go to your property to approve the location of the proposed well. In order for Environmental Health to approve your well permit application the proposed well site location must be marked (i.e. - staked) and clearly labeled. Other property features such as building sites, buried septic systems, leach fields, sewer lines etc., should also be marked to facilitate measurements.
3. After the location has been approved, Environmental Health will issue a permit. **This permit is valid for a period of one (1) year from the date of issue.** The permit will be mailed to the applicant or well driller as requested.
4. With the approved permit and preliminary plot plan, the applicant will have all of the information necessary to construct the system, including the size, configuration and special conditions of installation. Construction may commence at this time.
  - a. A representative from Environmental Health must perform the final inspection, which includes witnessing placement of the upper sanitary seal. Twenty-four (24) hour notice is **required** for scheduling of (this is usually scheduled by the driller) well seal inspections. Please contact Environmental Health at least 24 hours in advance to schedule a well seal inspection and every effort will be made to accommodate the time and date requested.
  - b. After the well is completed, the driller must submit a well log. **Environmental Health must receive a copy of the well log within thirty (30) days of drilling the well.** Final approval permit of your well cannot be completed until Environmental Health receives your well log.



**V. Permit Expiration and Extensions**

Water well permits are valid for one (1) year from date of issue. Approximately thirty (30) days prior to the permit expiration date, the applicant will receive written notification from Environmental Health that your permit is about to expire. If the well is not drilled within this thirty (30) day period, and Environmental Health has not been contacted to perform a final inspection, the permit will expire and a new application and fee must be submitted to complete the project.

**Extensions will be considered, provided the original permit *has not expired*. Once the original permit expires, a new well application and fee must be submitted.**



**VI. Permit Fees**

Permit fees are updated annually, please call our office at 530-283-6355 or Plumas County Planning & Building Services at 530-283-7005 for current fee information.



## VII. How to Care For Your Well



Prior to first use of your well it is advisable to disinfect the water since contaminants may have been introduced during the drilling or building process. This department also recommends disinfecting your well after flooding, work on the well pump, or any other action or activity that would compromise the water quality in your well. To disinfect your well, follow these steps:



- 1) Close all faucets.
- 2) Pour one (1) gallon of household bleach into the top of the well casing.
- 3) Go to the farthest point to which water will be carried in your home and open the faucet. Let water run until you smell chlorine **then immediately close the faucet**. Follow this same process for all other faucets, one at a time.
- 4) Allow the chlorine to remain in the system for 24 hours without any water usage.
- 5) After 24 hours, open all faucets to flush the system.
- 6) When the smell of chlorine can no longer be detected at the farthest point, close all faucets.
- 7) When finished, it is a good idea to collect a water sample for laboratory testing to confirm that your water is free from biological contamination.

Your water is now ready for domestic use.

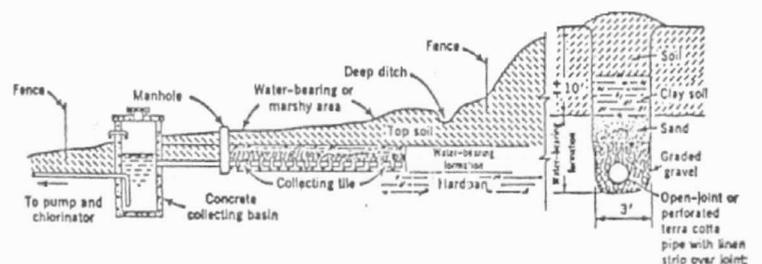
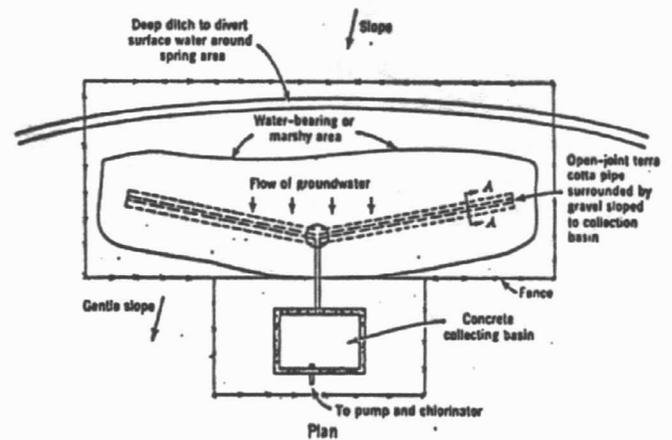
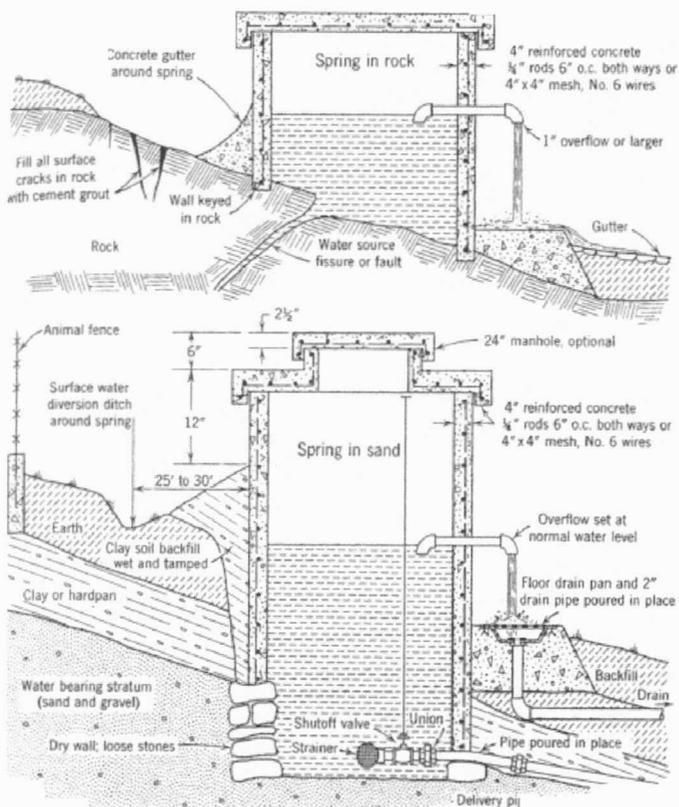
**Note: This method only removes biological contaminants, not physical or chemical pollutants.**

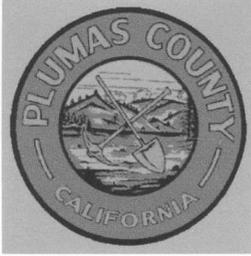


## VII. Springs as a Domestic Water Source

In some cases it may be possible to use naturally occurring springs on your property as a domestic water source. There are different regulations and requirements for utilization of a spring water source. These include documentation regarding water rights, an evaluation by a qualified public or private authority for quantity, and testing to determine water quality. Please contact our office for further information.

Source and Protection of Water Supply 245





## Plumas County Public Health Agency

### Environmental Health Division

#### Quincy Office:

270 County Hospital Rd, Rm 127  
Quincy CA 95971  
Phone: 530-283-6355 FAX: 530-283-6241

#### Chester Office:

222 1<sup>st</sup> Ave  
PO Box 1194  
Chester, CA 96020  
Phone: 530-258-2536 FAX: 530-258-2844

## WELL DRILLERS OPERATING IN PLUMAS COUNTY

Aquarius Well Drilling  
P.O. Box 6  
Mt. Shasta, CA 96067  
(530) 926-4185

Dickens Drilling  
189 Danny Court  
Quincy, CA 95971  
(530) 283-4844

Turner Drilling & Repair  
472-205 Johnstonville Rd  
Susanville, CA 96130  
(530) 257-6250

Diamond Well Drilling  
1660 Old Airport Rd.  
Auburn, CA 95603  
(530) 823-0354

Tri-State Drilling  
P.O. Box 8671  
Red Bluff, CA 96080  
(530) 527-9434 or (530) 243-0403 (Redding)

Steve's Pumps & Well Drilling  
711-715 Sears Rd.  
P.O. Box 249  
Janesville, CA 96114  
(530) 253-3601

David & Sons Drilling Co.  
P.O. Box 1029  
Oroville, CA 95965  
(530) 589-3914

Gary Tanko Well Drilling, Inc.  
12150 Luther Rd.  
Auburn, CA 95603  
(800) 734-8234

Beckett Drilling  
436-005 Willow  
Doyle, CA 96109  
(530) 827-2278

W.S. Heitman  
P.O. Box 1010  
Red Bluff, CA 96080  
(530) 529-0842

Anderson Exploration Drilling  
1635 Belford Rd.  
Reno, NV 89509  
(775) 826-5774

This list is for information only. This Department does not endorse or recommend any specific contractor or business listed above. If you are a contractor and would like to be added to this list please, contact our office and we will happy to add your name.

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